

PERCEPTIONS OF STAKEHOLDER INVOLVEMENT IN COASTAL GEORGIA POLICY
DEVELOPMENT: AN ASSESSMENT OF VALUES, COMPETENCIES, AND OBJECTIVES

By

TYLER PATRICK REINAGEL

Under the Direction of Hal G. Rainey

ABSTRACT

This study uses existing engagement typologies and stakeholder theories to frame the post-hoc perceptions of public policy stakeholder engagement. Where previous research has focused either on broad, universal policy processes or narrow, project-specific process management, this research uses engagement typologies and theories to identify common themes in the perceptions of engagement in coastal environments. This serves to address needs and interests of a specific environment and population, without focusing on a single, specific process. The result is a framing of the components influencing perceptions of engagement by participants within environmentally sensitive areas.

Using Q methodology, 45 respondents (24 self-identified stakeholders, 21 self-identified leaders) completed a subjective sorting of 40 perception-based statements derived from existing literature for quantitative analysis, and participated in a semi-structured interview with elaboration and reflection on specific experiences for qualitative analysis. These instruments focused on personal experiences and reflections on the engagement processes associated with one of five policy processes directly affecting coastal Georgia.

Factor analysis of the statements presented six applicable areas, each with distinct impact on how participants perceive the engagement process upon its completion. These influencing

factors include the perceptions of (a) process management; (b) empowerment of stakeholders; (c) esteem in which actors hold one another; (d) capacity of stakeholders to influence policy decisions; (e) awareness and knowledge actors have in their informed participation; and (f) equity of actors. In attributing perceptions based on these themes, participants can focus energy on a particular component of the engagement process to improve the quality of the engagement; ensure effectiveness; and enhance the values empowerment, equity, trust, and learning.

The management of the engagement process is requisite for this research, and public policy development efforts require a prioritization of prevailing values, necessary competencies, and process objectives. Specifically, the three competencies are aptitude in the practical and environmental sciences; adherence to legal, political, and economic expectations; and understanding the social and cultural dynamics of an affected community (Shen 1975). The balance of these three needs is policy-specific and requires prioritization. The balance is delicate, and decisions about resource allocation can affect the lucidity of the process.

INDEX WORDS: Stakeholder Engagement, Coastal Georgia, Public Policy

PERCEPTIONS OF STAKEHOLDER INVOLVEMENT IN COASTAL GEORGIA POLICY
DEVELOPMENT: AN ASSESSMENT OF VALUES, COMPETENCIES, AND OBJECTIVES

By

TYLER PATRICK REINAGEL

B.A., Fordham University, 2007

M.P.A., University of Georgia, 2009

A Dissertation Submitted to the Graduate Faculty of the University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA
2013

© 2013
Tyler Patrick Reinagel
All Rights Reserved

PERCEPTIONS OF STAKEHOLDER INVOLVEMENT IN COASTAL GEORGIA POLICY
DEVELOPMENT: AN ASSESSMENT OF VALUES, COMPETENCIES, AND OBJECTIVES

By

TYLER PATRICK REINAGEL

Major Professor: Hal G. Rainey

Committee: Robert K. Christensen
Joseph W. Whorton
Brian N. Williams

Electronic Version Approved:

Maureen Grasso
Dean of the Graduate School
The University of Georgia
May 2013

DEDICATION

Mom, Dad, and Taryn
Sts. Barbara, Timothy, Cecilia, and Regina
“Laugh and Grow Strong” – St. Ignatius Loyola
AMDG

ACKNOWLEDGEMENTS

While dedicated to my parents and sister, I would be remiss not to acknowledge the remainder of an inherently large Catholic family. To my grandparents Ed and Mary Lynn, and Linda. The unending relationship with the Templin family of my late grandmother, Barbara. To Karen. To uncles and aunts, Tim, Bean, Terri, Ann, Bill, and Lynne. And to countless cousins.

The Jesuit education I received at Fordham University in the Bronx is defined by principles of rationality, social justice, human nature, and the capacity to *learn* how to *learn*. The last of these has been a great motivation in these studies, for which I largely credit my mentor, advisor, and friend Mark Massa, SJ. My years at Rose Hill were marked by assiduous, gifted, and often bombastic personalities that have been close friends and great supporters for the past decade. In reverse-alphabetical order Paul Westcott, Mike Tadeo, Matthew Prochilo, Charles Nerko, Joe Marutollo, Michael Duffy, and Chris Catropa.

My time in Athens has also been defined by great friendships. As friends *and* colleagues, Jack Collens, Justin Bullock, Grace Bagwell, Chris Goodman, Justin Stritch, Mark Owens, and John Ronquillo. As friends at cookouts, trips, and bars, Neel Patel, Matthew Hickman, Kristina Patel, Grant Crowe, T Cole Brown, and Andrew Widener.

Thanks to Frs. Tom Tom Vigliotta, ofm and David Hyman, ofm of the Catholic Center at UGA.

For several years, public service faculty members at the Fanning Institute treated me as colleague, friend, and mentor. They have an eye for communities and I thank Skip Teaster, Maritza Soto-Keen, Carolina Darbisi, Lori Tiller, Kate Smith, Courtney Tobin, Kat Cason, Langford Holbrook, Brendan Leahy, David Meyers, Melanie Lee, and Debra Gates.

The staff at the Georgia Municipal Association has the devotion and zeal for the cities of Georgia and has given provided opportunities and placed (more than deserved) confidence in my work. Thanks to Becky Taylor, Jim Higdon, and Lamar Norton for their audacity in doing so.

Credit to Vicky Wilkins (and husband Chris), Melody Herrington (and husband Noel), Lisa Sperling, and Andy Whitford.

Ultimately, my greatest indebtedness goes to the members of my committee. Brian Williams has been a rock. In the classroom he exudes and passionate, as a scholar he is creative and calculated, and on my committee he has presented thoughtfulness and support. For six years, Joe Whorton has been a mentor, confidant, and advocate. He has allowed me to thrive in research, teaching, and public service objectives. His passion and enthusiasm for local government and community development have fueled my own. Rob Christensen has taken a chance on me during his first years at UGA, given me the opportunity to work collaboratively, and was instrumental in my first solo-authored peer-reviewed publication. Lastly, and most significantly, I thank Hal Rainey for remaining encouraging, accessible, and ever-insightful as my chair.

Clearly, it took a village to get to this point. I thank you all.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	v
LIST OF TABLES	ix
LIST OF FIGURES	xi
CHAPTER	
1 INTRODUCTION, OVERVIEW, AND RESEARCH QUESTION	1
Introduction.....	1
Motivation for Research	6
Statement of Problem	7
Research Questions.....	8
Organization of Dissertation.....	9
2 DEFINITIONS AND HISTORY OF STAKEHOLDER RESEARCH.....	12
Void in Existing Research	12
Terminology and Lack of Congruence	14
History of Stakeholder Engagement, 1960s-Present	25
Continued Response to Public Engagement Needs	33
Environmental and Natural Resource Concerns	42
Existing Research on Post-Hoc Perceptions of Stakeholder Engagement.....	48
Chapter Summary	55
Chapter 2 Tables and Figures	57
3 STAKEHOLDER TYPOLOGIES AND THEORIES.....	61
Values, Competencies, and Objectives Typologies.....	62
Existing Stakeholder Theories	88

	Chapter Summary	99
	Chapter 3 Tables and Figures	103
4	CHARACTERIZING THE COAST.....	107
	Introduction.....	107
	Background and Contextual Assessment.....	107
	The Coast of the United States.....	108
	The Coast of Georgia.....	110
	Coastal Georgia Policies and Projects	122
	Future of Coastal Communities	143
	Chapter Summary	146
	Chapter 4 Tables and Figures	147
5	METHODS	158
	Background of Q Methodology	158
	Survey Instrument and Data Collection.....	161
	Methods and Measures	168
	Individual Factor Inquiry	181
	Chapter 5 Tables and Figures	184
6	FINDINGS AND ANALYSIS	186
	Means Comparison	186
	Q Factor Analysis	188
	Coastal Georgia Sense of Place	209
	Influence on Existing Stakeholder Typologies and Theories	210
	Chapter 6 Tables and Figures	216

7	CONCLUSIONS.....	227
	Prominent Findings.....	227
	Perceptions of Stakeholder Engagement in Public Policy.....	228
	Framing Engagement and Contributions to Research.....	230
	Conclusion.....	231
	REFERENCES.....	232
	APPENDICES.....	254
A	Glossary of Acronyms.....	254
B	List of Q Statements.....	255
C	Respondent Consent Form (UGA IRB 2011-10077-1).....	256
D	Quantitative Survey Instrument.....	258
E	Interview Protocol.....	260

LIST OF TABLES

Table 2.1	Historical Definitions of “Stakeholder”	57
Table 2.2	Characteristics of Engagement Mechanisms	60
Table 3.1	Competencies Typology (Three-Dimensional Overlap).....	103
Table 3.2	Prevailing Stakeholder Theories and Stakeholder Engagement Values	103
Table 3.3	Continuum of Desired Competencies in Stakeholder Theories.....	103
Table 4.1	Percentage of Populations in Coastal Regions, by State	147
Table 4.2	Number of Coastal Counties (or County Equivalents), by State	148
Table 4.3	Coastal Georgia County Demographic Indicators.....	149
Table 4.4	Population Changes in Coastal Georgia Six-County Region, 2000-2010	149
Table 4.5	State-Level Coastal Population Projections.....	150
Table 4.6	Georgia County-Level Coastal Population Projections	151
Table 5.1	Natural Factor Analysis/Correlation, Iterated Principal Factors Un-rotated	184
Table 5.2	Descriptive Statistics on Proposed Forced Retained Factors.....	185
Table 6.1	Statement Descriptive Statistics, by Statement Order	216
Table 6.2	Leader/Stakeholder Means Comparison (Absolute Difference).....	218
Table 6.3	Gender-based Means Comparison (Absolute Difference).....	220
Table 6.4	Coastal Resident/Non Resident Means Comparison (Absolute Difference).....	221
Table 6.5	Factor Analysis/Correlation, Iterated Principal Factors Orthogonal Varimax Rotation.....	222
Table 6.6	Descriptive Statistics of Individual Factors, Six Retained Factors.....	222
Table 6.7	Factor Analysis Loadings, Six Retained Factors	223
Table 6.8	Means Comparison by Factor, Leaders/Stakeholders.....	225

Table 6.9	Means Comparison by Factor, Male/Female.....	225
Table 6.10	Means Comparison by Factor, Coastal/Non Coastal Residents	225
Table 6.11	Georgia Statement Means Comparison, Resident/Non Resident Absolute Difference	226

LIST OF FIGURES

Figure 2.1	Directional Context of Participant Interactions	60
Figure 3.1	Hierarchy of Stakeholder Engagement Influences	104
Figure 3.2	Three Dimensions of Sciences, Actors, and Disciplines	105
Figure 3.3	Stakeholder Strategies Typology	106
Figure 3.4	Stakeholder Traits Typology (Venn Diagram)	106
Figure 4.1	Coastal Georgia Counties (Map)	152
Figure 4.2	Map of United States Coastal Population Percentages, by State	153
Figure 4.3	Savannah Harbor Expansion Project, Project Area (Map)	154
Figure 4.4	Boundaries of South Atlantic Fishery Management Council (Map)	155
Figure 4.5	Coastal Comprehensive Plan, Planning Area (Map)	156
Figure 4.6	Glynn County Growth Task Force, Corridor Redevelopment Area (Map)	157
Figure 5.1	Plotted Eigenvalues	185

CHAPTER 1

INTRODUCTION, OVERVIEW, AND RESEARCH QUESTION

Introduction

In American public policy, engagement of stakeholders in the policy development process is a nearly universal expectation. It has been described as a “democratic right,” is widely accepted amongst policy-makers as obligatory, and is integral in decision-making processes from the local level to the international level (Chase, Siemer, and Decker 2002; Reed 2008; Stringer et al 2007). At the core, the “idea of citizen participation is a little like eating spinach; no one is against it in principle because it is good for you” (Arnstein 1969). Dating back to the roots of stakeholder engagement research in the 1960’s, though, the idea has demonstrated continued lack of definition, heightened frustration, and much confusion in its application in different sectors and with different intentions.

Throughout the first several decades of research on stakeholder engagement, the focus had been on the private sector. It was not until the mid-1990’s that decision-making processes and empirical implications of stakeholder engagement were considered distinct in the public sector. The public/private distinction that has long been a theme in broader public management literature has had direct influence on the sub-field of stakeholder engagement research. Consequently, researchers have been able to develop processes and assessments of policy development, implementation, and evaluation that address unique public-sector, stakeholder-based decision-making.

In the early years of private-sector research, the driving interests were management practices, economics, and generation of increased revenue for the benefit of shareholders - a term synonymous with stakeholder at this point in history (Emiliani 2001). As time progressed and the

research crossed into public sector decision-making, the foci became political forces and the public/private sector distinction. With needs and demands unique to the public sector being identified, differing engagement processes were designed and imposed. With the advantage of age, private entities have been able to further hone the engagement of their self-identified stakeholders and ensure the most effective and efficient processes that lend themselves to substantive engagement with meaningful outcomes. The public sector does not have that same luxury, and that relative youth has been the subject of much research. A dominant challenge of public-sector stakeholder engagement is the “burn-out” of participants (Rockloff and Lockie 2006).

The social science component of stakeholder engagement is vital. Public policy, human behavior, and communication are at the crux of stakeholder engagement. Among the knowledge gleaned from this research is (a) the nature of public attitudes and perceptions; (b) economic impacts; (c) differences of opinion between actors; and (d) the socio-economic and demographic trends that define the ‘face’ of a community (Springer 2006).

Occurring simultaneous to this maturation of stakeholder engagement research has been an increasing emphasis on the information sharing and participatory activities in environmental and natural resource policy development (Johnson 2009; Shackley and Deanwood 2002). Not only have these needs been identified, but public participation has become more common. In many ways, developing, implementing, and evaluating policy in these areas is comparable to policy development in education, healthcare, and social programs among others. All require degrees of (a) research, (b) planning, (c) decision-making, and (d) education, all of which are “vital in securing ownership of decisions and commitment to successful outcomes” (Rockloff and Lockie 2006).

The distinguishing factor in environmental and natural resource policies is the natural, or “hard” science, capacity that is necessary to understand and interpret knowledge in order to develop informed, deliberate, and sustainable policies that have the potential to affect the irreplaceable ecosystems, economy, and culture of an area to maintain existing and valued resources. The research demands are much more specialized and require substantial academic expertise, dependent on (a) the resource/environment in question; (b) the planning efforts must account for the difficult or impossible nature of “re-planning” and recovering/reviving lost resources; (c) the decision-making process is a niche-oriented and the implications are frequently absolute and definitive; and (d) the education obligations must take research-intensive scientific understandings and simplify them to digestible information provided to the affected stakeholders, though not over-simplified to the point where the information serves no useful purpose in understanding its role in the policy in question (Springer 2006).

The problem facing researchers, practitioners, and volunteer stakeholders at this point is (a) whether the “soft” social science and “hard” natural science are absolutely dichotomous or has the potential to be intertwined; and (b) if they can be intertwined, the nature of the relationship between the two emerges.

A belief in an absolute dichotomy creates a scenario in which an environmental/natural resource policy process creates a forced blending of the “soft science” concepts that accompany stakeholder engagement, public management, and rudimentary economic principles; and “hard science” disciplines such as biology, chemistry, and physics. Framing the soft science concepts in a hard science framework has been addressed in previous literature, once being described as “overly ambitious, premature, and more likely to do harm than good” (Mayer 1980). That is not to say that earlier literature did not entertain the idea of a non-dichotomous relationship. Rather,

Mayer proposed that "...economics is currently very different from a hard science, therefore, and does not rest on any fundamental dichotomy between the natural and the social sciences, but is based on much more mundane considerations" (Mayer 1980).

More recently, accepting the relationship as a spectrum of varying degrees of the respective sciences has gained traction. Recalling the earlier identification of her four social science classifications, Springer (2006) segues into this new "hard science" challenge by including a fifth element in her social science measures: "use patterns, uses of marine environment, uses of the environment, and relationship between different user groups."

A determination of the relationship between the sciences does little to resolve issues inherent to natural resource/environmental policies. What remain are issues of rights and responsibilities that accompany these increasingly diverse and complex public policy issues. Empowerment and equity values would dictate is an inherent right of stakeholders to participate in the policy process. Four decades of research are indicative of a greater desire among those stakeholders to participate and many are actively seeking out opportunities to do so, but we should realize that with those opportunities come responsibilities. These include becoming familiar with the policy/program, being aware the status and challenges, and participating in the opportunities made available." What are less obvious to stakeholders have been the values of trust and learning. The former takes time to build and the latter takes time to acquire and build upon (Reed 2008; Neuhauser 1976)

Potential stakeholder fatigue is exacerbated when introducing environmental and natural resource issues. Stakeholder willingness to learn is foundational in engagement, but is challenging when the individuals/organizations engaging themselves in a process are "faced with the double burden of assimilating vast amounts of information in areas in which they have

limited prior expertise, while earning no income as they do so” (Porter, Whitcomb, and Weitzer 2004; Reed 2008; Rockloff and Lockie 2006)

It has become an accepted practice that the process of developing, implementing, and evaluating public policy involves (and often legally requires) a degree of stakeholder involvement, i.e., the engagement of those who will be impacted or have some vested interest in the outcome of a proposed new policy or policy change. Substantial research in the early years of public stakeholder engagement focused on improving the public involvement process. What is understudied, yet equally important, is this mandated engagement efforts is “the perception of the role of the citizen held by the citizen” (Neuhauser 1976). “Mandated” or “available” roles are far less important than the perception of the role.

How public engagement is presented likely has impact on how it is subsequently perceived. Public involvement has been widely criticized as a mechanism to “sell” a program, rather than being used by policy-makers as a “tool” used to improve the decision-making process. A hindrance to ensuring a constructive use of public involvement is the potential to make the decision-making process more difficult. The success of public involvement is reliant on the viability of the participants and the degree of informed participation (Fairfax 1975; Freeman 1984; Glicken 2000; Treby and Clark 2004).

Stakeholder engagement processes are complex, intense, and often obligatory efforts that take on many different forms, as demonstrated by through elaboration on involvement in public decision-making. Most appropriate is a blending of approaches to adhere to the values of universal empowerment, equity among all members of the public, development of mutual trust, and a learning opportunity for all. This exploratory research will offer both theoretical and practical implications to the academic and practitioner work that make up the field of public

management constituencies (Bayley and French 2008; Ellsworth, Hildebrand, and Glover 1997; Fiorino 1990; Reed 2008; Taut 2008).

Motivation for Research

There is no shortage of research on stakeholder engagement processes themselves. These previous research efforts address issues including the most effective ways to recruit and retain stakeholders, methods to actively engage stakeholders in the process, the most efficient ways to manage an engagement process, and the need to meet the legal requirements in hosting an engagement process (Shaffer 1975, Dalton 2006).

Beyond the legal requirement to do so, there is little evidence that public sector leaders would have a willingness or enthusiasm about engaging potential stakeholders in the policy development process. From their perspective, it is easier to *not* to involve stakeholders. There is no need for logistics/event planning to accommodate potential stakeholders, there is not an investment of time that is needed to build a trusting relationship or reputable process, and there is no need for an agency to commit the resources (human and otherwise) to an engagement effort (King and Ehlert 2008).

The exploratory findings of this dissertation will have application to situations that will be defined in later chapters, and the ultimate objective is to ensure that both leaders and participants recognize effectiveness, efficiency, and equity in their participation in stakeholder engagement processes.

This research seeks to further the proposition of Neuhauser (1976) and address perceptions of the engagement processes post hoc, specifically as it relates to policies addressing environmental, natural resource, and sensitive areas. Both leaders and stakeholders play a role in

the process, but once it is complete and the policy development and implementation occur there has been little research conducted on how those participants perceive the work they have done.

Statement of Problem

While there has been a great deal of research addressing both the theoretical and practical use of stakeholder processes in policy development, little has been done to address the perceptions that stakeholders *and* leaders have of these processes after they have concluded. Knowledge in the field has gone to great lengths to improve the effectiveness and efficiency of these processes, but has focused almost entirely on the process itself.

This leaves a gap in existing research – the lack of research on *perceptions* of stakeholder engagement in the policy process, rather than strictly on the efficacy of the process itself. These two gaps ask similar questions about the values held by stakeholders, the competencies necessary to participate fully and actively in the policy process, and the established objectives that individual policy processes. Quantitative results will identify commonalities and disparities that may exist between leaders and stakeholders, demographic-based groups, and other sample subsets; qualitative findings to understand potential shifts in perceived value; and identify potential techniques to enhance the perceived value of necessary engagement by all participants (both leaders and stakeholders).

By understanding the perceptions engagement process participants share and those on which they differ, this research lays the foundation for tools and further research that will ultimately improve decision-making related to coastal development issues in Georgia. Insight into how and when public leaders involve the public in policy decisions and how they use that information is critical to better aligning the intentionality of public leaders and participants in

coastal policy development. This will contribute to more effective, efficient, and transparent policy development processes that are informed by thoughtful public input.

The project is designed as early-stage, exploratory research surrounding the perceptions and intentions of leaders and stakeholders along Georgia's coast. An intuitive question is, "why Georgia?" Simply put, the context of Georgia's coast is unique and presents previously unaddressed issues of (a) soft/hard science balance in public policy; (b) imbalance of actors; and (c) the perceptions held by participants in stakeholder engagement processes, post hoc. The state has a low percentage of its population living in the counties immediately adjacent to the Atlantic coast - 5.2% based on 2010 U.S. Census data. Comparatively, the coastal populations among Georgia's neighboring coastal states include: 8.6% in Alabama; 74.8% in Florida; 14.2% in South Carolina; and 10.0% in North Carolina. Of the 30 states with an Atlantic, Gulf of Mexico, Pacific, or Great Lakes coastline, an average of 64.3% of the state population lives in a coastal county. Because of this, there is an additional lack of research on the policy process in jurisdictions where democratic and representative influence is potentially diluted by population shifts and population concentrations.

Research Questions

Based on the review of existing literature and stakeholder theory, the elaboration on the context of coastal Georgia, and the discussion of the five policies/projects chosen for this research design, the remainder of this dissertation will address four primary research questions:

- (a) How are stakeholder engagement processes in Coastal Georgia policy development perceived by participants?
- (b) Are there particular themes that elicit extreme agreement/disagreement among participants in the policy process?

- (c) What can be done to enhance positive perceptions about the effectiveness of engagement efforts?
- (d) What unique opportunities and challenges exist for environmentally sensitive and natural resource environments in the broader policy process?

Addressing these exploratory questions will require a blend of quantitative and qualitative methods most adequately framed in Q-methodology.

Organization of Dissertation

This dissertation will be divided into seven chapters. Chapter 2 presents broad concepts such as conflicting definitions for key terms, historical survey of stakeholder engagement research, and interaction models between actors. This will include five key elements: (a) describe the void in existing research and present the four primary research questions; (b) provide clarity and functional definitions to the concepts of “stakeholder,” “perception,” and “participation” that will ground the subsequent analysis; (c) discuss the maturation of stakeholder engagement theories since the emergence of the concept in the 1960’s; (d) elaborate on the growing importance of environmental concerns, natural resource planning, and the necessary blending of both a social science *and* natural science needs public policy engagement processes; and (e) summarize existing research on post hoc perceptions of engagement efforts and more clearly define the existing gap in research.

Chapter 3 narrows the focus of this dissertation considerably, but is reliant on the broader definitions, research, and constructs from the previous chapter to introduce and analyze existing stakeholder typologies and theories. Specifically, this chapter will review (a) three existing typologies grounded in underlying values, desired competencies, and practical objectives for the *process* research and discuss how they might be applied to this *perception*-based research; and

(b) four existing stakeholder theories – collaborative governance, coproduction, deliberative democracy, and citizen democracy – their historical context, their respective strengths and weaknesses as identified in previous research, and their attributes that have demonstrated their value in different types/scopes of policy development, implementation, and evaluation.

Because of the focused area – policy development on the Georgia coast – there are unique traits identified, explained, and understood. Chapter 4 discusses the scope of coastal public policy in the United States; addresses the environmental, political/economic, and social challenges unique to coastal Georgia; and provides background on the five policy processes included in the research design of this dissertation. These five policies/projects directly affecting the Georgia coast that were included in this research include: a federal-level project (Savannah Harbor Expansion Project); a multi-state regional policy (South Atlantic Fisheries Management Council); state-level policy (Marsh Hammocks Docks and Marinas Management); a multi-county in-state project (Coastal Comprehensive Plan); and local city/county-based project (Glynn County Growth Task Force).

This chapter is heavily reliant on commissioned reports from public, quasi-public, and private firms; media coverage; opinion/editorial pieces; government documents; legislative goals, plans, and techniques for stakeholder engagement, and process evaluation; and research efforts that have specifically addressed the region’s natural science needs and concerns.

Chapter 5 will describe the methods used in this research. Because it is the core method utilized in this research, this chapter will discuss the “Q-methodology” concept at length. This is a mixed-methods technique that relies on both quantitative findings and qualitative findings, both of which are addressed. This chapter will also describe the design of the survey instrument,

identification and recruitment of respondents, the quantitative data-collection process, and the guidelines for the follow-up, semi-structured interview.

The penultimate chapter will present and analyze the findings of this research, inclusive of (a) sample subset means comparison; (b) factor analysis; (c) integration of qualitative findings to six thematic factors; (d) factor-based means comparison; (e) Georgia-centric findings; and (f) the corroboration/contradiction of factor analysis findings with existing stakeholder typologies and theories, as presented in Chapter 2.

The seventh and concluding chapter will summarize the relationship between the findings of this research and existing theory, describe potential application of the exploratory findings to coastal policy processes, and propose future implications and opportunities for generalizability in other environmentally/demographically unique environments.

CHAPTER 2

DEFINITIONS AND HISTORY OF STAKEHOLDER RESEARCH

Public policy is inherently complex, and three particular intricacies that affect this research. First, it has a broad scope. It addresses issues of social policy, foreign policy, fiscal policy, and monetary policy, among others. This research focuses wholly on natural resource and environmental policy, specifically on issues facing coastal environments. That does not, however, exclude the value of economic, social welfare, and other disciplines in coastal policy. Second, different formal authorities are vested in different levels and agencies of government. Distinguishing between jurisdictions and jurisdictional authority is an often-arduous task that does not necessarily yield clarity. Third, the policy process is multifaceted. It is a multi-step process that entails development, approval, funding, implementation, and evaluation. The process is broad and there are areas of research entirely rightfully devoted to particular facets. This research focuses only on the development stage of the policy process and, in particular, post hoc perceptions of that development stage on the part of those engaged in it.

Void in Existing Research

The present gap in research rests between the applied research literature of engagement constructs and proposed hierarchy of needs, and their application in theoretical literature on existing stakeholder theories. As the title of this dissertation asserts, the values, competencies, and objectives of an engagement process must be acknowledged, prioritized, and applied in a manner that meets the unique context of the proposed policy and the strengths, weaknesses, interests, and concerns of the stakeholders engaged. Integrating the proposed structures and theories of engagement results in a post-hoc analysis of how the process on the whole was perceived by all actors, including both leaders and stakeholders.

This chapter will approach the review of previous literature with five objectives. The first section will present the four core research questions that motivate this research on participants' post-hoc perceptions of stakeholder engagement processes.

The second is to provide a functional definition to the terms "stakeholder," "perception," and "participation." In addition to having amorphous, ambiguous, and divisive definitions, these three terms are integral parts of the research questions that will work to fill the void in stakeholder engagement research identified earlier. Over time, a number of definitions have emerged for all three of these terms and it is essential to this research that a single definition is employed throughout. Many contemporary definitions are maturation of previous definitions, while others present differing perspectives and are geared toward differing audiences. This section will address the strengths and weaknesses of several definitions and provide grounding for the definitions that are the crux of this research.

The third objective of this chapter is to provide historical context for stakeholder engagement. Substantive theoretical research on the topic began in the 1960's and has continued in an evolving form. It will discuss the defining characteristics, the dominant theories, and the new theoretical propositions that have emerged in each of the five subsequent decades. This section will conclude by addressing the public/private sector differences and summarize the research that exists on this distinction specifically as it relates to engagement efforts.

Fourth is an elaboration on the growing importance of environmental concerns, natural resource planning, and the necessary blending of both social science *and* natural science needs. With public policy engagement processes gaining legitimacy and defining themselves independent of their private sector counterparts, there is a newfound capacity to meet the complex multi-faceted demands that exist within the public sector. This third section will present

previous research on the idea of an absolute dichotomy between the “soft” social sciences and the “hard” natural sciences; the shift in values, competencies, and objectives (the proposed hierarchy) that occurs when these “hard” considerations are introduced to public policy; and previous findings on the potential impact of these issues natural resource on both the stakeholder engagement *process* itself and individual *perceptions of* the process.

The final section of this chapter is a survey of previous research on post hoc perceptions of stakeholder engagement. As was stated in the introduction (Chapter 1), research on this topic is limited. In instances where the topic has been studied, it has been limited to broader social policies (education, healthcare, etc.) or specific projects within a single organization (Gordon and Louis 2009; Hendricks 2011).

Terminology and Lack of Congruence

As stated, stakeholder involvement in the process of public policy development is not a new revelation, but rather one that has been an integral part of academic research in an array of disciplines dating back to the 1960s. One of the most substantive challenges facing research regarding stakeholder involvement (previous research on the process, this research on perceptions of the process, and any future research venture involving stakeholders) is the lack of a clear and consistent definition of individuals and/or organizations that constitute a “stakeholder.” The first objective in discussing stakeholder theory is to acknowledge this challenge, develop a comprehensive and functional understanding of historical evolution of the term, and clarify the meaning of the term as used in existing literature. The intent of this section is not to provide *a precise* or *ultimate* definition to the term, but rather to describe previous attempts to define the term, clarify the variation in definitions, and establish a functional definition utilized in this research (Table 2.1).

Definition of “Stakeholder”

The term “stakeholder” first appeared in a research context in 1963 when it was described in a Stanford Research Institute (SRI 1963, cited by Freeman 1984; Metcalfe 1998) internal communication as “the only group to whom management need be responsive” and “those groups without whose support the organization would cease to exist.” This SRI communication and early literature on the whole considered stakeholder engagement only through the lens of private-sector decision making and frequently equated the term ‘stakeholder’ with ‘shareholder,’ using the two interchangeably. The primary interest was profit and financial indicators are the primary measures of success (Driscoll and Starik 2004). The idea of a clear and concise definition applicable in both sectors became increasingly desirable in subsequent decades, though loose and vague definitions remained the norm. Examples include stakeholders as being "groups to whom the corporation is responsible" (Alkhafaji 1989) or as groups "in relationship with an organization" (Thompson, Wartick, and Smith 1991). The SRI definition remained the dominant definition for the subsequent two decades.

Since its introduction to stakeholder literature, one definition has been widely regarded as the modern standard-bearer. In 1984, still early in the scheme of stakeholder literature and still in the midst of the private sector focus of the term, Freeman defined the stakeholder as “...any group or individual who can affect or is affected by the achievement of the organization's objectives" (Freeman 1984). For his contemporaries, Freeman’s is the most common functional definition (Stieb 2009).

As literature matured and stakeholder engagement in the public sector developed its own identity, it became necessary to revisit the concept of the stakeholder and move toward a definition of greater inclusiveness. While private sector decision-making had been limited to

shareholders and those directly affected by the company's actions, potential and necessary actors in public policy processes lack the same clarity. Applying the SRI definition of stakeholder to a public process is not viable, as the public agency will not "cease to exist" and the obligation of responsiveness is vast. The most substantive challenge in defining the term in public sector stakeholder research is the role assumed by the citizenry. While some researchers delineate between stakeholders and members of the general public (suggesting that the two are separate groups and that members of the public at large do not constitute stakeholders), others cluster the two (acknowledging members of the public as stakeholders in a jurisdiction affected by a policy decision) (Bayley and French 2008).

In the case of coastal policy development, an example of the former is the Davos et al. model which identifies two groups of stakeholders: (a) individuals/organizations with a private interest in coastal management; and (b) individuals/organizations with some sort of responsibility in coastal management, such as elected representatives and government agencies. This does not provide a clear and explicit forum for the general public (Davos et al. 2002).

As the stakeholder engagement research movement continued to gain momentum throughout the 1980s, it became necessary to further define what/who constituted a public sector "stakeholder" and what their role was in a broader decision-making process. In an approach differing from earlier decades, the practice of providing a succinct and direct definition of the term was abandoned and the term was instead characterized by traits held by the individual/organization in question.

An example of this "definition by description" model is manifested by interaction between actors. To an extent, a person/group considered a stakeholder must be empowered to influence the decision-making entity, whether public or private. The stakeholder must also have

a relationship with the entity that is rooted and genuine to the point where it can be considered legitimate, and third should possess a claim that is both timely and urgent. A second example was introduced several years later. Researchers have a degree of consensus in that stakeholder engagement and the resulting theories require inter-group conflict. Differing values and expectations between individuals and/or groups (whether organized or not) is an inherent characteristic of stakeholders (Mitchell, Agle, and Wood 1997).

An etymological approach extracts the word “stake” from “stakeholder” and describes the “stake” as “what counts.” Stakes are also described as representing “fair economic opportunity...authenticity, or...political equality” (Reed 2002), “understood to impose normative obligations,” (Reed 1999) “an interest for which a valid normative claim can be advanced” (Reed 1999), or “something at risk, and therefore something to gain or lose, as a result of corporate activity” (Clarkson Centre for Business Ethics 1999). Others adopted similar models for defining the term, but with similar ambiguity and lack of consensus (Cordano, Frieze, and Ellis 2004; Lampe 2001; Mitchell, Agle, and Wood 1997; Reed 1999).

The third technique used in definition by description is identification of groups with particular roles or functions. Like others, Fletcher (2007) is forced to find an adequate way to present a definition of the term “stakeholder.” This defines by example, breaking down potential stakeholders into 11 “stakeholder categories,” including: (a) businesses with commercial interests; (b) federal-level government departments; (c) individuals that wouldn’t otherwise be represented by a particular group; (d) local authority members, which includes locally elected officials; (e) appointed local government officials; (f) local special interest groups; (g) national-level interest groups; (h) national professional organizations; (i) non-governmental organizations and non-profit organizations; (j) special purpose authorities; and (k) sector-based interest groups

(Fletcher 2007). Outside of these groups, participants are considered lacking legitimacy and are not considered “stakeholders.”

The 1990s was the first decade in which there emerged an accepted and definitive difference between the private sector stakeholder and the public sector stakeholder. The most recent approach to the “public stakeholder” has been recognition that a clear and generally accepted definition is not an attainable goal. Contemporary analyses have been that the “definition of a stakeholder comes in various forms and flavors, some of which prefer a narrow interpretation, [while] others deliberately maintain the broadest possible scope” (Scholl 2001); that an “understanding of what motivates individuals to act on an emergent issue, affiliate with an existing group, or to form a new group” is necessary, but ambiguous (Winn 2001); and that previous research has demonstrated the need for “a complex definition of stakeholder identity that includes both affiliation and commitment to act” (Cordano, Frieze, and Ellis 2004). The most explicit reinforcement of this idea is Scholl’s assessment that by virtue of the lack of definition, “public sector managers lack a proper toolkit for stakeholder identification and management” (Scholl 2001).

The ambiguity that accompanies this lack-of-definition has, to an extent, re-introduced a generalizable interpretation of the term and a degree of inter-sector usage reminiscent of the 1970s application of private sector engagement practices directly and without adaptation to public sector decision-making. It also does little to address the capacity of secondary and tertiary stakeholders to “contribute or to impede” the policy process (Scholl 2001). The timeline of research theories that accompany this progression of definitions will be addressed at length in the following section of this chapter.

The public policy development process has become increasingly reliant on natural resource/environmental impacts (Rockloff and Lockie 2006; Reed 2008; Springer 2006). While these three stages of definition – explicit and private sector oriented, definition by description, acknowledgement and acceptance of ambiguity - have each been critical in the development and ongoing research of stakeholder theory, the need for an explicit definition of “stakeholder” is necessary to frame the research in this dissertation. As a result, the most appropriate description of the term “stakeholder” for this research, and that which will serve as the functional definition moving forward is: “resource users, scientists, conservationists, government and nongovernment organizations, and the general public...[that] can contribute positively to management processes and may even benefit from such processes” (Dalton 2006).

Definition of “Perception”

The second need is a functional definition of the term “perception.” The term is decidedly more philosophical and psychological than either “stakeholder” or “participation.” Many definitions of the term reference memory and images, but there is a distinction between visual and art-based perceptions and verbal and socially oriented perceptions. The latter is the focus of this research. “Alteration of semantic meaning attached to the memory” is an individualized factor and directs a respondents’ understanding of a given term. Respondents enter this research process with a preconceived definition influenced by their own experiences or other memories and not necessarily congruent with the definitions used in this research. Chapter 5 of this dissertation will describe the use of semi-structured, qualitative interviews that are intended to mitigate the impact of these different perceptions. These qualitative components “actively address and transform distressing memories and images” that might not otherwise be captured in

a strictly quantitative tool, but are difficult to implement and are often accompanied by their own “circumstantial and inherent limitations” (Sarid and Huss 2011).

In most definitions of “perception,” there is a relationship between what is sensed by a stakeholder and their active response and that “perception controls action.” An existing typology identifies three types of potential perception, each conditioning a different response: (a) “object perception” and (b) “perceptual recognition,” which are based on more objective observations and on-going comprehension; and (c) “that-perception,” which is attentive to more subjective thoughts and feelings about a particular experience. In this instance, the most apt understanding of perception is “not so much concerned with action as with conceptualization of conscious experience” (Hope 2009; Milner and Goodale 1995).

Definition of “Participation”

The third and final term demanding clarity and a comparable functional understanding in this exploratory research is “participation.”

Regardless of definition, sector, or purpose, participation is an integral component of stakeholder research. It is the basis for each of the four stakeholder theories addressed in section (b) of Chapter 3. This requires clarification of the functioning definition of the term as its absence makes the four stakeholder theories a moot point.

Like stakeholder involvement, the concept of citizen participation (public-sector stakeholder engagement) has been present in literature and discussed at length over the past several decades, been subject to conflicting opinions, and lacks consensus (Arnstein 1969; Neuhauser 1976). Critique of citizen participation has been abundant: “The idea of citizen participation is a little like eating spinach; no one is against it in principle because it is good for you...” said Sherry Arnstein (1969), speaking to her research in the field of planning.

As is the case when interacting with stakeholders (regardless of definition), perception of role is a determining factor. A construct of interaction between participants (Figure 2.1) effectively illustrates the values held by participants in a process. While leaders are ultimately responsible for execution of an engagement effort, it is necessary for those considered stakeholders to be aggressive and insistent on two-way interaction – “participation” - that meets their needs and expectations. The interactions proposed in this typology are simple, yet exhaustive.

The first is a scenario in which there is *no* interaction. This requires little elaboration, as lack of interaction achieves none of the values held by actors in the process.

The second and third are *one-way* interactions between the actors. The one-way interaction in which the leader disseminates content to the stakeholders without the intent of receiving feedback or response is characterized as “communication” or “information sharing.” From the outset, this interaction has the sole intent of conveying content and technical awareness of the policy with actively engaged and receptive stakeholders. Contrarily, the scenario in which stakeholders provide feedback on their understanding of proposed policies without having been a part of that “information sharing” from the process leaders is described as “consultation.” Stakeholders provide advice to leaders, but not necessarily with full and accurate information and not with the preconception that that advice will be considered or acted upon. Both these second and third models of one-way communication have been critiqued in the modern phases of stakeholder engagement research in that they are strictly linear models that flow “from science to policy and society.” The validity of a one-way *transaction* as *participation* is debated. Dalton argued that “information exchange is important, [but] successful participatory processes will involve more than a one-way exchange of information.” Similarly, there have been recent

assertions that “traditional forms of public consultation are no longer adequate” (Hildebrand 1997), “stakeholder consultation does not work” (Ritchie and Ellis 2010), and that public decision-makers have an unachieved obligation to meet the desires and demands of stakeholders to be “actively and meaningfully involved” in the process. The information-sharing component of stakeholder engagement is important, but Dalton’s contention is that it is *necessary* rather than *preferred*. By sharing the most accurate information, maintaining a constructive dialogue about the information, and analyzing the information so as to ensure its most effective use, the information sharing will meet the needs of all actors and be used to develop thoughtful observations and have an informed influence on the ultimate policy decision (Dalton 2005; Hildebrand 1997).

The one-way models are reflected in three techniques of representation in stakeholder processes: (a) the trustee model in which representatives of groups are empowered to make decisions without consultation; (b) the delegate model in which representatives have no decision-making authority but rather act as an information conduit between the leadership and the group which is being represented; and c) the mandate model in which the representatives are acting on a decision/mandate that has already been determined by the represented. There are instances in which these three approaches are blended. In the delegate/mandate combination, the representative acts as a channel for information sharing where the constituency has an established and uniform view already in place. The trustee/mandate combination, the representative is empowered to make a decision provided it is in line with the predetermined constituency view but returns to the represented constituency for a mandate otherwise. Finally, the trustee/delegate combination are empowered to make decisions within the scope of the constituency’s predetermined decisions, but act as channels of communication in the event that a

pending decision goes beyond that scope. Ultimately, each of the three has inherent weaknesses in that they remain one-way in nature (Fletcher 2007).

The fourth and final model is *two-way* interaction that rebuts the critiques of linearity and validity. This construct is a combination of the “communication” and “information sharing” of the leader-to-stakeholder interaction, and the “consultation” of the stakeholder-to-leader interaction into a concept known and defined as “participation,” per Dalton (2006). There is an expectation in “participation” that stakeholders will be receptive to the information being shared with them by leaders and that leaders will be mutually receptive to the feedback and concerns raised to them by the now well-informed stakeholders. The model ranks the interactions in such a way that both leader and stakeholder values impact the level of engagement, with the *partnership* being the pinnacle, though rarely achieved (Dalton 2005; Eden 1998; Jaakson 2010; Jude 2008; Neuhauser 1976; Reed 2008).

The maturation of stakeholder research has led the recognition of public engagement as a discipline distinct from private sector engagement, widely acknowledged by scholars in the fields of both strategic management and public administration. There remains overlap between the two fields. The definition of the term “participation” is an example of that overlap, as Jaakson’s (2010) ranked engagement model was developed and imposed on four European private sector firms in the field of banking.

While the definitions of these terms appear similar, “interaction” and “participation” are not synonymous. “Participation,” requires a two-way relationship and is thereby form of interaction; “interaction” is not necessarily participation, as it includes both “communication”/“information sharing” and “consultation.” Participation is a relationship that imposes both opportunities (communication/information sharing) and responsibilities

(consultation and *informed* participation). Those responsibilities take the form of developing familiarity with the scope and implications of the proposed program/policy and being knowledgeable of the current status of the program/policy.

Similar to the approach taken by Mitchell, Agle, and Wood (1997) and Reed (1999) regarding “stakeholder,” Treby (1999) offered a “definition by description” with the term “participation.” The “wheel of participation” is a circular representation of the linear directional context of participant interactions (Figure 2.1). The seven elements in the proposed wheel are: (a) delegation, in which there is joint decision formation; (b) education, which serves as information sharing; (c) therapy, in which there is an “acknowledgement of people’s right to know”; (d) informing, or providing a one-way flow of information *from* leaders to stakeholders; (e) consultation in which there is feedback provided with no formal mechanism or assurance of consideration; (f) placation, or a formal structure for the two-way transaction but with limited impact on the ultimate decision; and (g) participation, as a less formal two-way discussion in which views and thoughts serve to legitimately influence the final decision (Treby 1999).

Assuming a transaction is taking place, it is in the best interest of all actors to adopt an “informed participation” model. This is reciprocal relationship that places an *expectation* of information dissemination upon leaders and of familiarity and understanding upon the stakeholder wishing to engage in the process. This is counter to traditional models that simply the *opportunity* (without expectation) to do so. The model imposes both rights and responsibilities on the stakeholder and asserts that “participation should transcend the outcome” which in this situation is the ultimate policy decision. This enhanced two-way/participation model is based on principles of both communication and consultation and is necessary “if the results are to be meaningful” (Freeman 1984; Glicken 2000; Treby and Clark 2004).

While having more pronounced clarity than the perpetually amorphous “stakeholder” and psychologically oriented “perception,” the term “participation” is accompanied by threats of its own. Dalton (2005) identifies and explains several of these unique challenges. Increased levels of participation can result in “resource intensive” programs that conflict with particular objectives and place excessive demands on human, physical, and financial capital. Another challenge that accompanies legitimate participation is the potential for lack of clarity in objectives. Participation is intended to engage multiple actors representing multiple interests. This has potential for actors to enter a coordinated process with the impression that there are certain objectives that aren’t necessarily being addressed. An example includes “the challenge of trying to separate site selection from deliberation” of protection actions in a European effort to determine the boundaries of an environmentally protected area, resulting in a false sense of participation (Alphandery and Fortier 2001; Dalton 2005).

History of Stakeholder Engagement, 1960s-Present

Emergence of Stakeholder Theory

Stakeholder theory as a research discipline dates to the 1960s and continues the maturation that has been ongoing for the fifty years since. The field of public sector stakeholder engagement theory began with “awareness raising” and observation of private-sector decision-making in the 1960s; proceeded to “incorporating local perspectives in data collection and planning” and integrating private sector practices directly into the public sector processes in the 1970s; recognition of local competency and approaching engagement as an opportunity to “put the last first” in the 1980s; treatment of public-sector as a business and the emergence of participation as the expectation in policy development in the 1990s; acknowledgement of the unique sector-specific demands and a critique of the field and existing research/theory in the

early 2000s; and re-evaluation and development of new theory based on the perceived successes and failures of previous theory in the most recent years (Reed 2008).

While occurring in formal settings as early as the 1960s, engagement research began as a subset of strategic management research and was focused almost exclusively on private sector decision-making. The intent was to “account for all the groups who have invested something in the business, whether it is something that is tangible and measurable like capital, or an intangible like customer goodwill.” This private sector grounding continued to thrive throughout the 1960’s (Reed 2008)

As the second decade of substantive research on stakeholder engagement came about in the 1970’s, the role of stakeholders (as originally defined by SRI 1963) expanded from private agency policy development and initial decision-making to include the benefits of “including stakeholders in the evaluation as a way to increase the likelihood of evaluation utilization” and the most effective and efficient way to engage participants in the evaluation process. As these further steps were made in the private sector, the scope of stakeholder engagement research in decision-making was simultaneously expanding to include the public sector, though without a clear sense of direction (Taut 2008; Scholl 2001; Winstanley, Sorabji, and Dawson 1995).

As the 1960s research in strategic management indicated, identifying actors in the private sector was done with ease as shareholders and employees had a clear and demonstrated interest in the “achievement of the firm’s objectives.” The sector shift resulted in the early belief that “decision-making should come either through elected representatives in Congress, the President, or through various state, county, and local representative bodies,” and others that believe in a more democratic (rather than representative) process for decision-making (Freeman 1984; Fairfax 1975; Olson 1969).

Formal mechanisms and requirements, process development, and empirical research on public sector engagement were less developed than private counterparts. While the time disparity is not an inherent challenge, it was observed at the time that there was a “rush to ‘involve’ the public” in the decision making process and that the pivotal questions of “why, how, and to what end” stakeholder engagement had a place in the public sector went unaddressed (Fairfax 1975).

The independent field of stakeholder research became most evident in Freeman’s *Strategic Management* (1984). As stakeholder theory continued to further define itself and distinguish itself from broader strategic management research for the first time in the 1980s, there was a movement toward a separate field of research on public sector stakeholder engagement. With stakeholder engagement had become standard in corporate environments, a progression began toward applying direct, un-adapted engagement practices to public policies, public programs, and government decision-making. Because there was no adaptation to public sector differences, many scholars continued to identify stakeholder theory as exclusive to the private sector and discounted its application in public decision-making (Scholl 2001). For those scholars subscribing to the applicability of stakeholder theory across sectors, an early challenge was distinguishing between public and private sector decision making processes, substantiating the applicability of private practices to public jurisdictions, and attempting to provide generalizability to newly emerging theories.

Actors, Roles, and Influences – 1980s

Research in the 1980s presents principles of stakeholder theory as being applicable in both sectors, with emphasis placed on which actors in the policy process are considered legitimate stakeholders (Table 2.11), the roles assumed by those actors in the decision-making process, and the influences on both the actors and the overall policy development process.

While research to this point has “focused on citizens and broader communities rather than on stakeholders more generally,” the roles of other entities including governing bodies, non-profit organizations, and private sector entities that serve as parts of the community “are no less important than the general public.” In fact, the public’s “stake in the decisions that are taken concerning coastal resources and uses” is acknowledged, and its absence in the coastal policy process is specifically criticized by other scholars (Ellsworth, Hildebrand, and Glover 1997; Thomas and Poister 2009).

The “elements of scale” expounds on the three actors that serve key functions in increased engagement of the general public. The first is the *scale of formal organization*, which “indicates the size of the governmental unit which provides a public good.” This is important in that it is indicative of the potential scope of a policy and the potential resources available for the decision-making process. Second is the *public*. Knowing that the role of the general public is consistently the most ambiguous element of public engagement research, this element is an early attempt at clarity. The “public” in this instance is “those who are affected by [a service’s] provision.” A challenge here is that there is no distinction between “public” offered in this definition and “general public” as referenced by Thomas and Poister (2009). The third element is the *political community*, defined as those “actually taken into account in deciding whether and how to provide” a service (Ostrom, Tiebout, and Warren 1961).

The Ostrom, Tiebout, and Warren delineation between the *public* that is affected by a policy and the *political community* that is considered in the decision-making process suggests that public stakeholder engagement is a farce, as “legitimate” involvement would be more apt to consider the two synonymous.

Many of the principles of stakeholder engagement are the applicable in both private and public environments, including external influences on management defined by the environmental factors, and internal influences on management.

Internal influences on private firms include the owners, customers, employees, and suppliers with a direct “stake” in the company, its decisions, and its outputs. The external influences can be further subdivided into two groups – the non-public and the public. The *non-public* entities were among the earliest introduced in literature, dating back to the topic as a subset of strategic management literature, and have remained relatively constant throughout stakeholder research. Among those are (a) competitors, or those providing comparable goods or services; (b) consumer advocates; (c) environmentalists, which gained traction beginning in the 1970s; (d) special interest groups; and (e) the media, which has made the gradual shift from newspaper and radio-based to television and internet-based (Freeman 1984; Smillie and Helmich 1999; Friedman and Miles 2006; Scholl 2001; Stone et al. 2008).

External influences in *public* decision-making involve additional actors and represent the second subset of stakeholder engagement research at this point in the timeline. Of critical importance to this research is Freeman’s notion that public entities play a consequential role in the corporate change process. His framing their role in the “US Business-Government Relationship” supports the idea that the public sector has a non-negotiable role in any institutional decision-making process. In the *Strategic Management* construct, the agency and the decision at hand are influenced by existing policies and actors including: (a) foreign governments with influence on policy regulation and economics; (b) public bureaucracy, including staff, agencies, and executive branch departments, with influence on regulations and economics; (c) “quasi-agencies,” such as the World Bank and IMF, tied into policy constraints

and economics; (d) Congress, Congressional Committees, and Congressional Staff, which drive national policy; (e) state governments and their legislative and executive branches, with heavy influence in jobs and taxes; (f) federal, state, and local courts, which determine product liability and anti-trust regulations; (g) local governments, with influence similar to state government on jobs and taxes; and (h) citizen initiatives that influence social policy (Freeman 1984).

Freeman's dichotomous characterization is important to the broader picture of stakeholder engagement because it clearly articulates the vitality, magnitude, and volume of public sector entities in the decision-making process and distinguishes the responsibilities and primary influences realized by each. Freeman presents this relationship as a web with a private entity at the center. The public/private distinction is heavily pronounced when public policy is the ultimate decision and the public agency is positioned at the center. The network becomes increasingly complex, the number of actors grows, the roles of individual actors shift, and both intra-network and inter-network relationships alter (Prell, Hubacek, Quinn, and Reed 2008).

The post-1980s normative assumption that stakeholder engagement in public sector decision-making is a discipline unique from its private counterpart is the basis for the remainder of this review and critique. A point of contention from the outset has been who/what constitutes a "stakeholder" in the public sector and, more specifically, the role of the public in decision-making efforts.

"Government as Business" – 1990s

In the 1990s, stakeholder research recognized differences between sectors, but directly and consciously applied the influences and practices of private sector stakeholder engagement to public sector decision-making. This is frequently described as "government as business" and become commonplace during this decade. The motivation for this approach is presented in

literature from the era as complexity and lack of responsiveness from public sector agencies when given the benefit of sector distinction and demonstrated success in private sector engagement in previous decades. For example,

A federal agency proposes to allow incineration of wastes at sea, then faces intense opposition in areas where the burns would take place; the same agency contemplates national standards for a chemical, but cannot establish a scientific or political consensus on the seriousness of the health risk or the acceptability of current risk levels; a state agency must establish criteria for siting, designing, and operating facilities that dispose of chemical wastes within its borders when no community appears willing to accept them; a community must decide whether to allow a laboratory to conduct field studies of genetically engineered organisms. (Fiorino 1990)

Advancements in technology and tools resulted in a series of external influences that rendered earlier models superfluous and irrelevant to the circumstances and social conditions at hand. While private sector engagement practices were being directly integrated with public sector decision making, an additional influence became evident. This new force in stakeholder literature was private sector decision making's obligation to corporate social responsibility – a “social contract” between the corporation and society, or “the notion that corporations have an obligation to constituent groups in society other than stockholders and beyond that prescribed by law or union contract, indicating that a stake may go beyond mere ownership.” In response to this social responsibility expectation placed on corporations, many of the definitions and research questions from earlier stakeholder research shifted. The initial intent was direct application of established private sector practices in public sector settings and increasing usage in that context. As the decade progressed and the shortcomings of this direct-application model were realized, a gradual adaptation began to take place (Driscoll and Starik 2004; Jones 1980).

Distinction of Sectors and Development of Public Practices – 2000s

Abandonment of the “government as business” trend began in the late 1990s, moved beyond sector-neutral stakeholder engagement research, and was studied more narrowly within

public administration literature, which itself predated the earliest formal research on stakeholder engagement in the 1960s. It was largely seen as pushback to early public administration literature which proposed that it was impossible to remove political interests in public sector decision-making. The common belief in the discipline's early research was that there was an appropriate level of inclusion of these political interests unique to each process (Ostrom, Tiebout, and Warren 1961).

Beyond the inherent sectorial differences that resulted in the shift of research disciplines, an obstacle faced by this model from the outset was difference in stakeholder/leader understandings of available resources, expectations of participants, and responsibilities of leaders that were engaged in various processes. Survey research has long been plagued by a concept known as "survey fatigue" in which respondents are overwhelmed by lengthy and laborious survey instruments that leave them tired, lethargic, and unengaged. Afflicted by this, results can be of substantially less value to the researcher. In a similar way, this fatigue takes place among overburdened respondents in a research setting; a similar challenge existed during the 1990s phase of public decision-making. Participants were most often unpaid volunteer. The inherent motivation felt by participants differs greatly from the private sector, where stakeholders are shareholders and employees that have financial interests in the decision-making process. The volunteers were often participating in a process with paid facilitators and governmental representatives, and were expected to endure lengthy meetings that were largely one-way information sharing and/or consultation sessions with little opportunity transaction-based, two-way participation processes. Expectations were frequently placed on stakeholders that did not correspond with their desired sense of purpose or non-existent compensation. Even those paid, professional practitioners often develop a sense of "disillusionment" when their commitment of

time and energy renders limited viable outcomes (Freeman 1984; Evan and Freeman 1979; Reed 2008; Rockloff and Lockie 2006).

Acknowledgement of this continued in the research of later decades and ultimately segued into the 2000s era of stakeholder research. For example, Donaldson and Preston (1995) “completely doubt the value and appropriateness of such undertaking because they see the theory as merely one of the (private-sector) firm governed by fundamentally different principles and implications than any public sector organization” (Scholl 2002).

Continued Response to Public Engagement Needs

Having established the four-decade timeline of the maturation of stakeholder engagement since its introduction in scholarly research, it is appropriate to consider the current state of research on the subject in the public sector. This review of literature will address the state of (a) *process-based* research, (b) the *public v. private* research distinctions, (c) increasing demand for *niche and focused policy expertise*, and (d) the state of *fragmented governance* in public sector decision-making.

Process Management Practices

The majority of research-based historical understanding of stakeholder engagement has been the study of the engagement process. While there is extensive literature on the engagement process itself, it is a precursor to the reflective, perceptions-based research that is the focus of this research. Coastal management, and specifically the accepted model of Integrated Coastal Zone Management (ICZM/ICM), involve multiple actors and is conducted with the understanding that these actors “will have different perceptions of the problems at stake.” The motive for this research is that those differences in perception of the “problems” will be echoed

in respective perceptions of the “process” (van de Riet 2003; Van Kouwen, Dieperink, Schot, and Wassen 2008).

References to “the process” prompts thoughts of an interaction, though not necessarily participation (Figure 2.1).

The process of two-way interaction of stakeholder engagement previously defined as a “transaction” or “participation” has four objectives, regardless of the formal structure utilized in the process and without regard for the nature of the decision at hand: (a) “opportunity for input, (b) early involvement, (c) motivated participants, and (d) influence over the final decision” (Dalton 2005). These are the four traits that distinguish the two-way participation model from the one-way interaction models of communication/information sharing and consultation. Dalton’s objectives reflect an advance of practice, as it recognizes “influence of the final decision” as a trait in effective engagement rather than the Ostrom, Tiebout, and Warren (1961) distinction between the public that would be affected and the political community that that commands the greatest influence in the ultimate decision.

While not in the direct scope of this research, it is necessary to at least address research on engagement instruments and tools. Because they are an integral component of engagement efforts and ultimately the post-hoc perceptions of the process itself, section will briefly address literature on *what* leaders want to do and *how* it should be done. While public involvement in environmental decision making has become widely accepted, “how to involve them...remains controversial” (Hildebrand 1997; Webler, Tuler, and Krueger 2001).

In the shift away from the “government as business” model of public sector efforts, two important progressions have been made. First, public engagement in “societal decisions” has become more prevalent amongst public decision-making bodies (Bayley and French 2008).

Second, an increasingly standardized model of approaches that “provide for community participation” with four engagement mechanisms was introduced: (a) a steering committee that makes decisions regarding what is or is not included in an implementation plan; (b) topic groups that address particular issues within the plan, including environmental and natural resource concerns; (c) interaction mechanisms distributed to the broader community to provide intentionally one-way consultation; and (d) open-access seminars/workshops that provide for qualitative discussion and one-way interaction in the form of information-sharing between participants (Bayley and French 2008; Edwards, Jones, and Newell 1997; Fiorino 1990; Reed 2008; Taut 2008).

Further research regarding these topics is necessary, with one of the primary criticisms of existing research being that each mechanism is typically critiqued independently of others, while comparative analyses between mechanisms are rarely conducted. In addressing the intricacies of particular environmental policies, understanding the benefits and drawbacks of particular tools, juxtaposed with one another, would be beneficial for leaders and facilitators (Bayley and French 2008).

The Widening Gap between Public and Private

The current state of public-sector engagement research has recognized that public policy differs drastically from its private counterpart, with different stakeholder constituencies, demands, requirements, expectations, values, and objectives. This disparity was discussed in academic research as early as the late 1990s, with the belief that “...coastal management should ideally be a government-driven process linking private-sector forces with public resources and voluntary action by NGOs [non-governmental organizations] and local communities in an effort to establish and implement mutually agreed upon policy.” While there are recognized actors

from both the private and non-profit sectors in the policy-making process, it is uniquely “government driven” and reliant on *public* resources (Hildebrand 1997).

The stakeholder process is not limited to leader-stakeholder interactions. While the vertical relationship between those actors is important, a second “aspect of planning processes is the way in which participants interact with one another.” This is particularly prudent with the larger number of inherent actors identified in public sector decision making versus inherent actors in the private sector (Dalton 2005; Freeman 1984).

This disparity in actors and the difference in relationship dynamic provide segue into recent literature on the public-private distinction. This is not new, but application of the topic specifically to stakeholder engagement is a recent advent. The most recent of the five phases in the timeline of stakeholder research has prompted a series of models of participation that reflect the unique public-oriented needs.

To achieve process objectives, engagement tools include public hearings, public surveys, negotiated rule making, citizens review panels, workshops, focus groups, electronic forums, and web-polling, among others. Most appropriate is a blending of approaches to adhere to the values of universal empowerment, equity among all members of the public, development of mutual trust, and a learning opportunity for all constituencies. Earlier models rely wholly on particular mechanisms for interaction, but more recent research has indicated that the process could benefit from studies of adaptive stakeholder involvement in different settings, each with well-addressed strengths and weaknesses (Table 2.2) (Fiorino 1990; Taut 2003).

Increasing Prominence of Specialized and Niche Disciplines

The most recent factor in the current state of stakeholder engagement research in the context of this research is the role of discipline-specific concerns, as discussed at length in the

following section of this chapter, in public sector decision-making and stakeholder engagement. Traditional approaches to one-way interaction of communication and consultation and the two-way interaction of participation are under increasing scrutiny by researchers for their shortcomings and inability to adapt to resource management needs. There is increasing demand for “new communication methods to inform and involve the public” in the policy-making process. Specifically, environmental and coastal policy introduces a wide array of fields, including both social and natural sciences that raise expectations in terms of competency that are placed on those participating in the process (Jude 2008).

Demands for opportunity, timeliness, motivation, and influence apply to both leaders and stakeholders and have a more significant inclination to the “informed participation” than the models introduced earlier and introduced in broader and more ambiguous decision-making processes (Dalton 2005; Freeman 1984; Treby and Clark 2004; Glicken 2000).

Fragmented Governance

The current state of public-sector stakeholder engagement is not without challenges of its own. Maintaining the normative assumption of the early 2000’s, public sector stakeholder engagement is a field unto itself, but has been faced with unique concerns and challenges. The prevailing challenge is in the form of fragmentation and accountability. Fragmentation is a legal/authority challenge in that the “typical citizen is not only under the jurisdiction of national, state, county, and city governments, but sometimes also subject to a metropolitan transport commission, a port authority, a sewage or sanitary district, a Soil Conservation District, a pollution control district, a school district, an airport commission, or a metropolitan planning commission or council of governments” (Olson 1969).

Research on private sector decision-making introduces public agencies into the framework of stakeholder engagement became more direct and explicit in subsequent decades. Existing efforts were identified by scholars with one description of the federal government as having “done a much better job in involving the citizen in its decision-making processes that (sic) have either state or local governments” (Neuhauser 1976). While subjective and anecdotal in nature, this observation was further manifested in the 1980’s. Even in later phases of stakeholder research, the differences between levels of government were observed. As recently as 2001, the mandated consistency in federal actions was juxtaposed with the variability that continues to exist in state and local government requirements. Freeman stresses the inherent complexity of public agencies. As he states, “government is not a monolithic entity, and it does not exist in a vacuum.” Instead, there is an obligation to recognize “multiple influences from various levels of government” and respond accordingly (Freeman 1984; Lawrence and Deagen 2001; Olson 1969).

In their study of participation in United States Department of Agriculture Forest Service participation efforts engaging the general public (not identifying as ‘stakeholders’), Germain, Floyd, and Stehman (2001) found that stakeholders generally found the processes in which they participated to be consultation-oriented rather than participation-oriented. While this study recognized the separation of sectors, it remained a study focus on the process itself. This included beliefs of pre-determined decisions, justification of poor decisions, and a façade of public involvement. These qualitative findings are corroborated by the quantitative findings that indicate strong agreement with the statement, ‘Once a project is conceived by the agency, it will use whatever means necessary to reach the point of implementation’ (Germain, Floyd, and Stehman 2001).

This fragmented governance is complex and necessitates a balance of societal “boundaries” of demand for public policies and programs, against the geo-political “boundaries” of the government providing for responding. Among these boundaries are (a) the *type* of government (local, state, central; general purpose, special purpose) with authority to adopt and implement policies in various public fields; (b) the number of governments and their “duplication of functions” and potentially “overlapping jurisdictions”; (c) the autonomy of individual jurisdictions; (d) the capacity and willingness of governments to recognize the “diverse problems” that affect people and areas outside of their geo-political boundaries; and (e) long-standing institutionalized recognition of metropolitan areas as a “crazy quilt pattern” of political jurisdictions entrenched in “organized chaos.” Many of these discontinuities were addressed in early public administration literature as having limited validity and existing as entities within an “intricate ‘framework’ for negotiating, adjudicating and deciding questions” related to the policy process and its subsequent impacts (Olson 1969; Ostrom, Tiebout, and Warren 1961).

As the historical evolution of the discipline has indicated, the accountability concern is cited by scholars who discount the viability of public sector stakeholder engagement as an independent field of study. Researchers note that higher stakes, greater visibility from more stakeholders, and increased tension among inconsistent objectives have made the process of intergovernmental relations increasingly difficult. In many ways, the scholarly criticism of the public sector is more rudimentary. The function of governments, regardless of level, has been described as “duplicative and unsatisfactory,” an “overlapping network,” and overly reliant on the federal government (Olson 1969). Later research recognizes the differences in goals, ideas, and values, and based on process-oriented studies has found that the most desirable action on the

part of both leaders and stakeholders has been to “recognize and value” tensions. (Conlan and Posner 2008; *Community Questions: Engaging Citizens to Address Community Concerns* 2010).

While the policies included in this research will be addressed at length in Chapter 4, an example of fragmented governance and overlapping jurisdiction is in the expansion of the Savannah Harbor to meet the needs of a widened and deepened Panama Canal. Considering only wholly public entities, the project requires agency collaboration from the National Oceanic and Atmospheric Administration (NOAA), United State Department of Commerce, South Carolina Department of Health and Environmental Control, United States Environmental Protection Agency (EPA), United States Geological Service (USGS), the United States Fish and Wildlife Service, United States Department of the Interior, South Carolina Department of Natural Resources, Georgia Department of Natural Resources, and Georgia Department of Transportation (*Savannah Harbor Expansion Project, Status Update* 2011).

Anecdotal evidence supports the adaptive model, proposed by Taut (2005) in response to the shortfalls of earlier mechanisms. As of April 2011, the Stakeholders Evaluation Group of the Savannah Harbor Expansion Project (SHEP) had held (a) 67 *public meetings*, announced in various media outlets with “round-ups” of those meetings were made available by web; (b) forums for *written, online, and verbal comments*, open for a sixty day window (extended from 45 at the behest of stakeholders) and generating 2,558 comments; and (c) a *public workshop* was attended by over 500 participants. Throughout the process, accessibility to participants was an objective. The public workshop, for example, “provided ‘booths’ for each of the “three E’s – engineering, economics, and environment” in order to simplify an admittedly complex process and clearly distinguish between issues affecting different facets of the project. Beyond these public organizations mentioned by process leaders, outreach to quasi-public, non-profit, and

community organizations has occurred with the Georgia Ports Authority (GPA), United Way Federal Campaign, a partnership with Savannah State University, National Engineer Week presentations and displays at local schools, an Earth Day booth at Forsyth Park in Savannah, and a float in the city's Martin Luther King, Jr. Day parade (*Savannah Harbor Expansion Project, Status Update 2011*).

An added challenge to the fragmentation is the lack of consistency in role and scope of the individual components. This includes growth in governmental services and functions, changing geographic scope that includes both direct service impacts within geo-political boundaries and broader socio-economic and cultural impact beyond jurisdictional borders, and perpetually pressure for more restrictive revenue-generating mechanisms and more effective and efficient use of existing financial resources (Margolis 1970).

Despite these challenges and contrary to the reports of media in the United States, research regarding environmental policy development and implementation in European Coastal Zone Management (CZM) has indicated that the local level is the most appropriate venue for the policy process to take place. In achieving the stakeholder value of empowerment, the local community proves to be the "lowest appropriate institutional level" (Edwards, Jones, and Nowell 1997; Reed 2008)

The roles assumed by differing levels of governmental entities play a vital component of this research, as different policy initiatives are deliberately included to reflect these differences, but this survey indicates that these distinctions have been present and observed for many decades. He attributes this to "the reduced influence of special interests, comparative to the interests of the public at large" and acknowledges that the *federal* government having superior engagement compared to the *local* government is somewhat counter-intuitive. A statistic

referenced by Neuhauser in his 1976 presentation is particularly prudent to this research, as at the time, less than 17% of “public participation strategies” in Georgia provided an opportunity to the general public to be involved in the process (Caldwell 1976; Neuhauser 1976). This inclination toward federal practices is not necessarily a constant. Adams (2004) found that in recent decades, there has been a movement toward the American model of 1960s public management and the modern revived European model of the 2000s, reliant on “local knowledge” or “community knowledge” that is more adequately informing local policy and bridging the fragmentation that had existed between the three sets of actors in local environmental policy development. The result is a belief that “...purely ‘municipal’ affairs of a local jurisdiction, presumably, do not create problems for other political communities” (Ostrom, Tiebout, and Warren 1961).

The network model was later applied specifically to environmental management. The five necessary principles are: (a) horizontal integration, mitigating duplication of efforts by different stakeholder or governing groups; (b) vertical integration, ensuring knowledge of both rights and responsibilities in a federalized model of decision-making; (c) legitimate influence of scientific demands, recognizing the interdependence of each actor; (d) integration of all actors, acknowledging and responding to the interdisciplinary of the environmental policy process; and (e) education and research programs, maintaining dialogue between actors and continuing education efforts throughout the process (Sorensen 1997; Wescott 2004).

Environmental and Natural Resource Concerns

Public policy is centered on sensitive issues regarding public goods. These include education, social welfare, healthcare, and others. Another, and the focus of this research, is environmental and natural resource policy. With the theoretical acknowledgement that there are inherent differences between the private and public sector stakeholder engagement processes, it

is necessary to further subdivide the public sector arm to meet demands and policies within specific niche disciplines.

Three prevailing challenges distinguish stakeholder engagement in environmental/natural resource policy from other policy fields: (a) the need for technical knowledge in specific fields; (b) competing values for inherently limited and irreplaceable resources; and (c) assurance from decision-makers that the scientific actors are not driving the process without regard to others. The specific knowledge of environmental and natural resource concerns takes the form of disciplines such as biology, ecology, chemistry, and physics, among others. These are colloquially referred to as the “hard sciences.” Technical capacity in these hard sciences does not offset the need for informed participation in the “soft sciences” of political science, history, economics, public policy, and other social sciences. These hard science needs do not discount continued lay engagement and socio-economic considerations. There is limited research and process models that exist to ease this increasingly delicate balance while ensuring effective engagement. What the limited and relatively recent research has indicated is that the “linear” information dissemination about the technical aspects of policies is “largely discredited” and that there is need for a “decision-making system [composed of] both expert and non-expert stakeholders” (Chuenpagdee, Knetsch, and Brown 2001; Dalton 2005; Quinn and Rohrbaugh 1981; Quinn and Rohrbaugh 1983; Treby and Clark 2004; Tregunno et al. 2004).

A recent challenge has been a focus of engagement process research on these environmental and natural resource policies. The scientific matters addressed by environmental and natural resource policy have an inherent complexity that requires unique approaches to information sharing, learning, and education. Coastal policy, for example, is credited with focusing on “complicated management documents and engineering plans” and having a pressing

need for “new techniques to communicate complicated coastal information” (Bayley and French 2008; Jude, Jones, Watkinson, Brown, and Gill 2007; Reed 2008; Rockloff and Lockie 2006).

Specifically as it relates to coastal environments, “...flooding, coastal erosion, and loss of livelihood of coastal communities” have been persistent concerns that require more informed, deliberate, and permanent policy development and implementation. This relates directly to the fragmentation concerns that afflict public policy development and place unique demands on the coastal environments. Those who have the most intimate familiarity with coastal environments and the challenges faced by coastal communities are oftentimes the best equipped to address those demands in an informed participation model. Consequently, localized decision-making would be most desirable (Edwards, Jones, and Newell 1997; Glicken 2000; McFadden 2007; Neuhauser 1976; Freeman 1984; Treby and Clark 2004).

Environmental demands are not limited to coastal areas, but rather include natural resources in all forms. One such instance would be areas in or near state/national forests. These areas are under the jurisdiction of their respective government, but communities and residents “have a legitimate interest in those forests” and are described in late-1990s literature as “co-owners.” Applied to the “government as business” research and process model, those non-residents that utilize the forests for recreation are not included in the process. This distinction is also seen in research focused on the involvement of local versus non-resident populations as ‘stakeholders.’ To that end, “one of the advantages to local participation is that these individuals presumably know the most about the area in question.” Though, “from the agency perspective, involving only local residents is problematic for issues involving public land and water resources, because it restricts or eliminates participation of the citizen-owners geographically distant from the watershed, disenfranchising a majority of the citizens” (Behan 1988; Griffin

1999). This mimics several of the definitions of stakeholder whose ambiguity has proven problematic from the outset of stakeholder research. Among those that corroborate this belief are stakeholders as “those whose welfare is tied with a company” (Palgrave et al. 1992); those “having some legitimate, non-trivial relationship with an organization [such as] exchange transactions, action impacts, and moral responsibilities” (Brenner 1995); or those “depending on the firm in order to achieve their personal goals” (Steadman and Green 1997). A clear distinction is drawn between those on the “inside” and those on the “outside” of decision-making without regard to sector or firm objective. Other sensitive areas include earthquake prone areas, flood zones, and vulnerable watersheds (Fairfax 1975; McClosky 1998; Wood, Good, and Goodwin 2002).

Public participation in environmental policy-making has become increasingly common and growth in participation in a niche policy area will require maturation of much of the existing research in environmental policy engagement has been. Much like broader policy fields, environmental policy decision-making has been the subject of a substantial amount of stakeholder *process* research with comparatively little in the *perceptions* of process (Johnson 2009).

As American natural resource policy development has moved away from the 1990s era notion of “government as business” and toward a model of differentiated public engagement, similar trust issues have confronted policy-makers. The belief that “the role of science in environmental management is to turn scientific facts directly into policy decisions or actions” without consideration of other interests spread throughout the United Kingdom in the 1990s and British researchers have been combatting that “myth” for several decades. American researchers are only more recently responding to this misconception and adapting their work to follow suit,

acknowledging specific concerns about the level of activity members of the public should have in environmental policy processes and ideal means of communication to achieve the desired level of activity (Fletcher 2001; Jude 2008; Treby and Clark 2004).

In response to these challenges, specialty models have been developed and introduced. While developed for “marine resource management,” a four-facet process developed in 2005 has wider applicability in these discipline-specific policies. Differing knowledge and areas of expertise that exist among pockets of the population motivate this model. The first facet addresses resource management by hosting negotiations between leaders and decision-makers and stakeholder *representatives*, rather than stakeholders at large. Second are land management concerns, best addressed by small-group negotiations that engage *all* affected stakeholders with leaders and decision-makers. Legal and judicial aspects of environmental and natural resource management require specific awareness and training that are best addressed through public hearings that intentionally serve as more information-sharing rather than participatory forums. The final facet is the public management necessary for the civic process. This is the venue to meet legal obligations for stakeholder engagement and offer the public at large the opportunity to participate. The primary objective of this component is to meet minimum requirements, but there is an expressed interest in meeting the needs of the public without rendering the interaction too rudimentary and potentially insulting the intelligence of the participants, or overly complicated and giving the impression of the intent to intimidate or patronize the audience (Morf 2005).

This balanced engagement of expert/non-expert stakeholders is not universally accepted. Coastal managers and decision-makers are often expected to include the non-expert stakeholders in the policy process, as proposed by the third and fourth facets of Morf’s model, but are reluctant to do so due to the lack of informed participation in a two-way, transactional form. The

information necessary for informed decision-making is described as “lengthy documents” and “engineering plans” that are “difficult to obtain and understand.” This yields three schools of thought among scholars of public-sector stakeholder engagement: (a) this effort is both unnecessary and wasteful of limited public resources; (b) that the engagement effort in these regions and related to these natural resources *should* serve as a one-way, information-sharing model; and (c) that the decision-making process should be left at the discretion of informed scientific and governmental decision-makers with the intentional exclusion of broader groups of stakeholders, as defined by Dalton (Dalton 2005; Dalton 2006; Glicken 2000; Jude, Jones, Watkinson, Brown, and Gill 2007; McFadden 2007; Treby and Clark 2004).

The Savannah Harbor Expansion Project (SHEP) again offers an anecdotal example of impact analysis requiring some degree of technical expertise. Among the coastal Georgia policies that are included in the empirical research is the expansion of the Savannah Harbor from its current 42’ depth to as deep as 48’ to accommodate larger ships traversing the expanded Panama Canal. Expansion of the harbor in Savannah would involve a number of “natural science” questions acknowledged by the United States Army Corps of Engineers (USACOE), including (a) the impact on wetlands; (b) the quality of water in the harbor being used by the City of Savannah; (c) the quality of sediment; (d) the disposal of the dredged material from the river; (e) the impact on fisheries; (f) the impact on cultural resources; (g) the potential impact on threatened and endangered species; and (h) the impact on groundwater (Letter from USACOE, 15 November 2010). The research scientists that have the most extensive understanding of these issues are vital in the decision-making process, particularly in a coastal region, for their ability to ensure that “policies [are] appropriately identified and correctly interpreted” (Helvey 2004).

Distinguishing public environmental and natural resource policy strictly based upon these “hard science” disciplines has been demonstrated as still largely over-simplified, given the complexities associated with public policy as a field of study. Beyond these are the secondary concerns of the socioeconomic implications of these resources.

Because of its relative youth as a research sub-discipline of public stakeholder engagement, environmental policy is in the midst of developing clarity and ongoing maturation. The core belief that appears throughout literature was synopsized by a practitioner participating in a qualitative study of environmental policy development who observed the need for “a system that works for the sea, not for the government administrative system” (Ritchie and Ellis 2010).

Existing Research on Post-Hoc Perceptions of Stakeholder Engagement

Formal research on perceptions of stakeholder engagement is limited. Existing literature on the topic focuses either on a decision-making within a single agency or policies made in broad fields, such as education, healthcare, and transportation. Following are six examples of empirical research that address perceptions of engagement. Each of these influences this research, subsequent findings regarding perceptions of engagement, and opportunities for further research.

These six examples of previous research include: (a) perceptions of student-athlete advisory committees in the NCAA; (b) perceptions of community engagement processes in higher education institutions; (c) understanding of roles in environmental policy development; (d) perceptions of effectiveness of food labeling policy; (e) perceptions of engagement efforts in statewide education reform in Colorado; and (f) perceptions of quasi-public organizations.

National Collegiate Athletic Association (NCAA) Student Athletes (Hendricks 2011)

An objective of the NCAA is to provide “a way to protect student athletes” at the collegiate level, having oversight of 23 sports and 430,000 student athletes at 1,066 active member

institutions (“National Collegiate Athletic Association” 2012). The organization describes itself as a “member association,” composed of both public and private institutions of higher education, and having an “executive committee” that is made up of administrators, faculty, and student-athletes from member institutions. While not a strictly public entity, there is significant public-sector participation and involvement.

Using both the Stanford Research Institute (1963) and Freeman (1984) definitions, a core constituent and stakeholder within the NCAA is the student-athlete. Respectively, this is the group “without whose support the organization would cease to exist” and “who can affect or is affected by the achievement of the firm’s objectives.” Because of the affect and participation in governance, primary research was conducted in 2011 to examine the “perceptions of stakeholder salience” in advisory committees of student athletes within the organization (Hendricks 2011). More specifically, the research objective was examination of influence advisory committee members perceive themselves has wielding.

The sample included both student members of the committees and administrators/academic faculty members that provided support and oversight for the group. The survey was administered without reference to a specific program or initiative within the NCAA and was intended to gauge the “perceptions of salience” or “the degree to which managers give priority to competing stakeholder claims.” Hendricks’ research makes specific reference to the Mitchell, Agle, and Wood three dimensions of salience (power, legitimacy, urgency) and applied them to three components of NCAA operations: (a) rules; (b) departmental policies; and (c) community relations. The aggregate of respondents perceived the strongest level of influence in rule-making and the weakest level of influence in departmental policies. With the focus on a single organization and without focus on a particular program/initiative, “perceptions of influence were

tempered by weak perceptions of involvement” by virtue of an internal framework with lack of focus (Hendricks 2011; Mitchell, Agle, and Wood 1997).

The resulting categorical recommendations from Hendricks’ research include: (a) levels of involvement; (b) structural support; (c) definition of priorities; and (d) participation in broader governance (Hendricks 2011).

Organizational Value and Propensity to Engage (Swanson 2009)

A second example of previous research on perceptions of engagement took the opposite approach, analyzing a broader policy field without regard to organization or concentrated technical competency in one of the “hard science” disciplines. Specifically, this research focuses on engagement in institutions of higher education (Chuenpagdee, Knetsch, and Brown 2001; Dalton 2005; Treby and Clark 2004; Swanson 2009). Methods include both quantitative and qualitative techniques, though focused on altered perceptions based on strategies. Like the study on the NCAA, this research expressed interest in the engagement practices of the broader institution and did not identify or require consideration of a specific project.

Both quantitative and qualitative measures indicated a positive relationship between belief that an “institution generated social or economic value” and respondents who self-reported higher levels of involvement within their respective, yet unidentified, organizations. The degree of the social and economic value was also measured, with higher perceived value among respondents based on particular engagement strategies (Swanson 2009).

The gap in post-hoc perceptions was noted, but specifically in regard to its relationship with clearly identified objectives and actions. Swanson’s study of higher education policy, the proposed research question was whether or not stakeholders would engage differently in an engagement process based on their beliefs about the role of the institution in the community.

Rather than perceptions about the engagement process, the focus is the perceptions of the institution and the potential change of perception that occurs over the course of the engagement process. This would most effectively measure the change of stakeholder perceptions based on the objectives of information sharing, community cohesion, and practicability (Hatherell 2007; Reed 2008; Swanson 2009)

Understanding of Roles (Bayley and French 2008)

A third example of previous research related to the topic of research on perceptions of engagement addresses the differing understandings of roles that exist between leaders of environmental policy development and managers of environmental policy implementation. This research was conducted in the current phase of American engagement research (post-“government as business”) and reflects the increasing relevancy of “hard science” disciplines. Its focus was bio-waste risk mitigation, public outreach, and improvement of sustainability programs in waste management at the local level.

This research indicates a significant disparity in perceptions of both role and self by respondents. Those residual and waste managers that are charged with implementing bio-waste policies indicated a lack of willingness to forego any control or responsibility in implementation in the name of stakeholder engagement.

What the findings indicate is that by engaging stakeholders and acknowledging the “hard” science/”soft” science divide, bio-waste managers can (a) adequately prepare for inevitable disagreements, (b) identify third-party observations of opportunities for improvement, (c) mitigate the vulnerability of their management practices to policy changes, and (d) develop an enhanced sense of confidence in their own work. The result is greater community cohesion,

identified as a primary objective of engagement processes (Bayley and French 2008; Beecher and Goldstein 2005).

Food and Drug Administrative Labeling Policy (Albert 2007)

A fourth example is a study of development of a policy addressing the labeling of genetically modified foods by the United States Food and Drug Administration (FDA). The study was motivated by the policy differences between the United States, where labeling of these modified foods by producers was voluntary, and the European Union where labeling of these products was mandatory. The American component of the study focused on a single policy under the auspices of a single organization, and was motivated by an “information asymmetry between sellers and buyers” of these goods.

The research was wholly qualitative and included interviews with individuals representing “the biotechnology industry, conventional and organic farmers, food manufacturers, critics of agricultural biotechnology and consumer rights advocates, as well as US officials and researchers.” Interviews with these stakeholders took place 2-3 years after the adoption of the policy and focused on perceptions of the public consultation process of revised labeling policies.

The research indirectly addressed the maturation of stakeholder research in its two most recent phases, describing the food industry’s concerns in the labeling policies “business risks in markets where consumers were skeptical” and American food producers not voluntarily labeling their products as having genetically modified ingredients. This practice recognizes the difference between the market-oriented concerns of the private sector and the public sector concerns of equity of information between consumers and producers. The interviews indicated the perception amongst American stakeholders that the existing engagement practices were “flawed” and that the “technical and legal parameters” for food labeling were complicated and

oft misunderstood by those without expertise in those fields. It was also found that the policy revision process served to create conflict *within* the technical and legal communities. Examples include controversy about definitions of genetic modification technology and what activities warranted mandatory labeling (Albert 2007).

Education Reform in Colorado (Woempner 2008)

This example focuses on perceptions of stakeholder engagement education reform in Colorado. When compared to environmental and natural resource policies, education is more universally applicable than more localized environmental and natural resource policies.

Diversity of respondents in this study was defined as geo-political and demographic differences but all reflecting upon their perceptions of goals, strategies, and challenges in Colorado's education reform.

Seen in this research were general stakeholder perceptions of lack of (a) legislative; (b) social; (c) professional; and (d) financial competencies in administration. In regard to programs, perceptions among respondents were that college and work-readiness programs in high schools were insufficient, students were not being treated as individuals in the classroom, the existing emphasis on standardized testing was hindering student growth and progress, and that the fundamental needs in education reform in the state were foundational support rather than immediate action on function or structure. While gauging the perceptions of stakeholders, this study was biased based on pre-conceived notions on the state of the existing secondary education model, rather than reactions to involvement in a formal engagement process (Woempner 2008).

Quasi-Public Agencies in Intergovernmental Behavior (Gaynor 2011)

A final example of related previous research on perceptions of stakeholder engagement analyzed the use of Community Development Corporations (CDCs) as quasi-public entities

working in conjunction with general purpose governments to address challenges in urban communities. Among the most common goals of these organizations are to “rebuild and revitalize communities that suffered from social unrest,” “react to the lack of government or inadequate programming,” and address “the economic and social maladies of urban communities.” The interests of the CDC are often general, broad, and ambiguous and require little technical knowledge to be competently addressed. The primary actors in these organizations are residents, local elected officials, and local government administrators.

A commonly used measurement in engagement literature is the “ladder of citizen participation,” originally composed by researcher Sherry Arnstein in 1969. This typology was generated at a time when the public sector was in the infant stages of attempting formalized stakeholder engagement research and practices that had been introduced in the private sector nearly ten years earlier. This “ladder” is a linear continuum indicative of increasing levels of stakeholder engagement with the extremities described as “passive dissemination of information”/“manipulation,” and “active engagement”/“citizen control.”

Like this dissertation, the primary method in Gaynor’s research on perceptions of CDC stakeholder engagement is Q methodology. This provided a balance between objective quantitative measures and subjective qualitative indicators. Respondents in this study were intentionally limited to stakeholders and their perceptions of the “role CDCs play in fostering resident participation in local government.”

Gaynor’s major findings were that: (a) community stakeholders believe that CDCs are working to maintain current engagement practices; (b) stakeholders believe that CDCs should work to encourage two-way participation; and (c) there should be increased opportunities for engagement of leaders and stakeholders. New direction in theory development and the lack of

consensus in existing organizations were acknowledged as the two most substantial shortfalls of existing engagement processes. The results of this research are an evaluation of the process itself, rather than the *perceptions* of the process that are the focus of this dissertation (Arnstein 1969; Gaynor 2011; Reed 2008).

The findings of these six examples influence the research in this dissertation, but stress differing traits. This research includes respondents interacting with different policy decisions, different levels of government, different forms of governance, interaction with multiple organizations, and specialized “hard science” policies. This is a combination of factors not present in any existing research.

Chapter Summary

The lack of uniform definition, particularly in the term “stakeholder,” is a burdensome challenge to research on engagement practices and theory. Specifically, the variation in the use of the term is large (59 peer-reviewed research definitions identified in this study) and practitioner, participant, and other non-academic interpretations of the term are inconsistent. Because a common interpretation of the term cannot be assumed, this research is particularly sensitive and places multi-methodological expectations for accurate assessment.

This obstacle has the potential to prevent subsequent research on engagement from taking place and/or hinder the findings of that research. To combat this, a functional definition of the term is used in this research and the understanding of the term by participants is considered in the qualitative data collection. Ongoing responses to engagement challenges have remained ambiguous and disagreeable among researchers because of this existing lack of definition and congruence. Changing practices in process management, the differences inherent to public and private decision-making, the desire and need for specialized knowledge and expertise, and a

structural understanding of government authority and limitations are all vital to engagement, but all vastly different when framed by differing definitions of who/what actually constitutes a “stakeholder.”

The impact of the definition does not end with the disparity in responses to these four challenges, but instead further affects both theories of stakeholder engagement and ultimately the post-hoc perceptions that are the focus of this research.

Developing a single and universal definition for any of the terms identified in this chapter, most notably “stakeholder,” is not plausible. In response, the assertion of a functional definition and consistent application and framing of that definition are vital to research on the topic. This is necessary in both existing procedure-based research and in this perceptions-based research. In a practical sense, this definition has direct impact on the response to obstacles, defining the values held by the individuals/groups determined to be stakeholders, the competencies necessary for informed participation and policy development, the objectives of a particular engagement effort. From a theoretical standpoint, this definition serves to assert the differences between the interests and concepts. Without the functional definition, the distinctions and relationships between theoretical frameworks lack clarity and the value they hold in continued research is mitigated.

Table 2.1: Definitions of “Stakeholder”

Functional definition for this research:		Source/Year
<i>“resource users, scientists, conservationists, government and nongovernment organizations, and the general public...[that] can contribute positively to management processes and may even benefit from such processes”</i>		<i>Dalton 2006</i>
Historical Definitions:		Source/Year
1	“Those groups without whose support the organization would cease to exist”	Stanford Research Institute (SRI) 1963
2	“The objectives of the firm should be derived balancing the conflicting claims of the various ‘stakeholders’ in the firm...The firm has a responsibility to all of these and must configure its objectives so as to give each a measure of satisfaction”	Ansoff 1965
3	Those who “have a stake or claim in the firm”	Evan and Freeman 1979
4	Those who “benefit from or are harmed by, and whose rights are violated or respected by, corporate actions”	Evan and Freeman 1979
5	Those who “can affect the achievements of an organization’s objectives to who is affected by the achievement of an organization’s objectives (Wide Definition)	Freeman and Reed 1983A
6	Those “on which the organization is dependent for its continual survival” (Narrow Definition)	Freeman and Reed 1983B
7	“Any group or individual who can affect or is affected by the achievement of the firm’s objectives.”	Freeman 1984
8	“The only group to whom management need be responsive.”	Freeman 1984
9	“‘Claimants’ who have ‘contracts’”	Cornell and Shapiro 1987
10	Those who “can affect” or who “is affected by business”	Freeman and Gilbert 1987
11	Those “without whose support the organization would cease to exist”	Bowie 1988
12	“Groups to whom the corporation is responsible”	Alkhafaji 1989
13	“Individuals or groups with which business interacts who have a stake or vested interest in the firm. Asserts to have or may have more of the kinds of stakes in business...may be affected or affect. Power and legitimacy.	Carroll 1989
14	“Contract holders”	Freeman and Evan 1990
15	“Groups that have a vested interest in the survival of the firm.”	Alkhafaji 1989, cited by Scholl 2001
16	“All those who have an interest in the firm’s survival”	Low 1991
17	“people who can help or hurt the corporation”	Miller and Lewis 1991
18	Those who “have an interest in the actions of an organization and have the ability to influence it”	Savage et al. 1991
19	Those “in relationship with an organization”	Thompson, Wartick, and Smith 1991

20	“Constituents who have a legitimate claim on the firm... established through the existence of an <i>exchange relationship</i> . They supply ‘the firm with critical resources (contributions) and in exchange each expects its interest to be satisfied (by inducements)’”	Hill and Jones 1992
21	“All parties who will be affected by or will affect [the organization’s] strategy”	Nutt and Backoff 1992
22	Participants in “the human process of joint value creation”	Freeman 1994
23	“The firm is significantly responsible for their well-being or they hold a moral or legal claim on the firm.”	Langtry 1994
24	“Passive stakeholders who have a moral claim on the company not to infringe liberties or inflict harm”	Mahoney 1994A
25	“...active stakeholders... whose claims are more in the nature of welfare rights”	Mahoney 1994B
26	“Investors who provide specific capital or opportunity capital to a business”	Schlossberger 1994
27	Those who “interact with and give meaning and definition to the corporation”	Wicks, Gilbert, and Freeman 1994
28	“All parties who have contributed inputs to the enterprise and who, as a result, have at risk investments that are highly specialized to the enterprise”	Blair 1995
29	Those who “are or which could impact or be impacted by the firm/organization”	Brenner 1995
30	“Any person group or organization that can place a claim on the organization’s attention, resources, or output, or is affected by that output”	Bryson 1995
31	“Legitimate claims”	Calton and Lad 1995
32	Those who “have, or claim, ownership rights, or interests in a corporation and its activities”	Clarkson 1995
33	“Those individuals with explicit or implicit contracts with the firm”	Donaldson and Preston 1995A
34	Those “identified through the actual or potential harms and benefits that they would experience or anticipate experiencing as a result of the firm’s actions or inaction”	Doanldson and Preston 1995B
35	“Groups or individuals with (a) the power to affect the firm’s performance and/or (b) a stake in the firm’s performance”	Jones 1995
36	Those who “interact with the firm and thus make its operation possible”	Nasi 1995
37	“All those with a stake in the decisions that are taken concerning coastal resources and uses. In particular, it is the public who are often left out of this equation.” (Speaking specifically to participants in coastal governance)	Ellsworth, Hildebrand, and Glover 1997
38	A “legitimate or urgent claim on the corporation or the power to influence the corporation”	Mitchell, Agle, and Wood 1997
39	"...who [or what] really counts"	Mitchell, Agle, and Wood 1997

40	Those “depending on the firm in order to achieve their personal goals and on whom the firm is depending for existence”	Steadman and Green 1997
41	“Those who have an interest in the company (so that the firm, in turn, may have an interest in satisfying their demands)”	Argandona 1998
42	“People or small groups with the power to respond to, negotiate with, and change the strategic future of the organization”	Eden and Ackermann 1998
43	“Everyone in the community who has a <i>stake</i> in what the company does”	Frederick 1998
44	“Those individuals or groups who depend on the organization to fulfill their own goals and on whom, in turn, the organization depends”	Johnson and Scholes 1999
45	Those with “an interest for which a valid normative claim can be advanced”	Reed 1999
46	“Those groups or individuals with whom the organization interacts or has interdependencies and any individual or group who can affect or is affected by the actions, decisions, policies, practices, or goals of the organization”	Gibson 2000
47	Those “which are put at risk and would experience costs if the firm fails or their relationship with the firm terminates” and who “have power over an organization”	Kochan and Rubinstein 2000
48	Those with “a direct influence on organizational performance and survival”	Scott and Lane 2000
49	“Moral actors,” as “relationships cannot be reduced to contractual or economic relations”	Hendry 2001
50	“Parties affected by an organization”	Lampe 2001
51	“Constituencies who have explicit or implicit contracts with the firm”	Ruf et al. 2001
52	“...individuals and collectives whose interests are thereby affected both negatively and positively”	Cragg 2002
54	“Participants in a business (who) have some kind of economic stake directly at risk”	Orts and Strudler 2002
55	Those who have “a basic stake, whereby stakes can be that of fair economic opportunity, a stake of authenticity, or one of political equality”	Reed 2002
56	Normative stakeholders are “whose benefit should the firm be managed”	Phillips 2003A
57	Derivative stakeholder have “potential to affect organization and its normative stakeholders”	Phillips 2003B
58	“persons, groups or organizations that must somehow be taken into account by leaders, managers and front-line staff”	Bryson 2004

Source: Primary literature review and previous compilation by Friedman and Miles (2009)

*Shading to distinguish decades

Table 2.2: Characteristics of Engagement Mechanisms

Mechanism	Direct/Amateurs	Share Authority	Discussion	Basis of Equality
Public Hearings	Yes	No	Limited	No
Initiatives	Yes	Yes	Potential	Some
Public Surveys	Yes	Limited	Unlikely	No
Negotiated Rule Making	Unlikely	Yes	Yes	Yes
Citizen Review Panels	Yes	Limited	Yes	Some

Source: Fiorino 1990

Figure 2.1: Directional Context of Participant Interactions

Leader → Stakeholder “Communication”/”Information-Sharing”
Leader ← Stakeholder “Consultation”
Leader ↔ Stakeholder “Participation”
Sources: Jude 2008; Neuhauser 1976; Reed 2008

CHAPTER 3

STAKEHOLDER TYPOLOGIES AND THEORIES

The objectives of this chapter are two-fold – (a) the presentation and discussion of three typologies of stakeholder engagement, based upon a hierarchical model of values, competencies, and objectives and (b) the analysis of the four prevailing theories of stakeholder engagement.

Based on the definitions, historical context, the natural science concerns, existing post hoc perceptions-oriented from Chapter 2, as well as the three engagement typologies, the final section will present the four prevailing theories of stakeholder engagement: (a) collaborative governance, (b) co-production, (c) deliberative democracy, and (d) citizen democracy. Much like the definitions of “perceptions,” “stakeholder,” and “participation,” understandings of each of these four theories vary greatly between researchers and at different points in time since the first venture into formal stakeholder engagement research in the 1960s. This focus on stakeholder theory and its role in public policy development will instill the vitality of “preferences and values through shared modes of political augmentation” and ultimately better equip public leaders in the policy development, implementation, and evaluation processes to address the needs of participants (Olson 2011).

Ultimately, the definitions and historical context, the applied research typologies, and the engagement theories meet differing needs. In many instances, various combinations of these facets complement each other and/or structural models and could potentially achieve similar ends. In other instances, there is contradiction that forces public leaders to consider multiple options in the face of unique policy processes. Conflict is a necessary element of the policy and stakeholder engagement processes and though often carrying negative connotation, it is not necessary the case. Differing policy themes have differing needs. In the case of the policies

included in this research, the engagement process for a large scale deepening of a harbor with extensive multi-jurisdictional implications differs greatly from a localized waterfront corridor redevelopment.

Values, Competencies, and Objectives Typologies

The first objective of this chapter is to integrate the functional definitions of key terms, the evolution of research in stakeholder engagement, and the unique demands of environmental and natural resource public policy (Figure 3.1). The traditional model of government decision-making has been a hierarchy focused on preservation of power with the mindset that there is a fixed amount of “power” in any given process resulting in a zero-sum game. The shortcomings of this model have been thoroughly studied and presented in earlier research. Qualitative research has indicated that if a planning process is “led from above,” it is oversimplified and not apt to achieve stated objectives. There has been a scholarly shift away from hierarchical models of decision-making toward more network-oriented research for broader inclusion and more effective management of public sector constituencies. For that reason, there is a necessary distinction between a hierarchy of *decision-making* and hierarchy of *influences* that better facilitates network-type decision-making. This resembles the overall objective of distinguishing between research of the *stakeholder engagement process* and research on the *post-hoc perceptions of the stakeholder engagement process* in this dissertation (Clarke and McCool 1985; Cyert and March 1963; Kearney et al. 2007; Ritchie and Ellis 2010; Scholl 2001; Songorwa et al. 2000).

The most suitable way to connect these practical influences on stakeholder engagement to the theoretical models that have been developed and debated since their emergence in the 1960s is a gateway in the form of a proposed hierarchy of influences (Figure 3.1). This typology

defines four core values that exist in stakeholder engagement theories; three competencies necessary for informed participation and decision-making; and “on-the-ground” objectives of the policy process (Reed 2008; Shen 1975; Bayley and French 2008).

Values Typology (Reed 2008)

The interactions typology gives heed to the stakeholder values component of the proposed hierarchy. These values in public-sector engagement are a) empowerment, b) equity, c) trust, and d) learning. These values necessitate interaction between the actors in the policy-making process. This includes not only interaction between leader-and-stakeholder, but is inclusive of stakeholder-to-stakeholder and leader-to-leader interactions (Reed 2008).

Reed’s values typology was complemented three years later with four elements of “shared motivation.” Complementing empowerment is the element of *commitment*. The definition of “empowerment” is similar to “informed participation,” in that it includes both rights *and* responsibilities. By responding to both an entitlement and an expectation, participants are demonstrating commitment to the decision-making and policy processes. Ensuring equity in the public policy process is an act of exhaustive civic engagement. This provides the engagement process with an enhanced sense of *legitimacy*. Without the reinforcement of community action representative of the “resource users, scientists, conservationists, government and nongovernment organizations, and the general public” identified by Dalton as stakeholders, the resulting decisions have limited legitimacy in the broader public sphere. The value of trust is elaborated upon and further honed as *mutual trust*. The term “mutual” reinforces the theoretical belief in two-way interactions that define “participation.” Learning is reliant on *education* and requires proactivity on the part of both the leader or expert that has technical knowledge of a topic and the stakeholder interesting in furthering their own knowledge of the topic (Colman

1988; Dalton 2006; Emerson, Nabatchi, and Balogh 2011; Huxham and Vangen 2005; Putnam 2000; Putnam, Leonardi, and Nanetti 1993)

Competencies Typology (Shen 1975)

These four values of empowerment, equity, trust, and learning are (to a degree) prioritized and require a combination of competencies that vary from actor-to-actor and from process-to-process. All policy processes require a three-dimensional balance of competency in the a) practical science, b) civic science, and c) cultural science (Shen 1975). This same concept was framed differently by Ellsworth, Hildebrand, and Glover (1997) as an increasing demand for involvement that “serves to integrate social, economic and environmental aspirations and values” in coastal policy decision making. As a hierarchical model, the determination of needs and influencing factors in a stakeholder engagement process is formulaic. This competencies typology is informed by the overarching values and directive of the practitioner-level objectives (Jaakson 2010; Yuan et al. 2009).

There is a disproportionate focus on the competencies, as previous research on both process and post-hoc perceptions of process have indicated that competencies have the greatest capacity to inform a participant’s perceptions about activities, behaviors, and attitudes. This warrants heightened focus as those perceptions are the subject of this exploratory research.

Competency in a variety of fields has become increasingly necessary. The competency typology manifests itself in three dimensional plane of three types of science: (a) practical science, largely understood to be the natural sciences; (b) civic science, which entails governance, economics, decision-making, and policy processes; and (c) the cultural science, which is less education-based and more driven by the characteristics, history, political climate, social interactions, and local color of a community. These three proficiencies result in a more

informed understanding of “scientific and technical know-how,” the ability to “bring their common sense to bear” upon their representatives and more deeply understand the democratic process, and to “bridge the widening gulf between the scientific and humanistic cultures,” respectively (Shen 1975). By expecting actors to acknowledge and act upon their responsibilities by developing a technical competency on the policy area, educating themselves on the scope of the proposed policy, and balancing the social dynamic as they perceive it to exist, leaders are encouraging informed participation; cogent arguments; and an efficient use of time, money, and other resources (Dalton 2005).

The interdisciplinary nature of stakeholder engagement is evident in the Shen (1975) “informed participation” model in that each of the three forms of science literacy proposed engages a collection of academic fields and research topics. Civic science, in particular, has been explored at length and previous research has treated the term as synonymous with “participatory, citizen, stakeholder and democratic science” (Bäckstrand 2006). The Shen and Bäckstrand three-dimensional models are complemented by categorizations of actors, behaviors, authorities, and other traits, proposed in Table 3.1/Figure 3.2. The three-dimensional competency model acknowledges that science, democracy, and social dynamics do not necessarily share values and their demands do not necessarily correspond with one another, but recognizes an inherent relationship between the three in stakeholder engagement in public policy development. For this reason, absolute competency in all three sciences is not viable. In practice, this has been corroborated by findings that participants share differing beliefs on the most effective ways for a process to address “hard science”/practical science components; the civic science issues of “power and trust,” “the role of strong leadership/direction,” and process management; and the

social dynamic/cultural science (Krueger, Tuler, and Webler 2001; Reed 2008; Tlili and Dawson 2010; Webler and Tuler 2006).

The proposed engagement process developed specifically for environmental and natural resource policy development largely coincides with the three-dimensional competency model. The resource and land management negotiation-based models inform the practical science competencies; the legal and judicial decisions inform the civic competencies; and the public participation model informs the cultural science competency, however there are risks and critiques that exist. A substantive argument is that lay judgments about risk are as sound or more so than those of experts...A normative argument is that a technocratic orientation is incompatible with democratic ideals...[and] an instrumental argument is that effective lay participation in risk decisions makes them more legitimate and leads to better results (Fiorino 1990; Morf 2005).

No process is completely void of any one of the three competencies and none of the competencies are mutually exclusive. Rather, there is a necessary blend of the three that exists and that is unique to every actor and policy process. The three competencies have an “intrinsic linkage” with one another. An example is a policy process to respond to the dwindling of groundfish stocks in eastern Canada in the early 1990s. This resulted in negative social *and* economic implications for the region and was exacerbated by insufficient scientific understanding and knowledge about a marine environment that is “delicately balanced, and interdependent.” Different weightings for different policy scenarios generate differing relationships. The customs and relationships that exist within a community and knowledge of the ecological and environmental demands of nearby natural resources is an example. This is an example of practical and cultural sciences being more heavily weighted than the third axis of civic science, but co-existing and positively influencing the process. The task of identifying the

appropriate weighting of the three axes is exaggerated in environmental policy as the practical science axis more often has elevated significance (Brown 2001; Chuenpagdee, Knetsch, and Ellsworth, Hildebrand, and Glover 1997; Reed 2008).

The “practical science” axis in Shen’s competency model focuses on the natural science concerns that present themselves during the policy-making process. The increasing importance of environmental and natural resource concerns in public policy and their particular relevance in this research creates increased prominence for this axis in research, as “hard science” demands placed on policy-makers are more substantial in these circumstances. This requires distinction between “expert” and “non-expert” stakeholders and stresses the vitality of this “scientific and technical know-how.” Earlier models of engagement processes would have allowed the “expert information” to be contained and result in an uninformed citizenry (directly contradicting the “learning” value of the Reed values typology). The consequences of this model are policy decisions most heavily reliant on scientific findings and opinions rather than the broader interdisciplinary policy needs. This places an artificially high emphasis on practical science competency. The current state of stakeholder engagement research and the growing relevance of the environmental and natural resource policies being addressed at all levels of government have led to the aversion of this direct, “linear” model of policy development wholly reliant on the “expert” stakeholders (Treby and Clark 2004).

“Civic science” is the second competency in Shen’s model and is based on the academic fields of public management, economics, and public policy. In this capacity, the public conceptualization of stakeholder engagement differs from the private conceptualization that dominated early years of research and theory development on the subject in the 1960s. The increasing need for this social science knowledge is widely appreciated, and research on

engagement process development and execution has begun to recognize it as “an essential ingredient.” High levels of civic competency in this science are concentrated in policy-makers, bureaucrats, academic scholars, economists, elected officials, and others that play prominent roles in communities and decision-making bodies and have a comprehensive understanding of the policy process (development, implementation, and evaluation) and the fiscal impact of a policy (Reed 2008).

The civic science capacity of a policy process is driven by a sub-typology of five actors: (a) the standpatters, with a primary interest in a status quo model and protecting the existing power structure; (b) the dabblers who generally represent neighborhood and special interest groups that do not have high levels of interest for the government as a whole; (c) reformers who are interested in broad-based reform of governmental bodies and have a more theoretical understanding of government than their counterparts; (d) statesmen who understand procedures and processes and are more apt at mediating conflict than the other four groups; and (e) the aspirants that are looking for political gain, priming themselves for future political successes, and nurturing and maintaining a popular public image. The components of civic science are not static and vary greatly from policy-to-policy. In some instances, traditional community indicators such as governance structure, racial diversity, education, and fiscal stability are adequate to make informed decisions. More complex policies demand indicators are reliant on multiple factors and are more susceptible to abrupt change, such as economies and social welfare. A third variable is management practices and “government willingness to involve citizens or citizen willingness to participate” and include elected official support, red tape, hierarchical authority, and transformational leadership (Hamilton 1982; Yang and Pandey 2011).

With the realization in recent years of stakeholder engagement research that public decision-making requires tools and management techniques that differ from the private sector, the relevance of the civic science has adjusted. The two prevailing expectations of public decision-making are transparency and representative participation (Dalton 2005).

Another important component of civic competency is a comprehensive understanding of the scope of public policy. Knowledge of the legal and statutory requirements is attributable to specific jurisdictions with defined geo-political boundaries – city, county, judicial circuit, regional planning agency, state, etc. The “societal boundaries” versus “jurisdictional boundaries” conflict that has aggravated public engagement research is problematic in that there is a possibility and likelihood that “the scale of the public and the political community not coincide with that of the formal boundaries of a public organization.” This complicates the role of the civic science in the decision-making process and renders actors that have high levels of competency increasingly valuable in the process (Olson 1969; Ostrom, Tiebout, and Warren 1961).

SHEP, referenced as anecdotal evidence of earlier literature, serves again an example of a policy process, in this instance as a result of its high demand for civic science competency. As described by a USACOE administrator overseeing the engagement process, the Secretaries of the Interior, Commerce, and Defense and the Administrator of the EPA must approve the expansion project before it can move forward. The authority vested in these independent federal agencies requires knowledge of legal precedent and navigation through bureaucracy and all applicable agencies processes (*Savannah Harbor Expansion Project, Status Update 2011*).

The third and final dimension of the competency typology is the cultural science. This axis has the greatest capacity for fluctuation and is the axis is most often misunderstood and

underappreciated. There are eccentricities that exist within all communities and understanding those unique traits is important in understanding a broader scope of the impacts of a public policy.

This axis could also be described as an understanding of “social conditions.” Size of community, relationships within a community, and a community’s historical precedent regarding policy development are all “particularly germane” to the engagement process and adapting that process to meet local needs. In addition to these conditions, there are community-based organizations that play a pivotal role in organizing and facilitating grass roots efforts. Civic organizations, not to be confused with civic science competency, play a major role in maintaining the truthful and ethical behavior of engagement processes, as “...an important element of ethical institution building consists of the cultural system...” (Crane, Matten, and Moon 2004; Hildebrand 1997).

While integration of disaggregated “component cultures” into the decision-making process is desired and often obligatory, their level of participation and role in the process lacks the same consistency. Relationships and mutual trust must be built between the individual components and practical and civic science actors, as well as with fellow cultural science actors (Treby and Clark 2004).

The social conditions, organizations, and components do little to elucidate high competency on this third axis. Because of local peculiarities, providing a generalizable example of what the cultural science axis may entail is not viable. Three specific examples of cultural science competency are awareness of: (a) institution-community relationships in a “college town”; (b) the historical value of a region; and (c) the role of native, aboriginal residents in policy development.

Examples of communities in which a college/university has substantial impact include Athens, Georgia (population of 115,452 and University of Georgia student body of 33,367); Auburn, Alabama (population of 53,380 and Auburn University student body of 25,469); and Gainesville, Florida (population of 124,354 and University of Florida student body of 48,975). In these three communities, the size of the student body is 28.9%, 47.7%, and 39.3% relative to the community's population. In these and other similar jurisdictions, the institution is recognized as having both economic value and social value to the community and region. Among the economic benefits realized in these communities are a more highly educated workforce with higher earning potential; demonstrated lower crime rates; and reduced need for social assistance. Among the positive social outcomes are an empirically demonstrated "healthy living" culture and heightened sense of safety. This example of cultural competency also demonstrates the inextricable relationship between facets of community living, as social value is "sometimes quantified in economic terms" (United States Census Bureau 2010; University of Georgia 2012; Auburn University 2011; University of Florida 2012; Christophersen and Robison 2002; Christophersen and Robison 2003; Robison and Christophersen 2007, 2008; Swanson 2009)

Coastal regions have cultural significance in their history, recreational use, and population dynamics. Yamacraw Bluff in current-day Chatham County (part of the region in this exploratory research, see Figure 4.1) was the landing site of James Oglethorpe and 114 other settlers in Savannah in 1733 and is widely considered the most significant colonial historic site in the state (Jackson and Stakes 1991). Another component is the social dynamic of the residents of the region conducting their affairs and governance in a form that meets their needs and demands without intrusion from outside influences (Rockloff and Lockie 2006). Economically, the policies that are the subject of this research highlight issues including ports and shipping,

commercial fishing, and tourism, all of which are vital to maintaining the culture and economy of these regions (Chuenpagdee, Knetsch, and Brown 2001).

Historical practices in coastal governance give enhanced legitimacy to cultural concerns and are indicative of the high potential for failure that exists. In the coastal zone management (CZM) engagement process in Australia, there was “frequent failure” to ensure participation by the Aboriginal and Torres Strait Islanders who would be most directly affected by the final CZM plan. Both “the lack of understanding of Aboriginal ways of doing ‘business’” and “a lack of understanding of the ways in which Aboriginal people construct the coastal environment and their own relationship to it” relegate non-Aboriginal actors to a lower competency on Shen’s proposed cultural science axis. This lack of competency has implications, as the authors cite the Aboriginal people (stakeholders) as having less confidence that their concerns would be acknowledged to and their awareness of the natural resources would be more highly regarded in the decision-making process. The result was widespread marginalization of this contingent of the population, community and conservation groups, and smaller organizations that lack the resources to actively engage themselves in the decision-making process (Rockloff and Lockie 2006).

The cultural competency axis is oftentimes discounted in the decision-making process, but “personal and societal values” are critical and expected contributions when a policy process is taking place in the public sector. Where practical science is based in formal research and the civic science is organized around codified processes, cultural science is largely undefined and lacks comparable clarity. Cultural science competency is comparatively difficult to develop without immersion and establishment in a community. It can be hindered by “polarization of opinions and attitudes,” by advanced by “acknowledgement of the varied cultures (or cultural

groupings) in the coastal zone” (DeSario and Langston 1987; Lawrence and Deagen 2001; Treby and Clark 2004).

The cultural competency serves an additional role in that it can further influence the placement on the three dimensions.

The “stakeholder strategies” matrix (Figure 3.3) defines the strategies stakeholders can take apply their efforts in an engagement process, based on their own observations about interactions between parties and the traits/strength of traits held by the various actors. These strategies are defined by two relative factors: (a) relative cooperative potential, and (b) relative competitive threat between actors. This matrix was originally developed for the private sector and is commonly utilized in strategic management literature. “Cooperative potential” describes the ability of the two parties to engage in constructive and beneficial participation efforts. The competitive threat, however, would be accompanied by a certain level of concern for active defiance and/or objection from the other actors. The balance of high versus low levels of both this cooperative potential and competitive threat are conveyed in a stakeholder strategy matrix that identifies four potential strategies for stakeholders to adopt (Figure 3.3), whether by conscious decision or otherwise (Freeman 1984).

In instances of high cooperative potential and low competitive threat, Freeman describes a “swing” strategy in which there exists a relatively low level of pushback to participation and a higher potential for combined efforts among parties in developing the most amicable public policy. This strategy has the greatest opportunity for creativity and flexibility that is largely absent otherwise.

A certain level of aggression is necessary in the “offensive” model that is defined by high relative levels of both cooperative potential and competitive threat. It is conceivable in this

scenario that much of the creativity and flexibility that define the “swing” model could be employed, but potential is inhibited by the accompanying higher relative threat and an overall guarded approach to the process. There is a certain offensive drive necessary on the part of the stakeholder to ensure the process and resulting policy capitalize on the cooperative potential and mitigate contention.

The third and fourth strategies are based on low levels of relative cooperative potential – a discouraging description for those active stakeholders striving for a participatory (two-way) process with positive and amicable outcomes. When that low level of cooperative potential is accompanied by a similarly low relative competitive threat, stakeholders are forced to adopt a “defensive” strategy. This is juxtaposed to the “offensive” strategy defined by *high* levels of both relative factors. With low levels of cooperation and competitiveness, probable stakeholders must be protective and watchful of their own intentions and needs, knowing that communion between groups is not likely, nor will there likely be an aggressive campaign against those same intentions and needs. The fourth and final strategy potentially necessary on the part of stakeholders is the “hold” model that balances the low cooperative potential with high levels of competitive threat. This strategy, more so than any of the other three, requires stakeholders remain adamant and unrelenting in their commitment to their own objectives. While neither model is likely to result in an alliance between actors, the “defensive” strategy demands a watchful eye on those objectives with potential reactive behavior, while the competitive threat defines the “hold” model requires proactive behavior on the part of stakeholders to ensure their own interests are maintained. The interests of third parties and the “indirect consequences or spillover effects” that may result are of minimal consideration for these stakeholders (Ostrom, Tiebout, and Warren 1961).

The strategies matrix (Figure 3.3) demonstrates the vitality of cultural science competency. The two-dimensional matrix provides context for approach and technique when engaging oneself (individual or organization) in a policy process. When engaging “defensive stakeholders” with little willingness or potential for cooperative decision-making and high levels of competitive threat, the group will assume a different social dynamic than the “swing” stakeholders’ more positive, optimistic, and creative approach. Because of the social component, Freeman described defensive stakeholders as being a scenario in which “one is most vulnerable with one’s friends, rather than one’s enemies” because of established relationships and familiarity (Freeman 1984). These beliefs can vary greatly based on the political and human geography of a particular area and, consequently affect the decision-making process. A preconceived cultural belief that scientific experts are well-equipped and well-intentioned in their participation may further increase the demand for competency on the practical science axis, while belief otherwise may heighten the process’s value of civic science competency. Understanding the social dynamic in a situation like this is critical, and having a higher competency in the “cultural science” or social dynamic of an affected population is necessary for a successful policy and engagement process (Treby and Clark 2004).

None of these quadrants is an “all or nothing” venture or an absolutely dichotomous relationship, but rather both cooperative potential and competitive threat exist along a spectrum. It is vital that within each of the three typologies that there is potential for competing values, competing competencies, and competing objectives; as well as potential for cooperative efforts within each of the three. The framing of stakeholder strategies largely defines how actors’ behaviors are driven, informs perceptions of engagement processes, and has applicability in public sector decision-making (Porter 1980, Freeman 1984).

The practical, civic, and cultural science axes provide framing, but positioning on this three-dimensional plane is determined by the prioritization of needs and interests. This requires "...identifying what values and objectives exist, how they should be analyzed, and the implications for choosing one set of values and objectives over another..." in a complex system. Prioritization in stakeholder engagement is an established principle. Dating back to the 1980s when research on the topic remained most heavily focused on private sector engagement processes, it was recognized that prioritizing different aspects of the decision-making process was necessary to most effectively distribute resources and energy. For example, a hypothetical example of a stakeholder/business success matrix identifies a series of entities (businesses) and forces them to prioritize stakeholder groups including employees, unions, stockholders, government, suppliers, customers, banks, and activist groups based on their importance in achieving business success. Each agency is unique in the goods and services they deliver and what will ultimately define "success." Even within the agency, however, interests and goals are not uniform. Because of inconsistency in priorities and goals within an organization, procedural difficulties persist. A second example, also applied to the private sector based on early stakeholder research, prioritizes issues based on stakeholder groups (employees, unions, stockholders, government, suppliers, customers, consumer groups, etc.). For each of these groups, Freeman's hypothetical example assesses the importance of truth in advertising, product safety, pricing policies, product service, and financial returns for each group. Once again, the priorities for each of these groups differ. Just as these examples force prioritization of different interests among different groups in the private sector, it is necessary for different groups to prioritize these desired values, competencies, and/or objectives amongst different groups in public sector policy development (Freeman 1984; Martin and Steelman 2004).

The three-axis competency model is augmented by nine additional three-pronged models that appear throughout stakeholder literature for both sectors and non-exclusive to policy disciplines. These typologies were constructed independent of, and in the years following Shen's (1975) original work (Table 3.1)

Much like the three-dimensional model itself, no actor or action is completely devoid of any of the three values. Each exerts force on behaviors and decisions to different extents. Environmental values dominate in high levels of practical science competency; emphasis on economic values corresponds with high levels of civic science competency; and the significance of social values corresponds with cultural science capacity (Brouwer 2000; Ellsworth, Hildebrand, and Glover 1997; Reed 2008; Shen 1975).

Differing sets of actors are most well-equipped to contribute their knowledge and expertise in each of the three disciplines. The practical science that demands academic and research knowledge about technical fields such as biology, ecology, chemistry, physics, and others is best addressed by scientific experts in the relevant fields. Given its demands for protocol, procedure, and execution of the engagement and policy-making process, contributions from both elected and appointed officials are most appropriate in the civic science. The cultural science is the most open and accessible, as understanding the context, history, and aura of a community are best achieved by those most established and embedded in an area. Citizens, having the highest levels of cultural science competency, "often think about problems differently than [civic] institutions or [scientific] professionals" (*Community Questions: Engaging Citizens to Address Community Concerns* 2010; Bäckstrand 2003; Driscoll and Starik 2004).

As seen in table 3.1, there is an overlap of typologies that stresses different characteristics of factors. The Mitchell, Agle, and Wood (1998) typology categorizes based the traits of

urgency, legitimacy, and power that mirror the practical, civic, and cultural sciences. The competencies rung of the proposed hierarchy provides an apt venue for applying those concepts. The first trait introduced in the model is urgency. This is described as “the degree to which stakeholder claims call for immediate action.” Because of the potential vulnerability of environmentally sensitive areas, immediate response is often necessary. For that reason, it corresponds with the practical science axis and is particularly applicable to the scientific experts. “Legitimacy” is described as a relationship between the individual stakeholder and the organization that serves as the decision-making body (whether private or public). Described as the both the most important and most difficult role assumed by governments and other public agencies, “*legitimizing* community-based institutions” is a critical function and one that demands knowledge and professional expertise. Applied to the three-dimensional competency model, high levels of legitimacy correspond with high competency in the civic science. This is indicative of strong relationships with policy-makers and bureaucrats and an awareness of the public management process. A stakeholder with “power” is recognized as having a strong social relationship and the ability to get an actor in the relationship to do something that they otherwise might not have necessarily done. It is important to note here that the relationship between actors in this situation is a relationship between individuals. As applied to the three-dimensions of competencies, power is indicated on the cultural science axis, is manifested as the potential capacity of coercion and use of established trust, confidence, and respect in individual-to-individual relationships (Dahl 1997; Mitchell, Agle, and Wood 1997; Shen 1975; Bäckstrand 2006; Benneworth and Jongbloed 2010).

The sense of urgency a stakeholder has in a public-policy decision is also an indication of the claim they may have in a particular situation. In some environmental and natural resource

policy situations, policy must be enacted as a *preemptive* measure to protect limited resources from destruction or extinction. In other situations, policy may be *reactive* in nature and responding to challenges and obstacles that may already exist through “conflict-based means.” In both instances, those scientific experts that have the best grasp of the timeline and immediacy of environmental demands have a unique sense of urgency. Those policy-makers and public-sector officials that have the greatest understanding and control of the policy-making and implementation processes have the most significant degree of legitimacy. They have an intimate familiarity with the legal and procedural requirements and expectations and are best equipped to balance the relationship between the public demands of the cultural science with the technical demands of the practical science. The general public as stakeholder, however, holds the ultimate influence over the process. This is a result of their “power to elect public officials” that will best represent the community in the policy process (Germain, Floyd, and Stehman 2001; Mitchell, Agle, and Wood 1997; Springer 2006).

Stakeholders are classified as: (a) “latent” stakeholders, those most removed from the core decision-making process; (b) “expectant” stakeholders, holding competency in one or more areas, but not necessarily aware or interested in the process; and (c) “definitive” stakeholders with the competency, awareness, and initiative to be an active part of a decision-making process. A stakeholder’s positioning is not stagnant, but because leaders’ perceptions drive the process, the onus is on the stakeholder to change their class by demonstrating higher capacities of the traits they are perceived to be lacking (Mitchell, Agle, and Wood 1997).

One of the most substantive challenges of the Mitchell, Agle, and Wood (1997) typology is that it was explicitly constructed around the Freeman (1984) definition of “stakeholder” as “any group or individual who can affect or is affected by the achievement of the organization’s

objectives.” While the typology includes the normative assumption that the three traits (power, legitimacy, and urgency) define stakeholders, it still finds itself grounded in the preexisting definition. The authors are critical of the vague definitions in the discipline’s research and of the continuing debate between the value of broad and narrow definitions.

While the three-dimensional model is an effective framework, assignment of actors based on affiliation or capacity is not mutually exclusive of other dimensions and is not a static placement. Local governments and local government officials would intuitively be thought to have the highest level of competency and the most potential for constructive contribution on the civic science axis. Depending on the nature of the policy, however, these officials have potential to shift and assume an alternative role in a broader state or national policy process (Ostrom, Tiebout, and Warren 1961; Ellsworth, Hildebrand, and Glover 1997).

The SHEP process resulted in such a shift. Though also a citizen of the affected region, the mayor of the City of Tybee Island (co-terminus with the island itself) submitted a formal response to the USACOE call for public participation on behalf of the city. With the city as stakeholder, the mayor identified a series of objections that the city had in regard to beach quality, erosion at the entrance/inlet that sits on the north end of Tybee Island, the lack of ongoing research and “hard science” data reflecting potential changes in environmental factors, the challenges brought on by offshore dumping of dredged material in future on-shore beach restoration needs (i.e. inaccessible sand), recreational/tourist impact accompanying on-shore disposal of dredged materials, detriments to the navigational use brought about by disposal of dredged material, and the lack of clarity on the disposal of dredged material. Personal observations that would have been appropriate demonstration of cultural competency were not included in this correspondence (Reuteman 2011).

In a research project focused specifically on expectations of engagement processes in watershed management (an environmental topic), a fifth corroborative typology was introduced and referred to as the “three A’s.” These expectations – accuracy, accessibility, and applicability – are necessary both in each of the three sciences and each of the actors identified by Bäckstrand (2003). Because of the sensitivity of their research, reports, and recommendations, the scientific experts that exhibit the highest level of practical science competency have an inherent expectation of accuracy. In managing the engagement processes, assuring compliance with legal requirements, and maintaining a level of transparency expected in public-sector decision making, the elected and appointed government officials are responsible for maintaining accessibility. This has become increasingly important in the most recent “phase” of stakeholder engagement research that has noted the distinctions between sectors and moved away from the model of treating government processes and responsibilities as if they were private firms. The citizenry must be proactive in their engagement in the stakeholder processes by developing an awareness of pending policies and any opportunities that may exist for them to provide informed participation. They must be aggressive in identifying their applicability in particular policies and policies’ applicability to them (Freeman 1984; Glicken 2000; Johnson 2009; Treby and Clark 2004).

The sixth supplement to the Shen model are three collaborative dynamics that are themselves a subset of a more complex diagnostic/logic model approach to collaborative governance. These three dynamics are a part of the broader “collaborative governance regime” that is the middle phase in the dimensions, drivers, development/regime) and outcomes of a stakeholder-oriented governance process. The primary responsibility of the scientific experts with the greatest practical science competency is ongoing discovery. Continuing education, new

findings and revelations, and informed findings are vital in maintaining, protecting, and utilizing natural resources to their greatest scientific capacity. The civic science role in these collaborative dynamics is consistent with earlier definitions of the primary actors, specifically referencing procedural and institutional arrangements in the process. The third and final element is the mutual trust that must exist between policy-makers and the general public. Without that trust, the decisions are indicative of a public that does not exert the power and influence that inherent in the policy process and does little to demonstrate to policy-makers that their participation is worthy of consideration; a lack of public trust in the actions of the policy-makers and public administrators detracts from the legitimacy of the collective action (Emerson, Nabatchi, and Balogh 2011).

The competencies typologies discussed to this point have been developed by scholars. The “essential components” of engagement typology was developed by a practitioner affiliated with the USACOE in 2010, and branded as the “three E’s” (not to be confused with Johnson’s “three A’s”). The three E’s – engineering, economics, and environment – were identified strictly based on experiences with SHEP. The engineering component of this project is best addressed by the scientific experts, as the project demanded fish passage design planning; biological opinions on rare species of sea turtles and whales; a timeline for construction and monitoring mechanisms for environmental impact of construction; mechanisms for resource and land conservation; dredged material relocation and disposal; and municipal water intake implications.

“Governance” and its distinction from “government” have been discussed in other research but not explicitly identified to this point. “Government” is described as the institution, while “governance” is the study “about how government, institutions, markets, and social organizations interact with citizens when making decisions.” Because of the role of economics in governance,

those policy-makers and administrators best equipped to address the economic pressures of public policies and projects. The third “E” is the environment. The term “environment” can assume multiple meanings. Throughout this review of literature and theory, it has been used in conjunction with natural resources and has focused on the ecological framing of environmental concerns. An alternative definition is environment as backdrop, setting, and surroundings, and applies directly to the citizenry and their cultural understanding that is not attainable through studies and reports, but rather only through immersion and first-hand experience (Ellsworth, Hildebrand, and Glover 1997; Bailey 2010; Johnson 2009; McFadden 2007).

The eighth in this series of corroborating technologies is the “deliberative interaction” model identifies three types of interaction that take place between the actors. The scientific experts that contribute most heavily to the practical science competency in policy development interact with other actors at the “meso” level which is the most “results-based environmental governance” (Bäckstrand 2006).

The politico-constitutional interaction encompasses the deliberation “in central political institutions” and has direct bearing on the civic science process. Those that understand how the policy development, implementation, and evaluation processes is to be executed have this competency and those are largely centered on legislative bodies, elected officials, and courts of law. The third and final interaction introduced is the societal. This interaction is defined by public deliberation, results in the formulation of opinions, and is manifested in the citizenry and in the media. These three interactions, as described by Bäckstrand, are appropriately described as they are largely unilateral actions that are not reliant on the actions of other actors and are one-way acts of communication, information sharing, and consultation (Bäckstrand 2006; Bäckstrand 2003; Meadowcroft 2004).

The ninth and final complementing typology is based on human behavior. The most important facet of practical science is the learning of new material. This can be the role of the primary researcher (the scientific expert, per Backstrand 2003) or the secondary student (the policy-maker and citizenry). Having a functional knowledge and rudimentary understanding of the hard science implications is indicative of a strong, educational-oriented behavior. The civic science competency is seen in attention, as the public policy process can easily become laborious and cumbersome, requiring attention to detail and legal requirements. The cultural science is best measured by the attitude of participants. This is particularly true for participants that engage in the process with preconceived notions and a belief that process is a farce. This is a belief justified by the ease with which agencies and entities can “engage with other stakeholders in ways that ultimately have little connection to, or influence over, decision making” and maintain a false sense of legitimacy (civic science) in the process (Rockloff and Lockie 2006; Treby and Clark 2004).

Overlap exists among all nine of these complements to the original competencies typology (Shen 1975): (a) values; (b) actors and expertise; (c) traits; (d) authority; (e) expectations; (f) relationship dynamics; (g) lessons from practitioner experiences; (h) models of interaction; and (i) behaviors (table 3.1). The three axes and these supplemental considerations should be collectively assessed and made known to all parties prior to the commencement of any policy or engagement process. The result has potential to be a new form of governance (McFadden 2007 definition) “...that serves to integrate social, economic, and environmental aspirations and values” (Ellsworth, Hildebrand, and Glover 1997). To achieve that integration, actors must collectively have an exhaustive awareness of available physical, human, and social

capital that are available and how that capital can be used in the most effective and efficient way in the public policy and stakeholder engagement processes.

Other scholars have supported the necessity of balance between these three competencies/actors. In discussing the US Forest Service (a federal entity more inclined toward “natural science” concerns), Fairfax (1975) acknowledged that engaging the public required sacrifice as “technical expertise and competence are directly challenged by giving maximum decision-making authority to lay citizens or to elected executives.” Much like the values identified by Reed (2008), the balance of interests in competencies has not been a stagnant decision. To the contrary, Fairfax acknowledged that different competencies have been favored at different times in the history of public engagement. There remains a delicacy in the balance.

The primary challenge that exists within the three-competency typology is whether practical, civic, and cultural science competencies are *necessary* or *desired* among actors. For the purposes of this research, the presumption is that these proficiencies are desired.

Ultimately, insufficiencies exist in all three competencies. Many scholars have framed the capacity to participate and inform the policy development process based on its constraints rather than its strengths. Comparable models have been applied in a variety of locations and in differing governance structures. In a European case study, six engagement processes were “...compared in three dimensions: the nature and organization of participation, the way the process is managed..., and the relation with formal democratic institutions” (Edelenbos and Klijn 2005). Regardless of framing, desire for comprehensive knowledge applicable to a specific policy process is the motive finding the appropriate placement on the three-dimensional plane. The positioning on those axes can be done *reactively*, compensating for the shortfalls of other actors; or *proactively*, taking advantage of known and existing resources. “Scientifically

informed” decisions are difficult to achieve, as those with the aforementioned capacity have little experience in the information-sharing necessary for informing a wider audience of actors; government information-gathering and sharing “will never be sufficient”; and the relationships between actors and the social power held by the citizenry are sensitive, subjective, and hold potential for collapsing the process (Edelenbos and Klijn 2005; Kearney et al. 2007; King, Feltey, and Susel 1998; Kweit and Kweit 1981; Thomas 1995; Germain, Floyd, and Stehman 2001; Wilson et al. 1994; Yank and Pandey 2011).

Objectives Typology (Bayley and French 2007)

The overarching values and guiding competencies descend to the bottom tier of the hierarchy, offering five “on-the-ground” objectives influenced and driven by the earlier typologies. While engagement processes are generally formed with a specific purpose or intention, there are five potential objectives that can be applied in a fairly universal sense. Information sharing is reliant on communication techniques and serves to educate the potential stakeholders (regardless of definition) on the process. It also ensures a smooth “information flow” between stakeholders and decision-makers. The second potential objective of a process is adherence to democratic ideals. This is significant in that it is what most differentiates stakeholder processes in the public sector from those in the private sector. It includes representativeness of the constituency in the process, accountability and transparency, equality, fairness, and influence. In addition to being differentiated by the *stated* objectives, the objective of democratic ideals is also unique in that it is heavily reliant on *perception* of the objectives. Even if they are present, if the stakeholders do not perceive these traits, process leaders will likely find limited success in their work. Community cohesion is the third objective, focusing on acceptability of processes, sharing of viewpoints, reducing conflict, and building trust among

participants. Fourth is practicability, or the logistics of the process. This requires maintaining costs, developing a realistic timeline, engaging stakeholders with the appropriate frequency, and ensuring that the resources necessary to make the process a success are available. The final potential objective of a process is an ultimate decision (Bayley and French 2007; French et al 2005).

The objective of this research is to explore more deeply the perceptions that participants hold upon completion of the process itself. Earlier literature has influenced these objectives, describing five features in the Marine Life Protection Act that structured the federal process. The proposed model includes unique objective-based impacts held by each of the features. It is proposed that (a) adequate information sharing and “decisions based on complete information” result in “improved knowledge of both natural and social characteristics”; (b) active participant involvement introduces “local knowledge and interests” into the discussions and epitomize the democratic ideals; (c) “positive participant interactions” impact positive growth of working relationships and develop a sense of camaraderie promoting community cohesion; (d) “efficient administration” encourages “sustained participation” and more practical processes; and (e) “fair decision making” results in increased levels of trust among participants and with decision/policy-makers. Collectively, these five features (and their desired impacts) complement the Bayley and French (1997) model and result in improved decisions and achieving of desired outcomes and objectives. By prioritizing and bringing clarity to these objectives, it is “possible to determine the appropriate level of engagement, who should be engaged and how best to engage them” (Dalton 2005; Reed 2008).

Information sharing consists of public education and information flow. Democratic ideals include transparency, legitimacy, equality and fairness, accountability, representativeness, and

influence. Community cohesion includes trust building, reducing conflict, shared viewpoints, stakeholder acceptability, and political acceptability. Practicability includes cost, timescales, frequency, and physical resource demand. The ultimate decision includes both a formulaic and methodical decision-making process with attention paid to procedural detail; and the quality of the decision (Bayley and French 2008).

Values will inevitably differ, holistic competency in all three disciplines is not realistic, and objectives must be prioritized. The onus is on those leading in and participating in engagement processes how they opt to prioritize these various traits. Dependent on any of a variety of variables, particular values, competencies, and objectives will be considered more important than others. The result of this reality and these three typologies is a proposed hierarchy of vision, influence, and procedural applicability.

In addition to the typologies for values, competencies, and objectives, there is a scalar measure that balances the potential for cooperative action with fellow actors against the threat of competing interests between actors, regardless of their capacities in any of the three sciences. These variables may influence the actions and behavior in the context of an engagement process and potentially influence the perceptions that participants have after the process is complete.

Existing Stakeholder Theories

The hierarchy of values, competencies, and objectives typologies (Figure 3.1) is reflected in existing stakeholder engagement theory. Recent stakeholder theory has adapted to the post-1990s notion of public sector stakeholder engagement and focuses on the “nature of the relationships between organizations and their respective stakeholders and the processes and outcomes of these relationships for organizations and their stakeholders” (Driscoll and Starik 2004). In particular, four theories of stakeholder engagement have adapted to the evolution of

needs and challenges since the 1960s: (a) collaborative governance, (b) coproduction, (c) deliberative democracy, and (d) citizen democracy.

While the four theories are interrelated, they are distinct in that they emphasize different demands and interests that have changed in stakeholder engagement practices, public sector decision-making, and time-sensitive environmental policies in recent decades. The hierarchy of typologies presents encompassing influences (values), information (competencies), and practices (objectives) and their respective roles in the engagement process. These typologies address three different components of the stakeholder engagement process – a directional understanding of interactions, desired traits in the actors, and practical intentions of engagement. Policies and circumstances stress different facets of each typology, supporting the common belief that a “unified stakeholder theory does not exist” (Scholl 2002). This review will identify and address the divergent principles in these four public sector stakeholder theories. The foundation for this theory analysis is the typologies in participation literature and discussed in the earlier section of this chapter - namely values, core competencies, and objectives. This section of the literature review discusses the evolution of stakeholder theory, the influence of the theories on one-another, and the role of the theories on this research.

Collaborative Governance

Collaborative governance is a stakeholder theory often attributed to public administration literature and, much like the terms “stakeholder” and “participation,” has a definition that “remains amorphous” and whose use in research and practice remains “inconsistent” (Emerson, Nabatchi, and Balogh 2011). Governance – “a set of coordinating and monitoring activities” - is at the core of the theory, prompting the question, “what makes it collaborative?” (Bryson, Crosby, and Stone 2006). More recent literature has crafted a definition that is intentionally

flexible, encompassing of an interdisciplinary mindset, and has an inherently broader scope than its predecessors. The theory stresses the value of equity and the need for stakeholder processes to “engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished” (Ansell and Gash 2008; Emerson, Nabatchi, and Balogh 2011; Reed 2008).

The theory of collaborative governance has traditionally (since it was introduced in the 1960s) been defined by its formality. Recent research has been critical of earlier concepts of “formal, consensus-oriented, and deliberative” processes that are largely limited to the public sector entity and the public sector manager. To that end, the “collaboration” has been between relationships between public/quasi-public agencies and has limited the integration of “nongovernmental stakeholders” (Agranoff and McGuire 2003; Ansell and Gash 2008; Emerson, Nabatchi, and Balogh 2011).

The greatest weakness of collaborative governance theory is that outputs and collaborative actions are not introduced until late in the engagement process. Endorsement, implementation, implementation, and enforcement are all identified as appropriate applications of collaborative governance theory, but the theory is not acknowledged as being applicable in the policy development process. Governance itself has been established in this review as “how government, institutions, markets, and social organizations interact with citizens when making decisions.” Stressing that “government” and “governance” are two distinct concepts, there is a normative assumption that collaborative governance does not take place at the ground level, but rather is reliant on an existing network of relationships between pre-determined actors, active avoidance of redundancy of efforts, and restraint from the desire to “start from scratch” with new

processes (McFadden 2007; *Community Questions: Engaging Citizens to Address Community Concerns* 2010).

The contemporary elaboration on the theory by Emerson, Nabatchi, and Balogh (2011) reframe collaborative governance (see definition above) as three “collaboration dynamics” that exist as a part of a broader model of collaborative governance. These three dynamics (discovery, procedural/institutional arrangements, and mutual trust) work in conjunction toward a series of proposed outputs and collaborative actions (Table 3.1).

While collaborative governance is the earliest formal stakeholder theory, it is reflective of the modern expectations of broadness and ambiguity and the theory has had resurgence in engagement research in the 2000s. These adaptations are intended to enable “different applications, classes, and scales” in processes and include more exhaustive use of networks in the collaborative governance process, and formalized structures that use effective processes to more effectively engage stakeholders in the policy process. One obstacle in the adaptation of the revived theory of collaborative governance is the broad “scope and scale of perspectives” that hinders the development and testing of theory (Emerson, Nabatchi, and Balogh 2011; Nabatchi 2010).

Co-Production

The second stakeholder theory is coproduction. The theory emerged in the late-1970s and is the most heavily focused on environmental and development issues. Previous research defines co-production as: “the provision of public services (broadly defined, to include regulation) through a regular long-term relationship between state agencies and organised groups of citizens, where both make substantial resource contributions” (Papadopoulos and Warin 2007; Joshi and Moore 2004).

A fundamental component of co-production theory is that public participation is vital in the “production and use of scientific knowledge” used in development phase of the policy process. Co-production is often referenced as “co-production of knowledge,” which is indicative of the vitality of the practical sciences in this particular theory of stakeholder engagement. The vitality of knowledge in this theory distinguishes it and strays from the traditional view that “decisions regarding technical issues should be left in the hands of experts and scientists” (Rowe and Frewer 2000). Co-production requires accessibility to a functioning technical knowledge of scientific/technical policy processes for potential stakeholders.

Co-production theory also focuses on networks more so than any of the other three stakeholder engagement theories. This particular perspective of co-production considers generation of knowledge (and in particular, knowledge used to inform policy development) as an action of multiple public agencies and the citizenry in question. Based on this theory, public agencies act independently of one another and each has unique positioning on the three-dimensional plane of practical, civic, and cultural science capacities. Active solicitation of actors with differing strengths and capacities would, in turn, produce more informed decision-making. Recognizing and embracing public entities as *separate* entities increases the number of actors in the process, thereby increasing the complexity of the process, but introduces additional knowledge that might have otherwise been neglected and proven detrimental to the overall process. Later research has found that the broad-based inclusion of co-production theory often reaches a threshold at which it becomes a negative force on the engagement process. When participants become increasingly comfortable with a process, existing group dynamics and local idiosyncrasies become evident and have the potential to negatively impact the process, reinforce

negative behaviors and/or stereotypes, and create an overall sense of “dysfunctional consensus” (Daly 2003; Hajer and Kesselring 1999; Kooiman 1993; Reed 2008; Shen 1970).

Of the four stakeholder theories addressed in this literature review, the maturation of co-production has been the most dramatic. Scholars have found that potential stakeholders are becoming “increasingly aware of the social and environmental impacts and risks associated with economic development” and the decision of leaders to include the non-expert stakeholders in these more scientific policy processes has become more commonplace. This increasing awareness is serving to “level the playing field” by disseminating information more broadly and efficiently and generating a more informed stakeholder contingency that is better equipped to inform and influence potential coastal policy. Still, later theorists critique the theory as being focused on “technocratic” or procedural values, rather than democratic values. Technocratic and democratic values as seen as mutually exclusive and the inclusion of expert opinions is done so at the direct cost of any democratic process, which became a substantive concern (Benn, Dunphy, and Martin 2009; French et al 2005; Johnson 2009).

Deliberative Democracy

Deliberative democracy is an adaptation of the earlier theory of collaborative governance. Where collaborative governance emerged in the 1960s, co-production in the 1970s, deliberative democracy didn’t emerge in earnest until the mid-1990s. An apt definition of the term in this perceptions-based research is:

... collective decision making with the participation of all who will be affected by the decision or their representatives: this is the democratic part. Also...it includes decision making by means of arguments offered *by* and *to* participants who are committed to the values of rationality and impartiality: this is the deliberative part. (Elster 1998, quoted by Nabatchi 2010)

The core elements are recognized as the same regardless of definition: (a) the demand for informed reasoning of beliefs, (b) desire for a binding decision, and (c) the need for ongoing dialogue about the policy even after development and implementation (Nabatchi 2010; Gutmann and Thompson 2004).

The theory was the first to be stressed in mainstream public administration literature and remained the most contemporary for the decade following. The development of deliberative democracy theory was largely a response to challenges that faced both collaborative governance and co-production in earlier years. It was energized by growth in stakeholder organizations (rather than individuals) that represented educational institutions and research organizations, public organizations with increased focus on educating citizens on the governing process and democratic principles, and civic/community groups. Respectively, these represent the practical/civic/cultural science typology referenced earlier (Elster 1998; Nabatchi 2010; Shen 1975).

With a “decline in American civic institutions, voting behavior, and social capital,” the formal and concepts of collaborative governance were no longer adequate. With people less invested in the formal institutions and participating less in the democratic process, the public entity retained the formal authority of governance while losing the informal “buy-in” of the citizenry. The policy-making bodies had a continued obligation to engage stakeholders in the policy process, though in a less formal setting. The most substantial challenge facing the theory is the ambiguity of its goals and “unrealistic expectations.” The targeted citizen participation frequently falls short and there is often critique that deliberative democracy “suggests that democracy is a goal in itself” (Hajer and Kesselring 1999).

As a theory of stakeholder engagement, deliberative democracy responds to the “citizenship and democratic deficits” by providing citizens “opportunities to exercise voice and a more responsive, citizen-centered government by embedding ‘governance systems and institutions with greater levels of transparency, accountability and legitimacy’” (Emerson, Nabatchi, and Balogh 2011; Nabatchi 2010; Henton, Melville, Amsler, and Kopell 2005).

An alternative view of deliberative democracy is as a form of “alternative dispute resolution” based on consultation with the public rather than a participatory engagement. In this approach to the theory, there is an inherently negative perception of the relationship between leader/policy-maker and citizen/stakeholder. The belief is that there is a conflict to be resolved rather than a belief that the stakeholders are distant and removed from the process (Fishkin 2011, Susskind 2009).

The theory was successful in addressing shortfalls of collaborative governance and its perceived over-reliance on civic formality, and co-production by shifting focus from the scientific information-sharing priorities. It sought to achieve “mediation between science and the public” and balance the urgency of the practical science demands with the influence of the residents and their cultural interests (Tlili and Dawson 2010).

Deliberative democracy from a dispute resolution (inherent conflict) perspective faces many of the same challenges facing other stakeholder theories and in many ways, follows the Shen three-science model. Recent literature on deliberative democracy from a dispute resolution perspective identifies three primary obstacles: (a) an adversarial problem, (b) a representation problem, and (c) a majority-rule problem. These reflect the practical science, civic science, and cultural science dimensions, respectively. An example of this adversarial relationship is a situation in which the technical knowledge and information held by those actors most proficient

in the practical sciences are made “overly complicated and inaccessible to the general public. Additional research supports this characterization of the challenges facing deliberative democracy, contending that it is “not reducible to consensus building” and is not relegated to the “expression of opinions rooted in social and cultural givens,” but rather possesses a complexity that demands *participation* rather than *consultation*. More specifically, the demand is for informed participation and includes basal expectation of “reasoned discussion” and “collective judgment” of citizens. Others have been critical of these three problems as being a blend of stakeholder theories (described as “misidentified” theory) and lack of clear objectives and methods. Ultimately, all three of Susskind’s purported problems present obstacles in each of the four theories explored in this review (Cohen and Fung 2004; Fishkin 2011; Nabatchi 2010; Shen 1975; Susskind 2009; Tlili and Dawson 2010).

Whether considered from a waning relationship or negative relationship perspective, deliberative democracy is more of a response-based theory driven by cultural and societal influences than any of the other three and had the greatest potential for the positive side effect of secondary benefits for governance as process, and government as entity (Nabatchi 2010).

Citizen Democracy

The final theory within stakeholder literature is citizen democracy. The idea that the entirety of a group with similar interests will actively participate in any process is unrealistic. Instead, citizen democracy is based on “layered” participation.

“Citizen representatives” are types of interest groups. To that end, there are entities that may be impacted or have an interest in a particular policy, such as economic organizations (labor unions, professional organizations); governmental bodies and other public entities (city, county, school district, state governments affected by policies from another jurisdiction); religious

groups or a particular church; civil rights organizations; ideological groups with a broad range of issue-based interests; or single issue groups with a particular interest in the policy at hand. Some of these groups have a large base – the NAACP has 300,000 members – while others have smaller bases (National Association for the Advancement of Colored People 2011). Regardless of size or their level of organization, leaders emerge in these groups and serve as an intermediary between the policy-makers facilitating the engagement process and the broader membership of the organization (Ginsberg, Lowi, and Weir 2011; Neuhauser 1976; Ridings 1991).

Citizen democracy moderates over-reliance on any specific competency (Table 3.3) and instead focuses on the unique capacities of differing populations. This includes differing education levels, socioeconomic characteristics, cultural traits, and demographics.

Efforts to increase effective participation by younger stakeholders have been enhanced by five lessons: a) empowerment and imposition of responsibility in the process; b) capacity building; c) adapted styles of working; d) involvement with other groups (adults, in this case); and e) adaptation to the sociopolitical context. There is a universal applicability that exists within these and that could be applied, at least in part, when engaging other types of stakeholder groups (Frank 2006; Talen and Coffindaffer 1999; Terrible 2000).

The proposed three-dimensional balance of competencies (Figure 3.2) and the actions in one of the five policies/projects in this empirical research substantiate this need for broader population engagement. The redevelopment of the Altama Avenue corridor in Brunswick, Glynn County, Georgia is addressed in the second part of Chapter 4 of this dissertation. As this local planning project was in its infancy, one of the stated goals in local media was to engage the youth because of the area's proximity to the local high school. Because there was a certain *cultural science* and local dynamic that needed to be embraced, this was a competency that those

actors participating in the process had to possess. As was noted by a UGA public service faculty member in an interview with the local newspaper, this corridor included the campus of Brunswick High School and an important consideration in commercial growth was “businesses there that will appeal to students” and “something comfortable for the high-school aged students” (Fakour 9 November 2010).

Theoretical Challenges

These four theories of stakeholder engagement are responses to the weaknesses and challenges of their previous theory and respond to increased recognition of the efficiency and effectiveness shortcomings of practices, the modern widening of the gap between public and private processes, recognition of the necessity of specialized knowledge and research capacities, and response to the fragmentation in the multi-layer governmental decision-making process. Responses to these four challenges, identified in Chapter 2, are indicative of acknowledgement of these challenges and efforts to reconcile differing values and challenges inherent to stakeholder engagement with a theoretical grounding that ensures the effectiveness, efficiency, and equity of engagement efforts for all participants.

Collaborative governance is the most formal and structure-based of the four theoretical models of stakeholder engagement introduced in this chapter. In regard to Freeman’s (1984) objectives in stakeholder engagement, collaborative governance focuses most significantly on the notion of democratic ideals.

Coproduction centers on the generation and dissemination of knowledge. It is information-based and relies heavily on a ‘network of knowledge’ that will adequately equip each of the parties involved in the policy process to introduce their own expertise while having

the capacity to utilize their counterparts with expertise in other disciplines to most effectively inform stakeholders and use the results of the engagement process in the ultimate decision.

Deliberative democracy focuses on relationship-building. The desired objective is community cohesion and by developing policy directly influences by the responses that emerge from engagement processes, regardless of what form or structure they assume, that cohesion is increasingly possible.

Citizen democracy is “layered” and focuses more on the decision-making (Freeman’s ‘ultimate decision’ objective) and its necessities. Different actors have differing capacities and are thus charged with different responsibilities. The theory emphasized collective action.

Chapter Summary

The policy process conflicts that exist in the coastal region that defines this research are reflected in individual and group values, specifically as identified by Reid (2008). Several examples were offered by Thompson (2007), including

...the owner of an expensive beach house who starts harassing people who are surfing or fishing because they are cluttering his view and invading his privacy;
or

...a visitor to a state beach. She is walking along the surf line enjoying the sound of the waves and the feel of the swash passing over her feet. Then she comes to a sand fence running perpendicular to the waterline. On the fence hangs a large sign declaring, “Private Beach No Trespassing.” She feels uncertain as to whether she can continue and angry that someone would so arrogantly bar her from the beach. But wouldn’t it be odd if a complete stranger became angry at you because you would not let her lounge around on your lawn anytime she wanted? (Thompson 2007)

In this case, the values and behavioral norms of two groups differ greatly and are two apt illustrations of why stakeholder engagement in *coastal* policy development takes on a different form than the broader theory.

To assess these differences, the most appropriate grounding is the three-tiered construct of stakeholder theories based (from broadest to most “on the ground”) on (a) the four stakeholder engagement process values (Reed 2008); (b) the three engagement process competencies (Shen 1975); and (c) the five engagement process objectives (Bayley and French 2008).

The values held by those participating in a process, regardless of position, are vital in influencing the overall tone and direction of the effort. Because of the inherent differences that exist in these four theories, it is evident that the prevailing values will differ between them. This does not discount the other values entirely, but rather is intended to recognize the dominance of particular values in particular theories.

A broader challenge facing each of the four theories of stakeholder engagement is fragmentation of governance. Each of the theories demonstrates varying degrees of emphasis on the three disciplines, but each has the inherent obstacle of increasing polarization among the three disciplines (Adams 2004).

The greater emphasis placed on Shen’s (1975) competency typology is intentional and vital to the research questions and challenges in earlier chapters. The overarching values that distinguish individuals and organizations in the policy process have been demonstrated in earlier research on the motivations and influences on process management and the bottom tier objectives must be catered to a given process. In addition, both values and objectives typologies are contemporaries of the competency typology. This is also reflective of previous research, as the examples cited in Chapter 2 either focus too broadly (universally applicable public/quasi-public policies) or too narrowly (organization-specific or policy-specific process assessment).

Complete competency in all three is idealistic and different balances are necessary given the context and scope of the policy in question. The balance for each of these three models will

be unique on the three- dimensional plane, but commonalities will likely exist. The three dimensional model (Figure 3.2) plots likely differences in desired/demanded competencies. Table 3.3 synthesizes the discipline priorities of the theories. It arranges the theories on a continuum based on their desired levels of competency, as compared with one another.

Another substantial contribution of this chapter to the broader research questions is the integration of a multitude of existing three-pronged stakeholder typologies into a single model reflective of multiple facets of Shen's initial work on the practical, civic, and cultural sciences. These additional constructs are all contemporaries of the initial typology – the earliest being introduced in 1997 (Table 3.1) – but all have remained disjointed throughout their existence. In some instances, it is plausible to believe that their author was not aware of academic research. The “three E's” essential components model, for example, was presented in a public forum by a practitioner from the USACOE. Not being a researcher and not having a background focused specifically on stakeholder engagement, it is unlikely that this individual was aware of a typology from an academic journal published nearly 30 years earlier. Other models, however, were academic in nature and simply went unattached or unconnected with Shen's earlier classification. This integration provides greater structure to the theoretical bases of stakeholder engagement and ultimately frames the findings of this research more clearly.

With this analysis of the existing literature on stakeholder theories, it is not surprising that the unique stages of the theoretical history each reflect different components of the values/competencies/objectives construct. The field of public sector stakeholder analysis has progressed from (a) “awareness raising” and private-sector observation; to (b) attempted direct application of private sector principles to public sector processes; (c) equity and value of policy eccentricities and peculiarities; (d) treatment of government practices and responsibilities as if

they were private sector firms; and ultimately to the current state of (e) continued development as an independent field of study with a definitive public sector orientation). This evolution of the four theories and their seemingly cyclical behavior are largely reactions to perceived shortfalls of existing theories. Many researchers have indicated their belief that subsequent theories have actually been an *over-reaction* to their predecessors and are ultimately faced with new and unique flaws.

The standing challenge facing stakeholder engagement in the public sector is a long-standing concern that “in the rush to ‘involve’ the public in their activities, few agencies had adequate opportunity to consider why, how, and to what end the effort was being made.” That challenge persists and the lack of consideration has potential to be detrimental to the resulting perceptions of the engagement process by all actors (Fairfax 1975; Reed 2008).

Table 3.1: Competencies Typology (Three-Dimensional) Overlap

Model				Source
Competencies	Practical Science	Civic Science	Cultural Science	<i>Shen 1975</i>
Values	Environmental	Economic	Social	<i>Ellsworth, Hildebrand, and Glover 1997</i>
Actors	Scientific Experts	Policy-Makers	Citizens	<i>Backstrand 2003</i>
Traits	Urgency	Legitimacy	Power	<i>Mitchell, Agle, and Wood 1997</i>
Authority	Claim	Relationship	Influence	<i>Mitchell, Agle, and Wood 1997</i>
“Three A’s”	Accuracy	Accessibility	Applicability	<i>Johnson 2009</i>
Collaborative Dynamic Elements	Discovery	Procedural/ Institutional Arrangements	Mutual Trust	<i>Emerson, Nabatchi, and Balogh 2011</i>
Essential Components (aka “The 3 E’s”)	Engineering	Economics	Environment	<i>SHEP Project Status Update Bailey 2009</i>
Deliberative Interaction	Meso	Politico-Constitutional	Societal	<i>Backstrand 2006</i>
Behavior	Education	Attention	Attitude	<i>Treby and Clark 2004</i>
Capital	Physical	Human	Social	

Table 3.2: Prevailing Stakeholder Theories and Stakeholder Engagement Values

Decade/Phase of Public Sector Stakeholder Research	Stakeholder Theory	Prevailing Stakeholder Engagement Value
		<i>Reed 2008</i>
Early 1960s	Collaborative Governance	Empowerment
Late 1970s	Co-Production	Learning
Mid 1990s	Deliberative Democracy	Trust
Mid 2000s	Citizen Democracy	Equity

Table 3.3: Continuum of Desired Competencies in Stakeholder Theories

Contextual Institution	Lowest Level of Desired Competency			Highest Level of Desired Competency
Practical Science	Citizen Democracy	Deliberative Democracy	Collaborative Governance	Co-Production
Civic Science	Co-Production	Deliberative Democracy	Citizen Democracy	Collaborative Governance
Cultural Science	Collaborative Governance	Co-Production	Citizen Democracy	Deliberative Democracy

Figure 3.1: Hierarchy of Stakeholder Engagement Influences

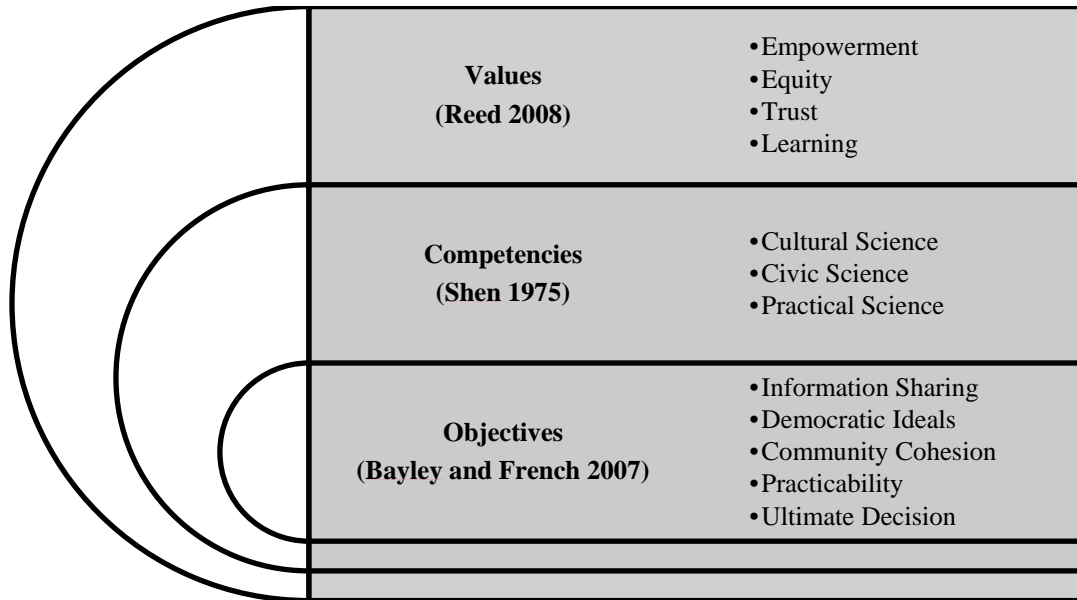
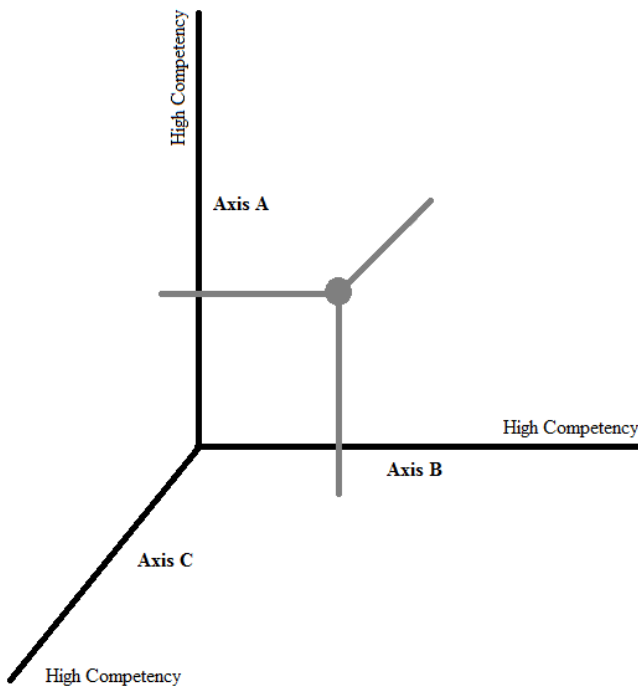


Figure 3.2: Three-Dimensions of Sciences, Actors, and Disciplines

Axis A

- Practical Science (Shen 1975)
- Scientific Experts (Backstrand 2003)
- Urgency/Claim (Mitchell, Agle, and Wood 1997)
- Accuracy (Johnson 2009)
- Discovery (Emerson, Nabatchi, and Balogh 2011)
- Engineering (Bailey 2010)
- Meso Interaction (Backstrand 2006)
- Environmental Values (Ellsworth, Hildebrand, and Glover 1997)
- Educational Behavior (Treby and Clark 2004)
- Physical Capital



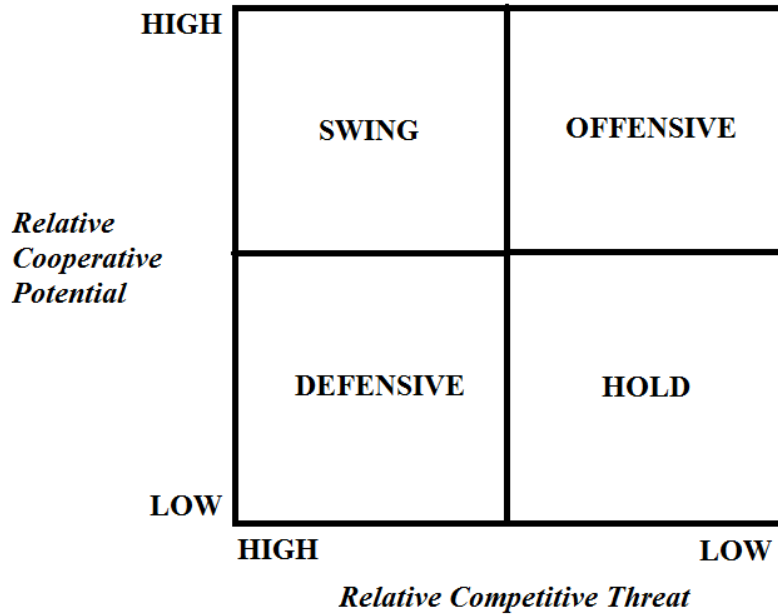
Axis B

- Civic Science
- Policy-Makers, Public Administrators
- Legitimacy/Relationship
- Accessibility
- Procedural/Institutional Arrangements
- Economics
- Politico-Constitutional Interaction
- Economic Values
- Attention-oriented Behavior
- Human Capital

Axis C

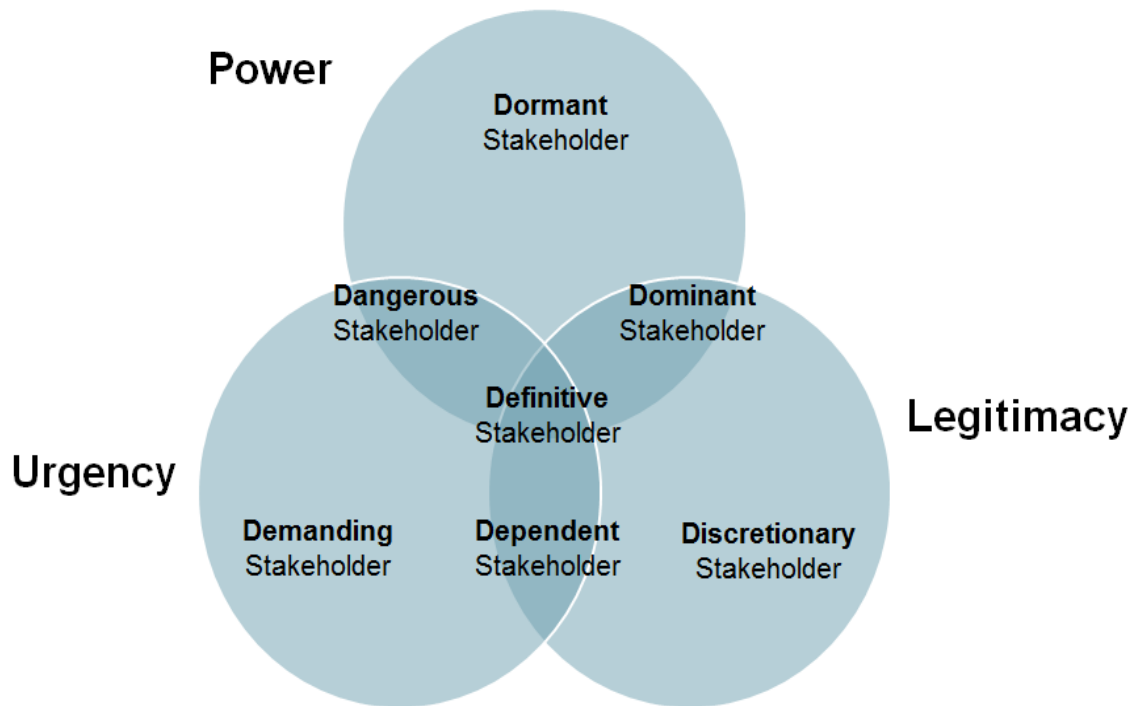
- Cultural Science
- Citizens
- Power/Influence
- Applicability
- Mutual Trust
- Environment
- Societal Interaction
- Social Values
- Attitude-oriented Behavior
- Social Capital

Figure 3.3: Stakeholder Strategies Typology



Source: Freeman 1984

Figure 3.4: Stakeholder Traits Typology



Source: Mitchell, Agle, and Wood 1997

CHAPTER 4

CHARACTERIZING THE COAST

Introduction

This research is intended to contribute to the environmental and resource concerns of all regions, not just the coast. Because of the unique construct of environments, however, it is necessary to have the skills appropriate to identify the needs and demands of particular environments. This chapter demonstrates a model assessment of the coastal Georgia region that should be taken and adapted to the environment at hand when this perceptions-based research is applied in broader settings.

Background and Contextual Assessment

The coastal regions of the United States are unique. There are historical, cultural, environmental, and economic circumstances that exist in coastal areas that exist in few, if any, other locations. For those reasons, this chapter is necessary to frame the exploratory research conducted through the remainder of this dissertation.

This chapter is unique in that it is largely reliant on secondary, non-academic research. This chapter is structured as three sections. The first will explore the context of the coastal areas of the United States. The second section will focus specifically on the context of Georgia's coastline in the greater state, through the lens of Shen's (1975) three competencies typology, discussed at length in Chapter 3. Finally, the chapter will introduce the five policies/projects that were used in the data collection and interviews that constitute the research instrument. These introductions will include information from a variety of sources including reports from governmental agencies, media coverage, opinion/editorial pieces, independent research, and others.

Two caveats distinguish this research on perceptions of stakeholder engagement from previous studies. First, it focuses on the unique demands of the coastal environment. The ecosystems, economies, and populations of coastal regions often differ from their inland counterparts and understanding the role that stakeholders play in policy development in these regions has some fundamental differences, many seen in the values, competencies, and objectives described earlier. The second distinguishing trait in this study area is the focus on a small subset of a broader population. Compared to other states with coastlines, Georgia has a strikingly low proportion of the state's population living in a coastal county – 5.2%. Much of this is attributable to growth in the Atlanta region, but still leaves the coastal counties with comparatively little influence in state policy development. Differing states face similar challenges with coastal and other natural resource assets. This population dynamic has potential to affect perceptions about decision-making and legitimate interest in stakeholder engagement efforts.

The Coast of the United States

The policy process in coastal environments has obligations that differ from more generalizable and universal policy areas. The environment is unique. In shoreline communities, there are “property conflicts that would seem very odd if they occurred away from the ocean” (Thompson 2007). There is an expected blend of social, economic, political, and cultural traits that define communities and policies, but there is an added need for the maintenance of coastal bio-diversity (Rockloff and Lockie 2006; Clark 1997).

Motivating the need for focused coastal policy research is the need for sustainable management practices. Because of the limited and temperamental nature of these coastal assets, it is necessary to manage and protect them in ways that avoid their loss while still meeting the

social, cultural, and economic demands of their coastal communities. Achieving this balance demands atypical relationships, such as a social worker and an anthropologist. The former holds a knowledge and experience with the social state of the community, while the latter has the practical understanding of the physical assets the coast provides to the community. To exclude either from the policy process does little to meet the unique needs. At a period in research history when public and private engagement were being widely differentiated for the first time and when niche policy disciplines were being acknowledged for the first time, the counter-intuitive relationships necessary to achieve broader objectives and the lack of pre-existing relationships had potential for conflict. In one example, “water users (like fishermen) have often frustrated government managers and academic experts in land resources who cannot understand what goes on under water or within the mangrove forests or coral reefs” (Clark 1997).

Beyond the property conflicts mentioned by Thompson (2007), the culture of coastal communities has differences from its inland counterpart. Among those are the status and trends of “coastal and marine resource uses, human presence within and around the site, demographics, dependence of the local community and adjacent communities on the sites’ natural resources, development history, master plans, relevant cultural beliefs and practices, historical context, and political context” in traditionally “small cohesive communities” that exist in coastal environments (Dahl 1997; Edwards, Jones, and Newell 1997).

On a national scale, the United States Coastal Zone Management Act (CZMA) was adopted in 1972 and directed state-level coastal management programs to achieve the stated objectives of: “(1) protection of estuaries and coastal wetlands; (2) protection of beaches, dunes, bluffs and rocky shores; (3) provision of public access to the shore; (4) revitalization of urban waterfronts; and 5) accommodation of seaport development” (Hershman et al. 1999). The act

places explicit demands on federal, state, and local governments; responds to inherent diversity in state and federal governance by providing actors flexibility in defining their roles in their respective states/policies; and generates structures and programs unique and catered to the needs of the states. The vitality of the core federal objectives was stressed in 1995, when the CZM Effectiveness Study took place to analyze how well these unique and catered programs in the respective states were working toward those broader objectives (Hershman et al. 1999).

The practical science components of coastal management “fit a familiar pattern” and have greater uniformity and consistency on an international scale than its civic or cultural counterparts. This has historically resulted in the feeling of residents subject to these policies that the environmental planners and experts are wholly driving the policy decision, rather than actively engaging those holding “familiarity with social and community dynamics and the broad range of social competences” to ensure that coastal policy decision-making is inclusive, meaningful, and participatory (Clark 1997; Neuhauser 1976; Fletcher 2001).

The Coast of Georgia

This research is focused wholly on the coastal area of the state of Georgia. This prompts an intuitive question: why Georgia? As referenced earlier, the six Georgia counties that sit immediately adjacent to the coast make up only 5.2% of the state’s total population based on 2010 US Census Bureau data.

Of Georgia’s 159 counties, 6 lie immediately adjacent to the Atlantic Ocean: Chatham, Bryan, Liberty, McIntosh, Glynn, and Camden, from north to south (Figure 4.1). Given the nature of the policy measures included in this research, our scope is limited to these six Georgia counties that sit directly on the coastline.

The unique population dynamic of Georgia is seen in Table 4.1 and Figure 4.2 with percentage of coastal states' populations that reside in counties immediately adjacent to an Atlantic, Pacific, Gulf of Mexico, or Great Lakes coastline; and Table 4.2 with the population density of the broader state compared to that of the coastal counties, indicative of higher levels of development

This disparity between coastal and inland populations can be challenging in the policy development process, particularly for policies that involve state or federal intervention. An example of this is the expansion of the Savannah harbor. The process – which will be addressed in greater detail in a later section of this document – the current expansion effort was initiated in 1997 and ultimately involved a series of decisions from state officials in Atlanta, leaders from South Carolina (the river forms the border between the two states), the mayor of Atlanta, and Washington, in addition to those on the coast that would feel the impacts of any decisions (Muller 2012).

While the makeup of the coastal population is important, there is a belief in American government that the voice of the populous and public input into the policy/program decision-making ought be done through elected representatives (state or federal) or executives, such as the President (Fairfax 1975). Those subscribing to this belief contend that decision-making by the populous is not the norm in American public policy. Instead, there is an inherent reliance on representatives to voice opinions, cast votes, and ultimately make decisions about programs and policies that are adopted by public sector entities. For this contingent, representation is vital.

Practical Science Competency

Georgia's seventeen islands have unique resources and threats that distinguish them not only from inland areas and the rest of Georgia, but oftentimes distinguish them from one another.

The string of islands encompasses roughly 600 square miles of land and an additional 550 square miles of tidal marshes, generally sitting on the western side of the island and separating it from the mainland. These represent roughly 35% of all remaining, undeveloped marshland on the eastern coast of the United States. These marshes are important, for one reason, due to their “pristine waters for clams; that require clean unpolluted water.” The benefit is cyclical and self-perpetuating, as those same clams “act as filters and can actually improve the quality of the water in which they grow.” Among researchers, the Georgia marshes are recognized as a “standard example of marsh to start from” and provide a rare opportunity to investigate marsh that hasn’t been affected by development or impacted by population growth (Gibson 1948; *The Savannah Morning News*, 12 January 2007; *The Secret Seashore --- Georgia’s Barrier Islands* 2008; Phillips 1999).

Another coastal attribute that lacks an inland equivalent are the sand dunes. On Cumberland Island, these dunes reach over forty feet high and are said to be the largest on the eastern coast of the United States. The dunes are protected by sea oats (described as “golden rods swaying in the breeze) and their deep root systems, and in turn provide practical benefit for the coastal region, as they are “fortifying a ridge of oak trees.” These dunes have historically been recognized and addressed by state government, as the Georgia Shore Assistance Act of 1979 required supplementary Department of Natural Resources approval for development on or near the dunes, and later was amended to limit motor vehicle usage on the dunes (*The Secret Seashore --- Georgia’s Barrier Islands* 2008; Ndubisi 1996).

The Savannah River receives significant attention as home of the port of Savannah, the riverfront tourist destination of visitors to Savannah, the state border with South Carolina, and other economic/industrial drivers. Several other major rivers drain into the Atlantic Ocean,

including the Altamaha with its oceanic outlet at the north shore of St. Simons Island. At the mouth of the Altamaha, the sand and sediment have been found to be beneficial for shore birds and as a result the remainder of the food chain. Another difference at the Altamaha River is that the Port of Brunswick does not rest on the banks of the river. As a result, the outflow of water, sand, and sediment results in *additional* shoreline being added to the north shore of the island. This differs significantly from other islands. Tybee Island at the mouth of the Savannah River faces existing north shore erosion and could be impacted by future policies regarding the expansion of the Savannah Harbor and the wake that would accompany larger ships (Figure 2.06), whereas Blackbeard Island faces a natural tidal action that is “undercutting the forest [and] bringing down the live oaks” (*The Secret Seashore --- Georgia’s Barrier Islands* 2008).

Impacts and potential impacts on the coastal region have been well discussed throughout the recent decades. The inevitable changing of coastal assets has generally been accepted, but the response to those changes is far less agreeable. Scientists studying climate and marine activity have repeatedly demonstrated that sea levels are rising, but there is little agreement on how to respond to that change. Without response, it has been claimed that the islands “will be submerged in one thousand years” and “another and quite similar chain born as these pass out” (Gibson 1948).

Civic Competency

“Civic science competency” encompasses both the formal governmental mechanisms/entities and the broader notion of “governance,” described as “how government, institutions, markets, and social organizations interact with citizens when making decisions” (Bailey 2010).

Governmental entities are one factor in broader governance and civic competency. Many of the intuitive actors in land-use planning - individual land owners; citizens; businesses; and federal, regional, state, and local governments – have remained involved in the land-use planning process, but conflicting interests, fragmented authorities, and overlapping jurisdictions have hindered those decisions. Land-use decision making in coastal Georgia has been a peculiar process since colonial founding in that the area was driven by planned development. Oglethorpe’s series of 24 squares in Savannah subdivided property and designated land use in a ward-based system dates to the city’s founding in 1733. Similar land-use plans were developed in Darien (McIntosh County) in 1736 and Brunswick (Glynn County) in 1763 (Bannister 1961; Ndubisi 1996).

In 1738, “Discontent for the strict land-use policies implemented by the trustees in Savannah had been a problem for some time and became increasingly pervasive. As a result, 119 colonists petitioned for private land titles in the colony. They demanded larger land holdings, the use of slave labor for agricultural production, and the elimination of the ‘fee-tail’ system of land tenure that allowed land to be conveyed only to lineal descendants.” There was pushback from colonists against the strict ward-based plans that were the basis for Savannah (Ndubisi 1996).

Engagement under Oglethorpe’s colonial leadership in Georgia was based in insurgency rather than consultation (Figure 2.1). While American governance has openly shifted to the latter, the challenges of stakeholder engagement in Georgia in more modern times are well-documented and better-quantified. In 1976, “less than 17% [of the public participation strategies in effect in Georgia] involve opportunities for any member of the general public to be involved” (Caldwell 1976, cited by Neuhauser 1976).

A series of three legislative actions two centuries later prompted significant investment of resources in stakeholder engagement. These include (a) the federal 1968 Intergovernmental Cooperation Act that requires national, state, regional, and local engagement in federal program/project implementation and provides state and local governments the opportunity to review federal plans for any conflict with existing local interests; (b) the state Georgia Coastal Marshlands Protection Act of 1970 permit requirement for filling, dredging, draining, or altering and marshland area in the state; and (c) the 1972 Coastal Zone Management Act provided funds for execution of state-level coastal preservation, protection, and restoration (Ndubisi 1996).

The legislation has been subject to continuous review, with amendments over time to best accommodate the integration of stakeholders and encouragement of an informed participation process. Most notably, this was seen in 1992 amendment to the Coastal Marshlands Protection Act, themed around sustainability, that “strengthened its enforcement measures, and incorporated public trust provisions” into the protection of the state’s marshlands.

While formal government action has been widely applauded and encouraged, actions have not followed intent. For example, the state’s Coastal Marshlands Protection Act exempted certain state agencies from its permitting process for the purpose of “keeping rivers and harbors open for navigation, and public utility companies.” Among those agencies was the Georgia Department of Transportation and its construction of Interstate 95 resulted in the loss of 3,976 acres of that protected marsh area. A second example is the 1970s era CZMA, from which Georgia withdrew and abandoned funding efforts as a result of “conflicts over land-use control” (Ndubisi 1996).

The economic makeup of coastal Georgia has changed significantly in recent decades. Accounts from 1948 describe “organized industry” and being “at a minimum,” with fishing and

farming being small scale and locally oriented. Today, the region's economy is diverse and driven by the unique assets held by particular segments of the coastline. The most prominent industries in the region are manufacturing (lumber and chemical), seafood harvests, tourism, and military (Fort Stewart in Liberty County, Hunter Army Air Field in Chatham County, Kings Bay Naval Base in Camden County) (Ndubisi 1996; Gibson 1948).

A third component in civic competency is the relationship between the governed and the governing. That is, how well do community leaders engage with the citizens/citizen groups within. The relationship between certain enclaves of the coastal communities and governing bodies has potential for great strain. A group of approximately 50 native Geechee residents maintain their residences on approximately 3% of Sapelo Island's 16,500 acres (495 acres).

The island, located in unincorporated McIntosh County, saw substantial increases in the assessed value of property on the island and as a result increased property tax burdens placed on the long-time natives of the island. In one instance cited in *The New York Times*, one of those residents had a property tax bill of \$362 in 2011 that jumped to \$2,312 in 2012 based strictly on a new assessed value. Among the mainland services that were being provided/improved were garbage pickup, fire protection, water management, and roads, none of which are available/used by the small native population on Sapelo (Severson 2012).

The relationship between the community and the county government became even more volatile when the United States Department of Justice community relations division held two meetings with the Geechee residents about potential racial discrimination and "cultural genocide." In an attempt to substantiate the assessment and tax demands, the city/county manager claimed that the effort was "trying to clean up years of bad management and correct

property taxes that were kept artificially low by questionable policies” in a county that admittedly “has a history of bureaucratic mistakes and election corruption”(Severson 2012).

Sensitive racial relationships in the county are well documented, as the book “Praying for Sheetrock” (Greene 1991) documents a 1970s era political battle between the county’s white sheriff and a contingent of voters who wanted to elect a black official to county government. More recently, state representation does little to improve the civic dynamic. The area’s State Senator “suggests that residents file a lawsuit if they do not get relief,” with no state-level legislative recourse (Severson 2012).

State and federal governments have become dominant civic players not only as geographically exhaustive governance bodies, but also as property owners. In five different instances, the state and federal government have ownership and direct oversight on Jekyll, Sapelo, Ossabaw, Cumberland, and Wassaw Islands (Figure 4.1).

Jekyll Island was home to the Jekyll Island Club, founded in 1886. Membership included wealthy Americans of the era including the Rockefeller, Vanderbilt, Morgan, and Pulitzer families. The “most elite social club in the country” fell victim to the Great Depression and the privately owned island and club were closed in 1942. Five years later, in 1947, the State of Georgia purchased the island and all its facilities for \$675,000. The island was designated a public park under the jurisdiction of the eight-member Jekyll Island Authority, a state chartered authority. With the state’s acquisition, development on the island was subject to a “65/35” regulation in which 65% of the island must be held in conservation while the remaining 35% may be developed. As of 2008, it is estimated that 32% of the island is developed (Ndubisi 1996; *The Secret Seashore --- Georgia’s Barrier Islands* 2008).

A second island under the direct auspices of the government is Sapelo Island. The island is not accessible by ground and is instead reliant on ferry service or air service through a private/non-commercial airport. The island had been purchased in the 1930's by tobacco executive heir Richard Reynolds of North Carolina. In 1953, Reynolds offered the University of Georgia to establish a "marine institute" on the island with access to the island's marshland and indoor lab space for studying "the marsh ecology, how everything interacts, the micro-organisms, plants, fish, crabs and shrimp." The southern portion of Sapelo Island was purchased with the Coastal Zone Management Act funds from the federal government and the remainder purchased with state funds. This is of great value for Georgia's coastal preservation efforts and UGA's research objectives, as Georgia's marshland represents 1/3 of all Atlantic coast marshland. The island itself has a small enclave of native residents (discussed in *Georgia Cultural Competency* section), while the remaining 97% is owned by the Georgia Department of Natural Resources, NOAA, and the University System of Georgia - an example of civic ownership with intergovernmental relationships (*The Secret Seashore --- Georgia's Barrier Islands* 2008; Ndubisi 1996).

Ossabaw Island is a third example of direct civic engagement in coastal resources. The previous owner fell victim to high operational expenditures and tax burdens and Governor Jimmy Carter facilitated state of ownership, allowing "the State of Georgia, in the name of the citizens here, to own the island" and create the state's "first Heritage Preserve" (*The Secret Seashore --- Georgia's Barrier Islands* 2008).

Cumberland Island is owned wholly by the federal government, maintained by the National Park Service since its designation as a national seashore in 1972. The property had previously been privately held by the family of Thomas Carnegie, brother of steel industry

executive Andrew Carnegie, who ...”arranged for most of the island to be transferred from private ownership to public park” in the 1950s and Cumberland is one of ten national seashores (*The Secret Seashore --- Georgia’s Barrier Islands* 2008).

The final example of direct public-sector ownership of coastal real estate is Wassaw Island. The island had been purchased by George Parsons, a cotton magnate from Savannah in 1866 with interest in agricultural ventures. Though unsuitable for agriculture, the island was never developed but was held by the family and passed down through several generations. Developers began to express interest in the island in the 1950s and 1960s and rumors circulated that the state government was making moves toward assuming control of the island.

The island was “secretly sold” to the non-profit organization *The Nature Conservancy* who, in turn, transferred the property to the federal government under the auspices of the United States Fish and Wildlife Service. The federal ownership remains in place and is one of 556 national wildlife refuges in the USFWS system (*The Secret Seashore --- Georgia’s Barrier Islands* 2008).

These five islands represent ownership and governance by (a) a state-chartered, quasi-public entity; (b) a joint federal/state and public/quasi-public ownership model; (c) direct, public, state-level ownership; (d) direct, public, federal-level ownership; and (e) acquisition and ownership transfer by a non-profit organization, demonstrating the diversity of governance models that exist in the region.

Cultural Competency

Oftentimes, vastly different cultures are inextricably linked by virtue of their proximity and the resulting group dynamics can serve to further define a community. Native populations, current residents, and other cultural factors influence the cultural science competency and yield

heavy influence in coastal environments. Specifically on several Georgia islands, the native, indigenous populations continue to play a role in the existence of the island.

From a cultural and societal perspective, the value of the six waterfront counties in Georgia cannot be underestimated. In regard to historical value, the coastal region is more important than any other region in the state. Savannah was the landing site of James Oglethorpe and the first settlement in the colony of Georgia, and the city served as the first capital for what would ultimately become the State of Georgia. The Georgia Historical Commission oversaw the installation of markers at historical sites across the state. By the time that effort concluded in 1998 the 3.8% of counties (6/159) in this research region were home to 19.2% of the state's historical markers (*Georgia Historical Markers; the Complete Texts of 1752 Markers* 1973).

Other cultural factors include demographics such as urbanization, population change, poverty, age, and income (Table 4.3).

The region is relatively young, with a higher proportion of African-American residents (35.4%) than the rest of Georgia (30.2%). Housing also provides a distinction, in regard to vacant housing units (7.4% v. 5.1% inland) and percentage of *owner*-occupied housing compared to percentage of *renter*-occupied housing – 32.2% of inland population lives in renter-occupied housing, compared to 37.5% of the coastal population. The latter is possibly indicative of residents and vacationers that are not permanent residents, presenting its own cultural distinction (United States Census Bureau 2010).

A strong sense of community is not necessarily hindered by physical barriers, as the economic relationship between St. Simons Island and mainland Glynn County is not impeded, reflected in jobs, consumer spending, port traffic, and tourism. Similarly, the region has a harmonious history that is another attribute of substantial cultural value. The state's islands are

“important sources of history and legend,” the region has been home to “the Battle of Bloody Marsh, Fort Frederica, [and] Spanish missionaries,” and the African-American Pentecostalism revivalism movement appeared and grew from the region (Gibson 1948; Goldsmith 1998).

Tybee Island – the northernmost of the state’s islands, sitting at the mouth of the Savannah River – differs from the others in that it is generally considered more of a vacation destination by visitors. Among the terms used to describe the island are the “Redneck Riviera of the South,” “Truckstop by the Sea,” and “Tacky Tybee.” It is the most densely developed of the state’s islands and the beachfront has been a recreational and social focal point since the 1930s (*The Secret Seashore --- Georgia’s Barrier Islands* 2008).

At the height of slave use in Georgia in the pre-Civil War 1800s, Cumberland Island was home to 348 slaves and their former quarters are among those remaining buildings. Slavery now being a part of the state’s and nation’s histories and agricultural activities having left the island many decades earlier, these are relics the past and epitomize the historic preservation efforts that are in place across the entirety of the coastal region (*The Secret Seashore --- Georgia’s Barrier Islands* 2008).

As addressed in Chapter 3, the policy process demands a balance of practical, civic, and cultural science competencies. Small native populations remain on Sapelo Island. While the majority of the island’s property is government owned, approximately 3% remains in the hand of the “Geechee” community of Hog Hammock. It is the last known remaining Geechee community in the state and is a rare *cultural* asset. The population of roughly 50 residents was described in 2012 by *The New York Times* as “one of the most fragile cultures in America” and their customary law and traditional uses of their native land have often been “sacrificed or neglected as other property rights have been superimposed upon them” (Beckman and Coleman 1999). In

addition to the earlier referenced *civic* challenge faced by the island residents in the form of tax assessment, other cultural issues facing the island have been racial tension with the county government (the county is 61.1% white, per the 2010 Census), language barriers (the island residents speak a variety of Creole), and lifestyle. While claiming that the culture is “being kept alive,” residents and observers alike note that “the old ways and traditions are disappearing” (*The Secret Seashore --- Georgia’s Barrier Islands* 2008; Severson 2012).

Engagement of all applicable stakeholders, representing all three of the axes in the competencies typology, will result in “a stakeholder analysis on current coastal and marine resource uses and information on how these activities have changed over time will help planners determine how to sustain ecological, economic, and cultural values and balance competing uses” (Gilman 2002). Understanding coastal assets, comprehending the governance process, and knowing the cultural eccentricities of a community are vital in effective policy development and implementation.

Coastal Georgia Policies and Projects

To provide focus for the research, stakeholders and leaders affiliated with the following five coastal projects that involve public input in Georgia’s coastal areas were solicited to participate in the research: (a) Savannah Harbor expansion (SHEP); (b) South Atlantic Fisheries Management Council policies (SAFMC); (c) Marsh Hammocks and the Docks and Marinas planning efforts; (d) Coastal Comprehensive Plan; and (e) Glynn County Growth Task Force/Alatama Avenue Corridor Redevelopment.

The selection of these five decision-making processes was strategic. They include policy development at the local, multi-county, state, regional, and national levels; address differing frequencies of process (routinely addressing fisheries management, 20-year comprehensive

planning, once-in-a-lifetime harbor deepening); and differing lengths of process (currently at 16 years for Savannah Harbor Deepening). Differentiating between “levels” of government was necessary given the findings of previous research. In studying coastal management in the village, municipal, and national governments in the Philippines and Indonesia, the requirements, successes, and challenges facing stakeholder participation in decision-making varied greatly (Christie et al 2005). Accounting for these differences was important and this approach was embraced by participants, with one noting that “fishery management probably involves stakeholders more effectively than any government process I know about. Perhaps it’s because they had a tradition of doing it routinely, rather than it being a one-time issue the Savannah harbor deepening is a one-time or once every 50- years project...,” observing the policies’ inherent differences.

As has been established in earlier sections of this dissertation, the objective of this exploratory research is to “step back” and evaluate the *perceptions* of engagement in selected processes affecting the six-county coastal region of Georgia. In order to evaluate these perceptions of processes, characteristics of the process itself are necessary in the evaluation tool. This section will provide background of each process, including its organizing body, goals and objectives, stakeholder engagement plans, assessment mechanisms, and overall effectiveness.

Savannah Harbor Expansion Plan (SHEP)

The addition of additional locks will bring maximum depth for the 49.7 mile canal from 39.37 feet to 60.04 feet. In Savannah, the concern and motivation for expansion of the harbor has been the increased *depth* offered by the Panama Canal lock additions. In its current state, the canal is too shallow to accompany a sizable number of the world’s cargo ships. The “post–Panamax” ships that are too large for the canal account for “27 percent of the world’s capacity of

containerized maritime shipping,” all of which is seen as lost port traffic as well (Reid 2007). The \$5.25B project was approved in 1995, construction began in 2007 and completion is scheduled for 2014 (Mann 2011; Reid 2007). The current expansion plan for Savannah Harbor will deepen the harbor from 42 feet to 48 feet and local media has published opinion and editorial pieces that question whether “...the plan to deepen the channel from 42 feet to 48 feet is already obsolete.” (*Annual Report and Regional Profiles* 2011).

The current depth has proven challenging for economic interests as in 1999, 52% of incoming barges “could not come up the river with a full load on less than high tide.” Site-specific post-Panamax challenges are being faced elsewhere on the east coast of the United States. Biscayne Bay in Florida would require blasting of limestone rather than the dredging of sand and sediment; the Port of New York has the *depth* necessary to accommodate the post-Panamax ships, but is inhibited by the clearance of the Bayonne Bridge that will not permit passage of a ship with cargo (Allen 2012).

The harbor itself has seen much change since Savannah’s founding in 1733. The first deepening of the original harbor was done in 1873, taking the harbor to a depth of 22 feet. Over the following 121 years, five additional deepening efforts were undertaken. The most recent dredge took place in 1994 to a depth of 42 feet¹. In 1999, Congress conditionally approved the 48’ SHEP with consent of the Secretaries of the Interior, Commerce and Army and the Administrator of the EPA. The positioning of the Savannah Harbor in relation to the Savannah River and other geographic/geo-political features is seen in Figure 4.3.

On the national front, the port of Savannah is the fourth largest container port in the United States and handles 16% of the east coast’s overseas cargo. The port of Savannah is

¹ Deepening projects include: (a) 1873, 22 feet; (b) 1907, 26 feet; (c) 1917-1935, 30 feet; (d) 1945-1954, 34 feet; (e) 1965, 38 feet; and (f) 1994, 42 feet.

widely recognized as an economic driver in the state of Georgia. Statewide, over 295,000 jobs (7.0% of state total); \$15.5B in income (5.0% of state total personal income); 61.7B in total revenue (9.0% of state total); and \$6.1B in federal, state, and local taxes are directly attributable to the port and its economic activity. (Humphreys 2010).

The Savannah Harbor Expansion Project (SHEP) is the most complex, far-reaching, and lengthy of the five policy processes included in this research. A series of 12 federal laws and 7 executive orders mandate stakeholder engagement in the project. While the Savannah harbor itself is under the jurisdiction of the Georgia Ports Authority (GPA), a state agency, the expansion project has been overseen by the USACOE. Consequently, this stakeholder engagement effort has been a *federal* process.

The expansion of the Panama Canal is a driving force behind SHEP. The ability to handle larger ships means increased cargo business and economic growth. For that reason, there is a rush among east coast ports to deepen their harbors to accommodate ships. Among those ports on the east coast vying for deepening are Miami, Florida (deepening to 50 feet); Charleston, SC; and Newark, NJ (Allen 2012). Because of this potential economic growth, there are an increasing number of potential stakeholders in the process, as defined by Dalton (2006). These stakeholders range from individuals with focused interests in a particular component of the expansion to the largest identified stakeholder – the entire state of South Carolina. In an October 2011 article from the Associated Press, South Carolina is identified as “a stakeholder that also operates the nearest competing port.” Among the reasons for this label are the shared boundary between the states that is formed by the Savannah River’s stretch between the harbor and its outlet into the Atlantic Ocean, the potential legal leverage of South Carolina in permit issuance, and the economic implications of the project on the state (Bynum, 15 October 2011).

The “hard science” concerns that were of primary interest in the early studies of the harbor deepening project were the impacts including salinity changes, dissolved oxygen, chloride levels, salt water wetlands, beach erosion, channel slope erosion, tide gate restoration, and tidal amplitude among many others (*Savannah Harbor Expansion Project, Status Update 2011*).

Practical science concerns have been throughout all dredging processes that have taken place at the harbor, but received varying degrees of attention and consideration depending on the time period. Among those most prominent throughout this process have been the salinity of the Savannah National Wildlife Refuge, contamination of drinking water in the aquifer, potential destruction of habitats for an endangered sea turtle, toxic runoff, and an impact on rare fish. Beyond the biological and ecological interests, practical concerns include climatology and the study of ocean levels. Experts in those fields have expressed concern that the proposed 48 foot depth would increase storm surge up-river (Landers 2011; Muller 2012).

Of the five projects studied as a part of this research, SHEP had the most structured and formalized approach to the engagement of stakeholders. The Stakeholder Engagement Group (SEG) had the two-fold objectives of providing: (a) empower the general public (specifically identified as such) to voice support and/or concern, access and familiarize themselves with the available research and information, and provide input in ways they deemed appropriate; and (b) advise the Georgia Ports Authority (GPA) on the practical science needs and analyses, anticipated and/or perceived impacts of the deepening, and options for mitigation of impacts.

To achieve these two ends, SEG was organized into a series of nine committees addressing operational issues, beach erosion, striped bass, technical modeling, communications, fisheries, economics, dredging and disposal, and the aquifer. These nine committees served as the forum for 37 identified concerns ranging from very broad (Salinity Changes) to very narrow

(Ship Wave Erosion on North Tybee Island). Through the end of calendar year 2011, the SEG had met 69 times with attendance averaging 44 and ranging 17-55, inclusive of both leaders and stakeholders.

Information-sharing became a dominant objective early in the SHEP timeline. The USACOE described their information sharing as an effort to “educate stakeholders” through mediums including “media interviews, meetings, workshops, [and] news releases” (“Corps of Engineers Col. Hall discusses harbor deepening” 2011). The most widely used medium has been the project’s website. It was established (www.savharbor.com) and maintained by a third party, private consulting firm (CH2M Hill) and included a timeline, background information, electronic versions of all studies and reports, illustrations, and links to meeting information. This tool served as a “communication” mechanism, but not as a tool for active participation (Reed 2008).

Both the website and in-person forums were critiqued by written comments:

... the CEO (Coastal Environmental Organization of Georgia, Inc.) feels that due to the vagueness of the premeeting advertisements and the GPA’s chosen format for this meeting whereby there is no true public comment and no opportunity for opposing viewpoints to be heard, the use of any input received at this meeting must be limited only to GPA’s internal information and advisory purposes. (Scoping Meeting Comments, Record 15)

and

GPA (Georgia Ports Authority) Should Hold a Public Meeting, Not an Informational ‘Meeting’. (sic) The ‘meeting’ announced by the notice consisted of a room with several display tables staffed by GPA agents and employees. Display materials indirectly pointed out the wide-ranging natural resource issues in need of further study, but carefully avoided any description of the Project’s expected impacts such as negative effects on sturgeon, striped bass, dissolved oxygen levels and freshwater marsh. Economic matters received the opposite treatment. (Scoping Meeting Comments, Record 157)

Because these “scoping meetings” were a part of the formal and proposed engagement process that was designed to meet legal requirements, their capacity to do so was consistently challenged by respondents and the validity of the findings challenged such that the USACOE and GPA not

“use the results of this meeting to establish anything conclusively” (Scoping Meeting Comments, Record 20). Among the other written descriptions of this portion of the engagement process were “a room with several display tables staffed by GPA agents and employees,” having “carefully avoided any description of...expected impacts,” and a part of a hastily organized response for a “‘fast-track’ authorization process that rushed the Project through Congress” (Scoping meeting Comments, Record 175).

Within the state, the project has been one of civic contention. Cost is a perpetual factor, and a “power grab” by the state’s Lieutenant Governor was described as a State Senator from the region as jeopardizing state-based funding (Peterson 2011).

The State of South Carolina has been a substantive actor throughout the process. The Savannah River forms the border between the two states and the dredging and deepening of the river will have an impact on both states, though the port itself sits on the south shore of the river. The role of South Carolina as stakeholder and the relationship between the two actors as peers in the “level of government” classification has been a recurring theme throughout coverage of the process with South Carolina challenging the expansion through a variety of mechanisms including an instance where the *state* government denied a water quality permit to a *federal* agency “saying it would cause unacceptable harm to the waterway’s endangered fish and fragile marshes.” The “cutthroat competition” between the two states, largely attributable to the Port of Charleston, SC being in direct competition to the Port of Savannah, has “made it harder for the two ports to maintain public support,” with reference to earlier deepening projects (“Leaders Discuss Environmental Impact of a Possible Georgia-South Carolina Port” 2000; Bynum, 15 October 2011).

In a more personal and public medium, South Carolina Governor Nikki Haley had told a Charleston audience that “Georgia has had their way with us for too long,” while Georgia’s *Savannah Morning News* “characterized the criticism [of an alternative effort] as jealousy of the Georgia Ports Authority and an effort to sabotage its future success” (Bird 2011; Bynum, 15 October 2011).

Government chambers have also served as a venue for the state-to-state conflict. The South Carolina legislature repeatedly criticized the project and specifically Georgia’s purported effort to dispose of the dredged material from the Savannah River on the South Carolina side of the state line; the Director of the GPA described South Carolina’s permit denial as a “nuisance”; and the Speaker of the Georgia House of Representatives stressed to his chamber the “hostile action” of the South Carolina legislature passing a resolution opposing the deepening of the Savannah harbor, “while seeking federal funds for deepening the Charleston harbor” (Bird 2011; Georgia House endorses deeper Savannah harbor” 2011; Bynum, 15 October 2011; “Leaders Discuss Environmental Impact of a Possible Georgia-South Carolina Port” 2000).

In response to these interdisciplinary demands, Col. Jeffrey Hall of the Savannah District of the USACOE described the corps’ role as bringing “together various experts – engineers, biologists, economists, and many others to address SHEP’s complex issues” (Corps of Engineers Col. Hall discusses harbor deepening” 2011).

South Atlantic Fishery Management Council (SAFMC)

The South Atlantic Fishery Management Council (SAFMC) was established by the federal government by virtue of the Magnuson Fishery Conservation and Management Act of 1976 and “is responsible for the conservation and management of fish stocks within the federal 200-mile limit of the Atlantic off the coasts of North Carolina, South Carolina, Georgia and east

Florida to Key West” (Figure 4.4) (*About SAFMC* 2008). Development and imposition of plans/policies by SAFMC is a *multi-state regional* process.

The SAFMC has long testified of their commitment to engaging stakeholders in their agency’s decision-making process, but media has addressed “...a cultural divide between fishermen and scientists” as a perpetual challenge for the council. The expertise, experience, “vocabulary,” and “way of looking at the world” differ between these groups rendering the decision-making process more difficult than more universal and generalizable counterparts (Hotz 2009). Participants and observers recognize this disparity, one publishing an editorial comment stating,

I am no economist, but here’s a layman’s view of what happens when the closure goes into effect in December. The bait shops, boat dealers and similar providers will be hurt first by the recreational shutdown. Anglers won’t take it on the chin economically...And the wholesalers and retailers of all the trappings of fishing, from squid to suntan lotion, will feel the sting. The head boats and other charter boats here that count on bottom-fishing will be damaged – but not all...Few of these boats and crews will be able to make a living once the deep-water fishing is closed...The wholesalers who supply all the smaller fish houses and restaurants with fresh seafood will take a hit but won’t go under...Prices go up. Quality goes down. That’s a lose-lose situation for all. (Sutton 5 June 2010)

When those parties are participating in a process alongside one another, not all obstacles facing SAFMC policies are addressed. The legitimacy of the economic and scientific work being developed and disseminated is regularly challenges, as one critique claims,

...that goofy piece of legislation also mandated that economic impact studies be done and that management decisions be based on the best science available. The economic study was a laugh. And the science is so unsound that council members have pretty much quit trying to defending it publicly (Sutton 5 June 2010)

Even with the “layman” opinion acknowledged and “legitimacy” challenges can exist in the objectives of stakeholder engagement, as a fisherman in the region claimed of a recent SAFMC

process, “NOAA told us where the replenishment reserves would be; they didn’t ask us” (Suman, Shivilani, and Milon 1999).

Regarding this particular policy and in this particular culture, participants have been largely forthcoming about their perspectives of the process and their own needs. The owner of the Capt. Stacy Fishing Center (in North Carolina) described the situation of the fishermen being that they “don’t go out there and catch a fish to put it in plastic, put it on the wall and sit there at cocktail parties and laugh about it...They go out to get fish to put food on the table so they can laugh about it over a glass of tea and feed their children” (Pippin 2007). Another North Carolina fisherman questioned the decisions of the SAFMC in the (*Wilmington, North Carolina*) *Star-News* in October 2009 when he posed the question, “...how can we make a living for our families and every year they’re taking something from us? But yet the tax man’s sittin’ there holding his hands out” (Hotz 2009). Participants’ interests are largely unilateral and participation is largely self-serving. This is the case not only for the fishermen and business owners quoted in local media, but also for scientists and public officials.

On the part of leadership, however, there is a demonstrated lack of clarity on the goal and objective of the engagement process. Recalling the directional context of interactions (Figure 2.1), both communication/information-sharing and consultation were desired, as the five public meetings consisted of staff and SAFMC representatives answering questions posed by attendees and gathering opinions of that group. The meetings were never presented or described as two-way or participatory in nature (Ferguson 2008).

Much like their counterparts in other policy areas, leadership within the SAFMC introduces technical competency to the discussion of stakeholder involvement. In the same Congressional testimony referenced earlier, the same chairman noted the importance that

“stakeholders understand the basis for developing specific management strategies and why resulting actions are necessary for the sustainability of the resource.” Without an awareness of the *practical* science behind fishery management, these policy-makers are implying that stakeholders that might be adversely affected by the policy changes don’t have the requisite competency to influence those changes. To the contrary, the SAFMC admittedly places greater emphasis on communication (a one-way venture passing information to stakeholders) (Hildebrand 1997; Neuhauser 1976; *On the Operations of the South Atlantic Fishery Management Council and the Reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act before the House Committee on Resources*; Sutton 20 December 2009; Reed 2008).

Marsh Hammocks, Docks, and Marinas Policies

In 1970, the State of Georgia passed the Coastal Marshlands Protection Act which was intended to provide statutory security for the Georgia coast’s remaining marshlands and the “fragile plant and animal life in saltwater and brackish marshes” (“Developers lobby to limit state regulation of marsh construction” 2006). As mentioned earlier, Georgia’s marshlands represent roughly one-third of the remaining, un-developed marshland on the east coast of the United States. In 2006-2007, the Georgia Department of Natural Resources (DNR) initiated a process to revise rules and regulations surrounding the construction of new, public-use docks and marinas in the state’s marsh hammocks between the barrier islands and mainland. Because it was led by a state agency and involves state-level policies, this project introduces a *state* process to the research (Landers 12 January 2007).

The DNR planning process for development near coastal marshes involved two public hearings in late 2006-early 2007. The Marsh Hammocks and Docks and Marinas stakeholder

engagement processes had impact beyond their own project. The Coastal Comprehensive Plan (another project within this research) utilized the recommendations of the Georgia Department of Natural Resources (DNR) Docks and Marinas Committee and the recommendations from the ‘DNR Marsh Hammocks Stakeholders Dialogue’ in generating strategies for their own efforts (Landers 12 January 2007; *The Secret Seashore --- Georgia’s Barrier Islands* 2008).

The Coastal Marshlands Protection Committee also led the standard-setting process for community docks and marinas across the entirety of six-county region making up the Georgia coast. While private docks (classified as “those that are share by four or fewer families”) are not subject to standards set by this committee, docks that are for community use were under review by this process. This process was intended to revise existing regulations on requirements for permitting based on dock length and its potential impact on existing marsh in the coastal region. The engagement process involved a “stakeholder committee” that served as one of three influences for the draft rule that was prepared and submitted to the DNR Coastal Resources Division and would ultimate be submitted to the DNR Board (Landers 22 December 2008)². Existing documentation in local media archives and DNR archives does not identify the members of this committee, how those members were chosen, or indicate how active they were in drafting the proposed regulations. After being presented to the Coastal Marshland Protection Committee for review, a “meeting to gather public input on the proposed standards for permitting marinas and community docks” in May 2009 at Armstrong Atlantic State University in Savannah

² At the time of the revision of the community docks regulations (2005-2009), Susan Shipman was the director of the Coastal Resources Division of the Georgia Department of Natural Resources. During the two-year window in which this grant-based research (beginning in 2010) was taking place, Ms. Shipman had retired from her position at DNR and agreed to serve as a member of the Advisory Committee for this grant-funded research.

Public behavior at the second public hearing was also described in *The Savannah Morning News* article. Those signed up to speak at the hearing (reported to be approximately 60) were each allotted three (3) minutes to make their observations. An environmental attorney was making points about the state's jurisdiction and interpretation of the Coastal Marshlands Protection Act when that three-minute allotment expired. In response, other attendees called "he can have my time." Based on the Landers' reporting, "at least half a dozen audience members" made this offer and the attorney whose time had expired continued, making additional points (Landers 12 January 2007). This response is indicative of a greater level of flexibility and lower level of formality in this particular process, as strict adherence to the three-minute cap would have likely invoked different perceptions on the part of the attorney and those participants vocally supporting his continuation.

At hand in developing this policy were three primary issues of concern to residents; recreational users of the coast; developers; environmental activists; ecologists, microbiologists, and marine scientists; and public officials: (a) a "buffer zone" between development (including docks and marinas) and the marshland; (b) the development of "mega-docks" of roughly 300 yards/900 feet in length; and (c) storm water run-off from supplementary amenities (Landers 12 January 2007).

For practical scientists (the vertical axis in Figure 3.2), the high level of desired competency was not witnessed in subsequent public meeting feedback. Media coverage indicates a desired compromise between a 100-foot buffer between development and marshland would be "good," but would hinder development; a 25-foot buffer would be compliant with existing state law and provide leverage to developers, but "inadequate" and "too close for comfort" in protecting the marshland; and a citizens' stakeholder group recommendation of a 50-foot buffer

with which many who attended the public hearing that *were not* participants in the state-convened group did not concur (*The Savannah Morning News*, 12 January 2007).

New facilities would likely attract additional users, which would place additional demands on existing infrastructure. The secondary effects and long-term side impacts of new and expanded infrastructure are considered in the rules, regulations, and permitting process and have historically presented challenges in the process. These include expansions of the sewer system, construction of new housing on higher ground, parking lots for day-users, and storage facilities for watercraft not parked at the dock/marina (*The Savannah Morning News*, 13 March 2006).

Much like the development that would result from a narrower buffer zone and the accompanying facilities and amenities, the development of the public-use mega-docks would create greater capacity for recreation use of the state's coastal region. The concern among the practical science experts is that the 300 yard docks "...could spur the accumulation of dead marsh grass, called marsh wrack," which in turn could have adverse impact on the organisms and animals that reside in and frequent the marshes. There is no mandated maximum length for docks, but the five-member Coastal Marshlands Protection Committee determines permitted construction on a case-by-case basis. Civics contributes to the conflict. From a legal perspective, this has been criticized as "arbitrary and not based on science"; from a governmental perspective, developers acknowledge that permitting at the local level is more expeditious than permitting at the state level but are critical of smaller counties that "aren't up to the job" and that "can't be counted on to do what needs to be done because of their staffing and funding and...[lack of] political will; and from an applicant perspective, there is criticism of inconsistency, describing the application process as "never the same twice (Landers 5 May 2009; "Developers lobby to

limit state regulation of marsh construction” 2006; “Group Grapples with Dock Permit Process” 13 March 2006)

Coastal Comprehensive Plan (CCP)

The Georgia Department of Community Affairs (DCA) is the state agency charged with the task to “develop, promote, sustain, and assist local government” through a variety of different functions and ultimately serve as a conduit for the local governments of Georgia (city, county, and regional commissions) and the state government (O.C.G.A. § 50-8-3). On 11 February 2005, as his first term as governor drew to a close, Sonny Perdue issued an Executive Order mandating the creation of a comprehensive plan for coastal Georgia (Figure 4.5). Because of its scope, this research considers the CCP a *multi-county* process.

From the outset, there was a recognition of the necessity of stakeholder involvement, as per the document, “it is further ordered: That the Georgia Department of Community Affairs shall draw on the knowledge and shall seek the counsel and assistance of other private and public entities with expertise in Coastal Georgia as appropriate” (State of Georgia 2005).

The Coastal Comprehensive Plan Advisory Committee (CCPAC) identified three tasks which they deemed most vital to the development of the plan. The first of those three tasks was stakeholder involvement. The 35 member CCPAC was constructed of city, county, and state leaders; representatives of development authorities and convention and visitors bureaus that have a presence in the six-county region; business owners/leaders in the region; and residents of communities from all along the coast. This group, in supporting the development of a “Stakeholder Involvement Plan,” (SIP) specifically sought reflection of the “full range of community values and desires” in the development of the plan and in the final product (*Georgia Coastal Comprehensive Plan: Stakeholder Involvement Plan* 2006).

In their SIP, the committee added clarity to the purpose of the plan and indirectly addressed the competencies typology. The purpose of the effort, the group stated in their plan, was to “address the complexities and often competing interests of tourism, economic development, housing, transportation, environmental management and other growth related issues” (*Georgia Coastal Comprehensive Plan: Stakeholder Involvement Plan 2006*).

Beyond the planning objectives of the CCP, the advisory committee sought to provide city and county leaders with the “tools and strategies” they needed in implementing their own jurisdictional comprehensive plans and contributing to the overall sustainable growth of the region (*Georgia Coastal Comprehensive Plan: Stakeholder Involvement Plan 2006*).

Though not identified as a concern, challenge, or obstacle, the committee’s plan clearly and explicitly identifies the diversity of functions and the multiplicity of jurisdictional planning initiatives and the need to coordinate with these efforts to ensure effective implementation. This includes federal (Kings Bay Study, Ft. Stewart/HHA Joint Land Use Study), state (Comprehensive Wildlife Conservation Strategy, Hurricane evacuation plans), and local (city/county comprehensive plans) projects.

At the heart of the SIP is a nine-pronged plan of action for encouraging and facilitating public involvement. Included in this are activities (a series of three public meetings/workshops, interviews, contingency meetings, and project team meetings), strategies (coastal comprehensive plan advisory committee, technical advisory committees, and media relations campaigns), and tools (project website, ‘community choices’ pictorial survey) that were perceived as vital to a successful process. In regard to the activities, the public meetings were held simultaneously in Savannah (Chatham County), Midway (Liberty County), and St. Marys (Camden County); project team meetings took place in Savannah; and technical advisory committee and coastal

comprehensive plan advisory committee meetings were held at varying locations throughout the region over the course of the year that they were reported to take place.

Potential stakeholders include: local elected officials, local appointed officials, local government staff, state and federal government agencies, chambers of commerce, homebuilder associations, industrial development authorities, environmental organizations, coastal scientific community, non-profit organizations, historic organizations, regional and interstate groups, university system and department of technical and adult education, cultural and historic resources organizations, agricultural and silva-culture interest groups, and local government organizations, including the Association County Commissioners of Georgia and the Georgia Municipal Association. (*Coastal Georgia Comprehensive Plan, Stakeholder Involvement Plan*, 2006)

The Coastal Regional Commission (CRC) is one of twelve regional commissions (RC) intended to serve as “regional planning entity for land use, environmental, transportation, and historic preservation planning” (O.C.G.A. § 50-8-32). Each city and county government within the region is a member by default. In addition to the required tasks set forth by state law, the CRC provides geographic information systems, information technology, transportation, and social program support to its regional jurisdictions (<http://www.crc.ga.gov/default.aspx>).

As independent entities, each of affected jurisdictions is enabled to create their own plans though they are required to be submitted by the city/county government to the regional commission for “review, comment, and recommendation.” In the spirit of the statutes, the city/county plan and the review from the regional commission will identify and address any conflicts that may exist with plans in the broader region, the needs of any other affected jurisdictions, and ensure uniformity (O.C.G.A. § 50-8-36).

While the SIP explicitly identifies three tasks, “Stakeholder Involvement” is most prudent to this research. Among the objectives of this task are ensuring the involvement of community values and desires, identifying and engaging stakeholders, and using existing state resources to effectively solicit stakeholder engagement and facilitate an adequate outreach effort.

Within this stakeholder improvement task, there are a series of public involvement *goals* and within those, subsets of *objectives*. The four goals address (a) opportunities to “learn about and help shape policies,” stressing openness, inclusiveness, and accessibility; (b) information sharing with stress on mediums of communication and the importance of clarity, accuracy, timeliness, and usefulness; (c) mechanisms for feedback; and (d) continuous monitoring of progress and effectiveness.

Highlighting the challenge of defining “stakeholder,” the SIP does not provide an explicit definition, but instead provides a “definition by example.” The plan identifies 16 “potential stakeholders” that may have an interest in the planning process. While a list of potential stakeholders is provided in the SIP, one of the goals explicitly distinguishes between “stakeholders, citizens, planning partners, and the project team.” This list offers no clarity in how the definitions of these groups differ, or how their respective roles in the policy process differ.

Another challenge present in the SIP is the integration of existing plans and initiatives from other entities. As will be addressed in Chapters 4 and 5, one of the most substantial obstacles facing policy makers is conveying the differences that exist between federal policies, state policies, local policies, and policies that exist from other public/quasi-public entities. In identifying the “relationship to other plans and initiatives,” the SIP introduces a variety of policy-making efforts, including (a) the Fort Stewart/HHA Joint Land Use Study (federal); (b) existing comprehensive plans (local); (c) comprehensive wildlife conservation strategy (Georgia

DNR); (d) hurricane evacuation plans (State/GEMA); and (e) Georgia Tech Population Study of the six coastal counties (University System of Georgia, state-level special purpose entity).

Glynn County Growth Task Force

The Glynn GTF deals with a specific geographic area and is the most geographically focused of the five projects. Jurisdictionally, the GTF involves only Glynn County and the City of Brunswick (the only city within the county). This research considers it a *local* process (“Glynn County” 2010).

The city of Brunswick was based on Oglethorpe’s “prototype plan of Savannah” and was constructed in 1763 as a planned community. The community has experienced significant growth since its founding and development/redevelopment processes have taken place to respond to and better accommodate that growth. The GTF is a group representing 14 local planning agencies working specifically along the Altama Avenue corridor and has four primary goals in place for the district: (a) planning for growth, (b) promoting connectivity and transportation options, (c) addressing housing opportunities, and (d) creating a sense of place (“Glynn County”). The major catalysts for the redevelopment of the ~1,600 acres in the corridor include construction of a replacement Brunswick High School, expansion of the College of Coastal Georgia, and Southeast Georgia Health System (Hospital), with additional interest from Cypress Mill Square (Mall) (Figure 4.6). The Altama corridor redevelopment was described by a University of Georgia official as “a big planning effort, so it’s very important to hear residents’ needs and what they would like to see” (Fakour 9 November 2010; Fakour 14 February 2011; “Next development target: Area near college” 2010; Ndubisi 1996).

For those that live, work, or otherwise frequent the corridor, the public input and stakeholder engagement plan was intended to reach these audiences as a condition of the \$2

million grant from the United States Department of Housing and Urban Development funding the effort. Along with research/analysis and design/implementation plan development, public input and stakeholder engagement were among the initial three objectives. From the outset, this was intended to consist of personal interviews, focus groups, a town hall meeting, an electronic survey, a visual preference survey, and informal conversations with those who use the corridor most frequently (*Altama Community Transformation District*; Fakour 9 November 2010).

In this process, application of stakeholder engagement and the theoretical bases of stakeholder engagement do not appear to reflect one another. Participation is critical to stakeholder engagement and participation, by virtue of the definition established here, is a two-way, interactive effort. Communication (sharing information) and consultation (receiving feedback) are the two traditional one-way forms of engagement that modern efforts have been shying away from, but an objective stated in this news article purports the latter. An earlier article portrays the process in a slightly different context and one more in line with the participation literature (Neuhauser 1976; Reed 2008). While still not wholly adhering to the existing concept of participation, this framing does espouse the principles to a greater extent.

The GTF is the most localized of the five policies/projects included in this research, but that does equate to simplicity. The process engages 14 local/regional planning agencies (city, county, Brunswick and Glynn County Development Authority, Southeast Georgia Health System, Brunswick-Golden Isles Chamber of Commerce, College of Coastal Georgia, Pinova and Georgia Power, among others) The project is not limited in layers of governance. In addition to city and county governments, the University System of Georgia and the Glynn County School System are engaged and support is also stemming from the Coastal Regional Commission. Their contribution had been “seeking a \$2 million grant from the U.S. Department of Housing and

Urban Development to provide funding for the project over a three-year period” (Next development target: Area near college” 2010).

Consistent Themes

As discussed in Chapter 2, one of the biggest challenges facing academic research on stakeholder involvement is lack of uniformity in defining “stakeholder.” In practice, lack of clarity exists in each of these five processes, indicative of broader ambiguity.

The CCP consistently makes reference to both “community stakeholders and citizens,” suggesting that the two are not one in the same, but acknowledges that additional participants will be identified by various niche planning committees, local government officials, civic organizations and other stakeholders’ suggestions and “invited to participate in public workshops.”

The CCP approach to stakeholders was peculiar in it broke down all affiliated individuals into seven different “key participants” categories: (a) project team, (b) project advisory committee, (c) stakeholders, (d) community groups, (e) elected officials, (f) metropolitan planning organizations, and (g) regional development center (now known as Coastal Regional Commission). While this approach strives to be all-encompassing, it detracts from clarity in the role that certain individuals assume in the process. For instance, “local elected officials” are included as potential stakeholders in the “stakeholder” category, but are explicitly identified in their own category. Similarly, local appointed officials (with planning commission members offered as an example) and local government staff are included as “stakeholders,” but identified independently as members of metropolitan planning organizations. When assigning engaged individuals to multiple roles or providing them with a multitude of labels that contextualize their work, any clarity that may have existed is removed.

Future of Coastal Communities

Coastal policy has, over time, adopted a model comparable to the three-dimensions of sciences, actors, and disciplines seen in Table 3.1/Figure 3.2. These dimensions are identifiable in an increasingly prominent process known as Integrated Coastal Zone Management (ICZM) or Integrated Coastal Management (ICM). ICZM/ICM is defined as a planning model in which “appropriate environmental, social, demographic, and economic information should be available to all stakeholder groups, such that informed decision-making can be supported across the entire catchment–marine–coastal continuum., developed in 1992 and focusing on the relationship between the three foci (potential stakeholders, scientists, and policy-makers) and achieving both social and environmental benefits at an amicable meeting point for conflicting interests (Rupprecht Consult 2006; Sribuaiam 2009; Wheeler, Peterson, and Gordon-Brown 2011).

As has been demonstrated in stakeholder engagement literature, there is an inherently interdisciplinary nature to decisions regarding management and development of coastal environments. Because of this diversity of interests and actors, it is necessary to more deeply consider stakeholder involvement (mentioned to some degree by all three) as it affects the coastal environment. The ICZM model was intended to address this need. As it has matured, the model has been recognized by scholars as achieving the goal of improved access to the planning process for stakeholders, but criticized for discounting the need for scientific knowledge and marginalizing scientists, their knowledge, and their research abilities (Christie et al 2005; McFadden 2008).

From a practitioner standpoint, there are potential emerging implications for coastal environments and communities across the country. Understanding these future factors is critical to informed participation. An example of this forward-thinking knowledge is awareness of

anticipated changes in the coastal population that can potentially affect the use of natural resources, infrastructure needs, service demands, and changing values. Based on state-level population projections (Table 4.5), there are likely population shifts with significant implications on coastal regions on the horizon. These population projections are generated by state-level agencies/institutions based on unique methodology and are generated at different times. Of the 30 states sitting directly on a coastline, three will retain the same number of residents in coastal counties, 10 are projected to have increased proportions of state populations in a coastal county, and the remaining 17 are projected to have decreased proportions of state populations in their coastal counties.

All counties in Delaware, Hawaii, and Rhode Island sit on the coast and consequently 100% of the population will remain in a coastal county.

Ten states forecast a *higher* percentage of their state population living in a coastal county in future years, with the most significant gains projected in Alabama (growth from 8.6% in the state's two coastal counties in 2010 to 13.1% in 2030); Louisiana (27.3% in 2010 to 33.8% in 2030) Maine (Growth from 53.8% in 2010 to 68.1% in 2028); and South Carolina (14.2% in 2010 to 20.4% in 2030). For these states, the natural resources in coastal environments are apt to receive increasing attention and engagement processes will have to adapt to the attention and growth

Most significantly, 17 of the 30 states project a lower percentage of their state's population living in an immediately coastal county at the conclusion of the projection window than 2010 census data indicate. Georgia is included in this list. The most dramatic declines are anticipated in Maryland (a drop from 66.3% to 50.5%); New Hampshire (31.8% to 22.5%); and New Jersey (57.0% to 51.3%). While Georgia's decline from 5.2% of the state population in one

of the six coastal counties to 4.8% does not appear too substantial, it is important to recall that Georgia's coastal population was already the third lowest among coastal states. In the many of each, there are major population centers in *inland* portions of the state (Atlanta in Georgia; Charlotte and Raleigh-Durham-Chapel Hill in North Carolina; Arlington, Alexandria, Richmond in Virginia) that are anticipated to further dilute growth in the coastal areas. While the region has followed the state pattern and experienced raw growth over the past several decades, it has been diluted by growth in inland regions. Lagging behind the broader state, this growth rate is indicative of waning political influence of the coast in the state legislature, Congressional representation, and in statewide referenda. The counties experienced a decline in the overall percentage of the state population from 6.8% of the state's population in 1960 to 5.2% in 2010. Growth in the most recent decade (2000-2010, Table 4.4) indicates continuance of this trend and projections from the Governor's Office of Planning and Budget indicate this number will further decrease to 4.8% by 2030 (Table 4.6). Population shifts are not uncommon and are not limited to coastal environments, but Georgia's current situation is unique and, in regard to research, uncharted (United States Census Bureau 2010; Governor's Office of Planning and Budget).

While Georgia's coastal region has followed the state pattern and experienced raw growth over the past several decades, it has been diluted by growth in inland regions. Lagging behind the broader state, this growth rate is indicative of waning political influence of the coast in the state legislature, Congressional representation, and in statewide referenda. The counties experienced a decline in the overall percentage of the state population from 6.8% of the state's population in 1960 to 5.2% in 2010. Growth in the most recent decade (2000-2010, Table 4.4) indicates continuance of this trend and projections from the Governor's Office of Planning and Budget indicate this number will further decrease to 4.8% by 2030 (Table 4.6). Population shifts

are not uncommon and are not limited to coastal environments, but Georgia's current situation is unique and, in regard to research, uncharted (United States Census Bureau 2010; Governor's Office of Planning and Budget).

As a result of inland growth, the influence of coastal stakeholders will continue to be diluted in state, regional, and federal policy processes and stakeholders are forced to be increasingly aggressive in ensuring the interests of residents and environmental assets are known.

Chapter Summary

Stakeholder engagement processes have common interests, but remain unique and must address interests and values specific to particular environments. While this research is based on a coastal environment and population, the research model and findings are applicable in other environments and in policy development at all levels of government. To effectively respond to the needs and demands of a community, however, it is necessary to have a practical understanding of the community and policies at hand. This chapter serves a template for analyzing (a) the current state of the communities based on objective demographic, governance, and civic engagement indicators; (b) application of the Shen (1975) competency model and the associated three-pronged typologies reflected in Table 3.1; (c) existing progress in policy development and existing public understanding of the policy at hand; and (d) anticipated changes in regions and communities that may warrant pre-emptive action through the policy process.

Table 4.1 - Percentage of Populations in Coastal Regions, by State

State	Miles of Coastline	Percentage of Population in Immediately Adjacent Coastal County
Alabama	53	8.6%
Alaska	6,640	82.1%
California	840	63.4%
Connecticut	96	62.1%
DC	0	0.0%
Delaware	28	100.0%
Florida	1,350	74.8%
Georgia	100	5.2%
Hawaii	750	100.0%
Illinois	63	46.0%
Indiana	45	11.9%
Louisiana	397	27.3%
Maine	228	53.8%
Maryland	31	66.3%
Massachusetts	192	52.3%
Michigan	3,288	47.3%
Minnesota	189	4.1%
Mississippi	44	12.5%
New Hampshire	18	31.8%
New Jersey	130	57.0%
New York	127	74.4%
North Carolina	301	10.0%
Ohio	312	22.0%
Oregon	296	17.0%
Pennsylvania	51	2.2%
Rhode Island	40	100.0%
South Carolina	187	14.2%
Texas	367	23.6%
Virginia	112	51.8%
Washington	157	68.6%
Wisconsin	820	36.0%

Sources: United States Census Bureau 2010

Table 4.2 - Number of Coastal Counties (or County Equivalents), by State

State	Total Counties	Number of Coastal Adjacent Counties	Coastal Population Density	State Population Density	Coastal/State Population Density³
Alabama	67	2	210.6	94.4	2.23
Alaska	29	23	1.2	1.2	1.00
California	58	18	700.5	239.1	2.93
Connecticut	8	4	977.8	738.1	1.32
Delaware	3	3	460.8	460.8	1.00
Florida	67	35	476.5	350.6	1.36
Georgia	159	6	178.7	168.4	1.06
Hawaii	5	5	211.8	211.8	1.00
Illinois	102	2	4235.4	231.1	18.33
Indiana	92	2	508.0	181.0	2.81
Louisiana	64	11	175.9	104.9	1.68
Maine	16	8	91.6	43.1	2.13
Maryland	24	15	535.2	594.8	0.90
Massachusetts	14	8	1263.6	839.4	1.51
Michigan	83	40	155.8	174.8	0.89
Minnesota	87	3	22.0	66.6	0.33
Mississippi	82	3	208.8	63.2	3.30
New Hampshire	10	1	392.3	147.0	2.67
New Jersey	21	10	1378.3	1195.5	1.15
New York	62	17	1577.9	411.2	3.84
North Carolina	100	17	110.0	196.1	0.56
Ohio	88	7	806.7	282.3	2.86
Oregon	36	7	41.4	39.9	1.04
Pennsylvania	67	1	350.2	283.9	1.23
Rhode Island	5	5	1018.1	1018.1	1.00
South Carolina	46	6	453.9	153.9	2.95
Texas	254	17	439.0	96.3	4.56
Virginia	134	30	609.6	202.6	3.01
Washington	39	14	254.2	101.2	2.51
Wisconsin	72	15	194.4	105.0	1.85

³ Ratio >1.00 indicates collective coastal county population density greater than respective statewide density. States in which all counties are coastal = 1.00. Those *lower* that statewide density are highlighted

Table 4.3: Coastal Georgia County Demographic Indicators

County (North-to-South)	Demographic Characteristics
Chatham County	Heavily urbanized; relatively little percentage-based population change; moderate-to-high poverty rate; moderate populations of both youth and elderly; a low-to-moderate household income
Bryan County	Not urbanized; moderate-to-high percentage-based population growth; low-to-moderate poverty rate ; heavy concentration of youth with low population of elderly; highest average household income in the region
Liberty County	Low-to-moderately urbanized; population loss over the last decade; moderate-to-high poverty rate; heavy concentration of youth with lowest population of elderly in the region; low-to-moderate average household income
McIntosh County	Not urbanized; highest percentage-based population growth in the region ; moderate-to-high poverty rate; moderate levels of both youth and elderly populations; the lowest average household income in the region
Glynn County	Low-to-moderate urbanization; low-to-moderate percentage-based population growth; low-to-moderate poverty rate ; moderate levels of both youth and elderly populations; low-to-moderate average household income
Camden County	Low levels of urbanization; low-to-moderate percentage-based population growth; low-to-moderate poverty rate ; heavy concentration of youth and comparatively low population of elderly; moderate-to-high average household income

* “Positive” indicators in bold – these are <15.0% population growth; <10.0% poverty rate; and >\$40,000 average household income. Urbanization and youth/elderly measures are excluded from these “positive” classifications.

Source: Georgia Governor’s Office of Planning and Budget

Table 4.4: Population Changes in Coastal Georgia Six-County Region, 2000-2010

County (N to S)	2000 Population	2010 Population	% Growth
Chatham	232,048	265,128	14.3%
Bryan	23,417	30,233	29.1%
Liberty	61,610	63,453	3.0%
McIntosh	10,847	14,333	32.1%
Glynn	67,568	79,626	17.8%
Camden	43,664	50,513	15.7%
Six-County Region	439,154	503,286	14.6%
State of Georgia	8,186,453	9,687,653	18.3%

Source: United States Census Bureau 2010

Table 4.5: Percentage of Population, Adjacent Coastal County, 2010-2030 ^{4 5 6}

State	Percentage, 2010 Census	Projected Percentage, 2030	Notes and Source	
Alabama	8.6%	13.1%	Projections Published June 2011 Source: US Census Bureau and Center for Business and Economic Research, The University of Alabama	↑
Alaska	82.1%	83.4%	Projections Published April 2012 Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section	↑
California	63.4%	60.0%	Projections Published June 2012 Source: Demographic Research Unit, California Department of Finance	↓
Connecticut	62.1%	63.1%	Projections Published March 2007 Source: Connecticut State Data Center, University of Connecticut	↑
Delaware	100.0%	100.0%	Projections Published March 2012 Source: Delaware Population Consortium, Delaware Office of State Planning Coordination	↔
Florida	74.8%	74.0%	Projections Published March 2010 Source: Warrington College of Business Administration, Bureau of Economic and Business Research	↓
Georgia	5.2%	4.8%	Projections Published March 2010 Source: Georgia Governor's Office of Planning and Budget	↓
Hawaii	100.0%	100.0%	Projections Published March 2012 Source: Hawaii Department of Business, Economic Development and Tourism, Research and Economic Analysis Division	↔
Illinois	46.0%	45.3%	Projections Published 2011 Source: Illinois Department of Commerce and Economic Opportunity	↓
Indiana	11.9%	11.5%	Projections Published 2010 Source: Indiana Business Research Center, IU Kelley School of Business	↓
Louisiana	27.3%	33.8%	Projections Published 2010 Source: Troy Blanchard, Department of Sociology, Louisiana State University	↑
Maine	53.8%	68.1%*	Projections Published Fall 2011 Source: Maine State Planning Office *Projections for year 2028	↑
Maryland	66.3%	50.5%	Projections Published December 2008 Source: Maryland Department of Planning, Planning Data Services	↓
Massachusetts	52.3%	53.9%*	Projections Published May 2004 Source: Massachusetts Institute for Social and Economic Research, University of Massachusetts-Amherst *Projections for year 2020	↑
Michigan	47.3%	45.6%*	Projections Published January 1996 Source: Office of the State Demographer, State Information Center *Projections for year 2020	↓
Minnesota	4.1%	3.5%	Projections Published June 2007 Source: Minnesota State Demographic Center	↓
Mississippi	12.5%	15.1%*	Projections Published September 2008 Source: Center for Policy Research and Planning, Mississippi Institutions of Higher Learning *Projections for year 2025	↑
New Hampshire	31.8%	22.5%	Projections Published December 2002 Source: New Hampshire Office of State Planning *Projections for year 2025	↓
New Jersey	57.0%	51.3%*	Projections Published July 2010 Source: New Jersey Department of Labor and Workforce Development *Projections for year 2028	↓

⁴ Projection/Forecast methodologies vary from state-to-state

⁵ Population projection forecasts used for year 2030, except where unavailable in Maine (2028), Massachusetts (2020), Michigan (2020), Mississippi (2025), and New Jersey (2028).

⁶ All data based on counties immediately adjacent to Atlantic, Pacific, or Great Lakes Coastline

New York	74.4%	74.8%	Projections Published September 2011 Source: Cornell Program on Applied Demographics, Cornell University	↑
North Carolina	10.0%	9.3%	Projections Published May 2012 Source: North Carolina Office of State Budget and Management	↓
Ohio	22.0%	20.0%	Projections Published January 2004 Source: Ohio Department of Development, Office of Strategic Research	↓
Oregon	17.0%	15.8%	Projections Published April 2004 Source: Office of Economic Analysis, Oregon Department of Administrative Services	↓
Pennsylvania	2.2%	2.0%	Projections Published October 2010 Source: Pennsylvania State Data Center, Pennsylvania State University	↓
Rhode Island	100.0%	100.0%	Projections Published August 2004 Source: Rhode Island Department of Administration, Statewide Planning Program	↔
South Carolina	14.2%	20.4%	Projections Published 2011 Source: South Carolina Budget and Control Board	↑
Texas	23.6%	23.7%	Projections Published Winter 2001-2002 Source: Carole Keeton Rylander, Texas Comptroller	↑
Virginia	51.8%	46.7%	Projections Published 2012 Source: Virginia Workforce Connection, State Data Center	↓
Washington	68.6%	66.0%	Projections Published October 2007 Source: Washington Office of Financial Management	↓
Wisconsin	36.0%	35.7%	Projections Released November 2003 Source: Demographic Services Center, Wisconsin Department of Administration	↓

Table 4.6: Coastal Georgia Population Projections, 2010-2030

County	Population	Projected Population				% Growth
	2010	2015	2020	2025	2030	2010-2030
Bryan	30,233	38,984	45,272	52,466	59,534	96.9%
Camden	50,513	59,766	70,548	83,431	96,743	91.5%
Chatham	265,128	273,756	290,615	307,576	324,098	22.2%
Glynn	79,626	85,890	93,461	101,441	109,771	37.9%
Liberty	63,453	71,937	78,740	86,448	93,821	47.9%
McIntosh	14,333	13,982	16,039	18,375	20,686	44.3%
Coastal Population	503,286	544,315	594,675	649,737	704,653	40.0%
State Population	9,687,653	11,076,619	12,189,252	13,426,590	14,687,906	51.6%
Coastal Population	5.2%	4.9%	4.9%	4.8%	4.8%	

Source: US Census Bureau 2010, Georgia Governor's Office of Planning and Budget

Figure 4.1 – Coastal Georgia Counties

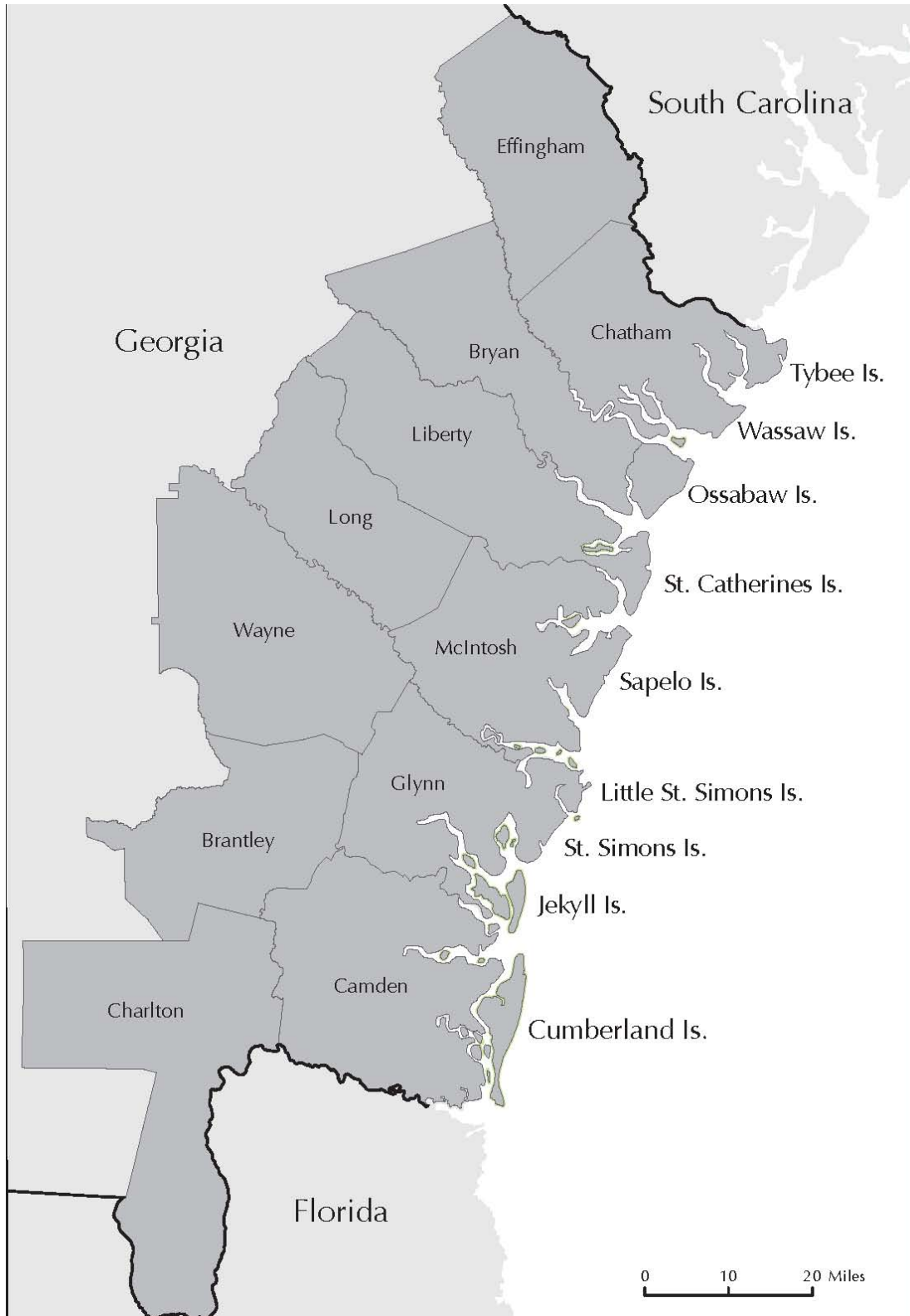
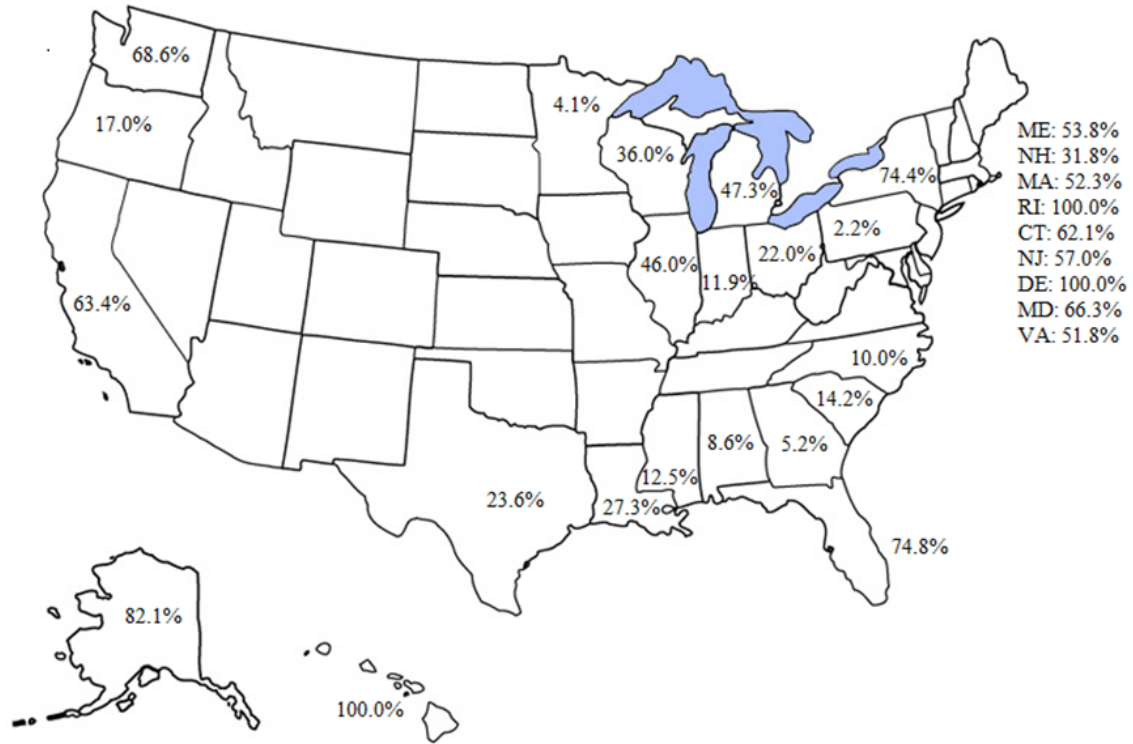
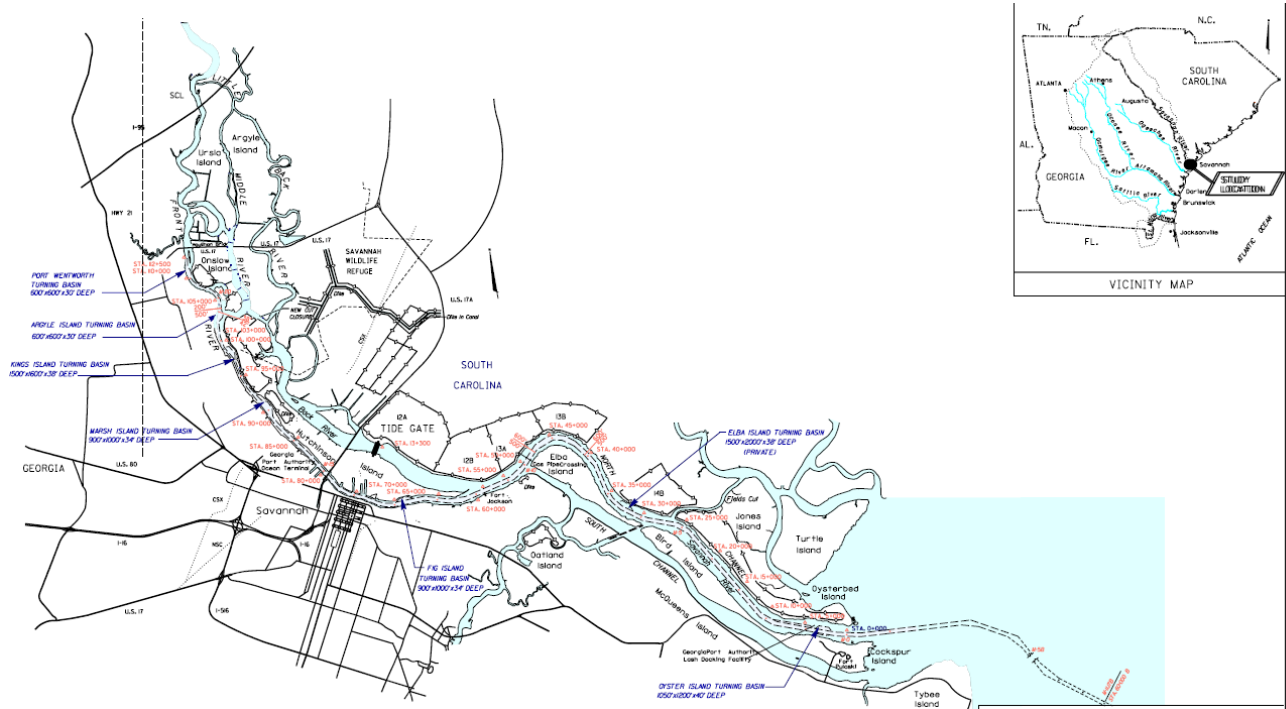


Figure 4.2 - Map of United States Coastal Population Percentages, by State



Source: 2010 United States Census

Figure 4.3: Savannah Harbor Expansion Project, Project Area



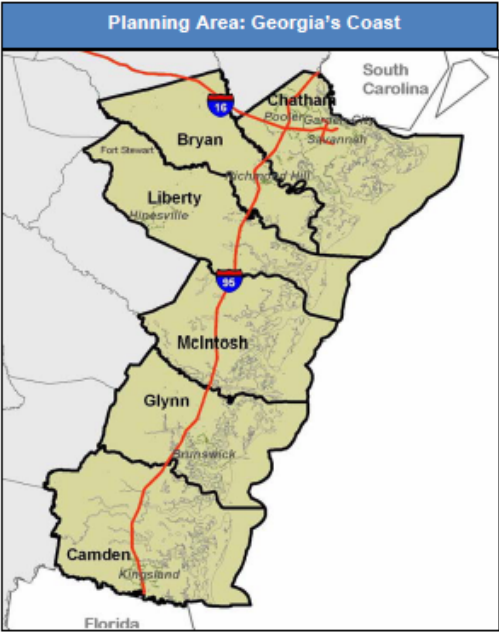
Source: Savannah Harbor Expansion Project Technical Documents, Savannah Harbor Map: (<http://sav-harbor.com/Technical%20Documents/Savannah%20Harbor%20Channel.pdf>)

Figure 4.4: Boundaries of South Atlantic Fishery Management Council



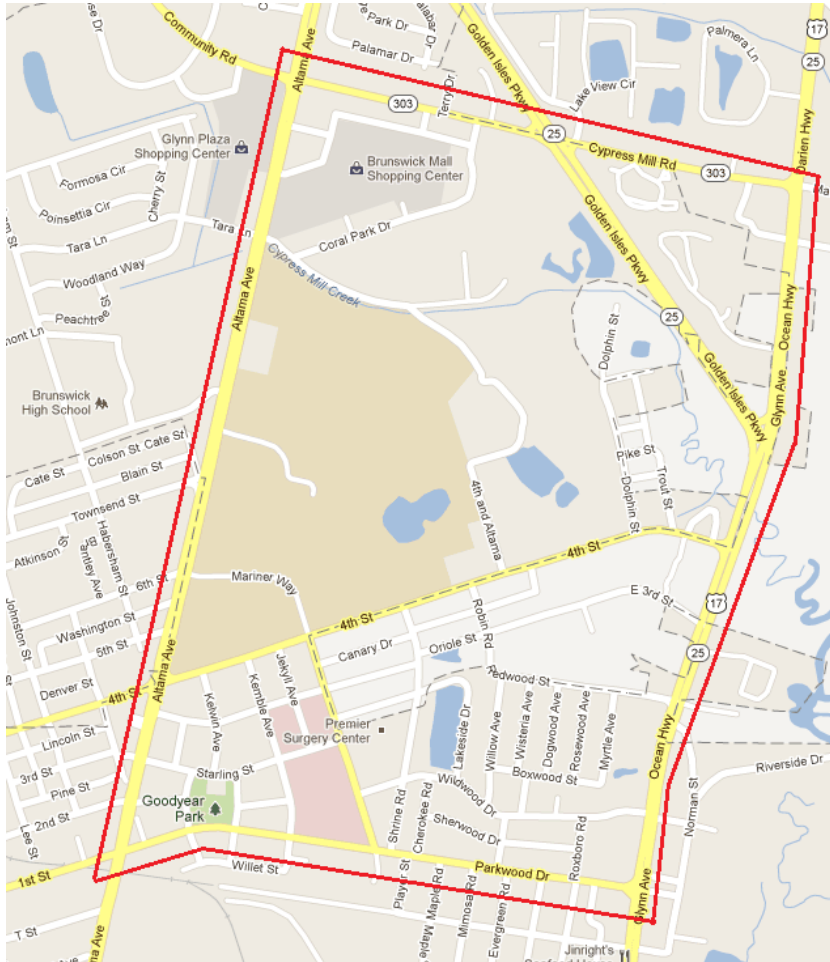
Source: South Atlantic Region and SAFMC Jurisdictional Boundaries, SAFMC 2010 (<http://www.safmc.net/LinkClick.aspx?fileticket=mgPoFVqDQoI%3d&tabid=361>)

Figure 4.5: Coastal Comprehensive Plan, Planning Area



Source: Georgia Department of Community Affairs, Coastal Comprehensive Plan 2008

Figure 4.6: Glynn County Growth Task Force, Corridor Redevelopment Area



Source: Google Maps (Image); “Next development target: Area near college,” 2 October 2010 (boundary identification)

CHAPTER 5

METHODS

This discusses (a) background on Q methodology; (b) the design of the survey instrument; (c) semi-structured interview (qualitative) protocol; (d) respondent recruitment and selection; (e) quantitative analysis techniques, including factor analysis; and (f) analysis of region-specific needs.

Background of Q-Methodology

Q-Methodology was developed by William Stephenson, in response to perceived over-reliance on qualitative and quantitative research with widespread reluctance to integrate the two. Stephenson, having received his doctorate in physics in 1926, a second doctorate in psychology in 1929, with continued studies in psychometrics, developed a primitive model for addressing this concern and laid the groundwork for continued enhancement of the notion of mixed-methods research in the social sciences. He described his proposed method as early as 1935 as “correlating persons instead of tests” and four years later as “alterative views on correlations between persons” through a blended use of quantitative measures and qualitative analysis. As the method has matured, it has been described as a “reductionist technique” that generates a manageable number of themes/categories for social scientists to analyze and explain. By reducing the number of variables, vulnerabilities in processes, programs, and policies are easier to identify (Cutter, Boruff, and Shirley 2003; Stephenson 1935; Burt and Stephenson 1939).

Q-Methodology responds to the need to incorporate subjectivity and spontaneous responses that provide a mechanism in which scholars can augment traditional quantitative measures and more effectively assess the attitudes, beliefs, ideas, or (in this case) perceptions of individuals. The method is explicitly considered an exploratory technique and “not appropriate

for the development and proposal of specific hypotheses.” The technique analyzes relationships in a social science environment and relies on a sorting of statements based on personal beliefs and values. This method allows for both a quantitative analysis of perceptions based on the participant’s sorting and a qualitative analysis by virtue of the subsequent interview. In response to the challenges faced by both unilateral quantitative and unilateral qualitative designs, a defining characteristic of the technique is that it “is neither fully qualitative nor fully quantitative,” but rather allows researchers to “draw upon components and values of both” and make the two sets of data “amenable” to one another (Brown 1993; Strauss and Corbin 1990; Ward 2010).

In accordance with the two-phase method, the analysis will reflect data from two sources: a) a quantitative assessment of perceptions of the role of stakeholders in the public policy process through a “Q-sort” tool; and b) a digitally recorded, semi-structured interview to provide participants an opportunity to elaborate on their responses to the first component and raise any additional concerns or beliefs that they may have had regarding the stakeholder process (“About Q Methodology” 2012).

Oftentimes, the Q-methodology is juxtaposed with its predecessor “R factor analysis.” While both include regression analysis for similarities/perceived similarities in data, the former identifies common patterns of traits and broader themes while the latter is focused on individual respondents within the dataset and the strictly quantitative measures that accompany. Similarities may exist between the emergent factors in both methods, but it is not intrinsic. The strictly objective, quantitative measures of the R factor analysis are replaced by more subjective, qualitatively-supported indicators of Q methodology. The fluctuation in similarities/perceived similarities that is identified at the individual level by R factor analysis is instead considered in

aggregate with the end result being identification of common themes amongst all respondents. Because of the subjectivity, two primary threats exist to the research process. First, researchers utilizing this technique have traditionally faced obstacles in maintaining an organized and standardized study. Second, many scholars have noted an “extreme reaction” to the quantitative reliance of R factor analysis and a resulting sacrifice of statistical training among researchers and reliance on statistically-based findings (Brown 1993; Clarke 2002; Keynes 1921; Sokal and Sneath 1963; Barry and Proops 1999; Martin and Steelman 2004).

The method has gone beyond its psychological roots and gained increasing presence in both (a) environment/natural resource research and (b) political/social sciences in order to more effectively identify “patterns of belief situated within people’s subjectivity.” This application in environmental/natural resource research mirrors the growth of specialized stakeholder engagement research in the same fields. Among issues identified in previous research are concerns of power, trust, direction, scientific information, and role of leadership. The survey populations and context of previous research have differed from the coastal policy development addressed in this research (Adams and Proops 2000; Barry and Proops 1999; Martin and Steelman 2004; Reed 2008; Steelman and Maguire 1999; Webler, Tuler, and Krueger 2001; Webler and Tuler 2006).

Q methodology is particularly appropriate in the public policy process, as inherent conflict has potential to dilute the core scientific, civic, and social concerns of the policy at hand. Utilization of this method “serves to locate elements of consensus (if they exist) that might (a) inhibit or disturb a balance between “technical, user, and institutional issues” or (b) go unnoticed in the emotional turmoil” of policy development (Clarke 2002; Gargan and Brown 1993; Jude et al. 2006).

Survey Instrument and Data Collection

Key to this research is the involvement of end users of this research – state, federal and local government public leaders and stakeholders. A project advisory committee, comprised of current and retired federal, state, and local leaders who negotiated the decision-making process affecting coastal policy in Georgia, worked with the research team throughout the two-year project. Many of the leaders in this group had also served in a number of stakeholder roles in Georgia coastal policy development over the past two decades. The purpose of engaging these actors was to ensure that the research questions being posed, the research techniques employed, and the needs being assessed were relevant to the process from the perspective of those most intimately familiar with the process.

The core element in the quantitative analysis and dependent variables are a series of statements intended to reflect feelings about different components of the engagement process in which they had participated, including information-sharing, trust, and process management. These statements were developed based on review of previous literature. In constructing this research instrument, the statements were developed from existing literature (see Chapters 2 and 3), previous research experience, and media coverage and editorial commentary. The exhaustive list of these statements is seen in Appendix 2

The respondent is to rank-order on a seven-point continuum, a process described as “Q-sorting.” Because the responses are based on individual experiences and beliefs, there is inherent subjectivity and the underlying knowledge among both researcher and respondent that there is no “right” or “wrong” response. Because of the highly “hard science” nature of coastal policy research, extra effort was made to avoid statements that would only be “comprehensible in detail by a relatively small audience.” An initial concourse of 67 specific topics or ideas was

constructed and further critique, clarification, and reduction in size was needed to meet the specific demands of this research and method. This was done through further discussions with the advisory committee members, though has consistently been observed as “more an art than a science.” Members of the research team from the University of Georgia and Savannah State University finalized the remaining 40 statements. The most effective administration of the survey instrument is in person, but allowing the participant the space and time needed to complete the exercise without the feeling of pressure from the researcher. Alternative methods include administration by mail, by e-mail, or web-based interface. Though the latter two are relatively recent advents given the timeline of the method, none of the three has been acknowledged as an apt substitute for the in-person administration.

The qualitative instrument is a follow-up interview. The most effective technique discussed in methods-oriented literature is an in-person interview immediately following the completion of the instrument. While not desirable, researchers have been able to effectively conduct these interviews at a second sitting and/or by phone. For this research, one phone-based interview was conducted. The interview template was left largely open-ended to allow the participant as much opportunity as possible to elaborate on particular experiences and describe their own perceptions (Brown 1980; Brown 1993; Stephenson 1978; Stephenson 1980)

In addition to the consent form, approved by the Institutional Review Board (IRB) at the University of Georgia (UGA) (Appendix 3), participants received two sheets which were ultimately completed and returned to the researcher. The first was a demographic/participation form (Appendix 4) which provided the information needed for the independent variables identified later in this chapter. The second was a “score sheet” that was used in the placement of statements that serve as the basis for the Q-method factor analysis (Appendix 4). The 40

statements were distributed to participants on 4"x6" index cards in Times New Roman font. In addition to the 40 cards with the statements printed upon them, the participants were given seven "header" cards of the same size and with the same font (though in bold). Participants were instructed to arrange the "header" cards (ranging from "Strongly Disagree" to "Strongly Agree") at the top of the desk/table in front of them and place the statement cards in front of the header card, based on their experiences and beliefs, on the continuum. While this research design relies on the seven point scale, strict adherence to this range is not necessary. Other researchers have used 9-point ranges [-4 to +4] and 11-point ranges [-5 to +5] (Brown 1993).

Coding of the scale was numeric, though participants saw only the titular designations and not the assigned coding values reflected in scalar coding. In a similar way, the statement numbers (those seen in Appendix 2) were deliberately hidden from the participants so as to avoid any potential influence on their placement of a given statement based on the arbitrary statement number. To address this concern, statement numbers were printed on the back-side of the 4"x6" statement cards and participants were instructed post-hoc to turn the cards and record the number in the appropriate column on the provided score sheet.

The titles assigned to each of these seven points mirrored one-another on opposite sides of the neutral point. The descriptor "strongly" was assigned to both of the extremities based on theoretical evidence and experiences from previous research (Brown 1980; Kalof 2000; Brunner 1983; Martin and Steelman 2004).

Research and previous usage of the sorting of the series of statements has employed both forced and natural distribution of statements. The forced distribution commonly reflects a normal distribution, with the fewest numbers of statements being placed at the extremities of the scale. This reduces the number of statements that elicit the most extreme responses. The "natural" or

”non-forced” scenario in which the respondent is not obligated to place a pre-determined number of statements at any of the seven points of the scale has been found to be “flatter than a normal distribution, but little difference has been seen between the two in regard to quantitative results. Participants have previously been observed as taking one of two approaches to the sorting process, often recommending one of the two approaches at the behest of the researcher administering the instrument. First is a multi-step process in which the respondent first breaks the statements into three categories of “agree,” “neutral,” and “disagree” and categorically subdivides based on extremity of reaction (typically forced distribution). The other approach is an instinct-driven, single-step process in which the statements are placed into a category with extremity of belief/perception reflected immediately (typically non-forced distribution). As a result, the time commitment and logistics of the survey process may differ. The process is generally seen instrument used in a non-forced distribution of statements (Brown 1980; Brown 1993; Van Exel and de Graff 2005).

For the purposes of this research, three populations have been involved or identified as stakeholders (Dalton 2006 definition) in Georgia’s coastal policy development: biologists, ecologists, and other natural science experts; public leaders, including elected and appointed officials in public and quasi-public agencies; and public participants, including individual citizens, community groups, and niche cause groups. There are three subgroups of participants based upon three attributes: the participant’s power to influence the policy process, both development and implementation; the legitimacy of the participant’s relationship with the potential impact of the policy; and the urgency of the participant’s claim(s) related to the policy, all based on their respective affiliation as addressed in Chapter 2. Using the proposed stakeholder typology as a basis, the three subgroups will be (a) definitive stakeholders – those holding

power, legitimacy and urgency – typically formally appointed or named stakeholders; (b) expectant stakeholders – those holding two of the three attributes (power, legitimacy and urgency); and (c) latent stakeholders—those holding only one of the three attributes – typically those who cannot participate, do not participate, or do not know they have the right to participate in the process. Because of the exploratory nature of this research, the scope of stakeholder participants is limited to the definitive and expectant stakeholders that were (to varying degrees) active in their respective processes (Mitchell, Agle, & Wood 1997).

Previous use of the method has demonstrated particular relevance to the topic of this research. Because the research is focusing wholly on the *perceptions* of the process, there is an underlying normative assumption that the process itself was functional. This does not equate a value judgment of effectiveness/ineffectiveness, good/bad, or any other subjective take on the process itself. Because of the subjective nature of the responses and lack of an external standard by which to measure responses, concerns about validity are mitigated. The research design was constructed around this desired methodology and measures of perception were established “by selecting, defining, and privileging different principles” held by participants through the instrument (Webler, Tuler, and Krueger 2001; Brown 1980; Brown 1993).

Participants in the research process were identified from public records of the five stakeholder engagement processes identified in Chapter 4 and from personal knowledge of the advisory council members. They were recruited through e-mails and follow-up telephone calls. The five projects directly affected a six-county region of Georgia that immediately abuts the Atlantic Ocean, but most had much broader reach into the state, region, and nation. Identifying and recruiting *public leaders* (at all levels) for participation required collection of contact information from agency/jurisdiction websites and other public records. This included appointed

city/county managers (14 total), elected city council members (22 cities, 72 elected officials), county commissioners (6 counties, 39 elected officials), and current and retired state agency/authority leaders (17 total). This group was narrowed to reflect only those officials in jurisdictions that had knowledge and/or experience with one of the five projects identified above. This narrowing was done by reviewing public records, reports, and other publications to identify the jurisdiction(s) impacted by certain policy decisions. Once this process was complete and the final list constructed, 142 participants identified as potential leaders were contacted.

Definitive and active stakeholders were identified through public records of previous participation. These stakeholders were defined as individuals who were aware of the implications of policies, were actively engaged in the process, and knew they possessed degrees of power, legitimacy, and urgency in the process. Ultimately, 70 were identified and approached.

Expectant stakeholders were defined as those aware of their role and the potential implications of policy decisions, but not actively engaged in the processes that had taken place. They were identified through two methods: using tangential projects and group affiliations to identify those with potential, and using recommendations from members of the advisory committee and other research participants with "on the ground" knowledge of others in their social and professional networks. Ultimately, this provided 30 potential stakeholder respondents. A total of 242 leaders and stakeholders were contacted to participate in the research. Ultimately, 44 individuals participated in the research project, giving a response rate of 18.18%.

In many research circumstances, a value of $n=45$ is considered exceptionally small for sample size, but previous literature on Q-methodology indicates the opposite for this research method. Because Q-methodology is not solely interested in the "mathematical substructure" that had accompanied R factor analysis in the years preceding its introduction in 1935, or that

accompanies other analytical models that have been honed in the years since, there is a greater focus on quality (described as “operant subjectivity” and “operationally distinct” from quantity) of responses in lieu of quantity of responses. Stephenson’s original description of the method noted the shift from “a large number of people [who] were given a small number of tests” to “a small number of people [given] a large number of test-items.”

The number of desired participants in the administration of the research instrument is seemingly low and smaller than would be expected in traditional, strictly quantitative, and confirmatory research designs. While a sufficient sample size is necessary, having large numbers of respondents in Q methodology has been described as “relatively unimportant” (Brown 1993).

The number of respondents that constitute a “sufficient” sample size has been extensively discussed in methods research. Because of the mixed-methods nature of the research and the enhanced reliance on qualitative findings, there is consensus with Brown’s (1993) observation from above. Regarding the number of respondents, three methodologists have provided the recommendations that: (a) a sample size of no larger than either 40 or 50, with some being executed with “far fewer participants”; (b) a sample size no larger than the number of statements (in this case, 40); or (c) a sample size ranging from 40 to 60. This is further substantiated by the illustration: “If you wish to examine the differences in color between a tub full of green and a tub full of red paint, for instance, a thimble of each will do and the buckets full from the same tubs will only provide redundant information.” The narrow window of respondents is described as “enough subjects to establish the existence of a factor for purposes of comparing one factor with another” (Brouwer 1999; Brouwer 2000; Brown 1980; Brown 1993; Brown 1996; Smith 2001; Stephenson 1935; Van Exel and de Graff 2005).

Of these 44 respondents, 19 were self-identified as leaders and the remaining 25 were self-identified as stakeholders. Administration of the survey instrument and the subsequent interviews took place from March 2011 through October 2011. (Brouwer 1999; Brown 1993; Van Exel and de Graff 2005; Ward 2009)

Association with the project as a leader or stakeholder was through self-identification by the participant. The 44 participants took the 40-statement instrument and recorded their responses along a seven-point scale, with seven being ‘strongly agree’ and one being ‘strongly disagree’. The distribution was not as pronounced as a regular normal distribution, being “flatter” and indicative of a more even distribution of individuals’ placement of statements along the seven point continuum. This corroborates earlier findings regarding a non-forced scenario (Brown 1993).

In the initial instrument, participants utilized a seven-point Likert scale inclusive of whole number values 1-7. For the purpose of analysis and ease of interpretation in the Stata 12 software package, these were modified such that [+1 to +7] was recoded to [-3 to +3] (Martin and Steelman 2004).

Methods and Measures

The quantitative analysis of the 40-statements is based on three quantitative techniques: (a) means comparisons to determine the extent of similarities and differences between sample subsets and potentially identify additional sources of group tension and can help lead to strategies to mitigate these differences; (b) factor analysis that indicates quantitative interdependencies that exist between variables and collections of factors referred to as “buckets”; and (c) application of qualitative findings to each of the unique factors that emerged from section (b).

Independent Variables

The independent variables focus most heavily on the relationship that the respondent has with the coastal region of Georgia.

Previous research on perceptions of stakeholder engagement has focused on one of two areas. This has either been the engagement process of a specific policy/project within a single organization (Hendricks 2011) or broader universal policies lacking definitive and tangible outcomes (Gordon and Louis 2009). As discussed in Chapter 4, this research identified five policies/projects specifically affecting the designated coastal Georgia region and overseen by five distinct levels of government. Since participants were targeted and contacted based on their engagement in one of these five pre-determined projects, the survey instrument asked the individual to self-identify the project with which they were involved. For the purpose of being exhaustive, a sixth class – “other” – was provided for respondents. This received zero responses. If the participant was involved in more than one of the projects, they were asked to consider the most recent and respond with only that process in mind. This was stressed in order to avoid the “tainting” of feelings of one project by the experiences and perceptions of another. These individuals were relegated to a single response, rather than administering multiple instruments to an individual with involvement in multiple and separate policies/projects.

Once the policy/project was definitively established both on the survey instrument and in the mind of the respondent, they were asked to identify themselves as a “leader” or “stakeholder” in that process. When initially contacted and when being administered the survey instrument, respondents were not told whether they were being identified by the researcher as one or the other. This classification is strictly self-identified.

An additional subjective question posed to the respondents was whether or not they believed their respective policy/project “complete” or “in process.”

Based on previous research, resident versus non-resident populations of designated areas have been found to have differing values and beliefs regarding policies and projects that would affect the community (Behan 1988; Griffin 1999). This distinguishes those with day-to-day interests and reliance on the community from those that visit the community for employment, recreation, or other activities. To further probe these previous findings, respondents were asked if their county of residence was in the six county coastal research region (Bryan, Camden, Chatham, Glynn, Liberty, or McIntosh, each identified as a different response), another county elsewhere in Georgia (not delineated), or outside of Georgia. In addition to the coding that duplicated the respondents’ instruments, a recoding was done to create a dichotomous variable that distinguished coastal Georgia residents, indicated by an affirmative response for any of the six counties, from their non-coastal counterparts.

For those respondents that identified themselves as being a resident of the six-county region, they were subsequently asked for the number of years they have lived in the region.

The final explanatory variable included in the instrument was the role that the respondent assumes in the course of their work. This differs from the earlier “leader” versus “stakeholder” question in that clear titles were provided, including elected official, local government administrator, state government official, federal government official, non-profit administrator, member of advocacy organization, technical advisor, observer, resident, or other stakeholder. It is possible that respondents would have multiple functions in different aspects of community life. For example, an elected official (i.e. County Commissioner) required to be a resident of the jurisdiction in which they are elected. While completely at the discretion of the respondent, this

County Commissioner would function more substantively in the development of the Coastal Comprehensive Plan as an “elected official”; rather than on the development of fish stock policy by SAFMC, likely as a “resident.”

In addition to these primary independent variables, gender and age are included as controls.

Pre-Factor Analysis Quantitative Methods

The first measure that will be presented will be a comparison of mean values of responses for individual statements, with delineation between differing subsets of the sample. This includes distinctions between self-identified leaders and self-identified stakeholders; respondents who reside in the coastal region versus those who do not; men and women; and participants in each of the five selected policies/projects.

The “sense of place” that was referenced in Chapter 2 prompts a second analysis of means differences. Thirty-three of the statements that comprised the survey instrument (Appendix 2) present statements that would be considered more generic or universal in nature. There is not a specific reference to Georgia or the specific coastal concerns that constitute the topic of this research. The remaining seven statements make specific reference to the Georgia coast. These two sets of statements will be analyzed independent of one another.

Factor Analysis Determinants and Methods

Factor analysis is an inherent component of Q-methodology with the primary purpose of identifying “latent similarities” among individual respondents as it relates to their participation in coastal Georgia policy engagement processes. The primary objective of the factor analysis is to indicate sets of variables (in this research, the 40 statements) that (a) generate linear combinations and (b) have the greatest common variation with the rest of the variables in the

respective factor. Clarifying the Q-oriented factor analysis will require (a) definition of key terms; (b) extraction of factors “without an a priori idea about how the variables are related”; (c) rotation of perspectives when constructing factors; (d) determination of the final number of factors to include in the analysis; and (e) determination of the sample size (Clarke 2002; Costello and Osborne 2005; Jude et al. 2006).

Factor Loadings are the most significant measurement in the factor analysis technique. These indicate the correlation between the individual variables – the 40 statements in this instance – and the factor in which they have been placed. These loadings are uniformly positive, as the measure is strictly for *strength* of relationship and not *direction* of relationship. Each variable (statement) has a factor loading within each of the designated number of factors, whether ‘natural’ or ‘forced’. Note, this definition of “forced” differs from that used earlier in this chapter. The first usage refers specifically to the sorting exercise engaged in by the participant and the act of placing a pre-determined number of statements at each point along the continuum of agreement. This second definition refers specifically to the researcher and the construction of the factor analysis output with a desired number of factor buckets in which the entirety of the statements (40) will be categorically placed, to be addressed later. The factor with the highest *loading* attributed to an individual variable (statement) is indicative of the highest correlation with a factor and consequently the factor bucket in which a given statement is assigned.

The factor loadings cannot be assumed as-is, but rather must be “rotated” so as to consider potential factors from multiple perspectives. The type of rotation conducted in this factor analysis is strategic and dependent on the nature of the research being conducted. In the case of this research, that rotation takes the form of an “orthogonal varimax rotation.” An

orthogonal rotation is based on the assumption that the resulting factors are not correlated. Because of the exploratory nature of this research, that assumption is used. The orthogonal rotation is one of the two dominant rotations that exist, the other being the “oblique” rotation in which there is an existent or anticipated correlation between factors. This type of rotation would be more appropriate in confirmatory research (Brown 2009; Costello and Osborne 2005; Gorsuch 1983).

The “varimax” rotation is one of three possible techniques in the orthogonal rotation construct. The others are “equamax” and “quattrimax.” The orthogonal varimax rotation, more than the other orthogonal rotation methods, maximizes the variance of the squared loadings within the individual factors. The varimax is generally regarded more objective than either the theoretical rotation that is narrowing the findings to a particular perspective or the judgmental rotation attempting to clarify preconceived notions about the relationships that further define the factors. Alternatively, the orthogonal equamax relies on weighted sums of variance within factors; orthogonal quattrimax maximizes variance of the squared loadings of the individual variables/statements. Previously, a fourth method known as “orthogonal orthomax rotation” had been commonly used by scholars. This technique creates a 2x2 matrix, an axis of individual versus factor-based; and a second axis of maximum variance versus weighting. In the case of the “orthomax” approach to orthogonal rotation, it assumes no correlation (as an orthogonal rotation) and is driven by individual variables/statements and their respective weighting (Brown 1980; Brown and Melamed 1990; Gorsuch 1983; *Stata Multivariate Statistics Reference Manual: Release 12*. 2011; Van Exel and de Graff 2005).

The orthogonal varimax rotation benefits the researcher in that it further differentiates between the individual factors and creates more definitive thresholds, as it maximizes the

squared loadings for the individual variable-factor correlations; assumes no correlation exists between factors; and generates an overall ease of interpretation. This orthogonal varimax approach is advantageous, however, in that the *rotated factor loadings* serve to exaggerate the loadings derived from the initial syntax, as squared values of higher factor loadings will result in continued high values; squared values of low factor loadings will result in increasingly lower factor loadings (Stata Corp.; Costello and Osborne 2005).

Rotation itself has an important role in that it analyzes potential points of view through which the relationships between individual statements and potential factors could be analyzed and clustered. This ensures the highest possible correlation between statements within a single factor and the lowest possible correlation with statements in the remaining factors.

In addition to this primary output, there are secondary statistics: (a) eigenvalue, which addresses variance; (b) difference, which addresses the relationship between ordered factors; and (c) uniqueness, which addresses remaining variance and independence from designated factors.

The first is the *eigenvalue*. This measure indicates the variance accounted for by an individual factor, measured as the sum of squares of the factor loadings referenced earlier. These values are indicators of the variance that exists within a given factor, with the highest amount explained by the first factor, next highest amount by the second factor, and so on until either the entirety of the variance is explained (the maximum ‘natural’ factors) or until the number of forced factors is achieved. In use of the ‘natural factors’ technique, there is a point at which the eigenvalues will shift from positive to negative. The point at which this shift takes place informs the researcher of the number of viable ‘natural factors.’ Simultaneous to the directional shift in eigenvalues, two additional measures reach thresholds indicative of the highest viable number of factors. First, the proportion of the variance that is accounted for by a given factor will shift from

a positive value to a negative value. Second, this threshold will also be the point at which the maximum cumulative proportion of variance will be achieved. While the ultimate cumulative value of explained variance will be 1.0000 (explanation of all variance), the cumulative value at the maximum number of viable factors will be in excess of one (and at its highest value) and offset by the *negative* proportions of explained variance that will follow.

The limitations imposed by the number of ‘forced factors’ include the amount of overall variance explained by the factors, but this must be balanced with the need for a manageable and reasonable number of factors, per the reductionist technique originally proposed Stephenson (1935).

These eigenvalues are supplemented by three additional quantitative indicators. The *difference* provides the difference between two ordered factors. That is, the difference between the factor and hand and the factor immediately following. This provides greater context for how much value the latter factor brings to the analysis in regard to explained variance. The proportion divides the variance explained by a given factor by the total variance to provide context in regard to a 1.0000 scale. The cumulative measure is a summation of all proportion values.

The final relevant term in analyzing the output is *uniqueness*. As the name would suggest, this measure indicates the proportion of the remaining variance that is not explained by the correlation and subsequent placement of a variable (one of the forty statements) within one of the factors (whether ‘natural’ or ‘forced’). As proportions, all are based on a maximum value of 1.0000. Because of the objective to have as much of the existing variance as possible explained through the factor analysis, lower *uniqueness* values are desirable (Milan and Whittaker 1995; Costello and Osborne 2005).

Use of Q-factor analysis has led to the creation of various indices in previous research and disciplines. Examples include the “social vulnerability index” created by reducing 42 statements to 11 factors based on socio-economic and demographic variables at the county level (Cutter, Boruff, and Shirley 2003); the disparity between animal-oriented and client-oriented veterinarians, based upon responsibility, interests, and professionalism that complicate the balance of acknowledged subjectivity in beliefs of the profession (De Graaf 2003; De Graaf & Van Exel 2002); and the categorization of physician and medical student subjective beliefs on the use of information technology in health care management and facilities (Valenta and Wigger 1997).

Within each of the factors, an individual statement’s correlation with the factor is indicated by a value known as a “factor loading,” as defined earlier. Each statement will have a factor loading with a value $[0.00 < x < 1.00]$. The higher this value, the stronger the correlation with the respective factor. Based on their correlation with a factor, individual statements are clustered and considered a part of the “bucket” that exists for each of the extracted factors. Ultimately, each of the 40 statements will have a factor loading with each of the included factors and the highest factor loading is indicative of the factor bucket in which the statement is placed.

The first step in conducting this quantitative analysis is identifying the number of factors to be included. Similar to the decision that must be made between forced versus un-forced distribution of statements by the participant on the 7-point scale in administering the survey instrument, the researcher utilizing factor analysis must decide to (a) allow the natural number of factors based on available data to be utilized, or (b) “force” the number of factors that will exist, as discussed earlier. The implications for “forced factors” are more significant than for a forced

distribution of the statements, as there is a reduction in the number of statements per factor and ultimately little collective behavior measure.

The most suitable number of factors has received increasing attention in recent years and there is a methodological debate as to whether the “natural” number of emergent factors is most appropriate, as it is more representative of the intrinsic subjectivity of the research design; or the “forced” number of extracted factors is appropriate for the ease of interpretation and practical application. Scholarly consensus is that the ideal number of factors is driven by the variability seen in the sorts, an indicator determined prior to the factor analysis. Five approaches are widely cited and used. Based on the 40 statement construct and a total of 44 respondents, the ideal number of factors lies between 3 and 10. This reduces the statements by as little as 75% (10 factors) and as much as 92.5% (3 factors). Similarly, this reduces the mean number of statements per factor bucket from 4 (10 factors) to 13.33 (3 factors) statements. While this basic description is a valid starting point, each of the three above-referenced determinant models yields different results.

The decision of the number of extracted factors within a “forced factor” research design is a multi-step process. The first step is to allow a natural, non-forced extraction of factors. The determining factor for the number of viable factors is the point at which the eigenvalue shifts from a positive value to a negative value. Based on data from respondents, 19 factor buckets are identified. This reduces the number of variables by 21, or 52.5% and does little to enhance or further explain the resulting perception-based themes and contributes little to the reductionist objectives of Stephenson (1935) (Table 5.1). To achieve this end, it is necessary to force a distribution of the statements into a predetermined number of factors.

The first method using the output from the natural, non-forced factor analysis and identify the factor eigenvalues for each plausible number of factors. The eigenvalues, being the sums of the squares of the factor loadings, with a value greater than 1.00 are indicative of the desirable number of factors. In the case of this research, the shift from a positive eigenvalue to a negative eigenvalue takes place following the 19th factor (Van Exel and de Graff 2005).

A second and more cynical approach was suggested in 1980 when, after being repeatedly pressed for a universally applicable number of factors, Brown cited his own experiences and claimed that “the magic number 7 is generally suitable.” He discounts this approach in his later work, asserting instead that the decision on the number of factors is “purely empirical” and reliant on the context of particular topics, situations, and participants, as understood by the researcher (Brown 1980; Brown 1993; Van Exel and de Graff 2005).

A third common models used to identify the ideal/appropriate number of factors is the “Kaiser-Guttman” criterion in which all factors with an eigenvalue greater than one are viable in the natural factor analysis referenced above. Based on the the Kaiser-Guttman model, but 1.0000 threshold is viable with up to nine factors (Table 5.1).

Fourth is the Cattell “elbow” model based on the subjective visual analysis of plotted eigenvalues (Cattell 1966; Guttman 1954; Kaiser 1960; Kaiser 1960; Wilson and Cooper 2008). The “elbow” point from the Cattell model (Figure 5.1) is more subjective, though occurs at roughly the same point. Being the most subjective of the five models, determining the ideal number of factors is difficult, but visual shifts occur in the plotting of these values and the 3 factor and 10 factor boundaries.

In determining the ideal number of factors for this research, the fifth approach was utilized. This approach consists of four sub-measures: (a) the absolute loading range and spread;

(b) the absolute loading mean; (c) the absolute loading median; and (d) variance explanation (Table 5.1). The absolute values of all four measures of these indicators are included because correlation is not necessarily *positive* in value, but rather could be a significant and negative relationship with the respective factor bucket. The absolute value indicates the correlation on a $[0.00 < x < 1.00]$ scale rather than a $[-1.00 < y < 1.00]$ scale and standardizes strength of correlation.

Output from the “natural” factor analysis provides the information needed to produce these descriptive statistics, which are seen in Table 5.03 for all potential factors ranging from 3 to 10. Regarding absolute loading range and spread, lowest maximum loading (the statement with the highest absolute loading in the forced factor distribution, but the lowest absolute loading amongst potential factors) is seen in the three-factor model. These values are measured by a “spread” generated by subtracting the lowest absolute loading from the highest absolute loading amongst the statements within the respective factor bucket. The greatest disparity was present in utilizing six factors, with a range of 0.6407 on the $[0.00 < x < 1.00]$ scale. This wider range provides greater opportunity to identify the significance of perceptions within certain thematic factors.

The absolute loading mean is an indicator of the greatest average strength of correlation. In this instance, a higher mean of absolute values of collective factor loadings within a given bucket indicates a greater strength in correlations as a whole. Like the first criteria, this measure indicates that six forced factors is the ideal model. On the same scale, the average absolute loading mean is 0.5662.

Median of factors is the middle value of the reported values. In the case of the odd numbers of proposed factors (3, 5, 7, and 9 factors), the actual median value is presented in

Table 5.2.; in the case of even numbered proposals (4, 6, 8, and 10 factors), actual median values are reported.

Amount of variance explained by the designated number of factors. In the earlier cited example of the social vulnerability index, 42 statements were reduced to 11 factors which explained 0.7640/1.000 of the total variance. An important finding from this dataset is that the natural factor analysis results in a “Heywood Case.” This results from a combination of relatively large correlations and sampling variation, indicated by the impossible factor loading greater than 1.00. Neither of these can be resolved in this instance as the correlations are based on completed data collection with a sample size that conforms to Q-method norms, and cannot be altered. It is indicative of a lack of that renders the proposed “natural model” invalid (Brouwer 1999; Brown 1980; Brown 1993; Brown 1996; Cutter, Boruff, and Shirley 2003; Fabrigar, Wegener, McCallum, and Strahan 1999; Smith 2001; Stephenson 1935; Van Exel and de Graff 2005; Ward 2010).

The impossible factor loading in the Heywood Case (Table 5.1) is accompanied by a proportion of variance in the variable at hand attributable to a common factor greater than 1.00/1.00. This is resolved when forced factor analysis is imposed. Each of the eight scenarios (3 factor minimum, 10 factor maximum) proposed in table 5.03 reduce that proportion of attributable variance to <1.0000 and circumvents the Heywood Case obstacle. In a forced factor analysis, the total variance explained by the designated number of forced buckets is always equal to 1.0000.

For comparison, table 5.1 indicates the proportion of variance explained by a given number of factor buckets in a natural factor analysis. Another fundamental trait in factor analysis is that additional factors will yield additional attribution of variance and a summation of higher

proportions of explained variance. In this model, that proportion ranges from 0.2216/1.0000 with three factors to 0.5652/1.0000 with ten factors. The mean variance explained in these eight constructs is 0.4131/1.0000; the median variance is 0.4478/1.0000. The proportion of variance explained in a six-factor construct is 0.431/1.000. This is the nearest value to both the mean and the median of the eight models, supporting the fifth determination model and its four components.

The perpetual challenge in determining a number of factors for the analysis is the balance between maximum explained variance, desired values, and a manageable number of factor buckets (Brown 1993). With those considerations and by defaulting to the fifth determination model (and sub-measures 3A-3D) above, the resulting number of “forced” factors for the 40 statements is six. This decision is corroborated by the maximum plausible factors in the natural factoring; the Kaiser-Guttman model in which the sixth factor has a natural eigenvalue of 1.7419, above the 1.0000 threshold; and the visually-oriented Cattell “elbow” model.

Individual Factor Inquiry

The “R factor analysis” that preceded its “Q” counterpart had been the standard method in factor analysis up until the mid-1990s. One of the most significant critiques that began to emerge about R factor analysis at that point was that it was unilaterally quantitative in nature and did little to integrate qualitative findings. Among the added benefits of this mixed-methods concept are assessment of values and objectives (recall the proposed hierarchy in Figure 3.1), “divergent perspectives,” and a broader acknowledgement of the value of subjective measures. These are ultimately reflected in examples of selected statements on a study of the method that describe as a balance of fairness (“access to process” and “power to influence [both] process and outcomes); competence (access to information, promotion of constructive interactions,

construction personal behaviors, and adequate analysis); and outcomes (objective of “enabling social conditions necessary for future processes”) (Webler, Tuler, and Krueger 2001).

The Q-methodology is largely rooted in quantitative measures, but continues to address the strictly formulaic analysis of process and practices supported by a “mathematical sub-structure” that is debilitating to potentially valuable qualitative observations (Martin and Steelman 2004; Brown 1991; Brown 1993).

The qualitative analysis of the research consists of two components: a one-on-one, digitally recorded interview that represents the second facet of the Q-methodology data collection that took place immediately following the participant’s completion of the 40 statements, and an independent analysis of available public comment/feedback surrounding the five policies/projects at hand. This final section will individually review each of the six resulting factors, the quantitative findings and relationships, and the qualitative indicators included in the research.

Immediately following conclusion of the administration of the survey instrument, participants were asked to participate in a recorded interview. This entailed a semi-structured interview template was a six-question model intended to gather anecdotal evidence and elaborate on concepts raised by the 40 statements. These prompts from the interviewer have also been described as “probes.” (Appendix 6) Since the statements were informed first by previous literature on stakeholder involvement, narrowed by members of the advisory committee in an early meeting, and finalized by the research team, the nature of the interview allowed the participants to elaborate on themes, concerns, or challenges in stakeholder involvement they felt were not addressed by the instrument as constructed (Clarke 2002; Webler, Tuler, and Krueger 2001).

The qualitative component proved advantageous and reflects the value of the interviews. Because of the small sample size, large-scale qualitative analytics are not plausible. In response, the findings from these interviews will be integrated individual, as appropriate, to supplement the quantitative findings of the factor analysis. Specifically, these will be applied to the factor-based discussions at the conclusion of the quantitative analysis in Chapter 6. These are used to further clarify intentions of the respondents, perceptions of the effectiveness of stakeholder engagement processes, and more deeply explore assumptions held by both leaders and stakeholders throughout the process.

Because of the public nature of these decision-making processes, many of the communications and other documents associated with the stakeholder engagement processes are public documents. This includes letters, emails, and other communications (with identifying information such as names and addresses redacted); transcripts of public meetings; and opinion/editorial pieces in local media. These available documents were reviewed and information gained from them as it relates to identified themes to further explain and probe the themes of post-hoc perceptions of stakeholder engagement.

Table 5.1: Natural Factor Analysis⁷/Correlation, Iterated Principal Factors Unrotated⁸

			Observations	35
			Retained Factors	6
			Number of Parameters	225
Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	7.0618	2.5638	0.3285	0.3285
Factor 2	4.4980	1.4187	0.2092	0.5377
Factor 3	3.0793	0.3319	0.1432	0.6809
Factor 4	2.7475	0.3761	0.1278	0.8087
Factor 5	2.3713	0.6295	0.1103	0.9190
Factor 6	1.7419	0.3313	0.0810	1.0000
Factor 7	1.4106	0.3404	0.0656	1.0656
Factor 8	1.0701	0.0588	0.0498	1.1154
Factor 9	1.0114	0.2886	0.0470	1.1624
Factor 10	0.7227	0.1347	0.0336	1.1960
Factor 11	0.5880	0.0422	0.0273	1.2234
Factor 12	0.5458	0.4212	0.0254	1.2488
Factor 13	0.5037	0.1126	0.0234	1.2722
Factor 14	0.3911	0.1045	0.0182	1.2904
Factor 15	0.2866	0.0811	0.0133	1.3037
Factor 16	0.2055	0.0362	0.0096	1.3133
Factor 17	0.1693	0.0355	0.0079	1.3212
Factor 18	0.1339	0.0982	0.0062	1.3274
Factor 19	0.0356	0.0366	0.0017	1.3290
Factor 20	-0.0009	0.0512	-0.0000	1.3290
Factor 21	-0.0521	0.0704	-0.0024	1.3266
Factor 22	-0.1225	0.0044	-0.0057	1.3209
Factor 23	-0.1269	0.0382	-0.0059	1.3150
Factor 24	-0.1650	0.0221	-0.0077	1.3073
Factor 25	-0.1872	0.0538	-0.0087	1.2986
Factor 26	-0.2410	0.0506	-0.0112	1.2874
Factor 27	-0.2916	0.0081	-0.0136	1.2738
Factor 28	-0.2998	0.0127	-0.0139	1.2599
Factor 29	-0.3125	0.0160	-0.0145	1.2454
Factor 30	-0.3285	0.0421	-0.0153	1.2301
Factor 31	-0.3706	0.0279	-0.0172	1.2128
Factor 32	-0.3985	0.0339	-0.0185	1.1943
Factor 33	-0.4324	0.0144	-0.0201	1.1740
Factor 34	-0.4468	0.0241	-0.0208	1.1534
Factor 35	-0.4708	0.0271	-0.0219	1.1315
Factor 36	-0.4980	0.0251	-0.0232	1.1084
Factor 37	-0.5231	0.0380	-0.0243	1.0840
Factor 38	-0.5611	0.0513	-0.0261	1.0579
Factor 39	-0.6124	0.0207	-0.0285	1.0294
Factor 40	-0.6331	-	-0.0294	1.0000

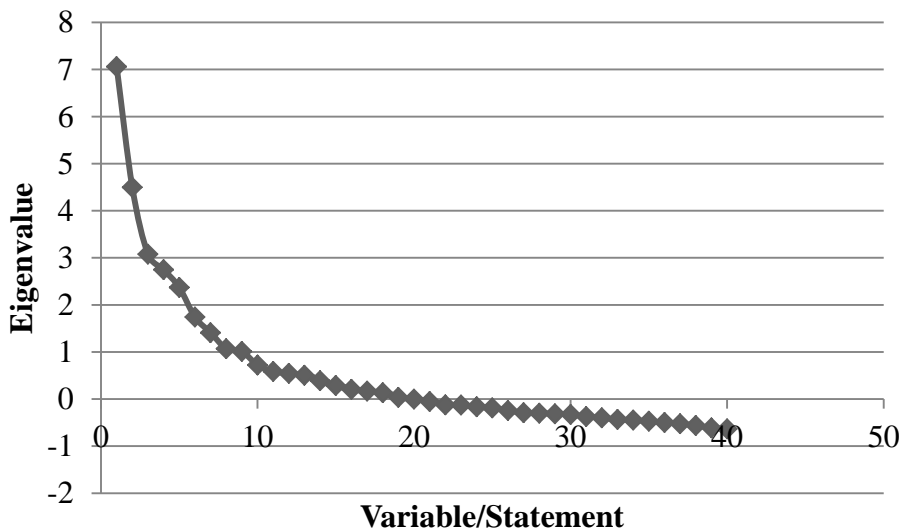
⁷ Natural factor analysis is invalid due to Heywood Case (P180).

⁸ Shaded values indicate threshold shifts of (a) eigenvalue, which addresses variance (the 1.0000 threshold and the positive/negative threshold); and (b) proportion/cumulative proportion at which point cumulative proportion of explained variance is 1.0000, basic proportion shifts from positive-to-negative, and the point at which maximum cumulative variance is explained. Both eigenvalue and proportion positive/negative thresholds take place at factor 19, indicative of maximum viable factors in this analysis.

Table 5.2: Descriptive Statistics on Proposed Forced Retained Factors, n=40

Proposed Number of Forced Retained Factors	Absolute Loading Range and Spread	Absolute Loading Mean	Absolute Loading Median	Natural Factor Analysis Proportion Variance Explained ⁹	Viable Number of Retained Factors (Positive Eigenvalue)
3 Factors	0.2157-0.8138 (0.5981)	0.4953	0.4951	0.2216	17
4 Factors	0.2242-0.8117 (0.5875)	0.5191	0.5189	0.2732	17
5 Factors	0.2793-0.8095 (0.5302)	0.5360	0.5336	0.3190	18
6 Factors	0.2481-0.8888 (0.6407)	0.5662	0.5336	0.4307	19
7 Factors	0.2957-0.8052 (0.5095)	0.5555	0.5650	0.4648	20
8 Factors	0.2954-0.8027 (0.5073)	0.5602	0.5644	0.4989	21
9 Factors	0.3238-0.7999 (0.4761)	0.5641	0.5638	0.5321	21
10 Factors	0.3984-0.7796 (0.3812)	0.5660	0.5646	0.5652	22

Figure 5.1: Plotted Eigenvalues (Cattell “Elbow” Model, 1966)



⁹ Natural factor analysis is invalid due to Heywood Case (P180).

CHAPTER 6

FINDINGS AND ANALYSIS

With established methods, this chapter will present and analyze the findings in four parts: (a) means comparison of sample subsets; (b) the Q-factor analysis; (c) the integration of qualitative findings in an individual analysis of each of the six extracted factors; and (d) defining the relationship between these findings and the existing stakeholder typologies and theories presented in Chapter 3.

Means Comparison

The most rudimentary quantitative analysis is the descriptive statistics of the forty statements, focusing specifically on the mean responses to the statements and the range of responses among the sample (n=45). These data are subdivided into aggregate analyses of (a) mean values and (b) range of responses.

This measure of difference isolates those statements where the correlation between statements was substantial (>0.5000) but where the difference in averages between leaders and stakeholders was most extreme. The default formula for this measure was: (mean value of leader correlation) – (mean value of stakeholder correlation) = (difference value). Because the intent of this measure is only to measure the *extremity* of the differences between the two subsets, the absolute values were utilized.

The absolute values of the mean statements are considered, as the framing of the statement (positive versus negative) could result in a reversed framing of the response (agree versus disagree). The absolute values are indicative of the extremity of agreement/disagreement or extreme neutrality. Based on an AV scale of zero-to-three, those statements with mean response values greater than 2 are considered “extreme” (table 6.01). These findings indicate that

concerns of motivation garner the most extreme responses - the legal requirements for stakeholder engagement, pre-existing conflict, empowerment of stakeholders, level of information sharing, and approaching stakeholders as “true partners” in the policy development process. Contrarily, relationships and understanding gather most closely to the neutral point of the scale – stakeholders’ trust of leaders, understanding of the interdisciplinary ramifications of policy, and previous experiences in engagement processes.

The first in the series of analyses is a comparison of mean values of responses to each of the statements identified as the variables. This will include the aggregate of the responses, as well as select subsets of the sample. These subsets will represent (a) those self-identified as leaders versus those self-identified as stakeholders; (b) male respondents versus female respondents; and (c) residents of one of the six coastal Georgia counties versus non-resident respondents.

When subdivided into self-identified stakeholders and self-identified leaders, several differences present themselves (Table 6.02). The number of responses (“n” value) fluctuate slightly due to no responses on particular statements (whether intentional or unintentional is not clear), but the peak number of observations for self-identified stakeholders is n=24, self-identified leaders at n=21. The means comparison between these two groups is based on absolute values for the same reasons identified in the aggregate description. The exceptionally low mean value threshold ($x < 0.1000$) remains the same for this subdivision and has markedly higher numbers of statements within each – six statements for stakeholders, three for leaders. Similarly, the exceptionally high mean value threshold ($x > 2.0000$) is more common – six for stakeholders, fifteen for leaders.

For those statements with the highest mean values among leaders, common themes are belief about stakeholders' roles, confidence in the process, and trust in leaders. When juxtaposed with the mean response values of stakeholders of the same statements, leaders' responses are generally more positive in each of these three areas than their stakeholder counterparts. Significant disparity between statement mean responses in the two subsets is minimal, and limited to issues of trust.

The relationship between leader and stakeholder is seen as most divergent regarding issues of information and information-sharing, as demonstrated in chapter 2. Four of the statements included in this study address those concerns with similar mean responses for both groups. The lone exception is the belief that "leaders do not share all necessary information with stakeholders." For their part, stakeholders' mean response is indicative of *disagreement* with this statement (-0.48) or a general belief that leaders are sharing available information. Leaders however have an average indicative of *agreement* (0.15) or an overall acknowledgement that they, as leaders, withhold some degree of information from stakeholder participants. This is similar to the directional differences seen in the statement of trust identified earlier.

Q-Factor Analysis

At the core of the quantitative techniques is the factor analysis. This technique is intended to identify and describe the variability that exists within the statements that constituted the survey instrument described in the previous chapter. The analysis generates a series of "factors" (as the technique name would suggest) that reduces the number of variables based on the commonalities. This analysis will be used to inform the remainder of the quantitative analysis and serve as the framework for the qualitative component in the subsequent section.

In identifying common themes in the perceptions, utilizing the maximum number of viable natural factors (in this case, 19) does little to further the analysis. The reduction of 52.5% of variables is not indicative of broad themes that are the objective of this research and it is more prudent to use a “forced” factor analysis in which the researcher dictates the number of factors that should be generated. This forced factoring of the existing 40 variables (the individual statements) into a desired and designated number of thematic factors. Based primarily on the four-part determination model and supported by the Kaiser-Guttman model and Cattell “elbow” model (Figure 5.1). An acceptable balance of loading values and plausibility of factors was realized at six.

The eigenvalues and proportion of explained variance in each of the six factors is seen in table 6.05. The explanation of variance based on the orthogonal varimax rotation is generally well-divided between the six extracted factors, ranging from 0.1368 (13.68%) to 0.2355 (23.55%). The overall strength of the collective factors is supported by their respective eigenvalues.

Factor loadings exist for each variable within each of the six factors. This value could potentially range from -1.0000 to 1.0000, exclusive of the extreme values. This factor loading indicates the correlation between the individual variables and the factors that are created, whether natural or forced. Assignment of individual variables is based on the highest absolute value of the six factor loadings (Brown 1993). The determination of appropriate factor is based on the absolute value of that loading, rather than the direction of the value. The objective of this technique is to determine *strength* of relationship rather than *direction* of relationship.

The motivation for this research was to use the experiences of leaders and stakeholders in five policy processes of varying complexity to determine how those engaged in the policy

process perceive the engagement of stakeholders post hoc. The contents of each of the six emerging factors were considered in describing a different quality of the broader notion of “perception.”

The defined themes are (a) perceptions of *process*; (b) perceptions of *empowerment*; (c) perceptions of *esteem*; (d) perceptions of *potency*; (e) perceptions of *cognizance*; and (f) perceptions of *equity* (Tables 6.06 and 6.07). Much of the quantitative significance demonstrated in the factor analysis was reflected in the qualitative data collection and the following six sections will integrate the qualitative findings into the six quantitatively defined factors.

Perceptions of Process

The first of the six factor themes is respondents’ perceptions of the process itself. Much of the previous research on stakeholder theory, as discussed in chapter 3, has focused on the process of stakeholder engagement. Efforts have historically been made to improve the efficiency and effectiveness of the engagement process, with little regard to the motives, desired outcomes, or results. While this exploratory research is explicit in creating a framework for studying *post hoc perceptions* of engagement rather than the process itself, in-process engagement processes remain an integral component of the research. The ten statements and the qualitative observations reflective of the execution of the engagement process are the largest single emergent factor in this research, demonstrated on the continuum of (a) motive and intent; (b) communication of opportunities for participation; (c) expectations of preparedness; (d) process management; and (e) process completion and response.

Motives and intentions on the part of leaders in processes are the first in the continuum of this factor. The proposition that “stakeholders are included to provide political cover to elected officials” is a consistent critique. In follow-up interviews, many respondents corroborated this

belief. On the part of leaders in the engagement process, responses were indicative of strategic political decisions and the motives are presented as more self-serving. One self-identified leader described the practice of “trying to implement a policy unilaterally” as “political suicide.” A second recognized potential fallacies in the engagement process, describing hidden political agendas as being “the norm...in the political and bureaucratic process.” Agreeing with this belief, stakeholder responses convey cynicism and reluctance to indulge the perceived political motives of process leaders. Among the criticisms offered in the one-on-one interviews was the belief that leaders “want to make [the engagement process] as complicated as possible” in order to dissuade participation or exhaust participants.

The most quantitative consistency (without regard to extremity of agreement) is the belief that “there is too much stakeholder involvement,” with which 76.91% of respondents disagreed. These findings are corroborated by qualitative observations and a broad-based belief that stakeholder involvement is advantageous, but none of the interviews yielded clarity on the question of *why* that is the case. The intent to engage stakeholders in the process is recognized, but the underlying motive for that intention suffers from a uniform lack of clarity among respondents.

The statement that generated the highest factor loading (0.8283/1.0000) and thereby the highest degree of correlation with the assigned factor was the adequacy of communication of opportunities for participation in the policy process to potential stakeholders. Follow-up interviews delineated between (a) mechanisms for communication and (b) response to communication.

Conveying information about engagement processes is consistently recognized as a challenge, though leaders believe their approach to communication to be “traditional” and

“adequate.” Leaders of many processes have adapted to technological advances and much of the communication of opportunities for participation is done via email. There is substantive criticism of this approach, however, in that those without access/regular access to email and the internet are not being reached by these tools. This has a strong relationship with the *perceptions of equity* factor discussed later in this chapter. An additional leader cited use of the “backside of the city’s water bill” as an additional medium, but expressed lack of confidence in this mechanism. Stakeholders express a feeling of being bombarded with “spam” and “junk mail” from organizers resulting in widespread disregard for the announcements within.

Respondents also acknowledge the repercussions of communication. While often structured to meet specific requirements and legal expectations, leaders acknowledge that announcements and recruitment materials are “often not well read or understood by the people to whom it’s important.” Beyond the difficulties associated with communication are potential benefits. When done clearly, exhaustively, and with transparency, there is a perceived increase in the level of *trust* built between stakeholders and policy-makers. The concept of trust in this context was explicitly referenced by a respondent identified as a leader, but has quantitative connections to other factor themes in this research, namely perceptions of the level of *empowerment* of stakeholders and perceptions of the *esteem* with which stakeholders are regarded. In identifying unique consequences faced in any communication process and/or mechanism, one respondent noted that it “probably can be improved,” giving credence to the notion that leaders have interest in continual improvement in the process, rather than achieving an “adequate” effort.

Expectations are a third subset of this *process* factor, specifically the role of “technical” issues, information, and competency. As was discussed in chapter 4, the “hard sciences” play a

much more prominent role in a coastal environment and in the coastal policy process than in many other locales. This is reflected in the notions that stakeholders “do not understand” and hold “limited capacity to provide advice” on technical issues facing this unique policy process.

Through a website hosted by the USACOE, comments, letters, emails, and other communications from interested parties were shared with personal information redacted. One respondent exhibited their bias claiming “even if time had allowed for detail analyses of the Economic report, it is highly unlikely comments would sway the Corps [of Engineers] in their 2 ½ year-long Economics Analysis.” The commenter continues, stressing that the process was not entirely without value and that “past experience with Congressional authorization..., the creation of the Stakeholders Evaluation Group..., and advocacy...does inform and provide some insights” (“Some Thoughts on Economics Analysis of SHEP” 25 January 2011).

An added challenge is the necessity of *informed* participation (Freeman 1984; Treby and Clark 2004; Glicken 2000). Experts often bring formal education and ongoing research to policy processes and convey necessary information to stakeholders, regardless of their level of participation, is a challenge. Respondents expressed concern over the lack of congruency in understandings of these issues and frequent difficulty in identifying the median knowledge and catering to those stakeholders. For the well-informed stakeholder, this approach is seen as rudimentary and unnecessary. For the uninformed stakeholder, the issues being presented and explained are frequently seen as too complex and complicated with the false assumption of pre-existing knowledge. For this contingent, the lucidity of the engagement is lacking.

The extent to which leaders “try hard to listen to stakeholders” also served to elicit a cross-section of responses, varying greatly between the two subsets. One leader openly

acknowledged that stakeholders “may be a little leery” of their counterparts’ genuine interest in their active participation.

Transparency is seen as an asset to the process in both methods. This transparency manifests itself in (a) the a priori transparency of process and (b) post-hoc ramifications of transparency. Ensuring that “all the cards eventually wind up on the table” was described as being the leaders’ responsibility, but also expressed belief that *all* “cards” are not put on the proverbial table from the outset and instead presented to the public with strategic ordering and timing in mind. This is a practical manifestation of the effort to “level the playing field” that informs the co-production stakeholder theory (French et al 2005).

Dependent on the realization of pre-mediated (leader) or expected (stakeholder) transparency, there are direct implications on the effectiveness of the on-going process. High levels of transparency, understood as the meeting point between the intent and actions of leaders that hold information and the stakeholders assessing and questioning the information being shared, are described as more beneficial to the engagement process, encouraging stakeholders to “think seriously about [the policy]” and “hope some consensus would be formed.”

Management of the engagement process is not exclusively reliant on decisions and actions by leaders. Rather, a certain amount of active participation by stakeholders is necessary. Based on results of both quantitative and qualitative analysis, there is an expectation that stakeholders must acknowledge and respond to their own bias when entering a process, appreciate the complexity and volume of perspectives, and develop a personal willingness to see the “bigger picture.” These findings demonstrate the challenges of governance fragmentation discussed in chapter 2. Disparity in the capacity of stakeholders to understand and respond to the

inherent complexity of the policy process is most evident when juxtaposing policy processes at the extremities of governance, the local and federal levels.

At the local level, an elected official in a coastal Georgia city described most of their city council meetings as being “very well attended” and having “very good turnout when we have meetings that affect the community.” The descriptions of previous experiences by this elected official also indicate a degree of synonymy between the city’s council meetings and designated “stakeholder groups.” In this context, the term “community” has a considerably narrower scope than in other “levels” of governance described in chapter 4 and this experience is reflective of a greater sense of ownership and obligatory participation by potential stakeholders at that level.

The same collective action is not seen and is not as viable with a larger volume of potential stakeholders and more complex implications. An appointed official at the federal level described widespread frustration that would come from both “20 people making one statement” with different and narrow interests, and “20 people making the identical statement” and trying to give increased legitimacy to their particular organizational interest. While the respondent definitively stated that these two challenges should not be interpreted as a claim that “you can have too much stakeholder involvement,” sorting, prioritizing, and incorporating viewpoints are obstacles for policy-makers. The same process (SHEP) was described by another participant with similar concerns:

I’ll be talking about the bigger picture. [Stakeholders] don’t see that beyond their own interests because they’re not looking at the – their minds block out to the big picture over here and how it affects even their livelihood in a lot of things.

Similar to leaders’ pre-mediated transparency and stakeholders’ expectations of the policy process, an appropriate balance must exist between over-simplification of issues and being

perceived as patronizing, and the over-complicating of issues being perceived as attempted manipulation and coercion.

Perceptions of process is the most complex of the six resulting factors from the Q factor analysis. The process is based on a timeline, extending from prior to opportunities being presented to stakeholders until after the commencement of the participation efforts, more so than any of the remaining five factor themes and while the quantitative factor analysis identifies the relationships within this continuum, the qualitative analysis is more apt to analyze preparation, logistics, and procedural implications.

Perceptions of Empowerment

The second factor focuses on stakeholder empowerment. Among the related themes are the extent to which the stakeholder feels they are a “true player” in the process, the level of power they yield, and the information with which they have been provided. The statements yielding the highest correlation to this factor reflect senses of (a) inclusiveness and (b) cooperation.

The mentality of inclusiveness is one that ultimately drives the actions and behavior of all actors in the engagement process. For their part, leaders must convey the desire for partnership as genuine and authentic. This requires consciously exceeding legal requirements in engagement practices to ensure the most exhaustive, accessible, and visible efforts possible; creating and developing a feeling of honest partnerships; developing the sense of power and influence held by stakeholders; and building a mutual sense of trust among actors. As noted by one elected official, there is a “responsibility to seek input” beyond minimal adherence to established standards. The same respondent recognized the potential to become jaded as a policy-maker, describing

previous experiences as beneficial because “even if some [stakeholder participants] are wild and crazy, it’s still worth listening to them because oftentimes they have legitimate points.”

Stakeholders must approach a process with confidence and optimism. In this sample, 35 of 45 respondents had previously participated in a stakeholder engagement process and many acknowledged their own cynicism prior to engaging in the process reflected in this research. In medias res, stakeholders commonly seek affirmation and validation from process leaders. While leaders can be critical of this demand - one criticizing previous experiences as being a “hug fest” and another describing the process as “not supposed to make you feel good” - there is indirect benefit in their role. Providing outward signs of approval, according to one stakeholder, can give stakeholder participants “more strength...to move certain projects forward to get things done.”

Cooperation is the manifestation of the broader sense of inclusiveness and outward evidence of stakeholder empowerment. Among variables that reflect this cooperation are the responses to challenges in conveying information to potential stakeholders and concerted effort to engage potential stakeholders of all races/ethnicities. The actions taken in a given process are not uniform or standardized, but require recognition of circumstances and adaptation to environment. A self-identified leader described successful recognition and adaptation as being “awkward and uncomfortable.”

Internal beliefs are considerably more static among both parties than behaviors that respond to changing needs and demands, but outward actions are adaptable and can serve to nurture a sense of empowerment that is demonstrated as necessary.

Perceptions of Esteem

The esteem in which leaders and stakeholders hold one another can have impact on how engagement processes are perceived. This factor challenges (a) the trust that stakeholders have in

leaders, (b) the open acceptance and reception of challenges and criticisms, (c) acknowledged validity of concerns, (d) how open and transparent leaders are with stakeholders, and (e) the capacity of stakeholders to actively participate.

The review of previous literature in Chapter 2 provided definition to several vague and ambiguous concepts, discussed the foundations of stakeholder theory, and established a timeline of the maturation of stakeholder theory and research to this point. Two prominent observations from that review were that a “stakeholder” is not necessarily an individual, but could be an entity or organization, and “participation” is a two-way, transaction-based activity that requires both the communication of information and the consultation of potential stakeholders, corroborating the functional definitions of both terms as adopted in Chapter 2.

A case-based example of both of these findings is seen in Tybee Island, a city of 2,990 on the eastern edge of Chatham County, Georgia and directly adjacent to the Atlantic Ocean coastline. Tybee Island’s northern shore (the physical island and geo-political city are coterminous) sits at the mouth of the Savannah River (See Figure 4.4). The potential impacts of the deepening of the Savannah Harbor are widely corroborated and the City of Tybee Island recognized its role as an organizational stakeholder represented by the incumbent Mayor.

In a letter to the USACOE written on behalf of the city, the mayor is critical of engagement mechanisms, referencing challenges the city faced in successful transaction of information and unanswered requests for information. Understanding participation as a two-way transaction-based action and having desire for informed participation, the perception on the part of the City of Tybee Island is that the process was not holistic and did not address the particular concerns that were raised. The consequences of this action include a diminished sense of value

on the part of the city, lack of “buy-in” on the part of the federal-level policy makers, and a hindered/diminished sense of mutual trust in the process as a whole.

An obstacle facing improved perceptions of the esteem in which actors are held is conveyance of that regard. This *esteem* factor is unique among the six in that its qualitative findings are the most direct, practical, and seemingly trivial. Among the actions identified as improving meaningful involvement and perceptions of high regard are (a) revisiting the idea of assigning labels to actors, including abandonment the term “stakeholder” and “quit with calling people something,” thereby reducing the feelings of institutionalism, formal practices, and impersonal relationships; (b) be more conscientious of honesty in interactions, as trust is quickly lost when fellow actors believe “they’re not honest or truthful in some things” and that they “catch them in too many lies”; (c) approach the policy-process with a “big-picture” viewpoint (see “process management” section in *Perceptions of Process* section) rather than focusing on minute details, observed by one self-identified stakeholder as the need for leaders to not “tell me how to do that one little thing”; and (d) convey a willingness to develop personal relationships and engage in constructive decision-making, avoiding a situation where an personal conflict in which an individual is described as “basically an ass hole,” or a critique of constructiveness in which a leader will describe a stakeholder as “a very vocal opponent toward the end and his reasoning was unfounded,” both being referenced by respondents as examples of experiences in the processes comprising this research.

Perceptions of Potency

The smallest of the six, housing only two statements, the *perceptions of potency* factor balances the stakeholders’ desire for influence and the inherent complexities and constraints of

public policy development. While limited in regard to the number of variables in quantitative measures, potency concerns were prevalent in the qualitative component of the research.

Leaders' responses indicate that heightened levels of "informed participation," as referenced in Chapter 2, would be beneficial in increasing stakeholders' potency in the policy process:

If the truth was told, if they educate themselves and be involved . . . When a certain group is saying, the professionals, to this group, "This is what will happen if we do this and we will be able to protect and preserve this." If they understand and be involved with that and be educated on that – it ain't bad at all because they're preserving and protecting this, and also this over here is helping over here.

Informed participation, similar to its prominent role in perceptions of *process* and *esteem*, impacts understanding of both potential influence and constraint and is necessary to achieve the appropriate balance.

A reality of the policy engagement process is that clout is mitigated by conflict. For leaders, an obligation to facilitate a process or mechanism for engagement does not equate to listening or considerations of the results and for stakeholders, an increasing number of actors lacking appreciation for the interests and needs of others dilute the potency of all.

While stakeholder criticism of leaders is more commonplace in these findings, findings are not entirely devoid of the opposite. Particularly in policies that elicit strong feelings, a higher volume of stakeholder participants, and increased potential for conflicting interests, leaders describe some individual and/or organizational stakeholders as "saying various things and they mislead the public [and] the people..." Those that identify themselves as leaders are aware and recognize inter-group conflict amongst stakeholders, further recounting the outward aggression, public accusations, and manipulation of "the facts and the truth." Even the framing of the response from this particular leader had a negative connotation of the group dynamic, having

been observed as an experience in which the dynamic was “the environmental people versus...the business world.”

This research garnered several responses from leaders particularly critical of environmental-oriented individuals and organizations. Those stakeholders motivated to engage by virtue of their environmental interests “don’t think in terms of dollars and sense. They don’t think in terms of jobs. They don’t think in terms of how it affects the commerce and the work and families and poverty and all these other things.” In the three dimensional competencies typology, these are the stakeholders with the interest and/or expertise in the practical sciences. Their increased prevalence is challenge unique to coastal/environmental policy processes and one of the primary motivations for this research. A common response to these practically-oriented stakeholders is to balance their oftentimes narrow interests with interests of the business community, residents and civic organizations, and social advocacy organizations. While ideal, this is rarely viable, as there are “too many situations where a handful of very vocal opponents of a specific issue can completely change the direction of how the policy is proceeding” and create an imbalance.

Constraints of policy development take two forms: (a) intimidation or (b) suppression. In the case of the former, complex and overwhelming policies and procedures might dissuade potential stakeholders from participating in the process – “...the more laws they can make the less the public is going to understand it” and “if you get people that don't understand it, they're going to shy away from it,” observed one self-identified leader. Process leaders often have similar difficulty in managing engagement processes and requirements – “Just in my dealings with stuff – with ordinances and codes and such, it can become very difficult to understand,” explained one. The intimidation model was described by one respondent:

I look at the federal government agencies don't share [sic] and open enough information to other groups. You can take the FBI, the GBI, and different ones and it seems like they're got their own little turf and stuff like this. The same thing with this sort of stuff. They just don't share all that information for some reason. I don't know why.

This and similar experiences have confronted stakeholders wishing to participate in a process yet are unaware of the appropriate avenue for obtaining information or providing feedback. For some, this serves to dissuade from active participation.

Constraints as suppressants differ, as they are representative of action and behavior in the midst of a process. There is often a degree of understanding of constraints, one leader ceded that policy-makers "may not be able to do what [the stakeholders] want us to do." Internal constraints may also serve to suppress the potency of a stakeholder, especially if that stakeholder is an organization with multiple interests, one participant referencing that challenge:

...one of the ones that's familiar with us right now is the renourishment (sic) of our beach. We're dealing with the Corp of Engineers who is involving with the deepening of the Savannah Harbor. They proposed something that would benefit them and would leave a lot of non-beach quality sediments on our beach. Oftentimes we may have conflicting goals between various agencies.

For the more aggressive actors that actively gather information and/or provide their consultation regarding a policy, many encounter frustration. One described their experiences with this suppression model as interactions with various entities in which, "it seems like they don't understand a lot of things that we're talking about. They might say they understand, but no."

The potency factor is one-sided in that it is overwhelmingly reliant on the stakeholder. Regardless of form, stakeholder efficacy is hindered by imbalance of stakeholders' views of themselves and understanding of the policy process.

Perceptions of Cognizance

The penultimate factor is perceptions of cognizance. As an indicator of awareness and considerations made in the policy process, the cognizance factor adequately conveys perceptions

of (a) what knowledge exists, (b) who holds that knowledge, (c) whether the knowledge is shared, and (d) when/how knowledge is disseminated.

The first obstacle faced by actors in being cognizant of a proposed policy is awareness that relevant information exists. In processes with genuine interest in achieving this end, leaders are those generating or receiving commissioned information and must therefore be proactive in communicating its availability to other leaders and potential stakeholders.

A balance that went wholly unrecognized by respondents in this sample was the need for both substantive, research-oriented information and observational, practitioner-based information. To that end, it is highly unlikely that a single person/entity would hold *all* relevant information. This further justifies the need for a two-way transactional engagement process. The scientific knowledge of abundance, status, and well-being of oceanic resources must be supplemented by the practical knowledge of those that spend their days on the water catching fish for the policies of the SAFMC to be treated as legitimate from as many perspectives as possible.

Even aggressive efforts to recruit intuitive, though traditionally disengaged stakeholders, as is the case with fishermen in the SAFMC case, there is neglect of counterintuitive stakeholders. Acknowledging the inclusion of fishermen in certain policy processes, it has been previously observed “the rights of other people to use the coast have not been recognized.” For example, “landfill projects usually proceeded without any negotiations with other stakeholders” (Kawabe 2004).

Respondents expressed the belief that sharing existing knowledge is vital in shared understanding of the policy process and informed participation: “If you want people to

understand why you're doing something, why you're doing a particular regulation, they need that data.”

While the obligation for sharing information is placed upon those leaders holding the information, there is a corresponding need for stakeholders to be receptive to the information. A challenge to this demand is the presence of “single-issue minded” actors in the process. A respondent identified as a leader stressed this impediment as a “significant weakness” in engagement efforts. In a criticism of stakeholders, the respondent claimed, “they only care about their point of view,” another believing stakeholders have “all this stuff be happening all around them and this and that in the environment that affects them a great deal, and they are right there still don’t know about it,” and a third expressing concern that “I don’t know whether [stakeholder participants] would have the necessary skills and expertise on all the, I would think, issues of various things” and ultimately being “limited somewhat.” The natural reaction to this is to educate stakeholders on the “bigger picture” of issues (see *perceptions of process* and *perceptions of esteem*) and on the status and details of the immediate process at hand, but most acknowledge this as idealistic and unattainable. The reality of the situation conveyed by several leaders was that most stakeholders “don’t care about anyone else or anyone else’s point of view.” The response concluded with the claim that “you can’t change people,” highlighting potential implications of pre-conceived biases on post-hoc perceptions.

Based on qualitative findings, many of the information dissemination perceptions were related to frequency and routinization of the process. One respondent the SAFMC process as involving stakeholders “more effectively than any government process I know about,” supporting this belief by comparing the national policy process (SHEP) with the multi-state

regional process (SAFMC), describing the former as a “one-time or once every 50 year project” and the latter having a “tradition of doing it routinely.”

Recalling the challenges identified in Chapter 2, fragmentation of government is prevalent in this factor. Awareness of the different roles assumed by local, state, and federal governments, as well as quasi-public and regional governance entities, is necessary in order to approach the appropriate entity with the appropriate jurisdiction, to actively engage in the policy process. This also relates to the “constraints” concerns identified in the *perceptions of potency* factor discussed earlier. Even with awareness of the distinctions between levels of government, respondents identified continued lack of clarity in what office, department, or jurisdiction was charged with executing certain functions and responsibilities. For some respondents, this was a source of exhaustion and resignation (intimidation); for others entering the process without having conducting the recognizance and attempting to express their concerns or interests to a policy-maker, the proverbial “run around” is often interpreted as a model to avoid accountability and responsiveness to public needs and demands (suppression).

This fragmentation was embodied in a case-based example from this research. When discussing a particular engagement session regarding the deepening of the Savannah Harbor, one respondent questioned themselves, “was the Army Corps of Engineers involved?” After contemplating for a few seconds, the stakeholder responded, “I don’t think they were actually. They should have been.” This supplementary question goes beyond whether and how information is disseminated, but questions which actors are receiving necessary information.

Successful information sharing initiatives were also cited in data collection process. The up-river concerns of the Savannah River demanded studies and reports from several agencies at multiple levels of government and a participant (leader) in that effort referred to the process as an

instance in which “the federal and state, especially the federal, came in and provided a lot of good information that was able to help educate the overall community and other kind of things on what was going on.”

Information sharing at any of the four points on the timeline described above is not a definitive or fixed model. A case cited by a respondent credited “individuals, environmental groups and other ones, who kind of made the federal government come up and open up with conversation to bring the whole factual truth up.” The availability, sensitivity, and complexity of information all serve as driving factors in information-sharing decisions. The results can range from feelings of adequacy and successful pre-emptive efforts, as seen in the Savannah River up-river studies, to feelings of “post-participation’ disillusionment” in instances of limited knowledge (Reed 2008).

Perceptions of Equity

The sixth and final factor in this research is the perceptions of equity. Since the emergence of formal stakeholder research in the 1960s, the public/private distinction has been long debated and influenced the evolution of the four stakeholder theories discussed in Chapter 2. Recent process models acknowledge that that holding a “stake” in public policy decisions is a broader scope than private sector and as a result, ensuring equity among those stakeholders and participants is vital. This factor is the embodiment of the sense of legitimacy held by stakeholder in the process. Recalling the Shen (1975) model, legitimacy accompanies competency in the cultural science and the well-equipped participants are those that understand the local culture and behavioral norms. If the stakeholder does not feel as though they are a legitimate actor of the engagement process, their post-hoc perceptions of that belief are reflected in this factor. These

findings reflect equity both as (a) amount of/access to participation and (b) representation in processes.

Of the six factors, *perceptions of equity* elicited the most direct qualitative observations about the value of stakeholder engagement efforts. Among those are the belief that “I don’t know that you can have too much stakeholder involvement”; “There can’t be too many points of view when there’s something really important at stake”; and “If [stakeholders] don’t want to participate, they’re only hurting themselves.” While having the common theme of all potential stakeholders participating to the process, there is inconsistency in which actors are obligated to bring that universal participation to fruition.

The sense of inclusion felt by participants can serve to further increase the positive perceptions of the equity of an engagement process:

I think when people feel like they’re on the inside of a discussion involving a decision and have input they’re less likely to be suspicious and they’re less likely to feel like their concerns aren’t being addressed in the stakeholder process.

Whether genuine or not, making stakeholder participants *feel* like they are on the “inside” of a policy process is widely considered advantageous for process leaders.

Equity of access is tangentially related to logistical concerns in the *perceptions of process* factor, but is oriented toward access within the participation forum. A criticism reflected in the *perceptions of esteem* and *perceptions of potency* factors was the ability of a small contingent of participants to dominate the process. The criticism is relevant again, in that a conversation dominated by one/a few serves to limit the opportunity for others to actively participate in the process. Without access in the form of time and forum, presence achieves little.

Concerns about equity in representation mirror the observations about the overall value of stakeholder engagement. Among those were “I don’t think they go all out to involve all races and

ethnic groups”; “...policy makers have a responsibility to include all of their constituents in any process...”; “just normal people...people who are not in office, people who are not attorneys”; and previous research that found “the interaction between Indigenous and non-Indigenous participants was often overwhelmingly dominated by non-Indigenous participants” (Rockloff and Lockie 2006).

Conflicting beliefs in this factor center on the weight of certain actors in the engagement process, specifically land-owners in affected areas. Where some respondents suggested in their responses that absolute equity was necessary, accompanied by the assurance of equal power (to the extent “power” is vested in stakeholders); and those that believe tangible and quantifiable interests in the affected area should yield additional weight in the process. Among the latter group, there is further disparity in perceptions of recruitment and conveyed value of coastal-region land-owners with one contingent perceiving it as “adequate” and another as “not very aggressive.”

Means Comparison, Framed by Factor

Tables 6.08, 6.09, and 6.10 demonstrate the average difference in mean responses for three subsets of the sample– leaders/stakeholders, male/female, and coastal/non-coastal residents. While no considerable differences stem from the gender distinction, the remaining two subsets yielded compelling distinctions.

Among those three groups, the lowest disparities are seen amongst leaders and stakeholders, with the lowest values/highest levels of agreement in issues of potency. Higher perceived capacity of stakeholders in the policy process, whether as potential or realized, is more prevalent amongst leaders.

Collectively, these findings demonstrate the highest levels of disparity between coastal and non-coastal respondents. The most substantive of the factors – those with average loadings >0.5000 – are the esteem in which stakeholders are held and the sense of equity that exists amongst actors. In both instances, coastal residents emerge as potentially jaded or cynical in that they perceive themselves as not being held in high regard and equity among actors to be insufficient.

Coastal Georgia Sense of Place

As discussed in Chapter 4, the context of coastal communities, the demands placed on the Georgia coast and the complexity of broader coastal policy were primary motivations for this research. The primary research questions are catered toward environmental, political/economic, and demographic challenges unique to these communities.

Consequently, prior to connecting the factor analysis findings to the existing stakeholder typologies and theories, fundamental analytics were prepared for the subset of seven variables that made specific reference to the “Georgia coast,” “coastal Georgia,” or “Georgia coastal policy.” The nature of these statements provided respondents a greater sense of place and a definitive locale, as opposed to the remaining 33 statements with broader and potentially less identifiable scopes.

Of the seven coastal Georgia statements, the majority (four) were reflected in the *perceptions of cognizance* factor. Because this factor is reliant on awareness and specific considerations, this clustering of statements is expected (Table 6.11).

The knowledge and awareness tied directly to the idea of cognizance are particularly relevant in several instances, all focused on the distinction between coastal and non-coastal residents. Among coastal residents, responses stressed a feeling of claim and ownership to the

Georgia coast. Regardless of their self-designation as leader or stakeholder, these respondents collectively indicated a belief that state and federal agencies lack an understanding of communities and resources unique to the coast. The non-resident respondents had confidence in their own understanding of these needs and demands, indicated by their opposite responses.

These ‘sense of place’ statements are important in that they stress ownership. This contributes to the generalizability of this research in that certain segments of populations, certain environments within jurisdictions, and certain unappreciated/underappreciated resources are often disregarded. While the framing and verbiage of statements and ‘local color’ references have contextual variation, this research method provides ample opportunity to identify and address impasses that may exist.

Influence on Existing Stakeholder Typologies and Theories

This research design was constructed around the primary research question, “how are stakeholder engagement processes in coastal Georgia perceived by those that participate in them?” Through the means comparison and factor analysis, these perceptions were reduced to a series of themes that inform these perceptions.

The subsequent and practical question is, “what can be done to generate increasingly positive perceptions about the effectiveness of engagement efforts?” Awareness of the relationships that exist between expectations and experiences contributes to a more organized, effective, efficient, and equitable engagement process. Facilitators can address particular weaknesses and the receptive stakeholders can develop a more holistic understanding of the coastal policy process.

The four theories presented and discussed in chapter 3 provide the framing of this section. Like the four dominant stakeholder theories identified and discussed in Chapter 3, the

six factors identified in this research are interrelated while prioritizing demands and interests specific to any given policy or population. The prioritization of desired competencies within these four stakeholder theories is reflected in table 3.3 earlier in this dissertation. Connecting these priorities with the thematic factors in these research findings, the corresponding competencies from the Shen typology, and the stakeholder theories with shared values and interests

Collaborative governance is the earliest of the formal theories of stakeholder theory and of the four theories in this dissertation, is most closely tied to public administration literature. With its reliance on adherence to structural and procedural norms, the theory is heavily influenced by civic science competency while relying comparatively little on cultural science competency. For this reason, collaborative governance is most heavily related to the perceptions of *process* and *empowerment*. The relationships that emerge between actors in the policy process are defined by their formality and the strict continuum of the process variables and the preemptive/responsive classifications of the empowerment variables reflect these definitive traits.

A trait unique to collaborative governance is the structure of public sector relationships – organizations and citizens. Entities, including “social organizations,” are considered as leaders in the public policy process and the collaborative governance reflects the relationships between organizations and citizens. This differs from more contemporary theory that recognizes the potential for organizations to act as stakeholders and thereby equivalent to the citizenry (McFadden 2007).

In their instrument, Davos et al. (2002) classify participation activities in eight categories: (a) their own willingness to participate; (b) their perceptions of other respondents’ willingness to

cooperate; (c) their perception of the institutional receptiveness to their own input during the process; (d) their perception of the institutional receptiveness to others' input; (e) the ease of figuring out the coastal management process; (f) the ease of learning the coastal management institutional arrangements; (g) the clarity of communication in establishing the coastal management objectives; and (h) the clarity of alternative solutions in the process and their potential impacts. The model focuses most heavily on the process of stakeholder engagement, but further considers the perceptions of that process after policy development is complete and these categories generally mirror the variables included in the perceptions of process factor.

In a scaled back model, Emerson, Nabatchi, and Balogh (2001) propose three dynamics of collaborative governance – discovery, procedural/institutional arrangements, and mutual trust. These dynamics are only partially reflected in the findings of this factor analysis research. The procedural/institutional arrangements are reflected in the process factor and the mutual trust is reflected in the empowerment factor, but the “discovery” dynamic is not demonstrated as having the quantitative commonalities to either derive a factor of its own or be clearly delineated within any of the six extracted factors. This is partially expected, as the definition of this third dynamic is both the most ambiguous and most reliant on creative and unconventional procedures.

To the extent that these models can be applied to the three competencies model, both the Davos categories and Emerson, Nabatchi, and Balogh dynamics models focus on the civic competency and the capacity of formal structures to facilitate stakeholder engagement.

The cyclical nature of the four theories has resulted in a renaissance of collaborative governance in the 2000's that has been reformed as broad and ambiguous, reflecting the challenges of the “discovery” dynamic. While this is a recent theoretical development, the findings (both quantitative and qualitative) of this research do not support this adapted

theoretical construct. Instead, these findings are more reflective of the earlier understanding of collaborative governance.

Co-production – the second in the timeline of formal stakeholder theories – responded to the earlier notion of collaborative governance theory by stressing relationship-building and collective action by groups of potential stakeholders. The formality of the earlier theory was abandoned in favor of unspoken influence and knowledge sharing, most closely tied to the factors of potency and cognizance.

Actors' perceptions of potency are a result of an understood balance between the constraints that exist in the policy process and the extent to which participants view themselves as influential in the process. The legal constraints of potential potency are more clearly codified than perceived influence in a process. As a result, the balance that defines potency is largely fixed on one end and open-ended on the other and consequently lacking the precise clarity of collaborative governance.

Cognizance is most fundamentally defined as what knowledge is had by participants, whether leader or stakeholder, in the policy process. Theorists describe co-production as reliant on the “production and use of scientific knowledge,” and thereby having the strongest relationship with this research on development and public policy in environmentally sensitive regions. The formal continuum of activities that served as the construct for collaborative governance theory and the *perceptions of process* factor in this research, was replaced in co-production by an informal continuum of knowledge sharing – what information is had, who holds information, whether the information is shared, and how the information is shared.

The theory has had maturation that, unlike collaborative governance, is corroborated by the mixed-methods findings of this dissertation. One respondent expressed the necessity of

having “all the cards eventually wind up on the table” and desiring knowledge dissemination as open and universal as possible during the policy development process. The quantitative findings of this research are similar, indicative of the collective actors being “increasingly aware of the social and environmental impacts” of policy implementation and placing increased pressure on those with the knowledge/information to disseminate to all participants (Benn, Dunphy, and Martin 2009; Johnson 2009).

With many researchers criticizing co-production as an over-reaction to the shortfalls of collaborative governance, the theory of deliberative democracy emerged.

Where the earlier theories focused on Shen’s (1975) civic science and practical science competencies, respectively, deliberative democracy focused most heavily on the cultural science competencies. These cultural competencies are defined in this research by the *perceptions of esteem* and *perceptions of equity* factors. In lieu of attention to detailed practices and policy-specific information sharing, this theory was built around broader concerns of citizenship and civic engagement among the populous. Outward indications of regard for participants and their consultation by leaders develop increasingly positive perceptions of esteem; ensuring universal access to engagement processes (both in terms of physical presence and active participation) develops increasingly positive perceptions of equity.

While these three earliest theories each heavily stresses one of the three axes in the competency typology, citizen democracy theory moderates the influence of each. While this theory largely discounts the importance of the practical science, it effectively balances the civic and cultural sciences. Lacking the competency typology extremes of its three predecessors, citizen democracy is not directly mirrored by any of the six factors developed in this research. The theory was described in chapter 3 as being “layered” in nature and having a mitigated

representation of all three competencies and, consequently, all six post hoc perception-based factors.

A summary of the citizen democracy theory (Frank 2006) identified five lessons originally directed at youth engagement in the policy process, but is in reality not limited to this demographic. With the six factors presented in these findings, their application is interpreted as more universal. The imposition of responsibility and empowerment (referenced by Frank as a single lesson) correspond with civic competency and perceptions of *process* and *empowerment*; capacity building and adapted styles of working correspond with practical competency and perceptions of *potency* and *cognizance*; and adaptation to sociopolitical context and involvement with other groups correspond with cultural competency and perceptions of *esteem* and *equity*.

A motivation for including five separate policies (chapter 4) in this research was to adequately reflect the unique circumstances that exist in policy processes. As was described in earlier chapters and is appropriate to stress in these theoretical connections, no single theory is most universally appropriate. It is instead the responsibility of those participating in the process to (a) determine the significance of the values, competencies, and objectives of their specific policy process; (b) consider existing stakeholder theories, their motivations, their strengths, and their weaknesses; (c) connect the pre-emptive actions of those theories with the potential post-hoc perceptions of their use; and (d) determine the most appropriate engagement process.

Table 6.1: Statement Descriptive Statistics, by Statement Order (Appendix 2)

Statement	N	Mean	SD	Min	Max
The public takes advantage of opportunities for involvement in policy development on the Georgia coast	43	-0.2558	1.7056	-3	3
Leaders manipulate and shape the stakeholder process to suit their own outcomes	44	-0.3182	1.7223	-3	2
Stakeholders are usually not willing to see the bigger picture beyond their own interests	44	-0.5909	1.5450	-3	3
Most leaders who involve stakeholders will deny there is a problem if they hear criticism	45	0.4667	1.5897	-3	3
Stakeholders are not true partners in the policy development process	44	2.3636	1.5111	-3	3
Transparency is important in stakeholder processes	44	-0.4318	1.8477	-3	3
If stakeholders do not feel powerful, they will not participate fully	44	2.2045	1.1119	-3	3
There are multiple reasons for leaders seeking public input	45	1.5333	1.3246	-3	3
Getting the right information out to the public is a challenge for leaders	43	2.2791	1.1407	-2	3
The more conflict there is about an issue, the more important it is to involve stakeholders	45	2.0444	1.2961	-3	3
Stakeholders do not trust leaders	44	0.0227	1.5172	-3	3
Government entities have the most accurate and reliable scientific information	45	0.7111	1.3250	-3	3
Stakeholders do not understand highly technical or legal issues	44	0.7955	1.7465	-3	3
Leaders try hard to listen to stakeholders	45	0.1333	1.6181	-3	3
Leaders only involve the public in policy development because the law requires it	44	-0.2022	1.2293	-3	2
There is too much stakeholder involvement	42	-0.9762	1.4731	-3	3
State and federal agencies do not understand policy concerns specific to coastal Georgia	45	0.1111	1.3688	-3	3
Stakeholders have an understanding of their role in stakeholder processes	45	-0.2000	1.6733	-3	3
Leaders do not take stakeholder comments into consideration when developing policy	45	-0.4000	1.7109	-3	3
Leaders do not have control of how stakeholder comments are used	44	-0.8409	1.5088	-3	3
Stakeholders are included to provide political cover to elected officials	44	-0.2727	1.6894	-3	3
Leaders do not share all necessary information with stakeholders	43	-0.1860	1.3845	-3	2
Individuals with lower income are not as likely to be asked to participate as a stakeholder	45	0.4444	1.3744	-3	2
The public has learned about the constraints of policy development through stakeholder processes	45	0.6889	1.4744	-2	3
Legal requirements for public involvement are not effective in creating a forum for meaningful feedback on policy development	44	1.4773	1.4862	-3	3
I have been part of an effective stakeholder process regarding Georgia Coastal Policy	45	0.0444	1.6781	-3	3
Leaders are transparent in how they develop processes for involving stakeholders	45	0.1556	1.5661	-3	3
Leaders use stakeholder processes to “sell” a pre-determined policy	45	-0.1556	1.3973	-3	2
Stakeholders view themselves as influential	44	0.5682	1.4848	-3	3
Individuals with less education are not as likely to be asked to participate as a stakeholder	44	0.4091	1.2817	-3	2
Public engagement has built trust of public leaders in coastal Georgia policy development	41	-1.8780	1.2883	-3	2
Involving stakeholders means too many points of view	45	-0.5333	1.3585	-3	1
Opportunities for stakeholders to participate in coastal Georgia policy development are communicated adequately	44	-0.5227	1.5920	-3	3
Leaders do not consider the potential strains on community resources	45	0.0444	1.4295	-3	2

when developing policy for coastal Georgia					
The differences in the roles of federal, state, and local government in policy development are clear	43	0.4419	1.5477	-2	3
There is not enough meaningful stakeholder involvement in policy development on the Georgia coast	43	-1.0930	1.4279	-3	2
Stakeholders are representative of a constituency affected by coastal policy development	45	1.6222	1.4348	-3	3
The public views policy adopted more favorably when stakeholders are involved in the process	45	1.3111	1.3952	-2	3
Stakeholders have limited capacity to provide advice on technical issues	45	0.4667	1.6321	-3	3
When involving stakeholders, public leaders make an effort to engage people of all races and ethnicities	45	-0.5333	1.6459	-3	3

Table 6.2: Leader/Stakeholder Means Comparison

Statement	Leader Mean	SH Mean	Absolute Difference
The public takes advantage of opportunities for involvement in policy development on the Georgia coast	-0.0952	-0.4091	0.3139
Leaders manipulate and shape the stakeholder process to suit their own outcomes	-0.0476	0.6522	0.6998
Stakeholders are usually not willing to see the bigger picture beyond their own interests	0.8095	0.3913	0.4182
Most leaders who involve stakeholders will deny there is a problem if they hear criticism	-0.4286	-0.5000	0.0714
Stakeholders are not true partners in the policy development process	-2.0952	-2.6087	0.5135
Transparency is important in stakeholder processes	-0.3333	-0.5217	0.1884
If stakeholders do not feel powerful, they will not participate fully	-2.0476	-2.3478	0.3002
There are multiple reasons for leaders seeking public input	1.6667	1.4167	0.2500
Getting the right information out to the public is a challenge for leaders	-2.1429	-2.4091	0.2662
The more conflict there is about an issue, the more important it is to involve stakeholders	2.0476	2.0417	0.0060
Stakeholders do not trust leaders	-0.4286	0.3478	0.7764
Government entities have the most accurate and reliable scientific information	1.0952	0.3750	0.7202
Stakeholders do not understand highly technical or legal issues	-0.7500	-0.8333	0.0833
Leaders try hard to listen to stakeholders	0.3333	-0.0417	0.3480
Leaders only involve the public in policy development because the law requires it	2.0476	2.0000	0.0476
There is too much stakeholder involvement	-1.2000	-0.7727	0.4273
State and federal agencies do not understand policy concerns specific to coastal Georgia	-0.2381	0.0000	0.2381
Stakeholders have an understanding of their role in stakeholder processes	-0.4762	0.0417	0.5179
Leaders do not take stakeholder comments into consideration when developing policy	0.1429	0.6250	0.4821
Leaders do not have control of how stakeholder comments are used	0.9048	0.7826	0.1222
Stakeholders are included to provide political cover to elected officials	0.0952	0.4348	0.3395
Leaders do not share all necessary information with stakeholders	-0.1500	0.4783	0.6283
Individuals with lower income are not as likely to be asked to participate as a stakeholder	0.3810	0.5000	0.1190
The public has learned about the constraints of policy development through stakeholder processes	0.7143	0.6667	0.0476
Legal requirements for public involvement are not effective in creating a forum for meaningful feedback on policy development	1.3333	1.6087	0.2754
I have been part of an effective stakeholder process regarding Georgia Coastal Policy	-0.1905	0.0833	0.2738
Leaders are transparent in how they develop processes for involving stakeholders	0.2381	0.0833	0.1548
Leaders use stakeholder processes to “sell” a pre-determined policy	0.1429	0.1667	0.0238
Stakeholders view themselves as influential	0.7143	0.4348	0.2795
Individuals with less education are not as likely to be asked to participate as a stakeholder	0.1905	0.6087	0.4182
Public engagement has built trust of public leaders in coastal Georgia policy development	-1.7368	-2.0000	0.2632
Involving stakeholders means too many points of view	-0.5238	-0.5417	0.0179
Opportunities for stakeholders to participate in coastal Georgia policy development are communicated adequately	-0.7143	-0.3478	0.3665
Leaders do not consider the potential strains on community resources when developing policy for coastal Georgia	0.0000	-0.0833	0.0833
The differences in the roles of federal, state, and local government in policy development are clear	0.4286	0.4545	0.0260
There is not enough meaningful stakeholder involvement in policy development on the Georgia coast	1.0476	1.1364	0.0887
Stakeholders are representative of a constituency affected by coastal policy	1.5238	1.7083	0.1845

development			
The public views policy adopted more favorably when stakeholders are involved in the process	1.3810	1.2500	0.1310
Stakeholders have limited capacity to provide advice on technical issues	-0.2381	-0.6667	0.4286
When involving stakeholders, public leaders make an effort to engage people of all races and ethnicities	-0.6190	-0.4583	0.1607

Table 6.3: Gender-based Means Comparison (Absolute Difference)

Statement	Male Mean	Female Mean	Absolute Difference
The public takes advantage of opportunities for involvement in policy development on the Georgia coast	-0.3667	0.0000	0.3667
Leaders manipulate and shape the stakeholder process to suit their own outcomes	-0.1935	-0.6154	0.4218
Stakeholders are usually not willing to see the bigger picture beyond their own interests	-0.5161	-0.7692	0.2531
Most leaders who involve stakeholders will deny there is a problem if they hear criticism	0.6563	0.0000	0.6563
Stakeholders are not true partners in the policy development process	2.3226	2.4615	0.1390
Transparency is important in stakeholder processes	-0.6129	0.0000	0.6129
If stakeholders do not feel powerful, they will not participate fully	2.1935	2.2308	0.0372
There are multiple reasons for leaders seeking public input	1.3125	2.0769	0.7644
Getting the right information out to the public is a challenge for leaders	2.2000	2.4615	0.2615
The more conflict there is about an issue, the more important it is to involve stakeholders	2.1250	1.8462	0.2788
Stakeholders do not trust leaders	0.0323	0.0000	0.0323
Government entities have the most accurate and reliable scientific information	0.8125	0.4615	0.3510
Stakeholders do not understand highly technical or legal issues	1.0000	0.3077	0.6923
Leaders try hard to listen to stakeholders	0.0625	0.3077	0.2452
Leaders only involve the public in policy development because the law requires it	-1.9677	-2.1538	0.1861
There is too much stakeholder involvement	-1.1333	-0.5833	0.5500
State and federal agencies do not understand policy concerns specific to coastal Georgia	0.0625	0.2308	0.1683
Stakeholders have an understanding of their role in stakeholder processes	-0.2813	0.0000	0.2813
Leaders do not take stakeholder comments into consideration when developing policy	-0.1875	-0.9231	0.7356
Leaders do not have control of how stakeholder comments are used	-0.9355	-0.6154	0.3201
Stakeholders are included to provide political cover to elected officials	-0.3226	-0.1538	0.1687
Leaders do not share all necessary information with stakeholders	-0.3548	0.2500	0.6048
Individuals with lower income are not as likely to be asked to participate as a stakeholder	0.5000	0.3077	0.1923
The public has learned about the constraints of policy development through stakeholder processes	0.7813	0.4615	0.3197
Legal requirements for public involvement are not effective in creating a forum for meaningful feedback on policy development	1.5484	1.3077	0.2407
I have been part of an effective stakeholder process regarding Georgia Coastal Policy	-0.0313	0.2308	0.2620
Leaders are transparent in how they develop processes for involving stakeholders	0.3125	-0.2308	0.5433
Leaders use stakeholder processes to “sell” a pre-determined policy	-0.0313	-0.4615	0.4303
Stakeholders view themselves as influential	0.6129	0.4615	0.1514
Individuals with less education are not as likely to be asked to participate as a stakeholder	0.2581	0.7692	0.5112
Public engagement has built trust of public leaders in coastal Georgia policy development	-1.9286	-1.7692	0.1593
Involving stakeholders means too many points of view	-0.3125	-1.0769	0.7644
Opportunities for stakeholders to participate in coastal Georgia policy development are communicated adequately	-0.5161	-0.5385	0.0223
Leaders do not consider the potential strains on community resources when developing policy for coastal Georgia	0.1563	-0.2308	0.3870
The differences in the roles of federal, state, and local government in policy development are clear	0.1667	1.0769	0.9103
There is not enough meaningful stakeholder involvement in policy development on the Georgia coast	-0.8000	-1.7692	0.9692
Stakeholders are representative of a constituency affected by coastal policy development	1.6250	1.6154	0.0096
The public views policy adopted more favorably when stakeholders are involved in the process	1.1875	1.6154	0.4279
Stakeholders have limited capacity to provide advice on technical issues	0.6563	0.0000	0.6563
When involving stakeholders, public leaders make an effort to engage people of all races and ethnicities	-0.7188	-0.0769	0.6418

Table 6.4: Coastal/Non-Coastal Resident Means Comparison (Absolute Difference)

Statement	Coastal Resident Mean	Non-Resident Mean	Absolute Difference
The public takes advantage of opportunities for involvement in policy development on the Georgia coast	-0.2941	-0.1111	0.1830
Leaders manipulate and shape the stakeholder process to suit their own outcomes	-0.5143	0.4444	0.9587
Stakeholders are usually not willing to see the bigger picture beyond their own interests	-0.5714	-0.6667	0.0953
Most leaders who involve stakeholders will deny there is a problem if they hear criticism	0.3611	0.8889	0.5278
Stakeholders are not true partners in the policy development process	2.2500	2.8750	0.6250
Transparency is important in stakeholder processes	-0.4286	-0.4444	0.1580
If stakeholders do not feel powerful, they will not participate fully	2.1143	2.5556	0.4413
There are multiple reasons for leaders seeking public input	1.3611	2.2222	0.8611
Getting the right information out to the public is a challenge for leaders	2.2353	2.4444	0.2091
The more conflict there is about an issue, the more important it is to involve stakeholders	1.8889	2.6667	0.7778
Stakeholders do not trust leaders	-0.0571	0.3333	0.3904
Government entities have the most accurate and reliable scientific information	0.5833	1.2222	0.6389
Stakeholders do not understand highly technical or legal issues	0.6857	1.2222	0.5365
Leaders try hard to listen to stakeholders	0.0555	0.4444	0.3889
Leaders only involve the public in policy development because the law requires it	-2.0286	-2.0000	0.0286
There is too much stakeholder involvement	-1.0000	-0.8889	0.1111
State and federal agencies do not understand policy concerns specific to coastal Georgia	0.2222	-0.3333	0.5555
Stakeholders have an understanding of their role in stakeholder processes	-0.3056	0.2222	0.5278
Leaders do not take stakeholder comments into consideration when developing policy	-0.5000	0.0000	0.5000
Leaders do not have control of how stakeholder comments are used	-0.8000	-1.0000	0.2000
Stakeholders are included to provide political cover to elected officials	-0.3143	-0.1111	0.2032
Leaders do not share all necessary information with stakeholders	-0.1765	-0.2222	0.0457
Individuals with lower income are not as likely to be asked to participate as a stakeholder	0.5000	0.2222	0.2778
The public has learned about the constraints of policy development through stakeholder processes	0.6944	0.6667	0.0277
Legal requirements for public involvement are not effective in creating a forum for meaningful feedback on policy development	1.7429	0.4444	1.2985
I have been part of an effective stakeholder process regarding Georgia Coastal Policy	0.0000	0.2222	0.2222
Leaders are transparent in how they develop processes for involving stakeholders	0.3611	-0.6667	1.0278
Leaders use stakeholder processes to “sell” a pre-determined policy	-0.1667	-0.1111	0.0556
Stakeholders view themselves as influential	0.6000	0.4444	0.1556
Individuals with less education are not as likely to be asked to participate as a stakeholder	0.4000	0.4444	0.0444
Public engagement has built trust of public leaders in coastal Georgia policy development	-1.9063	-1.7778	0.1285
Involving stakeholders means too many points of view	-0.4444	-0.8889	0.4445
Opportunities for stakeholders to participate in coastal Georgia policy development are communicated adequately	-0.5143	-0.5556	0.0413
Leaders do not consider the potential strains on community resources when developing policy for coastal Georgia	0.0278	0.1111	0.0833
The differences in the roles of federal, state, and local government in policy development are clear	0.5429	0.0000	0.5429
There is not enough meaningful stakeholder involvement in policy development on the Georgia coast	-0.9118	-1.7778	0.8660
Stakeholders are representative of a constituency affected by coastal policy development	1.7222	1.2222	0.5000
The public views policy adopted more favorably when stakeholders are involved in the process	1.2222	1.6667	0.4445
Stakeholders have limited capacity to provide advice on technical issues	0.3333	1.0000	0.6667
When involving stakeholders, public leaders make an effort to engage people of all races and ethnicities	-0.4722	-0.7778	0.3056

Table 6.5: Factor Analysis/Correlation, Iterated Principal Factors Orthogonal Varimax Rotation

			Observations	35
			Retained Factors	6
			Number of Parameters	225
Factor	Eigenvalue	Difference	Proportion	Cumulative
Factor 1	5.0640	0.9812	0.2355	0.2355
Factor 2	4.0828	0.8838	0.1899	0.4254
Factor 3	3.1991	0.0168	0.1488	0.5742
Factor 4	3.1823	0.1516	0.1480	0.7222
Factor 5	3.0307	0.0898	0.1410	0.8632
Factor 6	2.9409	-	0.1368	1.0000

Table 6.6: Descriptive Statistics of Individual Factors in 6 Retained Factor Model

Factor		Absolute Loading Range and Spread	Absolute Loading Mean	Absolute Loading Median	N
1	Perceptions of <i>Process</i>	0.3509-0.8283 (0.4774)	0.5922	0.5498	10
2	Perceptions of <i>Empowerment</i>	0.4054-0.8239 (0.4185)	0.6312	0.6167	7
3	Perceptions of <i>Esteem</i>	0.2481-0.7965 (0.5484)	0.5335	0.5251	5
4	Perceptions of <i>Potency</i>	0.8380-0.8888 (0.0508)	0.8634	0.8634	2
5	Perceptions of <i>Cognizance</i>	0.2828-0.6128 (0.3300)	0.4636	0.5130	9
6	Perceptions of <i>Equity</i>	0.4761-0.6043 (0.1282)	0.5343	0.5421	7

Table 6.7: Factor Analysis Loadings – Forced Factors (6)

Statement	Absolute Rotated Loading		
Stakeholders are usually not willing to see the bigger picture beyond their own interests	0.5780	Theme Average Absolute Factor Loading N	Perceptions of Process 0.5922 10
Transparency is important in stakeholder processes	0.4051		
There are multiple reasons for leaders seeking public input	0.5215		
Stakeholders do not understand highly technical or legal issues	0.7675		
Leaders try hard to listen to stakeholders	0.3509		
There is too much stakeholder involvement	0.7483		
Leaders do not have control of how stakeholder comments are used	0.7400		
Stakeholders are included to provide political cover to elected officials	0.5121		
Opportunities for stakeholders to participate in coastal Georgia policy development are communicated adequately	0.8283		
Stakeholders have limited capacity to provide advice on technical issues	0.4701		
Stakeholders are not true partners in the policy development process	0.7473	Theme Average Absolute Factor Loading N	Perceptions of Empowerment 0.6312 7
If stakeholders do not feel powerful, they will not participate fully	0.8239		
Getting the right information out to the public is a challenge for leaders	0.6167		
The more conflict there is about an issue, the more important it is to involve stakeholders	0.4054		
Leaders only involve the public in policy development because the law requires it	0.7445		
Public engagement has built trust of public leaders in coastal Georgia policy development	0.5844		
When involving stakeholders, public leaders make an effort to engage people of all races and ethnicities	0.4964		
Most leaders who involve stakeholders will deny there is a problem if they hear criticism	0.6933	Theme Average Absolute Factor Loading N	Perceptions of Esteem 0.5335 5
Stakeholders do not trust leaders	0.2481		
Leaders do not take stakeholder comments into consideration when developing policy	0.7965		
Leaders are transparent in how they develop processes for involving stakeholders	0.5251		
Leaders use stakeholder processes to “sell” a pre-determined policy	0.4045		
The public has learned about the constraints of policy development through stakeholder processes	0.8888	Theme Average Absolute Factor Loading N	Perceptions of Potency 0.8634 2
Stakeholders view themselves as influential	0.8380		

The public takes advantage of opportunities for involvement in policy development on the Georgia coast	0.4115	<p>Theme Average Absolute Factor Loading</p> <p>0.4636</p> <p>N 9</p>
Leaders manipulate and shape the stakeholder process to suit their own outcomes	0.5130	
Government entities have the most accurate and reliable scientific information	0.2828	
State and federal agencies do not understand policy concerns specific to coastal Georgia	0.5855	
I have been part of an effective stakeholder process regarding Georgia Coastal Policy	0.3578	
Individuals with less education are not as likely to be asked to participate as a stakeholder	0.3211	
Leaders do not consider the potential strains on community resources when developing policy for coastal Georgia	0.6128	
The differences in the roles of federal, state, and local government in policy development are clear	0.5173	
The public views policy adopted more favorably when stakeholders are involved in the process	0.5710	
Stakeholders have an understanding of their role in stakeholder processes	0.4761	<p>Theme Average Absolute Factor Loading</p> <p>0.5343</p> <p>N 7</p>
Leaders do not share all necessary information with stakeholders	0.5509	
Individuals with lower income are not as likely to be asked to participate as a stakeholder	0.4816	
Legal requirements for public involvement are not effective in creating a forum for meaningful feedback on policy development	0.5728	
Involving stakeholders means too many points of view	0.5421	
There is not enough meaningful stakeholder involvement in policy development on the Georgia coast	0.6043	
Stakeholders are representative of a constituency affected by coastal policy development	0.5123	

Table 6.8: Means Comparison by Factor, Leaders/Stakeholders

Factor	Average Absolute Difference
Perceptions of <i>Process</i>	0.2972
Perceptions of <i>Empowerment</i>	0.2225
Perceptions of <i>Esteem</i>	0.3017
Perceptions of <i>Potency</i>	0.1636
Perceptions of <i>Cognizance</i>	0.3227
Perceptions of <i>Equity</i>	0.2617

Table 6.9: Means Comparison by Factor, Male/Female

Factor	Average Absolute Difference
Perceptions of <i>Process</i>	0.4285
Perceptions of <i>Empowerment</i>	0.2434
Perceptions of <i>Esteem</i>	0.4795
Perceptions of <i>Potency</i>	0.2355
Perceptions of <i>Cognizance</i>	0.4229
Perceptions of <i>Equity</i>	0.4375

Table 6.10: Means Comparison by Factor, Coastal/Non-Coastal Residents

Factor	Average Absolute Difference
Perceptions of <i>Process</i>	0.3262
Perceptions of <i>Empowerment</i>	0.3594
Perceptions of <i>Esteem</i>	0.5003
Perceptions of <i>Potency</i>	0.0917
Perceptions of <i>Cognizance</i>	0.4082
Perceptions of <i>Equity</i>	0.5658

Table 6.11: GA Statement Means Comparison, Resident/Non-Resident Absolute Difference¹⁰

Statement	Factor	Aggregate Mean	Coastal Resident Mean	Non-Coastal Mean	Coastal/Non-coastal Absolute Mean Difference
The public takes advantage of opportunities for involvement in policy development on the Georgia coast	Cognizance	-0.2558	-0.2941	-0.1111	0.1832
State and federal agencies do not understand policy concerns specific to coastal Georgia	Cognizance	0.1111	0.2222	-0.3333	0.5556
I have been part of an effective stakeholder process regarding Georgia Coastal Policy	Cognizance	0.0444	0.0000	0.2222	0.2222
Public engagement has built trust of public leaders in coastal Georgia policy development	Empowerment	-1.8781	-1.9063	-1.7778	0.1285
Opportunities for stakeholders to participate in coastal Georgia policy development are communicated adequately	Process	-0.5227	-0.5143	-0.5556	0.0413
Leaders do not consider the potential strains on community resources when developing policy for coastal Georgia	Cognizance	0.0444	0.0278	0.1111	0.0833
There is not enough meaningful stakeholder involvement in policy development on the Georgia coast	Equity	-1.0930	-0.9118	-1.7778	0.8660

¹⁰ Shaded statement indicates directional (agreement/disagreement) mean difference between subsets

CHAPTER 7

CONCLUSIONS

Throughout the short history of stakeholder engagement research, however, there has remained a focus on the *process*. That is, emphasis has been placed on process structure and management, with comparatively little focus on how those actors participating in the process perceive their own role in the effort. Rather than focusing on the process itself, this exploratory research will focus on how those participating in the stakeholder engagement process perceive the process and their role. The intent of this dissertation is to analyze the perceptions held by participants in stakeholder engagement processes after the completion of the policy development process. Potential actors in the engagement process include scholars, scientists, elected officials, government bureaucrats at all levels, interest groups, civic organizations, residents of particular neighborhoods and in some instances the citizenry as a whole. Moving forward, this research will analyze the influence of overarching values, functional competencies, and practical objectives in the post-hoc perceptions of these actors in public sector decision-making, specifically that engagement in coastal policy engagement processes.

Prominent Findings

This research has examined the common traits of stakeholders' perceptions of the policy processes in which they participate, as identified through both quantitative and qualitative techniques, four prominent findings were examined.

While the intent of this research was to transcend the plentiful research on engagement process management, the logistics and behaviors exhibited during the process are reflected in the themed factors identified in this research. The six factors developed in this research and useful in gauging perceptions of participants address: (a) the effectiveness of the engagement process; (b)

the empowerment of stakeholders in decision making; (c) the level of regard leaders and stakeholders hold for one-another; (d) the power realistically vested in participants; (e) knowledge-sharing and strategic information dissemination; and (f) the opportunity for *all* potential stakeholders to participate in the policy process.

The capacity of individuals to actively and positively contribute to policy development is also seen, as there are instances in which these contributory practices have been displayed, said one respondent, “you can take a small group . . . but if it’s a strong, well-informed group working over here and the big picture is over here, then that affects so many people involved here.”

The third notable finding is the importance of regional sensitivity and awareness and appreciation of limited resources. Concerns of the limited influence of sensitive areas in the policy process and the lack of awareness by policy makers are common. With heavy influence from inland areas, policy makers often “don’t even touch the coast.”

Finally, this research identified higher perceived levels of overall salience amongst coastal residents, when compared with their non-coastal counterparts. The disparities in understanding and appreciation of the environment, the vested interest and cultural awareness of the impacted area, and the role of previous experiences as influences on continued participation are noticeable, and the different facets of perceptions of engagement are reflected in these exploratory findings.

Perceptions of Stakeholder Engagement in Public Policy

This challenge of policy development in sensitive environments is not unique to coastal Georgia. In other regions of Georgia and in other states, there are natural resources and

environments with unique demands that could potentially go under-appreciated or ignored by the majority populations that reside elsewhere.

While public policies such as transportation, education, social welfare, and healthcare are reliant on informed participation and stakeholder engagement, these policies have universal impact and are exhaustive of the entire population.

In the same way that coastal environments have unique scientific demands that warrant stakeholder engagement, “deciding when and how to involve stakeholders...is a challenge for state agencies throughout the United States” in other sensitive and niche environments is particularly challenging (Chase, Siemer, and Decker 2002). Examples of sensitive areas that demand heightened levels of scientific competency and continued stakeholder engagement are (a) wildlife areas, with natural habitats for animal species, forested areas prone to wildfires, and recreational opportunities for visitors; (b) earthquake prone areas, which demand both pro-active and reactive behaviors by residents and visitors, unique architectural standards, and home ownership challenges; (c) volcanic regions where warning signs of major activity, adequate and reliable evacuation routes, and protection from volcanic ash are important considerations; and (d) hurricane prone with needs for organized and reliable evacuation management, stockpiling of necessary supplies, and established inter-governmental coordination (both horizontal and vertical) for expedited response.

The findings and implications of this research are not limited to coastal stakeholder engagement. Rather, this research about the value of participants’ perceptions of stakeholder processes can more adequately inform models of engagement and ensure the highest levels of active participation by those most affected by policies affecting areas with limited natural resources, environmental sensitivity, and limited development, among others.

Framing Engagement and Contributions to Research

The behaviors and attitudes, the value of stakeholders, the environmental considerations, and the personal commitment and interest in a region are prominent frameworks for understanding how leaders and stakeholders perceive the engagement process upon its completion. These framings allow participants to reflect on their experiences, overcome potentially emotional and impulse reactions, and contemplate the effectiveness and overall value of their participation. Processes differ based on policy discipline, geographic/geo-political scope, complexity of networks, legal expectations, and varying capacities necessary for informed participation, but common interests and unique characteristics of the engagement process serve to influence how the process of engaging stakeholders is ultimately perceived. Process management has traditionally been the subject of public policy stakeholder engagement research with comparatively little attention paid to the perceptions of the process by participants after the process and policy adoption is complete. This void in existing research is particularly relevant in environmental and natural resource policy, as levels of scientific expertise exist that increase the number of essential actors and leave potential for increased conflict.

Involvement of latent stakeholders (those who cannot participate, do not participate, or do not know they have the right to participate in the process) will become an important facet of future research. This contingent – those individuals who cannot participate, do not participate, or do not know they have a right to participate in the process – will likely have a different perspective of the stakeholder process than their counterparts that were aware of the pending policy decision or were engaged in the process in some way. Including this population is difficult, as the work, family and other obligations may prevent many from being aware of the

processes. Others, however, might opt not participate due to biases, previous experiences, or frustration with the policy process

Conclusion

Within public policy processes, “stakeholder engagement” has long been considered a necessity. Whether through legal obligations, response to public pressure, or inherent interest by policy-makers, the term is used frequently and with little definition. Regardless of interpretation of the term or process motivations, “...stakeholder participation alone is insufficient to guarantee that stakeholder views are represented in a participatory coastal management process” (Fletcher 2007).

The influence of stakeholders varies greatly from policy-to-policy, but previous engagement process experiences, sense of ownership in a policy or project, and intrinsic obligation toward civic engagement can serve to motivate participation, encourage active engagement, and enhance positive experiences among potential stakeholders. Upon conclusion of the engagement process and the development phase of public policy, reflection on the engagement and receptiveness to participants’ perceptions of engagement are important assets in ensuring the sense of empowerment, equity among stakeholders, trust-building, and continuous learning opportunities that Reed (2008) identified as the core values of public stakeholder engagement.

References

Abdi, Hervé. "Factor Rotations in Factor Analyses." *The Sage Encyclopedia of Social Science Research Methods*. Ed. Michael S. Lewis-Beck, Alan Bryman, and Tim Futing. Liao. Thousand Oaks, CA: Sage, 2004.

"About SAFMC." *SAFMC Home*. South Atlantic Fishery Management Council. October 2008 <<http://www.safmc.net/AboutUs/AboutSAFMC/tabid/361/Default.aspx>>.

Adams, David. "Usable Knowledge in Public Policy." *Australian Journal of Public Administration* 63.1 (2004): 29-42.

Addams, Helen, and J. Proops. *Social Discourse and Environmental Policy: An Application of Q Methodology*. Cheltenham: Edward Elgar Pub., 2001.

Agranoff, Robert, and Michael McGuire. *Collaborative Public Management: New Strategies for Local Governments*. Washington, D.C.: Georgetown UP, 2003.

Albert, Janice Lee. *Labeling of Genetically Modified Foods: Stakeholder Perceptions of the Food and Drug Administration's Public Consultation Processes and Food Industry Reactions to the United States Voluntary and European Union Mandatory Policies*. Diss. Tufts University, 2007. Ann Arbor, MI: UMI Dissertation, 2007.

Alkhafaji, Abbass F. *A Stakeholder Approach to Corporate Governance: Managing in a Dynamic Environment*. New York: Quorum, 1989.

Allen, Greg. *The Race to Dig Deeper Ports For Bigger Cargo Ships*. National Public Radio. 5 January 2012. Radio.

Alphandery, P., and A. Fortier. 2001. Can a territorial policy be based on science alone? The system for creating the Natura 2000 network in France. *Sociologia Ruralis* 41:311–328.

Altama Community Transformation District. Rep. Athens, GA: Fanning Institute, University of Georgia, 2011.

An Assessment of the Citizen's Role in Public Planning Efforts in the State of Georgia. Rep. Atlanta, GA: Georgia Planning Association, 1976.

Ansell, Chris, and Alison Gash. 2008. Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory* 18:543–71.

Ansoff, H. Igor. *Corporate Strategy*. Harmondsworth, Middlesex, England: Penguin, 1965.

Argandona, A. "The Stakeholder Theory and the Common Good." *Journal of Business Ethics* 17 (1998): 1093-102.

Arnstein, Sherry R. "A Ladder Of Citizen Participation." *Journal of the American Institute of Planners* 35.4 (1969): 216-24.

Auburn University. Office of Communications and Marketing. *Auburn University Posts Record Enrollment, Highest Freshman ACT Scores*, 9 September 2011. Web. <<http://wireeagle.auburn.edu/news/3810>>.

Bäckstrand, Karin. "Civic Science for Sustainability: Reframing the Role of Experts, Policy-Makers and Citizens in Environmental Governance." *Global Environmental Politics* 3.4 (2003): 24-41

Backstrand, Karin. "Democratizing Global Environmental Governance? Stakeholder Democracy after the World Summit on Sustainable Development." *European Journal of International Relations* 12.4 (2006): 467-98.

Bailey, Col. William. "Savannah Harbor Expansion." Proc. of Georgia Water Resources Conference, Savannah, GA. 12 April 2009.

Bannister, Turpin C. "Oglethorpe's Sources for the Savannah Plan." *Journal of the Society of Architectural Historians* 20.2 (1961): 47-62.

Barry, J., & Proops, J. "Seeking sustainability discourses with Q methodology." *Ecological Economics*, 28.3 (1999): 337-345.

Bayley, Clare and Simon French. "Designing a Participatory Process for Stakeholder Involvement in a Societal Decision." *Group Decision and Negotiation* 17.1 (2008) 195-210.

Beckman, Robert, and Brady Coleman. "Integrated Coastal Management: The Role of Law and Lawyers." *The International Journal of Marine and Coastal Law* 14.4 (1999): 491-522.

Beecher, Ned, and Nora Goldstein. "Public Perceptions and Stakeholder Participation in Residuals Management." *The Social Context* (2005): 89-98.

Behan, R. W. "A Plea for Constituency-Based Management." *American Forests* 94.7-8 (1988): 46-48.

Benn, Suzanne, Dexter Dunphy, and Andrew Martin. "Governance of environmental risk: New approaches to managing stakeholder involvement." *Journal of Environmental Management* 90.1 (2009) 1567-1575.

Benneworth, Paul, and Ben Jongbloed. "Who Matters to Universities? A Stakeholder Perspective on Humanities, Arts and Social Sciences Valorisation." *Higher Education* 59.5 (2010): 567-88.

Bird, Allyson. "S.C. Letter Halts Jasper Terminal." *The Post and Courier* [Charleston, SC] 19 February 2011.

- Blair, M.M. "Whose Interests Should Corporations Serve?" *Ownership and Control: Rethinking Corporate Governance for the Twenty-first Century*. By Margaret M. Blair. Washington, D.C.: Brookings Institute, 1995.
- Bowie, N.E. "The Moral Obligations of Multinational Corporations." *Problems of International Justice*. By Steven Luper. Boulder: Westview, 1988. 97-113.
- Brenner, S.N. "Stakeholder Theory of the Firm: Its Consistency with Current Management Techniques." *Understanding Stakeholder Thinking*. By Juha Näsi. Helsinki: LSR-Julkaisut Oy, 1995.
- Brown, James D. "Choosing the Right Type of Rotation in PCA and EFA." *JALT Testing & Evaluation SIG Newsletter* 13.3 (2009): 20-25.
- Brown, Steven R., and Richard Robyn. "Reserving a key place for reality: Philosophical foundations of theoretical rotation." *Operant Subjectivity* 27.3 (2004): 104-124.
- Brouwer, M. "Q Is Accounting for Tastes." *Journal of Advertising Research* 39.2 (1999): 35-39.
- Brouwer, Roy. "Environmental Value Transfer: State of the Art and Future Prospects." *Ecological Economics* 32.1 (2000): 137-52.
- Brown, Steven R. "Q Methodology and Qualitative Research." *Qualitative Health Research* 6.4 (1996): 561-67.
- Brown, Steven R. *Political Subjectivity: Applications of Q Methodology in Political Science*. New Haven: Yale UP, 1980.
- Brown, Steven R. "A Primer on Q Methodology." *Operant Subjectivity* 16 (1993): 91-138.
- Brown, Steven R., and Lawrence E. Melamed. *Experimental Design and Analysis*. Newbury Park, CA: Sage Publications, 1990.
- Bryson, John M. "What to Do When Stakeholders Matter." *Public Management Review* 6.1 (2004): 21-53.
- Bryson, John M. *Strategic Planning for Public and Nonprofit Organizations: A Guide to Strengthening and Sustaining Organizational Achievement*. San Francisco: Jossey-Bass, 1995.
- Bryson, John M., Barbara C. Crosby, and Melissa Middleton Stone. *The design and implementation of cross-sector collaborations: Propositions from the literature*. *Public Administration Review* 66 (2006): 44-55.
- Burt, C. & Stephenson, W. "Alternative views on correlations between persons." *Psychometrika* 4 (1939) 269-281.

Bynum, Russ. "Corps Warns It May Ignore SC to Deepen Ga. Harbor." *Associated Press State Report - SC* 15 October 2011.

Caldwell, R.B. *An Assessment of the Citizen's Role in Public Planning Efforts in the State of Georgia*. Rep. Atlanta, GA: Georgia Planning Association, 1976.

Calton, J.M., and L.J. Lad. "Social Contracting as a Trust-Building Process of Network Governance." *Business Ethics Quarterly* 5.2 (1995): 271-95.

Carroll, Archie B. *Business & Society: Ethics & Stakeholder Management*. Cincinnati: South-Western Pub., 1989.

Cattell, Raymond B. "The Scree Test For The Number Of Factors." *Multivariate Behavioral Research* 1.2 (1966): 245-76.

Chase, Lisa C., William F. Siemer, and Daniel J. Decker. "Designing Stakeholder Involvement Strategies to Resolve Wildlife Management Controversies." *Wildlife Society Bulletin* 30.3 (2002): 937-50.

Christie, Patrick, Kem Lowry, Alan White, Enrique Oracion, Leila Sievanen, Robert Pomeroy, Richard Pollnac, Jason Patlis, and Rose-Liza Eisma. "Key Findings from a Multidisciplinary Examination of Integrated Coastal Management Process Sustainability." *Ocean & Coastal Management* 48.3-6 (2005): 468-83.

Christophersen, K.A., and M.H. Robison. *The Socioeconomic Benefits Generated by 16 Community Colleges and Technical Institutes in Alberta*. Rep. Vol. 1. Edmonton, AB, Canada: Alberta Association of Colleges and Technical Institutes, 2003.

Christophersen, K.A., and M.H. Robison. *The Socioeconomic Benefits Generated by Lakeland College*. Rep. Vol. 1. Edmonton, AB, Canada: Alberta Association of Colleges and Technical Institutes, 2002.

Chuenpagdee, Tarana, Jack L. Knetsch, and Thomas C. Brown. "Coastal Management Using Public Judgments, Importance Scales, and Predetermined Schedule." *Coastal Management* 29.4 (2001): 253-70.

Clark, J. "Coastal Zone Management for the New Century." *Ocean & Coastal Management* 37.2 (1997): 191-216.

Clarke, Ann H. "Understanding Sustainable Development in the Context of Other Emergent Environmental Perspectives." *Policy Sciences* 35.1 (2002): 69-90.

Clarke, Jeanne Nienaber, and Daniel McCool. *Staking out the Terrain: Power Differentials among Natural Resource Management Agencies*. Albany: State University of New York, 1985.

Clarkson Centre for Business Ethics. "Principles of stakeholder management." Toronto: Rotman School of Management, University of Toronto (1999).

Clarkson, M.B.E. "A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance." *Academy of Management Journal* 20.1 (1995): 92-118.

Cohen, J., and A. Fung. "Radical Democracy." *Swiss Journal of Political Science* 10 (2004): 23-34.

Coleman, James S. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94.S1 (1988): S95.

Community Questions: Engaging Citizens to Address Community Concerns. Rep. Dayton, OH: Kettering Foundation, December 2010.

Conlan, Timothy J., and Paul L. Posner. "Managing Complex Problems in a Compound Republic." *Intergovernmental Management for the Twenty-first Century*. Washington, D.C.: Brookings Institution, 2008.

Cordano, Mark, Irene Hanson Frieze, and Kimberly M. Ellis. "Entangled Affiliations and Attitudes: An Analysis of the Influences on Environmental Policy Stakeholders' Behavioral Intentions." *Journal of Business Ethics* 49.1 (2004): 27-40.

Cornell, Bradford, and Alan C. Shapiro. "Corporate Stakeholders and Corporate Finance." *Financial Management* 16.1 (1987): 5.

"Corps of Engineers Col. Hall Discusses Harbor Deepening." *The Savannah Morning News* [Savannah, GA] 8 June 2011.

"Corps Warns It May Ignore SC to Deepen Ga. Harbor." *Associated Press* [South Carolina] 15 October 2011.

Costello, Anna B., and Jason W. Osborne. "Best Practices in Exploratory Factor Analysis: Four Recommendations for Getting the Most From Your Analysis." *Practical Assessment, Research and Evaluation* 10.7 (2005).

Cragg, W. "Business Ethics and Stakeholder Theory." *Business Ethics Quarterly* 12.2 (2002): 113-42.

Crane, Andrew, Dirk Matten, and Jeremy Moon. "Stakeholders as Citizens? Rethinking Rights, Participation, and Democracy." *Journal of Business Ethics* 53.1/2 (2004): 107-22.

Cutter, Susan L., Bryan J. Boruff, and W. Lynn Shirley. "Social Vulnerability to Environmental Hazards." *Social Science Quarterly* 84.2 (2003): 242-61.

Cyert, Richard Michael, and James G. March. *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall, 1963.

Dahl, Christopher. "Integrated coastal resources management and community participation in a small island setting." *Ocean & Coastal Management* 36.1-3 (1997): 23-45

Dalton, Tracey M. "Beyond Biogeography: A Framework for Involving the Public in Planning of U.S. Marine Protected Areas." *Conservation Biology* 19.5 (2005): 1392-401.

Dalton, Tracey. "Exploring Participants' Views of Participatory Coastal and Marine Resource Management Processes." *Coastal Management* 34.4 (2006): 351-67.

Daly, Mary. "Governance and Social Policy." *Journal of Social Policy* 32.1 (2003): 113-28.

Davos, Climis A., Peter J.S. Jones, Jonathan C. Side, and Katy Siakavara. "Attitudes toward Participation in Cooperative Coastal Management: Four European Case Studies." *Coastal Management* 30.1 (2002) 209-220.

De Graff, G. *Tractable Morality. Customer Discourse of Bankers, Veterinarians and Charity Workers*. Diss. University of Rotterdam, 2003. ERIM, 2003.

De Graff, G., and J. Van Exel. "Veterinarians' Conceptualizations of Animals and Animal Owners." Proc. of 18th Annual Conference of the International Society for the Scientific Study of Subjectivity (ISSSS), Durham, United Kingdom. 2003.

DeSario, Jack, and Stuart Langton. *Citizen Participation in Public Decision Making*. New York: Greenwood, 1987.

"Developers Lobby to Limit State Regulation of Marsh Construction." *The Savannah Morning News* [Savannah, GA] 6 July 2006.

Donaldson, Thomas, and Lee E. Preston. "The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications." *The Academy of Management Review* 20.1 (1995): 65-91.

Driscoll, Cathy and Mark Starik. "The Primordial Stakeholder: Advancing the Conceptual Consideration of Stakeholder Status for the Natural Environment." *Journal of Business Ethics* 49.1 (2004) 55-73.

Eden, Colin, and Fran Ackermann. *Making Strategy: The Journey of Strategic Management*. London: Sage Publications, 1998.

Edelenbos, Jurian, and Erik-Hans Klijn. "Managing Stakeholder Involvement in Decision Making: A Comparative Analysis of Six Interactive Processes in the Netherlands." *Journal of Public Administration Research and Theory* 16.3 (2005): 417-46.

Edwards, Simon D., Peter J.S. Jones, and David E. Nowell. "Participation in coastal zone management initiatives: a review and analysis of examples from the UK." *Ocean & Coastal Management* 36.1-3 (1997): 143-165.

Ellsworth, James E, Lawrence E Hildebrand, and E. Anne Glover. "Canada's Atlantic Coastal Action Program: A community-based approach to collective governance." *Ocean & Coastal Management* 36.1 (1997): 121-142.

Elster, Jon. *Deliberative Democracy*. Cambridge, U.K.: Cambridge UP, 1998.

Emiliani, M.L. "A Mathematical Logic Approach to the Shareholder vs Stakeholder Debate." *Management Decision* 39.8 (2001): 618-22.

Emerson, Kirk, Tina Nabatchi, and Stephen Balogh. "An Integrative Framework for Collaborative Governance." *Journal of Public Administration Research and Theory* 22.1 (2011): 1-29.

Evan, W.M., and R.E. Freeman. "A Stakeholder Theory of the Modern Corporation: Kantian Capitalism." *Ethical Theory and Business*. By Tom L. Beauchamp and Norman E. Bowie. Englewood Cliffs, NJ: Prentice-Hall, 1979.

Fabrigar, Leandre R., Duane T. Wegener, Robert C. MacCallum, and Erin J. Strahan. "Evaluating the Use of Exploratory Factor Analysis in Psychological Research." *Psychological Methods* 4.3 (1999): 272-99.

Fakour, Shanessa. "Archway pro to spur growth." *The Brunswick News* [Brunswick, GA] 9 November 2010.

Fakour, Shanessa. "Officials Eye Changes for Corridor." *The Brunswick News* [Brunswick, GA] 14 February 2011.

Fairfax, Sally K. "Public Involvement and the Forest Service." *Journal of Forestry* 73.10 (1975): 657-59.

Ferguson, Anna. "Anglers Can Speak out on Planned Rule." *The Brunswick News* [Brunswick, GA] 6 February 2008.

Fiorino, Daniel J. "Citizen Participation and Environmental Risk: A Survey of Institutional Mechanisms." *Science, Technology and Human Values* 15.2 (1990) 226-243.

Fishkin, James S. "Making Deliberative Democracy Practical: Public Consultation and Dispute Resolution." *Ohio State Journal on Dispute Resolution* 26.4 (2011).

Fletcher, Stephen. "Using Stakeholder Decision-making Simulation to Teach Integrated Coastal Management." *Journal of Geography in Higher Education* 25.3 (2001) 367-378.

Fletcher, Stephen. "Influences on stakeholder representation in participatory coastal management programmes." *Ocean & Coastal Management* 50 (2007): 314–328.

Fletcher, Stephen. "Representing stakeholder interests in partnership approaches to coastal management: Experiences from the United Kingdom." *Ocean & Coastal Management* 50 (2007) 606-622.

Frank, Kathryn I. "The Potential of Youth Participation in Planning." *Journal of Planning Literature* 20.1 (2006) 351-371.

Freeman, R.E. *Strategic Management: A Stakeholder Approach*. Boston: Pitman, 1984.

Freeman, R.E., and D.L. Reed. "Stockholders and Stakeholders: A New Perspective on Corporate Governance." *California Management Review* 25.3 (1983): 88-106.

Freeman, R.E., and D.R. Gilbert. "Managing Stakeholder Relationships." *Business and Society: Dimensions of Conflict and Cooperation*. Ed. S.P. Sethi and C.M. Falbe. Lexington, NY: Lexington, 1987. 397-423.

Freeman, R.E., and W.M. Evan. "Corporate Governance: A Stakeholder Interpretation." *Journal of Behavioral Economics* 19 (1990): 337-59.

Freeman, R.E. "The Politics of Stakeholder Theory: Some Future Directions." *Business Ethics Quarterly* 4.4 (1994): 409-21.

Frederick, W. C. "Creatures, Corporations, Communities, Chaos, Complexity: A Naturological View of the Corporate Social Role." *Business & Society* 37.4 (1998): 358-89.

French, Simon, Emma Carter, Christoph Mohr, Gary Barker, Andy Hart, Richard Shepard, Clare Bayley, John Maule, and Nan Zhang. *Participation and E-Participation: Involving Stakeholders in the Management of Food Chain Risks in the Rural Economy*. Manchester Business School. The University of Manchester, 13 June 2005.

Friedman, Andrew L., and Samantha Miles. *Stakeholders Theory and Practice*. Oxford, UK: Oxford Univ., 2009.

Gargan, J.J., and S.R. Brown. "What Is to Be Done?" Anticipating the Future and Mobilizing Prudence." *Policy Sciences* 26 (1993): 347-59.

Gaynor, Tia Sheree. *Stakeholder Perceptions on the Role of Community Development Corporations and Resident Participation*. Diss. Rutgers The State University of New Jersey - Newark, 2011. Ann Arbor, MI: UMI Dissertation, 2011.

Georgia Coastal Comprehensive Plan: Stakeholder Involvement Plan. Rep. Atlanta, GA: Georgia Department of Community Affairs, 29 September 2006.

Georgia Historical Markers; the Complete Texts of 1752 Markers. Valdosta, GA: Bay Tree Grove, 1973.

"Georgia House Endorses Deeper Savannah Harbor." *The Savannah Morning News* [Savannah, GA] 29 March 2011.

"Georgia Port Environmental Stakeholders Wrestle with Size of Design Vessel." *The Savannah Morning News* [Savannah, GA] 17 November 2006.

Germain, Rene H., Donald W. Floyd, and Stephen V. Stehman. "Public Perceptions of the USDA Forest Service Public Participation Process." *Forest Policy and Economics* 3.3-4 (2001): 113-24.

Gibson, Count Dillon. *Sea Islands of Georgia, Their Geologic History*. Athens: Univ. of Georgia, 1948.

Gibson, K. "The Moral Basis of Stakeholder Theory." *Journal of Business Ethics* 26 (2000): 245-57.

Gilman, Eric. "Guidelines for Coastal and Marine Site-planning and Examples of Planning and Management Intervention Tools." *Ocean and Coastal Management* 45.1 (2002): 377-404.

Ginsberg, Benjamin, Theodore J. Lowi, and Margaret Weir. *We the People: An Introduction to American Politics*. New York: W. W. Norton, 2011.

Glicken, Jessica. "Getting Stakeholder Participation 'right': A Discussion of Participatory Processes and Possible Pitfalls." *Environmental Science & Policy* 3.6 (2000): 305-10.

"Glynn County." *Archway Partnership: Communities: Glynn Priorities*. Web. <http://archwaypartnership.uga.edu/priorities/glynn-priorities/> (2010).

Goldsmith, Peter. "Revivalism and the Advent of Cash Economy on the Georgia Coast." *Review of Religious Research* 29.4 (1988).

Gordon, Molly F., and Karen Seashore Louis. "Linking Parent and Community Involvement with Student Achievement: Comparing Principal and Teacher Perceptions of Stakeholder Influence." *American Journal of Education* 116.1 (2009): 1-31.

Gorsuch, Richard L. *Factor Analysis*. Hillsdale, NJ: L. Erlbaum Associates, 1983.

"Governor's Office of Planning and Budget." *Governor's Office of Planning and Budget*. 10 December 2012. <<http://opb.georgia.gov/>>.

Greene, Melissa Fay. *Praying for Sheetrock: A Work of Nonfiction*. Reading, MA: Addison-Wesley, 1991.

Griffin, C. B. "Watershed Councils: An Emerging Form Of Public Participation In Natural Resource Management." *Journal of the American Water Resources Association* 35.3 (1999): 505-18.

"Group Grapples with Dock Permit Process." *The Savannah Morning News* [Savannah, GA] 13 March 2006.

Gutmann, Amy, and Dennis F. Thompson. *Why Deliberative Democracy?* Princeton: Princeton UP, 2004.

Guttman, Louis. "Some Necessary Conditions for Common-factor Analysis." *Psychometrika* 19.2 (1954): 149-61.

Hajer, Maarten, and Sven Kesselring. "Democracy in the Risk Society? Learning from the New Politics of Mobility in Munich." *Environmental Politics* 8.3 (1999): 1-23.

Hamilton, David K. "Lay Local Government Charter-Writing Commissions." *State and Local Government Review* 14.3 (1982): 124-27.

Hatherell, W. *Challenging Boundaries: Perspectives on Community-college Engagement*. Brisbane, Queensland, Australia: QUT Publications, 2007.

Helvey, Mark. "Seeking Consensus on Designing Marine Protected Areas: Keeping the Fishing Community Engaged." *Coastal Management* 32.1 (2004) 173-190.

Hendricks, Lori A. *Perceptions of Stakeholder Salience for NCAA Campus Student-Athlete Advisory Committees*. Diss. University of Michigan, 2011. Ann Arbor, MI: UMI Dissertation, 2011.

Hendry, J. "Economic Contacts Versus Social Relationships as a Foundation for Normative Stakeholder Theory." *Business Ethics: A European Review* 29.2 (2001): 223-32.

Henton, Doug, John Melville, Terry Amsler, and Malka Kopell. 2005. Collaborative governance: A guide for grantmakers. Menlo Park, CA: William and Flora Hewlett Foundation.

Hershman, Marc J., James W. Good, Tina Bernd-Cohen, Robert F. Goodwin, Virginia Lee, and Pam Pogue. "The Effectiveness of Coastal Zone Management in the United States." *Coastal Management* 27.2-3 (1999): 113-38.

Hildebrand, Lawrence. "Introduction to the Special Issue on Community-based Coastal Management." *Ocean & Coastal Management* 36.1-3 (1997): 1-9.

Hill, Charles W. L., and Thomas M. Jones. "Stakeholder-Agency Theory." *Journal of Management Studies* 29.2 (1992): 131-54.

Hope, Vincent. "Object Perception, Perceptual Recognition, and That-Perception Introduction." *Philosophy* 84.04 (2009): 515.

Hotz, Amy. "Proposed Fishing Regulations Would Cut Catches." *The Star-News* [Wilmington, NC] 24 October 2009.

Humpreys, Jeffrey M. *The Economic Impact of Georgia's Deepwater Ports in FY 2009*. Rep. Athens, GA: Selig Center for Economic Growth, Terry College of Business, University of Georgia, 2010.

Jaakson, Krista. "Engagement of Organizational Stakeholders in the Process of Formulating Values Statements." *Atlantic Journal of Communication* 18.3 (2010): 158-76.

Jackson, Edwin L., and Mary E. Stakes. *The Georgia Studies Book*. Athens, GA: University of Georgia, Carl Vinson Institute of Government, 1991

Johnson, Gerry, and Kevan Scholes. *Exploring Corporate Strategy*. London: Prentice Hall Europe, 1999.

Johnson, Mark S. "Public Participation and Perceptions of Watershed Modeling." *Society and Natural Resources* 22.1 (2009) 79-87.

Jones, T. M. "Corporate social responsibility revisited, redefined." *California Management Review*, 22.2 (1980): 59-67.

Jones, T.M. "Instrumental Stakeholder Theory: A Synthesis of Ethics and Economics." *Academy of Management Review* 20.2 (1995): 404-38.

Joshi, Anuradha, and Mick Moore. "Institutionalised Co-production: Unorthodox Public Service Delivery in Challenging Environments." *Journal of Development Studies* 40.4 (2004): 31-49.

Jude S., A.P. Jones, J.E. Andrews, and I.J. Bateman. "Visualization for Participatory Coastal Zone Management: A Case Study of the Norfolk Coast, England." *Journal of Coastal Research* 22.6 (2006): 1527-1538.

Jude, S. R., A. P. Jones, A. R. Watkinson, I. Brown, and J. A. Gill. "The Development of a Visualization Methodology for Integrated Coastal Management." *Coastal Management* 35.5 (2007): 525-44.

Jude, Simon. "Investigating the Potential Role of Visualization Techniques in Participatory Coastal Management." *Coastal Management*, 36 (2008):331–349.

Kawabe, Midori. "The Evolution of Citizen Coastal Conservation Activities in Japan." *Coastal Management*, 32 (2004): 389–404.

- Kaiser, H. F. "The Application of Electronic Computers to Factor Analysis." *Educational and Psychological Measurement* 20.1 (1960): 141-51.
- Kaiser, Henry F. "A Second Generation Little Jiffy." *Psychometrika* 35.4 (1970): 401-15.
- Kearney, John, Fikret Berkes, Anthony Charles, Evelyn Pinkerton, and Melanie Wiber. "The Role of Participatory Governance and Community-Based Management in Integrated Coastal and Ocean Management in Canada." *Coastal Management*, 35 (2007):79–104.
- Keynes, John Maynard. *A Treatise on Probability*. London: Macmillan and, Limited, 1921.
- King, Cheryl S., Kathryn M. Feltry, and Bridget O. Susel. "The Question of Participation: Toward Authentic Public Participation in Public Administration." *Public Administration Review* 58.4 (1998): 317-26.
- King, Jean A. and John C. Ehlert. "What we learned from three evaluations that involved stakeholders." *Studies in Educational Evaluation* 34.1 (2008) 194-200.
- Kochan, Thomas A., and Saul A. Rubinstein. "Toward a Stakeholder Theory of the Firm: The Saturn Partnership." *Organization Science* 11.4 (2000): 367-86.
- Kooiman, J. (ed.) (1993), *Modern Governance: Government-Society Interactions*, London: Sage.
- Krueger, Rob, Seth Tuler, and Thomas Webler. "What Is a Good Public Participation Process? Five Perspectives from the Public." *Environmental Management* 27.3 (2001): 435-50.
- Kweit, Mary Grisez., and Robert W. Kweit. *Implementing Citizen Participation in a Bureaucratic Society: A Contingency Approach*. New York, NY: Praeger, 1981.
- Lampe, M. "Mediation as an Ethical Adjunct of Stakeholder Theory." *Journal of Business Ethics* 31.1 (2001): 165-73.
- Landers, Mary. "Citizens: Back off the Marshes." *The Savannah Morning News* [Savannah, GA] 12 January 2007.
- Landers, Mary. "Deeper River Won't Worsen Hurricane Effects." *The Savannah Morning News* [Savannah, GA] 14 September 2006.
- Landers, Mary. "Dock Length Again an Issue in Georgia." *The Savannah Morning News* [Savannah, GA] 22 December 2008.
- Landers, Mary. "Feds Disagree over Deepening." *The Savannah Morning News* [Savannah, GA] 9 April 2011.
- Landers, Mary. "Proposed Rules Fast Track Mega Docks." *The Savannah Morning News* [Savannah, GA] 5 May 2009.

Langtry, B. "Stakeholders and the Moral Responsibilities of the Firm." *Business Ethics Quarterly* 4.4 (1994): 431-43.

Lawrence, Rick L., and Debbie A. Deagen. "Choosing Public Participation Methods for Natural Resources: A Context-Specific Guide." *Society & Natural Resources* 14.10 (2001): 857-72.

"Leaders Discuss Environmental Impact of a Possible Georgia-South Carolina Port." *The Savannah Morning News* [Savannah, GA] 15 September 2000.

Low, M.B. "Stockholder Versus Stakeholder: How Managerial Attitudes Affect Goal Consensus Between Groups." *Academy of Management Proceedings*. 1991. 336-40.

Mahoney, J. "Stakeholder Responsibility: Turning the Ethical Tables." *Business Ethics: A European Review* 3.4 (1994): 31-35.

Mann, Carlos Guevara. "National Security or Special Interests? US Support for the Panama Canal Expansion Programme." *Global Society: Journal of Interdisciplinary International Relations* 25.2 (2011): 181-204.

Margolis, Julius. "Changing Roles of Different Levels of Government." *The Analysis of Public Output; A Conference of the Universities-National Bureau Committee for Economic Research*. New York: National Bureau of Economic Research; Distributed by Columbia Univ., 1970. 163-218.

Martin, Ingrid M., and Toddi A. Steelman. "Using Multiple Methods to Understand Agency Values and Objectives: Lessons for Public Lands Management." *Policy Sciences* 37.1 (2004): 37-69.

Mayer, Thomas. "Economics As A Hard Science: Realistic Goal Or Wishful Thinking?" *Economic Inquiry* 18.2 (1980): 165-78.

McClosky, Michael. "Local Communities And The Management Of Public Forests." *Ecology LQ* 25 (1998): 624.

McFadden, Loraine. "Governing Coastal Spaces: The Case of Disappearing Science in Integrated Coastal Zone Management." *Coastal Management* 35.4 (2007): 429-43.

McFadden, Lorraine. "Blackwell Publishing Ltd Exploring the Challenges of Integrated Coastal Zone Management and Reflecting on Contributions to 'integration' from Geographical Thought." *The Geographical Journal* 174.4 (2008): 299-314.

Meadowcroft, J. "Deliberative Democracy." *Environmental Governance Reconsidered: Challenges, Choices, and Opportunities*. By Robert F. Durant, Daniel J. Fiorino, and Rosemary O'Leary. Cambridge, MA: MIT, 2004.

- Metcalfe, Chris E. "The Stakeholder Corporation." *Business Ethics: A European Review* 7.1 (1998): 23-30.
- Milan, L., and J. Whittaker. "Application of the Parametric Bootstrap to Models That Incorporate a Singular Value Decomposition." *Applied Statistics* 44 (1995): 31-49.
- Miller, Richard Lee, and William F. Lewis. "A Stakeholder Approach to Marketing Management Using The Value Exchange Models." *European Journal of Marketing* 25.8 (1991): 55-68.
- Milner, A. David, and Melvyn A. Goodale. *The Visual Brain in Action*. Oxford: Oxford UP, 1995.
- Mitchell, Ronald K., Bradley R. Agle, and Donna J. Wood. "Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts." *Academy of Management Review* 22.4 (1997): 853-86.
- Morf, Andrea. "Public Participation in Municipal Planning as a Tool for Coastal Management: Case Studies from Western Sweden." *AMBIO: A Journal of the Human Environment* 34.2 (2005): 74.
- Muller, Julia C., comp. "Savannah River Deepening over the Years." *Savannah Morning News* [Savannah, GA] 12 April 2012.
- Nabatchi, Tina. "Addressing the Citizenship and Democratic Deficits: The Potential of Deliberative Democracy for Public Administration." *The American Review of Public Administration* 40.4 (2010): 376-99.
- Näsi, Juha. "What Is Stakeholder Thinking? A Snapshot of Social Theory of the Firm." *Understanding Stakeholder Thinking*. Ed. Juha Näsi. Helsinki: LSR-Julkaisut Oy, 1995. 19-32.
- National Association for the Advancement of Colored People. *NAACP Passes Resolution Supporting Strong Clean Air Act*. August 2011. <<http://www.naacp.org/press/entry/naacppasses-resolution-supporting-strong-clean-air-act>>.
- "National Collegiate Athletic Association." *About the NCAA*. National Collegiate Athletic Association (NCAA), 13 August 2012.
- Ndubisi, Forster. *Public Policy and Land Use in Georgia: A Concise Reference Book*. Athens, GA: Institute of Community and Area Development, University of Georgia, 1996.
- Neuhauser, Hans. "Sharing Power: The Citizen's Emerging Role in the Decision-Making Process." Conference on Marine Resources of the Coastal Plains States. Jacksonville, FL. 9 December 1976. Lecture.
- "Next Development Target: Area near College." *The Brunswick News* [Brunswick, GA] 2 October 2010.

Nutt, Paul C., and Robert W. Backoff. *Strategic Management of Public and Third Sector Organizations: A Handbook for Leaders*. San Francisco: Jossey-Bass, 1992.

O.C.G.A. (Official Code of Georgia, Annotated) § 50-8-3

O.C.G.A. (Official Code of Georgia, Annotated) § 50-8-32

O.C.G.A. (Official Code of Georgia, Annotated) § 50-8-36

"Office of Institutional Planning and Research." *University of Florida Factbook: First Day Enrollment*. University of Florida, 22 February 2013.

Olson, Kevin. "Legitimate Speech and Hegemonic Idiom: The Limits of Deliberative Democracy in the Diversity of Its Voices." *Political Studies* 59.3 (2011): 527-46.

Olson, Mancur, Jr. "The Principle of "Fiscal Equivalence": The Division of Responsibilities among Different Levels of Government." *The American Economic Review* 59.2 (1969): 479-87.

On the Operations of the South Atlantic Fishery Management Council and the Reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act before the House Committee on Resources, 109th Cong. (2005) (testimony of Dr. Louis Daniel, Chairman, South Atlantic Fishery Management Council).

Orts, E.W., and A. Strudler. "The Ethical and Environmental Limits of Stakeholder Theory." *Business Ethics Quarterly* 12.2 (2002): 215-34.

Ostrom, Vincent, Charles M. Tiebout, and Robert Warren. "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry." *The American Political Science Review* 55.4 (1961): 831-42.

Palgrave, R.H.I., Eatwell, J., Milgate, M. and Newman, P. *The New Palgrave Dictionary of Money and Finance*, London: Macmillan, 1992

Papadopoulos, Yannis, and Philippe Warin. "Are Innovative, Participatory and Deliberative Procedures in Policy Making Democratic and Effective?" *European Journal of Political Research* 46.4 (2007): 445-72.

Peterson, Larry. "Carter: Cagle Threatened Harbor Money." *The Savannah Morning News* [Savannah, GA] 1 April 2011.

Phillips, Charlie. "Clam Farming." *Airboating Magazine* 1999: 58-61. Web.

Phillips, R. "Stakeholder Legitimacy." *Business Ethics Quarterly* 13.1 (2003): 25-41.

Pippin, Jannette. "Deciding Where to Draw the Line: Fishermen Concerned about New Limits on Snapper." *The Daily News* [Jacksonville, NC] 7 September 2007.

Porter, Michael E. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York: Free, 1980 .

Porter, Stephen R., Michael E. Whitcomb, and William H. Weitzer. "Multiple Surveys of Students and Survey Fatigue." *New Directions for Institutional Research* 2004.121 (2004): 63-73.

Prell, Christina, Klaus Hubacek, Claire Quinn, and Mark Reed. "'Who's in the Network?' When Stakeholders Influence Data Analysis." *Syst Pract Action Res* 21.1 (2008) 443-458.

Putnam, Robert D. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster, 2000.

Putnam, Robert D., Robert Leonardi, and Raffaella Nanetti. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, NJ: Princeton UP, 1993.

"*Q Methodology: A Method for Modern Research*. International Society for the Scientific Study of Subjectivity, May 2012.

Quinn, R. E., and J. Rohrbaugh. "A Competing Values Approach to Organizational Effectiveness." *Public Productivity Review* 5.2 (1981): 122-40.

Quinn, R. E., and J. Rohrbaugh. "A Spatial Model of Effectiveness Criteria: Towards a Competing Values Approach to Organizational Analysis." *Management Science* 29.3 (1983): 363-77.

Reed, D. "Employing Normative Stakeholder Theory in Developing Countries: A Critical Theory Perspective." *Business & Society* 41.2 (2002): 166-207.

Reed, D. "Stakeholder Management Theory: A Critical Theory Perspective." *Business Ethics Quarterly* 9 (1999): 453-83.

Reed, Mark S. "Stakeholder Participation for Environmental Management: A Literature Review." *Biological Conservation* 141.1 (2008): 2417-2431

Reid, Robert L. "Navigation: Panama Plans to Expand Canal with Larger Locks." *Civil Engineering* (2007).

Reuteman, Jason. "Savannah Harbor Expansion Project; Draft Tier II EIS and GRR; Submittal to the Record." Letter to Col. Jeffrey M. Hall, District Commander, US Army Corps of Engineers. 25 January 2011. MS. Tybee Island, GA.

Ridings, Dorothy. "Citizen Democracy." *National Civic Review* 80.4 (1991): 413-16.

Ritchie, Heather, and Geraint Ellis. "A System That Works for the Sea'? Exploring Stakeholder Engagement in Marine Spatial Planning." *Journal of Environmental Planning and Management* 53.6 (2010): 701-23.

Robison, M.H., and K.A. Christophersen. *The Economic Contribution of Canada's Colleges and Institutes: An Analysis of Investment Effectiveness and Economic Growth*. Rep. Vol. 1. Moscow, Russia: EMSI, 2008.

Robison, M.H., and K.A. Christophersen. *Economic Contribution of Lakeland College: An Analysis of Investment Effectiveness and Economic Growth*. Rep. Vol. 1. Edmonton, AB, Canada: CCBenefits, 2007.

Rockloff, S.F. and S. Lockie. "Democratization of Coastal Zone Decision Making for Indigenous Australians: Insights from Stakeholder Analysis." *Coastal Management* 34.1 (2006) 251-266.

Rowe, Gene and Lynn J. Frewer. "Public Participation Methods: A Framework for Evaluation." *Science, Technology, and Human Values* 25.1 (2000) 3-29.

Ruf, B.M., K. Muralidhar, R.M. Brown, J.J. Janney, and K. Paul. "An Empirical Investigation of the Relationship Between Change in Corporate Social Performance and Financial Performance: A Stakeholder Theory Perspective." *Journal of Business Ethics* 32 (2001): 143-56.

Rupprecht Consult (2006) *Evaluation of integrated coastal zone management (ICZM) in Europe* Final Report Rupprecht Consult – Forschung & Beratung GmbH, International Ocean Institute.

Sarid, Orly, and Ephrat Huss. "Image Formation and Image Transformation." *The Arts in Psychotherapy* 38.4 (2011): 252-55.

Savage, G.T., T.W. Nix, C.J. Whitehead, and J.D. Blair. "Strategies for Assessing and Managing Organizational Stakeholders." *Academy of Management Executive* 5.2 (1991): 61-75.

Savannah Harbor Expansion Project, Status Update. United States Army Corps of Engineers, Planning Division. Savannah, GA: 24 June 2011.

Schlossberger, E. "A New Model of Business: Dual Investory Theory." *Business Ethics Quarterly* 4.4 (1994): 459-74.

Scholl, Hans J. "Applying Stakeholder Theory to E-Government: Benefits and Limits." *I3E '01 Proceedings of the IFIP Conference on Towards The E-Society: E-Commerce, E-Business, E-Government*. The Netherlands, 2001. 735-48.

Scoping Meeting Comments. N.d. Record Number 15. Savannah, GA.

Scoping Meeting Comments. N.d. Record Number 20. Savannah, GA.

Scoping Meeting Comments. N.d. Record Number 157. Savannah, GA.

Scoping Meeting Comments. N.d. Record Number 175. Savannah, GA.

Scott, S.G., and V.R. Lane. "A Stakeholder Approach to Organizational Identity." *Academy of Management Review* 25.1 (2000): 43-62.

The Secret Seashore --- Georgia's Barrier Islands. Georgia Public Television. Atlanta, GA, 24 March 2008. Television. Transcript.

Severson, Kim. "Taxes Threaten an Island Culture in Georgia." *The New York Times* [New York City, NY] 26 September 2012: A16.

Shackley, Simon and Robert Deanwood. "Stakeholder Perceptions of Climate Change Impacts at the Regional Scale: Implications for the Effectiveness of Regional and Local Responses." *Journal of Environmental Planning and Management* 45.3 (2002) 381-402.

Shaffer, N.E. "Citizen Involvement in Land Use Planning: A Tool and an Example." *Journal of Soil and Water Conservation* (1975): 211-14.

Shen, Benjamin S.P. "Science Literacy." *American Scientist* 63.3 (1975): 265-68.

Smillie, Ian, Henny Helmich, Tony German, and Judith Randel. *Stakeholders: Government-NGO Partnerships for International Development*. Paris, France: Organisation for Economic Co-operation and Development, 1999.

Smith, Noel W. *Current Systems in Psychology: History, Theory, Research, and Applications*. Australia: Wadsworth/Thomson Learning, 2001.

Sokal, Robert R., and P. H. A. Sneath. *Principles of Numerical Taxonomy*. San Francisco: W.H. Freeman, 1963.

"Some Thoughts on Economics Analysis of SHEP." *The Savannah Morning News* [Savannah, GA] 25 January 2011.

Songorwa, Alexander, Ton. Buhrs, and Ken F.D. Hughey. "Community-Based Wildlife Management in Africa: A Critical Assessment of the Literature." *Natural Resources Journal* 40 (2000): 603-43.

Sorensen, Jens. "National and International Efforts at Integrated Coastal Management: Definitions, Achievements, and Lessons." *Coastal Management* 25.1 (1997): 3-41.

Springer, Emilie. "Community Participation in Marine Protected Area Implementation: A Case Study of the Sitka Local Area Management Plan." *Coastal Management*, 34 (2006):455-465.

Sribuaiam, Kanongnij. "Legal Aspects of the Coastal Zone Management: On-going Process of ICZM in Thailand." *Journal of East Asia & International Law* 2.1 (2009): 345-80. 78

"Stata 12 Help for Factor." *Stata 12: Factor Analysis*. Stata Corp., n.d. Web.

Stata Multivariate Statistics Reference Manual: Release 12. College Station, TX: StataCorp LP, 2011.

State of Georgia. *Executive Order 02.11.05.01: Regarding the Comprehensive Master Development Plan for the Coastal Region of Georgia*. Atlanta, Georgia: 2005.

Steadman, Mark E., and Ronald F. Green. "An Extension of Stakeholder Theory Research: Developing Surrogates for Net Organizational Capital." *Managerial Auditing Journal* 12.3 (1997): 142-47.

Steelman, T.A., and Maguire, L.A. "Understanding Participant Perspectives: Q-methodology in National Forest Management." *Journal of Policy Analysis and Management*, 18.3: (1999): 361-388.

Stephenson, W. "Concourse Theory of Communication." *Communication* 3 (1978): 21-40.

Stephenson, W. "Consciring: A General Theory for Subjective Communicability." *Communication Yearbook*. Ed. D. Nimmo. 4th ed. New Brunswick, NJ: Transaction, 1980. 7-36.

Stephenson, W. "Correlating Persons Instead Of Tests." *Journal of Personality* 4.1 (1935): 17-24.

Stephenson, W. "Factor Analysis." *Operant Subjectivity* 3 (1980): 38-57. Web.

Stephenson, W. "Factors of Operant Subjectivity." *Operant Subjectivity* 11 (1977): 3-16.

Stephenson, W. "Scientific Greed - 1961: Abductory Principles." *Psychological Record* 11 (1961): 3-16.

Stephenson, W. "Technique of Factor Analysis." *Nature* 136.3434 (1935): 297.

Strauss, Anselm L., and Juliet M. Corbin. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, CA: Sage Publications, 1990.

Stieb, James A. "Assessing Freeman's Stakeholder Theory." *Journal of Business Ethics* 87.3 (2009): 401-14.

Stone, Kathy, Mahadev Bhat, Ramachandra Bhatta, and Andrew Mathews. "Factors influencing community participation in mangroves restoration: A contingent valuation analysis." *Ocean & Coastal Management* 51 (2008): 476-484.

Stringer, LC, MS Reed, AJ Dougill, M Rokitzki, and M Seely. "Enhancing participation in the implementation of the United Nations Convention to Combat Desertification." *Natural Resources Forum* 31: 198-211.

Studenmund, A. H., and Henry J. Cassidy. *Using Econometrics: A Practical Guide*. Reading, MA: Addison-Wesley, 1997.

Suman, Daniel, Manoj Shrivani, and J. Walter Milon. "Perceptions and attitudes regarding marine reserves: a comparison of stakeholder groups in the Florida Keys National Marine Sanctuary." *Ocean & Coastal Management* 42 (1999): 1019-1040.

Susskind, Lawrence. "Deliberative Democracy and Dispute Resolution." *Ohio State Journal on Dispute Resolution* 24.1 (2009).

Sutton, Jim. "Outdoors Notebook: SAFMC Expected to Approve Fisheries Closures." *The Florida Times-Union* [Jacksonville, FL] 5 June 2010.

Sutton, Jim. "Outdoors Notebook: SAFMC Votes for Another Closure." *The Florida Times-Union* [Jacksonville, FL] 20 December 2009.

Swanson, Lee A. "Value Perceptions as Influences upon Engagement." *Innovative Higher Education* 34.4 (2009): 269-81.

Talen, E., and M. Coffindaffer. "The Utopianism of Children: An Empirical Study of Children's Neighborhood Design Preferences." *Journal of Planning Education and Research* 18.4 (1999): 321-31.

Taut, Sandy. "What have we learned about stakeholder involvement in program evaluation?" *Studies in Educational Evaluation* 34.1 (2008) 224-230.

Terrible, R. S. "An Annotated Bibliography of Literature Concerning Children and Their Knowledge of the Environment." *Journal of Planning Literature* 14.3 (2000): 489-98.

Thomas, John Clayton. *Public Participation in Public Decisions: New Skills and Strategies for Public Managers*. San Francisco: Jossey-Bass, 1995.

Thomas, John Clayton, and Theodore H. Poister. "Thinking About Stakeholders of Public Agencies: The Georgia Department of Transportation Stakeholder Audit." *Public Organization Review* 9.1 (2009): 67-82.

Thompson, J. K., Wartick, S. L., & Smith, H. L. 1991. Integrating corporate social performance and stakeholder management: Implications for a research agenda in small business. *Research in Corporate Social Performance and Policy*. 12: 207-230.

Thompson, Robert. "Cultural Models and Shoreline Social Conflict." *Coastal Management* 35.2 (2007): 211-37.

Tlili, Anwar, and Emily Dawson. "Mediating Science and Society in the EU and UK: From Information-Transmission to Deliberative Democracy?" *Minerva: A Review of Science, Learning & Policy* 48.1 (2010): 429-61.

Treby, E.J. *Frames of Influence: Embracing Culture-Centric Perspectives on Public and Institutional Participation in Coastal Zone Management*. Diss. University of Southampton, 1999.

Treby, Emma J. and Michael J. Clark. "Refining a Practical Approach to Participatory Decision Making: An Example from Coastal Zone Management." *Coastal Management*, 32 (2004):353–372.

Tregunno, Deborah, G. Ross Baker, Jan Barnsley, and Michael Murray. "Competing Values of Emergency Department Performance: Balancing Multiple Stakeholder Perspectives." *Health Services Research* 39.4 (2004): 771-92.

United States Census Bureau. Raw data. Washington, DC (2010).

University of Georgia. Office of Public Affairs. *UGA Sets Second-highest Spring Enrollment. UGA Today: News and Information from the University of Georgia*. 1 March 2012. Web. <<http://news.uga.edu/releases/article/uga-sets-second-highest-spring-enrollment/>>.

Valenta, Annette L., and Ulrike Wigger. "Q-methodology: Definition and Application in Health Care Informatics." *Journal of the American Medical Information Association* 4.6 (1997): 501-10.

Van Exel, J., and G. D. Graaf. "Q methodology: a sneak preview." *Faculty of Social Sciences- Amsterdam* (2005).

Van Kouwen, Frank, Carel Dieperink, Paul Schot, and Martin Wassen. "Applicability of Decision Support Systems for Integrated Coastal Zone Management." *Coastal Management*, 36 (2008):19–34.

Ward, Whitney. "Q and You: The Application of Q Methodology in Recreation Research." Proc. of 2009 Northeastern Recreation Research Symposium. 2009. 75-80.

Webler, Thomas, and Seth Tuler. "Four Perspectives on Public Participation Process in Environmental Assessment and Decision Making: Combined Results from 10 Case Studies." *Policy Studies Journal* 34.4 (2006): 699-722.

Webler, T., Tuler, S., & Krueger, R. "What is a good public participation process? Five perspectives from the public." *Environmental Management*, 27.3 (2001): 435-450.

Wescott, Geoff. "The Theory and Practice of Coastal Area Planning: Linking Strategic Planning to Local Communities." *Coastal Management* 32.1 (2004): 95-100.

Wheeler, Peter J., James A. Peterson, and Lee N. Gordon-Brown. "Spatial Decision Support for Integrated Coastal Zone Management (ICZM) in Victoria, Australia: Constraints and Opportunities." *Journal of Coastal Research* 27.2 (2011): 296-317.

Wicks, A.C., D.R. Gilbert, Jr., and R.E. Freeman. "A Feminist Reinterpretation of the Stakeholder Concept." *Business Ethics Quarterly* 4.4 (1994): 475-97.

Wilson, J.A., J.M. Acheson, M. Metcalfe, and P. Kleban. "Chaos, Complexity and Community Management of Fisheries." *Marine Policy* 18.4 (1994): 291-305.

Wilson, Paul, and Colin Cooper. "Finding the Magic Number." *The Psychologist* 21.10 (2008): 866-67.

Winn, M. I. "Building Stakeholder Theory with a Decision Modeling Methodology." *Business & Society* 40.2 (2001): 133-66.

Winstanley, Diana, Dick Sorabji, and Sandra Dawson. "When the Pieces Don't Fit: A Stakeholder Power Matrix to Analyze Public Sector Restructuring." *Public Money and Management* (1995): 19-26.

Woempner, Carolyn L. *Analysis of Stakeholder Perceptions of Education Reform in Colorado*. Diss. University of Denver, 2008. Ann Arbor, MI: UMI Dissertation, 2008.

Wood, Nathan J., James W. Good, and Robert F. Goodwin. "Vulnerability Assessment of a Port and Harbor Community to Earthquake and Tsunami Hazards: Integrating Technical Expert and Stakeholder Input." *Natural Hazards Review* 3.4 (2002): 148.

Yang, K., and S. Pandey. "Further Dissecting the Black Box of Citizen Participation: When Does Citizen Involvement Lead to Good Outcomes?" *Public Administration Review* 71.6 (2011): 880-92.

Yuan, Jingfeng, Mirosław J. Skibniewski, Qiming Li, and Lei Zheng. "Performance Objectives Selection Model in Public Private Partnership Projects Based on the Perspective of Stakeholders." *Journal of Management in Engineering* (2009).

Appendix A – Glossary of Acronyms

CCP	Coastal Comprehensive Plan
CDC	Community Development Corporation
CEO	Coastal Environmental Organization of Georgia, Inc.
CRC	Coastal Regional Commission (CCP)
CZM	Coastal Zone Management (European Model)
CZMA	Coastal Zone Management Act
DCA	Georgia Department of Community Affairs
DNR	Georgia Department of Natural Resources
EPA	Environmental Protection Agency
FBI	Federal Bureau of Investigation
FDA	United States Food and Drug Administration
GCGTF/GTF	Glynn County Growth Task Force
GBI	Georgia Bureau of Investigation
GPA	Georgia Ports Authority
ICZM/ICM	Integrated Coastal Zone Management/Integrated Coastal Management
IRB	Institutional Review Board
NAACP	National Association for the Advancement of Colored People
NCAA	National Collegiate Athletic Association
NOAA	National Oceanic and Atmospheric Administration
NGO	Non-Governmental Organization
RC	Regional Commission (Georgia)
SAFMC	South Atlantic Fishery Management Council
SEG	Stakeholder Engagement Group (SHEP)
SHEP	Savannah Harbor Expansion Project
SIP	Stakeholder Involvement Plan (CCP)
SRI	Stanford Research Institute
UGA	University of Georgia
USACOE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

Appendix B - List of Q Statements

Number	Statement
1	The public takes advantage of opportunities for involvement in policy development on the Georgia coast
2	Leaders manipulate and shape the stakeholder process to suit their own outcomes
3	Stakeholders are usually not willing to see the bigger picture beyond their own interests
4	Most leaders who involve stakeholders will deny there is a problem if they hear criticism
5	Stakeholders are not true partners in the policy development process
6	Transparency is important in stakeholder processes
7	If stakeholders do not feel powerful, they will not participate fully
8	There are multiple reasons for leaders seeking public input
9	Getting the right information out to the public is a challenge for leaders
10	The more conflict there is about an issue, the more important it is to involve stakeholders
11	Stakeholders do not trust leaders
12	Government entities have the most accurate and reliable scientific information
13	Stakeholders do not understand highly technical or legal issues
14	Leaders try hard to listen to stakeholders
15	Leaders only involve the public in policy development because the law requires it
16	There is too much stakeholder involvement
17	State and federal agencies do not understand policy concerns specific to coastal Georgia
18	Stakeholders have an understanding of their role in stakeholder processes
19	Leaders do not take stakeholder comments into consideration when developing policy
20	Leaders do not have control of how stakeholder comments are used
21	Stakeholders are included to provide political cover to elected officials
22	Leaders do not share all necessary information with stakeholders
23	Individuals with lower income are not as likely to be asked to participate as a stakeholder
24	The public has learned about the constraints of policy development through stakeholder processes
25	Legal requirements for public involvement are not effective in creating a forum for meaningful feedback on policy development
26	I have been part of an effective stakeholder process regarding Georgia Coastal Policy
27	Leaders are transparent in how they develop processes for involving stakeholders
28	Leaders use stakeholder processes to “sell” a pre-determined policy
29	Stakeholders view themselves as influential
30	Individuals with less education are not as likely to be asked to participate as a stakeholder
31	Public engagement has built trust of public leaders in coastal Georgia policy development
32	Involving stakeholders means too many points of view
33	Opportunities for stakeholders to participate in coastal Georgia policy development are communicated adequately
34	Leaders do not consider the potential strains on community resources when developing policy for coastal Georgia
35	The differences in the roles of federal, state, and local government in policy development are clear
36	There is not enough meaningful stakeholder involvement in policy development on the Georgia coast
37	Stakeholders are representative of a constituency affected by coastal policy development
38	The public views policy adopted more favorably when stakeholders are involved in the process
39	Stakeholders have limited capacity to provide advice on technical issues
40	When involving stakeholders, public leaders make an effort to engage people of all races and ethnicities

Appendix C – Respondent Consent Form (UGA IRB 2011-10077-1)

Consent Form for Stakeholder Involvement study in Coastal Georgia

I agree to take part in a research study titled “Stakeholder Involvement: A Multi-Methodological Approach to Determining the Factors that Affect Quality, Satisfaction and Impact of Public Participation in Coastal Policy Making”, which is being conducted by Courtney Tobin, UGA Fanning Institute 706-542-1108 or ctobin@fanning.uga.edu. My participation in this study will be completely voluntary. I can refuse to participate or stop taking part at any time without giving any reason, and without penalty or loss of benefits to which I am entitled. I can ask to have information related to me returned to me, removed from the research records, or destroyed.

The purpose of the study is included in the following four outcomes:

- To identify and characterize the intent of the public leader for involving the public and how that influences the process of involving the public, public comments about the process, and the eventual impact of public participation.
- To understand how public leaders view leadership, the values they hold, and how those values affect the intent of the public leader for involving the public, the expectations the leader has for public participation and how the leader uses public participation when developing and implementing policy.
- To understand the expectations of public participants for public participation in policy development and how those expectations influence their participation.
- To determine which factors affect the quality of stakeholder and public feedback, distilling responses from public leaders and public participants into a series of options for use by public leaders in Georgia and coastal environments in other states for involving public participants in policy-making more effectively and with better outcomes.

The benefits that I may expect from the research are to gain a better understanding of why public leaders involve the public at large (and at what point), and why the public at large does or does not choose to participate.

If I volunteer to take part in this study, I will be asked to do the following things:

- I will take part in no more than 3 phone conversations lasting no longer than 2 hours.
- I will participate in either an on-line or manual Q sort process, lasting no longer than an hour.
- I will participate in a SYMLOG assessment lasting no longer than an hour.

No discomforts or stresses are expected.

No risks are expected.

Internet communications are insecure and there is a limit to the confidentiality that can be guaranteed due to the technology itself. However once the materials are received by the researcher, standard confidentiality procedures will be employed. All records will be kept by the data base analysts within the Fanning Institute and only the researchers will have access to the materials.

The only people who will know that I am a research subject are members of the research team and advisory committee members. No individually-identifiable information about me, or provided by me during the research, will be shared with others. All identifying materials will be kept for three years in a secure file within one of the researcher's offices.

The researcher, Courtney Tobin, J.D., will answer any further questions about the research, now or during the course of the project, and can be reached by telephone or e-mail: 706-542-1108 or ctobin@fanning.uga.edu.

My signature below indicates that the researchers have answered all of my questions to my satisfaction and that I consent to volunteer for this study. I have been given a copy of this form.

Name of Researcher
Telephone: _____
Email: _____

Signature

Date

Name of Participant

Signature

Date

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

Appendix D – Quantitative Survey Instrument

**Demographic and Profile Information
Sea Grant Research**

<p>Which Stakeholder Process are your responses reflecting?</p> <p><input type="checkbox"/> Marsh Hammocks, Docks, and Marinas</p> <p><input type="checkbox"/> Deepening of Savannah Harbor</p> <p><input type="checkbox"/> Coastal Regional Plan</p> <p><input type="checkbox"/> South Atlantic Fishery Council</p> <p><input type="checkbox"/> (Other, _____)</p> <hr/> <p>What did/do you consider your role in this process?</p> <p><input type="checkbox"/> Stakeholder <input type="checkbox"/> Leader</p> <hr/> <p>In which county do you reside?</p> <p>_____</p> <p>In which county do you work?</p> <p>_____</p> <p><i>(Specify if not a Georgia county)</i></p>	<p>Interest you represent (Check all that apply)</p> <p><input type="checkbox"/> Elected Official</p> <p><input type="checkbox"/> Local Government Administrator</p> <p><input type="checkbox"/> State Government Official</p> <p><input type="checkbox"/> Federal Government Official</p> <p><input type="checkbox"/> Non-Profit Organization Administrator</p> <p><input type="checkbox"/> Resident</p> <p><input type="checkbox"/> Advocacy Organization Member</p> <p><input type="checkbox"/> Technical Advisor</p> <p><input type="checkbox"/> Observer</p> <p><input type="checkbox"/> Other Stakeholder (Describe)</p> <p>_____</p>
<p>Is this process completed or in process?</p> <p><input type="checkbox"/> Completed <input type="checkbox"/> In Process</p>	

<p>Gender</p> <p><input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p>	<p>How long have you lived/worked in Coastal Georgia?</p> <p>_____ Years</p>	<p>May we contact you for an interview?</p> <p>I would prefer an immediate interview <input type="checkbox"/></p> <p>I would prefer a follow-up interview <input type="checkbox"/></p> <p>Phone: _____ - _____ - _____</p> <p>Email: _____</p>
<p>Have you been involved in a stakeholder process in Coastal Georgia before?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If “Yes,” how many stakeholder processes have you been involved in previously?</p> <p><input type="checkbox"/> 1-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-10 <input type="checkbox"/> 11+</p>	<p>How many times have you found yourself as a “leader” in stakeholder processes?</p> <p>_____</p>	<p>How many times have you found yourself as a “stakeholder” in stakeholder processes?</p> <p>_____</p>

Q Concourse Distribution – Sea Grant Research

	Strongly Disagree	Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Agree	Strongly Agree
Statement Number							

Appendix E – Interview Protocol

Interview protocol

Date: _____

Interviewee: _____

Interview Completed by: _____

INTRODUCTION

Thank you for taking the time to talk with me today. My name is _____ (and assisting me is _____). We are working with researchers at the University of Georgia to study public leadership in the Coastal Georgia region.

GROUND RULES

This interview will last no more than 45 minutes. You were asked for this interview because of your involvement as a public leader in the coastal Georgia region. There are no wrong answers. Keep in mind that we're just as interested in negative comments as positive comments and at times the negative comments are the most helpful.

Know that you are always able to decline answering a question. We will be on a first name basis although we won't use your name in our reports. The interview reports will go back to the researchers to help them plan for future research activities.

Do you have any questions before we begin? Please turn off your cell phone or pager.

INTERVIEW QUESTIONS

1. In your experience, why do you think public leaders involve stakeholders?
2. In your experience, why do you think the public participates in stakeholder processes?
3. What is not currently working in the stakeholder process (defining stakeholder process very broadly)?
4. What would you like to see happen to make the process more effective?
5. What are your expectations of us and our Seagrant research process?
6. What would you like to get out of participating in this process?