Deciding How to Decide: An Evaluation of Cultural Typologies on the Decision Making Structure of Watershed Organizations

THESIS

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Abstract

Population growth coupled with the limited availability and difficulty in accessing water has led policy makers worldwide to focus on developing and supporting volunteer based watershed management organizations. These organizations provide a wide range of necessary functions such as monitoring and reporting violations, hands-on volunteers to assist in clean-ups and promote public awareness, and raising funds to purchase supporting infrastructures. They are especially important when local governments are unable to provide the needed means due to political and/or financial reasons.

The structure and decision making process of an organization arguably affects the outcomes of that organization (Koontz et al. 2004); therefore, how an organization determines what types of rules used for decision making to administer becomes imperative for the functionality of the organization. Much literature focuses on the effects of particular decision types, but there is a limited understanding of the factors that influence how an organization chooses to structure its decision making rule process and thus form a structure and produce outcomes. This study examines the links between how individuals within an organization perceive the world and how that organization structures rules to make decisions.

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Chapter 1: Introduction to Study

The structure and decision making process of an organization arguably affects the outcomes of that organization; therefore, how an organization determines what types of decision making rules to follow is an important consideration. The intent of this research project is to uncover the factors that influence the decision rule making process, with a specific focus on the culture of the members of the organization.

An organization's cultural typology, as defined in Cultural Theory, influences the way in which the members of that organization perceive the world and, therefore, the way in which the members of the organization choose to respond and address important issues. These responses are reflected in the manner in which they structure and develop their organization's decision rule making process.

In order to understand the complexities of the decision rule making process, a comparative case-study of four watershed organizations in central Ohio was conducted. Data collection included observations of group activities and meetings, analyses of bylaws and websites, and interviews with members of the organizations responsible for establishing each organization's decision rule making process.

The analysis indicated that there is a relationship between the rules, defined by the Institutional Analysis and Development (IAD) framework (Ostrom, 1990), and the group-grid associations developed in Cultural Theory (Douglas, 1970) of an organization. Organizations with a strong group level are linked to clear boundary rules for outsiders

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entering the organization, an inability to speak for the organization as an individual, and unwillingness to deviate from the central mission of the organization. An organization with a high grid level will be associated clear boundary rules for members within the organization, clearly defined choice rules for each position, and rely on Robert's Rules of Order to make decisions. An organization with a low grid level, on the other hand, is associated with a consensus decision making process.

The results of this study are intended to expand the knowledge about the organizational decision rule making processes, and to build knowledge about the relationship between cultural typologies and organizational decision rules. Results raise several key questions for future research including how group level and boundary rules affect gaining and retaining new participants, the factors of a low grid level that foster the ability to establish a collaborative decision making structure, and if the changes in the organizational life cycle corresponds with the "surprises" that effect the worldview (Thompson, Ellis, & Wildavsky, 1990). Although the study is limited to evaluating an organization at a specific point in time, therefore a specific point in the organizational lifecycle, the research does provide evidence that the rules in use are linked to the cultural typology of the organization at that point in time. Understanding how the rules in use relate to the cultural typologies of an organization will assist managers in establishing and maintaining the internal structure of organizations managing natural resources, such as watershed.

Introduction

Water is a vital resource for human survival. Approximately seventy percent of the Earth's surface is covered in water (Gleick, 2004); hence Earth is dubbed the "water planet" (Solomon, 2010). Roughly two percent of the total water is classified as freshwater. Of the freshwater, less than one percent can be accessed and used by humans. Water provides global temperature regulation, normalizes the flow of nutrients in soils, and is a universal solvent (Solomon, 2010). Water is perceived to be a naturally, self-renewing natural resources, although, it is not (Solomon, 2010).

Water is valued in all societies, and searched for on other planets as an indicator of life (Gleick, 2004). Arnold Toynbee (1947) argued that all societies are driven, shaped and created by the environmental challenges that surround them; water and water scarcity being one of the critical ones (Solomon, 2010). Societies with consistent access to water show signs of economic prosperity, population growth and the ability to expand territories (Solomon, 2010). Water use is also linked to agricultural development and military benefits (Solomon, 2010). Lack of water is associated with food shortages, and energy deficiencies (Gleick, 2004; Solomon, 2010).

Access to water can no longer be the sole concern with the resource; proper management of the resource once access is achieved is becoming increasingly imperative (Gleick, 2006). Strict regulations and management strategies overseen by government agencies are often not the most beneficial for society, nor are they productive or efficient means to generate desired outcomes (Ostrom, 1999, 2007). Increasingly water management is being performed by non-governmental stakeholders in communities, often

in the form of watershed management organizations (Sabatier et al. 2005; Koontz & Hardy, 2008). The structure and activities of these organizations can have substantial impacts on water availability and use.

When evaluating most types of organizations, analysts typically focus on the production of outcomes as a measure of success or failure (Langbein & Felbinger, 2014). Unfortunately, outcomes, especially in an environmental setting, are difficult to measure for a multitude of reasons, including the wide range of factors that potentially interact to generate conditions on the ground (Laszer, 2008; Koontz & Thomas, 2006). Thus an examination of organizational success should include not only outcomes, but also organizational structures and processes (Thomas & Koontz, 2011).

A key component of organizational structures and process is the set of rules that govern how an organization makes decisions. Prior studies of natural resource management have examined how organizations such as watershed groups work to further their aims. Another stream of research has examined the role of culture in explaining organizational behavior. To describe the state of knowledge about organizational rules and culture, the remainder of this chapter proceeds as follows. First, natural resource management as a collective action is described, followed by organizational behavior. Next, studies about rules for organizational decision making are synthesized, including a focus on four types of rules (position, boundary, choice, and aggregation). This leads to a discussion of the Institutional Analysis and Development framework. Subsequently, the chapter turns to culture and cultural theory, and to the use of cultural theory to examine group dynamics. This leads to a discussion of debates about measuring cultural types.

Finally, the chapter ends with a brief discussion of linking cultural theory to the

Institutional Analysis and Development (IAD) framework and plan for the thesis.

<center>Natural Resource Management as a Collective Action</center>

Managing natural resources is usually a collective effort. This is especially

evident for watersheds, the focus on this study. Growing scientific understanding of the

interconnectedness of many components of the landscape surrounding waterways,

combined with increasing demands from diverse stakeholders, has fueled the evolution of

collaborative watershed management (Sabatier, 2005). This approach involves multiple

stakeholders, with differing views, coming together to form a decision by consensus

(Sabatier, 2005).

Prior studies of collaborative watershed management have focused mainly on

citizen participation (Koehler & Koontz, 2008), implementation of environmental laws

(Hoornbeek, 2013), stakeholder participation or "buy-in" (Neil, Pelkey & Leach, 2003;

Borisova, 2012; Lubell, 2004), and social factors such as trust building (Hansen, 2006).

Although a few studies have examined how such groups decide on their mission (Bonnell

& Koontz 2007) and many note the use of consensus decision making procedures

(Schively, 2007; Layzer 2008; Sabatier et al. 2005), other aspects of organizational rules

are less often studied. Since rules about decision making set the foundation for a group's

actions, more research is needed to understand how they are decided.

A fertile field of study related to rules for natural resource management has been

institutional analysis for collective action. Spurred by Ostrom (1990) and her colleagues,

scholars have sought to understand how rules enable resource users to collectively

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manage natural resources. Although this line of inquiry began by focusing on small-scale common-pool resources with user self-governance, recent work has expanded to address resources with external government involvement, which is a hallmark of collaborative watershed management (Fikret, 2006; Dietz, Ostrom & Stern, 2003; Ostrom, 2007).

Organizations have multiple forms of decision rule making processes from which to choose, and these processes influence the structure of the organization (Deschouwer, 2003; Nutt, 1995; Vroom, & Yetton, 1973). Previous literature indicates that the development of an organization's structure occurs in one of three manners (1) spontaneous emergence, (2) Market-coordinated exchange or (3) social selection (Knight, 1992). Spontaneous emergence is caused by an individual acting and causing "unintended social consequences" (Knight, 1992, page 12). In this type of organizational formation, the individual does not have a specific strategy for how to create the organization; instead, it is a series of unintentional, or unplanned, actions. A market-coordinated exchange, on the other hand, is when the market or economy encourages certain actions to be taken, thus producing an organization (Knight, 1992). This formation, similarly to spontaneous emergence, does not place the driving choice of the formation of the organization on the premeditated intentions of the individual; rather it is the outside economic factors that drive the formation. Social selection focuses on the collective benefit and how that determines how the selection process for the formation of the organization (Knight, 1992). In other words, it is the collective desires which drive the formation of the organization.

Some scholars argue that the structure of an organization is not established by the needs or wants of the community, or society, instead the organization's structure is formed by the rational choices of the individual. Knight (1992) applies rational choice theory to the establishment of organizations and describes how individuals structure the organization based on their preferences and expectations. But such application of rational choice theory has been critiqued as not correctly specifying how individuals make choices (i.e. they often do not clearly optimize among choices) (Foley, 2003). As Herbert Simon (1978) argued, individual actors are not like economists, but rather they "satisficing", or finding something that satisfies instead of optimizing their utility. Though much is known about the formation of organizations, little is known about why a collective body of individuals, in the form of an organization, selects the rules to guide the organization's subsequent decision making. For this reason, the central focus of this research study is to evaluate how the organizations choose to use and support rules about how they will make decisions and take actions.

<center>Organizational Behavior</center>

Organizations are formed for a variety of reasons and by a diverse range of members (Cox, 1991). Each organization, regardless of the reason of establishment, has a mission statement or a goal to achieve (David & David, 2003; Pearce, 1987). A chess club, for example, has the intent to produce the desired goal or outcome of a game of chess. A social justice organization with the mission statement of reducing homelessness in a city, on the other hand, has the intent to produce the outcome of reducing the number of homeless individuals through it actions (e.g. encouraging economic growth or

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providing educational opportunities for youth). Watershed organizations have a particular feature of generating outcomes that are often difficult to measure due to the multiple factors that potentially affect their outcomes (Layzer, 2008). In addition, watershed organizations differ from human service focused organizations in that they typically lack a dependent client group that constrains their actions (Nikolic & Koontz, 2008). Although these differences are present, watershed organizations are similar to other organizations in that they are mission driven which means that regardless of the outcomes or clients, the watershed organization defines itself by its mission. The degree to which an organization achieves its mission is vital for its survival (David &David, 2003). To achieve its mission, an organization makes decisions about which actions to take – in other words, the group's behavior.

Studies of behavior are not new, at least for individuals. In evaluating the decision making process of individuals, psychologists typically focus on the individual's attitudes, beliefs and perceived behavior control (Ajzen, 1991; Ajzen, & Madden, 1986; Grendstad, Selle, & Thompson, 1999). These factors combine with the norms of society to formulate the individual's intentions that that will presumably lead to cause the individual to act in a certain manner (Ajzen, & Madden, 1986). The Theory of Planned Behavior combines these factors (see Figure 1 in Appendix A). In a group, or an organization, unfortunately, no such theory exists. Many researchers have alluded to the concept of individuals influencing and creating a group mentality with theories such as geomentality (Yoon, 1991), however, there is considerable debate and no clear explanation for how an organization establishes its decision making process. For

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example, what influences one group to establish an organization based on consensus decisions whereas another group empowers a single individual to make decisions?

Numerous studies identify factors that affect the behaviors and subsequent outcomes of an organization, including issue definition (e.g. framing), resources (e.g. funding, participants, leaders, and social capital which those create) and structure and decision making processes (e.g. monitoring programs, conflict resolution, and decisions) (Bruns, & Waterhouse, 1975; Child, 1972; Daft & Lengel, 1986; Koontz, 2004; Leach, 2006). Figure 2 (see Appendix A) depicts the flow of actions within an organization that lead to the outcomes (Koontz et al., 2004). For the purpose of this thesis, one subset of factors that influence organizational behaviors and outcomes -- organizational structure and the decision-making processes -- is examined.

The structure of an organization greatly affects the manner in which an organization attempts to achieve its desired outcomes (Daft & Lengel, 1986; Innes & Booher, 2010). In a collaborative organization, for example, all members are equal, at least in theory, and decisions about actions the organization should preform are usually determined by consensus or by a majority vote (Innes & Booher, 2010). This structure is different than a hierarchical organization, commonly referred to as a "top-to-bottom organization". In a hierarchical organization, decisions about the actions of the organization are usually dependent on a single individual or authoritative committee at the top that renders a decision to be carried out by the members in lower levels of the organization (Daft & Lengel, 1986; Thompson & Wildavsky, 1986).

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Decision making processes are evaluated in many fields and in multiple fashions. A political scientist, for example, may evaluate the process an individual uses in order to achieve a desired outcome with a central focus on political institutions and structures (Aldrich, 1986, Kerremans, 1996; Thompson, Grendstad, & Selle, 1999). Psychologists, on the other hand, may focus on preferences and attitudes of the individual and how the primary needs of the individuals diverge over time from basic needs such as food, water and shelter to develop higher needs such as education, and leisure activities (Eagly &Chaiken, 1993; Thompson, Grendstad, & Selle, 1999; Zajonc, 1980). Theories from economists focus on the assumption that an individual will perform the most cost-beneficial action for himself (Tversky &Kahneman, 1986).

Organizational decision making literature tends focuses on the types of decisions that are used by the organization and how those decision structures affect the flow of information through an organization (Hage & Dewar, 1973; Thompson & Wildavsky, 1986). The social relationships among leaders, members, elite and general public are also discussed as an influencing factor or decision making process (Hage & Dewar, 1973). Recently, a growing body of literature has examined how technology is used in an organization to supplement human limitations to outcome production and potentially remove the individual from the decision making process (Jensen & Heckling, 1995). There is also ample literature on how to arrive at the most suitable decision for multiple stakeholders with techniques such as structured decision making (Gregory & Wiley, 2011) or strategic decision making (Eisenhardt & Zbaracki, 1993; Schwenk, 1988).

Though each approach advances the understanding of how individuals make decisions about what actions to take, and how organizations can achieve outcomes, there is less research focusing on the how a group decides how to decide (e.g. consensus, majority vote, single individual, or subcommittees). It is essential to understand how an organization chooses to establish decision making rules because that process affects the structure of an organization and the outcomes the organization can produce.

Rules for Organizational Decision Making

Scholars studying rules often measure rule types through document analysis, interviews, and observation. While documents may provide formal indication of different rules, unwritten rules may be in operation in a community. Ostrom (2005) argues that "written rules are always incomplete and therefore the very act of interpreting the rules may lead to different outcomes" (page 22). In the United States, for example, there are speed limit signs on the roads which indicate the maximum speed one can drive. A driver may read a sign as 35 miles per hour and acknowledge that as a promulgated written rule, known as a *de jure* rule. Although she understands this written rule, she may choose to drive at 40 miles per hour. Furthermore, the vast majority of individuals that drive on this road may choose to drive at an average speed of 40 miles per hour. The unwritten rule in practice is a *de facto* rule, or in use rule. The police department is aware that the majority of the drivers on this road exceeds the speed limit, and chooses only to pull over and ticket drivers who exceed 40 miles per hour. The law allows for the police officers to ticket individuals driving faster than 35 miles per hour, even if the individual is driving 36 miles per hour, but the police do not enforce this rule. In doing so, the

written rule, is no longer in practice, but rather it is replaced with the unwritten rule of one must drive 40 miles per hour or slower.

Institutional analysis focuses on categorizing rules to understand the effects of different rules, across diverse settings, on subsequent human action. Ostrom (1990, 2005) has described the importance of rules for collective action and types of rules that affect the decision making rules that an organization can make. She identifies seven types as follows: position rule, boundary rule, choice rule (also referred to as authority rule), aggregation rule, information rule, payoff rule, and scope rule (see Figure 3; Appendix A). Position rules identify the slots member fill within an organization. Boundary rules designate the qualifications for entering and exiting a position. Choice rules define the actions each individual within a position can and cannot perform at specified times. Aggregation rules establish how a decision made by the individuals within designated positions will be weighed. Information rules specify the information that the individuals within a position can or cannot access. Payoff rule describe the costs and benefits each individual can obtain (Ostrom, 2005). Scope rule determine range of outcomes within the action, such as whether it is an intermediate or final action.

Position, boundary, choice and aggregation rule are closely tied to a group's decision rule making process. A state's general election, for example, is influenced by the position, boundary, choice and aggregation rules. The position rule defines two different slots related to the action of voting: voter and non-voter). The boundary rules, such as voting requirements, establish the qualifications for an individual to enter the position of voter (Ostrom 1990, 2005). Boundary rules as voting requirements typically include the

meeting of a minimum age requirement and a place of residency requirement. The choice rule specifies actions that a person in a given position can or cannot take (Ostrom 1990, 2005). In the voting example, an individual who fulfills the boundary rules requirements for voting and enters the position of eligible voter can take the action of voting. The action of voting is the choice rule granted to individuals by position rule of "voter". The aggregation rule specifies how each vote is weighted to arrive at a collective decision. In a state general election, typically each voter has a single vote thus the votes are weighted at a one to one ratio.

Position, boundary, and choice rules allow and prevent certain populations of the public from affecting the decision making process. In an organization, these voting restrictions could be presented as determining which stakeholders have the right to be at the table and vote. If an organization is attempting to preserve a forest, for example, the organization may include the landowner and timber harvester but exclude the environmentalist. Defining position, boundary and choice rules causes inclusion and exclusion of voters which will affect the results of the decision making process (Ostrom 1990, 2005).

Aggregation rules determine how to weight the expressed preferences of the people who occupy specified positions (Ostrom 1990, 2005). In an educational organization based on a majority voting system, for example, if three teachers hold the position of eligible voters and only one student is classified as an eligible voter, the teachers have a higher weight in the decision making process compared to the student. On the other hand, if a unanimity rule is in place, then a single member who disagrees

with the others can prevent a proposal from being approved, allowing the single student to have equal weight as the teachers. The weight each member receives for a decision affects the organization's collective decisions.

<div align="center">The Institutional Analysis and Development Framework</div>

Scholars studying collective action often focus on rules. For example, game theory, a prominent, and frequently applied economic theory used by psychologists, sociologists, economists, and political scientists, relies on rules as the key explanatory factor linking choices to outcomes (Davis, 1983). While game theory is largely abstract, field studies have identified factors besides rules that affect how groups will address a situation (Ostrom, 1990; Wildavsky, 1987). The Institutional Analysis and Development (IAD) framework, based on the interactions from game theory, is the theoretical scaffolding that puts into context the interactions of the "players" in the "game" (Ostrom, 1990).

A focal point of the IAD framework is the action arena, which is where actors in a particular decision context make decisions or carry out actions. The action arena is affected by three variables (see Figure 4; Appendix A): (1) attributes of the physical world, (2) attributes of the community and (3) rules-in-use (Ostrom, 1990). The attributes of the physical world are the physical constraints that are in the world. The amount of water in an irrigation system, for example, is a physical attribute because there is a limited supply of water that can be confined in the system. This limits the available actions. The attributes of the community are typically defined as the behaviors of the society or culture of the people in the action arena (Ostrom, 1990). In these scenarios,

individuals who share a common belief system, or cultural view, or repeatedly interact with a set of individuals with the same cultural view, will choose to act according to that belief system. When an individual is raised to trust other individuals, for example, he will act with a higher level of trust in the interactions with others when acting in the action situation compared to those who were not raised with the same level of trust (Ostrom, 1990). Rules-in-use, as described previously, determine who does and does not have the authority to make decisions, what decisions can and cannot be made and how much weight each member is allowed to have for each decision (Ostrom, Gardner & Walker, 2006; Ostrom 1990). Furthermore, the individuals within the action arena determine which rules should be created and whether or not to follow those rules.

Ostrom (1990) argues that the individual actors establish the rules that affect the action arena. These same individuals are also influenced by their cultural perceptions, which encourage them to act in a particular manner (Ostrom, 1990). The question arises, is there a link between the attributes of the community and the rules that are chosen? In other words, do certain types of individuals choose to use certain forms of rules as opposed to other forms of rules because of their cultural perceptions or worldviews? The IAD framework as depicted in Figure 4 (refer to Appendix A) does not include interactions between attributes of community and rules-in-use. However, the research in this thesis aims to identify the degree to which these two variables are connected; in other words should we augment the IAD framework by drawing an arrow from the "Attributes of Community" box to the "Rules-in-Use" box?

Culture is the Context

In evaluating a group of individuals, whether it is a nation, organization or household, decisions are contextually dependent, specifically on culture (Wildavsky, 1992). This means that the rational choice of the individual within a group is determined by the cultural context in which he or she resides (Wildavsky, 1992), which is known as cultural relativity (Inciardi, & Rothman, 1990). Similar to the attitudes and beliefs which influence the individual to act, cultural relativity is the context in which a group acts (Inciardi, & Rothman, 1990). Without the cultural context, no solution is more or less rational because, depending on the culture, values and perceptions of the individuals may change, thus altering what is viewed by the individual as desirable (Inciardi, & Rothman, 1990; Wildavasky, 1992).

As an example, imagine the following scenario: You and a coworker decide to go to lunch together. As an individual, your favorite food is Mexican food, and you would choose to purchase an enchilada at the nearby restaurant if you were eating lunch alone. Your coworker's favorite food is Thai food, and if he/she were eating lunch alone he/she would purchase Pad Thai at the nearby restaurant. Each individual would receive the greatest personal, or individual, satisfaction from consuming their preferred food, however, together, you and your coworker choose to go to a local French bistro. As individuals, neither you nor your coworker, reached the maximum level of personal satisfaction, but overall, are satisfied with the decision.

Imagine the same scenario of determining where to go for lunch is occurring, but this time, between you and your employer. Again, your favorite food is Mexican food,

and your boss's favorite food is Thai food. Each of you would prefer, as individuals, to consume your favorite food. In the end, the decision is made to go to the local Thai restaurant. Individually, your boss would be more satisfied with this choice than you are, but overall you are as satisfied with the choice.

Where a psychologist might be confused by the conflicting actions and desires of the individual, a sociologist would understand the complexity of the interplay between the individuals in the scenario and the social interactions. Sociologists would site studies on conformity, defined by Cialdini and Goldstein (2004) as "the act of changing one's behavior to match the responses of others" (page 606) in order to explain the reason why an individual's personal beliefs do not always match their actions (Dresser, 2005; Haun, 2011). These studies would show how typical, law-abiding, American football fans could create violent riots after games (Kutcher, 2000) or how an individual "caught up in the excitement" (Harvard Law Review, 1995) could lead to the deaths of 55 individuals and the injuring of 2,300 others (Rogers & Taxin, 2012). Though in each of these scenarios, the individual is legally considered culpable for his or her actions, there is a strong understanding, even in the legal realm, that the group is a strong influencing factor on the individual (Harvard Law Review, 1995).

Culture is difficult to define, as its definition depends on whom you ask (Kroeber, & Kluckhohn, 1952). Sociologists, anthropologists, psychologists, and geographers have long grappled with this concept (Kroeber, & Kluckhohn, 1952). The study of culture can be further divided into three categories; behavioral, perceptual and material (Inciardi, & Rothman, 1990). For the purpose of this paper, the focus will be on the perceptual aspect

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of culture. This aspect is based on the principle that individuals have a distinct perception of the world, known as world view, which leads to a particular mindset, or mentality, and shapes an individual's understanding of the world (Kroeber, & Kluckhohn, 1952). In the United States, for example, the dominant culture is defined as *individualist* (Markus &Kitayama, 1991), meaning the central focus of action is placed on the individual (e.g., I do what is best for me). In contrast, the eastern culture of Japan is viewed as more communal or *interdependent* (e.g. I do what is best for my family/nation) (Markus & Kitayama, 1991). This difference plays out in many ways, from the creation of gardens (Yoon, 1991) to city structures (Yoon, 1982).

Of course, culture is not limited by nationality. For example, politically conservative people in the United States more closely relate to politically conservative people in France than to liberal people within their own nation (Markus & Kitayama, 1991). This means that conservatives across nations, and liberals across nations, have more in common with each other than with their counterparts in their home nation. This can also be applied to the formation of an individual's perceived identity. In a football game between two rival universities, for example, the students of each opposing team will have more in common with each other (socially, economically, experiential and age wise) than with the older, more wealthy elites sitting on their same "team's" side in the box seats. The question that arises is: *how do cultural differences affect the types of organizations that will be established, in particular how the organizations make decisions.*

Culture is not to be confused with social norms. Norms are defined as "the various rules, standards, and expectations that regulate an individual's interactions with other member of his or her culture and society" (Inciardi, & Rothman, 1990). These rules and standards are made by the group as whole, however, this does not necessarily imply that all members within the group agree or abide by them (Lippa, 1994). In other words, norms typically define the boundaries of what is socially acceptable for an individual to do. In the United States, for example, it is a social norm for men to wear pants, and for woman to have the option to wear dresses or skirts, but not vice versa. Culture recognizes that body adornment or clothing will be worn in society, however, it is the norm that dictates what type of attire (e.g., pants or skirt) will be worn and by whom (Inciardi, & Rothman, 1990).

Cultural Theory

Cultural Theory diverges from an attempt to explain a single individual's values, beliefs or behaviors, and instead focuses on the interaction of an individual's relationship within society. The fundamental questions for the individual are not, "What do I believe and why do I believe what I do?" instead, the questions are "Who am I, and what shall I do?" (Wildavsky, 1987). By framing the issue in the form of mentality or worldview, rather than attempting to derive the reasons for preference, one avoids the limitations that are typically present some social science research. With norms, for example, it is difficult to determine the true origin; does the individual act in a particular manner because of the societal norms, or do the societal norms develop because of the individual's actions (Krebs, 1970)? Avoiding the "chicken or egg" debate allows for the evaluation of the

effects of the individual's mentality and association with society to be compared with the structure of organization in which individuals are embedded (Morrill, 2008; Leighley, 1996).

Following Cultural Theory, one way to conceptualize the relationship between individuals and groups is through a "group-grid" diagram (Figure 4; see Appendix A), which indicates the degree to which an individual feels connected to a group and how she feels about power distribution (Douglas, 1970; Thompson, Ellis, & Wildavsky, 1990). A high group association means that the decision-making powers are in the hands of the group over the individual (Thompson, 1986). It is the collective that matters. In contrast, with a low group association, the decisions of the group are less important or binding than the decisions made for the individual by the individual (Thompson, 1986). To have a high group association, the individual must feel bound to the group over oneself (Lockhart, 1999). Grid association refers to the prescriptions an individual will face (Lockhart, 1999). In other words, grid refers to how an individual views his or her place within the society in relation to others (Douglas, 1970). An individual with a high grid mentality will believe in the legitimacy of a ranking system of authority, where as an individual with a low grid mentality will believe in equality among all individuals within society (Lockhart, 1999).

The group-grid format of Cultural Theory creates four typologies of culture, or ways of life, associated with different quadrants of the grid.

Egalitarian

Egalitarians have a high group association along with a low grid association (Thompson, 1986; Lockhart, 1999; Wildavsky, 1987). This means that egalitarians reject the notion of a legitimate authority and believe that all members within society are equal (Wildavsky, 1987). The flaws of society are the direct result, in the mind of an egalitarian, of the lack of equality within society (Wildavsky, 1987). Dissenting opinions are usually repressed because of the great difficulties associated with having a ruling authority, or ruling mediator, to resolve the conflict (Thompson, Ellis & Wildavsky, 1990). An egalitarian prefers not to speak for him or herself, but rather to present information or solutions to resolve problems on behalf of the group (Thompson, Ellis, Wildavsky, 1990). Egalitarians usually will prefer to reach collective decisions based on consensus and are described as aspiring to *The Social Contract* (Lockhart, 1999).

Fatalist

Fatalists are referred to as the "apathetic culture" (Wildavsky, 1987) and are characterized by disengagement with political life (Lockhart, 1999). Aaron Wildavsky (1987) states "there is no point in [fatalists] having preferences on public policy because what they prefer would not, in any event, matter" (page 7). Preferences do not matter for the fatalists because of the high grid association combined with the low group association. They perceive their fate to be out of their hands both because they do not feel a strong association with others ("every man for himself") and because they accept a power structure where decisions are made by those in power, regardless of their own preferences.

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Hierarchical

Hierarchical collectivism is formed from high group and high grid association. Hierarchical collectivism individuals are traditionalists (Dake &Thompson, 1999) who favor a socially constructed ranking order (Lockhart, 1999). Equality is not supported in this belief system, and institutions are necessary to ensure society continues to function properly (Lockhart, 1999). In other words, authority is presumed not only to be legitimate, but necessary to keep social structures intact (Thompson, 1990). The justification for a structured ranking system that can impose restrictions on other individuals is based on the belief that individuals have the ability to specialize in certain aspects of life, which is referred to by Thompson as, "different roles for different people" (Thompson, Ellis, Wildavsky, 1990). The political system of the hierarchical mentality is best portrayed in Plato's *The Republic* (Lockhart, 1999). This means that the individual member of society understands that there are socially imposed restrictions placed on him or her which he or she must abide by (Thompson, 1990).

Individualist

The individualist is best described as Adam Smith's *The Invisible Hand* (Lockhart, 1999). The individualist is a combination of low group and low grid association which makes this classification self-regulating (Lockhart, 1999; Wildavsky, 1987). The lack of ties to a group and the desire to be bound only to oneself drives the members of this way of life to strive to be unique, or different from the majority of the society; individualists do not value centralized authority (Wildavsky, 1987). The individualist way of life accepts competition to be the desired method for reaching

conclusions and uses methods such as bidding and bargaining to achieve goals (Wildavsky, 1987). Though the individualist is not bound to the group, this does not denote that the individualist cannot impose restrictions on other group members (Thompson, Ellis, Wildavsky, 1990).

<div align="center">Use of Cultural Theory</div>

Cultural Theory can be used to understanding different groups. A textbook example of the use of Cultural Theory to measure the culture of a group was performed by Karl Dake and Michael Thompson (1999), in which a survey was conducted of households in a city in the United Kingdom in order to evaluate each household's purchasing patterns. The individual's purchasing patterns were not evaluated; instead the entire household was considered one group (Dake &Thompson, 1999). This means that although there are multiple members within a household, they are all under the same roof, theoretically exposed to and using the same products. Dake and Thompson's (1999) analysis indicated that households exhibited four distinct cultural types (Dake &Thompson, 1999). The same assumption, that the distinct cultural types will be present, is presumed to be true for organizations (Thompson & Wildavsky, 1986). This means that as an organization is formed, the different cultural types that are present could influence the structure of the organization's decision making process[1].

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[1] The work of Mary Douglas and Aaron Wildavsky lead to the application of risk perceptions to Cultural Theory (Kahan, Jenkins-Smith & Braman, 2011). This adapted version of the theory is currently known as Cultural Cognition Theory. There are many benefits associated with applying Culture Cognition Theory to a study; however, the focus of this research is on the group -grid association, not on the group-grid association in accordance to an individual's risks perception and nature myths (Thompson, Grendstad, & Selle, 1999) therefore Cultural Theory is more applicable for this study.

Measuring Cultural Types

Cultural theory has spawned many scholarly debates over the years. Critics have argued that the majority of data provided by individuals do not lead to a statistically significant classification for that individual into a single cultural type (Brenot & Bonnefous, 1996; Marris, Langford & O'Riordan, 1998; Rippl, 2002). In the study by Marris, Langford and O'Riordan (1998), for example, only 32% of the sample could be classified as a single typology, and 6% of the sample had no distinguishable cultural type at all. In an analysis of Drake's Cultural Biases Questionnaire, Rippl (2002) concluded that "Dake's instruments, in their published form, are inadequate measures of cultural theory" (page 154) because the results did not correspond to the assumptions originally presented in cultural theory by Mary Douglas, including expected negative correlations between "hierarchy" and "individualism" as well as "egalitarians" and "fatalists" (Ripple, 2002). Other theorists argue that the cultural types lie on a continuum rather than distinctly bounded (Kahan, 2008).

Still others believe Culture Theory cannot be measured on the level of the individual. In this line of thought, an individual does not retain the same cultural typology throughout life and does not choose to join or seek out organizations and opportunities that align with their cultural typology (Kahan, 2008; Marris, Langford & O'Riordan). Instead, as Boholm (1996) states, the individual is subject to change depending on his or her social surroundings.

Debates over whether cultural types exist at the individual level, and how distinct these are, have not stopped researchers from analyzing cultural types in groups. A

leading study of cultural types in organizations is Gross and Rayner's (1985) book

Measuring Culture: A Paradigm for the Analysis of Social Organization. These authors

take a case study approach emphasizing the importance of operationalizing the evaluation

of group-grid structure. In particular, they argue that a polythetic classification, defined

as "the formation of classes according to a number of characteristics, such that no single

characteristic has to be present in every member of any class" (Gross & Rayner, 1985,

page 58), is central to understanding the group-grid dynamic within a group. In a

practical application of cultural theory, this would mean "(1) Each individual possesses a

large but unspecified proportion of the chosen properties and (2) Each property is more

commonly found among individuals in the class than among individuals outside the class

but in the same domain" (Gross & Rayner, 1985, page 58).

Gross and Rayner (1985), along with other scholars (cites?), highlight several key

indicators appropriate for measuring group and grid levels in an organization. Indicators

of group levels include proximity, transitivity, scope, and impermeability. Proximity is

defined as how close members perceive to be or feel they are related to one another.

Transitivity is a measure of the interactions members have between one another, and if

those interaction are limited by self-imposed restrictions. Scope defines the ranking order

of activities a member participates in compared to the primary focus or base group.

Impermeability evaluates the easy or ability for nonmembers to become members within

the base group.

For measuring grid levels in an organization, Gross and Rayner (1985) suggest

focusing on specialization, asymmetry and accountability. Specialization refers to the

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specified roles or tasks an individual member is to fill or complete. Asymmetry refers to the structure of exchanges or balance of power and authority within the organization. Accountability defines how members are held responsible socially or structurally to their actions within the group.

To measure each of these group variables, as well as the variables indicating grid level, Gross and Rayner (1985), favor the use of a combination of an ethnographic study (including interviews and document analysis) and quantifying observational data.

Linking Cultural Theory to the IAD Framework

The IAD framework focuses on what factors affect collective action among interacting individuals. This framework posits that rules, biophysical world, and community characteristics affect decisions (see Figure 4; Appendix A). Note that attributes of community has been defined by Ostrom and others as culture (Ostrom, Gardner & Walker, 2006). However, most studies using the IAD framework do not focus on this culture box. In addition, the effect of culture on rules has not been examined.

Cultural theory (CT) evaluates the worldviews of the members of society. CT expands on the relationship between group level or how bound the individuals feel they are to one another, along with the grid level, which describes the level of prescriptions the individual feels he or she must abide by (Douglas, 1970; Thompson, Ellis & Wildavsky, 1990). These interactions of the members of society are presumed to affect the manner in which information transfer between members and individual interactions occur (Thompson, Ellis & Wildavsky, 1990). This theory does not explain how world views lead to the creation of rules for an organization. Thus the thesis research examines

the rules portion of the IAD framework, compared to the culture described in Cultural Theory, and how rules interact with cultural world views.

To examine links between cultural theory and the IAD framework, this thesis proceeds as follows. Chapter 2 examines the study's research methods, detailing the use of comparative case studies of four watershed organizations in central Ohio, drawing on interviews, document analysis, and observational data. Chapters 3 through 6 provide the results and discussion of each individual case study, including measures of the four types of rules, four indicators of group level, and three indicators of grid level. Chapter 7 is a cross-case analysis of the four cases to identify patterns of which kinds of rules are correlated with organizational culture. Chapter 8 provides a discussion of the cross-case results along with concluding thoughts.

Research Question and Hypotheses

This research project investigates the cultural typologies of the members of a watershed organization and how those typologies influence the decision rule making processes. The central focus is on how the watershed organization's culture or way of life, as a whole, influences decision rule making and overall structure of decision rule making processes. This focus leads to one main research question:

How does a watershed organization's way of life, or cultural typology, influence the types of decision making rules the organization decides to institute?

Guided by Cultural Theory and the IAD framework, the following hypotheses will be tested:

Hypotheses

1. High group levels will be associated with clear boundary rules to enter into positions from outside the organization, whereas low group levels will be associated with unclear boundary rules to enter into positions from outside the organization.

2. High group levels will be associated with choice rules that prohibit members from speaking for the organization as an individual, whereas low group levels will be associated with choice rules that permit members to speak for the organization as an individual.

3. High grid levels will be associated with clear boundary rules for the members to enter into positions from within the organization, whereas low grid levels will be associated with unclear boundary rules for members to enter into a position from within the organization.

4. High grid levels will be associated with choice rules that prohibit members from acting outside their position, or sharing tasks, whereas low grid levels will be associated with choice rules that permit sharing tasks outside of positions.

5. High grid levels will be associated with formal voting and Robert's Rules of Order for aggregating decisions, whereas low grid levels will be associated with consensus driven decision making aggregation rules.

Chapter 2: Methods

Case study research is recommended for questions that seek to bridge the knowledge gap between theory and practice of processes situated in context, in order to understand the causal mechanisms which drive those processes (George & Bennett, 2005; Yin, 2003). Case studies are advantaged for studying human behavior in real-life settings (McGrath 1981). Furthermore, specific cases can be selected which allows for an in-depth review of designated variables (George & Bennett, 2005). The researcher asks questions designed to address particular variables of interest as they begin broadly and through the data collection process become more narrowly focused. Case studies are frequently criticized for their lack of external validity (Flyvbjerg, 2006); however, a case study is not intended to determine the frequency in which an outcome occurs or predict future outcomes (George & Bennett, 2005). Instead, the focus is on the causes which create those outcomes. Understanding the causal mechanisms at work in a process allow the researcher to make inferences from the cases under investigation to theories about how the world works (Yin 2003).

A case study method is particularly beneficial for this research study because it allows the researcher to evaluate the culture typology of the organization as well and the types of rules organization is using. These are dynamic processes that unfold over time and are intricately connected to their contexts.

Criteria of Organizations

The organizations selected for this research project must be currently active with functioning rules, or bylaws, and consider the following factors; geography and age.

Geography of Organizations

The organizations must be located within the bounds of Ohio because the laws pertaining to surface water and its designated use differ greatly from state to state (Getches, 1984). The riparian rights portion of the United States, for example, is considered to be located geographically east of the Mississippi River (Getches, 1984). In this section of the United States, water is considered to be an overabundant resource therefore the legal system managing the resource in the area operates under the system of "share and share alike" (Getches, 1984). States located geographically west of the Mississippi River do not have the same overabundance of the resource thus the legal system in these states is based on prior appropriation, or "first come first served" (Getches, 1984). The abundance, or lack thereof, of a resource such as water potentially is an influential factor in who joins watershed organization and the culture typology of the organization.

Differing counties, however, are less important because the laws usually are considerably similar to that of the state law, and watersheds span vast areas not abiding by the political jurisdictional boundaries set forth by the local population (Getches, 1984). This means that the watersheds within the central portion of Ohio share many similar geographical characteristics, and the laws surrounding those areas are comparable. A difference between these watersheds, that must be noted, is the number of

people that live in the surrounding area and the demographics of those individuals (United States Census Bureau, 2010). Thus, to minimize potential differences demographically, this study includes four groups with similarities on laws, geography, and demographics because they are all from the same county.

Age of Organization

Ideally, this study would focus on the formation of the organization's rules at the initial founding of the organization in order to evaluate the cultural typology of the organization and the types of rules associated with each typology. The reason for this specific time frame is two-fold. The first is that as an organization progresses through its natural life cycle, the organization is confronted with many different issues that may cause the organization to perform certain structural changes (Barnett, W., & Carroll, 1995; Budros, 1999). These changes can be caused by adopting a new technology (Romanelli & Tushman, 1985), frequent competition with other organizations, change of general processes (Hannan & Freemans, 1984), or external environmental events (Ocasio, 1995). Furthermore, the initial members, the ones that decided how the organization should execute decision rules, may not recall the initial foundation, or reasons as to why those decision rules were made in the beginning.

As more structural changes occur, there is also a potential for the makeup of the organization to alter as well (Barnett, & Carroll, 1995). This means that the original members could leave, or perceptions of why decisions were made in a particular manner could be altered. In an organization, for example, the chair could be given the authority to vote twice. Originally, this rule could have arisen in an organization as a solution to

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having an even number of board members, but as time passed and another member joined (making the number of board members an odd number once again), and the memory of why the chair has the ability to vote twice will be forgotten. As Hannan and Freemans (1984) argue, the change will be prominent in the minds of the members initially after the change but that memory will "gradually diminish" over time.

The second reason young organizations would be ideal for the selection process is that if repeated "surprises" or assumptions in the predicted manner that members of an organization believe the world should work, no longer do, the organizations may shift its culture typology (Thompson, Ellis, & Wildavsky, 1990; Thompson, Grendstad, & Selle, 1999). An organization with an egalitarian cultural typology could realize through numerous failures that a hierarchical system is more functional, or vice versa (Thompson, Ellis, & Wildavsky, 1990; Thompson, Grendstad, & Selle, 1999). This means that the cultural typology of the members, thus the organization, will change. During this change, the structure of the organization potentially will remain the same causing inner turmoil between members to increase, new members to be recruited to the organization replacing the founding members, or the organization could dissolve (Barnett, & Carroll, 1995; Boyne, & Meier, 2009; Budros, 1999; Haveman, 1992). The effects of the repeated surprises in an organization are currently unknown.

Considering time is a potential influencing factor that could lead to culture changes, the amount of time between establishment of the organization and the case study should ideally be minimized as much as possible. In reality, however, it is difficult to locate and study multiple watershed organizations within the same geographical

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boundaries that are currently being established at the same time. For this reason, the bylaws, observed current practices regarding decision making in board meetings, and stated decision making processes in interviews are evaluated to determine the organization's current cultural typology and decision making rules. Using multiple methods of review allow for a triangulation of the data to occur and enhances the accuracy of the data collected. The data do not focus on the initial founding of the organization and the rule making at that point in time, rather the focus is on the current cultural typology and how that corresponds to the current use of rules within the organization.

<center>Organization Selection</center>

A single county within a large metropolitan area was selected for this research project with multiple watersheds crossing the jurisdictional boundaries of the county. Demographically, this area is predominately white (US Census, 2010) and has a mean income, and education level of the average population of the United States (US Census, 2010). Currently, there are twelve active watershed organizations listed in the Ohio Watershed Network of this county. All twelve of these organizations were contacted, three of the organizations declined participation, five did not respond to the research inquiry and four were willing to participate in the study.

<center>Method of Contact for Study</center>

The President, highest ranking officer, or point of contact listed on the organization's website was contacted via phone or email to request participation in this study. Upon agreement, all members currently active in the decision rule making process

within one organization were requested to participate in the study. A minimum of seventy

percent of active decision making members must participate in the study in order for the

organization to be classified as a willing participant. This is because if only one member

participates, it becomes an individual representation rather than a collective

representation of the group. The data from each of the members within the organization

are aggregated to establish a single cultural typology. The data from the members are also

used to evaluate the types of decision rules the organization uses. Please refer to the next

sections for a description of how the cultural typology and decision rules of an

organization are determined.

Unit of analysis

The level of analysis influences the results of the data collected when the level of

data collection and analysis of data do not correspond. In cultural theory, for example, a

researcher could examine a conglomerate of data techs at a local company and determine

between the individuals there are a low perceived grid and a high group relation. Once

the manager arrives, however, the dynamic of the data techs begins to change to a high

grid and high group association. Thus, when the researcher is examining the

"organization" he or she must clarify to what level the organization will be examined to

ensure the data collection process corresponds with the level of analysis. For the purpose

of this project, only the decision makers of an organization will be examined.

Procedural Rules

The data for this project are collected via five strategies, when applicable, to

ensure the accuracy by triangulation. The methods used for data collection include semi-

structured interviews, observation of the decision making process in events (e.g. board meetings), observations of additional organizational activities (e.g. festivals, or clean ups), semi-structured interviews with outside members (e.g. volunteers, or governmental officials that are familiar with organization interactions), and an examination of the organization's bylaws.

Interviews

The interview questions are only provided to the members of the organization that currently take part in the decision rule making process because the focus of this research project is to evaluate the cultural typologies compared to the decision rules. The cultural typology of the individual respondents is compiled and a single value for the group and grid dimensions is designated for that organization. This approach is appropriate since a watershed organization's identity is formed by the compilation of goals and opinions on how to reach those goals by the members within the organization. This means that in order to form an organization, the members, in essence, are choosing to place communal identity over their own individuality. The implication is not that the individual will lose his or her personal identity, but will respect and appreciate the organization's identity and will place that identity, when acting as a member of the organization, above his or her personal identity (Cohen, 2010). In doing so, organizations are able to move forward as one common entity instead of as a series of individuals thinking and acting solely for their own benefit.

The benefit of conducting interviews as opposed to a survey is that the follow-up questions can cater more readily to the response of the interviewee. This adaptive nature

of the interview allows for the factors associated with the decision rule making process to be described without strictly guiding the interviewee into a designated topic, especially considering the factors associated with the decision rule making process are currently unclear. The interviewee, furthermore, can expand and elaborate on processes with the intent to uncover the factors that influence the decision rule making process (Barriball, & While, 1994).

Decision Making Interview Questions

The decision making of the organization is analyzed based on Ostrom's (1990, 2005) classifications of decision making rules which are as follows: position rule, boundary rule, choice rule, aggregation rule, and information rule (Ostrom 1990, 2005). Position, boundary, choice and aggregation rules are functions of the social interaction of constructing a decision rule making process, therefore, they are elaborated on further. This research focuses on the position, boundary, choice, and aggregation rules within an organization because they define the decision rule making processes itself.

Table 1: Elaboration on Rules (Information provided by (Ostrom 1990))

Rule	Definition
Position rule	The slots member fill within an organization
Boundary rule	The qualifications to enter into a particular position
Choice rules	The desired action to produce
Aggregation rule	The manner which the decisions of the many are aggregated into a single decision

Interview questions that address Cultural Theory and rules variables were asked of

each participating member of the organization, as follows:

1. Please describe the process, and how and why the organization determined the following.

Position Rule

1. What are the positions in the organization (e.g. president, member)?
2. Can one individual fill multiple positions in the organization?
3. Are there a set number of positions available for each one (e.g. one president)?

Boundary Rules

1. What are the qualifications of eligibility that must be met to fill each position?
2. Is there a process which determines eligibility for each position? What are the standards for the members to qualify?
3. How does one leave the position?
4. Are certain positions invitational (must be invited), competitive (complete a test or qualification exam), compulsory (required position if you are member) or open call?
5. Can multiple positions be held, if so how does one apply and how are the responsibilities given to that individual?

Succession/Exit

1. What is the succession process?
2. How does one exit the organization? What are the conditions that must be met to leave a position?
3. Are there fixed terms? If so, how can one leave?

Choice Rules

1. What are the actions individuals in each role can and cannot make?
2. Are there specific points of time that actions can be made (e.g. can only vote if a "call to vote" was declared)

Aggregation Rules

1. How many individuals are needed before an action can proceed (e.g. all members of the group, are there certain types of members)? Sometimes organizations will present this in the form of requiring a simple majority, or consensus, or super majority.

Decision Making Process

1. Please describe the process your organization went through in order to determine what decision rule making process should be used by your organization.
2. In the past, is there a point in time in which the organization had to re-evaluate the decision making process? Please elaborate.

Cultural Typology Interview Questions

To measure the group and grid dimensions of Cultural Typology, this research

follows Gross and Rayner (1985), as follows:

Table 2: Group Classifications (from Gross and Rayner (1985))

Measure	Definition
Proximity	Closeness of members
Transitivity	Interactions between members
Scope	Proportion of activities participating
Impermeability	Easy of a nonmember to become a member

Proximity

1. Are you close with the other members of the organization? How close would you say you are compared to your other friends, your family?
2. Is the turnover rate high in the organization?

Transitivity

1. Do you interact with all members in the board? If so, how do you interact with them (e.g. only board meetings or coffee outside of the organization)?
2. Do you only interact with other individuals because you are required to, or your role within the organization requires you to do so?

Scope

1. Are you member of other organizations, or activities, if what role in your life do they play compared to [organization name]?
2. Do you identify as a member of the organization? If so, why?

Impermeability

1. Is it easy to become a board member? What is the process for becoming a new board member?
2. What is the process that you went through in order to become a board member?
3. How often are there new board members?

Table 3: Grid Classification (Information provided by Gross and Rayner (1985))

Measure	Definition
Specialization	Proportion of all possible roles that a member assumes
Asymmetry	Lack of symmetry in role exchange
Accountability	Responsibility for completing tasks

Specialization

1. What are your roles in the organization?
2. Can anyone else perform those roles? If not, would the organization still be able to function?

Asymmetry

1. Do you feel that there is a disproportionate amount of power or authority to one or more members of the organization? If so, why?
2. Do you feel certain members do not provide much use to the organization?

Accountability

1. What happens if you are unable to finish a task you set forth to do?
2. Are there "punishments" or "rewards" in the organization?

Observations of Decision Making Process

Decision Rule Making

Rules-in-practice (de facto) and written rules (de jure) can differ in practice

(Ostrom 1990, 2005). Though rules are written, and in some instances legally binding,

individuals choose whether or not to abide by those rules. For this reason, at least one

board meeting, or meeting of decision makers, must be attended in order to accurately

record the procedures the members adhere to. The focus of the observations at this time

centers on the decision rule making procedures in which the organization participates.

Position Rule

1. What are the distinct positions each individual holds (e.g., active voting participant or observer without voting rights)?
2. Are there multiple individuals performing the same or similar functions?

Boundary

1. If a new project is discussed in the meeting, who is qualified to complete those tasks?
2. What is the process of assigning tasks (e.g. invitational, competitive, invitational (must be invited), competitive (complete a test or qualification exam), compulsory (required position if you are member) or open call?

Choice Rules

1. What are the actions individuals in each role can and cannot make?
2. Are there specific points of time that actions can be made (e.g., can only vote if a "call to vote" was declared)?

Aggregation Rules

1. How many individuals are needed before an action can proceed (e.g. all members of the group, are there certain types of members)? Sometimes organizations will present this in the form of requiring a simple majority, or consensus, or super majority.

An example of a practical application of the observations would be as follows:

At the board meeting, the members are provided with a copy of the agenda. Each member goes through his or her topic listed on the agenda and is the most knowledgeable board member on the event or topic he or she discusses (example of position rule). During the discussion of a topic on the agenda, one member begins to talk about a different topic. The President, and only the President (position rule) states that the member cannot talk about the topic at that moment but can wait until all other business is finished first (choice rule).

Cultural Typology

The interaction between individuals in the organization during meetings is a model representation of how the members function social as a single entity, or single cultural typology, to create the single until of an organization. The social interactions, and responses, are silent indicators of how members feel about each other socially. A member, for example, could be considered on the written rules to be equal to another member, however, in practice, that individual's opinion could be ignored. The following cultural indicators were the focus of the observations in the meetings.

Proximity and Transitivity

In a small group (the number board members in watershed organizations in this geographical area are typically range between three to eight members), it is difficult to avoid or limit contact with other board members, which makes it difficult to evaluate proximity and transitivity. When Gross and Rayner (1985) initially established these measures, they choose larger groups of individuals. Observation in this area focused on before meeting and after meeting discussions and interactions. If members interacted and discussed personal, non-organizationally based information they are considered to have a higher level of transitivity than those that do not. Seating arrangements, eye contact and who directs what conversation to who were also monitored to measure proximity. Transitivity, or the connectedness of the members, is not a concern for this study because all members in such small groups are aware of each other.

Scope

To evaluate the scope of the organization, social identification markers were be monitored. Social identification is defined by Ashforth and Mael (1989) as "the perception of oneness with or belongingness to some human aggregate" (page 2). In other words, an individual will identify with multiple categories at any point in time (e.g. I am a mother, sister, volunteer, and teacher) (Turner, 1987). Individuals that frequently used social identification markers, such as using the pronoun "we" instead of "I" (e.g. "We should volunteer at the booth", or "We need to put that on the website"), especially when discussing an individual task, were recorded as having a high level of scope.

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Specialization and Asymmetry

Specialization and asymmetry are very similar in that they are dependent on understanding the roles and functions of the members, but they should not be confused. Each member may have a skill set therefore a designated role in the organization. Member A, for example, manages the social media on the website while member B records the minutes of the meetings and member C manages the nonprofit and taxes (specializations). Members cannot perform each other's tasks because they lack the skill set to do so. During Earth Day, member A may have to work more than any other member in the organization at that time, and on April 15th, member C may have more work than any other member, overall however, member B consistently has more work to do than any other member (asymmetrical). Specializations were noted by the roles of the individuals and asymmetry was recorded by domination of the conversation.

Accountability

Observations focused on stated goals of the organization, in particular unmet goals. The responses of the board members were recorded and ranked based on importance of the task to the organization. A board member that was supposed to email a watershed coordinator and has yet to complete said task as promised to the organization, for example, was ranked lower than a board member that forgets to bring the honeysuckle remover to clean up for Earth Day. Rewards and punishments associated with each action were also recorded.

Observation of Organizational Activities

The structure and format of observing organizational activities were recorded in the same format as recorded in the stated in the "Observations of Decision Making Process" section. Considering fewer decisions were made during this time, however, a stronger emphasis is placed on the Cultural Typology analysis.

Semi-structured Interviews with Outside Members or Authorities

Outside members include general members of the organization (with or without voting rights), volunteers (with or without being considered an active member of the organization), or the general public (e.g., individuals that choose to stop by the table at a fair). Interviews with outside members primarily focused on the interviewees' perception of the organizations cultural typology. The focus of these questions was on the perceived "Proximity and Transitivity", or how the members of the board interact with the "outside" members of the organization.

Authorities are individuals with an academic or professional understanding of the organization's structure and/or decision making process. These individuals may not currently participate in the organization, but at least must have an awareness of the structure and interactions of the organizational members.

Examination of Bylaws

The examination of the bylaws was completed by evaluating the structure of each rule as a position, boundary, choice, and aggregation (Please refer to the section "Decision Making Interview Questions" for additional details). The bylaws are useful for understanding the written structure in place by the founding members of the organization;

however, one must note there is a difference between written rules and rules in use (please refer to the section "Rules for Organizational Decision Making" for further details). For the purpose of this study, a stronger emphasis will be placed on rules in use compared to the written rules, or bylaws.

Coding Variables

A case study provides an analysis of a real life scenario as events are currently unfolding. A case study methodological approach, though beneficial for examining real-world events, is not conducive to replication. For this reason, when measuring variables, a researcher must ensure validly and reliability in the data collection process. In qualitative data collection, the researcher must develop a codebook to ensure consistency with the data collection and to ensure the reliability and validity of the data collection (DeCuir-Gunby, Marshall & McCulloch, 2011; Miles & Hueberman, 1994).

The codebook developed for this study follows the outline created by DeCuir-Gunby, Marshall, and McCulloch (2011). In this format, there are three requirements; (1) code name, (2) definition and (3) an example. Miles and Hueberman (1994) define codes as the labels that are placed on descriptive data in order to give meaning to the unit of measurement. In this study, the term High or Low was used as a code for each variable as an absolute measure, not a relative measure. In doing so, the codes can be applied to other cases or compared to similar studies that collect comparable data. The definitions were applied from the theory as well as definitions provided by the research of Rayner and Gross (1985). Each example listed is below is an example from the data collected in the study.

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Variable 1: Scope

Code: High/Low

Definition: Scope describes the amount of time that an individual within an organization feels he or she is participating compared to all the organizations or activities in which he or she is participating.

Example: In an interview, when an individual is asked to describe the amount of time he or she dedicates to the organization the statements are evaluated as High/Low. The following are examples of High/Low statements.

High: "there isn't enough time to do both [organizations]" so I'm no longer an active member (of the other organization)" (Organization 1, Interview 5).

    (*Note: a preference is placed on one organization over another*)

Low: "3% of time" (Organization 4, Interview 6)

    (*Note: this indicates that 97% of the individual's time is spent with other organizations*)

Variable 2: Impermeability

Code: High/Low

Definition: The ability for nonmembers to enter into member status with the organization not based on qualifications.

Example: Observations at outside organizational events show the interactions between potential future members and Board members of the organization. An organization that

actively seeks out new members at events is considered High. Organizations that do not do not actively seek out new members are considered Low.

High: "[Organization B] doesn't want to exclude anyone, especially in regards to membership" (Organization 2, Interview 2).

Low: Board Members of Organization C place a sign in sheet for volunteers attending events, but do not always email them back or encourage them to become members.

Variable 3: Proximity

Code: High/Low

Definition: The feeling of closeness that the members of the organization feel towards one another.

Example: In the time period before a Board meeting begins, the Board members will have a brief discussion with each other. If the conversation is personal in nature (e.g. health issues or vacations), the organization is classified as High. If the conversation is strictly organizationally based, or individuals do not know personal details, the organization is classified as Low.

High: "I live through your vacations" (Organization 3, Board Meeting 1)

(*Note: Direct quotes about personal health are not recorded in this study in order to protect the privacy of the individuals the information pertains*)

Low: "one board member that gets under my skin" (Organization 2, Interview 4)

Variable 4: Transitivity

Code: High/Low

Definition: The willingness of Board members to be in contact with each other, and a general awareness of each other.

Example: In settings outside the organization, if Board members are willing to converse with one another, and know all the other Board members in a setting outside of a Board meeting, the organization is classified as High. If the Board members are not aware of each other outside of Board meetings, or do not have a willingness to converse with one another the organization is classified as Low.

High: The following comment was made at an outside event; "it was good to spend some time with Member Y and to get to know her" (Organization 1, Interview 3)

Low: "There is no way to distinguish (Board members), I don't even know all past board members and [wouldn't want to] to invite them back... not everyone shows up" (Organization 3, Interview 1)

Variable 5: Specialization

Code: High/Low

Definition: Acting within a specified role, or completing specific tasks that no other individual within the organization can complete or feels confident enough to complete.

Example: In interviews, if individuals mention there is a single project, or that all of the members work together to complete a task, the organization is classified as Low. If the

individuals mention that there are certain individuals who perform designated roles, the organization is classified as High.

High: "the longer members would step down if they could… they know that if they don't do it the organization wouldn't exist" (Organization 2, Interview 3)

Low: "usually there is one big project and they are all a part of it" (Organization 1, Interview 3).

Variable 6: Asymmetry

Code: High/Low

Definition: The amount of perceived importance or weight of work an individual feels is placed on each member.

Example: Organizations with individuals that feel certain members of the organization have more power or authority regardless of their position will be classified as High. Organizations with individuals that do not feel other members have more power or authority will be classified as Low.

High: "certain board members do more work" (Organization 3, Interview 3) or "I am learning from the master" (Organization 3, Board Meeting 1)

Low: The work load is reported as "feels equal and distributed" (Organization 1, Interview 3) or the organization is described as having a "horizontal power structure" (Organization 4, Additional Interview 2)

Variable 7: Accountability

Code: High/Low

Definition: The structural or social pressures an individual is perceived to experience if he or she does not complete a task he or she stated would be completed.

Example: Organizations with individuals who feel there is a level of social or structural pressure in an organization is classified as High. Organizations that do not have requirements for tasks to be completed are Low.

High: In a statement describing the pressures felt for competing tasks, and rational for leaving the organization because of the discomfort that pressure caused, an interview stated "you shouldn't' do things out of guilt and you can't keep doing things no one else wants to" (Organization 2, Interview 3)

Low: Statements describing tasks as there is "no you have to do this" (Organization 4, Interview 6)

Data Analysis

Once all interviews, observations and evaluation of bylaws were completed, the data was analyzed one variable at a time. The results were compiled into a single list, compared, and reviewed for content. Each variable was then coded as High or Low. Interviews were then conducted with three professionals in their fields who interacted with the organizations in the past or currently. These individuals were asked the same questions as the organizations to compare if their observations and interactions with the organizations were similar to how they were coded.

Chapter 3: Case One

Organization A was established in 1996 by a single, charismatic biologist, to address the growing environmental concern of protecting the ravines and water quality in the local area. The founding individual received a grant to produce an educational newsletter quarterly which was oriented on educating the public on the topic of ravines and the benefits they provide to the environment. The founder decided to recruit a select few community members who collaborated on and developed the first newsletter. The grant funded the newsletter to be published quarterly for the first year, but once the grant was spent, the number of times the newsletter was distributed decrease to twice a year. The focus of the newsletter remains the same, emphasizing the social, political, historical and biological importance of the ravines for the local community and environment, especially with regards to watersheds.

The founding individual, though highly influential in the creation of the organization, was unable to continue the organization for personal reasons. Without the founder's charm that lured the community members to the organization, there was a shared feeling of uncertainty from the community about the ability for the organization to survive. The founder, however, managed to "pass the rolodex on" (Organization A, Interview 1) to a selected member of the organization, entrusting that member to continue onward "holding the torch" (Organization A, Interview 1) and finding other supporting

members. To this day, that member remains an active member of Organization A and is the source of historical information about the organization for the current members.

The mission of Organization A, similarly to the newsletter, remained the same over the years and is listed on the organization's webpage as, "to educate and involve the community in the…area in conservation efforts to restore and preserve these natural areas". In conjunction with the newsletter additional activities, which have changed over the years, are supported by the organization such as an annual plant walk, art contest, and community forum. Advertisements are forbidden, by the members, to be placed in the newsletter, or website, to prevent the organization from appearing to show support to certain companies or for the funding to influence the decisions of the organization's members. For this reason, funding is earned through fundraisers, membership dues and grants.

The Board of Trustees of Organization A is comprised of six individuals. The roles of the members are as follows; Chair of the Board, Vice-Chair of the Board, Executive Operations Director, Secretary, Treasurer and Members at Large. Currently, Organization A is not classified as a 504 C3 for tax purposes, but instead operates as a nonprofit organization under an umbrella organization. Organization A is unsatisfied with this arrangement because there is a fee associated with using the nonprofit status under the umbrella organization. Furthermore, a number of fundraising opportunities have been hindered by this status because the donations go directly to the umbrella organization and weary potential financers refuse to donate to an unknown organization. For this reason, Organization A decided to restructure itself and become a 504C3 nonprofit organization

by the end of the year (2014). In order to do so, the members of Organization A must file the necessary paperwork which includes written bylaws. Though Organization A has been functions for numerous years and cannot be classified as a "new" organization per se, reaffirming the bylaws makes the organization reevaluate the decision making rules.

Position Rules

There are six roles, according to the bylaws, which the board members of Organization A can fill as follows; Chair of the Board, Vice-Chair of the Board, Executive Operations Director, Recording Secretary, Recording Treasurer and Members at Large. In the interviews five of the six board members identified the following roles; Chair of the Board, Vice-Chair of the Board, Secretary and Treasurer. The only interview that distinguished all roles with difficultly, and confirmation from reviewing the website, was the same board member that redesigned the website and listed the roles (Organization A, Interview 5). In doing so, she used the same titles that were listed on the webpage previously, not knowing the function of "Executive Operations Director" or how to classify herself within the organization (Organization A, Interview 5). This indicates that even though there are specified roles, and a limited number of each roles (one individual per position, with the exception of "Board Member at Large"), in practice, the title and function of the role has little practical importance.

Table 4 (see Table 4 in Appendix B) displays the positions available within Organization A and the number of board members that can fill each position.

Boundary Rules

Boundary rules describe the qualifications required to be eligible for a given position. The qualifications an individual must possess to enter into particular positions have changed greatly over time. Initially, for example, at the founding of the organization, a single individual was chosen at the discretion on the founder to assume the leadership role of the organization (Organization A, Interview1). An organization with this form of structure is invitational, or one must be invited in order to participate. In the past year, two new individuals were added to the Board of Trustees, and each was accepted by differing methods.

The first, identified as Member 1, sought out the members of the organization after reading the organization's newsletter and desiring to develop more contacts in the local community in the hope of acquiring a job. Member 1 attended board meetings, and offered to do tasks for the organization. After a few of months, Member 1 was asked in person by the Executive Operations Director to write an essay, if she wanted to become a board member, describing why she wanted to become an active member in Organization A and submit it to the Executive Operations Director (Organization 1, Interview 4). During the next board meeting, Member 1 recalls an "interview" being conducted by the current board members (Organization 1, Interview 4). Next, a vote was held by the Board of Trustees, and Member 1 was unanimously accepted as a board member with the title "Member at Large". Member 1 was then assigned the task of writing an essay for the newsletter about local artifacts found in a ravine (Organization 1, Interview 4). This format of accepting a board member is competitive because the written essay and the

interview must be performed successfully by the candidate, which is a form of a qualifying exam, prior to a vote to occur.

The second member in the past year, Member 2, also sought out the organization through the reading of the newsletter and responding to an advertisement of "how to get involved" listed in the newsletter. Member 2 immediately began to write and submit articles for the newsletter. She attended a couple board meetings without the intention of becoming a board member, but was asked if she was interested in become a board member within the first two or three meetings. As Member 2 stated, "it all happened so fast" (Organization A, Interview 5). There was a unanimous vote when a majority vote was necessary by the bylaws for the vote to pass. To Member 2 the vote seemed to be more of a discussion of agreement, and no qualifying exam was necessary, most likely because she wrote and submitted articles for the newsletter at the same time she attended board meetings. Member 2, similarly to Member 1, is now listed with the title "Member at Large" board member within the organization. This format of accepting a board member is open call because Member 2 sought out the organization herself, was not required to complete a qualifying exam, and was only questioned if she wanted to be a board member to ensure she wanted the position rather than inviting her into the position.

The seemingly lack of consistency in choosing members within the past year, especially with members that fill the same listed position, initially indicates that Organization A does not have a clearly defined set of boundary rules when filling select position.. This does not mean, however, that there are no standards, or set list of qualifications, that each member must meet prior to becoming a board member. The

standard that is emphasized with each of the cases of inducting new board members, which indicates clear boundary rules, is evidence that the individual can write a coherent story, perhaps due to the central focus of the organization; the newsletter.

In the past, when positions on the board needed to be filled, potential members with the desire to join the board were not offered a position. As described, one potential member was "a just no" (Organization 1, Interview 1) and the other "was a puff of dust in a whirlwind" (Organization 1, Interview 1). Each were later described in the interview as "very capable" individuals, but were not wanted on the board of Organization A (Organization 1, Interview 1). Furthermore, although few members of the board recall, one member, Member X, of the organization was removed from the Board of Trustees. Member X did not appreciate that the meetings took place at the same time as a fitness class and became frustrated with the other board members. Member X was described as a "stand alone" individual who would "come to the meeting but be unhappy" (Organization 1, Interview 1). In the end, the Board of Trustees unanimously decided, via email and personal conversations, to remove Member X from the organization. In order to formally remove Member X, the board wrote and sent a certified letter to Member X stating that at the next board meeting a vote would be called, and that there was an expected unanimous vote for the removal of Member X from the Board of Trustees.

In addition to boundary rules for outsiders desiring to join positions on the Board, there may be boundary rules for current Board members wishing to switch positions. In such cases, within the organization, the boundary rules for each position are unclear. In a volunteer organization, the qualifications for entering different positions is less important,

and typically defaults to whomever is willing to assume the role for the allotted time frame. In Organization A, most members have circulated through the various roles, and no single board member was known to be excluded from a role that they desired. As described in an interview, "all members are equal" (Organization 1, Interview 5). Though there is an understanding that certain board members are more skilled or knowledgeable on particular topics, all board members are considered equally skilled or capable of filling each role. This lack of specificity for individuals to fill each board member role indicates that there unclear boundary rules within the organization.

The combination of scenarios indicates that Organization A does not have clearly defined written boundary rules within the organization itself for each position, but there are certain unwritten boundary rules which the organization abides by when inducting new members into the organization. The first is that the members of the board must prove to be capable of coherently writing a story, and the second is that the personality of the potential board member must be acceptable as defined by the organization (see Table 5 in Appendix B for additional details).

Choice Rules

Choice rules describe what actions individuals are permitted to, required to, or prohibited from taking (Ostrom, 2005). The choice rules that each member must follow are described in the bylaws under "duties". In practice, or rules-in-use, however, these duties are not strictly defined to one position. Choice rules, in Organization A, are instead practiced from a common understanding of what is expected of each other (Organization 1, Interview 5). The primary action that is expected of the individuals is to act on behalf

of the organization as a whole rather than an individual. In other words, "there is no need to reinvent the wheel" by going it alone (Organization1, Interview 5). This means that an individual would not act alone, for the organization, without approval of the organization first therefore any action taken must be for the organization as a whole, not the individual. The following scenario elaborates on the application and practice of such choice rules (see Table 7 in Appendix B for further detail).

During the end of July and the beginning of August, a restaurant began to develop a site without informing the public. The developer of the site was operating under all the necessary requirements of the city and obtained the required permits. The developer was not required by the city to inform the public of the actions taken on the land and in the process of developing the land, damaged a ravine. Organization A prides itself on preserving ravines because they protect the quality of the water that enters the watershed by natural means such as trees which provide additional environmental benefits to the land and water.

A member of the public documented the process with photographs and posted them on the internet. The board member in charge of social media for Organization A, identified as Member 1, encountered the photos and asked the photographer if she would be able to use the photographs on Organization A's blog. Member 1, according to the bylaws, and as described during board meetings, has the authority to maintain the social media of the organization thus can add or remove content from the website at her own discretion. As Member 1 recalled, however, "as soon as I emailed her (the photographer), I emailed the group to ask to put the pictures on the blog… I knew it would be okay, but I

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had to email them anyway" (Organization 1, Interview 5). Once Member 1 received permission to use the photographs on the blog, and permission from the board members of Organization A to post the photographs on the blog, Member 1 posted the photographs and wrote a summary of the event on the organization's webpage. Member 1 described the reason why she confirmed with Organization A prior to posting the information of the website as desire not to "go off mission", meaning she did not want to diverge from the mission of the organization. This decision indicates that rules describing what a board member is allowed to say publically are not written in the bylaws but there are unwritten choice rules which each member feels he or she must abide by that personally limit the actions of the individual board members.

The public quickly learned of the event, and the local news station requested an interview with a member of the organization. Member 1 did not feel comfortable representing the entire organization on the local news station. Member 2 volunteered and was trusted to represent the organization because she is knowledgeable on the topic and was willing to speak publically about the situation (Organization 1, Interview 3). Prior to the interview with the local news station, Member 2 submitted a general summary of what would be said at the interview to the board members to confirm it was acceptable by the board members, and Member 2's email was approved by the members of the board. Member 2 stated the reasons for her action of submitting a summary statement to the organization prior to the newscast interview as, "a desire is to speak as a unified voice, even if you are just one member" (Organization 1, Interview 5).

The first quote shown in Table 6 (see Table 6 in Appendix B) is a general summary of the benefits ravines provide in the environment. The email quote is significantly longer and more detailed compared to the newscast clip. This most likely occurred due to the editing of the news agency because lengthy summaries are typically compressed into sound bites, and in a conversational style interview, as conducted by the news agency, an individual usually will speak more fluidly. The second quote, in the email as well as the newscast, simply clarifies that there are limited ways to protect the environment. In the email quote, there is special note on ravines, which is not present in the newscast, but each of these quotes focus on the lack of "protection" for environmental spaces. The third email quote is referring to a new program at the Department of Public Utilities and the permits that are required for development. In the past, an area that was once piped does not require public notice prior to development of the area, hence the explanation of the area being "piped at one point" on the newscast. The new program developed by the Department of Public Utilities, as mentioned in the email, emphasizes the importance of green spaces for stormwater not solely pipes. Although there are minor differences between the newscast and email summary, the content remained the same, illustrating that Member 2 in speaking to the reporter carefully followed the content approved by the group via email.

In the board meetings, the actions, or choice rules, of the individual board members are also limited. In each meeting, a printed agenda is distributed to each member present. The Chair of the Board then goes down the list of topics on the agenda, in the order they are present on the agenda, and the necessary members are asked by the

Chair to update the board on said topic. If for some reason, another topic is addressed during this time, the Chair of the Board acknowledges the topic and says "we will talk about that in other events" (Organization 1, Board Meeting 2), which is at the end of the meeting after all other listed topic have been addressed. Members typically do not diverge from the topic issue, and if they do, they are "quickly guided back to topic" (Organization 1, Interview 5).

The limitation of available actions a board member can make, or choices rules, present in board meetings starkly contrasts the vast array and unclear choice rules present within each position. The position role of the Chair of the Board, for example, has distinct responsibilities described within the bylaws and are followed more closely compared to the other positions on the board. In one board meeting, there was a desire to send out a formal letter to the Department of Public Utilities stating what the organization appreciated about the current administration. During this time, many questions arose about who was responsible for completing which task. The board members were unsure as to who would be responsible for delivering the letter, and more importantly who was responsible for signing the letter on the behalf of the organization. One member declared, "you have to sign it" (Organization 1, Board Meeting 2). The board member that the statement was directed to looked puzzled and asked why. It was clarified that the board member was the listed Recording Secretary of the organization, thus her signature was required. This indicates that even in a formal setting the choices pertaining to different positions are not always recognized by individuals who hold them and the choice rules

associated with each position are unclear. In fact one interviewee said, "there are no real job descriptions" (Organization 1, Interview 2).

Aggregation Rule

Aggregation rules refer to the manner in which the decisions of multiple individuals are combined into a single decision. In some organizations, for example, each member is giving a single vote and the majority of votes on the decision cause the decision to pass. In other organizations, a single individual determines the decision without the input of the other members.

Organization A is based on a consensus from of decision making process. In this form of decision making, a vote is rarely taken; instead the emphasis is placed on discussion until a mutual decision is agreed upon. The decisions, for example, that were made in each board meeting from determining who should be where at a booth for the organization at a festival to whether tree canopies should be supported in the local community were all discussed rather than voted on to determine a decision. In each meeting, no vote was taken. In interviews, there is mention of votes, but the interviewees must think about this and resort to statements such as "there are no Robert's Rules, it's more same minds" (Organization 1, Interview 1) and "consensus is the main unspoken goal" (Organization 1, Interview 4). This emphasizes the belief of consensus as an effective form of decision making (see Table 8 in Appendix B).

Group Association

Proximity

Proximity, as defined by Gross and Rayner (1985), is the feeling of closeness the members feel towards each other. Though the members do not meet outside of the board meeting, aside from organizational functions, each member reported frequent contact with the other members via emails between the meeting times. Furthermore, the extended families of the members of the organization are known, and able to be contacted. In one board meeting, for example, a poster banner was needed from a board member's house, but she was currently out of the country with limited ability to be contacted. One of the board members volunteered to contact the granddaughter of the board member because she knew she was currently housesitting.

In the board meetings, prior to discussion of the organization, there is typically a general discussion of personal events. The events occurring in the members' lives are discussed, including the personal health information about their spouses. The level of personal detail that is shared indicates a mutual trust and respect between the members that extends beyond a simple professional relationship. Furthermore, in two separate interviews, the members discussed staffing a booth at a festival together and how they enjoyed conversing with each other because one member was new to the organization. The older member stated, "it was good to spend some time with Member Y and to get to know her" (Organization 1, Interview 3). This indicates that there is a desire not only to work together, but to know each other. This unity is also reflected in the low turnover rate

within the organization. Although new members have been added over the years, a board member is frequently with the organization for years (Organization 1, Interview 1).

Overall, Organization A appears to have a high level of proximity because the board members are in frequent contact with multiple members of their families, discuss personal information, desire to know each other and the organization has a relatively low turnover rate of board members.

Transitivity

Transitivity, as defined by Gross and Rayner (1985), is the contact members have between each other. For example, if Member A talks to Member B, and Member B talks to Member C, what is the chance that Member A will talk to Member C? When evaluating watershed organizations with approximately four to nine board members, the probability that each member will discuss situations and topics with each other is high thus transitivity is measured by member interactions at board meeting as well as by outside organization interviews and observations made during organizational functions outside of board meetings.

As stated previously, the board members frequently discuss personal information, including health information, with one another prior to the board meeting. During the board meetings, jokes are occasionally made throughout the meeting allowing the board members not only to remain on task, but to also enjoy the company of one another. At no point in time, in the board meeting, or personal interviews, was frustration voiced about other board members. Furthermore, in organizational activities, the members seemed primarily interested in interacting with one another.

Organization A, for example, decided to set up a booth at a local community gathering. The booth showed photographs of activities the organization was involved in, past events sponsored by Organization A and the future events the organization would host within the local community. The members of the organization divided up the time each had available to staff the booth during the board meeting, and on the day of the event, the two members closing the booth decided to leave about two hours before the event ended. In the interviews, one board member stated, "it was good spend some time with Member Y and to get to know her" (Organization 1, Interview 3). Member Y, as identified above, stated in her interview "I didn't really know Member X very well and [the event] gave me time to talk to her" (Organization 1, Member 5). The event, which ended early, combined with the interviews that emphasized the interaction between the board members rather than discussing how many new recruits, or interested community members they conversed with during the event, emphasizes the importance of the board members to interact with each other and prioritize relationship building with one another over the general public.

Overall, Organization A has a high level of transitivity. The board members choose to interact with one another on a personal level, joke during meetings and do not voice frustration with each other. Furthermore, the events and activities of the organization focus on the enhancing opportunities of members to interact with one another.

Scope

Scope refers to how the individuals feel in relation to the organization he or she is participating in compared to other activities in his or her life. In the case of Organization A, all members seem to be involved in other organizations or activities ranging from different environmental groups, to hobby organizations such as reading or writing groups, or church and family groups. The majority of activities seem to be focused around environmental topics, but they do range to personal hobbies and family activities as well.

In each board meeting, the individual board members state their opinions and discuss the topics with which they are familiar from other organizations in which they participate. One member, for example, participates in a city funded environmental organization and has strong occupational connections to the local university. For this reason, when the board began talking about tree canopies and the benefit they provide to the local ravines, she was able to apply her knowledge about the city and university projects (Organization 1, Board Meeting 2). This indicates that the members are actively participating in other organizations, and they bring that knowledge or information back to Organization A.

Although the members participate in other organizations, they do not appear to be the primary focus of the board members, or the organization of personal preference. One member, for example, stated in an interview that she was a member of three organizations, however, once she became a board member she "no longer go[es] to" (Organization 1, Interview 5) the meetings, and feels she is "no longer an active member" (Organization 1, Interview 5) of the other organization. In the interview, she clarified her

rational for said decision as "there isn't enough time to do both [organizations]" (Organization 1, Interview 5), which indicates that she had to choose one organization over another in which to actively participate which, and she preferred Organization A.

Each member, in interviews, indicated a significant portion of their time was dedicated to producing each issue of the newsletter. Other activities outside the organization are placed on hold, or completed at a later time to ensure that a "wanted photo" (Organization 1, Interview 2) is located and the newsletter is produced. This means that the time distribution of the board members is centrally focused on meeting the needs of the organization. Furthermore, each board member identifies as being a member of Organization A, usually with a smile.

Overall, Organization A has a narrow range of scope because the majority of the free time of the members is dedicated to the organization. Although board members indicate that they participate in other activities or organizations, the focus, or primary activity, is Organization A.

Impermeability

Impermeability is defined by Rayner and Gross (1985) as "the likelihood that a nonmember who satisfies the categorical requirements for membership and wants to join will actually attain membership" (page 78). In an organization that evaluates personality as a qualifier in determining acceptance on the board, accurately estimating the number of individuals who want to join and their ability to satisfy the necessary personality requirements is unobtainable thus this measurement is not used in the study.

The board members do not meet with one another outside of organizational functions, however, during those organizational functions, they interact with one another. In the annual plant walk, for example, the board members host the event for all general members of Organization A as well as the general public. A guide, who is informed on the topic of wildflowers in the area, volunteers for the event and leads the group through the desired location. During this time, the four board members that attended stayed together throughout the walk and rarely socialized with the general members who attended. At one point, the guide had difficulty identifying a local flower and asked the crowd if anyone had a plant identification book on hand. One of the board members of Organization A did have a plant identification book on hand, but all four board members were engrossed in identifying a different plant and did not hear the guide. This indicates there is a high level of interaction between each board member, but a low level on interaction with others.

<p style="text-align:center">Summary of Group Relationship</p>

Organization A has a strong group relationship. This indicates that the group feels bound to one another and that the collective is more important than the individual. The high group relation is indicated in the high level of proximity and transitivity combined with the narrow scope of other activities that receive the focus of the individual members as is shown in Table 9 (see Table 9 in Appendix B).

Grid Relationship

Specialization

Specialization refers to the ability to have a specified role or activity to complete. In the bylaws for Organization A, for example, the Executive Operations Director is responsible for "Overseeing all phases of the production of *Newsletter*" and "Developing a strategy for dealing with yearly agenda and… projects with the City and the community or assign these duties accordingly" while the Chair of the Board is responsible for "Presiding over all meetings of the organization or appointing another party to preside over meetings" and "Serving as an ad hoc member of committees". The Executive Operations Director, according to the bylaws, does not perform the same tasks as the Chair of the Board, because the Executive Operations Director specializes in certain activities. Specialization closely relates to choice rules in what an individual can or cannot compete within a position.

In each interview, each board member states "yes [the organization] is stratified" (Organization1, Interview 3). Upon further review, however, each interviewee reveals that the "stratification" of board members does not correspond with the designated roles each play within the organization. Instead it is a function of the unique personal characteristics of the individual board member (see Table 10 in Appendix B).

An environmental organization with a "planner", "naturalist", "facilitator", "creative writer", "volunteer" and "researcher" would be quite functional, however, each of those supposed roles are not necessary for the functionality of the organization as they are descriptions of individuals not specified organizational roles. Examples of specified

organizational roles would be "bookkeeper" or "treasurer," not "fresh blood" and "naturalist". The focus of Organization A seems to be to use the unique personality of each board member and allow that personality to create the role of the board member rather than following pre-defined roles.

The lack of clearly defined specializations for the organization is also evident during board meetings and events hosted by the organization. There are events, and preferred tasks, which each board member chooses to participate in over other events. The Art Contest, for example, is called "Member X's baby" (Organization 1, Interview 2). Though one board member enjoys organizing the Art Contest, and pushes to continually do the same project annually, the original grant to fund the contest was found by a different board member, and during the contest all of the board members assist in the organizing of the event. As clarified in an interview, the roles of the board members of the organization are "overlapping but not duplicated" (Organization 1, Interview 3). This indicates that certain board members personally enjoy participating in and becoming involved with certain events or actions, such as organizing the Art Contest, but all of the members work together as a whole without specializations.

The differing positions described in the bylaws require individual board members to perform specific actions, or choice rules, which can lead to the specialization of a position within an organization. In Organization A, however, as is recognized by a board member in an interview "there are certain jobs with more work, like taking the minutes, and the members pull together to help her get them done" (Organization A, Interview 4). This indicates that even in a specified position, the members work together as a whole

instead of with specializations. Furthermore, in each interview, there was an overall discussion of the assistance provided when certain board members are in need. The active Treasurer, for example, recently injured her leg and was unable to attend certain meetings and preform the necessary functions at times, so the other members assisted in the process of preforming said tasks (Organization A, Interview 2). This shows that although there cannot be a functioning Chair of the Board, and Vice Chair of the Board performing the same tasks at the same time in a board meeting, the positions of each member are versatile when necessary and the choice rules performed are not necessarily black and white for each member or for each role as "there are no real job descriptions" (Organization 1, Interview 2).

The lack of specified roles for members, and a focus on personality, indicates there is a low level of specializations in Organization A. Furthermore, all board members participate on the same main activities of the organization to achieve one common goal, which is an indication of a lack of specialization.

Asymmetry

Asymmetry refers to the amount of perceived importance or weight of work an individual feels is placed on each member. In a furniture store, for example, two sales associates could have the same job title, but one sales associate chooses to stand at the front of the store to lure customers in to purchase products while the other stays in the backroom and does not converse with the customers. If a quota must be met by the sales department, and the quota is determined as an average of all sales, not by individual

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employee, the more active employee in the front of the store will feel like more work is placed on him or her. This is an asymmetrical relationship.

In Organization A, the activities of the board members are equally distributed. Certain roles, such as Secretary, can incur more duties or tasks on a single member, at certain points in time, such as summarizing the meeting notes and distributing them prior to a meeting. Other board members, as indicated in the interviews, know that these certain tasks can take more time or energy on specific board members so they "offer to help the Secretary" (Organization 1, Interview 4) or board member in need. In general, the work load is reported as "feels equal and distributed" (Organization 1, Interview 3) thus the workload is not asymmetrical.

In the board meetings, the tasks are divided by who chooses to volunteer for a task rather than by assignment. In staffing the booth at the community fair, for example, the allotted time was discussed and four of the members were able to divide the time together. This provided the function of allowing the booth to be covered at the fair, and the work of staffing the table to be distributed equally among the board members. The same method of dividing the workload was used in the board meeting to schedule the annual plant walk. After much discussion, one board member decided to further investigate and research a potential site to host the plant walk, while another contacted potential guides for the walk.

The desire to distribute the work evenly throughout the board members of the organization is thought to be occurring because "usually there is one big project and they are all a part of it" (Organization 1, Interview 3). The primary function, noted by all

board members in their interviews, and frequently mentioned as beneficial by outside observers, is the newsletter that is produced twice a year. This newsletter requires each board member to research an event or area and create an informational narrative about the event or area. The members typically work alone on the stories, but the stories are combined into a single newsletter that is based on a similar theme. The past newsletter focused on historical sites, such as a historical pet cemetery located on the river through the city, the next newsletter will focus on vernal pools and the benefits and beauty they provide the local area. The newsletter seems to allow the board members to work alone, but together, and creates a uniform work distribution in the organization.

In this organization, it must be noted that a single board member remained on the board from approximately the founding of the organization. As with most organizations, when one individual member remains on the board for prolonged periods of time, they become the source of historical information for the organization. This allows that individual to retain and maintain much of the information of the organization and in many cases holds a prominent role within the organization thus lead to an asymmetrical relationship with other board members. In the case of Organization A, the board member that holds this information, identified as Member X, is recognized as the source of information for the organization and is referred to as the "underlying thread of the organization" (Organization 1, Interview 3) or the "safety net that holds the organization together" (Organization 1, Interview 5). No interviewee reported Member X asserting authority, or directing the events or ideas of the organization in a particular manner, which indicates a lack of asymmetrical authority for Member X.

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Accountability

Accountability refers to the completion of tasks that are either assigned to an individual or the individual volunteered to complete. Unalike a contractual agreement between an employee and employer, Organization A is a volunteer-based organization. This means that the members of the organization do not face any financial "punishment" or "reprimand" from the organization itself; each is considered by the members to be unenforceable. There are, however, potential social repercussions for not completing a task. If a form is not completed by deadline, for example, other board members can contact the board member via phone or email and apply social pressure to the board member. Though social pressure is not a formal, enforceable action, it is an indication of accountability for actions within the organization.

In the board meetings, individuals choose to volunteer for certain tasks. Occasionally, board members note that the task from the previous meeting, which they said would be completed, is not completed. In these situations, the Chair of the Board simply asks when that board member expects to complete the task and no further discussion is made on the topic. Furthermore, the board member that should finish the task does not assume blame by stating apologizes or asking for forgiveness from the other board members. Interviews indicate that board members take personal responsibility for completing the necessary tasks instead of feeling a social pressure from the other board members. One board member stated she holds herself to a personal standard for the organization and "if [she] didn't do what [she] said [she] would it would be worse that

someone just yelling at [her]" (Organization 1, Interview 5). Thus Organization A has low social or organizational accountability.

Summary of Grid Relationship

Organization A has a low grid relationship. A low grid relationship signifies that the board members of the organization do not view their place in society in relation to the prescriptions others can place on them. Instead, the board members feel that no single member has the authority or ability to assert a level of dominance over the other board members. The grid relation is indicated in the summary Table 11 (see Table 11 in Appendix B).

Group Grid Classification Compared to Decision Making Process

The classification of group and grid for this organization indicate that Organization A is categorized as "egalitarian" (see Table 12 in Appendix B). In this system, the board members are expected to reject the notion of a legitimate authority and believe that all members within society are equal (Wildavsky, 1987). Furthermore, this classification of cultural typology includes the belief that the individual cannot speak for him or herself (Thompson, Ellis, Wildavsky, 1990), as is evident in the prohibited choice rules. The group believes that situations should default to reach collective decisions, usually based on consensus (Thompson, Ellis, Wildavsky, 1990) which corresponds directly to the mentality of Organization A's board members "consensus is the main unspoken goal" (Organization 1, Interview 4).

Organization A has high group relations, and unclear boundary rules within the organization itself. The unclear boundary rules are evident by the equality of members,

and general rotation of all board members through the listed positions. The high group relation is also coupled with clear boundary rules regarding outside members of the organization. In other words, the high group relation clearly identifies, through boundary rules, who is "in" the organization and who is "out" of the organization. The qualifications to be accepted into the organization initially appear to be unclear or variable to an outside observer, however, within the organization, the qualifications for the boundary rule are very clear and consistent. The consistency is in the "eye of the beholder" as the organizational members determine which personalities are or are not acceptable within the organization and if said member is capable of writing an article for the newsletter.

Organization A has a low level of grid relation and a strong level of permitted choice rules regarding sharing roles. These choice rules focus on the lack of specializations which is emphasized by board members working together on a single project and how each member's role is "overlapping but not duplicating" (Organization 1, Interview 3). The permitted choice rules also correspond with the lack of asymmetry in the organization as board members assist other board members with listed duties (e.g. Treasurer) and report that the workload "feels equal and distributed" (Organization 1, Interview 3)Furthermore, Organization A has a strong level of prohibited choice actions. In particular, the members of the board choose to act as whole, rather than an individual, noted with the statement "[the] desire is to speak as a unified voice, even if you are just one member" (Organization 1, Interview 5). The choice rules are not imposed on the board members, instead the board members choose to abide by these rules. This

corresponds with the notion of symmetry within the organization because no single individual has more rights or authority within the organization to speak or act on the behalf of the organization as a whole. The table below displays a summary of the findings for Organization A;

Application

Understanding the structure of a watershed organization has become increasingly important in order to manage the resource in the future. Governmental and nonprofit agents working with watersheds will need to be familiar with how cultural typologies influence the decision making structure of the organization (Thompson & Wildavsky, 1986). In a high group and low grid organization, such as Organization A, agents should realize that the boundary rules to enter the organization will be clearly defined. This means that it will be difficult for agents not only to enter into the organization but also disseminate information to the organization if the agent is seen as an individual attempting to impose an authority of the members of the organization as is indicated by the choice rules prohibited by Organization A.

To address Organization A, the agent working with the organization must not appear as an imposing authority. The members of Organization A value equality of members, as is demonstrated through the low grid levels. To disseminate information effectively to this organization, one must be seen as an equal otherwise the individual as well as the information will be rejected by the members of the organization (Thompson & Wildavsky, 1986).

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Chapter 4: Case Two
Position Rules

The Board of Directors for Organization B has five available slots. The slots include Chair of the Board, Vice-Chair of the Board, Secretary, Treasurer and Board Member at Large. Each position, with the exception of Board Members at Large, can be filled by only one individual. The Chair, Vice Chair of the Board, Secretary and Treasurer make the Executive Committee for Organization B (see Table 13 in Appendix B).

Boundary Rules

The boundary rules for an individual to enter a board member position for Organization B have remained fairly consistent for the past sixteen years. Although there are some exceptions, most of the board members were invited to attend a board meeting then asked to become a board member or directly approached at an event or within their personal life to become a board member. This method of joining an organization is referred to as invitational.

In the past, board members were selected for their skill set, occupation, or for what they could potentially bring to the organization (Organization 2, Interview 2). Currently, the desire to have "fresh-blood" (Organization 2, interview 1 & 2) on the board, and reduce the frequency that the same Board members hold the same positions (Organization 2, Interview 1) has reduced the qualifications of identifying a potential

board member to "showing interest" (Organization 2, Interview 1) in participating in the organization. Once an individual expresses interest in the organization, he or she is asked to become an active board member. One of the newest members, Member X, for example, was recruited at a volunteering activity. Member X was participating in the event and a board member, Board Member Y, did not recognize her. Board Member Y decided to approach Member X and discovered she just purchased a house in the area. The Board Member Y invited Member X to attend another event and Member X decided to attend. At the second event, another board member, Board Member Z, noticed Board Member Y and Member X talking. After the conversation, Board Member Z asked Board Member Y if Member X "was interested" (Organization 2, Interview 1) in becoming a board member. Member X was contacted and asked to join the board. Though the board members describe the process as "watch[ing] who shows up (to events) and nurture[ing] them" (Organization 2, Interview 2), Member X described the recruitment process as "[NAME] just bugged the crap out of me (to join)" (Organization 2, Board Meeting 2).

In the past two years, three board members have been asked to join the board by this method regardless of their qualifications (Organization 2, Interview 3 &4). The justification for the lack of qualifications in board members is described to occur because "[Organization B] doesn't want to exclude anyone, especially in regards to membership" (Organization 2, Interview 2). This indicates that Organization B has unclear boundary rules in place for members to join the organization.

For board leadership positions (chair, vice chair, secretary, treasurer), however, the boundary rule, or set of qualifications, becomes much more defined. This means that

certain board members who lack the necessary qualifications cannot fill specified positions even when the qualified board members do not want to retain their role. One year, for example, the Chair of the Board decided not to run for another term and instead decided to step down from an elected leadership position. Typically, the Vice Chair of the Board assumes the role of the Chair of the Board when the Chair of the Board decides not to run for another term. In this instance, the Vice Chair had no intention of becoming the Chair of the Board. For this reason, a Board Member at Large, referred to as Member X, decided to self-nominate as a candidate for Chair of the Board.

Member X was described as having an "abrasive personality" (Organization 2, Interview 1) and "passionate but unwilling to share information" (Organization 2, Interview 2). In board meetings, he would "rant about nothing" (Organization 2, Interview 4) and is considered to have a "personality conflict" (Organization 2, Interview 2) with each member on the board. The role of the Chair of the Board, however, "is to control the members" (Organization 2, Interview 2), or in other words "to be able to navigate through the waters" (Organization 2, Interview 2) to ensure the board is content and able to complete the necessary tasks and conduct orderly board meeting. Because Member X was perceived by the board to be incapable of maintaining the harmony between board members and remaining on topic at the board meetings, through a series of discussion, elaborated on further in the "Choice Rule" section, the other board members did not support Member X becoming the Chair of the Board.

The qualification of managing personalities does not result from a single member's attitude or personality within the organization. In an interview, the discussion

of the current Vice Chair of the Board becoming the Chair of the Board arose. At this time, some apprehensions were voiced about how the Vice Chair of the Board is "less tolerant" (Organization 2, Interview 2) to certain individuals and there was a general concern of "not know[ing] what would happen" (Organization 2, Interview 2) if the Vice Chair of the Board became Chair of the Board. This further indicates that one qualification for the Chair of the Board is to have the ability to strategically manage the differing personalities on the Board.

In Organization B, the general members, or dues paying members who are not part of the board, can nominate any candidate to run for a position, including Chair of the Board, at the annual meeting. This is a recognized fact by the board members, but one interview said the organization "want[s] to discourage nominating from the public and keep them out of leadership positions" (Organization 2, Interview 2). The desire is not to exclude individuals from participating in the organization, or to limit the ability for individuals to become Board Members at Large. Instead, individuals are strongly encouraged to participate in the organization and join the board as a Board Member at large, but not in leadership positions such as Chair of the Board.

Once an individual on the board is deemed qualified for a position, he or she is nominated by the organization to assume the position or asked to remain in the same position for an additional term, regardless of his or her desires. The conversation during a Board meeting led to the statement "In the past [the Chair of the Board] had three year stints… I think it is smoother that way… smoother than learning the ropes" (Organization 2 Board Meeting 2) as a rationale to keep a Board member in a particular position.

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The above mentioned statement emphasizes the fact that the qualifications are perceived by the other members of the board and that the qualifications are necessary for the positon. In this case, Member 1 later indicated that Member 2 was well qualified for the role because in each meeting he was able to perform the necessary tasks, such as writing an agenda the meetings, and able to mediate difficult personal situations in a professional manner.

In summary, Organization B has unclear boundary rules in regards to accepting people into the position of Board Member at Large. This is evident by the lack of qualifications an individual must possess to be considered as a potential member of the board. In a leadership role, however, Organization B has very clearly defined boundary rules. To become Chair of the Board, for example, one must demonstrate the ability to mediate meetings without creating personality conflicts as well as remain on topic with the agenda which guides the board meetings (see Table 14 in Appendix B).

<div align="center">Choice Rules</div>

Choice rules describe what actions individuals are permitted to, required to, or prohibited from taking. The board members of Organization B fully support, and permit, the notion of sharing duties between each of the board members. In the board meeting for nominating the Chair of the Board, for example, a Board Member at Large offered to assume the position of Vice Chair of the Board and complete the daily, or administrative tasks (Organization 2, Interview 1) for the Chair of the Board as long as the Chair of the Board agree to retain "the title of Chair" (Organization 2, Board Meeting 2). The same sharing of duties occurred when the board members needed to send out a letter to the

current dues-paying members about the annual meeting. Instead of relying solely on delegating the task to the leader of the communication committee, the board members split the task into organizing the member list, formatting the letter and content.

The sharing of duties also extends to the use of the social media for the organization. Organization B uses the popular social site Facebook to communicate with volunteers, members, other organizations, and the community at large about upcoming events, current environmental topics and general information about the organization electronically (Organization 2, Board Meeting 2). Each board member is granted "administrative" access over the site and can post text or images onto the profile page and comment on other pages (Organization 2, Interview 1).

One board member, Member X, for example, disapproved of the actions of another organization, Organization X, and decided to post a comment elaborating on his disapproval using the administrative access granted to board members for Organization B. All of the other board members in Organization B were satisfied with the actions of Organization X and thought "[Organization B] and [Organization X] … did good, and (Member X) was negative" (Organization 2, Interview 1). From this action, a board member from Organization X contacted the Chair of the Board for Organization B to "ban [Member X] from posting on [Organization X's] site" (Organization 2, Interview 1). The Chair of the Board of Organization B spoke with Member X stating "controversy takes away from the focus of the mission" (Organization 2, Interview 1). No other actions such as removing the access rights to the Facebook page were taken, therefore, Member X can continue to act as a representative of Organization B. This implies that each

individual board member is able to represent the organization as a whole entity without receiving confirmation or approval from the board. The only limitation that a board member is upheld to is that he or she should not express negative opinions about other organizations that work with Organization B.

The aforementioned occurrence also exemplifies the role of the Chair of the Board in Organization B in managing interpersonal conflicts. The Chair of the Board is the central point of contact for the organization, and is thought to be the person in charge of managing the board members within the organization. During board meetings, for example, a board member occasionally will "rant about nothing" (Organization 2, Interview 3) or veer off topic. When this occurs, the other board members become frustrated, "roll their eyes" (Organization 2, Interview 1) and "sigh heavily" (Organization 2, Interview 1). It is the responsibility for the Chair of the Board to ensure that the Board members return to the topic listed for discussion on the agenda, in an amicable manner (Organization 2, Interview 2). As only the Chair carries out this task, it is the duty of the Chair of the Board to stop the other members from deviating from the agenda (Organization 2, Interview 1). When questioned if other board members have the authority or right to correct the actions of other members, especially in regards to the staying on the agenda, one board member said, "I used to (when I was Chair of the Board), but now [NAME] is the Chair" (Organization 2, Interview 1). This demonstrates there are specific duties and rules that only the Chair of the Board is expected to perform within the organization.

There are certain tasks that are shared among all board members; however, there are a select number of tasks that board members cannot fill unless they are within a designated position. The general administrative tasks associated with the Chair of the Board, such as compiling the agenda or organizing events, can be – and often are -- completed by other members of the board (Organization 2, Board Meeting 2). The position specific choice, though, lies in the harmony or order that can be provided by the Chair of the Board.

In summary, in Organization B, there are a wide range of choice rules that apply to various scenarios. The board members are permitted to share certain tasks, but there are still certain tasks that are position specific (see Table 2 below). A board member is allowed to act as an individual and represent the organization as a whole, while at the same time the board member is prohibited from criticizing other environmental organization partners. Table 15 provides a general summary of the permitted, required and prohibited choice rules (see Table 15 in Appendix B).

<div align="center">Aggregation Rule</div>

Aggregation rules refer to the manner in which the decisions of multiple individuals are combined into a single decision. Organization B relies on Robert's Rules of Order when making formal decisions about nominations or finances. Other decisions, such as who can attend an event or design postcards for a mail out, are made strictly on a volunteering basis. As one member said in almost exacerbation, "There is a vote almost every meeting. We were always voting on something" (Organization 2, Interview 3). Occasionally, the volunteering will lead to a vote as well, but typically only if it is an

official action. In a board meeting, for example, the board member who is the current public representative for Organization B asked, "I don't know if you want me to be the representative again" (Organization 2, Board Meeting 2). Immediately, the Chair of the Board stated, "I move to close nominations" (Organization 2, Board Meeting 2). This indicates votes occur on formal actions, and Robert's Rules of Order apply (see Table 16 in Appendix B).

Group Association

Proximity

Proximity is the feeling of closeness the members feel towards each other. In Organization B, there is a low level of proximity between the board members which is indicated by their interactions at the board meetings, as well as their discussions of others during interviews. Prior to the commencement of a board meeting, the members of the board do not discuss personal information with one another. Instead, the members usually wait for a minute or two, and begin discussing who will or will not attend the meeting. Each member will confirm if an email was received, or give a general presumed update about the board member as to why he or she may be late, or not arrive at all. These assumptions are fairly general, such as referring to an individual might be busy with work, or a pregnancy. An example of a personal specific comment would be if board members know an individual was working late that night on a designated project, or that morning sickness occurred therefore the board member did not wish to attend. The lack of personal specifics shared at the board meeting indicates a lack of proximity between members.

Interviews allowed for further expansion on how individual board members feel about one another on a personal level, and the organization as a whole. In general, there is dissatisfaction towards certain individuals on a personal level from the board members and "personality conflicts" (Organization 2, Interview 2) arise. As one member explained her particular situation, there is "one board member that gets under my skin" and the meetings are unenjoyable because of the conflict (Organization 2, Interview 4). This is also apparent in the general attitudes of the board members as "they are tired of doing things" (Organization 2, Interview 3). The lack of enjoyment and dislike for particular members reduces the ability of members to increase their proximity.

The low level of proximity is also demonstrated by the lack of awareness of individual board members' desires, or intentions, and perceived roles within the organization. Interviews with certain board members, for example, indicated that there was a shared assumption that the current Vice Chair of the Board would be willing to be "coerced to step up" (Organization 2, Interview 2) to assume the role of Chair of the Board. The Vice Chair of the Board, however, stated that she was debating if she even wanted to remain on the board at all because, as she explained, she "likes the organization and the service but being on the board is painful" (Organization 2, Interview 4). Furthermore, prior to a board meeting nominating candidates for the next year, two of the board members met with the current Vice Chair of the Board and discussed her potential to become the Chair of the Board. Each were under the impression that she would succeed to the role of Chair of the Board, however, during the board meeting, before anyone could ask who would like to become Vice Chair of the Board, she

volunteered to be the Treasurer. This took both board members by surprise and one was so taken aback that he exclaimed "that sly little devil" (Organization 2, Interview 1). This indicates there was a lack of understanding the personal intentions and objectives between board members therefore, the Board members are not close on a personal level and have a low proximity to one another.

In addition to such indicators of low proximity, there are instances where members demonstrate greater closeness to one another. Board members, for example, report having lunch together or meeting with other Board members outside of the organization (Organization 2, Interview 1 and 2). However, such instances were relatively infrequent, and a few interviewees indicated that there was a limited personal connection or bond between the members. Instead, the focus tends to remain how to manage personalities in the organization and finding ways to encourage new members to attend the Board meetings. Furthermore, as stated in an interview, three Board members met for lunch and thought a conclusion was determined about the actions one of the three Board members, Member X, would take at the next Board meeting. Prior to the lunch, though, Member X did not wish to perform the desired action. During the lunch, Member X did not mention her personal opinion therefore the other two Board members thought a decision was agree upon by all three members. For this reason, during the Board meeting, the two Board members that attended the lunch though, the Member X changed her mind unexpectedly and without notifying the other two Board members. She stated she did this because she did not know how to explain she was contemplating leaving the organization, and did not want to take on more responsibilities (Organization 2, Interview 5). This

indicates that there is a connection and interaction between Board members, but it is not on a personal level, because the members do not feel comfortable discussing certain topics, thus the proximity between Board members is low.

Overall, Organization B has a low level of proximity because the board members do not have personal discussions with one another, do not enjoy the company of one another, and are not aware of each other's personal intentions within the organization.

Transitivity

Transitivity, the contact members have between each other, is also low. Organization B was invited to attend a ground breaking ceremony for a segment of the bike path to be completed along the river. During this time, there were multiple stakeholders from various departments within the city government, including the Mayor, news reports and a wide range of environmental officials, making this a formal event. Two of the board members for Organization B attended the event. The board members did not arrive together, and throughout the event they did not sit next to one another or converse with one another. At one point, one board member approached the other and asked if pamphlets for the organization were being handed to the attendees. After confirmation was received that the limited supply was dispersed through the public, the board members went their separate ways for the remainder of the event. At this point in time, there was no personal discussion between the two board members as the conversation was strictly about the distribution of promotional materials. The lack of personal greeting or desire to converse on a personal level indicates a low level of transitivity between the board members.

Organization B was invited to participate in a Party at the Creek in the local community to celebrate the creek and natural surroundings. There were multiple vendors from the surrounding areas who supported the river and watershed, and Organization B thought it was a great way to promote their image by participating in the event. The booth designed by Organization B posted photos of past events and included a map of the local watershed to show the public in which watershed they resided. Four of the Board Members from Organization B attended the event. Of these four, one member, Member X, was also staffing a separate booth for a different organization. Member X would occasionally look over at Organization B, and at one point in time walked over towards the booth and met another board member in the center of the path near the booth for Organization B. Though the two board members did chat briefly, at a distance from Organization B's booth, there was little effort on the part of Member X to associate with Organization B, or for Member X to converse with the other board members.

Furthermore, at the same event, two board members were conversing with one another when a general passerby hesitated next to the booth. One board member, Member Y, mid-conversation, stopped talking with the other board member to consult with the passerby. The primary focus of the board member was the conversation with the potential new individual rather than concluding the conversation with the other board member. Once the passerby left, Member Y did not return to the conversation with the other Board member. Instead, the two stood in silence for a period of time, until one Board member decided to walk around unannounced. This is not to say that members never have contact with one another. Of course at the monthly meetings they interact, and a few

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interviewees did mention carpooling to events such as the Board meetings and organizational events (Organization 1, Interview 1 and 4), though this was not common among all members, just two that lived nearby.

Overall, the lack of a desire for one board member to stand near the booth, and willingness to converse with all board members combined with the notion that the public is more important than conversations amongst themselves, indicates that association between the board members of Organization B is fairly low.

Scope

Scope refers to how the individuals feel in relation to the organization he or she is participating in compared to other activities in his or her life. Wide scope means an individual participates in many activities outside the organization, rather than making the organization central to their life. There are two active board members in Organization B who have potential conflicts between their occupation and the organization. This means that as certain topics arise within the organization they either abstain from voting (Organization 2, Interview 5), or as Chair of the Board, will not pursue said topic. At one board meeting, for example, there was a debate about supporting or voicing aversion to fracking within the state. Considering this topic is debated in multiple government agencies, including one in which a board members is an employee, the board member chose to abstain from the vote, regardless of if the necessary quorum was present or not. The action of choosing to abstain from a vote indicates that the workplace supersedes Organization B, or in other words, the scope of the organization is wider for these individuals compared to the workplace.

As a contingency plan, if there is an issue of concern for the organization, but an inability as an organization to voice a level of support or concern because of the conflict between a member and their occupation, an individual within the organization can be requested to voice their stance as a "private citizen" (Organization 2, Interview 1). This indicates that the individual has the right to act as a single entity which also surpasses the importance of the organization itself, or reduces the priority of the organization.

The majority of board members are also associated with other organizations or activities within the community. The Secretary, for example, is currently the President of a different, active environmental organization within the area as well as an active member in a number of other smaller organizations (Organization 2, Interview 1). Other board members dedicate their time to family events and activities, environmental organizations, or applying their skills to the local community (Organization 2, Interview 1, 2, 3 & 4). The importance is typically placed on the other organizations rather than Organization B, which can be seen by the manner in which board members participate in organizational events as well as the turnover rate of the organization.

At the groundbreaking ceremony for the bike path, described above in the "Transitivity" section, one of the two board members who attended the event was also passing out information and promoting the other organization that he was participating in. There was a brief discussion between the two board members about distributing more pamphlets for Organization B. The first board member mentioned he had passed out all that he brought, approximately fifteen, and the other board member did not have any with him but was able to bring the promotional material for his other organization. As the

leader of the communication committee for Organization B, remembering to bring promotional information for another organization, and limiting the promotional material for Organization B, suggests a higher level of importance was placed on the other organization than on Organization B. This is also demonstrated by board members of Organization B staffing a booth for a different organization at the same festival Organization B was attending.

The association with other organizations also seems to be the reason why many board members either step down from a position or leave the organization entirely. The former Chair of the Board, for example, realized "too much time" (Organization 2, Interview 1) was dedicated to being the Chair of the Board and "his personal life suffered" (Organization 2, Interview 1), and therefore he decided to step down from his position. Similarly, the former Treasurer thought too much time was needed to file and process all of the documents for Organization B and decided to leave the board after two years to pursue a more active role in other activities (Organization 2, Interview 1). The current Treasurer finds the load of work to be heavy for her personally, but acknowledges the reason as "[Organization B] is low on [my] priority list" (Organization 2, Interview 3). Another formally active board member, and founding member of Organization B, rarely attends meetings because "she is a big who-ha in her gardening club" (Organization 2, Interview 1) and the meeting times between the two organizations conflict.

The order of importance which the members place on Organization B compared to their other activities and organizations is fairly wide in range. This is demonstrated by

the board members desire to participate in other organization activities over Organization B in situations of conflict, or personal desire, and the action of promoting other organization or activities over Organization B. Overall, this indicates that the board members place Organization B low on their priority lists, thus the scope of the organization is very wide.

Impermeability

Impermeability is the ease of moving from non-member to member status. One indicator of impermeability is the degree to which members actively welcome and recruit outsiders into the organization. Organization B is typically invited to specialty events to show their support, such as the groundbreaking ceremony for the bike path, or the river festival. There are, though, certain events that are hosted by Organization B that allow additional interaction with potential future members such an Earth Day events. To host an event for the city, the organization must register on a website and describe the event they intend to host. Individuals from the public access the website and view the organization and the project which the organization intends to host. For the Earth Day celebration, Organization B decided to plant 30 seedling trees in a nearby park so that they could grow and be transplanted at a later date. Three board members, one frequently volunteering member of the organization, and two new individuals from the public attended the event.

The two volunteers attending the tree planting heard about the event through the website that listed all activities available on Earth Day. There was no particular reason why they chose to participate with Organization B over other organizations, as their

primary objective was to complete a service activity on Earth Day not to join an organization. One board member in particular tried to encourage a dialog between the two and collected their emails after the event to contact them in the future about additional events.

The action of encouraging volunteers to become involved was also demonstrated at the River Festival Organization B attended. At this event, a board member stopped talking mid-conversation with another board member in order to show a member of the public where in the watershed they lived (Further elaborated on in "Transitivity" section). The board member then discussed with the passerby the bike path along the river, provided a general map of the trails in the area and showed the child with the passerby two birds' nests found along the trail in hopes to pique their interests.

Board members are also discouraged from driving away potential volunteers or members from the organization regardless of their qualifications. At one event, for example, a board member, Member X, began a conversation with some local people attending an event. Member X questioned the prospective members about their environmental views and if they were composting at their home. When the individual stated they did not compost at their home, Member X told them "shame on you, harshly" (Organization 2, Interview 1). The individuals backed away from the booth and promptly decided to leave. Another board member, Member Y, witnessed the event and tried to calm the situation by encouraging the individuals to take some reading materials home to review. Once they left, Member Y told Member X "we are not in the position to say should" (Organization 2, Interview 1). This indicates there is a strong desire to reach out

to the public and to encourage the public to become involved in the organization, and this is socially enforced in the organization.

Although Organization B has not had success in attracting new active members to the organization, as the member list remains "check writers" rather than active participants (Organization 2, Interview 1). This does not mean that the board members do not consistently seek out new members. Overall, Organization B attempts at all activities to find new members to participate in the organization and is coded has having a low level of impermeability.

Summary of Group Relationship

Organization B has a weak group relationship. This indicates that group members generally do not feel bound to one another and that the individual is more important than the collective. The low group relation is indicated in the low level of proximity and transitivity combined with the broad scope of other activities that receive the focus of the individual members as is shown in the table below and low impermeability to non-members (see Table 17 in Appendix B).

Grid Relationship

Specialization

Specialization refers to the presence of specified role or activities to complete Organization B are highly specialized because there are certain roles that are filled by particular individuals to ensure the function of the organization. The most specific, or specialized, role within Organization B is the role of the Chair of the Board. In this position, the individual is responsible for scheduling and presiding over board meetings,

as described in the bylaws (choice rules), but also expected to ensure harmony between all board members and assert a level of accountability onto each board member during the meetings (The level of accountability will be discussed in further detail in the "Accountability" section). This skill in fostering harmony is developed over time and one reason that a board member said, "in the past [the Chair of the Board] had three year stints… I think it is smoother that way… smoother that to learning the ropes" (Organization 2, Board Meeting 2). This indicates that the Chair of the Board must possess a certain skill set that must be learned, or cultivated over time, thus is specialized.

As a volunteer based organization, Organization B seeks to use social media to recruit members and promote the organization throughout the community. Thus, at least one individual must be able to use the necessary form of social media. In Organization B, both a webpage and Facebook presence are used as points of contact. One individual in the organization is communication specialist although all members on the board have "administrative" access to the Facebook page. During a board meeting that the communication specialist did not attend, the board members were confused about how to use an electronic system in Facebook to send a message to all of their dues paying members to attend the Annual Meeting. Through a series of complicated discussions, proclamations that lack of personal Facebook pages limited their understanding, and confirmation via cell phones, the board finally determined the process by which the message could be sent to the members.

Organization B is aware of the challenges of specialization when it comes to knowing how to use social media. For this reason, the organization hired an individual

outside of the organization to educate the board members on use of the webpage. This indicates the board is aware that specialization has occurred, but also has the desire to reduce the specialization so that all members are capable of performing the same tasks.

The role of the Treasurer is also a highly specialized function, as only the Treasurer has the authority to access the accounts for the organization. The board members, in the nominating board meeting, noted this difficulty and emphasized the desire to have the treasurer maintain the same role for a longer period of time than simply the annual term. The general tasks of the Treasurer including creating projected estimations of the annual budget or balancing the bank account, and signing legal financial documents could be performed by any board member within the organization, who has a general understanding of a personal financial account. Typically two board members are listed on the account therefore are granted access to the information and can legally sign official documents regarding the finances. Due to a series of Treasurers assuming the role and leaving the organization, though, only the active Treasurer is listed on the account. The limitation of access to information creates a specialized role for the Treasurer.

The public representative for Organization B, referred to as Member Y, is also a specialized member within the organization. This occurs because Member Y is retired and therefore able to attend and represent the organization at any point in time throughout the day. Member Y explained, the other members of the board support his role as the representative as "who else has the time" (Organization 2, Interview 1) to attend the events. Thus Member Y has become the only available individual to represent the

organization at many meetings and events. The specializations for the position roles in Organization B strain the current Board members in the organization as the tasks at hand demand time and energy. A former member of the organization elaborated on the difficulties this creates for the organization's current members follows; "the longer members would step down if they could… they are tired of doing things and they know that if they don't do it the organization wouldn't exist" (Organization 2, Interview 3).

Overall, Organization B has high specialization within the board. This has led members to seek to keep individuals in these roles over time, to avoid the knowledge loss and learning curve that would challenge a new person stepping into these roles. In the case of social media, the board has actively sought to diversify this specialization.

Asymmetry

Asymmetry refers to the amount of perceived importance or weight of work an individual feels is placed on each member. The members of the board did not specifically identify an inequitable balance of workloads among members of the organization. As one member stated, "everyone has full loads" (Organization 2, Interview 3). This indicates that balance between members is fairly evenly distributed and at least is not perceived to be asymmetrical. There is one position, the Treasurer, which is considered to be more time consuming than the other positons.

The position of Treasurer is highly specialized, which limits the number of individuals who can access the information. This limitation causes the individual in the position of Treasurer to preform additional time consuming tasks above and beyond the other members. Furthermore, due to the internal structure of Organization B that

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delegates the collection of the dues from all of the members to the Treasurer, the Treasurer becomes responsible for the majority of the administrative work for the organization. The current Treasurer claimed "there is burn out (in Organization B) because no one wants to do the administrative stuff" (Organization 2, Interview 3). This statement indicates that the specialization of the role of Treasurer also creates an asymmetrical work load of administrative duties, at least where the treasurer is concerned.

The position of the Chair of the Board is the most important role of the organization. This is not because the duties the Chair of the Board must complete are crucial for the survival of the organization; rather the position is necessary to provide the essential mediation among the board members within the organization. The conflict between the board members affects the dynamics of the organization so much that one former member, and professional in evaluating organizational structures noted, "[Organization B] is more about relations with the Board than with [NAME of the river]" (Organization 2, Additional interview 2). This demonstrates the importance of the position of Chair of the Board thus the lack of balanced positions, or asymmetrical relations between positions.

Due to the emphasis of certain roles and the importance placed on others, there is an unequal distribution of work and importance between some of the roles. This indicates that overall, Organization B is somewhat asymmetrical in its structure.

Accountability

Accountability refers to the completion of tasks that are either assigned to an individual or that the individual volunteered to complete. Socially enforced accountability is predominately used in Organization B to ensure the tasks of the organization are completed. Organization B relies solely on the "personal accountability" (Organization 2, Interview 3) in order to achieve its objectives. Social pressures that influence the perceived personal accountability typically manifest as email reminders, personal feelings, or direct discussions or contact.

The former Treasurer of Organization B, for example, assumed the role or Treasurer because no one else in the organization was willing to do so. Considering this was her first time as Treasurer, she was unaware of the obligatory deadlines that certain papers needed to be officially signed and submitted for particular grants to be filed and for the organization to retain its nonprofit status. This means that initially the Treasurer was not completing the necessary tasks associated with the position of Treasurer. For this reason, the Treasurer received numerous reminder emails regarding the tasks she was expected to complete by other members of the organization. Additional Board members came together to assist her, to the best of their limited ability, so that all tasks were completed. As the Treasurer explained, there are tasks that need to be completed but there is "no be all end all" (Organization 2, Interview 3) if someone is not able to complete a certain task. This implies that there are specified tasks for a position; however, the most that will occur to ensure an individual will complete those tasks is a social reminder, typically in the form of an email.

There are general tasks within the organization such as assisting with staffing a booth at a festival or designing a postcard to send to each dues-paying member that require the support of a board member. In these scenarios, because "everyone has full loads" (Organization 2, Interview 3), or all of the board members are busy with a variety of life events, it is challenging to find volunteers for certain tasks. As one board member described the process of choosing who is to complete what task, it "depends on who offers to do something, and if no one does you sit and wait awkwardly, and often" (Organization 2, Interview 4). This implies that tasks are socially pressured onto an individual to be completed, and the individual is generally reluctant to complete such a task. To ensure the task is then completed after an unenthusiastic volunteer is assigned the task, guilt is imposed upon the volunteer to pressure said individual to complete the task. A former board member described the distain for this method of social accountability as "you shouldn't' do things out of guilt and you can't keep doing things no one else wants to do" (Organization 2, Interview 3). The feeling of guilt, imposed on members of an organization by other members of the same organization, to complete a task indicates there is a socially imposed pressure or accountability placed on the members.

Direct discussion is also cited as a means of accountability for certain members, especially when the board as a whole views the actions of a single individual board member as inappropriate. In these scenarios, the Chair of the Board is typically responsible for approaching the individual, although this does not occur in each scenario. The board members of Organization B, for example, define their role as an environmental

organization as to "not to inflame other groups or to be antagonistic" (Organization 2,

Interview 1). When a single individual board member criticized other organizations via

Organization B's Facebook account (please refer to the "Choice Rules Section" for

additional information), that board member did not lose his rights as an administrator to

Facebook, which would be an enforced punishment. Instead, he received a reprimand

from multiple individuals within the organization, most prominently a discussion with the

Chair of the Board, stating the disapproval for such actions, and how said board member

is not allowed to speak negatively of other organization via Organization B's Facebook

page.

The variety of methods of socially enforced accountability used by Organization

B, including email reminders, personal feelings and direct discussions or contact,

indicates that there is a high level of accountability associated with Organization B.

Summary of Grid Relationship

Organization B has a high grid relationship. The grid level is indicated by the high

level of specialization and accountability combined with the somewhat high level of

asymmetry. In an organization with a high grid level, the Board members believe there is

a role and place for each specific Board member. Furthermore, each Board member will

willingly respect the authority of others within the organization. The grid relation is

indicated in the summary Table 18 (see Table 18 in Appendix B).

Group Grid Classification Compared to Decision Making Process

The classification of group and grid for this organization indicate that

Organization B is categorized as "fatalistic" (see Table 19 in Appendix B). A fatalistic

worldview is associated with a lack of preferences or the desire to pursue said preferences, because "what they prefer would not, in any event matter" (Wildavsky, 1987; page 7). This sentiment is expressed by the board members of Organization B in the statement, "the longer members would step down if they could… they are tired of doing things…" (Organization 2, Interview 3). The desire to step down signifies a preference, but the inability to do so indicates that their preference is of little importance because they feel they cannot achieve that.

In this organization, there is a low group association, expressed by the low proximity of the members, low level of transitivity, and a wide range of scope, thus the decisions of the group are less important or binding than the decision made for the individual by the individual (Thompson, 1986). The notion of the individual over the group is reflected in the broad permitting choice rules regarding the manner in which an individual board member can represent the organization as a whole without the consent of the other board members. This form of action indicates that the individual thinks and acts as he or she perceives the organization rather than confirming that view first with the organization.

Within the organization, the low group association is reflected in the unclear boundary rules outside of the organization, as Organization B is willing to accept any and all new members. This notion is emphasized with the statement "[Organization B] doesn't want to exclude anyone, especially in regards to membership" (Organization 2, Interview 2). The lack of clearly defined boundary rules outside the organization, and

high level of impermeability emphasize the point that it is easy for members to enter and exit the organization regardless of their qualifications.

A fatalistic classification is also distinguished by a high grid association. The high grid association, as is present in Organization B, means the belief in the legitimacy of a ranking system of authority (Thompson, 1986). Board members highlight this belief as they defer to required choice rules stating certain board members are the legitimate authority within the organization and act accordingly. The comment, "I used to (do that when I was Chair of the Board), but now [NAME] is the Chair" (Organization 2, Interview 1) indicates that certain choice rules are assigned to certain positions and cannot be filled by other positions. The high level of grid is also expressed in the correlation between required choice rules and accountability within the organization. If an individual board member violates the required choice rules within the organization he or she will face a high level of accountability within the organization in order to correct or mediate said action.

The high level of grid is further emphasized with the clearly defined boundary rules within the organization. The clearly defined qualifications for certain positions creates a higher level of specialization as certain skills must be present and are cultivated over time. This is expressed in the desire to retain the same individuals in a particular role for an extended period of time as is indicated in the following quote; "in the past [the Chair of the Board] had three year stints… I think it is smoother that way… smoother that to learning the ropes" (Organization 2, Board Meeting 2).

Application

As an outside agent, such as a governmental agency or nonprofit, attempting to work with or disseminate information to Organization B, the outside agent must be aware that the worldviews of the individuals within the organization will affect the types of rules and decision making structures chosen for the organization (Thompson & Wildavsky, 1986). The combination of low group level combined with high grid level that is present in Organization B indicates that an individual attempting to enter the organization, or disseminate information to the members of the organization, will be able to easily enter into the organization due to the unclear boundary rules for outsiders. However, the high grid level encouraged the establishment of the clearly defined boundary rules for members with the organization. Furthermore, the choice rules available for the individual to act are limited to a designated position due to the high grid level.

In disseminating information to Organization B, or encouraging the members of Organization B to take guided actions, outside agents should be able to easily sway the members of the organization as long as those outside agents are seen in the role or position to act in such a manner. This type of organization is not seeking information, and is easily controlled by outside organizations of authority (Thompson & Wildavsky, 1986). Agencies should encourage action from this organization by using their political prestige or authority to encourage actions.

Chapter 5: Case Three

The monitoring and reporting of water quality in the local watersheds became a public concern during an environmental resurgence. As the public placed an emphasis on the health and wellbeing of watersheds, local environmental groups and organizations began to flourish. The public support also led to political support, and governmental agencies began to fund aspects of these developing groups and organizations. Organization C, for example, created a Watershed Action Plan, thus was provided the funds to support a Watershed Coordinator. Then, in 1997, Organization C formally became a 501C3, or nonprofit organization which furthered the organization's ability to recruit new members and find funding.

The funding provided by grants for the Watershed Coordinator's salary greatly influenced the structure of the organization. The diagram below shows the Organizational Chart of Organization C in 2004 (see Figure 5 in Appendix A). As the chart indicates, the Watershed Coordinator played a significant role in the daily activities of the organization, especially in regards to the volunteers, interns and membership. The funding for the Watershed Coordinator ended in 2006 and Organization C has subsequently sought ways to fund a full-time or part-time individual for that position. The lack of a consistent Watershed Coordinator alters the structure of the organization and places the decision making process in flux.

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The role of the Watershed Coordinator allowed for the development of Organization C's structure as well. The Watershed Coordinator was responsible for the majority of the "administrative" work for the organization such as maintaining the member list which allows the Board Members in particular to be free to perform other tasks with their time. One such task was presiding over committees. Though most of these committees are no longer active, a single committee, the Science Committee, remains.

<p style="text-align:center">Position Rules</p>

Organization C has up to ten positions available on the board of directors. There are four positions that create the Executive Committee of the organization, which include the President of the Board, Vice President of the Board, Secretary and Treasurer. The positions of the Executive Committee must be filled for the organization to function because only one individual may fill each position, thus only those designated individuals can perform the duties of their position (Please refer to the "Choice Rules" Section for further detail on duties of each position). In other words, as one member stated, "if you are secretary, you cannot be the treasurer" (Organization 3, Interview 1). The position of Watershed Coordinator is a remnant from the past when Organization C was supplied with a funded individual to assist with the organization. Only one individual may fill this position at a time, but this position is not required to be filled. Instead, if there is not a Watershed Coordinator, the remaining board members will assume the duties of this positon (Please refer to the "Choice Rules" section for further details). The remaining five positions are for Board Members at Large (see Table 20 in Appendix B).

Boundary Rules

Boundary rules describe the qualifications required to be eligible for a given position. Organization C is different, compared to the other organizations in this study, because of the committee structure that is in place. Instead of Board Members searching for potential Board Members from the volunteers that attend events, active members list, or the general public, Board Members focus on "super-volunteers" (Organization 3, Interview 1 & 2), or "members in good standing" (Organization 3, Interview 1), "active volunteers" (Organization 3, Interview 1), and attend committee meetings. This means that the pool which they draw from for Board Members is narrowed to the select group of individual that actively attend organizational meetings as well as actively support the organization. The reason provided for identifying potential board members from this select section of the organization is described as to "prevent mission creep" (Organization 3, Interview 1) or, in other words, there is a "mission to protect" (Organization 3, Interview 2). The desire to remain on mission, and not deviate from said mission, limits, or clearly defines, the individuals who the Board Members will or will not consider to be future Board Members.

There are specific characteristics that the individual should possess, beyond simply attending committee meetings, in order to be considered a potential Board Member. Some of these qualifications, mentioned in interviews, include, a sense of "institutional memory" (Organization 3, Interview 1) or a firm understanding of the functions, actions and structure of an institution, "people who are willing to help" (Organization 3, Interview 1) or being an active and knowledgeable member of specific

environmental organizations or institutions within the community (Organization 3, Interview 2). One Board Member, for example, is a representative for the Ecological Engineering Society (EES) at a nearby university. The EES nominates a representative annually to attend Organization C's board meetings as a Board Member for Organization C. This is a symbiotic relationship because the members of EES become aware of current environmental events within the community from the representative that attends the board meetings, and Organization C increases student awareness of Organization C on campus and gains access to students, who are the largest body of volunteers for the organization.

Once an individual is identified as meeting the qualifications suitable for a Board Member, he or she is consulted by a current Board Member. As elaborated on in an interview, the process occurs as follows, "most of the time there is an offer and then it's explained to them what the job is really about" (Organization 3, Interview 1). This is an invitational process that allows for the Board Member to know if the individual would be interested or not in attending the Board Meetings, and for the individual to understand the role he or she would be requested to play within the organization. It is essential to explain to the potential Board Member the role on the board, and the duties that entails, because, although he or she has proven to be an active and willing volunteer, some individuals view attending a structured meeting, such as a Board Meeting, as "a fate worse than death" (Organization 3, Interview 1). This limits the turnover rate and Board Member burnout once the individual joins the Board.

The most recent individual, Member X, to become a board member was invited to the board by a current Board Member; Board Member Y. Prior to Member X's invitation, Board Member Y consulted Member X to determine if he would be willing to be a Board Member. After confirmation that he was willing to accept the role, Board Member Y attended the next monthly Board Meeting and emphasized the importance of Member X to certain activities, and career, with statements such as "he's the one that got us the thirteen extra trees" (Organization 3, Board Meeting 1) and "he works for [NAME OF ORGANIZATION]" (Organization 3, Board Meeting 1). At the end of the meeting, Board Member Y asked the Board if they would "be okay" (Organization 3, Board Meeting 1) if she invited Member X to become a Board Member. A motion was then made, and passed; therefore, the Board confirmed that Member X could be officially invited to become a member of the Board.

The process used by Organization C shows that a current Board Member identifies potential members based on clearly defined qualifications, or boundary rules, including, (1) being a super- volunteer (2) attend committee meetings (3) institutional understanding (4) willingness to help and (5) associated with prominent organizations or institutions in the area, then the Board Member consults that individual, and confirms with the board that it is acceptable to invite that individual to join the Board. This indicates that Organization C has very clearly defined boundary rules to enter the Board.

The boundary rules within Organization C, similarly to those for outside members entering the Board, are clearly defined. As noted previously, the reason for this limitation for outside members is because the members "don't want the people to decide and create

mission creep" (Organization 3, Interview 1). This is also a concern for Board Members as they "question if [they] are just chasing grants and going off mission" (Organization 3, Interview 3). To address this issue, qualifications are in place to ensure only certain individuals are able to be in particular roles within the board.

Organization C's board is divided into two distinct sections, Members at Large and the Executive Committee, each requiring different qualifications to enter the section. The qualifications to enter the board as a Member at Large are listed in the "Outside Organization Boundary Rules" section. The Executive Committee is comprised of four individuals within the organization; President of the Board, Vice-President of the Board, Secretary and Treasurer. The distinction between these two categories within the same board occurs because the Executive Committee is responsible for making the "bigger decisions" (Organization 3, Interview 3) and "quicker decisions" (Organization 3, Interview 3) for the organization (Please refer to the Choice Rules Section for further explanation on what the duties of each category are in the organization).

In order to enter a position on the Executive Committee, unlike the invitational system in place for Board Members at Large, a competitive system is in place to ensure that only select members are able to enter into these elite positions. For an individual to run for a position on the Executive Committee, he or she must hold a position on the Board of Directors at the time when he or she runs for said position, and typically must be invited into the role by the current Executive Committee Members (Organization 3, Interview 3). This ensures that the mission of the organization is protected, as only individuals already known to actively participate according to the mission of the

organization are selected by the Board Members to participate on the Executive Committee.

Once a Board Member decides to run for a positon on the Executive Committee, he or she must "write a paragraph and hand it out" (Organization 3, Interview 3) to the members of the organization. The paragraph is a general summary, or introduction of that individual, and lists the reasons why he or she is qualified for the position he or she is applying to hold. The position of the President of the Board, due to its importance, also stipulates that it "must be a year before you are president by law" (Organization 3, Interview 4). This signifies the importance of the qualifications to hold the position of President of the Board because an individual cannot simply become President without first indicating their capabilities within the organization first. The additional qualification also assists in protecting the overall mission of the organization.

The slate of officers is then presented to the members of Organization C at the annual meeting. During this time, the officers are voted, based on a majority vote system, to determine who will hold which office. Currently, the Board has fewer than the required nine board members, and typically there are no challengers to each position (Organization 3, Interview 4). As one Board Member recalled his initial attempt to fill a position on the board in the past, "there was a time when [Organization C] was competitive. There were four people and two seats available" (Organization 3, Interview 4). Although the number of individuals pursuing a position on the board has changed, the structure of voting remained the same.

The role of Watershed Coordinator is unique in Organization C because it is a hired position. The sole purpose of this position is "to ensure the time and money are met" (Organization 3, Interview 3) within the organization or, in other words, perform the administrative tasks for the organization for a specified hourly wage (Organization 3, Interview 1) (The duties of the Watershed Coordinator are further elaborated on in the Choice Rules Section). The board determines which individuals are suitable for the job of Watershed Coordinator by tasks at hand and skill level of the individual applying to the position. The board has the authority to determine who is or is not qualified for the position because "officially the board is [the Watershed Coordinator's] boss" (Organization 3, Interview 3).

Overall, Organization C has clearly defined boundary rules within the organization in place. For an individual to be considered for a position on the Executive Committee, for example, the individual must meet the following criteria or qualifications (1) be a current Member on the Board (2) write a paragraph of explanation of why he/she is a suitable candidate (3) must be voted by majority to gain access to desired positon (4) to apply to the position of President, the individual must be on the Board for at least one year (see Table 21 in Appendix B for further detail).

<div align="center">Choice Rules</div>

Choice rules describe what actions individuals are permitted to, required to, or prohibited from taking. The structure of Organization C allows for decisions regarding the organization to be made on multiple levels. The committee structure, for example, allows for decisions to be made by the individuals who attend the meetings and then the

"idea is brought to the board" (Organization 3, Interview 4). Though the focus of this study is the decision making process of the Board Members, in this organization, it is important to understand the structure of the organization and how that structure influences the types of decisions that are made by the Board of Directors.

The Science Committee is the only active committee for Organization C. This committee is considered the "Nexus of the group" (Organization 3, Interview 4) or the "Brain" of the organization (Organization 3, Interview 6). The Science Committee is known for generating the ideas for the organization, searching for activities to participate in and hunting for grant opportunities (Organization 3, Interview 1, 2 & 3). In other words, if an individual in the Science Committee "brings the money, [they] can to do the work" (Organization 3, Interview 4). The decisions made within the Science Committee do not follow an ordered structure. Instead, the members discuss topics at length and a decision is made using what is referred to as "Robert's Rules of Chaos" (Organization 3, Interview 7). A single board member hosts the meeting therefore is responsible for contacting individuals and scheduling the meeting times. If that board member is unable to attend, the meeting is postponed or canceled for the month. Thus the "meeting convener" action is assigned to the position of Board member. Decisions that are made within the Science Committee are recorded and then reported to the Board by the Board Member who attended the Science Committee Meeting.

The connection between the Board Member who attends the Science Committee Meeting and the members who attend the meeting is important because it is the strongest link in the organization between the members and decision makers. Although the

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majority of activities and grants that are sought by the Science Committee are approved by the board of directors, ideas that use "unrestricted funds" (Organization 3, Interview 4) are reviewed more strictly. The rational for doing so is that this is "diving into the money pool" (Organization 3, Interview 4) which is more risky for the organization. Other activities that are scrutinized closely are those that potentially deviate from the mission or cause "mission creep" (Organization 3, Interview 1). In one instance, an individual in the Science Committee applied and received a grant, however, the Board of Directors for Organization C refused, by a vote, to allow the organization to participate in the grant because it was not in accordance with the mission of the organization. Thus while the Science Committee is permitted to suggest grant activities, the Board is permitted to deny such suggestions.

The structure of the Executive Committee within the Board of Directors is designed to allow for those individuals to make "quicker" and "bigger decisions" (Organization 3, Interview 3). The rational for this structure is that certain topics are time sensitive, and coordinating discussions with the four individuals from the Executive Committee is "easier" (Organization 3, Interview 3) than forming a meeting with potentially nine different board members. These impromptu meetings and decisions made by the Executive Committee usually are "by phone then are emailed out" (Organization 3, Interview 3) to the remainder of the board for a final vote. The reaction from the Members at Large to the decisions made by the Executive Committee is describes as "the board almost always does what the executive team says" (Organization 3, Interview 3), or in other words, votes in accordance with the decision of the Executive Committee. The

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voting occurs in this manner, without objection, because the Board Members at Large "place trust in [the Executive Committee] to make decisions" (Organization 3, Interview 3). This indicates that although there is not a written bylaw stating that the Board Members at Large must vote in accordance with the Executive Committee decisions, there are strong choice rules requiring the Board Members at Large to act with accordance to their positon.

Board Members at Large "place their trust in [the Executive Committee] to make decisions" (Organization 3, Interview 3) because Board Members at Large know they are not privy to the same information and knowledge as the Executive Committee. In the latest instance that the Executive Committee made a decision without the knowledge of the rest of the Board, for example, "some board members were surprised by the decision" (Organization 3, Interview 3). In this sensitive situation, the active Watershed Coordinator stepped outside her designated role within the organization and spoke to the press as a representative of Organization C. Although the Watershed Coordinator was, at the time, an active member and required to attend all board meetings, she did not have the authority within the organization to speak on behalf of the organization or to place her name on the organization's letterhead (Organization 3, Board Meeting 1). When certain members of the Executive Committee discovered these actions, a decision was made to convene and discuss the termination of the current Watershed Coordinator.

At the time the Executive Committee emailed the Board Members at Large their decision to terminate the employment of the Watershed Coordinator, and the need for a vote from the rest of the Board Members, the " [Board Members at Large were] not

aware" (Organization 3, Interview 3) of the situation. Many of the Board Members were "surprised by the decision" (Organization 3, Interview 3), however, the vote unanimously passed without discussion. Only one board member questioned the decision after casting his vote (Organization 3, Interview 3). This indicates that there is not only a trust between the Board Members at Large and the Executive Committee, but also an understanding from the Board Members at Large of their position within the organization thus what information they have. The lack of information for certain board members also shows that there are distinct tasks associated with certain positions in the organization that are not shared.

With the termination of the Watershed Coordinator, the duties assigned to the Watershed Coordinator were no longer completed as the position became open once again. Due to this, the Board Members began assigning themselves tasks to complete that were once the responsibility of the Watershed Coordinator (Organization 3, Board Meeting 1). One task in particular, completing the necessary articles for the newsletter, was of great concern for the Board Members because no one knew who could complete the task that was typically assigned to the Watershed Coordinator (Organization 3, Board Meeting 1). The lack of familiarity with writing the articles indicates that the Board Members rarely wrote the articles for the newsletter therefore the task was designated for a single position. Designating a task to a positon also indicates that tasks are not shared between positions, or, in other words, the duties and tasks are position specific.

In the board meeting, the lack of sharing duties between positions was socially enforced. At the beginning of the meeting, the Vice President of the Board, who recently

had been elected into his position, asked an older member if she wanted to run the meeting in the absence of the President of the Board. The Vice President promptly received the response, "No, you are the Vice President" (Organization 3, Board Meeting 1). Furthermore, one interviewee explained that "if you are Secretary you cannot be the Treasurer" (Organization 3, Interview 1). These situations indicate that the members are aware of the different duties associated with each position, and choose to only perform the duties associated with their specific positions.

Although each position has specific duties associated with it, this does not mean tasks are not shared. In specific situations, such as mail outs, each Board Member is requested to handwrite letters to a list of previous donors (Organization 3, Board Meeting 1). They are also asked to review the list of activities the organization completed in the past year, add suggestions and edit the content (Organization 3, Board Meeting 1). This task is shared by all Board members, however, this is not a position-specific duty listed in the bylaws or associated with a single position. Dues-paying members are considered to be associated with all board members thus all positions. For this reason, this task may be shared, but is not considered "sharing tasks" from each position (see Table 22 in Appendix B).

<div align="center">Aggregation Rule</div>

An aggregation rule refers to the way in which the decisions of multiple individuals are aggregated together in a single decision. In Organization C, Robert's Rules of Order are followed and decisions are made by the vote of the majority in a quorum. If a quorum is not present at the board meeting, a vote cannot be taken thus a

decision for the organization cannot be made. Instead, the board members will discuss the

options at hand, make a motion, second that motion and then an email is sent to all active

Board Members to vote on the motion (Organization 3, Board Meeting 1). When voting,

there are three options that a board member can choose from, "yes", "no" or "abstain"

(Organization 3, Interview 1), regardless of if Board members choose to abstain the

motion "still needs a majority vote" (Organization 3, Interview 1) in order to pass.

In a board meeting, for example, there were four board members in attendance

and one more board member was necessary for a quorum (Organization 3, Board Meeting

1). At the end of the meeting, one additional board member arrived and was greeted with

"Yea! We have a quorum!" (Organization 3, Board Meeting 1). This allowed for the

organization to complete the necessary steps to confirm a decision based on a majority of

the quorum. The text below is a transcript from a Board Meeting for Organization C

when a current member of the Science Committee was being considered as a new Board

Member.

> Board Member 1: "I have four votes now"
> Board Member 2: "[NAME] Make a motion"
> Board Member 3: "Motion for a [NAME] as a new board member"
> Board Member 4: "Second"
> Board Member 3: "Motion, and second, so vote for new board member"

In Organization C, all decisions whether they are about finances, volunteer

opportunities, inducting new board members or adjoining the meeting require a vote in

accordance with Robert's Rules of Order and a quorum present (see Table 23 in

Appendix B for further details).

Group Association

Proximity

Proximity is the feeling of closeness the members feel towards each other. The members of Organization C express a high level of proximity for one another in their discussions at the board meetings, interviews and outside activities. Prior to the board meeting, as board members began to enter the conference room, for example, the conversation began about a local dam construction and a couple of the events that were of interest to the functionality of organization (Organization 3, Board Meeting 1). Then, once a board member arrived from purchasing a pizza to share, the conversation became more social (Organization 3, Board Meeting 1). The board members discussed who would and would not attend, and in the process noted how one board member would be getting surgery within the next week or so (Organization 3, Board Meeting 1). This indicates a level of personal interaction between board members, or high proximity, because a board member does not need to share why he or she will not be attending, but chose to divulge personal health information with the board members of the organization.

Throughout the board meeting, at different points in time, the topic at hand changed from the organization to board members sharing personal information. One board member in the midst of the discussion about the time frame for the edits for a letter to the general members requesting annual dues began to discuss how he was pressed for time because he was going on vacation to Europe with his wife (Organization 3, Board Meeting 1). This led to a general conversation about Europe and vacationing in general with comments such as "I live through your vacations" (Organization 3, Board Meeting

1). Later, another board member discussed how he was intending to visit another country for a couple of weeks because his daughter studied abroad in that country (Organization 3, Board Meeting 1). Although the other board members were not aware that this board member had a daughter that studied in a different county, the board member felt comfortable in sharing personal family information with the board members. The desire to share information indicates that even though the board members may not currently know each other very well, they are open and willing to make an effort to become personal with each other.

The level of proximity is also presented in the social activities the Board members participate in at the end of the year. Annually, for example, there is a Christmas dinner that the Board members organize for each other to attend with their families (Organization 3, Interview 2). One year, the Board went to a restaurant and everyone chose dishes that were passed around which encouraged the conversation and increased the enjoyment of the event (Organization 3, Interview 2). For some Board members, this annual event is not the only time that they converse with the other Board members on a personal level because they have "known each other from other areas… they are neighbors and friends" (Organization 3, Interview 4). Occasionally, however, the annual Christmas dinner is not successfully planed because "everyone has great ideas and goes in different directions" (Organization 3, Interview 4). Although the dinner does not always occur, the involvement of the families of the Board members indicates a desire to know one another on a personal level therefore there is a high level of proximity within Organization C.

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Transitivity

Transitivity, the contact members have between each other, is low for Organization C even though the proximity of the members is high. This distinction occurs because there is a consistent turnover rate of Board members in Organization C. In Organization C, each term is stated, by the bylaws, to be three years. Annually, three Board members are elected, or reelected into office, while the remaining six members continue holding their position on the Board (Bylaws). The rotation of elections eliminates the concern that all new Board members will be elected at the same time thus altering the internal makeup or mission of the organization (Organization 3, Interview 1, 2 & 3).

Typically, Board members choose to remain on the Board for "one to two terms" (Organization 3, Interview 4). Not all Board members stay the duration of the term, choosing to leave for various reasons, but for the most part, they fulfill their term (Organization 3, Interview 3). Although there is a turnover rate within the Executive Committee and Board members in general, the turnover rate is not considered to be high by the Board members themselves, rather it is described as a "healthy turnover" (Organization 3, Interview 3) rate. Due to the flux of Board members, the Board members express their difficulties in even knowing other or former Board Members with statements such as "there is no way to distinguish [some board members]. I don't even know all the past board members, and even if we invite them back not everyone shows up" (Organization 3, Interview 1). This indicates there is a level of disconnect among

board members, or lack of contact between certain board members which is referred to as low transitivity.

The events for Organization C are usually attended by at least one or two Board members. During the events that two or more members attend, interactions among Board members are minimal. Furthermore, there are only certain Board members who choose to attend these events, which suggest only specific individuals, will have the ability to interact. The lack of, or limited, interactions among Board members further signifies a low level of transitivity for Board members in Organization C.

Overall, Organization C has a low level of transitivity because not all of the Board members are familiar with each other over the years, and the interaction among certain Board members is limited.

Scope

Scope refers to the range of activities in which an individual participates compared to the organization in which the individual is a Board member. In Organization C, the Board members are participants in multiple activities including other organizations and family events (Organization 3, Interview 3 & 4). In the past, Board members have left the organization to pursue other careers and opportunities in differing organizations (Organization 3, Interview 4). This corresponds with the flexible terms of the Board members, or the constant changing of the members that enter the organization. Although there is a level of flux within the organization, this does not mean that the level of scope, or the activities that Board members participate in while they are Board members for Organization C, are broad ranging.

One Board member, for example, left the Board after his term was completed and described his reason for leaving the organization for two years as "I was busy with life" (Organization 3, Interview 3). During this time, he did not participate in any activities with Organization C, including no longer participating as a volunteer. He decided to return as an active Board member, though, because "it was important" (Organization 3, Interview 3) to him to do so. Currently, he is still active in other organizations, but he does not consider himself "as active" (Organization 3, Interview 3) of a member as he is for Organization C. This indicates that he places a priority on the actions and ability to participate in Organization C as a Board member, thus the scope of his actions is narrow.

Impermeability

Impermeability refers to the ability of a non- member to enter into the organization as a member. In this case, it is measured as the degree to which Board members actively recruit outsiders to join them. Organization C has a tiered structure of entry which is as follows; dues paying members, volunteers, super-volunteers, Board Members at Large and Executive Committee. In an interview, the distinction between the classifications was "the paying members are the ones that keep the lights on, but the volunteers are the ones that get things done" (Organization 3, Interview 1). This indicates that each of the classifications is necessary for the function of the organization, thus the importance of the "super volunteers".

The differing classifications require different qualifications to enter into each category (please refer to the "boundary rules" section for additional details) which also makes it difficult for non-members, or non-volunteers to be considered to enter into a

position on the Board of Directors. At events, for example, there is customarily a signup sheet that asks for the name, contact information of the volunteer and if the volunteer would like to receive emails from Organization C. Contacting the potential future volunteers about the activities of Organization C allows the volunteers to be informed and up-to-date about the organization, but also makes the act of becoming involved the responsibility of the individual. This indicates that Board Members of Organization C actively reach out to volunteers or future members, but do not seek out those volunteers and members. The lack of pursuing volunteers and members indicates that Organization C has a high level of impermeability, or that an individual who desires to enter the organization must put forth effort to join.

The level of personal interaction between the Board Members compared to the Board Members with the volunteers and members is also demonstrated in the interactions at other meetings such as the Science Committee meetings. In the Science Committee meetings, the Board members who attend tend to converse with each other on a first-name basis, but will refer to other individuals as "that one volunteer", "the architect" or "the intern" (Organization 3, Committee Meeting 1). The lack of use of personal identifiers, such as a name, denotes a distinct separation between the Board Members and the volunteers and members who attend the meetings. This indicates that not only are the volunteers and members less memorable to the Board members, but also less likely to enter into the position of the Board.

Summary of Group Relationship

Organization C has a strong group relationship. This indicates that group members feel bound to one another and that the collective is more important than the individual. The high group relation is indicated in the high level of proximity and the narrow scope of other activities that receive the focus of the individual members. Although the table below indicates that the level of transitivity is low for Organization C, the level of proximity is high, which signifies that all Board members do not know each other, but those who do know each other interact on a personal level. The interaction between the Board members who are currently on the Board, signified by proximity, is more important in determining the group association, than the level of transitivity because it is the personal relationships with the current members that create the strongest bond among the members. In other words, simply because an organization has regular turnover does not necessarily mean that the Board members do not feel bound to one another (see Table 24 in Appendix B).

Grid Relationship

Specialization

Specialization refers to the tasks that are dedicated to certain members of the Board, and only those certain members. These tasks are usually beyond simply what is expected of a position. In Organization C, for example, there is a desire to seek out specific individuals to be on the Board of Directors from certain environmental and educational institutions within the local community so that "everyone brings skills" (Organization 3, Interview 4) and contacts to the Board (Organization 3, Interview 2).

This brings a unique attribute for each individual to add to the organization, outside simply his/her position. In the interviews, each member is described by his or her skill set such as "Member X is the business guy" (Organization 3, Interview 3), "Member Y brings people to the organization" (Organization 3, Interview 4) and "Member Z gets the grants" (Organization 3, Interview 2). Each description of the differing board member connotes his/her individual attribute, or specialization, for the organization that assists the functionality for the organization.

The specializations are also emphasized during the voting process in Board meetings. If a Board member, for example, is known for to have an in-depth understating on a topic or specialization, their opinion "has more weight but no intimidation" (Organization 3, Interview 3) or pressure is involved in the voting process. The specialization is typically limited to a single individual Board member, as is noted with the statement "if [Member X] were missing we would have to figure something out" (Organization 3, Interview 3). This indicates that the Board members recognize the specializations of other board members are important and the organization as a whole would have difficulty continuing to function without their presence. Furthermore, if a Board member ventures into another Board member's specialization, he or she will acknowledge this action with a statement such as "I am learning from the master" (Organization 3, Board Meeting 1).

Overall, Organization C has a high level of specializations because certain specializations are sought after in a Board member, the Board member recognizes and

acknowledges the specializations of the other members, and the organization would not function without the specializations of particular Board members.

Asymmetry

Asymmetry refers to imbalance in the level of power within the organization. Organization C is highly asymmetrical structurally as well as among Board members themselves. The structural asymmetrical relationship is formed by the limiting of information to certain Board members who are not a part of the Executive Committee. The Executive Committee is responsible for making "bigger decisions" (Organization 3, Interview 3) and therefore privy to more information. In the decision to terminate the Watershed Coordinator, for example, the Board Members at Large "place[d] trust in the [Executive Committee] to make decisions" (Organization 3, Interview 3) about another member without having complete information. Even though the Watershed Coordinator interacted with the Board members frequently, a level of trust was placed in the Executive Committee that the decision was not a personal vendetta, but rather best for the organization as a whole. This event demonstrates the structural asymmetry of Organization C, as the Executive Committee is trusted by the board members to make the necessary, informed decisions, and the Executive Committee has a higher level of authority and power as compared to the Board Members at Large.

The level of asymmetry is also reflected in the personal interactions among Board members when decisions are made. This is observable through the use of committees within the organization. The Science Committee, for example, is where the ideas of the organization are generated and funding is located. Therefore, whoever organizes and

operates the Science Committee has the strongest connection between active members and volunteers within the community to the Board members of Organization C. Because of this, the Board members recognize that "certain board members do more work" (Organization 3, Interview 3) within the organization and drive the organization "to move forward" (Organization 3, Interview 3) "and everyone else is hanging on with a finger" (Organization 3, Interview 2). The disproportionate level of importance of activities leads to certain Board members being more critical to the organization and thus fosters asymmetrical relationships among Board members.

As Board members recognize that certain individual Board members do more work than others, they describe the structure of Organization C as "hierarchical, no… but it's not consciously egalitarian either" (Organization 3, Interview 4) and "if [Member X] was missing we would have to figure something out" (Organization 3, Interview 3). This indicates that it is not the structure of the organization itself that is causing the asymmetrical relationship between members. If the asymmetrical level was a product of the structure of the organization, the President of the Board, or highest rank within the structure of the organization would hold the majority of the authority, not a single board member.

The weight of certain Board members, or asymmetrical relationship, can also be witnessed during the decision making process at board meetings. Although all votes are equal, if a Board Member who is respected presents and issue, or wants to vote in a certain way, the other Board Members "listen... To what [he or she] says [the Board] should do" (Organization 3, Interview 3).

In a Board meeting determining if a new Board member should be invited to join as a Board Member at Large, for example, the following conversation unfolded;

> Board Member 1: "I don't know. Do you want to meet him?"
> Board Member 2: "Will we take an interview?"
> Board Member 3 *(statement directed to Board Member 1)*: "I'm okay not interviewing him, if you are okay with him"

The conversation emphasizes the notion that the opinion of Board Member 1 is sufficient for the Board as a whole, as the Board members decided to waive the interview and trust the opinion of Board Member 1.

Organization C is overall highly asymmetrical because the structure of the organization limits information to the Executive Committee requiring the Board Members at Large to trust the decisions of the Executive Committee. This arrangement creates an asymmetrical power structure in the organization.

Accountability

Accountability, or the ability to socially or structurally enforce rules, is high in Organization C on both accounts. The members of the Board believe "there is no way to say if [a Board member does] not do [his or her] job [he or she is] out of here" (Organization 3, Interview1), however, there are systems in place to ensure that certain actions are or are not taken by the members of the organization. The Watershed Coordinator, for example, stepped outside her role by speaking for the organization as a whole without permission to do so. Although the Watershed Coordinator is not considered a 'member of the Board', this position requires the individual to attend and participate in all Board meetings (Organization 3, Interview 1 & 3). This indicates that the position of Watershed Coordinator is an integral position within the organization

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itself because the opinions and actions of the individual affect the organization even though this individual is bound to specific choice rules that do not allow the Watershed Coordinator to actively vote on the Board.

Once the Watershed Coordinator violated the choice rules of her position, arrangements were made by the Executive Committee to remove the Watershed Coordinate from the organization entirely. The Executive Committee had the structural authority within the organization to act in this manner because "officially the Board is [the Watershed Coordinator's] boss" (Organization 3, Interview 3) in particular, "the Executive Committee Chair is [the Watershed Coordinator's] boss" (Organization 3, Interview 3). Organization C not only has the structure in place to remove an individual from a position recorded in the bylaws, but also chooses to act according to those bylaws when deemed necessary. This shows that Organization C has a high level of structural accountability.

A degree of social accountability within the organization is also present, though not as high as the structural accountability. The former Treasurer, for example, received criticism for the lack of completion of certain tasks, and awareness of finances, by other Board members (Organization 3, Interview 2). The former Treasurer responded with the statement that "the Treasurer deals with the most amount of work" (Organization 3, Interview 5). The complaints represent socially enforced accountability occurring within the organization as the Board members applied social pressure to ensure the Treasurer was completing the necessary tasks. This level of accountability was then accompanied by a level of structurally enforced accountability because in the next election, the

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Treasurer stepped down and became a Board Member at Large, allowing another individual to assume the position of Treasurer.

Organization C predominately uses a structurally enforced mechanism to ensure all members of the board are accountable for their actions. The structural enforcement is supplemented by social accountability; therefore, overall, Organization C is ranked high on accountability.

Summary of Grid Relationship

Organization C has a high grid relationship. A high grid relationship signifies that the Board members view their place in society in relation to the prescriptions others can place on them. For this reason, the Board members feel that an individual, or committee such as the Executive Committee, has the authority or ability to assert a level of power over the other Board members. The grid relation is indicated in the summary Table 25 (see Table 25 in Appendix B).

Group Grid Classification Compared to Decision Making Process

Organization C has a high group and grid classification which signifies it is a "hierarchical" organization. A hierarchical system is said to favor a socially constructed ranking order (Lockhart, 1999), which is reflected in Organization C Board members' strong adherence to the Robert's Rules of Order and need to for a quorum in order to vote (Organization 3, Board Meeting 1). Furthermore, equality is not supported in this belief system, and institutions are believed to be necessary to ensure society continues to function properly (Lockhart, 1999). This belief system can be seen the removal of the Watershed Coordinator from the organization. In an equitable system, not only would the

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Watershed Coordinator have the same level of authority as the other Board members to speak about the organization, she would have equal voting rights within the organization. The lack of equity, especially in regards to the Watershed Coordinator, indicates that there is a high level of grid or that authority is presumed not only to be legitimate, but necessary to keep social structures intact (Thompson, 1990), thus hierarchical in structure.

The justification for a structured ranking system that can impose restrictions on other individuals is based on the belief that individuals have the ability to specialize in certain aspects of life, which is referred to by Thompson as, "different roles for different people" (Thompson, Ellis, Wildavsky, 1990). The differing roles in Organization C are emphasized by the choice rules, such as allowing the Executive Committee to access to more information compared to the Board Members at Large. This also corresponds with specialized structure within the organization for each Board member. Board members, for example are described by what they offer the organization such as "Member X is the business guy" (Organization 3, Interview 3), "Member Y brings people to the organization" (Organization 3, Interview 4) and "Member Z gets the grants" (Organization 3, Interview 2). The level of specialization within the organization also fosters the asymmetrical relationships among members themselves, as certain Board members' opinions are given more weight (Organization 3, Interview 3), and in the Executive Committee as a level of trust is given to "the [Executive Committee] to make decisions" (Organization 3, Interview 3). In general, Organization C's structure is segmented and stratified.

A hierarchical system is a classification with a strong group association. A strong group association means that the decision-making powers are in the hands of the group over the individual (Thompson, 1986). There is evidence that the decision of the group is more important than the individual by the strong adherence to the aggregation rules of a present quorum with a majority ruling (Organization 3, Board Meeting 1). This emphasizes the notion that the organization acts as a unified organization and not as a single individual. Furthermore, the desire to "protect the mission" (Organization 3, Interview 2), or high level of impermeability, is associated with the clearly defined boundary rules of staggering elections of Board Members, and limited selection, or qualifications, of outside individuals who can enter the organization. In other words, the Board Members feel bound to a single mission that the organization pursues (see Table 26 in Appendix B).

Application

Organization C has a high group and high grid level which corresponds to clearly defined boundary rules for outsiders and insiders. As an agent attempting to work with this organization, it is difficult to enter into the organization itself to disseminate information. In terms of data, this organizational structure is unique in that the most data, or raw information, will be located at the lower levels of the organization, and the amount of information is projected to decrease as one goes higher within the organization (Thompson & Wildavsky, 1986). This occurs as the information is selectively filtered by each level of order (Thompson & Wildavsky, 1986).

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Organization C is primarily concerned with maintaining a structure, and group

identity, hence the enforced choice rules to refrain from deviating from the mission, or

speaking as an individual. Although there is a strong retention of structure, and order

within the organization, the members are not unwilling to change their actions; rather,

they are unwilling to alter the current structure of their organization (Thompson &

Wildavsky, 1986). Any information presented to this organization should be provided

through the necessary channels to ensure that the structure of the organization is abided

by.

Chapter 6: Case Four

Organization D is composed of multiple watershed organizations within a single geographical area with the intention of collaborating on a single cause: to protect the local watersheds. Organization D was specifically established after funding was denied to multiple watershed organizations in the local area and therefore those organizations were no longer able to continue to finance their own watershed coordinator. In other words, Organization D was designed for the local watershed organizations to "come together, share and educate, because no one on their own can have staff" (Organization 4, Interview 3). Without the funds, these watershed organizations were struggling to stay active and functional because "it takes about four or five years to get groups to stick around" (Organization 4, Interview 1). The lack of financial support greatly influenced which organization could and could not survive thus the driving reason to establish Organization D was to ensure the watershed organizations could continue to function.

Although Organization D has been actively in existence for the past ten years, the organization, and its members, struggle with the identity and overall purpose of the organization. The question of "what are we, and who are we" (Organization 4, Interview 5) consistently emerges for the members. For this reason, on numerous occasions, an outside professional was consulted to assist in the mission building process and solidify the goals of the organization (Organization 4, Additional Interview 1).

After multiple attempts to define the organization, to no avail, the members agree that "the purpose (of the organization) is to come together and talk" (Organization 4, Interview 2). In other words, the organization is not currently able to achieve an overarching goal, rather it is a "support group for organizations" (Organization 4, Interview 5). The current potential of the organization, however, is not what the members intend the function and purpose of the organization to be in the future. Consequently, the members of Organization D are once again considering hiring an outside consultant to solidify the organization.

The desire to structurally reshape and solidify the organization makes this organization beneficial for this study because the organization's decision making process is currently in flux. This allows the decision making process to be observed in its formative state.

<center>Position Rules</center>

A position rule is defined as the positon, or role, an individual can hold in an organization. In Organization D, there are three clearly defined positions from the Memorandum of Agreement. These positions include the President, Secretary and Treasurer, which is also known as "the Steering Committee" (Organization 4, Interview 2). In practice, the Secretary does not always actively hold a position, and the duties, or choice rules, are distributed between the members (Organization 4, Interview 6). The remaining individuals hold the position of Board Members at Large. There are no clearly listed rules in the Memorandum of Agreement, or used in practice, that limit the number of Board Members at Large in the organization (see Table 27 in Appendix B).

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Boundary Rules

Boundary rules define the qualifications to enter or exit a position. Originally, Organization D was assumed to be only for representatives from active watershed organizations within the local area. The size of the organization, members wise or geographically, was not of importance, rather the focus was on if the individual was a representative of a watershed organization (Organization 4, Interview 1). Multiple discussions ensued over the past years to determine who is and is not allowed to be a member of Organization D, and who is or is not allowed to be an active voting member (Organization 4, Interview 1, 2, & 4). Certain organizations, such as national environmental clubs, for example, have a vested interest in environment, but are not specifically focused on watersheds. The question from the representatives of the watershed organizations becomes, "Should Organization X be a member?" (Organization 4, Interview 1). This presents a lack of clarity of who can or cannot enter into the organization.

The structure of Organization D, currently, allows an individual, regardless of their organizational affiliation, to attend the meetings. As the active President stated, for a representative of an organization to become a member in Organization D, he or she must "show up and you are a member, no dues, just attendance" (Organization 4, Interview 2) because "the purpose is to come together and talk" (Organization 4, Interview 2). At this time, the list of representative members includes multiple watershed organizations in the area, an environmental legal organization, a national environmental club, governmental agencies, a national voters club and several other undetermined representative members.

This indicates that there are no predetermined qualifications, other than an interest in watersheds, to enter into Organization D.

In the past, dues were required to be paid to Organization D to be classified as an active member and have voting rights. As one representative noted in the Board Meeting debating if dues should be required for membership again, "last year only [Organization Name] paid dues" (Organization 4, Board Meeting 2). Furthermore, as the debate on dues continued, a representative stated, "it's difficult for [Organization Name] and [Organization Name] to pay dues" (Organization 4, Board Meeting 2) which was meet with the response "they might not need to" (Organization 4, Board Meeting 2). This indicates that even defining rules of membership are not strictly followed by the representatives of Organization D.

One member described the process of entering into the organization as, "I asked [the President of Organization D] and she said the organization is open to anyone in the club" (Organization 4, Interview 6). This demonstrates an open call system for entering into the organization. Open call means that there are no predetermined qualifications to enter into a position; rather it is open to anyone who applies. The lack of qualifications to enter into the Organization and lack of invitations to potential members to join indicate that the boundary rules for Organization D are unclear or ambiguous even to members themselves.

Within Organization D, the structure is unclear and ambiguous to the members as well. There is a "Steering Committee" (Organization 4, Interview 2) which is voted on annually, and the positions include the President or Chair, Treasurer, and Secretary.

Furthermore, there is a role for "communication specialist" (Organization 4, Interview 2), however, the representative who holds this position at present does not recognize he is in this position (Organization 4, Interview 3) and it is not listed as a position within the bylaws. This indicates that the representative was not voted into this position, but is assumed by the organization to be in this position, perhaps due to a specialization (Please refer to the Specialist Section for additional information).

The lack of consistent meeting attendance presents the challenge of having a single representative in an official position on the Steering Committee. The elected Secretary, for example, has not attended the past couple of meetings "because she has been busy" (Organization 4, Interview 6) therefore other representatives "are taking turns" (Organization 4, Interview 6) assuming the role of Secretary to ensure the necessary tasks are completed (Please refer to the Choice Rules Section for additional information on the duties of each position). The lack of attendance, and flux of members, strains the structure of Organization D because there is a limited regularity in member attendance thus the tasks that can be assigned or completed.

There are two qualifications necessary to hold a role on the Steering Committee and neither is strictly enforced. The first qualification is that the selected member is willing to attend the majority of the scheduled meetings (Organization 4, Interview 5) and the second is that he/she is willing to perform the necessary tasks within the role. In many instances, the selection is limited "because there is only one person" (Organization 4, Interview 5) to choose. The qualifications are so unimportant, it is said that even "a group with something wacky would be recognized" (Organization 4, Interview 4). This

indicates that there are limited and quite ambiguous qualifications representatives must meet to assume a position on the Steering Committee.

The lack of qualifications is also noted in the election process at the Board Meeting. During this time, the President asked the seven other representatives if she could be President for another term regardless of her "changing role and not working with [Organization X] anymore" (Organization 4, Board Meeting 2). No official vote took place, there were just general nodding of heads instead. This indicates there was little to no concern about the role, or relationship between the representatives of the organization and the primary focus is on who is willing to volunteer for a position. The Treasurer was asked, "Would you be willing to serve as Treasurer again?" (Organization 4, Board Meeting 2) which also did not receive a vote. Finally the position of Secretary was discussed, and no one was willing to volunteer for the position. The President then stated, "Think about who we can corral into [the position of Secretary], maybe it will be just a six month term" (Organization 4, Board Meeting 2). This further demonstrates that even the specified qualification of an annual term is not enforced, or is willing to be altered (see Table 28 in Appendix B).

<p style="text-align:center">Choice Rules</p>

Choice rules determine what an individual within a position is permitted, required or prohibited from doing. Organization D is "loosely run" (Organization 4, Additional Interview 2) because the organization is "not real rules based" (Organization 4, Additional Interview 2). The lack of clearly defined choice rules, or structure to abide by, leads the members to have a "conversation style" (Organization 4, Additional Interview

2) thus in the board meetings, the "discussion can be lengthy" (Organization 4, Interview 4). This indicates that the members a permitted to discuss other topics, or not stay on task during the board meetings. As one member described, "sometimes it is two to three hours before [we begin] discussing the agenda" (Organization 4, Interview 4). The continuation of discussion also indicates that there is no authority, or "no real executive body format" (Organization 4, Interview 4) presiding over the members as a whole that guides the conversation (Further discussed in the Grid Association Section).

The equality of members is also emphasized in the ability to share roles and tasks within the organization. The Secretary, as mentioned previously, "has been busy" (Organization 4, Interview 6), therefore other representatives who attend the board meeting assume the position of Secretary and "someone does the minutes" (Organization 4, Interview 6). This indicates that the tasks of the Secretary are not position specific, or that in Organization D, there are "no real roles" (Organization 4, Interview 4) for each representative. The former President also stated task sharing occurred because he rarely performed the necessary tasks and the Secretary at the time "did more of the work" (Organization 4, Interview 5). The ability to share tasks regardless of positons indicates that sharing tasks is a permitted choice rule.

Organization D is driven by representatives voting, thus there is a desire to have equal votes for all organizations, or in other words, there is "no vote stacking" (Organization 4, Interview 4) (Please refer to the Aggregation Rule Section for additional details on the structure in place). This means that "two people from the same organization is [counted as] one vote" (Organization 4, Interview 5). But even this rule is subject to

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exceptions, because occasionally representatives are members of multiple groups, which are not prohibited from voting.

The representative structure of Organization D makes the most prominent prohibited choice rule, which each member abides by: to vote according to and represent their home organization. This is evident in situations such as when the Memorandum of Agreement was passed from representative to representative in the board meeting to sign in agreement, and one active representative who attends each meeting "never signed on the agreement" (Organization 4, Interview 3) because the representative "can't without the approval of the board [of the organization he represents]" (Organization 4, Interview 3). A similar scenario unfolded when the board decided to write a letter to the Mayor's office. In this situation, multiple members were unable to sign the letter until they received approval from their home organization's board members. As one member stated, "letters are funny, they have to go up the flagpole" (Organization 4, Interview 6). Even the act of paying dues to be an active member in Organization D becomes a complicated because as stated by one member "my board wants to know what [Organization D] is doing (with the dues)" (Organization 4, Interview 1). This indicates that the representatives of Organization D are limited in actions, or prohibited from acting outside what their home organization desires.

Voting rights are also dependent on the home organization the representative is representing. Some representatives are considered "nonvoting members" (Organization 4, Interview 3) because their home organization does not support actively participating as a representative of the organization. The limitation is typically due to "litigation issues"

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(Organization 4, Interview 1) arising from the need to receive "approval from the Board (of the home organization)" (Organization 4, Interview 3) and the fact that these representatives are representing an entire organization. As one member described the difficulty, referring to her home organization, "it's a club, and a club of people, so no one person can call the shots" (Organization 4, Interview 6). The structure of a "group of groups" (Organization 4, Additional Interview 2) limits the decisions that Organization D can pursue because not all members are allowed to vote on an issue.

Quarterly, the members of Organization D meet with the city officials from the Department of Public Utilities (DPU) to discuss the conditions of the watershed and the environmental activities in the city. The members of Organization D continue to attempt to foster this relationship because the contact with the high ranking political officials is seen as very beneficial to all of the individual organizations. This relationship also influences the actions which the members of the organization can and cannot take. In one board meeting, for example, a concern was raised about the state of the water in the city and if there would be another algal bloom in the coming months. Considering this is an environmental concern that pertains to the local watershed organizations, one Board member stated, "[Organization D] has a stand on (the issue)" (Organization 4, Board Meeting 2). The members seemed to agree that this is a pressing issue, and Organization D should take action, however, there was great concern that "(DPU) are going to get mad at us" (Organization 4, Board Meeting 2). For this reason, the solution to "write a letter from [Organization D] and run it by the DPU before (they) submit it to the (local newspaper)" (Organization 4, Board Meeting 2) was reached. The decision to consult

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with DPU prior to an action indicates that there is a strong choice rule present that prohibits members of Organization D from speaking negatively about DPU (see Table 29 in Appendix B).

<center>Aggregation Rule</center>

Aggregation rules defines how the decisions of many are totaled into a single decision. The members of Organization D do vote on formal issues such as nominating members into select positions (Organization 4, Board Meeting 3). In these situations, when voting does occur, "two people from the same organization are one vote" (Organization 4, Interview 5). In other words, there is "no vote stacking" (Organization 4, Interview 4) or giving more weight to certain organizations over others. Furthermore, in most instances the total number of members currently active is unknown by the Board members, and it presents the challenge of recognizing if a quorum is present (Organization 4, Interview 6). For this reason, the discussions at the Board meetings, with the members present at the time, are more important than receiving an official quorum (Organization 4, Board Meeting 3).

With daily tasks, most Board members state that "not many things are voted on" (Organization 4, Interview 6). Instead, the focus is on "unanimous consent" (Organization 4, Interview 4). In order to achieve this, "issues are done over time" (Organization 4, Interview 4) and "if the members don't agree, it usually goes back to discussion" (Organization 4, Interview 4) prior to a vote. For this reason, "discussion can be lengthy" (Organization 4, Interview 4) and the Board members hardly recognize the act of voting itself with statements such as "vote? Yea, I think we do" (Organization 4,

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Interview 3). This indicates that although voting does occur, Organization D focuses "more on consensus" (Organization 4, Interview1) and less on the structure of voting according to Robert's Rules of Order (see Table 30 in Appendix B).

Group Association

Proximity

Proximity is the feeling of closeness the members have towards each other. The members who attend the Board meetings for Organization D "come and go" (Organization 4, interview 4) which means that at each meeting new members, or members who have not attended for months, will attend the meeting (Organization 4, Interview 1). This limits the ability for all the members to interact with one another and thus presents a difficulty in developing a bond between each other. Furthermore, in lieu of personal discussions at the beginning of the meeting, each representative introduces him or herself to the Board and "states what the organization (they are representing) is doing" (Organization 4, Interview 4) before discussing the agenda. The act of introductions at each Board meeting is further evidence of the low level of proximity between members because they do not even know each other's names or organization.

There is a range of attendees to the Board meeting each month who will occasionally attend; however, there is also a recognized "core (selection of) members that are always there" (Organization 4, Interview 5). Even though the "same people attend" (Organization 4, Interview 4), representatives, in interviews, had difficulty associating the names of individuals with the corresponding organization affiliation (Organization 4, Interview 4 and 6), and, instead, frequently referred to the other representatives by the

organization name rather than the individual's name. The lack of personal interaction, and knowing one another's name and organization affiliation, indicates there is a low level of proximity between members in Organization D.

Transitivity

Transitivity, the contact members have with each other, is low for Organization D. As mentioned in the "Proximity Section" Board members are not aware of each other's names and have difficulty associating individual Board members to the organization they represent, thus a "lightning round of introductions" (Organization 4, Board Meeting 2) is done at the beginning of each Board meeting to familiarize each member with the other members. This indicates there is limited interaction between Board members outside of Organization D's Board meetings, therefore a low level of transitivity.

The low level of transitivity is also represented by the members' inability to determine who is or is not a member of Organization D. As one member stated, "I don't know how many total (Board members there are) … but obviously there was a quorum because it was enough to vote" (Organization 4, Interview 6). This indicates that Board members do not interact with one another, and there is limited awareness of who is or is not a current member.

The lack of awareness of one another is also demonstrated in Board meetings. During one Board meeting, for example, a discussion arose about a representative who had not attended the Board meetings for a couple of months (Organization 4 Board Meeting 2). When this was discussed, a concern was raised about whether there was a

need to accommodate this representative and one Board member asked, "who is that?" (Organization 4, Board Meeting 2). This indicates that the Board member was not aware of the other individual, or the reason the meeting time was changed, therefore represents a low level of transitivity between board members. Furthermore, in a meeting with DPU, the current president was examining the letterhead for the organization and noted "the letterhead needs to add [Organization X]" (Organization 4, Board Meeting 3). At the point which this was noticed, the representative for Organization X had been actively participating in Organization D for months unbeknownst to the former president of Organization D.

Overall, the members of Organization D do not interact frequently with one another; for this reason, the level of transitivity is low. With this disconnect, it presents a difficulty in increasing the proximity of Board members because if the Board members are not in contact with one another, they cannot build personal relationships with one another.

<div align="center">Scope</div>

Scope refers to the range of activities an individual participates in compared to the organization in which the individual is a board member. Organization D is unique in this aspect because "each representative is a governing body" (Organization 4, Interview 4) or in other words, each "Council Member" is a representative of another organization and "represents their organization, not self" (Organization 4, Interview 2). As a representative of another organization, this inherently means that the primary organization is the one which the representative is representing at Organization D, thus, Organization D is

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secondary to the primary organization. This indicates the scope, or importance of Organization D compared to the primary organization the representatives represent, is wide.

The wide scope is also evident by the actions of the Board members. The lack of attendance of members to the Board meetings, for example, indicates that the Board members have more pressing engagements to spend their time, and that Organization D is not as important. One member described the amount of overall time spent doing activities for Organization D at an estimate "three percent of time" (Organization 4, Interview 6) because she is "pulled in a lot of directions" (Organization 4, Interview 6). Other Board members are reported as "[Member X wanted to give up" (Organization 4, Interview 1) because she found Organization D a waste of time. Furthermore, the current Secretary does not attend the Board meetings "because she has been busy" (Organization 4, Interview 6), which indicates that Organization D meetings are not her primary concern. These events emphasize the notion that there are other activities that are more pressing for the Board members of Organization D than participating in Organization D.

The most recognized benefit for the representatives is stated to be the interaction between Organization D and the public officials at DPU, but even at these meetings, the representatives will focus on their own primary organization over Organization D. During a meeting with DPU, for example, a list of questions is composed and presented to the officials at DPU as the most important or pressing questions for the representatives of Organization D. As a question about drainage was being answered, one representative questioned the damage of "plastic bags in the sewers" (Organization 4, Board Meeting 3).

This was not a question on the list composed by Organization D, but was discussed in that Board member's primary organization's Board meeting. The act of asking a question not on the list of questions, with the intention of informing one's primary organization indicates that first concern is the providing information to the primary organization, regardless of if information is known or disseminated to Organization D.

Impermeability

Impermeability refers to the ability of an outside member to enter into the organization as a member. Organization D has a low level of impermeability because anyone who is willing to attend is willing to join the organization. As the current President stated, the process for becoming a member is "(you) show up and you are a member, no dues, just attendance" (Organization 4, Interview 2). Furthermore, the latest member to join Organization D stated she "sent an email" (Organization 4, Interview 6) and "just asked to come" (Organization 4, Interview 6). This indicates that the process for entering the organization is not based on qualifications, rather by a simple desire to attend, and it is easy to enter into the organization if said desire is present.

As a representative based organization, the ability for members is easier because it extends to the entire organization rather than a single individual. In one statement, for example, the President stated "the organization is open to anyone in the club" (Organization 4, Interview 6). This was apparent at two separate Board meetings when a frequent representative of an organization could not attend and her supervisor attended in her stead (Organization 4, Board Meeting 1 and 3). Allowing any member of an organization to act as an active Board member, and anyone to attend who is willing,

makes certain that "every once in a while someone new pops up" (Organization 4, Interview 6). This indicates that Organization D is fluid, or that there is a low level of impermeability in the organization.

<div align="center">Summary of Group Relationship</div>

Organization D has a weak group relationship. This indicates that the group members do not feel bound to one another and that the individual is more important than the collective. The low group relation is indicated in the low level of proximity, transitivity, and impermeability combined with the broad scope of other activities that receive the focus of the individual members (see Table 31 in Appendix B).

<div align="center">Grid Relationship</div>

<div align="center">*Specialization*</div>

Specialization refers to the tasks that are dedicated to certain members of the board, and only those members. The central focus of Organization D appears to be for representatives of watershed organizations to "come together, share and do education, because no one on their own can have staff" (Organization 4, Interview 2) to perform these tasks for them. This implies, in general, in Organization D, "everyone is there to support each other" (Organization 4, Additional Interview 2) and the "primary function (of Organization D) is to inform" (Organization 4, Interview 4) the watershed organizations of the events occurring in the local community. With this structure, there is "no purpose" (Organization 4, Additional Interview 2) or tasks to complete by the organization as a whole, which limits the ability for members within the organization to specialize in a certain area.

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The lack of specialization for the organization as a whole is replaced by individual specializations for the representatives' primary organization. In the structure of "a group of groups" (Organization 4, Additional Interview 2), with the primary focus of education and informing, the organizations with "success in areas will be listened to" (Organization 4, Additional Interview 2) and certain organization representatives will be "more respected due to length of tenure" (Organization 4, Additional Interview 2). This creates a specialization within the organization because, as one member stated, "if (Organization X) brings up an issue, then it is known to be an issue" (Organization 4, Interview 4). The ability to determine if an issue is an issue indicates a specialization for that representative within Organization D because the other members cannot do this task.

The level of specialization is also shown by the variety of members in Organization D. One member, for example, during a Board meeting, shared with the other members how to use a crowd sourcing website to increase donations to their primary organization (Organization 4, Board Meeting 1). This is also demonstrated with other representatives as one Board members is associated with an environmental legal firm, thus specializes in topics of legality, another is a volunteer group driven to promote volunteer opportunities and is deferred to in the specialization of citizen participation (Organization 4, Board Meeting 1). Although "all watersheds have the same goal" (Organization 4, Interview 1), each representing organization is slightly different in what is promoted or emphasized, therefore, their primary organization's focus becomes their specialization within Organization D.

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The specializations are brought by the individual representatives to the members of Organization D, however, it must also be noted that this does not always occur. In the meeting with DPU, one representative questioned the damage of "plastic bags in the sewers" (Organization 4, Board Meeting 3) because her organization was working to promote a city removal of plastic bags. This Board member knew a great deal about the concern, but did not share the reason for the question or the importance of the response to the other members of Organization D. Instead, the information was strictly brought back to her primary organization. Although members of Organization D are highly specialized, it must be noted that the main concern for these individuals is their primary organization.

Overall, Organization D is highly specialized because each representative is a skilled in a knowledge set from their primary organization and brings that information to the members of Organization D.

Asymmetry

Asymmetry refers to an imbalance level of power within the organization. The structure of Organization D is described as "some members have more influence; they have more resources" (Organization 4, Additional Interview 2) and some members are "more respected due to length of tenure" (Organization 4, Additional Interview 2), yet, at the same time, and by the same individuals, Organization D is recognized as having a "horizontal power structure" (Organization 4, Additional Interview 2). This indicates that certain Board members have select specializations within the organization, but the structure of Organization D is balanced or symmetrical.

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The "equal weight" (Organization 4, Interview 2) of the Board members or how "no one has more say" (Organization 4, Interview 4) is demonstrated by the actions that each member takes within the organization. In the Board meetings with DPU, for example, each member of Organization D takes notes, but those notes are never complied and distributed to the other members who did not attend (Organization 4, Interview 1, 3, & 6). This indicates that there is no central figure within the organization that holds the responsibility, or asserts their authority, for the organization and its Board members as a whole. In other words, if an individual representative wants a task completed, he or she is responsible for completing said task. This indicates the power level of the organization is equally distributed to each individual representative.

The distribution of tasks, based on the individual representative, is also apparent in the generally assigned tasks of the organization. At one point, for example, Organization D decided to send a letter to the Mayor's office to write of all the positives achieved in the year (Organization 4, Interview 6). Instead of sending a single letter from Organization D, each Board member was asked to write a letter from his or her primary organization. Together, the Board members "brainstormed ideas, but [wrote the letter] as an individual" (Organization 4, Interview 6). The individualistic nature of the structure of Organization D promotes the notion that there is an equal power among members, and that there is no central authority or power within the organization thus the organization has a low level of asymmetry.

Accountability

Accountability, or the ability to socially or structurally enforce rules, is low in Organization D. Enforcing rules structurally within Organization D is challenging primarily because most Board members state they "don't know how to structure" (Organization 4, Interview 1) the organization but recognize that Organization D "needs more structure" (Organization 4, Interview 2). A lack in the ability to understand the structure of an organization makes enforcing rules, or that structure, challenging for the members. For this reason, the only means of accountability that could be used in Organization D is socially enforced.

Socially enforced accountability is also rarely used in Organization D because the members tend to "come and go" (Organization 4, Interview 4). The constant flux of members makes it difficult to perform even the simplest task within the organization such as voting. The organizational rules for Organization D state there must be a "two-thirds majority present to vote" (Organization 4, Interview 2; Bylaws), however, when asked how many members there are currently, the frequent response is "I don't know how many total (members are active), but obviously there was a quorum because it was enough to vote" (Organization 4, Interview 6). This indicates the rules are not enforced either structurally or socially.

Certain members in the organization attend the Board meetings but do not have voting rights in the Organization D. One Board member described his situation as "I never signed on the Memorandum of Agreement, I can't without the approval of the board (referring to the Board of his home organization)" (Organization 4, Interview 3).

These select representatives of organizations are known by the Board members of Organization D to have "no vote because of litigation issues" (Organization 4, Interview 1). These "non-voting members" (Organization 4, Interview 3), however, admit to voting frequently in the meetings and assisting in the discussions that shape the decisions of the organization (Organization 4, Interview 3 & 6). This indicates that although the rights are limited to certain Board members, the rights are neither socially nor structurally enforced.

Even once a vote determines a task should be completed, the decision is unenforceable in Organization D. In the decision to send a letter to the Mayor's office, for example, each individual representative was asked to write a letter of support from their home organization. All organizations agreed to do so (Organization 4, Interview 6). In the end, only two representatives reported their organization's completing the task; the others did not, and were likely not to complete the task (Organization 4, Interview 6). One Board member explained the reason for not completing the task as "there is no you have to do this" (Organization 4, Interview 6) in Organization D, or in other words, representatives are not held socially or structurally accountable to perform actions in Organization D.

<div align="center">Summary of Grid Relationship</div>

Organization C has a low grid relationship. A low grid relationship signifies that the board members of the organization do not view their place in society in relation to the prescriptions others can place on them. Instead, the board members feel that no single member has the authority or ability to assert a level of dominance over the other board

members. The grid relation is indicated in the summary Table 32 (see Table 32 in Appendix B).

Group Grid Classification Compared to Decision Making Process

The classification of group and grid for this organization indicate that Organization D is categorized as "individualistic" (see Table 33 in Appendix B). The individualist is a combination of low group and low grid association which makes this classification self-regulating (Lockhart, 1999; Wildavsky, 1987). The degree of self-regulation is present in the representatives' primary organizations with statements such as "my Board wants to know what (Organization D) is doing [with the dues]" (Organization 4, Interview 1) and "I can't without the approval of the board" (Organization 4, Interview 3) rather than focusing on Organization D. The intent of the Board members of Organization D is not to promote Organization D as a whole; rather it is to act in accordance to their primary organization, as indicated in the choice rules.

The lack of ties between the group and the desire to be bound only to oneself drives the members of this way of life to strive different from the majority of the society, or an individual; similarity, individualists do not value centralized authority (Wildavsky, 1987). In Organization D, each Board member specializes in the focus of their primary organization, thus, is only bound to that primary organization and the Board members are seen as independent agents, or individualistic. Furthermore, the lack of enforceable social rules or structure indicates that there is no central authority imposed on the Board members in Organization D.

The low level of group and grid relation can be further seen in the unclear boundary rules within and outside of the organization. Considering in Organization D's lack of qualifications to enter the organization, or unclear boundary rules that allow even "a group with something wacky (to) be recognized" (Organization 4, Interview 4) without exclusion, and members can come and go as they please, enforces the notion of a weak group association. The lack of formal structure within the organization, or low grid, with the complaints of "there is no infrastructure" (Organization 4, Interview 1) and the persistent "struggle to find a place and purpose" (Organization 4, Additional Interview 2) is also coupled with the unclear boundary rules within the organization (see Table 33 in Appendix B).

Application

The low grid and low group levels of Organization D correspond to the unclear boundary rules for outside members as well as inside members. This structure is ideal for an outside agent to enter into the organization and be considered and equal voice within the organization due to the consensus driven aggregation rules. This structure, however, is referred to as a shifting system because the members frequently enter and exit the organization and the organization lacks consistency (Thompson & Wildavsky, 1986). Information provided to this organization may not be utilized to its fullest and actions are rarely enforceable within the organizational structure.

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Chapter 7: Summary of Cases
Patterns across Organizations between Rules and Worldviews

Four watershed organizations were selected from a single county within a large

metropolitan area thus the legal parameters and demographics are similar for all four

organizations. Although the central focus, or mission, for each watershed organization

differs, each watershed organization promotes the use and awareness of the water through

a combination of educational programs, raising public awareness and establishing

volunteering opportunities. Furthermore, all four watershed organizations are responsible

for locating funding to support the activities of the organization and are relatively the

same age. For this reason, the organizations are considered comparable.

For this research project, I conducted a detailed comparative case study drawing

on multiple sources of evidence, including: observations of board meetings and

organizational activities, interviews with organizational members and knowledgeable

outside professionals, and primary documents. Analysis of the evidence followed the

Institutional Analysis and Development (IAD) Framework developed by Elinor Ostrom

(1990) including positions rules, boundary rules (within the organization and for outside

members), choice rules, and aggregation rules. This was compared to the group and grid

level of the organization based on the system developed by Rayner and Gross (1985).

Group level was evaluated on three criteria including proximity, transitivity and

impermeability and grid level was evaluated on three criteria including specialization, asymmetry and accountability (see Table 34 in Appendix B for a summary of findings).

Position Rules: Number of Positions

Three of the four organizations (A, B, C) had the same number of designated positions. In each case the positions are Chair, Vice-Chair, Secretary, Treasurer, and Board Member at Large. The fourth organization (D) eliminated the position of Vice-Chair. There is no consistent pattern between number of positions and either the group or grid levels of the organization.

Clarity of Boundary Rules

Boundary rules can be divided into two categories: (1) entering into a position from outside the organization, and (2) entering a position from within the organization. For category (1), Organizations A and C had clearly defined boundary rules. As one interviewee said, potential members can be "very capable" (Organization 1, Interview 1) individuals, but not suitable for Organization A because they "[are] a puff of dust in a whirlwind" (Organization 1, Interview 1) hence the need for the strict qualification system to enter the organization. Organization C, similarly, has a list of qualifications to enter the organization because the Board members "don't want the people to decide and create mission creep" (Organization 3, Interview 3). In contrast, for category (1) Organizations B and D had unclear boundary rules. This is evident in Organization B's Board members constant hunt for "fresh-blood" (Organization 2, Interview 1) and the desire "(not) to exclude anyone, especially in regards to membership" (Organization 2, Interview 2). Organization D's openness to new members, and unclear boundary rules,

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was indicated by the belief that members had that even "a group with something wacky would be recognized" (Organization 4, Interview 4). Thus the boundary rules for organizational outsiders is clear in organizations with high or mostly high Group levels (Organizations A and C), whereas there was no consistent pattern with Grid levels.

For category (2), entering a position from within the organization, organizations with high levels of grid, such as Organization B and C, have clear boundary rules to enter positions. In Organization B, for example, the clear boundary rule to enter a position is described as "there is a desire to have certain people in a role" (Organization 2, Interview 1). Organization C, similarly to Organization B, restricts the boundaries rules within the organization by requiring Board members to be on the Board for at least "a year before you are president" (Organization 3, Interview 4) or enter into the Executive Committee and by limiting the individual that can enter certain positions. Furthermore, in this organization, Board members are required to write a paragraph describing their potential contributions to the organization, which is a competitive boundary rule. This emphasizes the importance of clear boundary rules, or for individuals to possess certain skill sets, to enter positions, in the high grid level organizations (Organization B and C). In organizations with low grid levels, such as Organization A and D, the boundary rules to enter positions are unclear. The Board members in Organization A, for example, rotate between positions because "all members are equal" (Organization 1, Interview 5) in regards to qualifications for positions. Organization D also rotates the Board members through positions depending on the question "are you willing" (Organization 4, Interview 5) which indicates the only qualification is willingness. Thus the boundary rules for

organizational insiders is clear in organizations with high Grid levels (Organizations B and C), whereas there was no consistent pattern with Group levels.

Overall, there is an important difference in how group and grid levels are linked to boundary rules, depending on whether the boundary rules are for organizational insiders or outsiders. For entering positions from outside of the organization, group seems to be the important factor. In contrast, for entering positions from within the organization, grid is associated with the clarity of boundary rules.

Choice Rules

Choice rules cover many conceivable actions within an organization. For comparison across the four organizations, data include choices about three common actions: (1) Task Sharing, (2) Speaking for the Organization and (3) Going off mission.

Task Sharing

Among all four organizations, each was willing, to some extent, to share tasks at one point or another. This can be seen in Organization A debating who should man the booth at a local fair and at a what times (Organization A, Board Meeting 2), Organization B when Board members are willing to perform the "housekeeping roles" (Organization 2, Interview 1) for the organization, or in Organization C when Board members edit and handwrite letters to mail out to their members (Organization 3, Board Meeting 1). These tasks are not necessarily role specific, thus can be performed by any member of the organization without violating specifically designated choice rules for designated positions within the organization. Furthermore, the tasks are most likely completed by a

range of members because they lack a specific designation with a position in the organization and are required for the functionality of the organization.

Some organizations, such as Organization A and Organization D take the sharing of tasks a step further as multiple members will assist in the tasks designated for a specific role. In Organization A, this occurs because "there are certain jobs with more work, like taking the minutes, and the members will pull together and help [the Secretary] get them done" (Organization 1, Interview 4). In Organization D, the Board members have few, if any, designated roles, or choice rules, for the listed positions therefore can "take turns" (Organization 4, Interview 6) performing the tasks of specific positions. In these two organizations, "there are no real job descriptions" (Organization 1, Interview 2) for each position, thus there are not defined choice rules that must be followed by the Board members. Instead, it is a permitted choice rule to share tasks, and in essence share positons in the Board, hence the difficulty identifying the titles of each positon (Organization 1, Interviews 1, 2, 3, 4 & 6). The permitted choice rule, that allows share of tasks, is also coupled with a low grid association in Organizations A and D.

Other organizations, such as Organization B and Organization C, have strong required choice rules, which prohibit certain Board members from acting outside of their designated role, or position. This is signified with statements such as "I used to (when I was Chair of the Board), but now [NAME] is the Chair" (Organization 2, Interview 1) and "No, you are the Vice President (upon asking if member of the Board would lead the meeting)" (Organization 3, Board Meeting 1). Each of these refers to a specific positon within the organization (*Chair of the Board* and *Vice Chair of the Board*), recognizing a

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certain choice rule that must be performed by that position (*correcting Board members* and *leading the Board meeting*), and is expressing an inability to complete the task for the other position (*guiding the Board meeting*). This is associated with a high grid association in Organizations B and C.

Overall, general tasks are shared among members in all four organizations. However, for tasks specific to a particular position, such sharing occurs more in Cases 1 and 4, which have low Grid levels, than in Organization B and C, which have high Grid levels

Speaking for the Organization

A watershed organization is composed of many individuals who come together and choose to act as a single entity: the watershed organization. This presents the dilemma of representation for the organization because the organization cannot speak for itself, thus it is the responsibility of the individual members to do so. Choice rules regarding organization representation can be divided into two categories: (1) individuals can speak on behalf of the organization without the approval or confirmation of the other members of the organization and (2) individuals must receive confirmation or approval to speak for the organization as a whole.

Organizations B and D, with low group levels, fit into category (1) therefore the individual Board member is capable of speaking for the organization as a whole without the consent or approval of the other members. In Organization B, for example, each Board member is granted "administrative" access on the social media pages used by the organization (Organization 2, Interview 1). With this access, Board members can post

photos, comments and voice frustrations about other organizations without consulting or receiving the approval of the other Board members (Organization 2, Interview 1). Organization D, on the other hand, does not have a social media outlet, but is structured in a representative framework. This means that each individual representative "represents their organization not self" (Organization 4, Interview 2). Therefore, similarly to the "round of up-dates" (Organization 4, Board Meeting 1) at each Board meeting, when the representative introduces him or herself and the activities of his or her primary organization, each representative returns to their primary organization and updates them on Organization D. This structure allows the individual representatives to speak of Organization D without the approval or consent of the other Board members of Organization D.

Organizations A and C, conversely, have a high group level and fall into category (2) meaning the individual Board members must receive confirmation or approval from the organization as a whole prior to speaking about or for the organization. In Organization A, for example, the Board member responsible for the social media site described the process of receiving confirmation from the Board members prior to posting images on the Organization's blog as follows; "as soon as I emailed her (the photographer), I emailed the group to ask to put the pictures on the blog… I knew it would be okay, but I had to email them anyway" (Organization 1, Interview 5). One Interviewee in Organization C stated he would "personally ask (the Board) and others would too" (Organization 3, Interview 3) before discussing aspects of the Organization C with the public. Furthermore, members of Organization C, such as the former Watershed

Coordinator, who do not receive approval from the Board to speak about the organization, were removed from the organization (Organization 3, Interview 3).

Overall, the choice rule of speaking on behalf of the organization is associated with the group level. In Organizations B and D, the low group level is linked to a general acceptance of members speaking about the organization without receiving confirmation from the Board as a whole. In Organizations A and C, in contrast, the high group level is linked to Board members requesting permission from the Board as a whole prior to discussing the organization in public.

Going Off-Mission

The mission of each organization defines how that organization will approach an event. In an educationally based organization, for example, when a watershed issue arises, the Board members will primarily focus on educating the public about the issue, unlike an activist organization that will strive to sway the public. Organizations will either (1) attempt to remain on a clearly defined mission or (2) choose to approach activities and opportunities that can make the organization as a whole diverge from the original mission.

The Board members in Organization A and C, two organizations with a high group level, remain in the first category because they express a general concern about deviating from the mission of the organization. The importance of staying on mission was emphasized in an interview with a Board member from Organization A. In this interview, the Board member described why the members of Organization A should act as a single group to stay on mission as, "there is no need to reinvent the wheel" (Organization 1,

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Interview 5) by acting alone. This statement emphasizes the importance of staying within the mission created by the organization originally so that one does not have to struggle on their own to achieve the same goals. In Organization C, the Board members restrict access to certain roles within the organization in order to "prevent mission creep" (Organization 3, Interview 1). Furthermore, the members of Organization C are constantly "questioning if (they) are just chasing grants and going off mission" (Organization 3, Interview 3) which emphasizes the importance to the Board members to remain on mission.

Organizations B and D, however, with a low group level, fall into the second category, and do not emphasize the importance of maintaining a mission. In Organization B, maintaining an amicable relationship with other organizations takes precedent over the following the mission. As one Board members stated the goal of Organization B was "not to enflame other groups or to be antagonistic" (Organization 2, Interview 1) because "controversy takes away from the mission" (Organization 2, Interview 1). This statement shows there is recognition of a mission, but the importance is on limiting controversy rather than maintaining a strict mission. Organization D, with the representative structure and willingness to allow "a group with something wacky (to) be recognized" (Organization 4, Interview 4), also focuses on limiting its negative image, or controversy, rather than the central mission of the organization. In the Board meetings, this was demonstrated when, instead of concentrating on acting as a unified group, or organization, to send out a single letter, the statement was made, "the City of [NAME] is not coming if we are commiserating" (Organization 4, Board Meeting 3). For this reason,

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the representatives of Organization D chose not to act as a single organization and instead act as individual representatives. This indicates the central focus is not to maintain a single, organizational mission, and instead is to ensure a positive image is maintained by avoiding controversy.

Overall, the choice rule of going off mission is associated with group level. In Organization A and C, the high group level is linked to a strong attempt to remain on a clearly defined mission whereas Organizations B and D, with the low group level, are linked to weak desire to remain on mission or to choose to approach activities and opportunities that can make the organization as a whole diverge from the original mission.

Aggregation Rules

Finally, aggregation rules used in these organizations are of two types, majority voting and consensus. Organizations with a high grid level, such as Organization B and C, are associated with majority rule and following Robert's Rules of Order to determine a decision compared to organizations with a low grid level. As one interviewee in Organization B explained, "There is a vote almost every meeting. We were always voting on something" (Organization 2, Interview 3). This statement emphasizes the importance for the members of Organization B to vote in order to perform an action. Organization C, similarly to Organization B, strictly adheres to Robert's Rules of Order, especially in regards to having a quorum present prior to voting. In one Board meeting, a vote could not be taken until an additional member arrived to the meeting, which was celebrated with the exclamation "Yea! We have a quorum!" (Organization 3, Board Meeting 1).

Once this occurred, the voting commenced, with the statement stressing the use or Robert's Rules of Order "motion, and second, so vote for a new board member" (Organization 3, Board Meeting 1). Each of these scenarios elaborates on the importance for the members of Organization B and C to follow Robert's Rules of Order to use a majority voting system to determine decisions for the organization.

In organizations with a low grid level, conversely, such as Organization A and D, the members strive to achieve consensus. In Organization A, for example, an interviewee explained "(there are) no Robert's Rules, it is more same minds" (Organization 1, Interview 1) hence "consensus is the main unspoken goal" (Organization 1, Interview 4). With this unified feeling between members when decisions are made, there is no need to vote and find the majority rule. Similarly, in Organization D, "not many things are voted on" (Organization 4, Interview 6) and instead, "issues are done over time" (Organization 4, Interview 4) because "if the members don't agree, it usually goes back to discussion" (Organization 4, Interview 4). By extending the time decisions are made, and discussing issues until all members fully agree, "unanimous consent" (Organization 4, Interview) is formed and a vote is not necessary to determine how the organization should aggregate the decision.

Overall, organizations associated with high grid levels, such as Organizations B and C, aggregate decisions by find a majority using Robert's Rules of Order. Organizations with low level of grid, such as Organizations A and D, are associated with consensus driven decision making processes. This correlation between aggregation rules and group, as well as aggregation rules and grid, are summarized in Table 2, along with

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other relationships between rules and group worldview. Overall, four variables are correlated with grid, while three are correlated with group. Also, only one variable – position rules – is not correlated with either group or grid, whereas nearly all of the other variables are correlated with either group or grid (but not both) (see Table 35 in Appendix B).

Chapter 8: Discussion
Position Rules

The numbers of positions within the organizations are the same in three organizations, and one less in the fourth organization. In all four organizations, each position is currently occupied. There is no association with either group or grid level with the position rule. This suggests that the base number of positions in the watershed organizations in this study range from four to five individuals regardless of their group or grid relation.

The titles and tasks for each title are also relatively similar in each organization. The Chair of the Board, for example, provides the same function in Organization A as in Organization B, and is the same as the President of the Board in Organization C. This indicates that each organization is deriving the titles and tasks associated with each title from a common source, rather than customizing it by worldview.

The lack of variance in total number of Board members for each watershed organization's Board, ranging from six to seven total Board members, limits the ability to analysis if size of the Board effects the number of positions available compared to the group-grid relationship. In organizations with larger Boards, for example, more positions might be necessary to manage sections of the organization which could be related to grid level of the organization. In other words, as the size of the organization increase, one

would expect to see an increase in position available. The lack of variance of position rules in this study, however, prevents a comparative analysis to be completed.

<div align="center">Boundary Rules within the Organization</div>

Boundary rules define the qualifications that an individual must possess in order to enter a position within an organization (Ostrom, 1990). For this reason, boundary rules for members were hypothesized to correspond with grid levels (Hypothesis 3). A watershed organization with a high grid level, for example, was expected to have clearly defined boundary rule to enter a position. The clarity of the boundary rule would be a function of the grid portion of the worldview because it distinguishes which individuals have the right to enter a particular role (Thompson, Ellis, Wildavsky, 1990). In this study, a high grid level is associated with clear boundary rules to enter a position, as predicted.

Organizations with clear boundary rules within the organization, such as Organization B and Organization C, are linked to a high grid association. Allowing only certain individuals to enter into a position because of his or her specific qualifications, links directly to the specialization section of the grid association. As the Board members of Organization B stated, "there is a desire to have certain people in a role" (Organization 2, Interview 1) which establishes the notion that there are "different roles for different people" (Thompson, Ellis, Wildavsky, 1990) or that a ranking, or hierarchical structure is formed. This means that an individual within a high grid structure will view his or her place within the society in relation to others (Douglas, 1970). An individual with a high grid mentality will believe in the legitimacy of a ranking, or class, system of authority, whereas an individual with a low grid mentality will believe in equality among all

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individuals within society (Lockhart, 1999). The inequitable belief system fosters the notion that qualifications are necessary to enter into certain positions (*clear boundary rules*), especially those of greater authority, which are necessary to ensure society, or the organization, continues to function properly (Lockhart, 1999).

Organizations such as A and D, with a low grid association, do not have clear boundary rules for entering positions or required qualifications for individuals to enter into a position. In Cultural Theory, low grid levels are associated with rejecting the notion of a legitimate authority and the belief that all members within society are equal (Wildavsky, 1987). This concept was expressed in the mentality of each organization's Board members, especially in Organization A with the statement, "all members are equal" (Organization 1, Interview 5) in regards to their skill set for each position. Both Organization A and D practice this belief as the Board members rotate through each position in the organization over time, therefore, no single member specializes in a single position. This occurs because, according to Cultural Theory, the individuals do not value centralized authority (Wildavsky, 1987). Under centralized authority the flaws of society are believed to be the direct result of the lack of equality within society (Wildavsky, 1987). For this reason, the low grid level restricts the individual member's ability to assert authority over other members of the organization by defining acceptable qualifications for entering a position.

Although Organization D has a high level of specialization, which arguably leads to the justification for individuals to be within a position, the specialization of the Board members expressed in Organization D is related to their primary organization, not for the

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functionality of Organization D as a whole. This means that each member specializes in representing their primary organization, just like all other members, rather than acting as a functioning specialized agent for Organization D. The equality of the members remains the same throughout the organization.

Overall, boundary rules for entering a position within the organization are linked to the grid level of the organization. The belief of equality among all members, or low grid level, reduces the need for Board members to clearly define boundary rules for entering a position. In other words, Board members with a low grid level believe if everyone is equal on the Board, there is no need to clarify the equality with clearly defined boundary rules. In a high grid setting, however, the clarity of boundary rules is necessary to ensure that only certain individuals, the qualified individuals, can enter a position.

<center>Boundary Rules outside the Organization</center>

The boundary rules regarding outsiders entering the organization are associated with group level. This result supports Hypothesis 1. In other words, a high group level corresponds with clear boundary rules for outsiders to enter the organization and a low group level corresponds with unclear boundary rules for outsiders to enter into the organization.

The clarity of boundary rules parallels the notion that individuals who express a high group level will restrict admission into the group because in a high group level "the social unit is hard to obtain, [thus] making the unit more exclusive and conscious of its boundary" (Rayner & Gross, 1985, page 5). This is expressed in Organization A with the

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requirement that Board members have the ability to write a coherent story for the primary focus of the organization; the newsletter. Also, in Organization C, the list of qualifications that are expected of outside members to have in order to enter into the Board such as "institutional memory" (Organization 3, Interview 1), as well as being an active or knowledgeable member of specific environmental organizations or institutions within the community (Organization 3, Interview 2) are clearly defined boundary rules which indicate who is or is not acceptable to be a member of the Board. The clear boundary rules assist organizations in defining their group and thus creating the identity of the organization.

Organizations with unclear boundary rules, on the other hand, do not experience the high group levels and the "tight identification of members" (Rayner & Gross, 1985, page 5). Instead, these organizations are willing to accept a wide range of members with varying qualifications, thus reducing the unification of the members. Organizations D, for example, defines the qualification, or boundary rules for the organization as "show up and you are a member -- no dues, just attendance" (Organization 4, Interview 2) and even "a group with something wacky would be recognized" (Organization 4, Interview 4). This indicates there is no solidarity among members as should be shown in high group leveled organizations (Rayner & Gross, 1985, page 5). Furthermore, the lack of solidarity among members leads members to have an individualistic view of life (Thompson, Ellis, Wildavsky, 1990; Wildavsky, 1987). In other words, individual members will act as an individual and not rely on the support of the organization to complete actions (Rayner & Gross, 1985).

Boundary rules are typically evaluated on entering a specific position rather than simply entering the organization as a whole (Ostrom, 1990). By distinguishing these two types of boundary rules, the group and grid relationship could be analyzed compared to the boundary rules. As predicted, clear boundary rules to enter the organization correspond to a high group level. In a high group level, there must be a clearly defined boundary between "us" and "them" to ensure group cohesiveness (Thompson, Ellis, Wildavsky, 1990).

Choice Rules

Choice rules clarify the actions that individuals can make within specific positions (Ostrom, 1990). Initially, choice rules appear to strongly relate to grid level because as the grid level increases, a ranking system is defined thus the actions of certain individuals are limited (Thompson, Ellis, Wildavsky, 1990). Not all choice rules, however, correspond to grid level. On actions that pertain to the organization acting as a single entity, such as promoting an image or following a mission, group level is a stronger indicator if a choice rule will be followed or not.

Choice Rule: Position Task Sharing

Choice rules pertaining to sharing tasks, as expected, are associated with the grid level of an organization. This result supports Hypothesis 4. In other words, as the grid level of an organization increases, the ability to share specific tasks between roles decreases. According to the assumptions presented in Cultural Theory (Thompson, Ellis & Wildavsky, 1990), as individuals are limited to specific actions or choice rules, the equality between Board members decreases thus a ranking system is formed.

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General task sharing occurs in all four organizations, however, in certain organizations, the roles of positions cannot be violated within an organization. In organizations for which roles cannot be violated, such as Organization B and C, there is also a high grid level. A high grid level indicates there are specific roles for specific individuals in the organization, therefore only certain individuals have the right or ability to perform certain actions (Thompson, Ellis, Wildavsky, 1990). In Organization B, for example, an interviewee stated, "I used to [when I was Chair of the Board], but now [NAME] is the Chair" (Organization 2, Interview 1). This indicates that at one point this individual had the authority and responsibility, but now no longer does. In contrast, in a low grid level organization such as Organization A, an interview stated "there are no real job descriptions" (Organization 1, Interview 2) and confusion often arises determining who is responsible for performing what task.

The distinction in roles and establishment of choice rules that permit, or prohibit actions are a reflection of the worldview or grid relation of the Board members. In a high grid level, members favor a socially constructed ranking order (Lockhart, 1999). In other words, equality is not supported in this belief system, and institutions are necessary to ensure society continues to function properly (Lockhart, 1999). For this reason, authority is presumed not only to be legitimate, but necessary to keep social structures intact (Thompson, 1990). In Organization C, this mentality is demonstrated by the decisions that can be made only by the members of the Executive Committee. The Executive Committee has the authority, or right, to make these decisions because the structure of the organization, or choice rules, allow these individuals to have additional information

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whereas other members of the Board do not have access to the same information. This further emphasizes the notion that certain individuals are granted the right to perform certain tasks (Thompson, Ellis, Wildavsky, 1990).

In a low grid level organization, on the other hand, the choice rules permit individuals to perform tasks of differing positions. In Organization A, for example, the members rotate through positions, and members also are willing to perform the tasks of clearly defined positions such as the Secretary, to limit her workload, or the Treasurer when she was recovering from an accident. This occurs because in a low grid worldview, the individuals reject the notion of a legitimate authority and believe that all members within society are equally able to perform tasks of positions (Wildavsky, 1987). In other words, no single individual, or body of individuals, has the right or authority to create a centralized authority (Wildavsky, 1987).

Choice Rule: Speaking for the Organization

Watershed organizations are a conglomerate of members who work together for a common cause. With this structure, individuals must find means and ways to represent the organization as a single entity. For this reason, as being a single organization, the identity of the individual presumably diminishes, as the individual members become committed to a larger social unit, the organization as a whole (Rayner & Gross, 1985). This means that as the group level increases, the actions and identity of the individual reduce while the actions for the group as a whole, and identity of the group over the individual, increases. In Organization A, this was demonstrated by the removal of an individual Board member from the organization on the precept that she was a "stand

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alone" member (Organization 1, Interview 1) meaning she acted as an individual rather than a group member. Therefore, there is an inverse relationship between group level and individual identity and individual actions, as expected (Hypothesis 2).

Organizations with strong group levels, such as Organization A and C, have clear choice rules that prohibit individuals from speaking for the organization, as an individual, without confirming the message with the other board members. In Organization A, for example, the Board member responsible for the organization's social media stated, "I knew it would be okay, but I had to email them anyway"(Organization 1, Interview 5) in regards to positing a new series of photos on the website. This demonstrates that with a strong group association the decision-making powers are in the hands of the group over the individual (Thompson, 1986). It is the collective that matters. In other words, in a strong group association, the individual must feel bound to the group over oneself (Lockhart, 1999). Thus, in order to maintain a single, strong group association, the members of the organization act as a single unit, or organization, rather than as an individual. The prohibitory choice rule, therefore, requires all members of the organization, to act accordingly, or as a single group. The focus on the group over the individual is strongly demonstrated in Organization C as the Board members will "personally ask (the Board)" prior to discussing the organization publically (Organization 3, Interview 3) because if their actions are not approved, as with the Watershed Coordinator, they are removed from the organization. This emphasizes the importance for an organization with a strong group level to ensure all members of the organization act as

a single entity rather than an individual by creating and enforcing choice rules encourage said actions.

In organizations with a low group association, such as Organizations B and D, the decisions of the group are less important or binding than the decision made for the individual by the individual (Thompson, 1986). This occurs because the identity of the organization is secondary to the identity of the individual. In Organization D, for example, each representative acts as an individual and goes back to their primary organization to present Organization D to the Board members of their primary organization as they so desire. Similarly, each of the Board members of Organization B has "administrative" access to the webpage of the organization allowing each to choose how to represent the organization as a whole without the consent of the other members. These actions emphasize the notion that as the group level, or feeling of being bound to the organization, is secondary to the individual, the individual has the understanding that he or she can act as a single unit for the organization without confirming with the remainder of the Board members on the organization (Rayner & Gross, 1985). In other words, the organization establishes choice rules that permit the individual to use his or her best judgment for actions concerning the organization.

Group levels are inversely related with choice rules allowing an individual to speak for the organization as a whole without consulting the Board members of the organization. As group level increases, choice rules that allow individuals from speak for the organization decrease and vice versa for decreasing group levels. This occurs because

as group level increases, the identity of the individuals within the organization becomes tighter, or as one rather than as many (Rayner & Gross, 1985).

Overall, choice rules regarding speaking for the organization relate to group level. The decision to act as a single entity reinforces the belief that there is a single organization, or high group level, rather than a body of individuals acting on their own accord.

Choice Rule: Going off Mission

Similarly to how stronger group levels leads to clearer boundary rules, thus the notion, *you are like us, therefore you can enter;* a high group level leads Board members of organizations to establish choice rules that prohibit members from deviating from the mission of the organization. The mission statement of an organization is the identity of the organization, or the concept that distinguishes one organization from another (David & David, 2003). One would find the mission statement analogous to distinctions between individuals' personalities or the qualifications of individuals. Furthermore, identity is an individual and socially defined construct (Vignoles, Chryssochoou et al, 2000). In other words, a group identity is unimportant, or useless, if it is unable to distinguish one group from another (Turner, 1987).

The mission statement is important to an organization because without a mission statement an organization would not have a distinguishable identity. As mentioned by one interviewee, "all watershed [organizations] have the same goal" (Organization 4, Interview 2), thus the ability to distinguish the members from one organization to another becomes important for organizations with high group levels and clear boundary rules.

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Organizations with high group levels drive to restrict admission into the organization to ensure the group boundary is clear and well defined (Rayner & Gross, 1985).

Organizations A and C have high group levels, clearly defined boundary rules and strong choice rules that prohibit deviating from the mission. This is demonstrated with statements such as in Organization A "there is no need to reinvent the wheel" (Organization 1, Interview 5) and in Organization C with the Board members constantly "question[ing] if [they] are just chasing grants and going off mission" (Organization 3, Interview 3). Each of these statements emphasizes the importance for each of these organizations to clearly identifying themselves, or distinguishes themselves from others.

Organizations B and D, on the other hand, have low group levels, unclear boundary rules for outsiders and are less concerned with deviating from their mission. The focus of these organizations is to avoid the perception of controversy within their organization. This is demonstrated with statements such as in Organization B "controversy takes away from the focus of the mission" (Organization 2, Interview 1) and in Organization D "City of [NAME] is not coming if commiserating" (Organization 4, Interview 2). The desire to present an image free of controversy, for the organization itself as well as for outsiders who view the organization, occurs because a clearly defined self-identity is formed not only by the individual organization but through interactions, perception and communication with others in the same social surrounding (Vignoles, Chryssochoou et al, 2000). This means that it is just as important for the organization to present itself clearly, or without inner conflict, to other organizations in order to ensure its identity is maintained.

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According to Distinction Theory, identity is strongly related to the ability of one to show a distinction, or difference, between themselves and others who are similar within a community (Vignoles, Chryssochoou et al, 2000). One reason organizations with low group, or an indistinguishable mission, might be more likely to avoid controversy, especially among similar watershed organizations, is that an individual is more likely to desire to be compared to another to whom he or she is similar, particularly when that individual feels he or she is in a threatening or challenging scenario (Vignoles, Chryssochoou et al, 2000). This means, that if an organization has a low group level, their identity is in question, or their level of distinction between comparable organizations is low, then there is a low desire to disrupt the level of harmony between the perceived comparable organizations for fear that the current positive distinction will become a negative future distinction. Organizations with a high group level, and a perceived unique mission, do not maintain this same level of fear, and can worry about promoting their mission rather than avoiding controversy.

Aggregation rules

The establishment of aggregation rules in an organization is related to the grid level within the organization. In an organization with a high grid level, such as Organization B and C, Robert's Rules of Order and majority rule are used. Conversely, in organizations with low grid levels, such as Organization A and C, consensus building is typically used instead of majority rule. This result is as expected (Hypothesis 5).

Low grid levels most likely lead to the establishment of a consensus based format of decision making because a low grid level mentality does not support the belief of a

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legitimate ruling authority, or ruling mediator, in resolving the conflict (Thompson, Ellis & Wildavsky, 1990). In other words, as one interviewee stated, "all members are equal" (Organization 1, Interview 5) within the organization. The equality of members indicates that each of their opinions are valued the same, thus, regardless of if it is a single dissenting opinion or majority dissenting opinion, the opinion of one still matters equally in comparison to the many. Enacting a decision made by the majority, while disregarding the dissenting opinion of one, would imply that there was a belief in a legitimate ruling authority, the majority, therefore the members would no longer experience said equality. The belief of equality, established by the low grid level, therefore creates the consensus driven decisions as it encourages members to use methods such as bidding and bargaining to achieve goals in place of asserting authority (Wildavsky, 1987).

In a structure where all members are equal and there is no legitimate authority, discussion can be lengthy as members must discuss the options and whether they can agree with a decision. In Organization D, for example, it can be "2 to 3 hours before discussing the agenda" (Organization 4, Interview 4) because members are still trying to make a single decision. This can slow the decision-making process thus the perceived functionality of the organization to outsiders and cause dissenting opinions to be repressed (Thompson, Ellis & Wildavsky, 1990).

In high grid structures, all members are not equal, and a ranking system is formed which imposes restrictions on members (Thompson, Ellis & Wildavsky, 1990). Organization C, for example, demonstrates this type of tiered decision structure as the Executive Committee has the legitimate authority to make decisions without the input or

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consideration of the Board Members at Large. The lack of equality also promotes the idea that the structure is necessary for the organization to ensure the organization continues to function properly (Lockhart, 1999). This structure, with its lack of equality among members, also gives way to the notion that the majority is more important than the opinion of the individual, thus majority rule is an acceptable means of decision making.

The way of life, or view of grid relations, affects the aggregation rule because it is a reflection of the member's beliefs on equality of members. As the equality among members increases, grid level should decrease as is predicted in Cultural Theory. In a consensus building setting, as equality among members increases, no single vote should overrule another vote. Therefore, it is predicted, and is indicated in this study, organizations with a low grid level, thus equality among members strive for consensus in the decision making process. In organizations with a high grid level, though, a structured rule system is put in place to ensure legitimacy and majority rule.

Management Implications

The structure of an organization affects the flow of information through the organization and thus the actions the participants within the organization will or will not perform. In a hierarchical, or top-to-bottom, organization, for example, the largest amount of information is at the bottom of the organization (Thompson & Wildavsky, 1986). The information at the lower level is processed and or reduced in quantity as it filters to the top of the organization. In doing so, the top of the organization will have less information, but the information is more refined. Decisions in a hierarchical organization are made from the top and disseminated to the lower levels. The flow of information and

decision is vertical in nature. In other structures, the information is distributed in a horizontal manner allowing the majority of members to have access to an equal share of information (Thompson & Wildavsky, 1986).

Once the structure of an organization is understood, an outsider, such as a government agent, would be able to distribute the necessary information more effectively to the members of the organization. The results of this study indicate that high group levels are linked to clear boundary rules for an outsider which means that an outsider would have difficultly presenting information to the organization. Furthermore, the study indicates that high grid levels are linked to clear boundary rules for the inside members to act within their positions. Understanding the group and grid relations within an organization would assist with the ability to process and disseminate information to an organization.

Chapter 9: Conclusion
Intention of Research

The ability of a community to manage a natural resource such as water is vital for the survival of the society. Without clean water, issues including food shortages, energy deficiencies and most notably human health and sanitation are on the rise (Gleick, 2004; Solomon, 2010; World Health Organization, 2014). Furthermore, with the increase in population combined with the predicted deceased amount and availability of clean water, more communities are expected to suffer water shortages in the future (Gleick, 2004). With the increased interest in community-based, collaborative efforts to address water issues, it is imperative to understand the structure of watershed organizations to evaluate and understand how they function in watershed management. The purpose of this study is to expand upon our knowledge of how watershed organizations are structured and make decisions in order to assist in the management of the water resources in the future.

Application of Theory

Watershed organizations are challenged by the fact that their outcomes are difficult to measure. Although watershed organizations typically have a similar mission to protect and preserve the water quality within their watershed, the variety of grants and programs which they applied for and methods used to pursue the mission ranges from organization to organization (Hardy, 2010). Furthermore, it is difficult to quantity the results from these pursuits (Laszer, 2008). The difficulty in quantifying the benefit,

however, does not imply these organizations are not functional or necessary in society. Frequently, governmental agencies turn to these organizations for assistance in implementing and promoting programs. These community-based watershed organizations provide a necessary natural resource management function within society, therefore it is important to understand how they function.

Ostrom (1990) developed the institutional analysis and development (IAD) theoretical framework in order to elaborate on how community-based organizations function and produce outcomes. The central focus of her work, along with many other common-pool-resource scholars, is on the rules-in-use, or how rules influence the actions that an individual within an action arena will or will not take. Though Ostrom (1990) recognizes the importance of the attributes of the community, also known as culture, little is understood about cultural influences on the rules chosen within an organization. Cultural Theory, developed by Mary Douglas (1970), on the other hand, provides a structural framework used to classify differing cultures. In this framework, a culture is evaluated on a group and grid scale, which defines the cultural perception or worldview of the individuals within each quadrant (Douglas, 1970; Thompson, Ellis & Wildavsky, 1990). The combination of these two theories allows for the culture of the organization to be evaluated and compared to the decision rules chosen by the organization in order to test for correlations.

Methodology

A case study methodology was used to evaluate the key variables in this project. In the selected geographical area, there are twelve active watershed organizations. All

listed watershed organizations were contacted via phone, email or in-person. Of the twelve listed watershed organization, three are presumed to have dissolved, five organizations either declined the offer to participate or did not respond and four organizations agreed to participate in the study.

Across the four cases, twenty-five of the twenty-seven Board members were interviewed. Interviews were also conducted with three professionals in the field who either currently work with the listed organizations or have worked in the past with the organizations. In addition to the interviews, the investigator participated in local events. At least two Board meetings were attended for observational purposes for each organization (a total of eleven meetings) as well as at least one outside event or organizational activity (a total of nine events). A thorough review of each organization's bylaws was completed. These multiple methods from various sources allowed for the data to be triangulated ensuring its reliability (Guba & Lincoln, 1981; Yin, 2013).

Summary of Findings

By applying the IAD framework's analysis of rules and Cultural Theory's group-grid relations to watershed organizations, an association between select rules and group and grid level were discovered. In particular, boundary rules, choice rules and aggregation rules were affected by the group and grid relations in each organization (see Table 35 in Appendix B for a summary of the findings).

Boundary rules for outsiders define who is and is not considered to be part of the group or organization. In organizations with a strong group association, clear boundary rules are defined and created to ensure that only the specified individuals can enter into

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the organization. In doing so, this alters the action situation by limiting who is or is not able to participate in the action arena. An example of this scenario, as elaborated on previously, is when an organization is preserving a forest and chooses to invite a landowner and timber harvester to the table, or action arena, but chooses to exclude an environmentalist. Boundary rules for the insiders, however, relate to the grid level. In a high grid level, the boundary rules for individuals within the organization are high; in contrast the organizations with low grid levels had low boundary rules for insiders. This is important to recognize because it sheds light on how a participant can act, or what constrains his or her actions, within the action arena in the eyes of the organization. It indicates how easily an outsider, such as a government agent or nonprofit organization, will be able to penetrate a watershed organization's boundary and what level of roles, or positions, he or she will be able to fill within the organization.

Choice rules are the actions that an individual can take within an action situation (Ostrom, 1990). Choice rules that allow sharing clearly defined position tasks are related to the grid level of an organization. This means that the higher the grid, the less an individual within a position can share his or her tasks with other members in the organization, and vice versa for lower grid level organizations. Furthermore, choice rules regarding speaking for the organization as well as going off mission is related to group level within the organization. In an organization with a high group level, for example, the members of the organization will not speak for the organization without the approval from the other members and will not deviate from the mission; the opposite is true for organizations with a low group level. As an outsider coming into an organization, such as

a governmental agent or academic, this is important to understand because it defines which actions would be considered acceptable to perform and by which individuals in designated positions can perform which actions within the organization.

Aggregation rules define how the decisions of many will be consolidated into a single decision. With a low grid level, organizations are based on consensus building decision making. In contrast, organizations with a high grid level are associated with majority rule voting. Much research is dedicated to the understanding of consensus building and how to create a collaborative setting, thus, the association between grid level and consensus could facilitate in creating these types of scenarios in the future.

<div align="center">Application of Research</div>

Examining how certain rules are created in a watershed organization based on a cultural worldview expands the understanding of the actions and responses of participants within positions in an action situation. Furthermore, this understanding will assist professionals in the field to determine which actions are best suited for each organization, including how to provide necessary information to the organization members.

Numerous studies, for example, elaborate on the difficulties agencies face when attempting to impose new rules or sanctions on a local community. The father of *the Tragedy of the Commons,* Hardin (1968) argues that the players, or the actors of the situation using the common pool resource, are trapped in the game, or scenario of use. For this reason, outsiders, such as governmental agents, must come to the situation and impose new rules that are enforceable to ensure the players change the game.

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Unfortunately, in many cases, the local communities disregard or do not abide by these rules and sanctions (Ostrom, et al. 1999).

Ostrom (2007), for example, noted that a certain subset of lobster fishermen in the local community would abide by a simple rule structure which did not require the support of the government. There were, however, "roving bandits" or lobster fishermen who were not part of the local community and did not abide by the rules, thus in those instances the governmental enforcement was necessary (Ostrom & Turner, 2007). Ostrom and Turner (2007) reasoned that there needed to be community ties for the effectiveness of community management of the natural resource. The community ties she eludes to align strongly with the group classification within Cultural Theory. This is important to understand because if the community-based lobstermen have a high group level, they would presumably have clearly defined boundary rules for outsiders to enter. If those boundary rules make it difficult for an outsider to enter, he or she will not enter the group and will remain outside the community.

The level of grid is also important in the community-based system because it affects which choice rules will be established. For the community lobstermen, regardless of whether the lobstermen were abiding by the laws and regulations imposed by the government, the lobstermen, being low grid level, would likely disregard the central authority. Such disregard could potentially hinder the assistance the central authority would provide to block the "roving bandits" from outside the community-based group.

Understanding the group and grid levels, and their effects on rules, affects how rules by outsiders should be enforced and information disseminated. A professional

working with a watershed organization with a high group level, for example, will know that there will be clear boundary rules for entering the organization, and therefore he or she may not be accepted into the organization. If the professional is not accepted into the organization, the information he or she has to present may not be accepted by the members of the organization. An organization with a high grid level also might have difficulty accepting the information of a professional in the field if he or she violates the required choice rules supported by the organization. Understanding the cultural influences on rule making allows professionals from government agencies and academics to cater their message in a manner that is most effective for the organization and supply the necessary information in the most beneficial manner to the organization.

Limitations

Applying a case study method to multiple cases requires a significant amount of time and understanding for the investigator. In an ideal case, an ethnographic study, rather than a literature review, would be completed to clarify which variables are best suited in defining each classification within the group and grid relation (Rayner & Gross, 1985). Once multiple studies are completed on similar organization, such as watershed organizations, a complied list of important variables could be recorded and developed into an effective tool for measurement.

The case study methodology, similarly to a survey, presents a secondary limitation of being a snapshot in time. This means that at the time in which the data were collected certain events and situations unfolded and caused the individuals within the study to respond or perceive the world in a particular manner. In Organization A, for

example, a portion of land was destroyed and the local media contacted the organization. Interaction with the media is a single, discrete event, that can influence and affect the actions of the individuals involved known as a history threat (Langbein & Felinger, 2006). Thompson (1990) argues that these events can be "surprises" and in turn alter the world view or cultural typology of the individual or organization. This means that a researcher must be cognizant of these effects and the potential implications on the classifying of each variable. While bylaws and interviews are to some extent artifacts of the past, they are limited in the degree to which the investigator can reconstruct past events related to cultural worldviews.

Future Research

A growing body of research focuses determining how to retain volunteers (Hidalgo & Moreno, 2009), the behaviors of volunteers (Sudeen, 1989), motivations and attitudes of participants and volunteers (Stewart & Weinstein, 1997; Brannstrom, Clarke, & Newport, 2004), how to engage participants, determining the success of outreach programs (Cutt &. Murray, 2009) and creating collaborative methods of interactions (Michaels, 1999; Michaels, Mason, & Solecki, 1999; Griffin, 1999). A volunteer organization, such as a watershed organization, can only continue to function if enough members are willing to participate, thus, participants are always an issue of concern. Future studies that combine the ability to gain new participants and retain current participants should include an analysis of group level and boundary rules. If the group level is significantly high for an organization, for example, it would be expected that the organization would have clearly defined boundary rules for entry. Therefore, the

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organization would experience difficulty gaining new members in the organization, while at the same time ease in retaining a select few core members. In contrast, an organization with a low group level would be presumed to have either difficulty in attracting new members, or an inability to retain the same members in organizational activities.

In this study, Organization B was classified as a low group and high grid organization, or as "fatalistic". Kahan (2007, 2012), among others, argues that the fatalistic classification is nonexistent for voluntary organizations, because such organizations should not have a low group classification combined with a high grid level. Who would join such an organization? Upon further examination of Organization B, however, one will note that the majority of the members are older in age and have been active members of the organization for at least five years and in most cases over ten years. Additionally, new members typically choose to leave or step down within the first year of participating on the Board of the organization, which did not occur in the past according to current Board members. This indicates that a change occurred within the organization and its worldview shifted to low group and high grid.

In the organizational life cycle, Organization B is aging and could potentially be declining towards organizational "death." These changes within the organization could be coinciding with a "surprise" in life thus cause a change in the cultural worldview of the organization and rules in use (Thompson, Ellis, Wildavsky, 1990). The threat rigidity hypothesis, for example, argues that as an organization experiences external threats it responds by restricting the information of the members of the organization and limiting the channels of interactions between members (Staw, Sandelands & Dutton, 1981).

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Further research applying the group-grid relation to the organizational life cycle and evaluating the external threats of an organization could expand upon why certain organizations change over time, die and how the worldview affects changes within the organization.

As stated previously, the bylaws, or written rules, of an organization are not always followed by the members of the organization or are subject to change due to the differing interpretations of the current members (Ostrom, 1990). Additionally, organizations periodically go through changes, as is indicated by the organizational life cycle, which dramatically change them. These changes to the organization potentially could be created by a flux, or turnover, of old to new members with differing worldviews. The change in cultural worldviews as defined by Cultural Theory could lead to the change in use of bylaws or stages in the organization life cycle. For this reason, a future study should survey each individual board member for their cultural world views compared to the cultural world view of the organization in order to evaluate the effects of the individual members on the whole watershed organization's worldview. The results from a study of this nature would provide additional insight on the influence of the individual to the organization as a whole, and shed new light on if the rules of the organization are more or less malleable depending on the fluxing cultural views of the individual organization members.

Overall, the study of rules in conjunction with cultural worldviews is an important avenue for better understanding community based watershed management. This research unfolds the importance of the group and grid relation within an organization and how that

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affects the decision rule making process, thus, the internal structure of an organization.

This research also sheds light on the reasons why organizations with similar goals or

missions can be structured differently depending on the cultural typology of the members

of the organization. In a management setting, the structure of an organization must be

understood because policy makers and community members choose to turn to such

organizations to address pressing water issues, therefore, the structure of watershed

organizations will continue to be important to understand them.

Appendix A: Figures for Chapter 1

Figure 1: Theory of Planned Behavior

Source: Ajzen (1991)
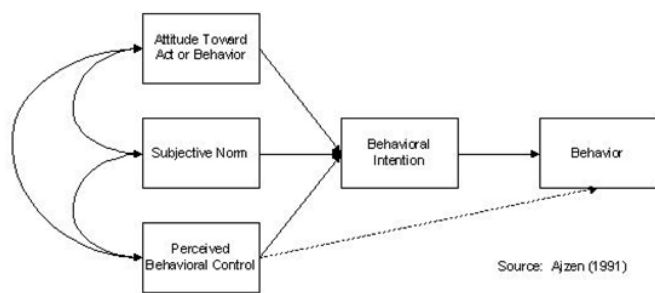
Figure 2: Framework for Analyzing Governmental Impacts on Collaborative

Environmental Management

Source: Koontz (2004)
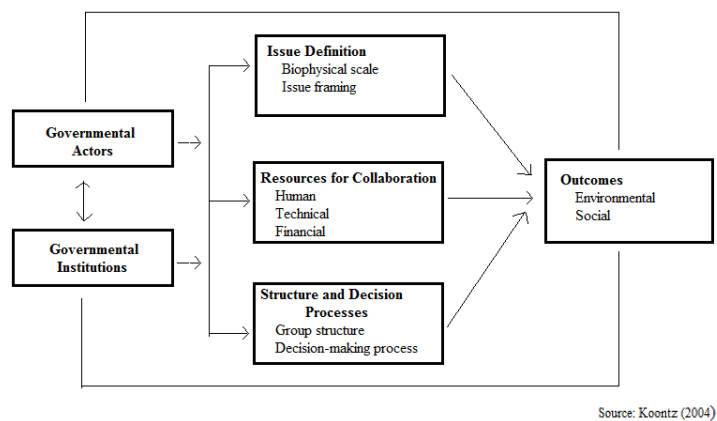
Figure 3: Social Institutions for Rule-Based Reasoning in the Social Ecological System
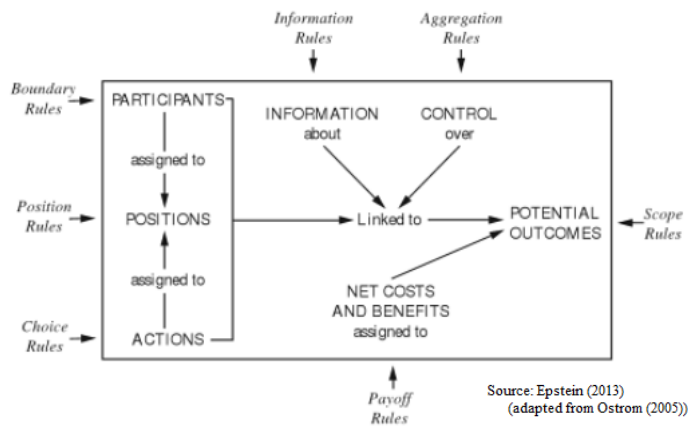
Figure 4: Institutional Analysis and Development Framework
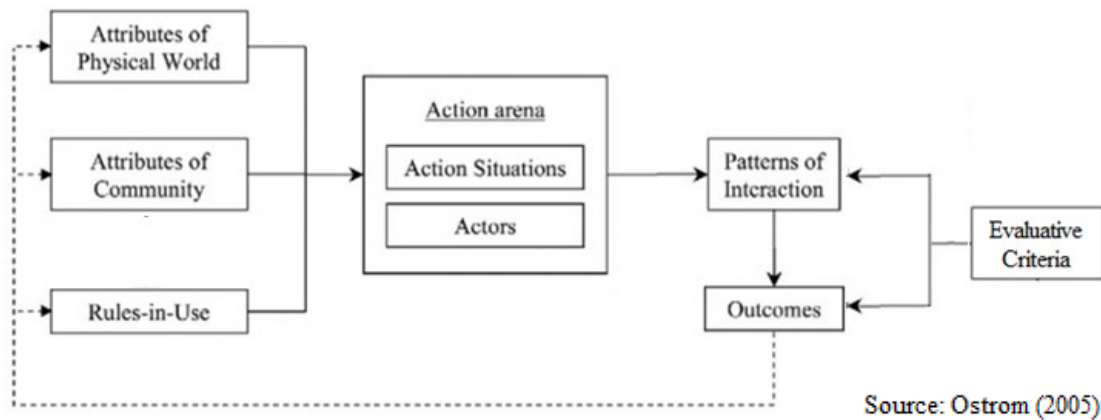
Figure 5: Group- Grid Relations
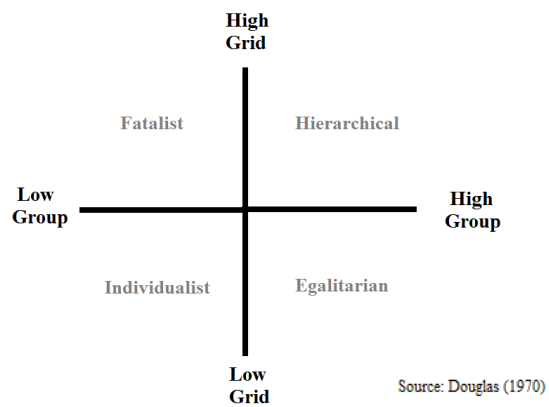
Figure 6: Organization C's Organizational Chart (2004)
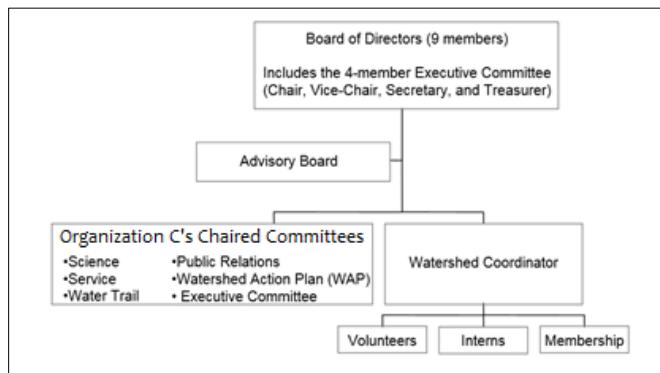
Appendix B: Tables for Case One

Table 4: Position Rules for Organization A

Position Title	Number of Available Positions
Chair of the Board	1
Vice Chair of the Board	1
Recording Secretary	1
Recording Treasurer	1
Other or Board Member at Large	0 to 5
Total Positions	4 to 9

Table 5: Boundary Rules for Organization A

Boundary Rule Focus	Clarity	Supporting Evidence
Within Organization	Unclear or Ambiguous	"all members are equal" (Organization 1, Interview 5) in regards to their skillset for each position
		Rotation of all board members through positions occurs
		Board members are not excluded from desired positions by the other members of the board
Outside Organization	Clearly Defined	Future members must write a story or essay to demonstration abilities to coherently write a story
		Qualified potential board members must have a suitable personality
		Unsuitable potential members are described as "a just no" or "a puff of dust in a whirlwind" (Organization 1, Interview 1)
		Former members are removed is the board member is considered "stand alone" or "comes to the meeting but [is] unhappy" (Organization 1, Interview 1)
		Interviews or discussions at board meetings occur prior to voting a member on the board
		Formal votes are conducted to determine if board members should be inducted into the organization or removed from the organization

Table 6: Comparison of News Quotes

Quote from Email to Organization	Quote from Newscast
"Preserving Ravines preserves quality greenspace full of biologic diversity, preserves trees, steep slopes to prevent erosion, and avoids costly, even dangerous development that frequently destabilizes these steep slopes"	So the trees and the habitat could go. "They filter pollution, they filter storm water, they keep water clean," said [NAME].
"There are no tools to protect ravines, special green spaces with mature trees, or protect steep slopes "	"It points to the fact that there is no good protection for environmental spaces," said [NAME]. [NAME] and [NAME] both think there is a serious need for a tighter ordinance and plan to make a push for that.
"Department of Public Utilities is implementing a Green Infrastructure program in place of the typical pipes in answer to stormwater problems."	"Because this area was piped at one point, they decided that it didn't deserve those protections," said [NAME] with [ORGANIZATION A]

Table 7: Choice Rules for Organization A

Choice Rules	Action	Evidence
Permitted Choice Rule	Sharing tasks of positions	"there are no real job descriptions" (Organization 1, Interview) thus members complete the necessary tasks regardless of their listed position
		"there are certain jobs with more work, like taking the minutes, and the members pull together to help her get them done" (Organization A, Interview 4)
		The Treasurer injured her leg and the remaining members of the board assisted in completing all of her tasks
		Uncertainty about which position within the organization is responsible for signing and delivering official letters for the organization: "you have to sign it" (Organization 1, Board Meeting 2)
Required Choice Rule	Duties of position	The Chair of the Board is required by the bylaws, and in practice during board meetings to run the meeting, other positions and duties are very lax
	Act as a single organizational body	"[the] desire is to speak as a unified voice, even if you are just one member" (Organization 1, Interview 5)
Prohibited Choice Rule	Acting as an individual rather than a single organization	"as soon as I emailed her (the photographer), I emailed the group to ask to put the pictures on the blog… I knew it would be okay, but I had to email them anyway"(Organization 1, Interview 5); Permission from board members must be gained prior to performing an act on behalf of the organization
	Diverge from the mission statement	There is a person desire not to "go off mission" (Organization 1, Interview 5)
		"There is no need to reinvent the wheel" (Organization 1, Interview 5) stated in reference of diverging from the mission statement

Table 8: Aggregation Rules for Organization A

Consensus building rather than formally voting	There are "no Robert's Rules, it is more same minds" (Organization 1, Interview 1)
	Formal votes are not taken in board meetings, the meeting instead focuses on discussion, and discussion based decisions
	"Consensus is the main unspoken goal" (Organization 1, Interview 4); the focus is to come to a single decision

Table 9: Summary of Group Level for Organization A

Category	Ranking	Supporting Evidence	
Proximity	High	Frequent contact by multiple personal avenues	extended families of the members of the organization are known and able to be contacted (granddaughter for a poster)
		Personal discussions prior to board meetings	Discussions prior to the board meetings about personal information such as health concerns
		Low turnover rate of board members	Some board members have been on the board for over 12 years; most have been on the board about 6 to 7 years, with no desire to leave
		Board members interact on a personal level	Discussions prior to the board meetings discussing personal information such as health concerns
Transitivity	High	Board members interact on a personal level Lack of frustration voiced about board members	Jokes are present in meetings
			Discussed personal information prior to the beginning of the board meeting
			No interview indicated frustration or annoyance with another board member
		At events there is a desire to interact with one another	"it was good spend some time with Member Y and to get to know her" (Organization 1, Interview 3)
			"I didn't really know Member X very well and [the event] gave me time to talk to her" (Organization 1, Member 5)
Scope	Narrow	Board members focus their time on the newsletter	Other outside activities are placed on hold to find a "wanted photo" (Organization 1, Interview 2) for the newsletter
		Board members that are part of other organizations, do not focus their attention or time on the other organizations	"there isn't enough time to do both [organizations]" so I'm "no longer an active member" (Organization 1, Interview 5)
Impermeability	High	Board members interact with one another over the general public or future members	During the plant walk, the board members were engrossed in their plant book and did not share it with the other members of the walk

Table 10: Summary of Stratification for Organization A

Member	Personal characteristics
Member 1	"Brain child" (Organization 1, Interview 3) "Planner" (Organization 1, Interview 4)
Member 2	"Naturalist" (Organization 1, Interview 3) "Knowledge and Expertise" (Organization 1, Interview 5)
Member 3	"Facilitator" (Organization 1, Interview 3)
Member 4	"Fresh blood" and "dog walking perspective" (Organization 1, Interview 3) "the creative writer" (Organization 1, Interview 1)
Member 5	"Volunteer" and "Starter" (Organization 1, Interview 3)
Member 6	"Researcher" (Organization 1, Interview1, Interview 3, Interview 5) "big ideas" (Organization 1, Interview 3)

Table 11: Summary of Grid Level for Organization A

Category	Ranking	Supporting Evidence	
Specialization	Low	Based on the personality	Refer to Table in "Specialization Section"
		Shared activities and tasks	"there are no real job descriptions" (Organization 1, Interview 2) therefore no one single role or specialization
			Roles within the organization are "overlapping but not duplicated" (Organization 1, Interview 3)
			All members work on the same tasks including the newsletter and Art Contest; "usually there is one big project and they are all a part of it" (Organization 1, Interview 3).
Asymmetry	Low	Activities of the board members are equally distributed	"offer to help the Secretary" (Organization 1, Interview 4)
			All members work on the same tasks including the newsletter and Art Contest; "usually there is one big project and they are all a part of it" (Organization 1, Interview 3).
			the work load is reported as "feels equal and distributed" (Organization 1, Interview 3)
		Assigning tasks to complete	Board members volunteer, rather than are assigned tasks at the board meeting
			Time is divided among board members for events such as the manning a booth at a festival
			In the board meeting, the workload was divided when scheduling and organizing the annual plant walk
			All members work on the same tasks including the newsletter and Art Contest; "usually there is one big project and they are all a part of it" (Organization 1, Interview 3).
		No single board member holds authority over the other board members	The longest running board members is referred to as the "underlying thread of the organization" (Organization 1, Interview 3) or the "safety net that holds the organization together" (Organization 1, Interview 5) not as an authoritative figure

Table 11 continued on the following page.

Continuation of Table 11

Category	Ranking	Supporting Evidence	
Accountability	Low	Personal accountability rather than social or organizational accountability	Board members that should finish the task does not assume blame by stating apologizes or asking for forgiveness from the other board members
			"if [she] didn't do what [she] said [she] would it would be worse that someone just yelling at [her]" (Organization 1, Interview 5).

Table 12: Summary of Organization 1 Characteristics

Variable	Description
Position Rule	5 available positions
Boundary Rule (within the organization)	Clearly defined rules
Boundary Rule (outside the organization)	Unclear rules
Prohibited Choice Rule: speaking on behalf of the organization	Strong
Permitted Choice Rule: sharing position tasks	Strong
Required Choice Rule: duties of position	Weak
Aggregation Rule	Consensus decision making
Proximity	High
Transitivity	High
Scope	Narrow
Impermeability	High
Specialization	Low
Asymmetry	Low
Accountability	Low

Table 13: Position Rules for Organization B

Position Title	Number of Available Positions
Chair of the Board	1
Vice Chair of the Board	1
Secretary	1
Treasurer	1
Other or Board Member at Large	0 to 5
Total Positions	4 to 5

Table 14: Boundary Rules for Organization B

Boundary Rule Focus	Clarity	Supporting Evidence
Leadership position	Clearly Defined	organization "want[s] to discouraging nominating from the public and keep them out of leadership positions" (Organization 2, Interview 2) "a fear of other people" (Organization 2, Interview 2
		"usually there is a desire to have certain people in a role" (Organization 2, Interview 1).
		"abrasive personality" (Organization 2, Interview 1) and is "passionate but unwilling to share information" (Organization 2, Interview 2). In board meetings, he will "rant about nothing" (Organization 2, Interview 4
Board Member at Large	Unclear or Ambiguous	"watch[ing] who shows up (to events) and nurture[ing] them" (Organization 2, Interview 2), Member X described the recruitment process as "[NAME] just bugged the crap out of me (to join)" (Organization 2, Board Meeting 2).
		"fresh-blood" (Organization 2, interview 1 & 2) and reduce the "incest of the board members" (Organization 2, Interview 1)
		"[Organization B] doesn't want to exclude anyone, especially in regards to membership" (Organization 2, Interview 2).

Table 15: Choice Rules for Organization B

Choice Rules	Action	Evidence
Permitted Choice Rule	Sharing tasks of positions	Performing the "housekeeping roles" or "the ticky-tacky" (Organization 2, Interview 1) without holding "the title of Chair" (Organization 2, Board Meeting 2)
		Each board member is granted "administrative" access over the site and can post text or images onto the profile page and comment on other pages (Organization 2, Interview 1)
		sharing of duties occurred when the board members needed to send out a letter to the current due paying members
Required Choice Rule	Duties of position	"I used to (when I was Chair of the Board), but now [NAME] is the Chair" (Organization 2, Interview 1)
		Board members to stay on topic saying "what is the point?" (Organization 2, Interview 1)
Prohibited Choice Rule	Speaking out against other organizations	"controversy takes away from the focus of the mission" (Organization 2, Interview 1
		"not to inflame other groups or to be antagonistic" (Organization 2, Interview 1)
		"rant about nothing" (Organization 2, Interview 3)

Table 16: Aggregation Rules for Organization B

Formal decisions are made by voting with Robert's Rules of Order	"There is a vote almost every meeting. We were always voting on something" (Organization 2, Interview 3)
	"I move to close nominations" (Organization 2, Board Meeting 2)
	"I don't know if you want me to be the representative again" (Organization 2, Board Meeting 2)

Table 17: Summary of Group Level for Organization B

Category	Ranking	Supporting Evidence	
Proximity	Low	Personality conflicts between board members	"one board member that gets under my skin" (Organization 2, Interview 4)
			"likes the organization and the service but being on the board is painful" (Organization 2, Interview 4)
		Lack of understanding other board members desires and intentions	"that sly little devil" (Organization 2, Interview 1)
Transitivity	Low	Lack of board member interactions	Board members do not sit next to one another at events
			Board members limit conversations at events
			mid-conversation, stopped talking with the other board member to consult with the passerby
Scope	Wide	Board members dedicate their time to other organizations and activities	Organization B requires "too much time" and "his personal life suffered" (Organization 2, Interview 1)
			"she is a big who-ha in her gardening club" (Organization 2, Interview 1)
			"[Organization B] is low on [my] priority list" (Organization 2, Interview 3).
Impermeability	High	Board members actively seek to recruit new members	"watch[ing] who shows up (to events) and nurture[ing] them" (Organization 2, Interview 2), Member X described the recruitment process as "[NAME] just bugged the crap out of me (to join)" (Organization 2, Board Meeting 2).
			"[Organization B] doesn't want to exclude anyone, especially in regards to membership" (Organization 2, Interview 2).
			"we are not in the position to say should" (Organization 2, Interview 1)

Table 18: Summary of Grid Level for Organization B

Category	Ranking	Supporting Evidence	
Specialization	High	Organization stratification based on abilities or limitations of board members	One individual in the organization is communication specialist
			The limitation of access to information creates a specialized role for the Treasurer.
			"who else has the time" (Organization 2, Interview 1)
			"the longer members would step down if they could… they are tired of doing things and they know that if they don't do it the organization wouldn't exist" (Organization 2, Interview 3)
Asymmetry	Somewhat High	Activities of the board members are not equally distributed	"everyone has full loads" (Organization 2, Interview 3)
			"there is burn out (in Organization B) because no one wants to do the administrative stuff" (Organization 2, Interview 3).
			"[Organization B] is more about relations with the Board than with [NAME of the river]" (Organization 2, Additional interview 2).
Accountability	High	Personal accountability as well as social accountability	"personal accountability" (Organization 2, Interview 3)
			"no be all end all" (Organization 2, Interview 3)
			"you shouldn't' do things out of guilt and you can't keep doing thing no one else wants to do" (Organization 2, Interview 3)

Table 19: Summary of Organization B Characteristics

Variable	Description
Position Rule	4-5 available positions
Boundary Rule (within the organization)	Clearly defined rules
Boundary Rule (outside the organization)	Unclear rules
Prohibited Choice Rule: speaking on behalf of the organization	Weak
Permitted Choice Rule: sharing position tasks	Strong
Required Choice Rule: duties of position	Weak
Aggregation Rule	Majority Rule (Robert's Rules of Order)
Proximity	Low
Transitivity	Low
Scope	Wide
Impermeability	Low
Specialization	High
Asymmetry	High
Accountability	High

Table 20: Position Rules for Organization C

Position Title	Number of Available Positions
President of the Board	1
Vice President of the Board	1
Secretary	1
Treasurer	1
Watershed Coordinator	0-1
Other or Board Member at Large	0-5
Total Positions	4 to 10

Table 21: Boundary Rules for Organization C

Boundary Rule Focus	Clarity	Supporting Evidence	
Within Organization	Clearly Defined	Qualifications for Board Members to Enter Positions	"don't want the people to decide and create mission creep" (Organization 3, Interview 1) or "question if [they] are just chasing grants and going off mission" (Organization 3, Interview 3).
			Members at Large and the Executive Committee, each require different qualifications to enter the section
			"must be a year before you are president by law" (Organization 3, Interview 4)
			To be on the Executive Committee one must "write a paragraph and hand it out" (Organization 3, Interview 3) to the members of the organization.
Outside Organization	Clearly Defined	Qualifications for New Members to Enter the Board	"prevent mission creep" (Organization 3, Interview 1) or, in other words, there is a "mission to protect" (Organization 3, Interview 2).
			"institutional memory" (Organization 3, Interview 1) or a firm understanding of the functions, actions and structure of an institution, "people who are willing to help" (Organization 3, Interview 1) or being an active and knowledgeable member of specific environmental organizations or institutions within the community (Organization 3, Interview 2)

Table 22: Choice Rules for Organization C

Choice Rules	Action	Evidence
Permitted Choice Rule	No sharing duties between positions	"No, you are the Vice President" (Organization 3, Board Meeting 1)
		"[Board Members at Large were] not aware" (Organization 3, Interview 3) of the situation. Many of the Board Members were "surprised by the decision" (Organization 3, Interview 3)
Required Choice Rule	Formal decisions	"if you are Secretary you cannot be the Treasurer" (Organization 3, Interview 1)
		"place trust in [the Executive Committee] to make decisions" (Organization 3, Interview 3).
Prohibited Choice Rule	Violating roles	Must have a quorum to make a decision
		Must vote on decisions: "yes", "no" or "abstain" (Organization 3, Interview 1), regardless of if board members choose to abstain the motion "still needs a majority vote" (Organization 3, Interview 1) in order to pass
		Activities that potentially deviate from the mission or cause "mission creep" (Organization 3, Interview 1) are scrutinized harshly
		Speaking for the organization without authority: Watershed Coordinator did not have the authority within the organization to speak on behalf of the organization or to place her name on the organization's letterhead (Organization 3, Board Meeting 1)

Table 23: Aggregation Rules for Organization C

Formal decisions are made by voting with Robert's Rules of Order	Formal decisions are made by a formal vote which requires a motion to be made, seconded and then passed
	"Yea! We have a quorum!" (Organization 3, Board Meeting 1)

Table 24: Summary of Group Level for Organization C

Category	Ranking	Supporting Evidence	
Proximity	High	Personal discussions at Board meeting	There are get-togethers outside of Board Meetings
			Though they don't really know about each other they do share at these meetings (discuss vacations, and daughter)
			"I live through your vacations" (Organization 3, Board Meeting 1)
Transitivity	Low	No interconnectedness between Board members	"known each other from other areas… they are neighbors and friends" (Organization 3, Interview 4)
			"There is no way to distinguish, don't even know all past board members and invite them back… not everyone shows up" (Organization 3, Interview 1)
Scope	Narrow	Board members dedicate their time to other organizations and activities but return to the organization	Board Members serve "one to two terms" (Organization 3, Interview 4)
			He decided to return to the Board as an active board member, though, because "it was important" (Organization 3, Interview 3)
			Members do not consider themselves "as active" (Organization 3, Interview 3) of a member in other organizations
Impermeability	Low	Potential members are only selected from "super volunteers"	"Don't want the people to decide… mission creep" (Organization 3, Interview 1)
			Board Members of Organization C reach out to volunteers or future members, but do not seek out those volunteers and members to join the Board.
			Board members refer to others as "that one volunteer", "the architect" or "the intern" (Organization 3, Committee Meeting 1).

Table 25: Summary of Grid Level for Organization C

Category	Ranking	Supporting Evidence	
Specialization	High	Each board member has a specific role	that "everyone brings skills" (Organization 3, Interview 4)
			"Member X is the business guy" (Organization 3, Interview 3), "Member Y brings people to the organization" (Organization 3, Interview 4) and "Member Z gets the grants" (Organization 3, Interview 2
			"if [Member X] were missing we would have to figure something out" (Organization 3, Interview 3).
Asymmetry	High	Structure of Organization	"place[d] trust in the [Executive Committee] to make decisions" (Organization 3, Interview 3)
			"hierarchical, no… but it's not consciously egalitarian either" (Organization 3, Interview 4)
		Personal relations of Board Members	"and everyone else is hanging on with a finger" (Organization 3, Interview 2
			"I'm okay not interviewing him, if you are okay with him" (Organization 3, Board Meeting 1)
			"certain board members do more work" (Organization 3, Interview 3)
			"I am learning from the master" (Organization 3, Board Meeting 1).
Accountability	High	Removal of Individuals from positions	"officially the board is [the Watershed Coordinator's] boss" (Organization 3, Interview 3) and can be removed by a vote from said position

Table 26: Summary of Organization 1 Characteristics

Variable	Description
Position Rule	5 available positions
Boundary Rule (Entering Organization)	Clearly defined rules
Boundary Rule (Within the Organization)	Clearly defined rules
Prohibited Choice Rule: speaking on behalf of the organization	Strong
Permitted Choice Rule: sharing position tasks	Strong
Required Choice Rule: duties of position, acting as a single organizational body	Strong
Aggregation Rule	Majority Rule
Proximity	High
Transitivity	Low
Scope	Narrow
Impermeability	High
Specialization	High
Asymmetry	High
Accountability	High

Table 27: Position Rules for Organization D

Position Title	Number of Available Positions
President of the Board	1
Secretary	0-1
Treasurer	1
Other or Board Member at Large	1
Total Positions	3 to4

Table 28: Boundary Rules for Organization D

Boundary Rule Focus	Clarity	Supporting Evidence	
Within Organization	Unclear or Ambiguous	Qualifications for Board Members to Enter Positions	"Steering Committee" chair, treasurer, secretary" (Organization 4, Interview 2)
			"Think about who we can corral into [the position of Secretary], maybe it will be just a six month term" (Organization 4, Board Meeting 2)
			"because there is only one person" (Organization 4, Interview 5) to choose
			"because she has been busy" (Organization 4, Interview 6) therefore other representatives "are taking turns" (Organization 4, Interview 6)
			"there is only one person 'are you willing'" (Organization 4, Interview 5)
			"last year only [Organization Name] paid dues" (Organization 4, Board Meeting 2).
Outside Organization	Unclear or Ambiguous	Qualifications for New Members to Enter the Board	"I don't know how many total" (Organization 4, Interview 6)
			"just asked to come"(Organization 4, Interview 6) "sent an email" (Organization 4, Interview 6)
			"volunteer group multiple people and have a core belief" (Organization 4, Interview 1)
			"show up and you are a member, no dues, just attendance" (Organization 4, Interview 2)
			"purpose is to come together and talk" (Organization 4, Interview 2)
			"asked (the current President) and said the organization is open to anyone in the club" (Organization 4, Interview 6)
			"a group with something wacky would be recognized" (Organization 4, Interview 4)
			"Should Organization X be a member?" (Organization 4, Interview 1)

Table 29: Choice Rules for Organization D

Choice Rules	Action	Evidence
Permitted Choice Rule	Sharing duties	"someone does minutes" (Organization 4, Interview 6)
		"Member X, now taking turns cause she has been busy" (Organization 4, Interview 6) "what are we called? Council Members?" (Organization 4, Interview 4)
		"loosely run" (Organization 4, Additional Interview 2)
		"not real rules based" (Organization 4, Additional Interview 2)
		"conversation style" (Organization 4,Additioanl Interview 2)
		"Meetings are informal" (Organization 4, Additional Interview 2)
		"full member and votes" (Organization 4, Interview 4)
		"2 to 3 hours before discussing the agenda" (Organization 4, Interview 4)
		"each representative is a governing body" (Organization 4, Interview 4)
		"[the Secretary] did more of the work" (Organization 4, Interview 5)
		"no real executive body format" (Organization 4, Interview 4)
		"no real roles" (Organization 4, Interview 4)
		"discussion can be lengthy" (Organization 4, Interview 4)
		"someone does minutes" (Organization 4, Interview 6)
		"Member X, now taking turns cause she has been busy" (Organization 4, Interview 6)
Required Choice Rule	Formal decisions	"two people from the same organization is one vote" (Organization 4, Interview 5)
		"brought an intern, the intern would not vote. Not official" (Organization 4, Interview 4)
		"no vote stacking" (Organization 4, Interview 4)
Prohibited Choice Rule	Violating roles	"City of [NAME] is not coming if commiserating" (Organization 4, Interview 2)
		"My board wants to know what they are doing (with the dues)" (Organization 4, Interview 1)
		"never signed on the agreement" (Organization 4, Interview 3)
		"can't without the approval of the board" (Organization 4, Interview 3)
		"non-voting member" (Organization 4, Interview 3)
		"letters are funny, have to go up the flagpole" (Organization 4, Interview 6)

Table 30: Aggregation Rules for Organization D

Formal decisions are made by voting , but most decisions are consensus based	"more on consensus, no motion, no second, just voiced dissent" (Organization 4, Interview 1)
	"2/3 majority present to vote" (Organization 4, Interview 2)
	"I don't know how many total" (Organization 4, Interview 6) "obviously there was a quorum because it is enough to vote" (Organization 4, Interview 6)

Table 31: Summary of Group Level for Organization D

Category	Ranking	Supporting Evidence	
Proximity	Low	Lack of personal discussion in meetings	No personal discussion (Organization 4, Board Meeting 1, 2 & 3)
			"each organization states what the organization is doing then the rest of the agenda is presented" (Organization 4, Interview 4)
			"there are core members that are always there" (Organization 4, Interview 5)
			Constant confusion of names associated with each organization (Organization 4, Interviews 4, 5 & 6)
			Unaware who can or cannot vote (Organization 4, Interview 1, 2 & 6)
Transitivity	Low	No interconnectedness between board members	Must do a lighting round of introduction to introduce each other
			"all watersheds have the same goal, think they need a project" (Organization 4, Interview 2)
			"who is that?" (Organization 4, Board Meeting 2)
			"Letterhead needs to add [Organization X] " (Organization 4, Board Meeting 2)
			"you have a letterhead? I have never seen it" (Organization 4, Board Meeting 2)
			"I don't know how many total" (Organization 4, Interview 6) "obviously there was a quorum because it is enough to vote" (Organization 4, Interview 6)
Scope	High	Board members dedicate their time to other organizations and activities	"each representative is a governing body" (Organization 4, Interview 4)
			"[Member X] wanted to give up" (Organization 4, Interview 1)
			"represent their organization not self" (Organization 4, Additional Interview 2)
			Member X discussed plastic bags, which was not on the on the list of questions, to bring back to the group (Organization 4, Board Meeting 2)
			"it's a club, and a club of people so no one person can call the shots" (Organization 4, Interview 6)

Table 31 continued on the following page

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Continuation of Table 31: Summary of Group Level for Organization D

Category	Ranking	Supporting Evidence	
Scope	High	Board members dedicate their time to other organizations and activities	"letters are funny, have to go up the flagpole" (Organization 4, Interview 6)
			"3% of time" (Organization 4, Interview 6)
			"pulled in a lot of directions" (Organization 4, Interview 6)
Impermeability	Low	Potential members are anyone willing to attend	"just asked to come"(Organization 4, Interview 6) "sent an email" (Organization 4, Interview 6)
			Don't have to be a watershed organization to join (Organization 4, Interview 1, 2, 3, 4, & 6)
			"show up and you are a member, no dues, just attendance" (Organization 4, Interview 2)
			"a group with something wacky would be recognized" (Organization 4, Interview 4)

Table 32: Summary of Grid Level for Organization D

Category	Ranking	Supporting Evidence	
Specialization	High	Each board member specializes in the area of his or her primary organization	"brainstormed ideas but do as an individual" (Organization 4, Interview 6)
			"all watersheds have the same goal, think they need a project" (Organization 4, Interview 2)
			"[Member X] is the person now" (Organization 4, Interview 6)
			"if [Organization X] brings up an issue, then it is known to be an issue" (Organization 4, Interview 4)
			"no one has more say; one group, one vote" (Organization 4, Interview 4)
Asymmetry	Low	Structure of Organization	"horizontal power structure" (Organization 4, Additional Interview 2)
			"equal weight – more weight if they are certain groups" (Organization 4, Interview 2)
		Personal relations of Board Members	"success in areas will be listened to aren't really strong personalities" (Organization 4, Additional Interview 2)
			"some members have more influence; they have more resources; no real moving" (Organization 4, Additional Interview 2)
			"more respected due to length of tenure, Organization X more successful" (Organization 4, Additional Interview 2)
			"brainstormed ideas but do as an individual" (Organization 4, Interview 6)
Accountability	Low	Removal of Individuals from positions	"don't know how to structure" (Organization 4, Interview 1)
			"no you have to do this" (Organization 4, Interview 6)
			"brainstormed ideas but do as an individual" (Organization 4, Interview 6)
			"no you have to do this" (Organization 4, Interview 6)
			"need more structure" (Organization 4, Interview 2)
			"2/3 majority present to vote" (Organization 4, Interview 2)
			"[Organization X] has no vote because of litigation issues" (Organization 4, Interview 2)
			"My board wants to know what they are doing (with the dues)" (Organization 4, Interview 2)
			"non-voting member" (Organization 4, Interview 3)
			"can't without the approval of the board" (Organization 4, Interview 3)
			"never signed on the agreement" (Organization 4, Interview 3)

Table 33: Summary of Organization D Characteristics

Variable	Description
Position Rule	3-4
Boundary Rule (Entering Organization)	Unclear or ambiguously defined rules
Boundary Rule (Within the Organization)	Unclear or ambiguously defined rules
Prohibited Choice Rule: speaking on behalf of the organization	Strong
Permitted Choice Rule: sharing position tasks	Strong
Required Choice Rule: duties of position, acting as a single organizational body	Strong
Aggregation Rule	Consensus even when voting
Proximity	Low
Transitivity	Low
Scope	Wide
Impermeability	Low
Specialization	High
Asymmetry	Low
Accountability	Low

Table 34: Cross Case Summary of Variables

Variable	Organization A	Organization B	Organization C	Organization D
# of positions	5	5	5	4
Clarity of boundary rules (outsider)	Clear	Unclear	Clear	Unclear
Clarity of boundary rules (insider)	Unclear	Clear	Clear	Unclear
Choice rules (task sharing)	Permits	Discourages	Discourages	Permits
Choice rules (going off mission)	Discourages	Permits	Discourages	Permits
Choice rules (speaking for the organization as an individual)	Discourages	Permits	Discourages	Permits
Aggregation rules	Consensus	Majority Rule	Majority Rule	Consensus
Group dimension[a]	++++	----	+-++	----
Grid dimension[b]	---	+++	+++	+--

[a]: includes: proximity, transitivity, scope, impermeability
[b]: includes: specialization, asymmetry, accountability
Key: + high   -low

Table 35: Summary of Patterns between Rules and Worldviews

Variable	Correlated with Group?	Correlated with Grid?
Position rules	No	No
Boundary rules to outsiders	Yes	No
Boundary rules to insiders	No	Yes
Choice rules: position task sharing	No	Yes
Choice rules: speaking for the organization	Yes	No
Choice rules: going off-task/mission	Yes	Yes
Aggregation Rules	No	Yes

References

Ajzen, I. (January 01, 1991). The theory of planned behavior. (Special Issue: Theories of Cognitive Self-Regulation). *Organizational Behavior & Human Decision Processes, 50,* 2.

Ajzen, I., & Madden, T. J. (September 01, 1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology, 22,* 5, 453-474.

Aldrich, J. H. (1986). *American government: People, institutions, and policies*. Boston: Houghton Mifflin.

Allen, R. W., Madision, D. L., Porter, L. W., Renwick, P. A., & Mayes, B. T. (January 01, 1979). Organizational Politics: Tactics and Characteristics of its Actors. *California Management Review, 22,* 77-83.

Ashforth, Blake. & Mael, Fred. (1989). Social Identity and the Organization. *Academy of Management Review.* Vol. 14. No. 1. pages 20-39.

Banzhaf, J. F. (July 01, 1966). Multi-Member Electoral Districts. Do They Violate the "One Man, One Vote" Principle. *The Yale Law Journal, 75,* 8, 1309-1338.

Barnett, W., & Carroll, G. (1995). Modeling Internal Organizational Change. Annual Review of Sociology, 21, 217 -236.

Barriball, K. L., & While, A. (February 01, 1994). Collecting data using a semi-s structured interview: a discussion paper. *Journal of Advanced Nursing, 19,* 2.)

Berkes, Fikret. (2006). From Community-Based Resource Management to Complex Systems: The Scale Issue and Marine Commons. *Ecology and Society*. Volume 11.

Boholm, Asa. (1996). Risk perception and social anthropology: Critique of cultural theory. *Journal of Anthropology*. Volume 61, Issue 1-2, pages 64-84.

Bonnel, Joseph & Koontz, Tomas. (2007). Stumbling Forward: The Organizational Challenges of Building and   Sustaining Collaborative Watershed Management.

Society & Natural Resources: An International Journal . Volume 20, Issue 2, pages 153-167.

Borisova, Tatiana; Racevskis, Laila & Kipp, Jennison. (2011). Stakeholder Analysis of a Collaborative Watershed Management Process: A Florida Case Study. *Journal of the American Water Resources Association.* Volume 48, Issue 2, pages 277–296.

Boyne, G. A., & Meier, K. J. (July 01, 2009). Environmental Change, Human Resources and Organizational Turnaround. *Journal of Management Studies, 46,* 5, 835-863.

Budros, A. (January 01, 1999). A conceptual framework for analyzing why organizations downsize. *Organization Science, 10,* 1.)

Brannstrom, Christian., Clarke, James. & Newport, Mariana. (2004). Civil Society Participation in the Decentralization of Brazil's Water Resources: Assessing Participation in Three States. *Singapore Journal of Tropical Geography.* Volume 25, Issue 3, pages 304–321

Brembs, B. (1996, May). Chaos, Cheating and Cooperation: Potential Solutions to the Prisoner's Dilemma. Oikos, 76, 14-24.

Brenot, Jean, Sylviane Bonnefous, and Claire Marris. (1998). "Testing the Cultural Theory of Risk in France." *Risk Analysis*. 18.6: 729-739. Print.
Brewer Marilynn (1993). Social Identity, Distinctiveness, and In-Group H Homogeneity. Social Cognition: Vol. 11, No. 1, pp. 150-164.

Bruns, W. J., & Waterhouse, J. H. (October 01, 1975). Budgetary Control and Organization Structure. *Journal of Accounting Research, 13,* 2, 177-203.

Child, J. (January 01, 1972). Organizational Structure, Environment and Performance: The Role of Strategic Choice. *Sociology, 6,* 1.

Cialdini, Robert B., & Goldstein, Noah J., (2004). Social Influence: Compliance and Conformity. *Annual Review of Psychology.* Vol. 55: 591-621.

Cohen, Don. (2001). *In Good Company: How Social Capital Makes Organizations Work.* Boston. Harvard Business School Press.

Cox, T.H. (August 01, 1991). Managing Cultural Diversity: Implications for Organizational Competitiveness. *The Executive*, 5 3, 45-56.

Cutt, James, and Victor V. Murray. (2000).*Accountability and Effectiveness Evaluation in Non-Profit Organizations*. London: Routledge. Print.

Daft, R. L., & Lengel, R. H. (May 01, 1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science, 32,* 5, 554-571.

Dake, Karl; Thompson, Michael. (1999). "Making Ends Meet, in the Household and on the Planet". Innovation. 12(3), 427-438.

David, F. R., & David, F. R. (January 01, 2003). It's time to redraft your mission statement. *Journal of Business Strategy, 24,* 1, 11-14.

Deschouwer, K. (July 01, 2003). Political Parties in Multi-Layered Systems. *European Urban and Regional Studies, 10,* 3, 213-226.

Dietz, Thomas; Ostrom, Elinor & Stern, Paul. (2003). The Struggle to Govern the Commons. *Science*. Volume 302 No. 5652 pages 1907-1912

Duckstein, L., & Opricovic, S. (February 01, 1980). Multiobjective optimization in river basin development. *Water Resources Research, 16,* 1, 14-20.

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.

Edge, A., & Remus, W. (1984). The Impact of Hierarchical and Egalitarian Organization Structure on Group Decision Making and Attitudes. *Developments in Business Simulation & Experiential Learning*, 11, 35-39.

Eisenhardt, K. M., & Zbaracki, M. J. (March 08, 1993). Strategic decision making. *Strategic Management Journal, 13,* 17-37.

Epstein, Graham, Vogt, Jessica M, Mincey, Sarah K, Cox, Michael, & Fischer, Burney. (2013). Missing ecology: integrating ecological perspectives with the social-ecological system framework. *International Journal of the Commons.* Vol 11(2).

Douglas, M. (1970). *Natural symbols: Explorations in cosmology*. New York: Pantheon Books.

Ethingoton, Philip; McDonagh, Eileen. (1995). "The Eclectic Center of the New Institutionalism: Axes of Analysis in Comparative Perspectives". Social Science History. 19(4), 467-477.

Feasibility and Admissibility of Mob Mentality Defenses (March, 1995).*Harvard Law Review*Vol. 108, No. 5, pp. 1111-1126

Fenno, R. F. (June 01, 1962). The House Appropriations Committee as a Political System: The Problem of Integration. *The American Political Science Review, 56,* 2, 310-324.

Flyvbjerg, B. (January 01, 2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry, 12,* 2, 219-245.

Garicano, L. (2000). Hierarchies and the Organization of Knowledge in Production. Journal of Political Economy, 108, 874-904.

Glacken, Clarence. (1992). "Reflections on the History of Western Attitudes to Nature". *GeoJournal.* 26(2), 103- 111.

George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social sciences.* Cambridge, Mass: MIT Press.

Gleick, P. H., & Cain, N. L. (2004). *The world's water, 2004-2005: The biennial report on freshwater resources.* Washington, D.C: Island Press.

Gleick, P. H. (2006). *The world's water, 2006-2007: The biennial report on freshwater resources.* Washington: Island Press.

Gregory, R., & Wiley InterScience (Online service). (2011). *Structured decision making: A practical guide to environmental management choices.* Chichester, West Sussex: Wiley-Blackwell.

Grendstad, G., Selle, P., Thompson, M., Workshop on Cultural Theory, & Workshop on Cultural Theory. (1999). *Cultural theory as political science.* London u.a.:Routledge.

Grief, Avner. (1994). "Cultural Beliefs and the Organization of Society: A Historical Reflection on Collectivist and Individualist Societies". Journal of Political Economy. 102(5), 912-950.

Griffin, C B. (1999)"Watershed Councils: an Emerging Form of Public Participation in Natural Resource Management[1]." *Jawra Journal of the American Water Resources Association.* 35.3: 505-518. Print.

Guba, Egon G, and Yvonna S. Lincoln. *Effective Evaluation.* San Francisco: Jossey-Bass Publishers, 1981. Print.

Hage, Jerald, and Robert Dewar. 1973. Elite Values Versus Organizational Structure in Predicting Innovation. Administrative Science Quarterly 18(3): 279-290.

Hannan, Michael. & Freeman, John. (1984) Structural Inertia and Organizational Change. *American Sociological Review*. Vol. 49, No. 2. Pages 149-164

Hansen, Carsten Jahn. (2006). Urban transport, the environment and deliberative governance: the role of interdependence and trust. *Journal of Environmental Policy & Planning*. Volume 8, Issue 2.

Hardin, G. (1968)."The Tragedy of the Commons: the Population Problem Has No Technical Solution; It Requires a Fundamental Extension in Morality." *Science*: 1243-8. Print.

Hardy, Scott. (2010). Governments, Group Membership, and Watershed Partnerships. *Society & Natural Resources: An International Journal.* Volume 23, Issue 7, pages 587- 603.

Haveman, H. A. (January 01, 1992). Between a rock and a hard place: organizational change and performance under conditions of fundamental environmental transformation. *Administrative Science Quarterly, 37,* 1.)

Herdt, T. d. (2003). Cooperation and fairness: the flood-Dresher experiment revisited . Review of Social Economy, 183-210.

Hidalgo, M C, and Pilar Moreno. (2009)."Organizational Socialization of Volunteers: the Effect on Their Intention to Remain." *Journal of Community Psychology*. 37.5: 594-601. Print.

Hoornbeek, John; Hansen, Evan; Ringquist, Evan & Carlson, Robert. (2013). Implementing Water Pollution Policy in the United States: Total Maximum Daily Loads and Collaborative Watershed Management. *Society & Natural Resources: An International Journal*. Volume 26, Issue 4, 2013

Inciardi, J.A., & Rothman, R.A. (1990). *Sociology: Principles and Applications.* San Diego: Harcourt Brace Jovanovich,   Publishers.

Innes, J. E., & Booher, D. E. (2010). *Planning with complexity: An introduction to c collaborative rationality for public policy*. Milton Park, Abingdon, Oxon: Routledge.

Jensen, M. C., & Heckling, W. H. (September 06, 1995). SPECIFIC AND GENERAL KNOWLEDGE, AND ORGANIZATIONAL STRUCTURE. *Journal of Applied Corporate Finance, 8,* 2, 4-18.

Keough, Heather, L., & Blahna, Dale, E. J. (October 01, 2006). Achieving Integrative, Collaborative Ecosystem Management. *Conservation Biology, 20,* 5, 1373-1382.

232

Kerremans, B. (January 01, 1996). Do Institutions Make a Difference? Non-Institutionalism, Neo- Institutionalism, and the Logic of Common Decision-Making in the European Union. *Governance Oxford-, 9,* 2, 217-240.

Keser, C., & van Winden, F. (2000). Conditional cooperation and voluntary contributions to public goods. Scandinavian Journal of Economics, 102(1), 23-39.

Kahan, Dan M., (2008).Cultural Cognition as a Conception of the Cultural Theory of R Risk. Handbook of Risk Theory, S. Roeser, d., Forthcoming; Harvard Law S School Program on Risk Regulation Research Paper No. 08-20; Yale Law School, Public Law Working Paper No. 222.

Kahan, DM, D Braman, J Monahan, L Callahan, and E Peters. "Cultural Cognition and Public Policy: the Case of Outpatient Commitment Laws." *Law and Human Behavior*. 34.2 (2010): 118-40. Print.

Kahan, D. M., Jenkins-Smith, H., & Braman, D. (February 01, 2011). Cultural cognition of scientific consensus. *Journal of Risk Research, 14,* 2, 147-174.

Knight, Jack.(1992). *Institutions and Social Conflict*. Cambridge [England: Cambridge University Press. Print.

Klandermans, Bert. (1984). "Mobilization and Participation: Social-Psychological Expansions of Resource Mobilization Theory". *American Sociological Review. 49(5*), 583-600

Koehler, Brandi & Koontz, Tomas. (2008). Citizens Participation in Collaborative Watershed Partnerships. *Environmental Management*. Volume 41, Issue 2, pp 143-154

Koontz, T. M. (2004). *Collaborative environmental management: What roles for government?*. Washington, DC: Resources for the Future.

Koontz, Tomas. & Hardy, Scott. (2008). Reducing Nonpoint Source Pollution through Collaboration: Policy and Programs   across the United States. *Environment Management*. Vol. 41, Issue 3, pages 301-310

Koontz, Tomas. & Thomas, Craig. (2006). What do we know and need to know about the environmental outcomes of collaborative management. *Public Administrative Review*. Vol. 66, Issue 1, pages 111-121.

Krebs, D. L. (January 01, 1970). Altruism: An examination of the concept and a review of the literature. *Psychological Bulletin, 73,* 4, 258-302.

233

Kroeber, A., & Kluckhohn, C. (1952). Culture: A critical review of concepts and definitions. Cambridge: The Museum.

Kutcher, Louis. (2004). The American Sport Event as Carnival: An Emergent Norm Approach to Crowd Behavior. *The Journal of Popular Culture*. Volume 16, Issue 4, pages 34–41.

Lam, L., & Suen, C. Y. (September 01, 1997). Application of majority voting to pattern recognition: An analysis of its behavior and performance. *Ieee Transactions on Systems, Man & Cybernetics: Part A, 27,* 5.)

Langbein, L. I. (2012). *Public program evaluation: A statistical guide*. Armonk, N.Y: M.E. Sharpe.

Laszer, Judith. (2008). <u>Natural Experiments: Ecosystem-Based Management and the Environment</u>. Massachusetts. MIT Press.

Leach, W. D. (January 01, 2006). Policy - Public Involvement in USDA Forest Service Policymaking: A Literature Review. *Journal of Forestry, 104,* 1, 43.

Leach,William; Pelkey, Neil; Sabatier, Paul. (2002). Stakeholder partnerships as collaborative policymaking: Evaluation criteria applied to watershed management in California and Washington. *Journal of Policy Analysis and Management.* Vol 21, Issue 4, pages 645–670.

Le, Bon G. (1995).*The Crowd*. New Brunswick, N.J: Transaction Pub,. Print.

Leighley, J. (1996). Group Membership and the Mobilization of Political Participation. The Journal of Politics, 58(2), 447-463.

Lippa, R.A. (1994). *Introduction to Social Psychology.* Pacific Grove: Brooks/Cole Publishing Company.

Locke, Edwin; Motowidlo, Stephan; Bobko, Philip. (1986)."Using Self-Efficacy Theory to Resolve the Conflict between Goal-Setting Theory and Expectancy Theory in Organizational Behavior and Industrial/Organizational Psychology". *Journal of Social and Clinical Psychology*. 4(3), 328-338.

Lockhart, C. (1999). Culture Contributions to Explaining Institutional Forms, Political Change, and Rational Decisions. Comparative Political Studies, 862-893.

Lubell, Mark. (2004). Collaborative Watershed Management: A View from the Grassroots. *Policy Studies Journal*. Volume 32, Issue 3, pages 341–361.

Lumsden, Charles. (1990). "Theory and Research in Organizational Ecology". Annual Review of Sociology. 16, 161-195.

March, James; Olsen, Johan. (1984). "The New Institutionalism: Organizational Factors in Political Life". The American Political Science Review. 78(3), 734-749.

Markus, H., & Kitayama, S. (1991). Culture and the Self: Implications for Cognition, Emotion, and Motivation. Psychological Review, 98, 224-253.

Marris, C., Langford, I., & O'Riordan, T. (1988). A Quantitative Test of the Cultural Theory of Risk Perceptions: Comparison with the Psychometric Paradigm. Risk Analysis, 18, 635-67.

McCarthy, John. (1977). "Resource Mobilization and Social Movement a Partial Theory". American Journal of Sociology. 82(6).

McDonald, R. I., Green, P., Balk, D., Fekete, B. M., Revenga, C., Todd, M., & Montgomery, M. (January 01, 2011). Urban growth, climate change, and freshwater availability. *Proceedings of the National Academy of Sciences of the United States of America, 108,* 15, 6312-7.

Michaels, Sarah. (1999) "Configuring Who Does What in Watershed Management: the Massachusetts Watershed Initiative." *Policy Studies Journal*. 27.3: 565-577. Print.

Michaels, Sarah., Mason, Robert., & Solecki, William. (2001). Participatory Research on Collaborative Environmental Management: Results from the Adirondack Park. *S Society & Natural Resources: An International Journal.* Volume 14, Issue 3, pages 251 – 255.

Milfont, Taciano; Gouveia, Valdiney. (2006). "Time perspective and values: An exploratory study of their relations to environmental attitudes". Journal of Environmental Psychology. 26, 72-82.

Millennium Development Goals. (2014). Retrieved January 2014, from United Nations Development Programme: http://www.undp.org/content/undp/en/home/mdgoverview.html

Mohammed, S., & Ringseis, E. (January 01, 2001). Cognitive diversity and consensus in group decision making: the role of inputs, processes and outcomes. *Organizational Behavior & Human Decision Processes, 85,* 2.)

Morrill, Calvin. (2008). "Culture and Organization Theory". Annals of the American Academy of Political and Social Science. 619, 15-40.

Nutt, P. C. (1995). *Context, tactics, and the examination of the alternatives during strategic decision making*. Columbus, Ohio: Max M. Fisher College of Business, Ohio State University.

Nutt, P. C. (July 01, 1986). Decision style and its impact on managers and management. *Technological Forecasting and Social Change, 29,* 4, 341-366.

Ocasio, William. (1995). The enactment of economic adversity-a reconciliation of theories of failure-induced change and threat-rigidity. *Research in Organizational Behavior: An Annual Series of Analytical Essays and Critical Reviews*. Vol. 17, No. 17, pages 287-331.

Ostrom, E. (1990). Governing the Commons: The Evolution of Institutions for Collective Action. New York: Cambridge University Press.

Ostrom, E. (1999). Revisiting the Commons: Local Lessons, Global Challenges. Science, 278-282.

Ostrom, E. (2005). *Understanding institutional diversity*. Princeton: Princeton University Press.

Ostrom, E., & Turner, B. (2007). A diagnostic approach for going beyond panaceas. Proceedings of the National Academy of Sciences of the United States of America, 15181–15187.

Peters, Guy. (2010). American Public Policy: Promise & Performance. Washington D.C.CQ. Press.

Pearce, J. A. (May 01, 1987). Corporate Mission Statements: The Bottom Line. *The Academy of Management Executive (1987-1989), 1,* 2, 109-115.

Pearce, F. 2006. When the rivers run dry : water, the defining crisis of the twenty-first century. Beacon Press, Boston.

Rippl, S. (2002). Culture theory and risk perception: a proposal for a better measure. Journal of Risk Research, 5(2), 147-165.

Romanelli, Elaine. & Tushman, Michael. (Oct, 1994). Organizational Transformation as Punctuated Equilibrium: An Empirical Test. *The Academy of Management Journal*. Vol. 37, No.5 pages 1141-1166

Rustagi, D., Engel, S., & Kosfeld, M. (2010). Conditional Cooperation and Costly Monitoring Explain Success in Forest Commons Management. Science, 330(6006), 961-965. doi: 10.1126/science.1193649

Schellenberger, Michael; Nordhaus, Ted. (2004). "The Death of Environmentalism". The Heartland Institute. Singh, Jitendra;

Schively, Carissa. (2007). A Quantitative Analysis of Consensus Building in Local Environmental Review. *Journal of Planning Education and Research.* Vol. 27 no. 1 82-98.

Schwenk, C. R. (1988). *The essence of strategic decision making.* Lexington, Mass: Lexington Books.

Simon, Herbert A. (1978). "Rationality As Process and As Product of Thought." *The American Economic Review.* 68.2: 1-16. Print.

Solomon, S. (2010). *Water: The Epic Struggle for Wealth, Power, and Civilization.* New York: Harper Perennial

Spencer, B. (1994). Models of Organization and Total Quality Management: A Comparision and Critical Evaluation. Academy of Management Review, 448-471.

Staw, B. M., Sandelands, L. E., & Dutton, J. E. (January 01, 1981). Threat-Rigidity Effects in Organizational Behavior: A Multilevel Analysis. *Administrative Science Quarterly, 26,* 501-524.

Stewart, Eric & Weinstein, Rhona. (1997). Volunteer Participation in Context: Motivations and Political Efficacy Within Three AIDS Organizations. *American Journal of Community Psychology*. Volume 25, Issue 6, pp 809-837

Stratmann, T. (January 01, 1992). The Effects of Logrolling on Congressional Voting. *American Economic Review, 82,* 5, 1162.

Sundeen, Richard. (1989). "Volunteer Participation in Local Government Agencies." *Journal of Urban Affairs*. 11.2: 155-167. Print.

Taxin, Amy & Rogers, John. (2012, April 25). Twenty years later, Rodney King riots still resonate. Los Angeles, California,   Unites States: The Associated Press.

Thomas, Craig. & Koontz, Tomas. (2011). Research designs for evaluating the impact of community-based management on   natural resource conservation. *Journal of Natural Resource Policy Research*. Vol. 3, Issue 2, pages 97-111.

237

Thompson, M. (2003). Yes, Culture matters, but in what Way? In E. Ehlers, & C. Gethmann, Environment Across Cultures (pp. 39-54). Berlin: Springer.

Thompson, M., Ellis, R., & Wildavsky, A. (1990). Culture Theory. Boulder: Westview Press.

Thompson, M., Grendstad, G., & Selle, P. (1999). *Cultural theory as political science*. London: Routledge.

Thompson, M., & Wildavskky, A. (1986, May 3). A Culture Theory of Information Bias in Organizations. Journal of Management Studies, 273-286.

Toynbee, A., In Somervell, D. C., & Royal Institute of International Affairs. (1947). *A study of history*. New York: Oxford University Press.

Turner, JC. (1987).A self-categorization theory. In J. C. Turner, M.A. Hogg, P. J. Oakes, S. D. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the social group; A self-categorization theory* (pp. 42–67). Oxford, England: Blackwell.

Tversky, A., & Kahneman, D. (January 01, 1986). Rational Choice and the Framing of Decisions. *The Journal of Business, 59.*

Vignoles, Vivian; Chyssochoou, Xenia & Breakwell, Glynis. (2000). The Distinctiveness Principle: Identity, Meaning, and the Bounds of Cultural Relativity. *Personality and Social Psychology Review .*Vol. 4 no. 4 337-354

Vinder, Stephen. (2004). "Rethinking Crowd Violence: Self-Categorization Theory and the Woodstock 1999 Riot." *Journal for the Theory of Social Behaviour*. 34.2: 141-166. Print.

Vroom, V. H., & Yetton, P. W. (1973). *Leadership and decision-making*. Pittsburgh: University of Pittsburgh Press.

Water Sanitation Health. (2014). Retrieved January 2014, from World Health Organization: http://www.who.int/water_sanitation_health/en/

Wildavsky, Aaron. (1987). "Choosing Preferences by Constructing Institutions: A Cultural Theory of Preference Formation". The American Political Science Review. 81(1), 3-22.

Wildavsky, A. (1992, January). Indispensable Framework or Just Another Ideology. Rationality and Society, 4, 8-32.

Yin, R. K. (2003). *Applications of case study research*. Thousand Oaks: Sage
  Publications.

Yoon, H.-K. (January 01, 1982). Environmental Determinism and Geomancy: Two
  Cultures, Two Concepts. *Geojournal, 6,* 1, 77-80.

Yoon, Hong-Key. (1991). "On Geomentality". GeoJournal. 25(4), 387-392.

Zajonc, R. B. (January 01, 1980). Feeling and thinking: Preferences need no inferences.
  American Psychologist, 35, 2, 151-175.

Primary Sources

The names of the participants and organizations are not included in this section to
ensure the confidentiality of each individual as is required by the guideline put forth by
the International Review Board that granted approval for this research project.

Additional Interview 1. Personal interview. 9 September 2014.

Additional Interview 2. Personal interview. 12 September 2014.

Additional Interview 3. Personal Interview 10 September 2014.

Board Meeting 1, Organization 1. Personally attended. 26 April 2014.

Board Meeting 1, Organization 2. Personally attended. 17 April 2014.

Board Meeting 1, Organization 3. Personally attended 2 September 2014.

Board Meeting 1, Organization 4. Personally attended. 10 April 2014

Board Meeting 2, Organization 1. Personally attended. 27 August 2014.

Board Meeting 2, Organization 2. Personally attended. 23 October 2014.

Board Meeting 2, Organization 3. Personally attended. 25 September 2014.

Board Meeting 2, Organization 4. Personally attended. 9 October 2014.

Board Meeting 3, Organization 4. Personally attended. 23 September 2014.

Interview 1, Organization 1. Personal interview. 25 July 2014.

Interview 1, Organization 2. Personal interview. 18 April 2014.

Interview 1, Organization 3. Personal interview. 1 June 2014.

Interview 1, Organization 4. Personal interview. 25 July 2014.

Interview 2, Organization 1. Personal interview. 1 August 2014.

Interview 2, Organization 2. Personal interview. 23 July 2014

Interview 2, Organization 3. Personal interview. 19 September 2014

Interview 2, Organization 4. Personal interview. 1 June 2014

Interview 3, Organization 1. Personal interview. 9 September 2014.

Interview 3, Organization 2. Personal interview. 18 September 2014.

Interview 3, Organization 3. Personal interview. 6 October 2014.

Interview 3, Organization 4. Personal interview. 10 September 2014.

Interview 4, Organization 1. Personal interview.16 April 2014.

Interview 4, Organization 2. Personal interview. 16 September 2014

Interview 4, Organization 3. Personal interview. 29 September 2014.

Interview 4, Organization 4. Personal interview. 22 September 2014

Interview 5, Organization 1. Personal interview. 10 September 2014.

Interview 5, Organization 2. Personal interview. 17 September 2014.

Interview 5, Organization 3. Personal interview. 25 September 2014

Interview 5, Organization 5. Personal interview. 23 September 2014.

Interview 6, Organization 1. Personal interview. 17 July 2014

Interview 6, Organization 2. Personal interview. 10 Sepptember 2014.

Interview 6, Organization 3. Personal interview. 25 September 2014

Interview 6, Organization 4. Personal interview. 10 August 2014.