POLYRATIONAL COMMUNICATION:

THE PROCESS OF ENGAGING WITH THE PUBLIC

WHILE DRAFTING A RIPARIAN ORDINANCE

by

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TERMINAL PROJECT ABSTRACT

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Imagine that you just purchased a house with a backyard deck that overlooks a pristine river. Imagine being able to look out your back window at a beautiful natural body of water. Imagine how important that river would be to you. Wouldn't you want to do everything you can to both (a) maintain your access to the beautiful river and (b) maintain the quality of the river's water? Therefore, how do community and regional planners implement land use policies that allow landowners to accomplish both of those goals?

Implementing policies that protect the land immediately adjacent to a body of water can be a complicated process. Known as riparian ordinances, these policies are meant to regulate urban development near rivers, creeks, and streams in order to protect water quality. Many times, however, landowners are resistant to these types of policies. Riparian ordinances are viewed by some landowners as a violation of their property rights. This conflict is complicated because both sides are valid. As individuals, no one wants their government to set seemingly arbitrary restrictions regarding what can and can't be done on private property. On the other hand, as members of a community, no one wants to see the quality of their water detrimentally impacted by a stubborn and selfish landowner.

The purpose of this project is to demonstrate how planning scholars may actively and strategically engage with the public to have their research impact public deliberation, policy, and practice. The case studies for this project are three small cities located in the State of Oregon: Turner, Coburg, and Shady Cove. Utilizing methods such as document analysis, participant observation, and interviews with landowners, land use planners, and policymakers, this project draws upon Cultural Theory to help uncover the varied rationalities that must be considered when attempting to implement a riparian ordinance. The commoditization of land is at the center of this issue. How do we implement land use policies that respect the property rights of landowners while still protecting the quality of the natural environment?

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This study is dedicated to Katie Bednar.

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CHAPTER I

INTRODUCTION

Imagine that you just purchased a house with a backyard deck that over looked a pristine river. Imagine being able to look out your back window at a beautiful natural body of water. Imagine how important that river would be to you. Wouldn't you want to do everything you can to both (a) maintain your access to the beautiful river and (b) maintain the quality of the river's water? Wouldn't it be frustrating if the quality of water outside your home was detrimentally impacted by poor water quality standards upstream? Wouldn't you want to feel free to make necessary changes on your property while still maintaining the high quality of the river's water? Therefore, how do community and regional planners implement land use policies that allow landowners to accomplish both of those goals?

Since 1973, Oregon has maintained a strong statewide program for land use planning. The foundation of this program is a set of 19 Statewide Planning Goals. Statewide Planning Goal 5 is meant to protect natural resources and conserve scenic and historic areas and open spaces, including rivers. One of the most effective ways of achieving this goal is for local governments to implement policies that are meant specifically to protect the areas of land immediately adjacent to a body of water.

However, adopting and implementing policies that protect the land immediately adjacent to a body of water can be a complicated process. Known as riparian ordinances, these policies are meant to regulate urban development near rivers, creeks, and streams in order to protect water quality. Adopting a riparian ordinance is a great strategy for communities that are trying to make water quality improvements by mitigating negative

impacts from non-point source pollution, or runoff. These policies are based on the idea that much of the damage that bodies of water experience is due to land use activities that result in degraded runoff from adjacent areas of land. If we protect the areas of land that are immediately adjacent to a river, we therefore protect the quality of the river's water by mitigating some of the negative effects resulting from runoff.

Many times, however, landowners are resistant to these types of policies. Riparian ordinances are viewed by some landowners as a violation of their property rights because these policies are able to regulate development on lands near a body of water. This is upsetting to landowners who do not want to feel like their land is being controlled by the local government. This conflict is complicated because both sides have valid arguments to make. As individuals, no one wants their government to set seemingly arbitrary restrictions regarding what can and can't be done on private property. On the other hand, as members of a community, no one wants to see the quality of their water detrimentally impacted by a stubborn and selfish landowner.

Many times, riparian ordinances are used as tools to, in part, meet Federal and State water quality requirements. In smaller communities, local jurisdictions adopt riparian ordinances in response to being told that they are out of compliance with Federal or State water quality standards. Therefore, local jurisdictions usually have to take on the battle of defending a policy that is inspired by Federal and State regulations. This can be a complicated task in communities that have planners and policymakers that don't agree with certain Federal or State water quality standards.

On top of that, small cities frequently lack both the technical expertise and financial resources to review policy options and implement effective management

strategies. Many local governments also lack support from the residents to implement these regulations. Riparian ordinances can go a long way in protecting the natural resources of a city, but community support is vital.

Gaining community support can be very difficult in small and rural, but growing, cities, where the population is on the rise and resource regulations are becoming more stringent. However, ordinances are often not as restrictive as many community members may think. Disseminating information about what a particular policy does, the language within that policy, and the importance of that policy, is necessary to garner support from community members. An effective public outreach and education program can aid in this objective of information dissemination and can go a long way in helping residents understand the intricacies of the policy process.

Healey (1992) supported this notion and called it the "communicative turn in planning theory." Known as "planning through debate," Healey's theory aims to realize the democratic potential of planning practices within contemporary society. In Healey's view, "Any claim for the relevance of planning in such societies has to confront the challenges to the planning idea from both the resurgence of economic evaluation within public policy, and, more fundamentally, the philosophical post-modernist critique of scientific rationalism" (p. 1). The notion of how scientific rationalism and planning theory are related is discussed in greater detail in the following chapter, which highlights pertinent literature for this study.

The purpose of this project is to demonstrate how planning scholars and practitioners may actively and strategically engage with the public to have their research impact public deliberation, policy, and practice. Flyvbjerg (2002, 2004) presents the

theory and method of phronetic planning research, which is an approach to the study of values and power in planning based on a contemporary interpretation of Aristotelian phronesis, variously translated as practical wisdom or judgment.

The aim of phronetic research is to inform public deliberation and practice though effective communication strategies. Such research is focused on the following four value-rational questions, asked for specific instances of planning practice in a particular context: (1) Where are we going with planning? (2) Who gains and who loses, by which mechanisms of power? (3) Is this development desirable? (4) What should be done, if anything?

Even in Aristotle's original definition of phronesis, laid down more than two millennia ago, the knowledge–action relationship is clear. Phronetic research results ("reason") are therefore results only to the extent they have an impact on practice ("action"). Similar to the concept of praxis, phronetic planning research is concerned with using theory to inspire action.

Phronetic planning is a helpful resource for planners and policymakers who are confronted with wicked problems such as protecting riparian areas. Wicked problems are issues that have no substantive solution and are constantly being redefined based on the rationality of the people engaged with the problem. In order to engage with the public in an effective and meaningful way, it is essential to understand that everyone comes from different backgrounds and carries different ethics and values. The purpose of this project is to help planners and policymakers uncover the varied rationalities that exist within their communities and to understand how those different rationalities might inform a communication or public engagement process.

CHAPTER II

REVIEW OF THEORECTICAL FOUNDATIONS

In order to fully comprehend this study, it is essential to understand the origin and evolution of riparian protection policies. The first section of this chapter focuses on defining wicked problems and analyzing how communicative rationality is linked to planning theory. The next section highlights how Cultural Theory can be utilized as a tool for effectively engaging with the public.

The final two sections will also review theories that are essential to this study. The first summarizes the political economic approach, particularly as it pertains to community planning and highlights the concept of "commodification." Lastly, the final section gives a brief description of the water quality regulations that are important to know for this study.

Wicked Problems and Communicative Rationality

Understanding the different rationalities that exist within a given community is a crucial step in being able to effectively communicate with landowners and residents. Jurgen Habermas has been called "the last great rationalist," and in many ways he is (McCarthy, vi). But his perception of rationalism is unique in its incorporation of insightful critiques into his framework of the concept. It seems as though the "basic question for Habermas is whether a critical theory of society in the contemporary age that shares the practical intentions of Marx's theory is still at all possible" (Roderick, 22). In Habermas's perspective, in order to achieve this goal there should be less of a

concentration on the mode of production and more of a focus on the process of communication.

In *The Theory of Communicative Action*, Habermas outlines how the ideal speech situation can be constructed. To begin with, the first step of his argument presupposes that it is indeed possible for two or more subjects to reach an agreement or understanding. The next step contends that it is possible to distinguish between genuine and deceptive communication. However, the persuasive force of the better argument can prevail if and only if communication is free of deceptive, hidden constraints. Habermas notes that communication is only free of hidden constraints when there is a symmetrical distribution of opportunity to communicate for all participants. In short, "the ideal speech situation (as a communicative characterization of ideas of freedom, truth, and justice) contains a practical hypothesis upon which the critique of ideology (as 'systematically distorted communication') can be based" (Thompson, 128). Its main hypothesis is that rationality is created and reified by communicatively achieved agreement.

This notion of communicative rationality is an important concept for community planners to understand. Many of the problems that planners face involve understanding and acknowledging a number of different rationalities. Communicative rationality is the most affective model for community planners to adhere to when attempting to solve a "wicked problem." Hartmann (2012) defines a wicked problem "by the following properties: it cannot be definitively formulated, it has no 'stopping rule' and it is always unique (and so is its solution). A solution to a wicked problem is not 'true-or-false,' but 'good-or-bad'; such a solution cannot be tested, and there are no enumerable options of solutions. In addition, a wicked problem can be considered as a symptom of another

problem, and the choice of explaining a wicked problem determines the problem's resolution" (2). In other words, a wicked problem is an issue that has no definitive answer. It involves a number of different stakeholders who have a hard time even defining the problem. Wicked problems require "clumsy solutions" because a clumsy solution is polyrational by design (Hartmann, 9).

Rittel and Webber (1973) noted that wicked problems are never solved; "at best they are only re-solved – over and over again" (160). In their view, "In a pluralistic society there is nothing like the undisputable public good; there is no objective definition of equity; policies that respond to social problems cannot be meaningfully correct or false; and it makes no sense to talk about 'optimal solutions' to social problems unless severe qualifications are imposed first. Even worse, there is no 'solution' in the sense of definitive and objective answers" (155). In other words, they are coming from a postmodern perspective where the planner is not someone who is simply "hired to eliminate those conditions that predominant opinion judged undesirable" (156). Instead, planners have to deal with problems that are inherently wicked. The problems they face are difficult to define and require a solution that is a "one-shot operation" because there is no opportunity to learn by trial and error (163).

This, however, is not true for all problems that planners face. Rittel and Webber (1973) did not acknowledge simpler problems that many planners have to solve. One example would be deciding whether or not to put a stop sign at an intersection. Another example would be deciding whether or not to add more car lanes to a street or to add a bike lane. These problems are easy to define, they have solutions that can be uncovered through the process of trial and error, and they have a stopping rule- similar to a

mathematics equation, a chemistry problem, or a chess game. For these problems, there are immediate and open tests to the solutions.

This, of course, is not true for the wicked problems that planners have to face, such as food security, unemployment, and homelessness. Another wicked problem that planners have to face is protecting the areas of land that immediate interact with a body of water in order to mitigate negative impacts from runoff. As note earlier, implementing policies that protect riparian areas can be a complicated process because, many times, landowners who live near the body of water are resistant to these types of policies. On the other hand, as members of a community, no one wants to see the quality of their water detrimentally impacted by a stubborn and selfish landowner. The fish and wildlife in the area also have to be taken into account, as well as tourists who are using the rivers and streams for recreational purposes. In other words, there are many rationalities to consider. Riparian area protection is consistent with Rittel and Webber's ten criteria for wicked problems and thus requires a clumsy solution.

Rittel and Webber (1973) believe that the "existence of a discrepancy representing a wicked problem can be explained in numerous ways. The choice of explanation determines the nature of the problem's resolution" (166). This means that the perspective from which the story is told influences the perceived correct resolution. This is certainly true for riparian area protection. The definition of the problem changes depending on whether a landowner is telling the story, whether an Environmental Protection Agency representative is telling the story, or whether a tourist is telling the story. That is why communicative rationality is the best model for solving these problems. It can produce the clumsy solutions needed for polyrational problems.

However, many planners choose to utilize the advocacy model instead. Some planners believe that we should “reject the notion of a rationality-based democracy as a major vehicle for solving our problems, and join with like-minded allies to work toward what is right” (Flyvbjerg, 234). Davidoff (1965) believes, "Where plural planning is practiced, advocacy becomes the means of professional support for competing claims about how the community should develop... The advocate planner would be more than a provider of information, an analyst of current trends, a simulator of future conditions, and a detailer of means. In addition to carrying out these necessary parts of planning, he would be a proponent of specific substantive solutions" (425).

This is completely inconsistent with Rittel and Webber’s interpretation of wicked problems. As previously noted, Rittel and Webber (1973) believe that pluralism produces a reality absent of undisputable truths. Therefore, taking a stance that one position is highly superior to the other is contradictory to what makes wicked problems wicked. Instead of adhering to this model, planners should utilize communicative rationality and follow Martin Buber’s advice of being "participants in a genuine dialogue (as opposed to merely a conversation) [and] have a real openness to one another. Rather than tuning out each other’s views and marshaling arguments to counteract what each other says, participants [should] internalize the views of others to enhance their mutual understanding" (Innes, p. 119). In order for this to occur, all claims must be accurate, comprehensible, sincere, and legitimate (Innes, 98).

Advocacy planning is about making your own personal argument prevail. "Dialogue on the other hand is not about winning or making your own view prevail. When someone's mistake is uncovered in dialogue, everyone gains..." (Innes, 121).

Planners should be less interested in acting as advocates and engaging in persuasive arguments, and they should be more interested in adhering to Habermas's notion of the ideal speech situation and engaging in mutual dialogue.

Cultural Theory and Polyrationality

Cultural Theory was first introduced to academia in the 1960s by anthropologist Mary Douglass and then was further developed by Michael Thompson (Verweij & Thompson, 2006) and others. Benjamin Davy was the first to introduce Cultural Theory to the field of spatial planning. Although Cultural Theory was developed over fifty years ago, its emphasis on the polyrational nature of culture is still an important concepts for community and regional planners to think about today. It works as a great tool for public engagement because it is based on the notion that there are four distinct rationalities: individualistic, egalitarian, hierarchical, and fatalistic.

According to Hartmann (2010):

> *Individualists believe that problems should be solved by the market and interventions should be rare in order not to create market failures. Egalitarians emphasize morality and community; the world is a dangerous place to live, and society has to care for the protection of nature. Command and control through rules and nested bound networks is the approach of hierarchists; for them nature can tolerate human intervention as long as society does not exceed certain boundaries* (p. 17).

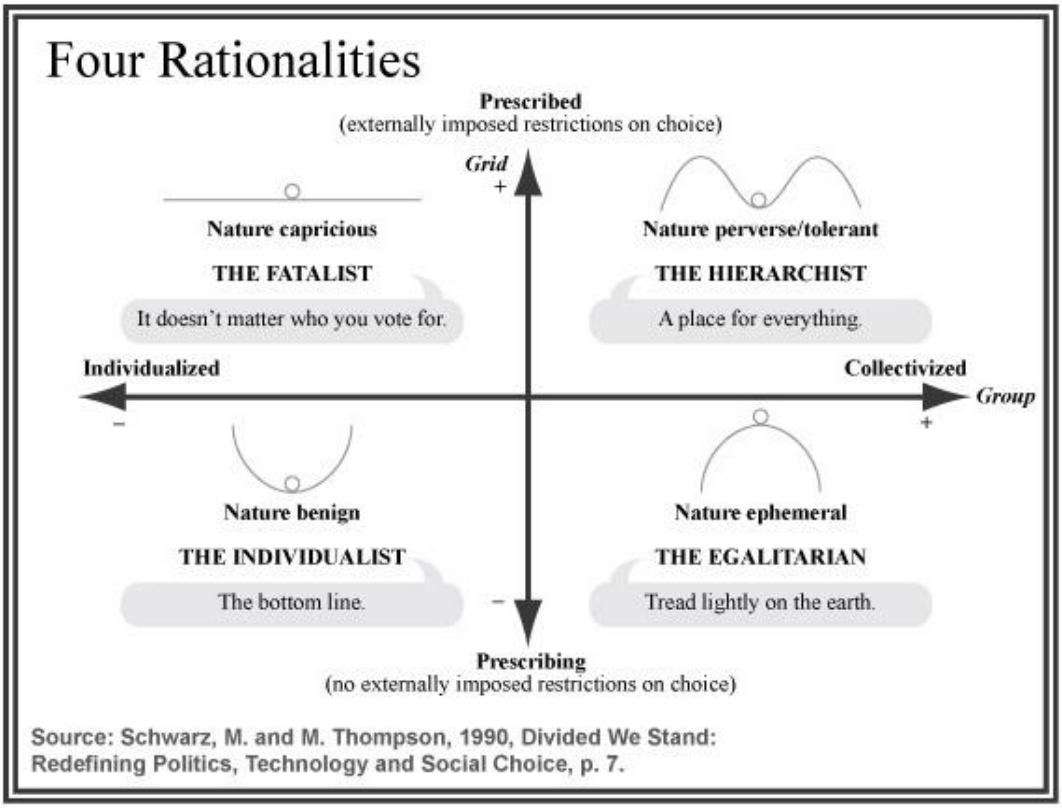
Thompson (1990) notes that fatalists do not believe in the controllability of the market; for them fate is a rational response to the world. Fatalists believe in a fate that will occur regardless of any sort of human intervention. From the perspective of one rationality, the responses of the others are obviously irrational (Davy, 1997).

Recognizing the polyrational nature of policymaking, Schwarz and Thompson (1990) promoted a new framework for policy analysis. One of the main components of the political culture that Schwarz and Thompson desired was recognition of the four rationalities laid out in Cultural Theory. In fact, they utilized these four rationalities to analyze a number of planning and public policy issues. In their view, "Each of the rationalities, when acted upon, both sustains and justifies the particular organizational form that goes along with it. The high-rise, system-built tower block, for instance, is the hierarchist's solution to the housing problem; gentrification, the individualist's; cooperative self-build, the egalitarian's; homelessness, the fatalist's" (p. 8).

In other words, myths about the nature of reality legitimatize and reproduce certain kinds of institutional relationships. One's perception of how humans are supposed to interact with nature drastically impacts perception of plans and policies. Schwarz and Thompson (1990) note, "Hierarchists trim and prune social transactions until they fit neatly into their orderly ambit, individualists pull them into the marketplace, egalitarians strive to capture them into a kind of voluntary minimalism (which, to those on the outside, often looks more like 'coercive utopianism'), and fatalists endure with more or less dignity whatever comes their way" (p. 8).

The diagram below represents the focus of each rationality. It also describes how each rationality perceives nature by utilizing pictographs. This diagram makes it easy to see why it is so difficult to implement land use ordinances that are consistent with every community member's perception of reality. How do you write an ordinance or organize a public outreach campaign that takes into account individualists, who see nature as benign, as well as egalitarians, who see natural as ephemeral?

Figure 1. Cultural Theory's Four Rationalities



It is important to remember that every community is made up of different rationalities. In that sense, this theory of polyrationality is extremely useful for planners and policymakers. Cultural Theory can serve as a tool to help structure a polyrational public outreach campaign.

The political economic constraints of mass communication are also crucial to understand for this study. Planners need to be aware of concepts such as reification, commodification, and fetishism. The next section highlights these concepts and frames them in terms of their role in the communication process.

The Political Economy of Communication

Political economists of communications have sought to decenter the control of communication by investigating its economic, political, and other material constituents. At the heart of political economy is the notion of "viewing systems of communication as integral to fundamental economic, political, social, and cultural processes in society" (Mosco, 2009, p. 66). This task requires political economy scholars to look not only at those decisions made regarding information content, but also at those decisions made and policies set regarding how and why capital will be invested in certain resources. This includes considering those people who set the parameters and goals for information production and distribution, and for the introduction and developments of new technologies. In other words, political economists of communication analyze how power and control is produced and reproduced within the process of communication.

This relates to the mode of production. Colby (1997) describes the mode of production as "the way in which a society chooses to appropriate and allocate all of the productive resources and surpluses needed for and created by the process of production;" and he notes that "capitalists create rules defending unequal distribution determined by competition between capitalists and each individual's willingness to pay for goods and services" (p. 193).

Marx's *Capital: A Critique of Political Economy* (1999) begins with an analysis of the basic component of the capitalist economy: the commodity. From this he explains how many of the contradictions within a capitalist society arise. In the case of commodity-form capitalism, the intrinsic quality of something no longer determines its value, only its base of exchange. The commodity, then, becomes "crucial for the

subjugation of men's consciousness to the forms in which this society finds expression and for their attempts to comprehend the process or to rebel against its disastrous effects and liberate them from servitude" (Lukacs, p. 85). This means that even the way in which one thinks about solving the problems caused by the commodity structure is influenced by the commodity structure (ex: Think about how individualists perceive nature.)

Georg Lukacs would call this phenomenon "reification." This concept refers to an abstract idea becoming material, and forming the basis for society's perception of reality. For instance, in contemporary capitalist society, exchange value has become the dominant way of knowing, organizing, and expressing the world. This means that the "problem of commodities must not be considered in isolation or even regarded as the central problem in economics, but as the central, structural problem of capitalist society in all aspects" (Lukacs, p. 83).

Drawing upon this notion, Adorno was one of the first people to identify information distribution as a major site for elite domination within contemporary capitalist societies, and recognize that this domination had connections with broader structures of political and economic power and control. He labeled this concept as "the culture industry." According to Biltereyst and Meers (2011), "If there is one truism in communication research then it is the one about how people rely on the culture industry for the images, words, and voices with which they interpret and interact with their social environment" (p. 415).

Marx begins *Capital* by explaining the contradictions between use-value and exchange-value. The idea of "fetishism" is key in this discussion, in that modern

capitalist societies don't really operate based on use-value. The intrinsic value of an object doesn't mirror its market value. Instead, in today's economy, value is based on the commodities ability to be fetishized.

The work of Adam Smith is seen as the origin of the political economy approach. Smith's classical political economy was founded on two main pillars of 18th Century Enlightenment scholarship: 1) Descartes's vision of rationality and 2) Bacon's approach to empiricism. In general, classical political economists, such as Smith, David Ricardo, and John Stuart Mill, sought to apply the principles of physics to the world of capitalism and determine the "economic constraints that constituted the stable, underlying reality for a world undergoing massive transformation" (Mosco, 2009, p. 38).

Marx and Engels extended upon these ideas and applied them to modern capitalist society. These concepts were then extended by Chicago School scholars, such as George Stigler, Richard Posner, and Gary Becker, as well as Frankfurt School critical theorists Theodore Adorno and Max Horkheimer. Today, scholars such as Jurgen Habermas, Janet Wasko, Dan Schiller, Graham Murdock, Vincent Mosco, and Eileen Meehan are working on describing the major role that political economy plays when studying and analyzing communication.

In his preface to *Capital*, Marx outlines political economy's method of analysis. To Marx, the purpose of political economy is to analyze the capitalist economy, not as the sum of individual acts of exchange, but as a complex system, dominated by laws of its own which are as powerful as the laws of nature. Understanding the role of commodification in or society is crucial to this study.

A Brief History of Federal and State Water Quality Regulations

In 1972, the United States Congress passed the Clean Water Act, which established procedures for developing, issuing, and implementing Total Maximum Daily Loads (TMDLs). TMDLs refer to a specific body of water's pollutant loading capacity. In other words, it measures how much pollution a body of water can take before it is negatively affected.

As the USEPA (2012) explains:

> *Under section 303(d) of the Clean Water Act, states, territories, and authorized tribes are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters. A Total Maximum Daily Load, or TMDL, is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards*.

The policy of Oregon's Environmental Quality Commission is to have the Department of Environmental Quality establish TMDLs and have responsible sources meet these allocations by complying with discharge permits. The NPDES Storm Water Program, in place since 1990, regulates discharges from municipal separate storm sewer systems (MS4s), construction activities, industrial activities, and those designated by EPA due to water quality impacts. These MS4 permits are one of the strategies that the State of Oregon utilizes to regulate water quality.

The goal of these permits is to help mitigate the negative effects of non-point source pollution, or runoff. Unlike pollution from industrial and sewage treatment plants, runoff comes from many diffuse sources. Non-point source pollution is caused by rainfall or snowmelt moving over and through the ground.

These permits are also intended to implement water quality management practices (WQMPs) that are considered to be best management practices (BMPs). One of the easiest ways for communities to partially meet their TMDL requirements is to implement a riparian ordinance. However, residents often feel threatened by these types of policies. Whenever possible, planners and policymakers should look for non-regulatory strategies for meeting TMDL requirements.

For many landowners, environmental stewardship is a natural part of owning and maintaining a property. In fact, there is often a great deal of interest among landowners around protecting a community's natural resources. One of the biggest obstacles towards good stewardship is the lack of convenient sources of information regarding stewardship practices and incentives

The following section describes the methods and procedures used for conducting this study. As stated previously, this study will attempt to answer two main research questions:

1) What are the different rationalities that exist within a given community?

2) What are the best strategies for engaging with these different rationalities?

CHAPTER III

DESCRIPTION OF METHOD

Case studies were the primary method used for this study. The case studies for this project were three small cities located in the state of Oregon: Turner, Coburg, and Shady Cove. Utilizing methods such as document analysis, participant observation, and interviews with landowners, land use planners, and policymakers, this project uncovered the varied rationalities that must be considered when attempting to implement a riparian ordinance. The researcher asked the interviewees about their experience in the public engagement process and whether they have experienced any of the four rationalities described by Cultural Theory.

To conduct this study, the researcher began by contacting selected landowners, land use planners, and policy makers through contact information personally provided or found on the internet. If the interviewee was in close enough proximity to the researcher, the researcher set up a face-to-face interview; but if the interviewee was not in close proximity, the researcher conducted a phone interview or sent an email questionnaire. The goal of these interviews was to identify the most commonly experienced rationalities. The researcher wanted to discover whether the four rationalities laid out by Cultural Theory were accurate indicators of the types of people that exist within these communities and the strategies planners and policymakers use to engage with these populations.

The researcher also spoke to the City Administrator from all three of the case study cities, as well as a number of land owners, City Council members, and city staff. The researcher also spoke to representatives from the Department of Environmental

Quality (DEQ), the Environmental Protection Agency (EPA), Eugene Water and Electric Board (EWEB), Department of Land Conservation and Development, (DLCD), Oregon Sea Grant, and other relevant environment protection organizations.

The following sections highlight each case study community and describe the role that a polyrational public engagement campaign would serve in each town. While all of the case study communities were similar in some ways (small, under-resourced communities that contained riparian areas), they were also very different in other aspects. Some rationalities were more prominent in certain communities than they were in others. Therefore, a polyrational public engagement campaign is the most effective strategy for disseminating information.

For this study, it was important for the researcher to be able to decipher between rationalities in order to make an accurate analysis. When deciding which rationality an individual seemed to adhere to, a researcher might ask three simple questions: 1) Does this person perceive riparian areas as individual property or a community resource? 2) Does this individual care about how his or her actions affect others? 3) How does this individual perceive the role of government?

While the researcher did not ask the interviewees these questions specifically, he asked questions that helped him understand the interviewees' perspectives of these issues. After analyzing how each respondent felt about these three issues, the researcher made a subjective conclusion about the rationality of the residents who lived in the three case study communities. The next section describes these case study communities and highlights the findings from the researcher's interviews.

CHAPTER IV

CASE STUDY FINDINGS

Cultural Theory teaches that public engagement is most effective when the specific characteristics of the community are acknowledged, understood, and considered. Therefore, the best way to think about Cultural Theory and its impacts on the public engagement process is to utilize polyrational communication in the context of specific case studies. This section highlights the three case study communities that the researcher worked in and was involved with during their water quality protection process.

"Meet the Rogue in Shady Cove"

The beautiful and majestic Rogue River runs directly through the small town of Shady Cove, Oregon. Shady Cove is located in the Upper Rogue subbassin, which is a watershed that encompasses 1,613 square miles. With a population of approximately 3,000 people, Shady Cove is known for being a great vacation spot for campers, hikers, and river rafters. It is also the gateway for those visiting the world famous Crater Lake National Park.

In 2011, the Community Planning Workshop (CPW) at the University of Oregon received grant funding from the Environmental Protection Agency (EPA) to implement a 2-year pilot project that focuses on assisting small cities in Oregon to improve their development ordinances and wetland and riparian area protection strategies. The EPA grant focuses on providing technical assistance to three small cities in Oregon with developing local programs and policies that protect wetlands and riparian areas. Coburg and Shady Cove are the first cities receiving assistance under the EPA grant (Shady Cove Work Plan, 2012).

The Rogue River, as it runs through Shady Cove, is currently meeting state and federal water quality standards. However, the Rogue is not in compliance with regulatory standards for water quality downstream, specifically for temperature and bacteria. In addition, Indian Creek, a tributary to the Rogue River that flows through the City, has dissolved oxygen issues (Shady Cove Work Plan, 2012).

The City of Shady Cove, however, has had a difficult time implementing policies that would help to address these water quality issues. In 2011, after completing a Total Maximum Daily Load (TMDL) Implementation Matrix, Shady Cove worked with the Rogue Valley Council of Governments (RVCOG) to draft a riparian ordinance. City planners and the RVCOG worked hard to draft a riparian ordinance, but getting the ordinance adopted has not yet been successful. The biggest hindrance to the ordinance's adoption appears to be misunderstandings and suspicion about the extent to which the ordinance will restrict private property rights.

When community members heard that the city planners were trying to implement a policy that protected the land immediately adjacent to the Rogue River from development, many landowners became skeptical of the City's intentions. It seemed to many landowners that lived along the Rogue River that this type of policy was a direct threat to their freedom to build on their property as they wished.

One landowner even went so far as to mail out an information packet to all of the residents along the Rogue River explaining to them what he felt the ordinance was going to do to their property rights. In this particular individual's view, the riparian ordinance created development buffers that turned private land into public land. Riparian areas were viewed as a taking of private property.

While this perception is, of course, completely inaccurate, it is a great representation of how many landowners view riparian ordinances. Because many community members are misinformed as to what exactly a riparian ordinance is, many times rumors start to spread throughout the community that are detrimental to the process of implementing these policies.

By the time Shady Cove decided to hold a public hearing to discuss the riparian ordinance, negative rumors about the policy had become so pervasive within the community that the ordinance was met with almost unanimous opposition by residents. In order to prevent this from happening, Shady Cove should have engaged in a more extensive public outreach campaign before drafting the ordinance and having a public hearing.

The main conflict in Shady Cove seemed to be between homeowners who owned property along the Rogue River and local fish and wildlife advocates who care about the protection of the natural environment. The landowners definitely seemed to approach this topic from a very individualistic rationality. According to Ed Mayer, a Shady Cove planning commissioner, very few of the landowners along the river were concerned about the impacts of their property to parts of the river downstream. They were more concerned about how the government creating these types of regulations would impact their personal property rights.

For those who have seen the Rogue River as it passes through Shady Cove, you can sympathize with the landowners. The Rogue River is a beautiful clear blue as it passes through Shady Cove. From the naked eye, it would be hard for any person to imagine that Shady Cove is out of compliance with any water quality standards. The

EPA, however, has noted that Shady Cove has dissolved oxygen issues and is contributing to bacteria and temperature issues downstream.

On July 11, 2012, CPW met with Shady Cove's City Administrator and members of the City Council and Planning Commission. In that meeting, David Haight, a fisheries biologist with the Oregon Department of Fish and Wildlife, explained to the City's representatives that residential development along the Rogue River in Shady Cove is having detrimental impacts to fish and wildlife downstream. Because of the mass removal of natural vegetation along the Rogue River in Shady Cove, the water temperature downstream has become higher than historical levels. As a result, fish and wildlife are having a hard time adjusting to changes in their natural ecosystem.

For an egalitarian, this argument is all that is needed to be convinced that a riparian ordinance is justified. For this rationality, the problem is simple: Humans have negatively impacted the natural environment and, therefore, should take action to try and mitigate any future detrimental impacts to the natural environment. An egalitarian would have no problem increasing the vegetation along the Rogue River or, at the very least, not removing any more vegetation.

For the most part, as Ed Mayer noted, the landowners who have property along the Rogue River seem to adhere to a very individualistic perspective. They are skeptical to support any policies which encourage government protection of land that might already be private. The idea of protecting the natural habitats of fish and wildlife downstream is not convincing enough to encourage them to support riparian protection policies. Instead, individualists are persuaded by arguments that directly affect their personal well-being.

Therefore, when engaging with landowners along the Rogue River, it is important to understand the political economy of space. Most of the landowners along the Rogue in Shady Cove view their property as a commodity. They do not perceive their private property as a natural community resource. Tourists view the river in terms of recreational use, and egalitarians see the value of that land in terms of natural resource protection.

That is why it is essential to have a public engagement campaign that acknowledges the different rationalities within a given community. In Shady Cove's first attempt to implement a riparian ordinance, they did not acknowledge the individualistic rationality of the landowners along the Rogue. Instead, they addressed the riparian protection issue as if everyone was an egalitarian. As a result, the ordinance faced opposition by angry and frustrated landowners who felt that their local government did not respect their property rights.

Currently, CPW is working with Shady Cove to draft a surface water management program. This program will promote specific types of voluntary behavior within riparian areas and will focus primarily on actions identified in the City's TMDL Implementation Plan. The purpose of this type of riparian protection policy is to acknowledge the rights of landowners while still addressing water quality issues within a community. This non-regulatory approach to riparian protection is discussed in greater detail in the Conclusion.

Coburg: "…amidst the farmland of the beautiful Willamette Valley"

According to the coordinated population forecasts adopted by Lane County in April 2009, Coburg will grow from 1,092 persons in 2010, to 2,322 persons in 2030—an

increase of 1,210 persons. This equates to a 3.4% average annual growth rate. Much of this potential population growth will be facilitated by the new wastewater treatment facility that is almost operational.

Coburg currently has a number of water quality efforts in place or underway. For example, Coburg was the first Oregon city to complete a Drinking Water Protection Plan. The City also has a local wetland and riparian inventory and assessment that was been approved by the Division of State Lands. While Coburg did complete the local wetlands inventory (LWI), it did not adopt the corresponding policies that are required for the city to comply with Statewide Planning Goal 5 (Natural Resources) and the relevant provisions of OAR 660-023. In short, at the time of this study the City of Coburg needed to implement a process to develop and adopt a Goal 5 compliant wetland ordinance.

The Oregon Department of Environmental Quality (DEQ) issued Total Maximum Daily Loads (TMDLs) for temperature, bacteria, and mercury in the Upper Willamette subbasin. Many of the strategies that reduce bacteria and temperature loading in tributaries of the Willamette River will also reduce mercury loading in these waterways. Muddy Creek and Mill Slough are the main stormwater channels, with dry wells and a network of roadside ditches encouraging infiltration throughout the city.

Both Muddy Creek (to the east of Coburg) and Mill Slough are currently in compliance with water quality standards. The Willamette TMDL, however, requires the City of Coburg to develop and implement a TMDL Implementation Plan (TMDL Plan) that identifies management strategies to reduce sources of stream heating, bacteria, and mercury that are under the City's jurisdictional control. DEQ officially approved the City of Coburg's TMDL Implementation Plan on June 4, 2008.

Within the approximately 700 acres of the Coburg Local Wetland Inventory Study Area, only seven wetland areas were identified, totaling 20.1 acres. This is not unexpected, given the intensity of agricultural management of this landscape. Waterways in particular have been filled, disconnected, diked, piped, rerouted and removed from some of the historic locations. Wetlands have become, therefore, more isolated from historic hydrology sources. As a result of this hydrologic manipulation, in combination with management of vegetation throughout the area, very little remains of the historic wetland resources within the City (Coburg Work Plan, 2012).

Coburg also has plans to construct a bike and pedestrian trail that loops around the entire city. The goal of this plan is to have the trail go through the wetlands and riparian areas, as a way of showing off Coburg's natural resources. Under the same EPA grant being used to work in Shady Cove, CPW is helping Coburg draft an ordinance that protects these important natural resources while still allowing the City's bike and pedestrian trail to be constructed. In other words, CPW is working with Coburg to balance water quality protection policies with a creative public engagement campaign.

In order to achieve this goal, Coburg must engage the community members from the very beginning. Many of the residents of Coburg are extremely individualistic. When the City announced it was going to construct a wastewater treatment facility, many residents expressed strong opposition to the plan. They feel that having individual septic tanks was sufficient enough and it is a waste to spend millions of dollars making water treatment a public service. According to Coburg's mayor, Jae Pudewell, the City needs to keep this rationality in mind when discussing water quality protection plans with the local residents because they make up a significant part of the community.

It is important to reach out to these residents, though, according to Sarah Kolesar, Oregon Sea Grant's Research Program Specialist. She says that the individualist, the most vulnerable of the rationalities, is important to reach if you ever hope of organizing a communication campaign that truly engages the public and mitigates any unnecessary misconceptions about the project being discussed. Joe Cone, Oregon Sea Grant's Director of Communications, agrees with Kolesar's contention and adds that it is always important to remember who your audience is. In other words, who lives in this community?

Of the seven wetland areas identified in Coburg's inventory, only one was found to be significant and another was found to be potentially significant. Only those areas will be protected by a wetland ordinance. The potentially significant wetland is located within Mill Slough, which is adjacent to a residential neighborhood. Therefore, Coburg has to implement a wetland ordinance that protects the natural environment, allows the City's bike and pedestrian trail to be constructed, and acknowledges the individualistic rationality of landowners who have property along Mill Slough.

In other words, Coburg's City Council and Planning Commission members are dealing with a number of different rationalities in this scenario. They have to acknowledge the personal rights of land owners who are concerned with their individual properties; they are trying to draft a wetland protection ordinance that promotes egalitarian values; and they are attempting to construct a bike and pedestrian trail that serves recreational and educational purposes. In that sense, the individualistic, the egalitarian, and the hierarchical rationalities are all prominently represented within this

issue. That is why it is crucial for Coburg to implement a polyrational public engagement campaign that addresses the needs and values of these populations.

Turner, Oregon: "The Good Neighbor Town"

In 2011, the Community Planning Workshop (CPW) received grant funding from the Department of Environmental Quality (DEQ) to implement a 2-year pilot project that focuses on assisting small cities in Oregon improve their riparian ordinances and stormwater controls. The DEQ grant, through the Nonpoint Source Implementation 319 Program, focuses on providing technical assistance to two small cities in Oregon with meeting TMDL requirements. Turner, Oregon was identified as the first community to receive assistance from this grant.

CPW helped Turner meet the Middle Willamette Subbasin TMDL requirements by assisting with the implementation of their MS4 permit, obtained in 2006. The overall objective of the project is to help Turner draft and implement a riparian ordinance. This will be done by identifying development code changes needed to improve water quality standards and drafting a final ordinance for the city to adopt. The secondary component to this project includes water quality related education and outreach within the community.

Turner is located directly south-east of Salem, Oregon's state capitol. Mill Creek runs through Turner and into Salem. The Mill Creek Watershed consists of approximately 111 square miles (71,039 acres) that include the cities of Sublimity, Stayton, Aumsville, Turner, and Salem. It is approximately 24 miles long and 6 miles

wide. The maximum elevation is approximately 2,200 feet above sea level, with most of the basin lies at lower elevations and only 6.5 square miles over 1,000 feet.

The area has a varied landscape, with steep slopes and flat floodplains. Hilly terrain lies east and west of Turner, with mostly flat plains north and south. Currently, agriculture represents three-fourths of the watershed's land use, with forestry representing 13 % and urbanization representing 12 % (DEQ, 2006).

The watershed has a dynamic and changing history. The Mill Creek watershed was once a land of open prairie and scattered forest. Mill Creek flowed through braided channels and wetlands and was joined along the way by smaller waterways. Trees along stream banks provided shade and a source of woody debris to nourish the stream. Watershed habitats supported a variety of plants and animals.

As development occurred over time, however, Mill Creek was pumped for water supplies, harnessed to generate energy, and used to carry wastes. It was altered both to move water closer to where it was needed, and to move flood waters away quickly. Urbanization, industrialization, agriculture and timber harvesting, have all affected the natural stream environment (DEQ, 2006).

Mill Creek itself is approximately 25.7 miles long. The source of Mill Creek is the Cascade foothills. From its source, Mill Creek flows west through forests, agricultural land and the cities of Turner and Salem. Along the way, it adds to its flow with water from the North Santiam River (diverted via the Salem Ditch), and from Beaver, McKinney, Battle, and Rogers creeks. In Turner, the creek runs through a primarily urban environment surrounded by agriculture before heading into Salem.

The creek can be split into three distinct segments. The northern segment, from the mouth of Mill Creek down to Salem is primarily urban environment. The middle segment, from Salem to Aumsville, is a mix of urbanization, agriculture, and forestry. Finally, the southern segment, from Aumsville to the head of Mill Creek, is primarily agriculture, with forestry dominating the south (DEQ, 2006).

The City of Salem has reported elevated levels of fecal coliform counts in the creek. The Santiam Water Control District estimates that 130-150 cubic feet per second are added to natural flows in Mill Creek from June through September. Estimates of the amounts of impervious surface in the Glenn-Gibson and Mill Creek basins are currently below 10%, thus ranking the creeks as "sensitive." With continued development in the watersheds, all creeks have the potential of becoming "non-supporting" streams. Non-supporting streams have limited aquatic diversity. The life in these streams is mainly composed of pollution-tolerant insects and fish.

About 28% of Mill Creek was classified as having high shade cover with another 11% as having medium, 16% as having low shade cover, and 141.72 miles of stream enclosed in pipes. In spring 2000, the Local Wetlands and Riparian Area Inventory was completed for the City of Turner (MWVCOG 2000). The study area covered about 14.8 miles of riparian area located within the City of Turner's urban growth boundary, and found that most of the riparian area in Turner has been disturbed by building, landscaping, farming, or roadways.

In this context, CPW created a draft riparian ordinance in order to help Turner meet one of the requirements of their TMDL Implementation Plan. The ordinance will also help Turner address post-construction runoff control, which is one of the issues to be

addressed under the MS4 permit. The Public Education and Outreach program developed by the CPW team meets one of the requirements under the MS4 permit. It will also help the city implement better stormwater management practices, which are another issue that the city is required to address under the TMDL Implementation Plan (Turner Work Plan, 2012).

The education and outreach plan that CPW developed for Turner is extremely polyrational in nature. To begin with, an internship program will be established to provide Turner with the staff support it needs to implement the rest of the public outreach and education plan. For the first year, Salem has agreed to collaborate with Turner and have the Salem Water Quality Intern work on projects related to Turner's riparian areas. Considering that Mill Creek runs directly through Turner immediately before reaching Salem, working with Turner to improve its water quality standards seems like a very beneficial partnership. Every year after that, each summer, a university student intern will be given the opportunity to develop and implement projects aimed at informing the community about local water quality issues. The intern will help coordinate fundraising events such as the Mill Creek Run and other ongoing projects like the model riparian site.

The Mill Creek Run would be a fun run in Turner that will support the goals of Turner's riparian ordinance and education plan. The run's water quality theme and event staging area will provide opportunities to educate participants about water quality issues in the Mill Creek Watershed. This event will build awareness about ongoing water quality projects in Turner. Proceeds from the run will fund Turner's water quality education projects and the staff support needed for their implementation.

Finally, a model riparian site will be established on a segment of Mill Creek that borders the Turner Elementary School playground. This project will provide hands-on education opportunities for teachers and students, and will demonstrate how riparian restoration and Low Impact Development (LID) strategies are achieved. The park will provide public green space and wildlife habitat, and will act as a model for future restoration projects in the Mill Creek watershed.

All of these ideas are meant to help promote the riparian ordinance as a beneficial thing for everyone in Turner, regardless of one's rationality. There are a number of landowners that live along Mill Creek in Turner. Just like in Shady Cove and Coburg, these landowners tend to adhere to a very individualistic rationality. The purpose of the education and public outreach campaign is to help these landowners understand how a riparian ordinance can serve as a direct benefit to their personal lives. The water quality intern will be their direct point of contact for any questions or concerns they may have. The public engagement campaign will also help egalitarians learn strategies that can protect the well-being of the natural environment (the model site), as well as show hierarchists how riparian protection plans and education campaigns can serve a productive role environmentally, socially, and economically (the Mill Creek Run fundraiser).

The City of Turner has close to 220 acres of floodplain and approximately 237 individual parcels that are partially or entirely located within the special flood hazard area (SFHA), commonly referred to as the 100-year floodplain. Mill Creek has a long history of flooding. One of the largest peak flows on record for Mill Creek occurred in 1937. Since then, the construction of flood control measures in the late 1930's changed the

pattern of flooding significantly. The City of Turner has experienced several floods in the last 48 years. One of the most memorable floods during this time period, the “Christmas” flood of 1964, was rated "approximately a 100-year flood", and, according to FEMA was probably the most damaging in Oregon’s history.

Heavy rains from the January 2012 storm caused extensive flooding throughout the City of Turner. Oregon designated twelve Counties, including Marion County, as adversely affected by the January disaster. During a five-day period starting January 16, the City of Turner received as much as 9.01 inches of rain. Runoff from the heavy rainfall was intensified by the melting of three to six inches of snow that had fallen in higher elevations the previous week (Statesman Journal, 2012).

Turner documented flood damage to more than 80 homes throughout the city. In addition, damage to the sewer system resulted in more than 100 households utilizing portable toilets set up in the street. The flood event stretched local resources well beyond capacity, putting the entire town at risk. Issues confronted included: fire hydrants and water valve box piping were destabilized by the flood and ready to break; structural damage to bridges and road shoulders making use of narrow road corridors dangerous; all of the roads in and out of Turner were closed at one point with 75% remaining closed for multiple days; hundreds of individual evacuations; heavy flood waters directly impacted two businesses forcing one to close permanently; all downtown businesses were closed off to customers due to road closures, including the major mill complex in town; shut-off and later re-activation of the natural gas system created risk for potential explosions and fires (Statesman Journal, 2012).

As of March 2, 2012, the President issued a major disaster declaration (DR-4055) under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 *et seq*. Following the declaration, affected and qualified infrastructure and emergency costs are eligible for a 75% reimbursement from FEMA to help the community recover from damage caused by the storm. The President's declaration, while the process is still ongoing, will bring needed money into the state to help repair Oregon roads, bridges, culverts and other governmental facilities. The money will also help prevent future danger to lives and property, both public and private (Oregon Presidential Disaster Declaration, 2012).

Turner is a perfect example of the need to address environmental protection issues with a multi-objective approach. Riparian protection issues are intimately tied with floodplain issues; yet, most ordinances do not acknowledge this relationship. There is an opportunity to address Turner's floodplain problems while also addressing Mill Creek's water quality issues at the same time.

This would involve planners and policymakers studying and analyzing the Statewide Planning Goals and other rules and regulations in order to find connections and gaps between existing policies. Planners and policymakers should be looking for incentive-based strategies for landowners and residents who participate in actions that protect the riparian areas and floodplains. This would go a long way in helping to promote these types of water quality protection strategies.

The goal of planners should be to create effective policies that acknowledge the polyrational nature of our communities. This means drafting and implementing ordinances that acknowledge the different perspectives of all the diverse populations

within a given community. It also means creating efficient policies that address all of the issues within the community.

There is no reason why Turner should not be able to address their riparian protection issues while also addressing floodplain problems. A multi-objective approach can go a long in increasing the effectiveness of these policies and positively impacting the way landowners and residents perceive these types of regulations. Just like in Shady Cove and Coburg, Turner needs to think polyrationally because the city has a number of goals it wants to achieve. They also need to balance those goals with the thoughts and feeling of the residents that live in their communities.

"Everyone wants to be a part of the future."

Turner's City Administrator, David Sawyer, believes that the public engagement process starts at home. When he thinks about how to address a particular issue, he first thinks about how he would explain the situation to his young daughter. He asks himself: What is her base of knowledge? What is persuasive to her? What is the most important information she needs to know about this particular issue?

In other words, David's strategy is to communicate with people from where they are, not from where he wants them to be. This means acknowledging the polyrational nature of Turner and addressing issues in a way that is effective in reaching all of the different populations of residents. David believes that it is extremely important for the local government to feel relevant in people's lives. This can only be accomplished by

helping residents feel that their local representatives understand and respect their opinions and perspectives.

Turner's Mayor, Paul Thomas, echoed David's sentiments. He noted that people do not like to feel like they are the problem. Residents love their local government when it's in their advantage to do so; however, their opinion changes when their local government tries to implement policies that affect their personal rights.

This is certainly the case for riparian protection issues. Landowners along a river do not like to hear that their actions are detrimental to the quality of the river's water. Therefore, it is crucial to draft a public outreach campaign that won't make the landowners feel defensive. Instead, the goal of the engagement campaign should be to give the residents a sense of ownership over the quality of water in their river. It is essential to make them feel like their actions can potentially serve an extremely positive purpose as far as protecting the river's water quality.

Petra Schuetz, Coburg's City Administrator, noted that sometimes it's easier to engage with populations that are upset with the work of their local government, as opposed to residents who think their local government is doing a fine job. In her experience, residents that think their local government is doing something wrong are more likely to engage with the political system than residents who are satisfied with the work of their local representatives. Many times, Petra notes, these upset residents adhere to an extremely individualistic rationality and feel that the local government is impeding on their personal rights. They could also be egalitarians, however, who feel that their local government isn't doing an adequate job protecting the environment.

Danise Brakeman, Shady Cove's City Administrator, certainly can relate to Petra's opinions. Danise says that many times residents who are satisfied by the work of their local government are overcome by a sense of apathy. They don't feel like they really need to participate in the political realm because they don't have much to complain about. However, when they do find something to complain about, that sense of apathy is replaced by strong emotions. In other words, policymakers often have to engage with apathetic residents who support the work of the government but don't want to take the time to participate in the political process, as well as extremely emotional residents who feel like their local government is not doing an adequate job protecting their personal values.

Ed Mayer, a Shady Cove Planning Commissioner, believes that this one of the major obstacles that has stopped Shady Cove from having already implemented a riparian ordinance. He noted that when they tried to have a public hearing at City Hall pertaining to the riparian ordinance that was drafted by the Shady Cove Planning Commission many residents showed up to voice their opposition to the ordinance. Ed pointed out, however, that the mass majority of those residents did not actually read the ordinance itself. Instead, they opposed the policy purely out of principle.

Pamela Wright, a Willamette Basin Coordinator for Oregon's Department of Environmental Quality, has definitely dealt with this scenario before. She says that many times local residents utilize a public hearing about a particular issue to communicate their broader opinions about the role of politics, in general, instead of focusing on the actual issue at hand. That is why many of the residents in Shady Cove didn't read the actual ordinance before attending the public hearing to voice their oppositions. They opposed

the policy purely as a result of their personal ideology pertaining to the role of government in their day-to-day activities.

John Morgan, the Community Development Director for the City of Damascus, Oregon, also has experience dealing with this issue. He sympathizes with the residents of these small Oregon communities. They are people who, for the most part, chose to live outside of an urban environment in order to avoid having other people telling them what to do and dictating their actions. Therefore, John believes that the greatest challenge for community planners is balancing minimal intrusion to personal rights with significant restoration to the natural environment.

In order to do this, John believes that planners must make an effort to get all rationalities to participate in the political process. Like other planners and policymakers, John has experienced that it is easy to get people to come to the table when they are upset. Hence, the goal for planners should be to provoke and inspire people to participate in the planning process other than when they are simply dissatisfied with the job their local planners are doing. In order to do this, John's motto is: "Every one, every day." That means John takes the time to think about the perspective of each and every members of his city before making a decision that impacts the entire community.

James Rojas is a Los Angeles-based urban planner who focuses on a group's perception of the physical layout of their community. He believes that everyone has a desire to have their thoughts and feelings heard and legitimized. By giving residents a sense that their ideas influence the physical layout of their community, you promote a sense of ownership over the community's resources. In his view, that is the best strategy for promoting and producing public engagement. He says, "Everyone wants to be a part

of the future." Planners should work to give residents a sense that they are an integral part of their community's future.

When discussing these issues with representatives from the Department of Environmental Quality (DEQ), the Environmental Protection Agency (EPA), the Department of State Lands (DSL), the Department of Land Conservation and Development (DLCD), and other Federal and State environmental protection agencies, it became obvious that one of the most glaring problems facing these agencies is the lack of communication with each other. In other words, not only do planners need to think about all of the perspectives of the residents within a given community, they also need to understand and acknowledge the views and opinions of other agencies that might have similar but different policies pertaining to the particular issue at hand. Effective inter-agency communication is essential if Oregon hopes to tackle its water quality issues while also acknowledging and respecting the rights of landowners.

In all of the interviews conducted for this study, the interviewees agreed that they had experienced all four of the rationalities presented within Cultural Theory. While the individualist was definitely seen as the most prominent rationality that planners and policymakers should be aware of when engaging with the public, the egalitarian was also viewed by many interviewees as a problematic population. Many times, this group has a hard time acknowledging and respecting the rights of landowners when promoting policies. Instead, they advocate for policies that completely ignore other rationalities. They don't remember that these landowners are acting the way they are simply because everyone wants to feel like they are a part of the future.

CHAPTER V

CONCLUSIONS

The purpose of this study was to answer two main research questions:

1) What are the different rationalities that exist within a given community?

2) What are the best strategies for engaging with these different rationalities?

Planners and policymakers need to have a strong understanding of the Clean Water Act, which established procedures for developing, issuing, and implementing Total Maximum Daily Loads (TMDLs). They also need to study Oregon's Statewide Planning Goals. Planners and policymakers that have a deep understanding of Oregon's Statewide Planning Goals (and the regulations associated with each one) have the greatest potential to draft and implement creative policies and public engagement campaigns that acknowledge the diverse nature of our communities.

For planners and policymakers that are specifically tackling water quality related issues such as riparian and wetland protection, Goals 5 is essential to understand as well as OAR 660-023 and OAR 660-016. Planners and policymakers that don't have a strong understanding of these regulations will not be able to produce policies and public engagement campaigns that adequately address all of the different strategies for tackling the particular water quality issue at hand or that acknowledge all of the different rationalities that exist with a given community. In short, planners and policymakers need to know the history and evolution of Federal and State water quality protection legislation and they need to have an extremely thorough understanding of Oregon's Statewide Planning Goals.

In this study, phronetic planning was an important concept for the researcher to understand. Phronteic planning uses communication to inspire action, and that is precisely the goal of an effective public engagement campaign. Similar to what Marx would label as praxis, phronteic planning is focused on turning theory into practice and using practice to inspire theory.

Cultural Theory presents an excellent framework for planners and policymakers who are interested in understanding the different rationalities that exist within their communities. From the results of analyzing the three case study communities and interviewing planners, policymakers, landowners, and environmental protection agency representatives, it can be concluded that the individualist is the most prominent rationality that planners and policymakers need to spend their time engaging with during the process of drafting and implementing natural resource protection policies such as riparian ordinances. This rationality often feels as though these types of policies are a violation of their personal rights.

It is important to keep in mind, however, that many times these individuals do not actually read the ordinances. Instead, they oppose these policies purely out of a sense of principle based on their own personal ideologies pertaining to the role of government in their everyday lives. That is precisely why a public engagement campaign is essential during the drafting stage of a riparian ordinance. An effective public engagement campaign that targets the rationality of the individualist, specifically, can go a long way in helping to mitigate any potential negative feedback from the community.

The egalitarian is also an important rationality to focus on. While convincing this group to take action to protect the natural environment will most likely be extremely

easy, convincing this group to respect the rights of landowners can sometimes be a tough task. Therefore, it is important to have information regarding the rights of landowners intimately integrated into a polyrational public engagement campaign.

The importance of Cultural Theory doesn't simply lie in understanding the four rationalities it presents in its model; it lies in simply understanding that everyone adheres to a different rationality and understanding that can produce extremely effective public engagement campaigns. Understanding this fact can help planners and policymakers produce more effective public engagement campaigns. While the four rationalities identified within Cultural Theory do create a good framework for understanding the rationalities that exist within most communities, the main lesson that Cultural Theory teaches is that we need to view each community and each individual as different and unique.

Although we can group people together based on similar opinions about certain topics, the importance of Cultural Theory lies in understanding that planners and policymakers need to approach each public engagement campaign differently depending on who is being targeted. It helps planners and policymakers realize that they can't use the same public engagement campaign for every community that wants to implement a riparian ordinance. Each community faces different problems and contains different rationalities.

This model is also consistent with the criteria of a wicked problem. This is important because most of the issues that planners face can be considered to be wicked problems. Therefore, it is essential that planners recognize theories and public engagement strategies that acknowledge that fact.

The concept that makes this particular issue so wicked is commodification. Because everyone perceives riparian areas to hold different value, different groups butt heads about how to regulate the land. Some people utilize use-value to decide how to protect the land, while others utilize exchange-value. In that sense, Marx's analysis of political economy is central to this discussion. The way in which individuals commoditize the land greatly impacts the ability of planners and policymakers to protect the natural environment.

One important component of any successful public outreach campaign is a clear explanation of the process of drafting and implementing the particular policy at hand. Community members like to know: Why is our community obligated to have this type of policy? What is the history of these types of regulations? Who will write the policy? Will I have a chance to voice my opinion on the issue?

Being transparent about the process of drafting and implementing a riparian ordinance can go a long way when trying to engage with hierarchists, as well as individualists and egalitarians. According to Michael Mattick, a Watermaster for the State of Oregon, it is usually hard to distinguish fatalists from individualists. Many times, a person adheres to a very individualistic rationality because of a belief in a particular fate that will occur beyond the control of human intervention.

One blindspot of Cultural Theory is its lack of acknowledgement for shadow populations, groups that are marginalized by the very political system that we are asking them to engage with. In other words, Cultural Theory does not present a model for engaging with people who have not gone through the legal requirements of gaining citizenship in the United States and, therefore, cannot participate in the political system.

Some planners might argue these populations are not our concern. However, it is the duty of planners to acknowledge and understand every rationality that exists within the community they are working for. Therefore, planners need to establish strategies for engaging with shadow populations.

If a planner only understands the perspective of those who go out of their way to voice their opinion, then that planner does not have a full grasp of the community's perspective of itself. Shadow populations can offer important insight that can help planners create policies that are consistent with the community's values. Understanding a group's perception of the land they live on is an important factor in being able to effectively engage with the public.

That is why political economy is an important approach to keep in mind for this discussion. The commoditization of land is at the center of this issue. The reason that different groups view riparian areas differently is because each group commoditizes the same piece of land differently. To the individualistic landowner, the riparian area is a commodity that can be bought and sold for personal gain. To the egalitarian, it is a community resource. To the egalitarian, it is a community resource and an exchangeable commodity. Understanding the political economy of space is important for planners and policymakers that are in the process of drafting and implementing a riparian ordinance.

The best way to engage with the public during the riparian ordinance process is to start right from the beginning. As soon as it is decided that this process will begin, planners and policymakers need to start engaging with the community. As has been discussed throughout this paper, they should not create one public engagement campaign that is meant to target a very broad audience. Instead, planners and policymakers need to

think about the exact rationalities that exist with their community and create a number of different public engagement campaigns that target very specific audiences.

The engagement campaigns need to include a clear description of the history of these types of policies and why it is necessary for this community to undertake this process. Every resident needs to have an understanding of the riparian ordinance process and how they will be able to voice their opinions. Even more importantly, every landowner needs to have an accurate understanding of how a riparian ordinance will affect their actions of their private property.

Cultural Theory presents an excellent framework for being able to address this issue from the perspective of every rationality that exists within a community. The importance of Cultural Theory doesn't simply lie in understanding the four rationalities it presents in its model, it lies in simply understanding that everyone adheres to a different rationality and understanding that can produce extremely effective public engagement campaigns. Cultural Theory help planners and policymakers remember that everyone wants to feel like they are a part of the future.

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