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UNDERSTANDING PLACE AS A CULTURAL SYSTEM:
IMPLICATIONS OF THEORY AND METHOD

by

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Abstract

UNDERSTANDING PLACE AS A CULTURAL SYSTEM: IMPLICATIONS OF THEORY AND METHOD

by Linda Everett Kruger

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This dissertation seeks to provide insight into the relationships between public philosophy and the theoretical and methodological implications of social inquiry; to increase understanding of what it means to conceive of place as a cultural system; and to increase understanding of what it means to take a civic science approach to social assessment.

This dissertation is based on four pieces of work. The first piece is an examination of the relationships between public philosophy, theory and methodology: how knowledge is defined and created; the relationship of the knower to the known; and who can be a knower. A public philosophy framework was developed by drawing from Sandel's theory of public philosophy and a Stanley's theory of civic forums. The framework was then used to contrast a deliberative democratic public philosophy with a competitive pluralist public philosophy. The second piece of this dissertation is the conceptual development of a theory of place, based on conceiving place as a cultural system, and the development of categories that provide empirical access to meanings and symbol systems through the examination of social events and actions.

The third piece is based on a unique opportunity to participate in a setting in which these issues were being played out in lived experience. This opportunity involved working with the White Pass Community Self-Assessment project in rural southwestern Washington. Involvement in this project allowed the theoretical discussion of this dissertation to be grounded in a real world application. The project afforded the researcher an opportunity to experiment with the role of research facilitator, and observe and learn as a participant from within an actual civic science effort. The final piece includes a critique of standard social impact assessment and a comparison of a social impact assessment with the White Pass process.

The study demonstrated that research, as a social activity, entails many choices, including choice of theory and method, that have implications for research outcomes, including how these choices affect places as cultural systems. The study showed that, given the opportunity, citizens will engage in research as lay scientists and can produce useful and meaningful knowledge. In this study, civic science and social learning processes increased the usefulness, meaningfulness and benefit of social assessment for citizens and resource agencies.

TABLE OF CONTENTS

vi

LIST OF TABLES

PREFACE

In the 1960's the Alaska Road Commission constructed a road along a river and into a small lake near Haines, Alaska. In the process, one extremely large, nondescript rock was blasted to make way for the road. It was an impediment to progress, but...unbeknownst to the road crew...

...for hundreds of years the Chilkoot Indians had celebrated the significance of Deer Rock, also known as Peace Rock. The rock had played an important role in traditional ceremonies that had ended tribal wars. To the Chilkoot people the rock, a symbol of peace, was named for the deer considered to be the most peaceful creature of the forest. The meanings and values of the rock were an important part of a cultural system that could not be seen by road commission workers. In fact, the significance was not in the rock itself but in the relationships, rituals, and the symbolic and sentimental meanings[1] and values that had built up around the rock

To the Chilkoot people, Deer Rock was priceless and irreplaceable. It played a role in their identity as a people. It was a symbol much like our United States Flag, Liberty Bell or Statute of Liberty. To the road crew it was a worthless hunk of rock that impeded progress. Not knowing that the rock had significance the road crew destroyed the rock to make way for the road.

The story is re-created daily in many different forms. It is at the heart of much of the controversy over how public lands, among other places, are managed. Our public places -- forests, recreation and wildland places and other places that make up our human habitat -- are social and symbolic as well as ecological systems, having both tangible and intangible meanings. Controversy often results from the failure to recognize multiple meanings and collective values of a place (Anderson 1996; Gobster

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[1]Meaning is the sense of significance of something conveyed through language. Meanings may be functional, symbolic, sentimental, spiritual or psychological. Meanings are intersubjective in that we develop meanings through social relations (Firey 1945; Schroeder 1994; Williams 1995).

1995; Miller 1993; Shannon 1992; Williams 1995; Williams et al. 1992;) and the failure to engage the people who live, work, and play in the place in civic discovery and civic conversation (Reich 1985).

1. Chilkoot Lake - An Alaskan experience

As a park ranger for the State of Alaska in the late 1970's and early 1980's I was honored to work with the Chilkoot people to reconstruct – as best could be done – and commemorate Deer Rock by placing a plaque at the site. The plaque told the story of Deer Rock, in both English and Tlingit, the native language of the Chilkoot people. As I cleaned the toilets, picked up litter, and repaired vandalism at the state park campground located at Chilkoot Lake, near the site of Deer Rock, I came to understand that the place held many different meanings for people. These varied meanings led to conflict and controversy over the management of the place. I also saw an opportunity for different cultures, political and philosophical perspectives, disciplinary orientations, public and private interests, government agencies and citizens to come together to talk and share their meanings.

But mostly the fisheries biologists studied the salmon, the foresters studied the trees, the wildlife biologists studied the bears and goats and bald eagles. The recreation managers asked people how long they stayed in the campground, how often they came, and what new facilities they might like. Public hearings were held, when required by law, but mostly decisions were made by managers with little participation from the public, and certainly none from the Native American residents who were not socialized into the government's system of formal public process. People did not really communicate with each other about the place. Or maybe they did and the government agencies were not listening.

2. Tongass National Forest experience

My personal and professional experiences with the US Forest Service's public involvement processes on the Tongass National Forest in the mid-to-late 1980's were much the same. Public comments were limited to "facts" as they related to

predetermined proposals. The relationships that people had developed with a place over a lifetime – how ever long that may have been – were inconsequential to the process. The experiences and the meanings and values people had for a place were not "knowledge." Meanings, values, and experiences were "anecdotal," subjective, biased, and value-laden, often emotional and thus inappropriate for consideration in a formal "objective" process.

At the scale of the Forest plan comments on specific places were too specific – planning was done on a larger more generalized basis. But at the project level, it was too late to comment on a specific place as decisions made in the Forest plan committed the agency to certain actions required in specific places. Thus decisions about the place had already been made without considering the particular context of the place where the action would eventually occur.

Many people became frustrated. As a result, much of the public land on the Tongass has been legislatively designated as wilderness, national park, national monument or given another special designation sought by people who were concerned that management agencies were not being responsive to the values and expectations that the people had for the land.

An administrative study of public participation on the Tongass was conducted by Dr. Robert Lee in the early 1980's. Lee concluded:

> Publics are generally concerned with particular places or resources. The planning process has done a fairly good job of recording resource-related concerns. However, it has done a poor job of recording the claims that publics make to particular areas in the forest. (Lee n.d.)

Lee went on to suggest that while the public did provide information on particular places and the importance of these places to people, the information was rarely systematically recorded. When there was no continuity from one meeting to the next people became frustrated as it appeared that the agency had not listened or did not care. Lee recommended methods be developed to facilitate the identification of

x

interests and values related to specific places through an iterative, on-going process. Lee's study also demonstrated that public participation processes were designed to "professionalize" the exchange of information, based in part on the assumption that public comment was too general and lacked relevance to decision making.

3. Washington-Oregon coastal experience

In 1989 and 1990, in my first year of graduate school, I studied the potential impact of off-shore oil and gas development on tourism and recreation along the coast of Washington and Oregon. This study entailed interviewing many residents of small coastal communities and visitors to the area.

Many of the people I spoke to over the course of the study had very strong personal attachments to the places I was asking them about. Many had long histories of visiting the same place year after year and could recall a long line of special memories involving the place. There seemed no end to the stories people were eager to share. (At the time I did not realize that their stories were narratives describing place as a cultural system, in comparison to the ways I was familiar with studying it as thing).

I was struck most of all by the strong, heartfelt relationships people had with specific places and the significance that a place could come to have in someone's life. At the time we were planning to study the potential impact of development using generic photographs showing oil platforms in different configurations at different distances from the shore and asking people to rate the photos for acceptability.

I came to realize that taking the context away – not providing information about the place – significantly altered how people felt about an activity, and did not provide reliable data concerning how people would react to the activity when they actually knew the particular place. I also noticed that it wasn't as simple as identifying or measuring scenic beauty, visual attributes, or "amenity values." What was important to people was not simply the visual stimulus but was more of a holistic experience. People had invested meanings in everyday places thus giving them special

value. The meanings and values were based on a holistic character that included past experiences, memories, meanings, and symbols. Those interviewed expressed a sense of appreciation and attachment that went far beyond the visible features of the physical location. It wasn't something that could be measured or observed by looking at the setting and inventorying its features or by having "experts" assess its beauty or "value" as agencies were attempting to do using cookbook approaches. The willingness-to-pay and landscape assessment techniques used by of our study were the latest technology, yet were inept at eliciting cultural aspects of meanings and symbols.

These and other personal social experiences helped form my conception of place and piqued my curiosity about the implications of how place is studied. Drawing on the literature from many disciplines and a multitude of scholarly discussions has enabled me to gain a much deeper understanding of the role place plays in our relationship to our environment and each other. I still have a long way to go.

ACKNOWLEDGMENTS

> What creates coherence and continuity in social science is not
> consensus around a theoretical paradigm but concern for
> practical problems in the world.
>
> Bellah, *The ethical aims of social inquiry*

There are so many people who have helped me, so many who deserve thanks. Beginning with my parents and grandparents people throughout my life have instilled in me a concern for practical problems. I have been fortunate to surround myself with many like-minded people.

My Committee members have been a source of support and inspiration through a long and arduous process. Dr. Al Wagar and Dr. David Allen especially put much thought (and ink) into editing numerous drafts. Their meticulous work was very helpful. I could not have asked for a better chair for my adventure than Dr. Margaret Shannon. I am grateful to her for continuing to see a finished product when it all seemed like such a blur to me. She was unfailing in her dedicated assistance as I wrote and re-wrote page after page with her guidance. As my chair and friend I appreciate and respect her academic and professional advice and guidance. She continues to be a constant inspiration.

Dr. Roger Clark stood by me through all my ups and downs and false starts and coming around again only to find myself back where I started. His patience has been unyielding. Cassie, Connie, Sandy, Margaret, Kevin and others at the Seattle Forestry Sciences Lab have helped me out in so many ways. To all of them I am grateful.

Amanda Graham shared the White Pass experience with me. She has became a great research partner and friend. Many other graduate students have also been good friends sharing ideas, encouragement and stimulating conversation. I am especially grateful to Rebecca, Alex, Tamara, John, Jan, Sue, and Graciela.

DEDICATION

This dissertation is dedicated to my extended family of parents, grandparents, brothers and sisters, aunts, uncles, and cousins, and best-of-friends and colleagues who have been there for me along my life-course and who have helped me as I sojourned on this most rewarding adventure. I couldn't have done it without your encouragement and unfailing confidence in me.

> Keep us O God from pettiness;
> Let us be large in thought, in word,
> in deed.
> Let us be done with fault-finding
> and leave off self-seeking.
> May we put away all pretense and
> meet each other face to face, without
> self-pity and without prejudice.
> May we never be hasty in judgment
> and always generous.
> Let us take time for all things;
> make us grow calm, serene, gentle.
> Teach us to put into action our
> better impulses, straightforward
> and unafraid.
> Grant that we may realize it is
> the little things that create differences;
> that in the big things of life
> we are as one.
> And may we strive to touch and
> to know the great common [persons]'s
> heart of us all, and oh, Lord God,
> let us not forget to be kind.
> Mary Stewart
> (quoted in Jackson 1994:93-94)

CHAPTER 1
INTRODUCTION

> A well-cultivated sense of place is an important dimension of
> human well-being. Carried further, one may discover an
> implicit ideology that the individuality of places is a fundamental
> characteristic of subtle and immense importance to life on earth,
> that all human events *take place*, and all problems are anchored
> in place, and ultimately can only be understood in such terms.
> Meinig, *The Interpretation of Ordinary Landscapes*

I. INTRODUCTION

A. Overview

This chapter provides an orientation to the research presented in the five

chapters that follow. In the first section a connection is made between resource

conflict and controversies and how place is conceived of and studied. An introduction

to two approaches to social inquiry follows. Next, the purposes and components of

this research are presented.

The second section introduces opposing public philosophies of *competitive

pluralism* and *deliberative democracy* and examines the relationships between public

philosophy, theory and method. The third section introduces theories and perspectives

of place, including the *professionalization of place*.

The next section presents a brief history and overview of *social impact

assessment* as an example of the professionalization of place, and explores possibilities

of *participatory social assessment*. A critique of Forest Service planning is

summarized, followed by an introduction to concepts of *social connectedness, civic

engagement, civic science and social learning*. The *Montana Study* is presented as an

illustration of social assessment as a civic science process. Finally, the *White Pass*

community self-assessment, the process that provided the field experience for this research, is introduced. This chapter then closes out with an orientation to the organization of the remaining five chapters.

B. Reconnecting with our places

Late-nineteenth century social theorists believed that "an attachment to place and local community served as an important element in the stability of a democracy" (Entrikin 1991:34). It was along these same lines that Korten (1981:610) suggested that, as a society, we must reestablish "the individual's lost sense of intimacy with and responsibility for his or her local community and its natural environment" if we hope to achieve a sustainable society. Social assessment may provide an opportunity to help people reconnect with their local community and sense of place while improving resource decisionmaking.

Krannich et al. (1994:36-37) found that understanding symbolic dimensions of environments is critical to understanding the implications of environmental change and why conflicts over resource management become so contentious. Others have noted the importance of recognizing the socially constructed meanings associated with settings and locations people care about (Brandenburg and Carroll 1995; Greider and Garkovich 1994; Kemmis 1990; Mitchell et al. 1993; Williams 1995).

Some social scientists who have studied our resource-based conflicts have suggested that conflicts over resource management are related to an almost exclusive reliance on the predominant Western approach to science (Entrikin 1991; Orr 1992; Sagoff 1992a,b; Sack 1990; Shepherd 1993; Williams 1995; Wright 1992) which has led to an oversimplification of meanings and values (Bengston 1994; Wilkinson 1992).

This *empirical-analytic approach* is based on a model that abstracts humans from nature (Peat 1987; Talbot 1991) and place (Entrikin 1991) and devalues the knowledge people have (Gaventa 1993; Park 1993; Shepherd 1993). This approach removes the "essence of the everyday lifeworld . . . from the research itself"

(Brandenburg and Carroll 1995:384). Results may include: diminished usefulness of the research (Brandenburg and Carroll 1995), loss of community and loss of sense of connectedness (Bellah et al. 1985; Putnam 1995), a sense of placelessness (Relph 1976), decreased civic trust (Putnam 1995; Williams 1995), polarization of interests and values (Wilkinson 1992), and a lost sense of a community embedded in a place (Kemmis 1990) – a loss of exactly those characteristics which Korten (1981) and others (Bellah et al. 1985; Kemmis 1990; Putnam 1995; Williams 1995) have suggested need to be reestablished and strengthened.

Can social assessment processes go beyond mechanical inventory and accounting procedures to allow researchers, resource managers *and* citizens to work together to assess, inventory, and monitor sociocultural meanings? (Appleyard 1979; Burch 1979; Krannich et al. 1994; Shannon and Antypas 1996; Williams 1995; Wondolleck and Yaffee 1994). Is it possible for social inquiry processes, particularly social assessment, to reestablish connectedness, a sense of civic responsibility and civic trust, and what Kemmis (1990) referred to as "inhabitation of community rooted in place"? This dissertation proposes that social assessment, based on understanding place as a cultural system, can strengthen civic engagement and civic trust and lead to a more informed citizenry, more vital communities and better resource decision making.

C. Approaches to social science inquiry: How to access meanings

Much of contemporary social science inquiry has focused on objectification of aspects of life as variables to allow counting and measuring these variables and how they change over time. Common social variables are employment, unemployment and wages. *Empirical-analytic methods* used in most social assessments are not oriented to accommodate the symbols, meanings, metaphors, and myths that are critical to understanding place as "lived experience" (Entrikin 1989, Appleyard 1979). In addition to diminishing social connectedness, civic responsibility and civic trust, this

4

limited approach can also complicate resource management. Williams (1995:9) suggested that "methods of knowing that minimize or obscure important emotional or symbolic meanings of objects, events, or places, no matter how scientific they are, will not be favorably received by those who sense the loss." Those living in the Pacific Northwest can especially relate to this assertion in the wake of spotted owl and old growth controversies.

Williams (1995) and others (Appleyard 1979; Brandenburg and Carroll 1995; Brunson et al. in press; Burch 1979; Mitchell 1990; Mitchell et al. 1993; Schroeder 1992,1996; Stankey and Clark 1992) have called for tools and conceptual frameworks that allow managers to assess, inventory and monitor sociocultural *meanings* of places in order to incorporate socially relevant meanings into social inquiry and planning processes.

In order to access a cultural system of meanings, symbols, metaphors and myths, an *interpretive approach* is required. To understand meanings, symbols, metaphors, and myths of places the researcher must become an active participant and the participants must become active researchers as part of the place. Some researchers have referred to this interpretive-participatory research as *"new paradigm research"* (Heron 1988; Reason 1988a, 1994).

> In the old paradigm only the researchers do the thinking that
> generates, designs, manages and draws conclusions from the
> research; and only the subjects – often knowing nothing of
> what the researchers are up to in their thinking – are involved in
> the action and experience which the research is about. In the
> new paradigm this separation of roles is dissolved. Those doing
> the research as co-researchers are also involved as co-subjects.
> The same persons devise, manage and draw conclusions from,
> the research; and also undergo the experiences and perform the
> actions that are being researched. (Heron 1988:40)

D. Purposes and summary of components of this dissertation

The purposes of this research were as follows:

1. To increase understanding of what it means to conceive of place as a cultural system, rather than just as a geographic location or setting, a complex of resources, or an abstracted set of social categories;

2. To provide insight into the relationships between public philosophy and the theoretical and methodological implications of social inquiry because these relationships influence how place is conceived of and studied;

3. To increase understanding of what it means to do civic science within a social learning framework, as a component of social assessment; and

4. To expand the methodological approaches available for social assessment and public participation.

To accomplish these purposes this dissertation is based on four study components. The first component is an examination of the relationships between public philosophy, theory and methodology: how knowledge is defined and created, the relationship of the knower to the known, and who can be a knower. Drawing from a theory of public philosophy developed by Sandel (1996) and a theory of civic forums developed by Stanley (1988/1), a public philosophy framework was developed. The framework was used to contrast a deliberative democratic public philosophy with a competitive pluralist philosophy. Understanding these relationships is the first step in understanding how we conceive of and study place.

The second component develops a conceptual theory of place, based on understanding place as a cultural system. Understanding place as a cultural system provides a way to empirically access meanings and symbols through the examination of social events and actions (Geertz 1973).

The third component draws upon a unique opportunity to participate in a setting in which the work of place creation could be observed and understood. This component links the theoretical discussion of place to a real world application. The experience afforded a research opportunity to experiment with the role of *research*

facilitator, and to observe and learn as a participant from within an ongoing effort of civic science and social learning.

The final component has two parts. The first part critiques the standard social impact assessment process. In the second part, the social impact assessment from the Environmental Impact Statement for the Gifford Pinchot National Forest Forest Plan (FEIS 1990) is presented as an illustration of a standard assessment and is compared with the White Pass participatory assessment.

II. RELATIONSHIPS AMONG PUBLIC PHILOSOPHY, THEORY, AND METHODOLOGY

Public philosophy, as defined by Sandel (1996:4), is "the political theory implicit in our practices, the assumptions about citizenship and freedom that inform our public life." Public philosophies take very divergent views of political participation. Two opposing public philosophies were elucidated by Stanley (1988/1) in a discussion of public forums. Rather than a discussion of familiar types of forums such as public hearings or open houses, Stanley (1988/1:4) delineated what he described as:

> forum conditions for deliberative political conversation intended
> as a constitutive act of political world-making on the part of
> people who come together as citizens (not as experts, interest-
> group members, victims, or even elected representatives) for
> this purpose.

Stanley (1988/1:4) offered his comments as a contribution to a discussion of "what it means to think of democratic citizenship in all areas of endeavor as political communicative competence." He saw citizens coming together in civic conversation to learn and deliberate about common interests and concerns as enactment of citizenship. Enacting citizenship through civic engagement, civic science and social

learning all sound good. We can assume that most people want to be good citizens. So, why aren't there more examples of these civic activities in resource management? The answer may lie in the predominating public philosophy.

Stanley's (1988/1) two models help illustrate major differences in public philosophies. His first model underlies the predominant approach to social science. It views public participation as chaotic and unnecessary since experts can make better decisions than laypersons (Stanley 1988/1). The second model builds on ideas of civic humanism. In this model "the necessity for the forum is the need to rediscover the civic commons and its associated identity of citizenship amid the varied settings of modern life" (Stanley 1988/1:8). Stanley (1988/1:8) posited that in what he called the democratic model "the forum exists for its own sake as the place where citizens meet to make justice." Thus, citizens can come together to deliberate about the common good, share a sense of belonging and connectedness, and create and strengthen a moral bond to the community (Sandel 1996).

The first model, based on a public philosophy of *competitive pluralism*, views people as free to choose their own values, interests, and preferences with "autonomous will" indifferent to the needs and desires of others and "unencumbered by moral or civic ties" (Sandel 1996:6). The second model, based on a public philosophy of *deliberative democracy* recognizes the human condition as one in which we are each engaged in family and community (defined broadly) and thus have "natural duties" and obligations to the common good (Sandel 1996; Stanley 1983, 1988/1).

Theories, paradigms, models, frameworks, assumptions, and methodologies frame what questions are asked, what is considered data or evidence, how data are gathered, interpreted and presented, and who can be involved in knowledge production and use. The public philosophy one adheres to underlies all of these choices.

The predominant approach to social research is based on a public philosophy of competitive pluralism. Referred to as positive science, this approach, derived from

natural science, is characterized by the following actions/positions of the researcher: the researcher taking a position outside and separate from whatever is being studied; objectifying whatever is being studied; fragmenting lived experience by separating "facts" from values and meanings; and effectively excluding "non-experts" from participating. A more in-depth overview of an empirical-analytic approach based in positive science is provided in Chapter 2.

An alternative theoretical and methodological approach is needed to allow social scientists, resource managers and planners to expand understanding of social and cultural phenomena. This expanded knowledge could extend and supplement the technical knowledge of positive science with interpretive, social knowledge grounded in lived experience. An interpretive-participatory methodology, described in more detail in Chapter 2, allows the researcher to become part of the research process. Becoming part of the research process improves access to meanings and symbol systems through examination of social events and actions (Geertz 1973). These meanings and symbol systems are the essence of place as a cultural system.

III. DEFINING AND CREATING PLACE

A. The use of the word "place"

The term *place* is used many ways both in academic literature and in civic life. Substantial literature on place can be found in environmental psychology, humanistic geography, cultural anthropology, and landscape architecture. Place is used to mean location, locale, region, space, site, setting, landscape and environment, among other things. These are all analytic concepts: they can be separated into components, and described by counting or measuring.

In contrast, Relph (1976) saw place as an integrated, meaningful *phenomenon*. He wrote, "Places are indeed foundations of [human] existence, providing not only the context for all human activity, but also security and identity for individuals and

groups" (Relph 1976:41). Relph (1976) differentiated place from the environment by recognizing place as a part of the environment that has been experienced by people and to which people have attached meanings.

> Places are fusions of human and natural order and are the significant centres of our immediate experience of the world. They are defined less by unique locations, landscapes, and communities than by the focusing of experiences and intensions onto particular settings. Places are not abstractions or concepts, but are directly experienced phenomenon of the lived-world and hence are full of meanings, with real objects, and with ongoing activities. They are important sources of individual and communal identity, and are often profound centres of human existence to which people have deep emotional and psychological ties. (Relph 1976: 141 – Author's note: I have maintained the British spellings of fusions, centres, and intensions.)

Agnew and Duncan (1989:2) described three ways place has been used in social theory. As *location*, place can mean "the spatial distribution of social and economic activities" that results from different costs of doing business in different places. Place as *locale*, on the other hand, provides the setting or backdrop for everyday activity. *Sense of place*, the third definition, involves individual or group identification with a place that comes from interacting with it. These conceptions, often seen as competing and incompatible, demonstrate the multidimensionality of place. Place, according to Agnew and Duncan (1989) simultaneously encompasses all three aspects.

Pred (1984) saw place as a *process* of transforming and appropriating nature and space, simultaneous with and inseparable from the transformation and reproduction of society. Much in the same vein, Stankey (1995:44) referred to place as "the *way* in which people attach meaning and importance to space" (emphasis added). Thus, place isn't something "out there" separate from, or that can be

separated from, the people who create and define it through their day-to-day experiences.

However place is defined many social scientists (Bengston 1994; Brandenburg and Carroll 1995; Mitchell et al. 1993; Williams 1995) agree that "meanings have been overly restricted to the tangible and instrumental to the neglect of the historic, cultural, and spiritual meanings" (Williams and Patterson 1994:14). The limited perspective that results can be traced to the tendency to choose theories and methods that favor technical and instrumental knowledge over interpretive and social knowledge. Economic values and narrowly defined empirical variables have been counted and measured while other values and meanings have been discounted or disregarded as "non-empirical."

Petrich (1984:67) suggested that the most important aspect of the "specialness" of places is a holistic character that involves past experience and social and cultural meanings identified with the place such that the place "elicits an appreciation and attachment beyond the observable features of the landscape" Thus, to know or understand place requires us to look at place from a perspective that encompasses and can illuminate meaning and action. Meanings are expressed through enactment and engagement which are social activities, and thus are observable and apprehendable using an interpretive methodology. Rather than as a static location, setting, or landscape, in order to access meanings we must conceive of place as a cultural system, much in the same way Geertz (1973) conceived of religion as a cultural system. Conceiving of place in this way may provide an opportunity to integrate multiple perspectives, grounded in lived experience, into a whole that better represents the real world. A conceptual framework based on place as a cultural system is developed in Chapter 3.

B. Professionalization of place

In their book, *Placemaking: The art and practice of building communities*, Schneekloth and Shibley (1995) defined placemaking as an activity that involves people who live, work, and play in a place, gives legitimacy to all forms of knowledge and focuses on the relationships among people and between people and the place. It involves ongoing construction and negotiation of knowledge of a place and making that place meaningful through discussion, decision-making, planning, design, and development processes.

They described the negative impacts they saw resulting from the appropriation of placemaking activities by professionals. Professionalization is a division of labor. Procedures establish who can participate in activities and how activities will be carried out. Approaches commonly used by social scientists, resource planners and others who study social phenomena associated with public resource lands are professionalized processes which can be described as follows:

- They do not accommodate the experiential, everyday social knowledge and expertise held by the public (Overdevest, McNally, and Hester 1994; Sancar 1994; Park 1993; Maguire 1987).

- They are based on an assumption that people are somehow separate from "nature" and can be studied separately from natural systems (Burch 1979).

- They focus on 'things' rather than relationships and processes (Williams 1995; Sancar 1994).

- They assume that one singular reality can be identified (Denzin and Lincoln 1994).

- They view research singularly as a process for creating technical knowledge, while avoiding opportunities to foster "education and development of consciousness, and of mobilization for action" (Gaventa 1993:34), empowerment, social learning, and building community capacity (Schneekloth and Shibley 1995; Putnam 1995).

Some will argue that these last activities -- education, development of consciousness, and mobilization for action -- do not fit within the role of science. While they do not fit within what has come to be seen as conventional research, researchers involved in action science and other forms of participatory action research (Park 1993; Reason 1994), as well as those working in areas of critical theory, including feminist theory (Guba and Lincoln 1994; Harding 1986, 1987; Maguire 1987), recognize and accept these not only as legitimate but as morally and ethically imperative research activities.

The question becomes to what extent can an expanded view of social research provide a platform from which to better understand social phenomena associated with resource lands, and simultaneously provide the venue for civic conversation, civic engagement, civic science, and social learning.

IV. SOCIAL ASSESSMENT AS THE STUDY OF PLACE

A. A brief history and overview of conventional social impact assessment

Social impact assessment (SIA) evolved in the 1970's out of the need to better understand potential social impacts of proposed development projects and resource management decisions (Burdge 1993). SIA became part of the environmental impact statement (EIS) required by the National Environmental Policy Act of 1969 (NEPA) and demonstrate quite effectively the professionalization of place.

Sharing many features common to other definitions, one of several definitions of SIA provided by Burdge (1993:9) defines SIA as:

> A process using social science methods to study the probable or potential consequences, of a proposed project development, on the human environment which takes into consideration alternatives and is part of the decision-making process.

Interestingly, Burdge (1993) noted a difference between approaches taken by researchers in the U.S. and Canada. While the SIA model used in the United States focuses on measuring limited variables such as employment and wages, the Canadian model attends to social action and helping people adjust to change. This difference is based in opposing public philosophies. The model employed in the U.S. is based on *competitive pluralism* while the Canadian model takes more of a *deliberative democratic* approach.

While much of the literature and research equate social assessment and SIA (Burdge 1993), Shannon (1981) differentiated between these concepts. She described *social impact analysis* as a process to predict "social consequences of a particular decision or project on a site-specific social system" (Shannon 1981:5). In comparison, she described *social assessment* as a process "to help clarify the issues and concerns of people affected by the management and allocation of resources" (Shannon 1981:5).

The mandate from NEPA requiring social assessment has resulted in much more attention being given to SIA. As a result, most social assessment work is based on a constrained SIA model (Bryan 1996; Dale and Lane 1994). Most of the SIA literature and research is directed to fairly large scale projects involving major industrial development (Krannich et al. 1994). This orientation has resulted in a limited focus on social and economic variables aimed at measuring social disruption that might result from a proposed activity. Examples of such variables are employment, unemployment, wages, population size and composition (Burdge 1993; Dale and Lane 1994; Krannich et al.; Machlis, Force and Dalton 1994). To obtain data on these variables typical SIA methods depend on collection and analysis of existing, secondary data drawn from Federal Census, social service and labor agency records (Shannon 1981) which are often inadequate for the issues that need to be addressed (Bryan 1996; Burns and Preston 1994; Dale and Lane 1994; Murphy and Pilotta 1984; Palinkas, Harris and Petterson 1985; Williams 1994, 1995).

When one is investigating specific places, this data collection is "little more than abstraction piled on top of abstraction, disconnected from tangible experience, real problems, and the places where we live and work" (Orr 1992:127). These abstract generalized data lead to places simply becoming real estate or natural resources recognized only for their utilitarian values (Bengston 1994; Orr 1992) and people becoming simply a job or salary (Dale and Lane 1994; Murphy and Pilotta 1984).

Social scientists have argued the need to go beyond this limited approach which obscures human relationships, sentiments and contexts of real places (Bengston 1994; Murphy and Pilotta 1984; Palinkas, Harris, and Petterson 1985) to include aspects of lived experience – place as a cultural system – meanings, symbols, metaphors, myths, and traditions (Krannich et al. 1994; Machlis, Force and Dalton 1994) and additional opportunities for dialogue (Krannich et al. 1994; Larsen 1990; Shannon 1991b). Without this perspective on place SIA conducted as part of an EIS has limited usefulness due to the types and amounts of data available to answer the questions being posed (Krannich et al. 1994).

B. Improving the usefulness of SIA with interpretive-participatory methods

In order to improve the usefulness of SIA participatory methods anchored in interpretive theory can be used. These methods can tap into cultural systems and thus can result in greater understanding of the meanings a place has for people and their way of life. As meanings, preferences and interests are shaped and formed through social interaction participatory processes are necessary to access them (Wildavsky 1987). Meanings and preferences "come sideways, from identifications, experiences, and conversations . . . . They are ultimately disposed through the presence or absence of social validation" (Wildavosky 1987:9). Therefore, several social scientists have suggested that a focus on people and participation is a key to success in planning and

social assessment (Bryan 1996; Dale and Lane 1994; Larsen 1990; Murphy and Pilotta 1984; Palinkas, Harris and Petterson 1985).

With a focus on learning, social interaction, and opportunities to identify and work through problems, public engagement in social assessment can contribute to both broader understanding and more effective decisionmaking and implementation of decisions (Krannich et al. 1994). "From a detailed description of a local culture, of its various lifestyles, and of the meaning an area has to its residents' way of life, a good projection can be made about the effects of a proposed project" (Shannon 1981:4).

However, standard SIA has not capitalized on the opportunities and importance of social learning (Krannich et al. 1994). In their analysis of community assessments Murphy and Pilotta (1984) found that continued use of traditional data collection methods resulted in reduced opportunities for meaningful participation which led to unhappy citizens. Kaplan (1984) found that formal public involvement processes and survey research methods often antagonize people while resulting in data that will never be used. Bryan (1996:149) noted that implicit in the orientation taken by standard social impact assessment "is that the public has neither the skills or the responsibility to be actively involved in the process of planning."

Dale and Lane (1994:258), in their work with Australian aboriginal communities, found that "most contemporary SIA applications simply perpetuate inappropriate planning processes by the contribution of value-laden technical information to centralized decisionmaking." As an additional factor, Gold (1985:47) found that researchers doing agency SIAs were not interested in:

> what life was about . . , what the people's values were and why,
> what held the community together, why the members found it
> to be so attractive in its present state, what the members'
> environmental concerns were and why, what was already
> impacting the community's culture and social structure.

It is not surprising that traditional agency approaches to planning and standard SIA have been criticized and deemed unsuccessful based on their reliance on experts

using analytic techniques and secondary data sources (Allen and Gould 1986; Larsen 1990; Palinkas, Harris and Petterson 1985; Shannon 1991a). These methods and the data acquired using them do not address the questions dealing with meanings and values and these are the questions on which much of the contemporary resource controversy is based (Allen and Gould 1986; Appleyard 1979; Bates 1993; Bengston 1992; Burns and Preston 1994; Schroeder 1992; Williams 1994). In addition, social scientists have demonstrated that the methods being used have generated defensiveness and restricted creativity in citizens (Bryan 1996; Dale and Lane 1994; Murphy and Pilotta 1984).

C. Public resource planning as an opportunity for civic science and social learning

A critique of Forest Service planning noted that "concern by the American people for the use of [public] lands has never been more intense" (Larsen et al. 1990:v). The critique also asserted:

> Planning is not the exclusive domain of experts, planners, and technical processes. Planning is not something planners do – it is something they help other people do. (Larsen et al. 1990:3)

Highlights of what was learned during the critique process are not particularly surprising (Larsen et al. 1990:9-15):

- People expect public involvement to be ongoing. Building long term relationships is essential.

- People expect to be involved, not because it is required but because their contributions are valued, and because decisions will be better.

- Technical answers alone are not sufficient. The sole use of technical approaches alienates people.

- Pressing social and political problems are not orderly, systematic, or technical. Instead they are often driven by strongly held values.

- Social and political problems, referred to as wicked or transcience problems, usually yield only difficult choices – not "right" answers.

Many researchers have written about these particularly pesky problems. Allen and Gould (1986:22) suggested these problems "are almost never successfully solved by selecting the rationally best solution but more often by choosing the emotionally satisfying one." They also concluded that there are never single solutions, only more or less useful (and acceptable) ones. "Solutions are generally good or bad rather than true or false; their validity cannot be tested objectively" (Allen and Gould 1986:22). Weinberg (quoted in Lowe 1990:138) suggested that while they "can be stated in the language of science, they are unanswerable by science; they transcend science." Miller (1993:563) described these problems as "complex, messy problems about which little is known." However one describes them, these are the common problems which resource managers address.

Thus, the forest planning critique found that learning is essential.

- Forest planning provides a needed forum for citizen participation in resource management. *The most important outcome of planning processes is the learning that occurs through the process.* Everyone involved learns.. All participants learn about working with people with different beliefs and values. (Larsen et al. 1990:15, emphasis added)

Research in areas as diverse as criminal justice, medicine and education are also discovering the need for citizen involvement through community-based processes that are both responsive and socially responsible (Murphy and Pilotta 1984). Under the right circumstances, social assessment and public participation processes, as placemaking within public forest planning, can provide the venue for civic engagement (Bellah et al. 1985; Putnam 1995), civic science (Shannon and Antypas 1996), and social learning (Reich 1985; Shannon 1991a,b; Krannich et al. 1994; Friedmann 1987). Unfortunately, studies show that in public resource management, forums for civic conversation and civic engagement are not being provided as often as they could be

(Krannich et al. 1994; Kusel and Fortmann 1990; Shannon 1991a,b). Therefore, applied studies are needed to help identify specific opportunities, appropriate circumstances, and useful methods for increasing levels of citizen engagement. Literature and research on civic engagement, civic science, and social learning form a solid foundation from which to begin such an effort.

D. Strengthening social connectedness through civic engagement in placemaking

Social scientists and community leaders have called for strengthening social connectedness and increasing sense of community (Kemmis 1990; Schneekloth and Shibley 1995). Identification of this need comes as studies of communities in this country have shown a decline in civic engagement and social connectedness in recent years (Putnam 1995). Putnam (1995) suggested that "high on America's agenda should be the question of how to reverse these adverse trends in social connectedness and civic trust."

Putnam's study has been criticized by those who say the indicators he used to measure civic engagement may have been dated. In an article in the *Seattle Times* (February 2, 1996) syndicated columnist Neal R. Peirce noted that Putnam's ctitics have argued that while bowling leagues, parent-teacher associations, Elk and Kiwanis clubs may be down in numbers other forms of civic engagement may be up. Peirce wrote that in response to Putnam's study, Brian O'Connell, of the Washington-based Independent Sector, wrote that about half of the American adult population and over half of the teenage population are actively involved as volunteers. According to O'Connell over half of those volunteering donate over five hours per week to a worthy cause. O'Connell argued that there are no good measures of volunteer activity, neighborhood and other action and advocacy, self-help, or religious social service group activities. Putnam argued that while many people pay dues and make donations to worthy causes actual *engagement* in activities is down as evidenced in the finding that the average American watches television four hours a day (Putnam 1995).

Putnam suggested that the more television people watch the less civically engaged they are and the less trusting. Other studies cited by Peirce, including a national poll conducted by Harvard University, the Kaiser Family Foundation, and The Washington Post, have documented levels of fear and mistrust that appear to be threatening long held American values of participation and mutual assistance.

Bellah et al. (1985), drawing on a major study of communities, suggested that "communities of memory" and practices of commitment help maintain community trust and civic engagement.

> People growing up in communities of memory not only hear the
> stories that tell how the community came to be, what its hopes
> and fears are, and how its ideals are exemplified in outstanding
> men and women; they also participate in the practices—ritual,
> aesthetic, ethical—that define the community as a way of life.
> We call these 'practices of commitment' for they define the
> pattern of loyalty and obligation that keep the community alive.
> (Bellah et al. 1985:154)

Placemaking activities, as practices of commitment, may help promote communities of memory and help maintain or restore vitality and capacity to adapt to change (Kemmis 1990; Schneekloth and Shibley 1995). Schneekloth and Shibley (1995) suggested that the appropriation of placemaking activities by professionals and technicians is leading to a sense of dysfunction of communities. Professionalization "disempowers people because it denies the potential for people to take control over events and circumstances that *take place* in their lives" (Schneekloth and Shibley 1995:2).

Kemmis (1990) suggested that developing a greater sense of what he called "inhabitation of community in place" could make politics more cooperative and thus improve the quality of life and well-being. Park (1993:19) went even further to say that "saving the world from technological and spiritual destruction depends on transforming it into a human sphere of life where community and critical consciousness thrive."

Kemmis recommended rethinking our relationships with our communities and our places. Gary Snyder very eloquently wrote of the disservice the analytic concept of environment does to how we think about our relationship to our homeland and dwelling place.

> The concept of country, homeland, dwelling place becomes
> simplified as 'the environment'—that is, what surrounds us.
> Once we see our place, our part of the world, as *surrounding*
> us, we have already made a profound division between it and
> ourselves. We have given up the understanding—dropped it out
> of our language and so out of our thought—that we and our
> country create one another, depend on one another, are literally
> part of one another; that our land passes in and out of our
> bodies just as our bodies pass in and out of our land; that as we
> and our land are part of one another, so all who are living as
> neighbors here, human, and plant, and animal, are part of one
> another, and so cannot possibly flourish alone; that, therefore,
> our culture must be our response to our place, our culture and
> our place are images of each other and inseparable from each
> other, and so neither can be better than the other. (quoted in
> Kemmis 1990:80-81)

E. Civic science as an exercise in citizenship

Civic science is an effort to democratize science by involving citizens as researchers "in the creation of a better, more meaningful and more fulfilling [world]" (Shannon and Antypas 1996:67).

> [Civic science] involves observation but is oriented toward
> interpretation (of nature and society) and involvement. It thus
> becomes part of the world rather than a process of standing
> away and looking at it from a distance. (Shannon and Antypas
> 1996:67)

The process that Shannon and Antypas (1996) described joins research and practice. At its core is the idea that citizenship entails the responsibility to act as "lay social scientists" and to learn about "themselves, their communities and their society"

(Shannon and Antypas 1996:68). Civic science is founded on the belief that "active citizenship requires citizens to be engaged in creating knowledge, including scientific knowledge, in order to better imagine possible solutions and put them to work" (Shannon and Antypas 1996:68).

When citizens take on this role, the role of the professional scientist becomes one of research facilitator and catalyst for learning. Civic science can be a component of, or catalyst for, a social learning process that goes beyond investigation and learning to embrace social action.

F. Social learning as democratic deliberation and social action

Civic engagement and civic science require public forums and processes to generate social learning. The kind of civic conversation facilitated by these processes can shape policy debates and allows people to gain new understanding of themselves and others (Reich 1985). Through processes of social learning, individuals adjust their opinions (about both facts and values), and thereby discover and develop common interests, resulting in new shared values (Reich 1985). Reich (1985) argued for the importance of deliberative participation because he saw preferences and values shaped *through* the process of democratic deliberation rather than as pre-formed and personal.

Korten (1981:614) described social learning as a capacity building process linking "knowledge, power, and people in ways which simultaneously generate new knowledge, new benefits, and new action potentials as integral outcomes of a single process." This definition parallels definitions of participatory action research (PAR) which strive to blend research, education, and action (Maguire 1987; Park et al. 1993; Reason 1988a).

G. The Montana Study: an exercise in civic science as an alternative approach to social assessment

The Montana Study provides an example of the application of deliberative democratic public philosophy (Poston 1950). It was an experiment in citizenship as citizens came together to conduct social assessments as exercises in civic science directed toward social learning (Poston 1950). Poston (1950) provided an excellent overview of the Montana Study process in his book, *Small town renaissance: A story of the Montana Study*. The Montana Study was the dream of Ernest Melby, chancellor of the University of Montana in the mid-1940's. Melby's hope was to find ways for the university to help people "gain the spirit, the knowledge, and the willingness to work for a more perfect society" (Poston 1950:15).

Melby supported improved technology but believed that:

> [Technology] has given human beings neither the disposition
> toward each other, nor the social direction by which [social]
> goals can be reached. We have given nurture to a science
> which has remade the productive world, but we have not
> equipped men to live in that world. (Poston 1950:16)

Melby's plan had four components. The first component was to get the University out into the communities to serve people of all ages. The second component, was to "find ways to stabilize the family and small community" (Melby, quoted in Poston 1950:24). The third component was to make small communities interesting and exciting so that people would appreciate their cultural and historical traditions and become more involved in life, becoming participants rather than spectators. The fourth component focused on recreation and the arts in an effort to provide creative outlets for young and old.

The Montana Study was a three-year project funded by the Rockefeller Foundation. Melby recruited Baker Brownell, a professor of philosophy at Northwestern University, who like John Dewey believed that democracy is to be found in "small communities and rural areas where people meet each other as neighbors,

where they have a sense of belonging, and a feeling of personal responsibility toward

each other" (Poston 1950:22). Brownell agreed with Melby that maintaining

opportunities for citizens to engage in civic activity was the key to democracy.

However, the Montana Study was *not* meant to "tell others how to run their

communities or how to organize their lives" (Poston 1950:25).

> [It] was to be the work of people participating with one
> another, studying and discussing their own community with a
> view toward improvement. This was the general method by
> which it was hoped to 'find ways to enrich the quality of living
> in Montana.' And if the program proved successful the
> methods and techniques developed could be used in small
> communities anywhere in America. (Poston 1950:25)

H. The White Pass Community Self-Assessment as civic science

The White Pass Community Self-Assessment presented in Chapter 4, while not

an exact replication of the Montana Study, shares many features with the Montana

Study, including many of the same outcomes. The White Pass Community Self-

Assessment project, which took place in the summer of 1995, provided a unique

opportunity to join a group of citizens in a participatory research effort.

The assessment was one of those "being in the right place at the right time"

occurrences of serendipity. Amanda Graham, another graduate student, and I worked

together as *research facilitators*. We joined 25 high school student-researchers and

three teacher-supervisors in a four-week civic science process aimed at discovering

who local residents are, why they live in this valley, and what about this place is

important to them. The process was one component of an ongoing social assessment

project initiated by the White Pass Community Self-Assessment Committee. The

Committee, an unchartered group, formed in late 1994: to address local concerns

about the accuracy of the Federal Census, to develop a data base describing the

community's residents and their concerns and needs, to document the history and

culture of the area, and to explore opportunities for training and education. The White

Pass assessment project is presented in more detail in Chapter 4. The assessment was important because it provided an opportunity for citizens, resource managers and researchers to explore the use of civic science in social assessment.

IV. ORGANIZATION OF THE DISSERTATION

This dissertation is organized into six chapters. Chapter 2 develops a public philosophy framework and compares opposing public philosophies that underlie empirical-analytic and interpretive science. Theoretical and methodological perspectives and underlying assumptions are contrasted. The discussion examines the implications of choice of theory and methodology on research outcomes and responds to the second purpose of this research effort. Chapter 3, in addressing the first purpose of this research, develops a conceptual understanding of place as a cultural system. Working with this framework, a set of categories is identified that provide empirical access to meanings and systems of symbols that can make place visible to a researcher. Chapter 4 presents the White Pass assessment as a civic science process. The categories developed in Chapter 3 provide an organizing framework to illuminate the process of construction and meanings of place. In Chapter 5 standard social impact assessment is critiqued and the process and outcomes of the White Pass assessment are compared and contrasted with those of the social assessment that was part of the EIS for the Gifford Pinchot National Forest's Forest Plan. The White Pass assessment is evaluated as a participatory assessment while the Forest Plan assessment process is viewed as a standard non-participatory assessment. The public philosophy framework developed in Chapter 2 is used to structure this analysis. And finally, in Chapter 6 conclusions from this study and implications for citizens, managers, and researchers are summarized.

CHAPTER 2
COMPARISON OF TWO
RESEARCH APPROACHES

The term *theoria* originally implied a complex but organic mode
of active observation — a perceptual system that included asking
questions, listening to stories and local myths, and feeling as
well as hearing and seeing. It encouraged an open reception to
every kind of emotional, cognitive, symbolic, imaginative, and
sensory experience — a holistic practice of thoughtful awareness
that engaged all the senses and feelings.

    Walter, *Placeways: A Theory of the Human Environment*

The complicated skills passed on through scientific
apprenticeship serve to train the scientist in the difficult task of
ignoring many of the everyday meanings and purposes of
events. . . . It means looking away from the human relevance of
things to see them as detached, measurable "qualities" that can
then be charted and interrelated by conceptual formulas.

    Sullivan, *Beyond Policy Science: The Social Sciences as*
        Moral Sciences

I. INTRODUCTION: THEORETICAL AND METHODOLOGICAL CHOICE

Many of the concepts resource managers are faced with daily entail knowledge
of place — adaptive management, social assessment, watershed analysis, and public
involvement are a few examples. Inherent in each of these concepts are theoretical
and methodological choices.

Choice of theory and method implies assumptions about the nature of
knowledge, what kinds of knowledge are legitimate, what scientific paradigms will
generate such knowledge, and even what public philosophy is appropriate for society.
In social science and especially the study of place, these assumptions have critical

implications for understanding and the very nature of what is being understood. An understanding of underlying public philosophy and the implications of one's choice may help researchers and managers decide among alternative theories and methods.

To study place as a cultural system of symbols, meanings and metaphors, research must begin from a theoretical and methodological approach appropriate for the study of cultural systems. One key aspect of such an approach is the engagement of people as participants in creating knowledge rather than simply being the objects of study.

One proposition of this dissertation is that the public philosophy that researchers and resource managers operate within drives their choice of theory and method. The White Pass assessment, described in Chapter 4, could not have taken place as it did within a *competitive pluralist* public philosophy. This dissertation adds weight to the argument that civic science and social learning can only occur within a public philosophy of *deliberative democracy*. In the next section these two opposing public philosophies are contrasted. Then, in order to expose the implications of choice of public philosophy, theory, and method, for this dissertation specifically, and for scientific study in general, contrasting patterns of knowledge and scientific paradigms are examined as well. The discussion that follows explores the linkages between public philosophy, theory and method. The discussion also demonstrates how a public philosophy of competitive pluralism leads to the use of standard social impact assessment methods and, alternatively, how a deliberative democratic public philosophy can lead to civic science and social learning (as demonstrated in the White Pass process).

II. PUBLIC PHILOSOPHY FRAMEWORK

A. Two opposing public philosophies drive choice of theory and method

Sandel (1996) contrasted two opposing public philosophies which he saw as underlying how we think about citizenship and public life. The first public philosophy stems from liberal political theory (Sandel 1996:5). Today, the word liberal is used in many different ways. In this particular branch of political theory, however, the central idea is "that we are separate, individual persons each with our own aims, interests, and conception of the good; it seeks a framework of rights that will enable us to realize our capacity as free moral agents, consistent with a similar liberty in others" (Sandel 1984:16). As individual values are of primary importance, a sense of a common good is assumed to take care of itself (Unger 1984) and therefore the common good is not considered a precondition of decisionmaking. As a result all values become private (Kemmis 1990). The term *competitive pluralism* conveys the notion of each individual competing with others to satisfy her individual desires. As Kemmis (1990:15) put it,

> Individuals would pursue their private ends, and the structure of government would balance those pursuits so cleverly that the highest good would emerge without anyone having bothered to will its existence.

An alternative public philosophy builds on "deliberating with fellow citizens about the common good and helping to shape the destiny of the political community" (Sandel 1996:5). This public philosophy views citizens as having a sense of the common good and a moral bond with their neighbors. Stemming from civic republicanism, this public philosophy builds on the notion that citizens need to have or acquire certain "civic virtues." This public philosophy is referred to as *deliberative democracy* because it builds on "a politics of engagement" (Kemmis 1990:12). As Kemmis (1990:12) described this public philosophy,

It depended first upon people being deeply engaged with one another ('rejoicing and mourning, laboring and suffering together') and second upon citizens being directly and profoundly engaged with working out the solutions to public problems, by formulating and enacting the 'common good.'

Deliberative democratic and competitive pluralist public philosophies are compared and contrasted in Table 1 using a framework developed from work by Stanley (1988/1). This framework compares each public philosophy on four points: education outcome, consensus achieved, an experiential analogy, and role of participants. This framework provided an organizing structure for analysis and discussion in later chapters.

Table 1. Comparison of two public philosophies
(adapted from Sandel 1996 and Stanley 1988/1)

Result of public philosophy \ Public philosophy	Competitive Pluralism	Deliberative Democracy
Education outcome	educate people in range of policies constrained by market economy	civic education, experiential inquiry, social learning, treats citizens as policy makers
Consensus achieved	evaluate trade-offs among policy options developed by experts	shared, ongoing narrative; civic conversation re: where "we" are and where "we" want to go - defines common vision; civic engagement; individual and group identity
Experiential analogy	grief - coping, focus on being deprived of something	immigration - working through change to transcend, adaptation to achieve improvement; empathy, civic friendship
Role of participants	aggregates of individuals with pre-formed wants, values based on individual interests	"complex social beings," inherent obligation to common good, participants in civic science

1. Education outcome. Deliberative democracy encourages experiential inquiry and social learning. As defined by Korten (1981:614) social learning involves simultaneous generation of "new knowledge, new benefits, and new action potentials as integral outcomes of a single process." Civic education, as described by Stanley (1988/1:8) "reveal[s] to citizens the ways in which they not only influence policymakers but are policymakers." Korten (1981:613) described the key to social learning as "effectively engaging the necessary participation of system members in contributing to the collective knowledge of the system and generating policy choices out of what Wildavsky refers to as a social interaction process." In contrast, competitive pluralism seeks to educate people about politics developed by experts while basing decisions and the development of policies on the economics of market demand.

2. Consensus achieved. A deliberative democratic public philosophy strives to achieve a "shared, cumulative, and ever more inclusive deep-structure narrative, as it were, regarding 'our' collective story and where 'we' want to take it from here" (Stanley 1988/1:11). Deliberative democracy is not about difficult trade-offs, or creating winners and losers. Instead the focus is on "decoding society" through experiential inquiry in order to broaden understanding of issues. Thus, "consensus" is achieved through ongoing public narrative. This concept of consensus differs from the "surface-structure agreement on specific value or policy directions" implied in the competitive pluralist philosophy (Stanley 1988/1:11) which requires evaluating trade-offs among pre-developed alternatives.

It is along these lines of experiential inquiry that Wallace Stegner (1969) implored people to recognize that "cooperation, not rugged individualism" was the answer to the problems of the West. A forum to facilitate ongoing narrative and consensus-building is one answer to Putnam's (1995:77) call for "restoring civic engagement and civic trust." This ongoing civic conversation can also result in the

development and strengthening of individual and group identity (Hull IV, Lam and Vigo 1994; Kemmis 1990).

3. Experiential analogy. Stanley (1988/1) developed a representative experiential analogy for each public philosophy. While he saw competitive pluralism resulting in a process similar to grieving, democratic deliberation, he said, is more like immigration in that people are able to transcend change and felt-loss. Stanley (1988/1:12-13) identified four stages in this process.

(1) "Crystallization" involves developing a narrative of one's experience. Often referred to as anecdotes, these narratives are shared with others. Stanley recognized the value of local history "for translating individual narratives into community contexts."

(2) "Griefwork" entails "coming to terms with the general emotional costs of social change in one's life." It also involves articulating losses in ways that can be shared with others. Through processes of sharing one discovers that "intersubjective consciousness transcends the illusory limits of atomistic subjectivity [and] can lead to a sense of new possibilities for compassion and for cooperative transcendence of what must appear to the isolated ego only as tragedy or pathos."

(3) "Denaturalizing stereotypes," especially negative stereotypes or prejudices is an attempt to examine one's "boundaries." Coming to grips with who is "in," "out," "them," etc. Stanley suggested that:

> critically inquiring into the sources of such boundary lexicons encourages asking how a social problem arises, what political achievements result in making perceived policy alternatives seem 'practical,' how still other alternatives get to appear impractical or visionary, and how the history of one's community reveals one's ancestors as people who constructed, reformed, or reconstituted their world as their legacy to the present.

(4) "Eschatological hope" stresses the importance of hope for a better future and "a more just public life." This stage includes hope for social betterment for one's self, one's family, one's community and one's country.

There is much emphasis on sharing of one's experiences while working through change in order to transcend one's situation. Transcending change in this way builds on ideas of civic friendship and empathy for the situation of our neighbors.

4. Participants. A deliberative democracy conceives of participants as *"complex social beings* whose consciousness is partly prestructured by group and institutional memberships, collective memories, mythic themes, and naturalized ideologies" (Stanley 1988/1:14). Rather than atomized persons with no obligations beyond their own self-interest, participants have obligations due to their "encumbered identities" as members of multiple social worlds including families, cultures, racial and ethnic traditions, neighborhoods, voluntary associations, professions.

Stanley (1988/1) suggested that citizens have a responsibility to be active inquirers, to be civic scientists. Civic science, as defined by Shannon and Antypas (1996) involves observation oriented toward interpretation and involvement with social action. Civic science "revitalizes democracy by making citizens more aware and understanding of each other and their world" (Shannon and Antypas 1996:67). Stanley (1988/1:14) provided an example of understanding consciousness in the way we conceive of unemployment.

> To take the one instance of unemployment, the problem for democratic civil literacy is not just to make hard choices between free market and government solutions. It is for all to understand that the suicidal sense of worthlessness that may afflict an unemployed man is not natural but socially induced. An unemployed man is not necessarily unproductive. Like the "housewife" or the "good cause volunteer," a man may be endlessly productive in his life, a boon to those whose needs he serves. Not all good works appear in the marketplace. When one's economic survival, or one's sense of worldly group identity, is based on a position in the labor market, however, that market becomes the determinant of what being "productive" means. To understand this is the first step toward a type of policy imagination capable of asking why the labor market is organized to be so unrewarding to the many activities that everybody knows to be productive.

B. Implications for social scientists and resource managers

The two public philosophies differ greatly in their approaches to political participation. As these public philosophies inform theory and method they have implications for social science research, resource planning and other resource management practices.

Competitive pluralism views knowledge as value-free "facts" that can be drawn from the Federal Census, state labor reports and similar reports that count and measure variables extracted from lived experience and objectified such that they can be counted and measured. The livelihood that people carve out for themselves becomes represented simply as an aggregation of numbers of jobs or amounts of wages. Data collection and analysis are done by researchers or technicians.

Political participation by the public is seen as chaotic and unnecessary. In resource management and planning competitive pluralism is evidenced by choosing a method that relies on expert scientific analysis (Bryan 1996) and policy elites for their ability to make "rational" decisions (Stanley 1988/1). This method is what Bryan (1996:149) referred to as a "technocratic approach." Within this approach "data are considered suspect unless gathered by experts, analyzed by experts, and interpreted to the public by experts" (Bryan 1996:149). Bryan (1996:149) noted that "implicit in this orientation is that the public has neither the skills or the responsibility to be actively involved in the process of planning."

Within a philosophy of competitive pluralism processes are put into place that avoid bringing parties with differing viewpoints together to deliberate on a common good. Formal public hearings allow public comment but no discussion. Even open houses are limited in opportunities for conversation among citizens. Few formal public involvement processes facilitate what Yankelovich (1991) referred to as a "working through" process. Instead of processes that bring citizens together to formulate values and interests through conversation, formal processes such as the

methods of standard social assessment and social impact assessment for "weighing, balancing, and upholding rights" have been institutionalized (Kemmis 1990).

In contrast, a deliberative democratic public philosophy is built on ideas of civic humanism (Stanley 1988/1). A deliberative democracy values democratic participation and civic engagement and builds on a conception of shared values, or common ground (Kemmis 1990) that emerges through the deliberative process. Thus, within this philosophical orientation, there is an effort to provide forums for people to come together as citizens, to deliberate about themselves and the common good (Stanley 1988/1). Citizens are conceived of as policy makers interested in understanding issues and implications of alternative courses of action. Knowledge is created by citizens in deliberative processes which include observation, interpretation and involvement (Shannon and Antypas 1996). "Knowledge production is integrated with and therefore cannot be separated from the enlightenment function of self-discovery and the moral effects of political deliberation and choice" (Shannon and Antypas 1996:68). Ongoing civic science can become part of daily life as citizens work as lay scientists side by side with researchers in the formulation of questions, problem definition, development of inquiry approaches, and discussion of possible solutions and implementation strategies. Knowledge becomes that which will help citizens advance their deliberation and improve their ability as citizens to exercise their policy making capabilities.

Thus the public philosophy to which one adheres has implications for the theoretical and methodological choices one makes. Within competitive pluralism there are few formal or institutionalized opportunities for face-to-face democratic participation. A deliberative democratic public philosophy, on the other hand, embraces political participation and civic engagement as ends in themselves by which "to rediscover the civic commons and its associated identify of citizenship" (Stanley 1988/1:8).

Critical to this dissertation are the issues of what is acceptable knowledge and who creates it. As long as scientists and policy elites are privileged as knowledge producers, as they are in competitive pluralism, citizens are subordinated, disempowered, and unable to fully participate in making scientific knowledge (Gaventa 1993). This dissertation posits that this subordination and disempowerment are not inevitable predetermined results, but, in part at least, result from choice of theory and method which are within the control of the researcher.

Drawing from this discussion of public philosophy, managers and social scientists might ask: What messages do resource agencies send with the methods they use in social research, planning and public involvement to create useful and appropriate knowledge? What knowledge and opportunities are missed because of the way knowledge is defined or the methods that are used to acquire it? What processes could bring people together to learn with and from each other, and to create common ground instead of keeping people apart as competing interests? What do the answers to these questions imply for how we approach research? The answers to these questions may lead to increased interest in the opportunities afforded by civic science where citizens as lay scientists can join with managers and researchers in the creation of knowledge that benefits society. A public philosophy of deliberative democracy is necessary to engage citizens in creating knowledge through civic science (Shannon and Antypas 1996).

III. THEORETICAL FRAMEWORK

A. Science and knowledge of place

Critical to understanding a "place" is accessing the system of meanings which create it (Appleyard 1979; Williams et al. 1992). However, standard studies of place -- particularly those conducted as part of resource agency planning processes, community assessments, and social impact assessments -- rely upon the empirical-

analytic paradigm. Studies based on this paradigm focus on measuring social indicators like employment, unemployment, wages, and population density. These indicators, or variables, are unsuited to examining symbols, metaphors, and meanings. The generalization required by empirical-analytic science to achieve universal "truths" minimizes interest in particular places and undermines the importance of meanings (Entrikin 1991). Objectification, reductionism, and other aspects of many scientific approaches obscure the relationships and experiences which define places. Appleyard (1979:143) noted that "the professional and scientific view of the environment usually suppresses its meaning." This suppression results because meanings are tied to values and, as defined by the competitive pluralist public philosophy that usually underlies social science inquiry, values are considered private and not generalizable. Being free from such assumptions is important because meaning, as perceived from an interpretive paradigm, is viewed as intersubjective, created through and thus visible through, social action.

A methodology is needed that maintains the link between meaning and object. Maintenance of this link entails a stronger commitment to localism and particularity rather than universalism and generalization. Place in this context needs to include perceptions, meanings, metaphors, myths, memories and values as part of the data used in making decisions in order to make decisions that are implementable.

The dilemma arises when separating meaning from objects becomes a defining characteristic of science (Wright 1992). The word science comes from the Latin *scientia* meaning "to learn" or "to know." Science creates "scientific" meanings which lead to the subjugation of other ways of knowing and other forms of knowledge (Gaventa 1993). Empirical-analytic science, rather than being one form of science leading to one form of knowledge – useful in making predictions and generalizations –– has become the only form of science and recognizes only knowledge gained through the empiricist scientific method (Gaventa 1993; Shepherd 1993). As a result, science

and expertise are disengaged from the study of social experience (Gaventa 1993; Shepherd 1993).

This choice of theory and method conforms to a public philosophy of competitive pluralism. Thus, common, indigenous, traditional, practical, relational, intuitive, local, or even interpretive or critical knowledge — knowledge that Korten (1981) referred to as social knowledge — are discredited as less valid than "scientific" knowledge. Clearly, facilitating participatory democracy, civic conversation, and civic discovery is difficult if science and resource management do not value what people know. Participatory methods, including civic science, are better suited for the goals of developing common understanding and shared values.

B. Expanding ways of knowing place beyond the limited view of empirical-analytic science

Belief in a value-free scientific knowledge has had a significant impact on how we come to know places (Schneekloth and Shibley 1995). The devaluation of feeling and meaning by professionalized practices of science and management results in alienation and disempowerment of the people who live, work and play in a place and who want to be involved in decisions about the place (Schneekloth and Shibley 1995; Walter 1988; Reich 1985). Other ways of knowing (other than traditional science) are frequently subjugated and "disqualified as inadequate to their task or insufficiently elaborated" (Foucault quoted in Schneekloth and Shibley 1995:215). Texts produced by local people, clients, public stakeholders, publics — all non-government, non-science, non-management interested parties – have often been systematically devalued (Eisler 1987; Lee n.d.; Schneekloth and Shibley 1995). Experiential and practical knowledge have become merely interesting anecdotes.

To gain an understanding of place requires expanding our existing ways of knowing and learning about places to include creative and innovative processes that recognize and celebrate relationships, involve people in making places, validate

common knowledge of places, and reinvest responsibility for places with the people who live, work and play in them[1] (Cortner 1996; Allen and Gould 1986; Friedmann 1987; Kemmis 1990; Schneekloth and Shibley 1995).

An important political agenda, especially internationally, has been to make sure these unheard voices are given the opportunity to be heard (Park 1993; Gaventa 1993). In this country our laws requiring public involvement in planning processes, such as forest planning and environmental impact statements, were meant to relieve this problem. However, within a political framework of competitive pluralism, opportunities for true participation remain few (Larsen et al.1990; Lee, nd., Shannon 1991a).

C. Differentiating types of knowledge

Knowledge is not a single category. Habermas (1972) identified three kinds of knowledge: instrumental or technical knowledge, interactive or interpretive knowledge, and critical knowledge (see also Maguire 1987; Park 1993). Table 2 compares and clarifies these three types of knowledge. Instrumental or technical knowledge is often accepted by science as the only valid form of knowledge and is recognized as "scientific" knowledge. Interactive, or interpretive knowledge is created (rather than discovered) using interpretive theory and research methods, and aims at explicating meanings of social action. Critical knowledge, aimed at increasing awareness and empowering participants to engage in social action for an improved quality of life, results from applying critical theory and using participatory research methods.

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[1] Reich (1985) explored a case of involving the local public in decision-making dealing with the smelter in Tacoma, WA. He discussed the importance of social learning and public responsibility in decisions that affect places people live, work, and play.

Table 2. Types of knowledge
(based on Habermas 1972; Maguire 1987; and Park 1993)

	INSTRUMENTAL/ TECHNICAL	INTERACTIVE/ INTERPRETIVE	CRITICAL
characteristics	externalization (subject-object split), researcher control	no subject-object split, interactive, interpretation as an aspect of being human	
relationship of researcher to researched	separateness, exclusion, subordinates people to scientists	connectedness, inclusion, partnership	
orientation to values	value-neutral	values are recognized as data	value oriented (moral values)
source	analysis of empirical data by scientists	reflection and action, conversation sharing meanings, collaborative processes	
context	decontextualized, generalized, isolated	tradition, history, culture, society	tradition, history, culture, society, unheard voices. power inequity
orientation	control	community, connectedness	raise consciousness, community, connectedness
who can know	specialists, experts, scientists, technicians	all participants	
basis of reason	instrumental reason, technical rationality	practical reason	practical reason, moral ends
approach	compartmentalized	holistic	
interest	technological	practical	emancipatory
results	disempowering, generic knowledge, fragmented "view from nowhere,"	empowering, integrated view from somewhere	action for a better living situation, empowering, integrated view from somewhere

Korten (1981) provided a slightly different view of knowledge. Coming from a background of public administration, Korten has looked at ways to "rehumanize society" in order to deal with global problems through local participatory action. He suggested institutionalizing public processes that "strengthen capacities for creative local self-help action and self-control" (Korten 1981:610). In effect, his argument was to shift away from a public philosophy of competitive pluralism to one of deliberative democracy.

For this shift to occur choices about "the processes by which knowledge is generated and utilized" and decisions about who can be knowers or creators of knowledge must be addressed (Korten 1981). Comstock and Fox (1993:103) suggested the need to answer the pivotal questions of: "Who has the right to create knowledge?" and "Should the people affected by new knowledge participate in formulating the problems to be studied, collecting and analyzing the data, and deciding how to use the results?" Korten (1981:612) determined that an underlying problem in answering these questions is "the presumption that the frames of reference and methodologies which have contributed so substantially to the technological advance of human society are equally relevant to the solution of its social problem[s]."

In comparing what he referred to as "scientific knowledge" and "social knowledge" (Table 3), Korten (1981) noted that the generation of empirical-analytic-based knowledge is separate from its application or practice and often results in reducing social problem solving to a technical exercise.

> When so applied in the social realm the scientific knowledge
> paradigm has proven less than adequate — perhaps in part
> because of the complexity and interdependence of the
> phenomena involved and in part because human behavior
> involves both values and purpose. (Korten 1981:612)

Schneekloth and Shibley (1995), in their studies of placemaking, found that to study place requires an approach which links knowledge and practice such that theory, which informs and is informed by practice, can evolve through practice.

Table 3. Scientific and social knowledge
(adapted from Korten 1981)

SCIENTIFIC KNOWLEDGE	SOCIAL KNOWLEDGE
scientific methods generate knowledge; theory and knowledge are separate; professional	knowledge is acquired (constructed) and applied simultaneously (theory and application are joined); praxis
knowledge is generated by scientists, applied by technicians	knowledge is acquired and applied collaboratively
analytic, reductionist. mechanistic	synthetic, organizational process, organic
isolation of variables, control of influences	engage participation of many voices, acknowledge social, cultural, historical context
order, precision, manipulation, control,	messy, ambiguous, chaotic, uncertain, unexpected outcomes
possibility of domination	partnership, cooperation, collaboration
replicability	understanding particularity

In Korten's (1981) discussion of knowledge he combined interpretive and critical knowledge within the category of social knowledge. This framework of knowledge emphasizes how knowledge is defined and who can create and use it. Both issues have important implications for understanding place.

D. "Whose science? Whose knowledge?"[2]

The differences in these orientations to knowledge are related to different ways of looking at the world, or paradigms[3]. Paradigms encompass what is defined as

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[2] This heading is borrowed from the title of Sandra Harding's (1991) book *Who's science? Who's knowledge?:
Thinking from women's lives.* Ithica, NY: Cornell University Press.

[3] Thomas Kuhn (1970) used the word paradigm to describe a set of skills, attitudes and approaches that frame how we see the world and that becomes so accepted that one becomes unaware of it. For example, the people of the Emerald City, in The Wizard of Oz, saw the world around them as green. Everyone was wearing green-

"reality," what can be known about "reality," how knowledge is created, the relationship of the knower to the known, how the knower proceeds to know what can be known, and who can be a knower. Within the philosophy of science these elements are a paradigm's underlying ontology, epistemology, and methodology (Guba and Lincoln 1994). Paradigms differ in areas such as what is acceptable as evidence, how evidence can be gathered, how it will be analyzed, the role of the investigator, the relationship of the investigator to what is being studied, and the role of interpretation.

Predominant approaches to science use empirical-analytic methods that focus on measuring things and rarely incorporate the cultural meanings and multidimensional values people have for places (Bengston 1994a). Denzin and Lincoln (1994) asserted that in this process localized meanings are lost. By asserting value-neutrality, the fundamental relationship between facts and values is denied (Shannon 1981). Denzin and Lincoln (1994:100) suggested:

> [Empirical-analytic approaches] fail to address satisfactorily the theory- and value-laden nature of facts, the interactive nature of inquiry, and the fact that the same set of "facts" can support more than one theory.

Guba and Lincoln (1994), among others, have summarized criticisms of empirical-analytic approaches (see also Lowe 1990; Miller 1993; and Wheatley 1994). Empirical-analytic approaches have been criticized by philosophers of science like Kuhn (1970), critical theorists like Habermas (1971, 1972, 1973), and by postmodern and poststructural philosophers such as Foucault (1972, 1980). Feminist theorists have especially criticized this traditional view of the world as operating within this view serves to maintain the power of dominant values – even as it purports to be value-free (Harding 1986, 1987; Maguire 1987; Shepherd 1993; Eisler 1987).

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tinted glasses and thus shared the same world-view. Our world-view is tinted by an empirical-analytic paradigm adopted by Western science as science (Peat 1987).

Some of the strongest challenges to the empirical-analytic paradigm have come from physics and quantum theory, including research related to the indivisibility of nature, the interconnectivity of everything to everything else (Bohr's work), the effect the observer has on what is observed (Heisenberg's uncertainty principle), and John Wheeler's theory of the participatory universe, which suggests that instead of an impartial observer a scientist is a participant in whatever is observed (Peat 1987; Leviton 1992). In essence many critics agree that empirical-analytic frameworks may result in studies that are "excessively reductive and biased," "insensitive to lay knowledge," and disinterested in social and historical context (Miller 1993).

E. The interpretive paradigm

The interpretive paradigm underlying the approach taken in this dissertation, is a scientific paradigm grounded in the German tradition of hermeneutics, and critiques of positivism and logical empiricism (Schwandt 1994:118). A branch of the interpretive tradition, social constructionism, maintains that, due to the nature of language, realities are socially and experientially based constructions[4] that are "local and specific in nature . . . . Constructions are not more or less 'true,' in any absolute sense, but simply more or less informed" (Guba and Lincoln 1994:110-111). A social constructionist approach asserts that the researcher cannot be "neatly disentangled from the observed . . . Hence the findings or outcomes of an inquiry are themselves a literal creation or construction of the inquiry process" (Schwandt 1994:128).

This paradigm assumes that the researcher and whatever is being researched are inextricably interlinked, thus rendering the split between subject and object inappropriate. Findings, rather than being pre-existing truths that are discovered, are actually created through the research process. Reason (1994:324) suggested that "this

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[4] A construction is a coherent structure created by people to help make sense out of the complexity of the world. It is a "useful fiction" in that there is no way to know how well it corresponds to reality. Constructions consist of both objects and ideas (Simmons 1993:165).

worldview sees human beings as cocreating their reality through participation; through their experience, their imagination and intuition, their thinking and their action." Thus, from this perspective, the separation between ontology and epistemology becomes blurred (Guba and Lincoln 1994). This perspective is supported by contemporary research in quantum physics and chemistry and is being adopted in management and organization theory as well (Wheatley 1994).

The interpretive paradigm builds on an understanding that "interpretation is not simply a methodological option open to the social scientist, but rather the very condition of human inquiry itself" (Schwandt 1994:118). It denies the ability to separate facts and values or the researcher from the object of study. These ontological and epistemological assumptions result in methodological requirements of interaction and exchange between and among researchers and respondents (Guba and Lincoln 1994).

Interpretation occurs using hermeneutical techniques and dialogue grounded in day-to-day activities. Hermeneutics asserts that "what we take to be objective reality is one of many possible interpretations, all of them stemming from an interpreter" (Slife and Williams 1995:86). Thus "to regard the activities themselves objectively is for them to lose their purpose and their 'natural' existence" (Slife and Williams 1995:86).

Rather than an attempt at prediction and control, this methodology aims to explicate meaning and increase understanding of social action. A hermeneutic approach, according to Slife and Williams (1995:89),

> affords the most basic knowledge available, ... To study
> human action from an 'objective' perspective is to study it as an
> abstraction from the lived world. It may be an abstraction that
> has some usefulness, but we cannot evaluate this usefulness
> until we know the lived world in which the abstraction is to
> function.

From this perspective meanings cannot be separated from objects and experiences that are meaningful. In addition, this view acknowledges that no interpretation can be unbiased. "The point is that interpretations are always *and* already interpretations *of* something" (Slife and Williams 1995:89). Originally applied only to written text, hermeneutics is now applied to understanding all human actions (Ricoeur 1979; Slife and Williams 1995).

IV. METHODOLOGICAL FRAMEWORK

A. Comparison of two methodological approaches

In Table 4 the comparison between interpretive theory and a more traditional empirical-analytic approach is extended to research design. The interpretive-based model, used in this dissertation, was developed from complementary works in: interpretive theory (Allen, Benner and Diekelmann 1986; Guba and Lincoln 1994; Stewart 1994); critical theory (Fay 1975); feminist theory (Gilligan 1982; Harding 1986; Reinharz 1981, 1991, 1992; Shepherd 1993;); holism theory (Miller 1993); participatory action research (Gaventa,1993; Hall 1993; Maguire 1987; Merrifield 1993; Park 1993); placemaking studies (Schneekloth and Shibley 1995; Tuan 1991; Williams et al. 1992); ecosystem management theory and application (Slocombe 1993); postmodernism (Slife and Williams 1995); leadership and management theory (Wheatley 1994); and the partnership model developed by Eisler (1987).

The comparison in Table 4 explicates areas of difference between the interpretive approach and approaches more closely modeled on the natural science tradition, but used extensively in standard social assessment work. These are not the only approaches nor in practice are they fully exclusive of each other.

Table 4. *A comparison between the empirical-analytic paradigm and the*
interpretive-critical paradigm extended to research design

	EMPIRICAL-ANALYTIC PARADIGM	INTERPRETIVE-CRITICAL PARADIGM
Nature of knowledge	verified hypotheses established as facts; singular, universal reality that can be discovered	socially constructed through language and other social processes; multiple realities
Inquiry aim	explanation: prediction and control, domination, generalizability and representativeness	understanding, effective interaction, empowerment, improved relationships, partnerships, particularity
Quality criteria	internal and external validity; reliability; objectivity	trustworthiness; authenticity; making clear what has been confused; generate further discourse and inquiry; democratic communication
Subject-object relationship: values and voice	values are excluded, influence is denied, research is assumed to be "value-free," scientist as disinterested, objective observer	values are included; situation of researcher is disclosed, scientist as participant facilitating a multi-voice construction
Approach	reductionist, results in fragmentation, static, focus on things, objectification	holistic, dynamic, focus on relationships, effects and influences, experiences
Role of researcher, knowledge	discover and verify truth, privileges knowledge of researchers	facilitate participation in construction of knowledge, researchers as participants
Source of knowledge	analysis of empirical data from observation	conversations sharing ideas, interests, experiences, participation and observation
Communication styles	competitive, independent, exclusive	collaborative, cooperative, inclusive
Relationship between theory and practice	separation of theory and practice	blending, interaction, feedback - each informing the other
View of place	view from nowhere - abstract, no specific place	view from somewhere - place specific

B. Expanding the realm of acceptable knowledge

When the study of place delves into the human world of meanings, values, feelings, emotions, and passions, it draws from interpretive theory and the interpretive approach to research. Through symbols, meanings, and metaphors, place is understood as a cultural system.

Understanding place as a cultural system is not possible using predominant scientific approaches that depend on a narrow definition of empirical evidence (Bengston 1994a; Clark and Brown 1990; Kaplan and Peterson 1993; Miller 1993; Vining 1992). A paradigm that embraces the values, passions, emotions, and meanings that express the experiences of people and places is needed. This paradigm would recognize the importance of rituals, festivals, arts, languages, myths, and spirituality, along with other characteristics of being human, through which people celebrate place (Merchant 1990; Walter 1988; Orr 1992) and which allow people to participate together in the creation of place (Schneekloth and Shibley 1995).

"Places take on the meanings of events and objects that occur there, and their descriptions are fused with human goals, values and intentions" (Entrikin 1991:11). Walter (1988:16) admonished that any theory of place that neglects "feelings, symbols, memories, dreams, myths, and all the subtle energies that go into the expressive dimension ignores the most human region ... of life." While there is no denying a need for technical information, Harding (1987) noted that the questions people are interested in finding answers for rarely require technical answers, but are rather *value* questions.

> [These questions] are rarely requests for so-called pure truth. Instead, they are queries about how to change [their] conditions; how [their] world is shaped by forces beyond [themselves]; how to win over, defeat, or neutralize those forces arrayed against [their] emancipation, growth, or development.

Often the social knowledge gained through processes of "working through" (Yankelovich 1991) is more useful than "scientific" knowledge as social knowledge can accommodate the complexity of relationships and multidimensionality of knowledge located in place (Korten 1981). In addition, the working through process is concerned not only with the production of knowledge but with how it is used as well (Shepherd 1993). Thus, the process is as important as the product, and, in some situations, the process will be the most important product (Korten 1981; Shindler, Peters, and Kruger 1995; Shindler and Neburka 1995).

C. Relationship between knower and known

Using an empirical-analytical approach, studies of place often involve decontextualizing and generalizing processes that remove knowledge from the place and the people who know and care about the place. This knowledge is relocated in scientists and managers who assume a position separate and detached from the object of study (Schneekloth and Shibley 1995). Schneekloth and Shibley (1995) referred to this as an aspect of professionalization. Professionalization as an effort to claim exclusive knowledge, independent of context, can result in subordinating and disempowering others.

Slife and Williams (1995:76), on the other hand, recognized "scientists [as] no different from other human beings; their experiences with their data are always interwoven with their interpretations, as guided by their a priori organizing." This is because humans are "self-interpreting animals," which means that our interpretations are part of our experience. Our interpretations are interpretations of interpretations, nothing more or less (Stewart 1994:53). In addition, things matter to humans. We care about things and assign value and meaning to objects and experiences. This means that "human identity is situation-specific -- that is, continually changing -- and that it is socially and culturally negotiated" (Stewart 1994:53). Thus, in response to the human condition of being human, Talbot (1991:297) implored science to "replace

its enamorment with objectivity -- the idea that the best way to study nature is to be detached, analytical, and dispassionately objective -- with a more participatory approach."

Interpretive approaches recognize the participatory nature of research. This means that interpretive approaches recognize that research design, observation, data collection, acceptance of data as valid, and data interpretation and analysis are influenced not only by the social and historical context within which the research occurs, but by the theories, biases, beliefs, behaviors, and perspectives of the researcher as well (Slife and Williams 1995). The interpretive researcher recognizes these influences as part of the evidence that must be considered and presented in a research activity (Daly and Cobb 1989; Harding 1987; Miller 1993; Reason and Rowan 1981; Shepherd 1993). The disclosure of this information increases objectivity and decreases what Harding (1987) calls "objectivism" which hides evidence that can influence findings.

A goal of interpretive research is *verstehen*[5], or understanding the meanings behind human actions, an understanding from the participant's point of view (Schwartz and Jacobs 1979). One interpretation of *verstehen* is that by being in the same situations as those being studied the researcher can reach a deeper understanding of how the subjects are experiencing the situation (Schwartz and Jacobs 1979). This assumes that people experience situations in similar ways, which may not be accurate. An alternative perspective views interpretation as creative in contrast to a search for a pre-existing Truth. "Interpretation -- the process of developing *verstehen* -- is creative, not restorative, and is grounded in communication" (Stewart 1981:116). Stewart's (1981) understanding of *verstehen* rests on Habermas' conception of hermeneutic understanding as implicating the interpreter as a partner in dialogue and viewing understanding as emerging from communication. Whichever perspective one takes on

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[5] Dilthey is credited with first describing verstehen with Weber also adopting it (Adler and Adler 1994).

the meaning of *verstehen*, experiencing a situation with those being studied moves a researcher much closer to understanding what is happening than a survey questionnaire or another detached or remote method would.

In addition to *verstehen*, feminist and critical approaches, including participatory action research (PAR), also focus on emancipation and grounding knowledge in self-understanding in order to produce agents of change (Harding 1986, 1987; Maguire 1987; Park et al.1993; Simmons 1993). PAR focuses on the process of involving people in much the same ways as civic science and social learning. In addition to roles normally taken on by research, researchers facilitate "processes of collaboration and dialogue that empower, motivate, increase self-esteem" and develop individual and group identity (Reason 1994:329). PAR uses multiple methods to tap into the knowledge people hold and to provide a forum for their thoughts and voices. In this way, creativity and personal capacity to understand and express issues and concerns are developed and nurtured in addition to the benefits of adding rigor, breadth and depth to research.

D. Who can create knowledge? Who can know?

An interpretive perspective recognizes and legitimizes the voices of others beside researchers. This perspective recognizes that a single place can have many different meanings and can be experienced quite differently by different users (Greider and Garkovich 1994; Rodman 1992). Rodman (1992:643) suggested that:

> Places, like voices, are local and multiple. For each inhabitant,
> a place has a unique reality, one in which meaning is shared
> with other people and places. The links in these chains of
> experienced places are forged of culture and history.

Places, as cultural systems, are significant not because of any *inherent value* or discernible "facts." Places are significant because of the *meanings and values* that evolve through our social interactions (Entrikin 1991; Hess 1990; Relph 1976).

Therefore, a study of place requires attention to social interaction and inclusion of those involved in the interactions in the study process (Schneekloth and Shibley 1995; Pred 1984).

Wheatley (1994) noted that an empirical-analytic approach leaves interpretation to experts who are supposed to be value-free, neutral observers. Recognizing that this is not possible, that no one can be neutral and value-free, Wheatley (1994:64) suggested that the way to confront "the murky, fuzzy world of non-objectivity" is through broad participation. She recommended that by expanding participation to multiple perspectives, viewpoints, and interpretations we can make better sense of the world. This "making better sense" can occur through an interpretive-participatory approach which enables participants to become lay social scientists (Stanley 1988/2) and researchers to become participants as catalysts, teachers or guides. Participatory approaches that allow citizens to become lay social scientists, such as civic science and social learning, require an underlying public philosophy of democratic deliberation.

E. Conceiving of and coming to know place

In the past 15 years or so, place has become an important topic, both in academia and in the popular press. For scholars place is locus of analysis, especially in fields like geography, environmental psychology, and landscape architecture, as well as sociology, anthropology, and environmental history. A stroll through a bookstore quickly reveals that literature on "place" is growing. Well known authors, such as Wendell Berry, Annie Dillard, Daniel Kemmis, Barry Lopez, Gary Nabahan, Richard Nelson, Gary Snyder, Wallace Stegner, Richard White, Charles Wilkinson, and Terry Tempest Williams are notable among the many authors writing about place in fiction and non-fiction. Interest in place is seen by some in social science as a reaction to the treatment of people and their place-based lived experiences by science and the mass-media (Sack 1992; Schroeder 1992; Williams 1995). It is hard for people to reconcile

their lived experiences with what they see on television, in the movies, in advertising, and at theme parks, (Sack 1992) and with what they read in formal reports and assessments (Williams 1994). The literature on "place" presented in Chapter 3 helps to situate this study as an inquiry into how researchers conceive and study place. The literature helps illuminate how place and placemaking are related to citizenship and democracy, and may also shed light on the increasing interest in this topic.

CHAPTER 3
UNDERSTANDING PLACE AS A
CULTURAL SYSTEM

> If places are indeed a fundamental aspect of man's existence in
> the world, if they are sources of security and identity for
> individuals and for groups of people, then it is important that
> the means of experiencing, creating and maintaining significant
> places are not lost.
>
> Relph, *Place and Placelessness*

I. INTRODUCTION

The meanings that people associate with places may be the glue that bind
people together (Hull IV et al. 1994). Thus in order to understand social relationships
and social systems accessing place-based meanings is important. Sagoff (1992b:365)
implored us to consider human relationships.

> Look first not to economic or ecological but political theory to
> figure out how a diversity of human communities can survive
> together – since people must trust and depend on one another at
> least as much as upon natural resources and ecological systems.

Stokols referred to these meanings as the "sociocultural 'residue' (or residual
meaning) that becomes attached to places as the result of their continuous association
with group activities" (quoted in Hull IV et al. 1994:110). In this chapter social
science approaches used to study place are reviewed. A conceptual framework of
place as a cultural system is developed that provides an alternative to the technical
rational view accessed by standard social assessment. A working framework is
developed to enable meanings, symbols, metaphors, and myths to be understood as
part of placemaking. Civic science is presented as a participatory approach to social
assessment enabling expression of and access to place as a cultural system.

II. SOCIAL SCIENCE AND THE STUDY OF PLACE

A. Place as a center of meaning

Tuan (1975:152) recognized place as "a center of meaning constructed by experience." He found this cultural conception more meaningful than considerations of size, scale, setting, or geographic location. However, understanding place as a cultural system, encompassing the meanings, symbols, human intentions, and experiences that create and recreate places, has received little attention from researchers (Fishwick and Vining 1992:57). By imposing narrow definitions on concepts such as "objectivity," and "rationality," and on what it means to study something "empirically," and who can do research, restrictive models of science have limited our access to place as a cultural system (Entrikin 1991). These unnecessarily reductive notions of science by separating the "feelings, symbolic meanings, moral sentiments, and intuitions . . . from the intellectual, rational features" (Walter 1988:2) have relegated the former to the arts and humanities. Thus, much of the work on place has been literary and artistic. This study is positioned in science; however, it recognizes and draws from sources in the humanities, literature, and the arts as well as the sciences.

B. Social science inquiry: approaches to the study of place

An interpretive methodology is a scientific approach that can access symbols and meanings and is thus able to broaden the perspective of place to include the aspects mentioned by Tuan (1975) Walter (1988) and others. This methodology also resists objectification of place (Greider and Garkovich 1994). The combination of resisting objectification and broadening the perspective of place makes the study of place more meaningful. As a narrative approach, an interpretive methodology uses description and storytelling techniques that are more commonly recognized and used by humans (Reason and Hawkins 1988) than the numerical displays, graphs and charts

predominantly used in empirical-analytic methods. Schneekloth and Shibley (1995:62) referred to stories as the "adhesive that holds groups together." Narrative approaches are powerful tools of explanation (Wondolleck and Yaffee 1994) and have the advantage of providing a more coherent and complete interpretation of social action (Tuan 1991) than empirical-analytic approaches. Entrikin (1991:23) described narrative as "a way of 'seeing things together.'" Stories provide a vehicle for creation and maintenance of place (Schneekloth and Shibley 1995).

Yet most social assessment research has focused on the physical, visual, and instrumental/utilitarian aspects of places and on describing places by location, appearance, types and quantities of resources, and reference to social and economic data. These measures do not illuminate the meanings that people ascribe to a place, or the relationships and social actions that create and recreate places.

This inadequacy is important. Stokowski (1991), Wilkinson (1992) and Williams (1995) have suggested that in resource management knowledge of meanings is not inconsequential. It is meanings that provide the basis for individual and collective action related to natural resource and community issues. Relph (1976:47) asserted that "places can *only* be known in their meanings" (emphasis added).

As described in Chapter 2, social inquiry based on a public philosophy of competitive pluralism and an empirical-analytic paradigm has very limited ability to access socially constructed symbols, meanings, metaphors and myths or the processes through which meanings are created, negotiated, and renegotiated (Caldwell 1990; Entrikin 1991; Greider and Garkovich 1994; Sack 1992; Wright 1992). These symbols, meanings, metaphors and myths are critical to an interpretive understanding of place (Appleyard 1979; Burch 1979; Bryan 1996; Entrikin 1989).

Empirical-analytic methods most often use standardized social variables to allow comparison across time and space (Machlis, Force and Dalton 1994). Population, employment, unemployment, and wages are frequently used variables. The Federal Census and state labor reports are commonly used sources of secondary

data. These data are collected regularly, are fairly easily accessible, and can be interpreted for non-experts.

In spite of their advantages, these data sources and standardized variables have problems. Much of the available data are limited to certain scales. Often the scales for which information is available do not match the scale at which information is needed. Federal Census data, particularly in rural areas, are not very useful or accurate below the county level. Community level data are often unavailable for rural communities.

Most importantly, variables don't speak for themselves. Variables must be interpreted by someone. The data themselves cannot tell us "why" something is different from one place to another or why something changes in the same place over time. The answers to the questions of "why" and "what is going on" are key pieces of information having to do with meanings and values.

The "particularity" of a place – that which makes a place what it is to the people who care about it – and its historical and cultural context are made invisible through the use of empirical-analytic methods. Places and the people who live, work and play in them often become homogenized – indistinguishable from one another (Johnston 1991). Use of empirical-analytic methods reduces place to a "context-less assemblage of objects" (Shields 1991:26). This reduction results in lost understanding of the more holistic aspects of place that may be critical in making management decisions.

Not only do empirical-analytic approaches miss key information and the richness of meanings, but no matter how scientific the study, if important meanings are overlooked, or if those who care about a place feel they have not had an adequate opportunity to participate, the results of the study may not be acceptable to stakeholders (Bates 1993; Brunson 1993; Koch and Kennedy 1991; Williams 1995). Dissatisfied stakeholders may resort to lawsuits, civil disobedience or Congressional action.

III. CONCEIVING OF PLACE AS A CULTURAL SYSTEM

While ethnographic studies frequently document legends, rituals, myths, and objects and locations of significance to people, rarely are these recognized as legitimate conceptions of place by empirical-analytic science or management that is based in this orientation. Yet, it is these myths, legends, rituals, and other cultural aspects, *including the researcher's study and documentation of these cultural aspects*, that contribute to the creation of a meaningful world out of neutral space – or the enactment of place (Walter 1988; Tuan 1991).

The enactment of place is equally the enactment of community. Berry (1987), Kemmis (1990), and Wilkinson (1992) have written of community and place as being inseparable and mutually supportive of each other. Place and community define and inform each other. In their discussion of community capacity, Kusel and Fortmann (1991:16) suggested that "responsibility to community relationships also requires explicit recognition of local residents' conception and valuation of place." They also suggested that "places which reinforce and help define the community living tradition . . . also provide the linkage between individual and society" (Kusel and Fortmann 1991:15).

While *community* can be used in a narrow sense to mean a geographic location or a legally recognized entity, Kusel and Fortmann (1991:10) expand the definition to encompass community "both as a specific place and as a sense of belonging and a shared identification among individuals." Individuals who live, work and play in a place may share in a sense of community. Additional characteristics of community include reciprocal and interdependent relationships and individual responsibility for a collective good (Kusel and Fortmann 1991). Examples of communities include churches, families, couples, and other sets of human relationships that entail a sense of belonging and shared identification.

A. A framework for place as a cultural system

The following conceptual framework conceives of place as a cultural system. The framework is modeled on Geertz' (1973) analysis of religion as a cultural system. Geertz (1973:89) defined culture as:

> an historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which [people] communicate, perpetuate, and develop their knowledge about and attitudes toward life.

Understood as a cultural system, place is a (1) system of meanings and symbols which invokes (2) powerful and long-lasting commitments to a shared image (3) by forming conceptions of attachment and interconnectedness through social interaction (4) such that a particular identity seems real and (5) people enact rituals to sustain individual and collective identity and a shared vision.

This is not to say that everyone agrees on the same meanings and vision. There are multiple perspectives and meanings are ever changing. One place can mean different things to different people (Greider and Garkovich 1994) and different things to the same person at different times and under different circumstances.

B. The role of ritual in creating and recreating place

Conceiving of place as a cultural system focuses attention on the ways people come together to create and maintain a collective set of meanings and symbols. One of the ways they do this is through rituals. According to Rappaport (1979:28), ritual is the "performance of conventionalized acts" that "gives the members of society confidence, it dispels their anxieties, it disciplines their social organization." The forest planning process and associated environmental impact assessment conducted by resource agencies, including public hearings, open houses and formal written review processes, have become rituals. Ritual is a process of social interaction that reinforces shared meanings and symbols. Rituals can be positive, as in the celebration of

centennials and other community events such as county fairs or community barbecues. Rituals have negative sides as well and may become merely a vehicle for propaganda to conceal and distort information or to convince citizens that things are the way they should be when that may not be the case. Forest planning processes illustrate this aspect of ritual when resource managers attempt to convince the public, and even those inside the agency, that benefits outweigh costs, when costs are actually higher. Using complex computer models costs are pro-rated out into the future to reduce the cost per-year of roads and other developments. Benefits are maximized by inflating potential use of logging roads for future recreation. These are only two of the ways numbers can be juggled to make benefits appear to outweigh costs.

"Ritual is used to shape and direct energy" (Kryder 1994:33). In American society, democratic forums (Stanley 1988/1) including civic science (Shannon and Antypas 1996) are examples of ritual activities that could be initiated to enact citizenship – shaping and directing the energy of citizens toward making better lives for themselves. One proposition to be examined in this dissertation is whether the sharing that occurs in civic science and social learning processes strengthens social connectedness and civic trust. Can citizen involvement in social learning reinforce citizen commitment to the social group and connectedness to the place? Can this involvement strengthen individual and group identity?

Social assessments and other resource planning processes have also become ritual activities. Resource agencies and development interests have tried to control these processes in order to define their respective predetermined visions (Gold 1985). As rituals these processes have the capacity to serve as forums for civic conversation and civic science that can lead to social learning, keeping in mind that conflict as well as cooperation shapes meaning and vision. The sharing that occurs within processes of civic science and social learning may reinforce personal and group identity, attachment, connectedness, and commitments to a shared image – that may be different from the one espoused by the agency and that may not always agree with

each other. One group may define a place in opposition to a group seen as a competitor, for example attaching meaning to a forest by labeling it "old growth" or "ancient" when others have proposed the trees for harvest.

C. Categories through which meanings can be expressed and accessed

To conceive of place as a cultural system required identifying cultural categories through which meanings could be expressed and rendered accessible. It is possible to understand place as a cultural system because meanings are public (Geertz 1973). To conceive of place as a cultural system required using an interpretive-participatory approach as "our formulations of other peoples' symbol systems must be actor-oriented" (Geertz 1973:14). To enable expression of and access to place as a cultural system people, rather than merely objects of study, must be participants in the study. No one can understand symbolism and meanings better than an "insider." Thoughts, actions, experiences, and expressions are constantly "becoming" through social actions. Place is thus emergent rather than out there waiting to be discovered; it must be experienced from the inside. This orientation to place is consistent with an understanding of *verstehen* as a creative process (Stewart 1981).

· As meanings are articulated through social action "we gain empirical access to [symbolic systems] by inspecting events" (Geertz 1973:17). In the White Pass assessment a search for social actions that would allow access to a system of symbols and shared meanings resulted in identification of several sociocultural constructs, or categories that can be observed and studied empirically (Table 5). Not to be confused with analytical categories, these categories are neither exclusive or inclusive. The categories are interrelated and cannot be separated out from each other, or taken out of their context and still retain their meaning. Each is a piece of an incomplete puzzle. These pieces, however, help illuminate our understanding of what the whole might be. The categories are not for counting or measuring but rather to help make invisible meanings and symbolism visible.

Table 5. Categories for conceiving of place as a cultural system

PLACE AS A CULTURAL SYSTEM CATEGORIES	LITERATURE RECOGNIZING THESE CATEGORIES

Civic engagement
    practices of commitment
    intermediate institutions
    governance
	Bellah et al.1985; Kemmis 1990; Meidinger 1987; Poston 1950; Schneekloth and Shibley 1995; Shannon 1991b; Stanley 1988/1; Tuan 1991

Civic friendship
    community of memory
    community of hope
	Bellah et al. 1985; Fircy 1945; Kemmis 1990; Poston 1950; Schneekloth and Shibley 1995; Shannon 1991a,b; Stanley 1983

Individual and group identity
    impression management
    self-worth   ,
    group identity
    quality of awareness
    inhabitance
	Dewey 1946, orig. 1927; Greider and Garkovich 1994; Hull IV, Lam and Vigo 1994; Kemmis 1990; Maguire 1987; Mumford 1938; Orr 1992; Park et al. 1993; Poston 1950; Relph 1976; Tuan 1975, 1991; Walter 1988

"Unpacking" each of these categories illustrates their usefulness in increasing our understanding of place as a cultural system. The descriptions which follow demonstrate how the categories were used to enable meanings, symbols, metaphors, and myths embedded within the White Pass community to be understood within the larger context of placemaking.

1. Civic engagement. Civic engagement reflects a high level of interaction with citizens working together to identify and work for a common good. Described by Kemmis (1990:11) as a "face-to-face, hands-on approach to problem-solving, with its implicit belief that people could rise above their particular interests to pursue a common good." Engagement can be understood through practices of commitment, establishment and maintenance of intermediate institutions and acts of governance.

a. Practices of commitment. Bellah et al. (1985:154) defined *practices of commitment* as "the patterns of loyalty and obligation that keep the community alive." Examples include rituals, and aesthetic and ethical practices. These practices involve shared activities that people participate in for the experience and the value of the activity itself rather than strictly as a means to an end (Bellah et al. 1985; Etzioni 1993). Practices of commitment are actions which improve the community and increase community capacity which is "the ability of the community to address local problems and to respond to external threats" (Kusel and Fortmann 1991:16). Kusel and Fortmann (1991) recognized practices of commitment as being important to both individual and community well-being.

"Sharing practices of commitment . . . helps us identify with others different from ourselves, yet joined with us not only in interdependence and a common destiny, but by common ends as well" (Bellah et al. 1985:252). Practices of commitment are important for collective and individual identity (Bellah et al. 1985). A neighborhood watch and a rural barn-raising are practices of commitment at the neighborhood or community level (Kemmis 1990). Organizing and attending family reunions are also important practices of commitment for both families and the greater community.

b. Intermediate institutions and networks. Churches, schools, civic groups, scout and 4-H clubs, and other social networks and community institutions are *intermediate institutions.* They are networks and organizations that mediate between private life and public life (Schneekloth and Shibley 1995). Intermediate institutions provide an opportunity to get involved at the local level and at a smaller scale than public office. Bellah et al. (1985) equated these activities of "getting involved" with the enactment of citizenship. Meidinger (1987:20-21) saw democracy as "not solely or even perhaps essentially a problem of the state. The ideal and practice of democracy pervade all forms of social organization." Thus, it is through these institutions that democracy and citizenship take on personal meaning. Aspects of interest to social inquiry include levels of diversity, both in respect to the variety of

institutions in a community and the diversity of participants in those institutions, and the overlap of interests, purposes, and participants.

The engagement of citizens in intermediate institutions perpetuates and develops "knowledge about and attitudes toward life" (Geertz 1973:89). Putnam (1995:76) saw the need for organizations and networks that "effectively embody – or generate – *social capital*, in the sense of mutual reciprocity, the resolution of dilemmas of collective action, and the broadening of social identities." The social action undertaken by intermediate institutions works to sustain individual and group identity and a shared vision that are important components of place as a cultural system.

The study groups that participated in the Montana Study can be understood as intermediate institutions (Poston 1950). The Montana Study founders believed that it was these rural, small scale activities (intermediate institutions) that provided the care and nurturing necessary to maintain a healthy democracy (Poston 1950). In small towns participation in clubs and organizations overlaps and interconnects forming a web of interrelationships that "offers a forum for the practice of democracy" (Schneekloth and Shibley 1995:230).

c. *Governance.* Governance, as the term is used here, is closely related to intermediate institutions and inhabitance, discussed below. Governance is about responsible participation in decision-making processes. It is "the act of living together, finding mutually acceptable uses for land and resources, and engaging in ongoing debate and dialogue to define and resolve mutual problems" (Shannon quoted in Bates 1993:105-106). The key consideration is ongoing dialogue. Intermediate institutions often provide a forum for dialogue. A recent land trade negotiated by Weyerhaeuser and a group of environmentalists can be understood as governance demonstrating that when given an opportunity people can come together to negotiate acceptable solutions to resource issues. An article in *The Seattle Times* (April 9, 1996) noted that:

> They are perhaps the most unlikely trading partners, but
> Weyerhaeuser and environmentalists led by the Sierra Club are
> joining today to propose a huge land swap in the Cascade
> Mountains . . . . Environmentalist and timber officials say it's
> an example of how bitter and complicated natural resource
> issues can be resolved without fighting.

Governance consists of the everyday experiences upon which people build a knowledge of their community and which allow them to make decisions grounded in their reality of the place (Friedmann 1987). Mumford (1938:382) referred to this as "the human scale in government."

> We must create in every region people who . . . will know in
> detail where they live: they will be united by a common feeling
> for their landscape, their literature and language, their local
> ways, and out of their own self-respect they will have a
> sympathetic understanding with other regions and different local
> peculiarities. They will be actively interested in the formal
> culture of their locality, which means their community, and their
> own personalities. Such people will contribute to our land
> planning, our industry planning, and our community planning,
> the authority of their own understanding, and the pressure of
> their own desires. Without them, planning is a barren
> externalism. (Mumford 1938:386)

The idea behind governance is that people will care enough to learn about their community and become involved in the discussion and debate of issues. This involvement assumes that there will be mechanisms which will accommodate their participation in processes such as civic science and social learning.

The Montana Study was an experiment in governance (Poston 1950). The community of Conrad, for example, organized and succeeded in getting a major bond passed for a new school; formed a public forum that, among other things, analyzed the state school laws; and organized people and resources to build a community swimming pool and bathhouse (Poston 1950).

(1) Second language. An important aspect of governance is developing a *second language.* A second language is a language of cooperation, collaboration, negotiation, partnership and neighborliness. It exposes the interconnectedness – or in its absence the lack of connectedness – of the community. It is a language that springs up from and supports tradition and commitment to place and community (Bellah et al. 1985; Kemmis 1990). Bellah et al. (1985) referred to the use of a second language in "neighborly conciliation" in conjunction with practices of commitment. Second languages:

> establish a web of interconnections by creating trust, joining
> people to families, friends, communities, and churches, and
> making each individual aware of his reliance on the larger
> society. They form those habits of the heart that are the matrix
> of a moral ecology, the connecting tissues of a body politic.
> (Bellah et al.1985:251)

Second languages are used when we refer to long term commitments and the common good rather than personal desires. Rooted in ways of being that are modeled and passed on to future generations, second languages are based on taking responsibility for the care of others "because that is what is essential to living a good life" (Bellah et al. 1985:162). Second language evolves through and enhances civic engagement and civic conversation. The concept of second language builds on the republicanism of classical Greece and Rome.

> [This perspective] presupposes that the citizens of a republic are
> motivated by civic virtues as well as self-interest. It views
> public participation as a form of moral education and sees its
> purposes as the attainment of *justice* and the *public good.*
> (Bellah et al. 1985:335)

The people of Lonepine, Darby, Stevensville, and the other Montana communities which Poston (1950) described, depended on second language in order to

create better communities. A second language was necessary for Weyerhaeuser and environmentalists- to negotiate a land trade.

2. Civic Friendship. Stanley (1983:861) referred to *civic friendship* as "the principle of public integration... a concept designed to call attention to bonds transcending mere commercial or military unity." This friendship develops and is maintained through communities of memory and hope as people "share an identity which is superordinate to whatever else divides them" (Stanley 1983:860).

a. Community of memory and community of hope. Telling a shared story is an important aspect of place. Shannon (1991b:28) noted that, "Places have social history. A place is created by people living and remembering changes in the social landscape over time." How the community came to be, its hopes and fears are part of *community of memory*. "These stories of collective history and exemplary individuals are an important part of the tradition that is so central to a community of memory" (Bellah et al. 1985:153).

> In order not to forget the past, a community is involved in retelling its story, its constitutive narrative, and in so doing, it offers examples of the men and women who have embodied and exemplified the meaning of community. (Bellah et al. 1985:153)

Here again there is a close connection between the larger community and family, as stories are often embedded in family experience (Poston 1950; Bellah et al. 1985; Kemmis 1990). Based on studies in Boston in the 1940's, Walter Firey (1945) identified the significance of symbolism and sentiments that included aspects of aesthetics, history, and family ties. Firey (1945) found that meanings, memories and sentiments provided the basis for certain social actions that were not based on economic reasoning. Fishwick and Vining (1992), in more recent studies of recreation sites, found that past experience was a key factor people identified with place. Community of memory can be understood through centennial celebrations and special community events to honor people and important events in a community's history.

Community of hope entails memories that "carry a context of meaning that can allow us to connect our aspirations for ourselves and those closest to us with the aspirations of a larger whole and see our own efforts as being, in part, contributions to a common good" (Bellah et al. 1985:153). Johnston (1994:iii) referred to these stories as "the embodiment of ideas and ideals."

The establishment and nurturing of *civic friendships* is an outcome of sharing in communities of memory and hope (Stanley 1983). *Communities of memory and hope* are often intertwined, as memories -- even sad, painful memories -- often carry a hopeful note for a better future. Church groups and many of the activities they undertake, both for their membership and for the community at large, are based on hope and faith (Schneekloth and Shibley 1995). Community groups like the study groups that came together in rural Montana in the late 1940's to study their communities, can be understood as communities of hope (Poston 1950).

3. Individual and group identity. Identity, as it is used here, encompasses place creation and definition through the media and other forms of impression management; sense-of-self and self-worth, including personal identification with and attachment to special places and experiences; identification with and a sense of attachment to a group; and development of quality of awareness; and inhabitance of a place. The five components that make up this category are intertwined and mutually re-enforcing.

a. Impression management. Place is created and re-created through communication. "What was a mere marker on the horizon can be transformed, by imaginative narration, into a vivid presence" (Tuan 1991:686). "Words," Tuan (1991:692) said, "have the grand power. . . to call places into being." Language and storytelling, are critical to conceiving of place as a cultural system. The meaning of a place results from "historical and social process, built up over time by large and small happenings" (Tuan 1991:692). Tuan (1991:692) said that "the meaning of a real place is constructed. . . through accretional layers of gossip and song, oral history, written

history, essays and poems, and through pictures." Greider and Garkovich (1994)
identified a variety of forms of impression management used to express meanings and
symbolism of places.

> Impression management . . . occurs through a variety of cultural
> media. Laws, customs, myths, legends, novels, poems, stories,
> histories, biography, art, photography, music, and movies are
> only some of the media through which [places] are created,
> recreated, and redefined. Indeed, any human activity (including
> talk) or product intended to communicate meaning to others is
> a potential medium for symbolizing [place]. (Greider and
> Garkovich 1994:18)[1]

Tourist flyers, brochures, and maps are examples of vehicles used in
impression management. Maps in particular can be very powerful in the way they
portray an area. Aberley (1993), in *Boundaries of home: Mapping for local
empowerment*, examined the vital role maps play in our lives. He countered the
appropriation of map making (a professionalization process) by providing a book full
of examples showing how communities have used map making in creating and
nurturing civic engagement, inhabitance, quality of awareness, and governance. He
suggested that the key to making empowering maps is experience of place.
Communities, through their mapping experiences shared stories, myths, songs, and
• images documenting the cultural connections among people and between people and a
place. Answering the question "what do you value in your place?" people are
encouraged to record and thus share what they know and care about. In one
particular project an English group based in London has successfully encouraged
hundreds of communities to map their "parishes." In the project, people have
recorded the values and meanings of places using "textiles, ceramics, photographs, a

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[1] Greider and Garkovich (1994) discussed impression management from the perspective of landscape but they
use landscape broadly to represent a symbolic environment that is socially created. For the purposes of the
discussion of impression management their comments apply equally well to place as conceived of as a cultural
system.

newspaper, paint and song" (King 1993:31). The group, Common Ground, has found that these mapping activities have identified what local places have to offer and what needs more attention, what makes one place uniquely different from another, and where people draw boundaries between places and why. Common Ground found that the mapping led to discussion and social action aimed at "ensuring that ordinary but well-loved features are looked after" (King 1993:33).

   b. Individual and group identity. Place identity has been studied as a component of *self-identity and community identity* by environmental psychologists (Hull IV, Lam, and Vigo 1994; Proshansky, Fabian, and Kaminoff 1995) and humanistic geographers (Buttimer 1980; Relph 1976; Tuan 1980). Place identity develops as a person identifies with a particular place and, over time, "acquires a sense of belonging and purpose which give[s] meaning to his or her life" (Proshansky, Fabian, and Kaminoff 1995:90). This sense of belonging is unselfconscious. This means that often people don't appreciate the connection they have to a place until the connection, or the place, is threatened (Brandenburg and Carroll 1995; Hester 1985).

   Relph (1976) recognized this relationship with place as vital to individual and group identity and security.

> The essence of place lies in the largely unselfconscious
> intentionality that defines places as centres of human existence.
> There is for virtually everyone a deep association with and   •
> consciousness of the places where we were born and grew up,
> where we live now, or where we have had particularly moving
> experiences. This association seems to constitute a vital source
> of both individual and cultural identify and security. (Relph
> 1976:43)

   Thus, a primary role of place is thought to be to engender a sense of belonging, attachment and security (Buttimer 1980; Relph 1976; Tuan 1980). As demonstrated in the White Pass assessment such feelings can improve one's sense of self worth and self-confidence. Group identity operates in much the same way as individual identity.

However, at the group level people work together to develop and maintain shared images through social interactions such as rituals.

c. *Quality of awareness.* Tuan (1975) described quality of awareness as something that is experienced with the whole body. This awareness is an important component of placemaking. Tuan (1975:165) said,

> To live in a place is to experience it, to be aware of it in the
> bones as well as with the head . . . . Place, at all scales from the
> armchair to the nation, is a construct of experience; it is
> sustained not only by timber, concrete and highways, but also
> by the quality of human awareness.

Developing *quality of awareness* was one of the goals of the Montana Study (Poston 1950). Entailing memory and imagination, images and sensory perceptions, moral judgment, passions, feelings, ideas, sentiments and meanings Walter (1988) referred to quality of awareness as "topistic reality." While some might look upon these aspects of awareness as individual and personal, understood from an interpretive perspective they are intersubjective and socially constructed. What this means is that they are shared through lived experience and communicated meanings and are thus knowable (Shield 1991).

d. *Inhabitance.* The concept of *inhabitance* is based on dwelling (Kemmis 1990) and having roots (Relph 1976; Orr 1992). "To *inhabit* a place is to dwell there in a practiced way, in a way which relies on certain regular, trusted habits of behavior" (Kemmis 1990:75). "To have roots in a place is to have a secure point from which to look out on the world, a firm grasp of one's own position in the order of things, and a significant spiritual and psychological attachment to somewhere in particular" (Relph 1976:38).

Orr (1992) contrasted inhabitants with residents. He saw *residents* as people who have shallow roots, loose ties, know little, and maybe care even less, about a place. Through participation in processes of engagement, especially civic science and

social learning, residents can become *inhabitants*, people who live in a close, "mutually nurturing relationship with a place" (Orr 1992:130).

Inhabitance is more than simply living somewhere. It is "an art requiring detailed knowledge of a place, the capacity for observation, and a sense of care and rootedness" (Orr 1992:130). This rootedness, while having aspects similar to a plant being rooted in the ground, refers more to a sense of connection within a web of relationships. To be rooted may be "the most important and least recognized need of the human soul [and] one of the hardest to define" (Weil quoted in Relph 1976:38).

Inhabitance is closely connected to governance, and quality of awareness. Orr (1992) suggested that inhabitance is the basis on which communities create and recreate themselves and is a necessary component for democracy as conceived of by Mumford, Dewey, and Jefferson. Others have suggested that inhabitance (in comparison to simply residing) can increase community capacity (Richardson 1994: Schneekloth and Shibley 1995) and is necessary to efforts to achieve sustainability (Sancar 1994).

People who take an active role in local planning or forest planning processes may be demonstrating inhabitance. There may be other more political reasons for their involvement, but for some it is to continue to gain and share knowledge of place. The concept of "living with," of finding ways to share space and inhabit a place with others, is a component of inhabitance. Since this often requires "the building of trust, of some sense of justice, of reliability or honesty," Kemmis (1990:118) suggested that it is this situation "from which civic virtues evolve." Thus, he determined that "places may play a role in the revival of citizenship" as we learn to inhabit places together (Kemmis 1990:118). Park (1993:19) went even further to suggest that "saving the world from technological and spiritual destruction depends on transforming it into a human sphere of life where community and critical consciousness thrive."

Inhabitance emphasizes the public's role in resource decisions. The public frequently defers to scientists looking for guidance in solving resource and

environmental issues. However, the decision of which action to take from among those offered by science is a social question rather than a science question (Caldwell 1990). Science can provide input but society must make the final choices. Inhabitance and quality of awareness enable more informed choices.

IV. USING PARTICIPATORY RESEARCH METHODS TO EXPRESS AND ACCESS PLACE MEANINGS

A. Gaining an understanding of place as a cultural system through social learning

"*Social learning* involves linking knowledge, power, and people in ways which simultaneously generate new knowledge, new benefits, and new action potentials as integral outcomes of a single process" (Korten 1981:614, emphasis added). These outcomes parallel the purposes of participatory research which proposes to blend investigation, education, and action (Maguire 1987; Park et al. 1993). Within the social learning tradition,

> knowledge is derived from experience and validated in practice, and therefore it is integrally a part of action. Knowledge, in this view, emerges from an ongoing dialectical process in which the main emphasis is on new practical undertakings: existing understanding (theory) is enriched with lessons drawn from experience, and the 'new' understanding is then applied in the continuing process of action and change. (Friedmann 1987:81)

Experts can facilitate these learning processes. However, the processes of learning require conscious reflection and interaction by citizens who desire meaningful participation. To get from public participation as simply data gathering or one-way education to a point where civic conversation, civic science, and social learning can occur requires a view of the public "as composed of whole individuals *who are learning about their interests* as they talk to one another" (Shannon 1991a:83).

Learning occurs during processes that allow citizens to explore their own interests and the interests of others as they negotiate meanings (Williams 1995). Professionals who participate in these processes can learn about the meanings and priorities people hold and can improve their professional understanding of the implications of various resource management alternatives (Shannon 1991a,b).

Conscientisation, a useful concept found in the international development literature, is the process through which "people try to understand their present situation in terms of the prevailing social, economic, and political relationships in which they find themselves" (Burkey 1993:55). Burkey described this process of self-reflective critical awareness as *true participation,* since the people who are directly affected are involved in deciding what their needs and issues are rather than experts from somewhere else. The process is empowering because understanding develops among participants while they work together.

B. Participatory research as citizenship and democracy

According to Aristotle individual fulfillment could only be achieved through civic participation (Walter 1988). Through *civic engagement* one could improve the quality of life by striving for the common good. Bachrach (1975:41) described democratic participation as "a process in which persons formulate, discuss, and decide public issues that are important to them and directly affect their lives." It is an ongoing process in which participants are active from start to finish, from the identification of issues through taking action on them. It involves a central meaning of "democratic" — the process of working for and reaching consensus (Bellah et al 1985).

Bellah et al. (1985:200) saw citizenship as "getting involved with one's neighbors for the good of the community." Mary Stanley (1988/2), in her description of citizenship, recommended that citizens aspire to become *lay social scientists.* It is the lay social scientist who engages in civic science (Shannon and Antypas 1996) and social learning (Korten 1981). As lay social scientists, citizens become active "inquiring and critical citizens" instead of passive unreflective recipients of the services

of, and objects of the actions of, a few scientists (Stanley 1988/2:14). As lay social scientists citizens can reclaim access to placemaking activities, including understanding and participating in decisions about the places they live, work, and play.

Research is a social activity with the researcher as a part of what is being investigated (Burkey 1993). Roles are expanded as citizens become researchers and researchers become citizens. The object is not only to generate new knowledge, the traditional role of science, but to facilitate an ongoing process of reflection and action whereby citizens will continue the documentation, analysis, and dissemination of information and become empowered in dealing with new issues as they arise (Burkey 1993; Maguire 1987; Park et al. 1993).

As a social learning process, participatory research leads to "education and development of consciousness, and of mobilization for action" and a sense of power for involved people (Gaventa 1993:34). The process enriches people's lives, affects individuals' outlooks, their personalities, and their "development into social beings" (Bachrach 1975:52) and active citizens (Shannon and Antypas 1996).

> Participants are regarded as integrated human beings who are objects and subjects at once. They are regarded as people whose thoughts, actions, experiences, and ascriptions of meaning are constantly becoming through their involvement in the workings of society. (Pred 1984:280)

Participatory processes build on the understanding that reporting on a place he or she knows is within the capacity of every person. This dissertation proposes that through processes of reflection and reporting self-confidence, group skills, individual and group identity, civic connectedness and community pride increase as knowledge about a place is shared and grows. The knowledge gathered is that which is most useful and important to citizens rather than what is assumed to be important by outsiders (Burkey 1993).

This participatory approach builds on the premise that the experience will be richer as more people are involved. Wheatley (1994:65) recognized the need for

approaches "in which more and more of us engage freely, evoking multiple meanings through our powers of observation." She observed that "[a] multiplicity of interactions can elicit many . . . potentials, giving a genuine richness to the data that is lost when we restrict information access to only a few people" (Wheatley 1994:65).

Traditional planning and management activities often achieve the following:

- They disconnect actions and effects from the places in which they will occur.

- They decontextualize activities by looking at social and economic aspects in isolation from environmental aspects.

- They oversimplify and polarize social meanings and values.

- They simply collect data when they could be promoting conversation and civic science.

- They often exacerbate social class differences

- They can stymie the public's meaningful participation, prevent discovery and expression of meanings people have for places, and deny participants -- agency and citizens alike -- an opportunity to engage together in social learning.

C. Social assessment as civic science -- using participatory research

The White Pass Community Self-Assessment provided an opportunity to use a participatory approach in a social assessment. This methodology is particularly appropriate when conceiving place as a cultural system because place meanings are not fixed or finished but always in the process of being enacted. Conceived as a cultural system, place is reconstructed through the process of study. Thus, it is imperative that people who are themselves part of the place are involved in its study.

Participatory processes operate within an interpretive paradigm that allows expression of and access to meanings, symbols, and metaphors. A variety of methods for making meaning and action visible were used in this study including participant observation, both individual and group interviewing, document analysis, and use of

photography and mapping. These methods allowed access to interactive, practical, relational, and interpretive knowledge – knowledge necessary to illuminate place as a cultural system.

CHAPTER 4

THE WHITE PASS COMMUNITY SELF-ASSESSMENT: STUDYING PLACE AS A CULTURAL SYSTEM

> We are always in a cultural world, amidst a "web of significance we ourselves have spun." There is no outside, detached standpoint from which to gather and present brute data. When we try to understand the cultural world, we are dealing with interpretations and interpretations of interpretation. Culture, the shared meanings, practices, and symbols that constitute the human world, does not present itself neutrally or with one voice. It is always multivocal and overdetermined, and both the observer and the observed are always enmeshed in it; that is our situation. There is no privileged position, no absolute perspective, no final recounting.
>
> Rabinow and Sullivan, *The Interpretive Turn: Emergence of an Approach*

I. INTRODUCTION

The third component of this dissertation was participation as a research facilitator and participant in a civic science process. To study place as a cultural system required conditions difficult to create through standard research design. Conditions had to emerge within a "wild laboratory," i.e., they had to occur naturally within the day-to-day circumstances of social life. Fortunately for this study, serendipity intervened and necessary conditions were realized. Stemming from President Clinton's Forest Summit in Portland, Oregon, in April 1983, a series of events was set in motion. When combined with local conditions and personalities, these events provided the capacity to proceed with a study of place as a cultural

system as experienced through the White Pass community self-assessment, hereafter referred to as the White Pass process.

By way of background to this study, the Forest Summit is introduced along with some of the processes that followed it. Then, an orientation to the physical and social setting of the Cispus Adaptive Management Area (AMA) and the White Pass School District is provided. This is the setting within which the White Pass process was embedded. Next, the White Pass community self-assessment, as *social learning*, and the Discovery Team process as *civic science* are presented as a study of place as a cultural system. The categories developed in Chapter 3 are used to help elucidate the White Pass process as the study of place as a cultural system. Events that occurred in the process of the assessment itself are presented along with excerpts from the narratives developed by the student-researchers.

The discussion presented in this chapter is not an attempt to present exhaustive coverage of everything that could be said about the cultural system found in the White Pass area. While other organizing frameworks are possible and other equally appropriate and valuable stories could have been collected, the purpose here is to demonstrate the usefulness of conceiving of place as a cultural system. The categories overlap and many relationships and social actions could have been classified within more than one category. Some may view this as a limitation. It can also be viewed as demonstration of the interrelationships that create and maintain place. The categories community of memory and community of hope were so closely intertwined that they were collapsed into one category. Initially civic science and social learning were considered categories. However, it became evident that civic science and social learning are the *processes* that enable the understanding of place as a cultural system by increasing our awareness.

II. THE FOREST SUMMIT AND STUDY BACKGROUND

The origin of the White Pass self-assessment requires going back to President Clinton's Forest Summit in 1993. The summit was an attempt to find common ground that would help resolve forestry issues in the Pacific Northwest.[1] Following the day-long meeting, Clinton appointed three teams to assist in exploring issues and developing options for relieving the contentious situation that had developed around the management of the region's federal forest lands.

The Forest Ecosystem Management Assessment Team (FEMAT) was given the task of developing, analyzing, and evaluating a range of options for management of federal lands within the range of the northern spotted owl in Western Washington, Oregon, and Northern California (Shannon and Johnson 1994). Within days of the President's visit the FEMAT convened in Portland.

The social scientists working on FEMAT were frustrated with the lack of public participation in the social assessment component of the FEMAT process. The social assessment component was developed in a couple of months, partially from information gathered in "expert" workshops held with extension agents and other government employees familiar with local communities in the study area. Public participation was not possible because of the limited time frame, inadequate funding, and requirements of the Federal Advisory Committee Act (FACA).[2]

Frustrated by these limitations and by the broader problem of inadequate funding for social research, in their writing the social scientists encouraged communities to undertake *self-assessments* on their own initiative. The thinking behind this formal recommendation was two-fold. First, if communities would do this,

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[1] The April 1994 issue of the *Journal of Forestry* provides an overview of the summit and the activities that followed.

[2] For more information on FACA and FEMAT see "FEMAT Goes to Court" in the *Journal of Forestry*, April 1994, page 18.

social assessments could be done even if agencies and other research institutions did

not have the resources to do them. And second, self-assessments might be able to

provide more useful information than standard social assessments had provided. As

discussed earlier, indicators used by standard assessment processes are often

inadequate and fail to provide managers with useful information. For employment, a

standard variable used in assessments, data provide no information on self-employment

and other kinds of income that may be substantial. In some rural communities trade

and barter are important economic factors that are not reflected in income reporting.

In addition, employment may not be the appropriate measure for the questions that

need to be asked and may not provide information that is of practical use to managers.

Community capacity for action or community-well being may not be understood, let

alone measured, by traditional assessment methods and variables (Bengston 1994a;

Krannich et. al 1994; Kusel and Fortmann 1991; Williams 1995). Chapter 5 provides a

more complete critique of a standard social assessment process.

The FEMAT report does not say how to do a self-assessment. What it does

say is:

> Self-assessment is useful for understanding communities needs
> *and*, equally important, will enhance community capacity by
> stimulating local involvement, providing local residents
> experience in planning for the community, improving morale
> and, if assessments include county and state officials and
> resource agency personnel, making linkages with outside
> institutions. Providing a forum where communities can voice
> their concerns, collectively define their needs and become
> effective actors in determining their futures can help catalyze
> community-based improvement efforts that go well beyond
> forest management. (FEMAT 1993:VII-79)

Self-assessment as conceived by FEMAT requires understanding the role of

citizens as scientists and the role of researchers as participants. Within this orientation,

the White Pass process can be understood as a process of *civic science* (Shannon and

Antypas 1996).

III. SOCIAL AND PHYSICAL CONTEXT

A. Adaptive management areas as venues for experimentation

The FEMAT process laid the groundwork for the creation of the Northwest Forest Plan. One aspect of this plan was the creation of a system of ten Adaptive Management Areas (AMA) to allow and facilitate experimentation with both technical and social aspects of ecosystem management (Thomas 1994). The AMAs were created to be diverse in terms of biology, geography, climate, social and economic relations, ownership patterns, and technical management challenges. The new management areas were co-located with transitioning communities experiencing significant change as a result of decreased timber harvest levels.

AMAs were designed to provide an opportunity to connect and reconnect local communities with the forest by recognizing and incorporating local knowledge into management (Stankey and Shindler 1996). Specific opportunities were left undefined in the hope that innovative methods of experimentation such as civic science would create both ideas and the capacity for action that would lead to specific experiments appropriate to each individual AMA.

B. The Cispus Adaptive Management Area and the White Pass School District

The Cispus AMA on the Gifford Pinchot National Forest overlaps two ranger districts. The AMA is wholly managed by the Gifford Pinchot National Forest. At 143,000 acres the Cispus AMA and the surrounding forest are heavily used by a variety of recreationists drawn by the area's many attractions.

> There is Mt. Rainier at 14,410 feet tall. It is the highest peak in the Cascades. There is Mt. Adams at 12,307 feet tall, now the second highest peak. Mt. St. Helens stands at 8,363 feet tall. (Discovery Team 1996)

The Goat Rocks Wilderness Area to the east, Mt. Rainier National Park to the north, Mt. St. Helens National Volcanic Monument to the south, and the Pacific Crest Trail, which cuts through the Cispus AMA, all attract visitors to the area. The Cispus AMA is dotted with scenic lakes and sliced by rivers and streams. Wildlife such as deer and elk are abundant. The Forest Service maintains a number of campgrounds, trails, and other recreational facilities within the Cispus AMA.

The Cispus AMA and the surrounding National Forest lands are popular with horseback riders, hikers, campers, snowmobilers, mountain bikers, berrypickers, hunters, fishers, and sightseers. Recreationists from Olympia, Tacoma, and Seattle are frequent visitors, often returning to the same place year after year. *Special forest products*, like mushrooms and bear grass, are gathered within the Cispus AMA. Commercial timber is also available for harvest on the Cispus AMA.

Within the group of ten AMAs, each AMA has a different focus. One focus of the Cispus AMA is the use of social science research to develop management approaches that are responsive to the relationships people have across the landscape. This focus was defined by a regional steering committee of Forest Service employees at the ranger district and forest levels subsequent to the original designation of AMAs and their "official" emphasis. Focusing on relationships is particularly important in the Cispus AMA where the demands for environmental values, recreation, special forest products and timber are often seen as competing and incompatible. Even within one interest group, such as recreation, the demands of different groups can seem at odds as horseback riders and hikers, or hikers and mountain bikers may appear to have competing or conflicting interests and needs.

Part of the Cispus AMA lies within the White Pass School District. Most of the inhabited portions of the school district are within what is locally known as the Big Bottom Valley, which is located in eastern Lewis County of southwestern Washington. US Highway 12 runs east-west through the valley floor. Three unincorporated communities -- Packwood, Randle and Glenoma -- straddle the highway at the east

end of the county. Based on the 1990 census the approximate population of the valley and the school district which encompasses these three communities is 5,000 residents.

Business and community activity center around this narrow corridor of private land situated between mountain ranges forming the national forest. The valley is from two to six miles wide and about thirty miles long. The mountains tower above the valley to both the north and south. The valley was formed by the Cowlitz River which is joined at the lower end (to the west) by the Cispus River.

IV. THE WHITE PASS COMMUNITY SELF-ASSESSMENT AS SOCIAL LEARNING

In order to elucidate the White Pass process as a placemaking activity information about how the process progressed chronologically is provided. Understanding this process provides a foundation for analysis and discussion presented in the remainder of this dissertation.

A. Coming together as citizens to explore concerns and interests

Social learning is a process that brings together knowledge, power and people in order to generate new knowledge, new benefits and opportunities for social action (Korten 1981). The idea for a community self-assessment provided the impetus for citizens in the White Pass community to join in a civic project that could be approached as an experiment in social learning.

The White Pass self-assessment evolved opportunistically with the coincidence of several interests that could be satisfied through social inquiry. Three local interests — represented by the AMA coordinator, social service providers, and the school superintendent — are presented here to introduce the process. Assistance to and study of the inquiry process itself became a fourth, "outside," interest represented by the Pacific Northwest Research Station (PNW), a research unit of the Forest Service.

1. The Cispus AMA coordinator. Margaret McHugh was appointed coordinator for the Cispus AMA in 1994. One of the first requirements for each AMA was to develop a management plan that included social assessment as one component. McHugh recognized the importance of social science and public participation and looked to self-assessment as a way to embrace both while strengthening the identity of the Forest Service as part of the community. While most agency public involvement is a professionalized process of either gathering or providing information, it was symbolic that, under the rubric of adaptive management, McHugh proposed two processes that would involve the public and the agency in new ways. The first process was a collaborative learning process to be facilitated by the agency and the second was a self-assessment process that would be a community-based project with agency participation.

As part of AMA planning, members of the public were invited to join with the agency as collaborators in a process that emphasized managers, researchers and citizens learning about the AMA together. The process involved a series of evening work sessions, two day-long workshops and a field trip. The process was organized and orchestrated by the agency but the public was made to feel welcome by having employees in street clothes participating along with citizens, allowing plenty of time for verbal and written feedback at each session, and designing each session so that it was highly interactive with an emphasis on participation with other citizens, managers and scientists.

Recognizing an opportunity to involve the public and acting to create it demonstrated both a commitment to the future of the community and a desire to improve relations between the community and the Forest Service. Like a proffered olive branch, the offer to engage in a collaborative effort was appreciated by the citizens in the White Pass area (Graham 1996).

2. Social service providers. While McHugh was exploring how to accomplish a social assessment, a small, informal group of social service providers (consisting of

Doug Hayden, director of White Pass Community Services, a local non-profit social service organization; Larry Cook, Second Chance Services Grant Coordinator; and Dennis Degener, a Methodist minister and mental health counselor), was considering how to challenge the 1990 Federal Census. Hayden, Cook, and Degener were fairly well convinced that the Federal Census data, upon which state funding for social service programs is based, did not accurately reflect the demographics of the community. To them the Federal Census represented financial support for their programs. Their experience in working with those in need, and thus their practical knowledge, showed that poverty levels, measured by food bank requests and free lunch use, had increased as funding for these programs had decreased. The identity of the community as defined by the Federal Census was not the same as the reality they lived with daily. For them the Federal Census was a powerful foe.

3. The school superintendent. McHugh was interested in making connections with the community. She approached Gene Schmidt, School Superintendent, with her idea for a community self-assessment. With school board members as the only elected officials in the White Pass area, the school superintendent is recognized as a community leader. Schmidt had an interest in expanding educational and training opportunities for high school students. He believed that exposing students to a research experience would significantly benefit White Pass students. He saw community self-assessment as a way for students to apply their academic skills, and learn new skills, in a community-based application.

The White Pass is a remote, rural school district. Schmidt believed that the exposure of the students to research activities and researchers would expand their horizons beyond the mill and other timber industry work they were familiar with in their day-to-day lives. McHugh and Schmidt quickly identified the compatibility and potential of self-assessment as a school project.

4. PNW Research Station. While McHugh was in the early stages of her discussions with members of the community, she requested assistance in developing

and carrying out a community self-assessment from Dr. Roger Clark. Clark is the Program Manager for the People and Natural Resources Research, Development and Application (RD&A) Program in the Pacific Northwest Research Station of the US Forest Service. He was the team leader for the social science team involved in the FEMAT. As an RD&A effort the People and Natural Resources Program has a direct mission to both transfer scientific research to potential users and to engage them in defining the research focus of the program. In order to share the lessons learned with others, Clark was interested in seeing how a community would go about the process of self-assessment.

Clark became an unofficial advisor to McHugh, Schmidt, Hayden, Cook and Degener and over the first few months attended meetings and participated by asking probing questions about what members hoped to accomplish, and why, and suggesting ideas about how they might proceed. He also offered support in the form of a graduate student to help record the process. Clark's initial involvement opened the door for this dissertation research, primarily because of the stance he took in working with the White Pass people. Recognizing the lack of trust in the Forest Service and in research as an institution, he recognized the need to build trust. Clark approached the White Pass situation "not by insisting that others place their trust in [him] but by placing [himself] in trust with them, by risking [himself]" (Friedmann 1979:11). Friedmann (1979:11) suggested that "in this way, reciprocity will be forthcoming, dialogue will be achieved." In the White Pass case this approach worked and dialogue and trust were forthcoming.

B. Blending related interests to form a community group

A synergistic relationship developed between the Forest Service AMA, represented by McHugh, social service providers, initially Hayden, Cook, and Degener, and the school, represented by Schmidt. With most of the initiative coming from McHugh and Schmidt these efforts coalesced, resulting in the formation of the

White Pass Community Self-Assessment Committee (hereinafter referred to as the Committee) late in 1994. This unchartered, "self-generated" group took its name both from the self-assessment idea in FEMAT and from the decision to use the school district boundaries as the study area.

The coalescence of this new citizen's group is impressive as those who committed to regular participation already had many other civic responsibilities. Ginger Burns was active in the Illahee Garden Club, the RSVP senior citizens group, and was one of the primary volunteers for the food bank. Degener, in addition to his responsibilities as a Methodist minister, also maintained a mental health practice and worked with two mental health organizations. The individuals who came forward to participate were committed enough to make room for this activity in their already busy schedules.

To keep the group process moving, Schmidt served as facilitator and McHugh took notes at the Committee's regular monthly meetings. McHugh also handled mailing the meeting notes and other information to members on a growing mailing list. Initially Schmidt, through his position at the school, donated lunches from the school cafeteria for the lunch time meetings.

Of those initially involved, Schmidt and McHugh had most to gain from the success of this effort. McHugh needed to gather social assessment data and received no separate budget for the social assessment element required by the agency AMA planning effort. Schmidt, on the other hand, was facing possible non-renewal of his contract with the school and was looking for something that might establish his value to the community. He was a catalyst for action, exercised leadership and facilitation skills and had a charismatic personality that drew people into the project. However, his contract was not renewed and he left the area in June. There was confusion among many as to why Schmidt was "let go." Some Committee members speculated that he was too progressive and may have tried to move too quickly in this conservative community. He had suggested closing the elementary school in Glenoma, not

recognizing that, even though it may have been a smart management move, the school is what represents community to those living in Glenoma. Without the school, many feared, Glenoma would cease to exist.

C. Building a base of participation

As the Committee matured it passed through the four stages of participation identified by Mondros and Wilson (1994) in their study of community organizations: (1) identification of a member pool and "building a base," (2) creating and communicating a message, (3) initial engagement, and (4) sustaining and deepening participation. These stages help explain the process of organizational development that took place. The stages also link nicely with categories in the place framework. Stage 1 focuses on who participated. Stage 3 covers how they came to be involved. Discussion of stages 2 and 4 are discussed later as they relate especially to creating and maintaining group identity and practices of commitment — aspects of place as a cultural system.

Initial Committee members were primarily educators and social service workers. This composition made it easier for the group to keep a focused agenda as they shared a common language and many of the same interests and concerns. Mondros and Wilson (1994) found that most individuals find it easier to work with people they know well and who have similar agendas. In contrast, Clark suggested that a committee having a cross section of members from all parts of the local community was important to the success of the assessment effort. This recommendation was in keeping with the scientific work of the Committee in that the meaning of the history and social context could not be fully understood without participation from all those whose lives give it meaning.

The Montana Study, as a scientific effort, also identified the importance of having a representative group and a diversity of opinions as a means to achieving "objectivity" by bringing into the conversation a variety of perspectives on a question

(Poston 1950). These natural tensions between developing a full, rich analysis with a diverse group and having an easy to manage group are inherent in open democratic processes. Careful leadership and strong commitment to the process are necessary to overcome them. In the White Pass assessment the Committee was not able to diversify its membership beyond the initial education, social work, Forest Service interests. This may have limited the Committee's potential for learning and action.

Initial members acted as "*boundary-spanners,*" reaching out to others in their various networks. A boundary-spanner is someone who, as the result of their job or social and community activities is a member of several different groups and can communicate across the differences between groups. In a new group achieving a diverse membership requires drawing members from different social groups. Boundary-spanners improve a group's ability to accomplish this. Schmidt was a boundary-spanner. Through his position as school superintendent he provided a link between the school, the social service community, and the business community. One member Schmidt helped draw in was a newspaper reporter. Diane Evans, became a regular member of the Committee after coming to track down a story for the newspaper. Evans, a White Pass High School graduate, lived in nearby Morton, but maintained a strong commitment to White Pass.

> I'm kind of playing two parts. Gene invited me last month, and I went to see if there was a story. I didn't write a story on [the project] but I became very interested and wanted to become involved as an individual. (personal communication)

Within a few months of forming, the group had expanded (Table 6). County level social service providers from outside the local community joined the Committee. This expanded the perspectives represented in the group as new members from Chehalis, Centralia, and Morton came from much bigger communities and could put the White Pass concerns in a larger context. However, since they weren't local residents, they could not speak from the same perspective as someone who lived in

White Pass. A high school teacher and a literacy program director also joined the Committee. Local business people who attended on occasion included a Packwood realtor, and an economic development specialist who lived in Morton but who was responsible for economic development activities in the White Pass area of the county.

Table 6. Members of the White Pass Community Self-Assessment Committee

White Pass Community Self-Assessment Committee Frequent Participants	
Ginger Burns	RSVP, Illahe Garden Club
Dennis Degener	United Methodist Church, Cascade Mental Health White Pass Community Services
Doug Hayden	White Pass Community Services
Margaret McHugh	Randle Ranger District
John Hawkins	Packwood Ranger District
Gene Schmidt	White Pass School District
Betty Klattenhoff	White Pass School District
Larry Cook	Second Chance Services Grant Coordinator
Sandy Floe	East Lewis County Historian
Bill Marshall	Economic Development Council
Deanna Cook	Lewis County Community Health Services Employment Security
Bill Truit	4-U Realty
Mary Brown	Human Response Network
Kim Megyesi	Human Response Network
Cap Pattison	WP Community Assistance Group (also a writer for the *Chronicle*)
Charlotte Lang	Morton General Hospital
Jan Crayk	Lewis County Literacy Services
Diane Evans	Morton *Journal*

Over the course of the spring and summer of 1995 the attendance at Committee meetings was more or less stable with most of the individuals listed in Table 6 attending regular monthly meetings to participate in discussions about the community and the issues Committee members identified.

D. Creating a self-assessment process

With Schmidt being the strongest and, with the exception of McHugh, the most dedicated member of the Committee, the Committee's first major step in the actual doing of a self-assessment was to create a student social assessment project. The school, being an entity recognized by the government, was able to apply for and receive state and county grant money that the unincorporated Committee did not have access to. Schmidt recognized the potential for funding and he explored funding possibilities. He personally wrote two grants for a project designed to employ high school students as researchers.

As a project that would engage students as researchers, the process was expected to improve understanding of the community while building student skills. The project was also expected to help identify information needs for future assessment activities, while building ownership of and responsibility for the process within the community.

The school received $21,000 for the summer project. The Job Training Partnership Act (JTPA) and the Washington Department of Social and Health Services (DSHS), through the county's Continuum of Care, provided the funding. The grants were restricted to hiring students, and the JTPA grant targeted at-risk students. At-risk students were students enrolled in special education classes who had been labeled as academically challenged and at risk of dropping out of school. There was also money for supervisors and a very small amount for supplies and travel expenses.

Receiving this funding was pivotal because it framed the project much differently than if the grant had not been tied to a student employment program. With Schmidt's impending departure, Betty Klattenhoff, Vocational Education Director at the high school, took on responsibility for the project. Under Klattenhoff's influence, the project took on an emphasis oriented around employability skills and job training.

In her end-of-project report,[3] Klattenhoff recalled the issues around which the Committee and the social assessment were formed.

> The committee felt that there was no common understanding of the true demographics of the area but there was an increasingly vital need to collect and validate social, economic, and geographical data. The information collected needed to be useful to a large segment of the population and stored in a location that would be easily accessible for sharing and maintenance. It was felt that the community itself must be involved in deciding what data would be collected, to insure that the information was pertinent and of value to the residents.

Her statement reflects the community's historical feelings of powerlessness and their decision to take action on their own behalf. Traditionally, data are collected by outsiders (non-community researchers), stored outside the local area, and are inaccessible to local citizens -- or at least from the local perspective appear to be. The White Pass area had been studied in 1991 by an outside consultant hired by the state as part of a SWOT study. A SWOT is a quick assessment of local strengths, weaknesses, opportunities, and threats. The White Pass SWOT was conducted by a consultant who came into the area and spent two to three days interviewing key individuals around the community. The SWOT report was based on this brief experience. The SWOT report was not seen as a credible study or looked on favorably by Committee members because the study had been designed, orchestrated and conducted by outsiders. Local residents felt that "it had been done to them."

In the situation community members faced with the SWOT they felt that they had little control over the use of information about them, their lives and their community. They felt powerless to affect the resulting actions of others based on the information gathered in the SWOT. John Dewey, (in 1927), wrote that the "invasion"

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[3] In August Klattenhoff developed a report to give to funders, school board members and others interested in the Discovery Team process. The report included the Committee goals, an overview of the Discovery Team

of local communities "by outside uncontrolled agencies [is an] immediate source of the instability, disintegration, and restlessness which characterizes the present epoch" (Dewey quoted in Orr 1992:130). The purpose of committing White Pass community resources and energy to the collection of social information was to control how information is used, what actions result and who participates in making these choices.

Schneekloth and Shibley (1995) documented several occasions where social groups took control over aspects of their social lives. In one case, a large Baptist congregation worked together in thinking through its needs for a new church both for its own work and also to fill needs of the larger community. Members of the congregation worked for two years developing a design that would satisfy their needs. While the effort began as a construction project, the process included working through questions that helped congregation members clarify their overall mission and purpose – and their convictions to their church, its mission, and each other.

The Roanoke Neighborhood Partnership (RNP) in Roanoke, Virginia was based on the premise that people care about the places they live and will become involved if forums are provided that are accessible and understandable (Schneekloth and Shibley 1995). The partnership project involved bringing together individuals, non-profit and volunteer organizations, businesses, and government to identify issues and needs and to find ways to take action on them (Schneekloth and Shibley 1995). The cases described by Schneekloth and Shibley mirror the work of the Montana Study (Poston 1950) as citizens came together to take control of situations affecting their lives. This can be understood both as civic engagement and the enactment of citizenship.

Much along these same lines the members of the Committee were committed to the identification of concerns and needs and ways to take action on them. The Committee wanted to learn about the residents of the White Pass area, what it was

process, list of Discovery Team participants, and excerpts from student-researcher and teacher-supervisor evaluations of the process.

about the Big Bottom Valley that kept people there, and what concerns and interests they had. The Committee was interested in grounding their efforts in the interests of the community as a whole. The information important to the Committee can be seen as place-based information. The Committee was interested in placemaking – in creating an understanding of the White Pass area as the place that they and their day-to-day lives were intertwined in.

E. Creating and communicating a group identity

For the Committee defining its purpose was an important step in establishing the group's identity. In March 1995 Committee members drafted a set of four goals to guide their efforts and to enable them to describe their purpose to others (Table 7). The goals encompassed the Committee's interest in collecting both data that would allow it to challenge the Federal Census and information on historic, cultural, economic and social aspects of the White Pass area.

Goals addressed strengthening relationships and gathering information on needs, concerns, and opportunities in areas of economic development, social services, and training and education. The goals are examples of what Mondros and Wilson (1994) identified as step 2 of group organizing - creating and communicating a message. Having an agreed upon set of goals represented a commitment to a shared vision.

Table 7. White Pass Community Self-Assessment Committee Goals

Develop an information infrastructure that is pertinent and accessible

Objectives:
- Develop a database that accurately represents East Lewis County
- Validate census information and previous surveys
- Establish a computer network for the community
- Make it accessible to the public
- Keep it simple

Appreciate the history of the area

Objectives:
- Document the history of the area
- Link young people back to the community

Strengthen links between community, schools, and government agencies

Objectives:
- Develop trust
- Share resources
- Actively seek collaboration between agencies
- Develop a working relationship with individuals within the agencies

Maintain a viable community (social and economic)

Objectives:
- Identify types of economy necessary for survival; current and future economic diversity
- Identify and track money flow into, through and out of the community
- Identify factors that keep population in the valley
- Identify support service needs of the community
- Identify training and academic opportunities

In addition to gaining control over what data were collected, how the data were used, and who had access to the data, the Committee goals and objectives acknowledge the importance of interconnectedness. The Committee was not interested in data collection alone. Developing relationships -- engagement with others -- was equally as important and is critical to the creation and maintenance of place. The relationships they hoped to build included inter-generational relationships, as well as those between the school, businesses, and government agencies -- especially the Forest Service. The goals acknowledge a need -- and potentiality -- to increase levels of trust and share resources.

The goals demonstrate the educational orientation of the Committee. The goals express a concern for identifying opportunities for training and academic advancement. The Committee was interested in expanding learning opportunities for high school students, recent high school graduates, and adults of all ages. This parallels the premise of the Montana Study which saw learning as a lifelong endeavor enmeshed in day-to-day-life rather than cloistered on university campuses (Poston 1950). This educational component was in some measure achieved, beyond the education engendered by involvement in the White Pass process itself, in that businesses identified by the student-researchers agreed to work with high school students as part of job training and careers programs.

F. The role of the Pacific Northwest Research Station

In the White Pass community self-assessment Dr. Clark, from the Pacific Northwest Research Station, saw the science opportunity of learning about processes of social learning and civic science (FEMAT 1993) in order to better understand and be able to share them with managers. The early relationship that developed between Clark and the Committee brought together Clark's professional knowledge and experience as a social scientist, his perceived power as a scientist involved in creating the Northwest Forest Plan now governing the Gifford Pinchot National Forest, and the

power that comes from having federal research funding to support potential projects in the community. The extent to which his knowledge, experience, and funding would contribute to the Committee project are evidenced in the definition of the purpose and outcome of the process.

The most tangible evidence of support was the funding for two University of Washington graduate students to participate as full-members of the project, not simply as outside observers. Amanda Graham, a graduate student in Forest Resources, came to the project to assist with documentation of the self-assessment. Graham was already a part of the AMA work of McHugh and was documenting and evaluating a collaborative learning process taking place on the Cispus AMA. In addition to graduate studies the author (Kruger) works as a Research Social Scientist with Clark in the People and Natural Resources RD&A Program. This position enabled Kruger to participate in this project as part of her job responsibilities. The project encompassed the research program's programmatic goals of experimenting with and documenting new ways of involving people in resource management activities and Kruger's personal interest in finding ways to increase opportunities for citizen participation in learning about place as a cultural system.

Kruger's introduction to the Committee came at the Committee's February meeting. Clark was going to be traveling for a few weeks and he wanted the Committee to know that someone would be available to help them while he was away. He introduced Kruger to the group as a graduate student and PNW social scientist who would be available to answer questions and provide ideas. It was on the drive back to Seattle that Clark and Kruger discussed asking Graham to help with the documentation of the project.

Initially Kruger's involvement was peripheral and entailed attending meetings and participating in discussion. However, at the April Committee meeting which Graham and Kruger attended together, the two students offered to move to the White Pass community for the summer and participate as partners in the project. The

Committee enthusiastically accepted their offer. While they would never be full "insiders," a shift occurred and Kruger and Graham were no longer total "outsiders" either. They became situated in an in-between position, becoming boundary spanners who were able to link research with practice and bring their broader outsider's perspectives to the process while being accepted as insiders (Louis and Bartunek 1992).

At the Committee's April meeting members learned that grant funding had been approved to allow the school to hire 25 high school students. For the most part the project remained undefined. Kruger and Graham volunteered to develop several items: clarification of a community self-assessment; suggestions for questions to be asked in a self-assessment process; ideas for potential high school student activities; and identification of skills and knowledge that students might develop through participation in the project. A research team consisting of Graham, Kruger, Clark, and Dr. Margaret Shannon, Associate Professor at the University of Washington College of Forest Resources (also a member of the FEMAT social science team, and advisor to both graduate students) developed ideas on these topics for the Committee. Klattenhoff provided this information to students who interviewed for research positions with the project. With Graham taking the lead, a memorandum was developed offering suggestions on how to define a self-assessment and what questions to keep in mind throughout the project (Appendix 1).

The memo recommended using multiple approaches in order to expand learning opportunities. It suggested that self-assessment can be accomplished using a variety of methods, including, but not limited to, a survey. There is little in the social assessment literature based on a deliberative democratic public philosophy, but what there is supports the use of multiple methods (Bryan 1996, Krannich et al. 1994, Murphy and Pilotta 1984, Park et al. 1993, Poston 1950, and Preister 1981). The memo identified possible assessment activities including "review and analysis of demographic and historical documents, field trips to specific places in the community,

and the development of a creative project about the community, such as a video or a play."

1. Research facilitators. The role that Graham and Kruger took on was that of *research facilitator* The research facilitators brought a different sort of knowledge and skills than was available in the community, the role of a boundary-spanner, but they made every effort to emphasize the important knowledge and skills held by local citizens. This approach was in the spirit of Bellah's (1981,1983) concept of a *practical social science.*

> Unlike the natural sciences, we are not "outside" what we study
> and certainly not "above" it. To imagine that we are is to
> deprive those we study of their dignity by treating them as
> objects. It is to imagine that we understand them better than
> they understand themselves because our heads are not filled
> with muddled ideas, false consciousness, traditions, and
> superstitions (murk and vestiges) that are theirs. It is to
> imagine that we are enlightened and free of illusions. (Bellah
> 1981:11)

Building on the idea of a practical social science, the research facilitators recognized their need to be with those being studied as much in the capacity of students as teachers. Understanding that the attitude with which an outside researcher approaches a study can result in disempowering local people (Schneekloth and Shibley 1995; Park et al. 1993), they positioned themselves -- as much as possible -- as fellow learners with student-researchers and Committee members. The research facilitators emphasized that "locals" held knowledge that "outsiders" did not have. In this study local knowledge was important knowledge. The role of the research facilitators was to help insiders recognize and create a coherent interpretive knowledge of the White Pass area as a place.

G. Barriers to social learning

Clark, Schmidt, McHugh, and many others embraced social assessment through social learning as an opportunity. To a few, however, the idea of new knowledge or new benefits, at least in the way the project was progressing, appeared to compete with, or even threaten their own ideas.

There were three areas of opposition, or at least potential opposition, to the White Pass project. From within the Committee, the agenda of at least one social service provider did not entail providing jobs and training for students. Doug Hayden, director of White Pass Community Services, a social service provider, had envisioned a "computer super-highway" that would link social workers in the White Pass area with others around the county and state. Hayden's plan involved the purchase of software, hardware, phone lines, and training for area social service providers. He was unhappy with grant money coming to the Committee that did not directly address his priorities. His perspective was one of a zero-sum game of limited resources. He saw the money for student employment as reducing funding possibilities for his project.

From outside the Committee, opposition came in the form of Sylvia Sterling, a woman who, saying she represented a small group of folks who were against the project, attended the May Committee meeting. (After the meeting the research facilitators discovered that Sterling was a member of a small but vocal group of anti-government, anti-education, right wing, private property rights advocates who didn't pay taxes but, according to Schmidt, seemed to have a lot to say about how tax dollars were spent.) Sterling was opposed to the student study and predicted it would be a waste of time and money as no one would talk to the students. Members of the Committee, particularly Schmidt, disagreed, arguing that community members would be happy to talk with students.

Although she remained resistant, neither Sterling or any other member of the group she represented attended another Committee meeting or project event. Beyond Sterling's initial attendance, a linkage to this group was not developed. The divergent

viewpoints represented by individuals and groups such as those espoused by Sterling could have broadened both Committee discussion and the results of the process itself. Gaining entry into this group or engaging their members in Committee activities could have provided insight into a part of the community that remained unknown.

Engaging a diverse membership that is representative of the variety of perspectives present in a community is a challenge for small groups like the Committee (Mondros and Wilson 1994). Broad representation becomes even more critical as the group orients itself toward action. Those individuals and groups who have remained "outside" the Committee are more likely to criticize and challenge future Committee actions (Mondros and Wilson 1994). The potential impact of "outsiders" was illustrated very well in the Montana Study when individuals who had little knowledge of the purpose and day-to-day activities of the study groups, spread rumors and condemned the study groups and the Montana Study itself (Poston 1950). The Montana Study groups that were most successful were those that were able to tap into the diversity represented in their communities.

The third group that might have opposed the project actually became supporters. Lewis County Commissioner Glenn Aldrich attended the February Committee meeting along with two constituents from Chehalis-Centralia representing the Farm Bureau. The constituents were county rights advocates and there was some apprehension among Committee members, especially McHugh, about their attendance at the meeting.[4] The Committee treated the visitors very warmly, consciously working to show that their ideas were valued. The meeting ran smoothly and the visitors participated actively. The visitors emphasized the importance of getting in touch with a community's cultural roots. Commissioner Aldrich suggested that the information gathered might help him address the needs and concerns of White Pass residents better. This was only the beginning of the Committee's relationship with the

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[4] The Forest Service and other federal agencies had faced recent challenges, including physical violence, from county rights groups at public meetings around the Pacific Northwest.

Commissioner. He became active in the AMA process and maintained his interest in and support of the process. His participation symbolized to the community that residents "had his ear" on matters important to this part of the county.

H. Laying the groundwork for civic science

In an effort to increase understanding of what people of the White Pass area perceived as needs and concerns before the student project even began, Klattenhoff developed a questionnaire containing two questions: What do you see as *needs* for our community? What do you see as *concerns* for people within our community? The questionnaire was distributed in several high school classrooms, using student respondents, distributed at an AMA collaborative learning workshop, and sent home with students for their parents to complete. The questionnaires were analyzed by students as part of the summer project. Questionnaire responses provided an initial focus for assessment work. Equally important, the questionnaire informed community residents about the larger study and helped build an identity for the Committee.

Identification of needs and concerns, and investment in the students by involving them in the project, demonstrate the hope the community has for creating a better future. The Committee itself may not take action on any of the findings. Just as with the study groups established in the Montana Study, this group was not created to be an action group. They have no official authority. However, there are other community groups that may take on one or more projects identified through the self-assessment.

The initial questionnaire completed by 49 students and 62 parents resulted in information consistent with the SWOT study done in 1991 and a Lewis County Comprehensive Park and Recreation Study completed in 1980. Many students and adults who responded to the questionnaire identified the need for recreation facilities like a swimming pool or recreation center, and community parks (Table 8).

Table 8. White Pass Community needs and concerns

	Parents	Teens
Needs	jobs for adults activities for teens shopping mall bank work together on problems	jobs for adults dances/dance hall shopping mall school facilities better education recreation center video arcade
Concerns	drugs and tobacco teen drinking too many tourists uncertain timber industry/mill operations	youth activities vandalism dumping garbage/littering timber industry better education

People in the White Pass area are concerned about having activities and jobs that can hold the interest of young people so they will stay in the community and so they will return after completing college. Highlighted by the survey and identified in the SWOT report, this same concern was one of the primary driving forces behind the Montana Study (Poston 1950). This was also one of the factors that motivated the Committee to involve the students in the self-assessment process: a hope that by learning more about their community, young people would be more interested in staying or returning.

V. THE DISCOVERY TEAM PROCESS AS CIVIC SCIENCE

A. The process of civic science

Civic science is a process of becoming engaged in observation in order to better interpret the world around us (Shannon and Antypas 1996:67). It is an effort to democratize science by involving citizens as researchers "in the creation of a better,

more meaningful and more fulfilling [world]" (Shannon and Antypas 1996:67). The process, as described by Shannon and Antypas (1996), joins research and practice. At its core is the idea that citizenship entails a responsibility for people to act as lay social scientists and to learn about "themselves, their communities and their society" (Shannon and Antypas 1996:68).

With citizens cast in the role of lay social scientists, the role of the professional scientist becomes one of research facilitator and catalyst for learning. Civic science can be a component of, or catalyst for, a social learning process that goes beyond investigation and learning to embrace social action.

In the White Pass process the Discovery Team is viewed as a civic science process within the social learning process of the broader social assessment. This section describes the Discovery Team process.

B. Getting the process off the ground

The Discovery Team process was designed as a process of *civic science* much in the spirit of the Montana Study (Poston 1950). Twenty-five students applied, interviewed, and were hired for summer positions with the self-assessment project. Supplemental funding was arranged to allow the hiring of every student who took the initiative to apply. Two additional teachers were hired to help Klattenhoff and the research facilitators.[5] Student-researchers started work June 19, 1995. They worked for two weeks, from 8 AM to noon, took a two week break and came back on July 17, 1995, for an additional two weeks.

The schedule of two weeks on and two weeks off was a residual of the annual mill shut down the first two weeks in July. It was expected that some students would be traveling with their parents. Just as important for the process, however, because

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[5] An interesting side note is that all five adults and 80 percent of the student-researchers were female. The research facilitators discussed this and explored how this might have made a difference in the process. Whatever difference this made is beyond the scope of this study, except to alert readers to the influencing role gender may have played in the process.

Klattenhoff worked at the mill during those two weeks she was unavailable for the assessment project. For the research facilitators the break provided time to reflect on the first two weeks activities and deliberate with teacher-supervisors on the best use of the last two weeks.

The role of the Committee can be understood as that of research designer, providing direction primarily through the goals and secondarily through joint meetings with student-researchers. The student-researchers worked as research consultants, actually carrying out the research work. The research facilitators wanted the student-researchers to have a sense of ownership of the study. As the Committee goals were quite broad, the goals provided wide latitude for the student-researchers to define the specific topics student-researchers would address in the assessment.

C. Research facilitator responsibilities

Within a civic science approach the professional researcher takes on the job of facilitator for learning. The job of research facilitator, as self-defined, consisted of two major responsibilities. The first was to identify and provide oversight over the methods used in the project. The second responsibility was to assist the students in becoming researchers and carrying out the study as much as possible themselves.

1. Identification and choice of methods. Research facilitators selected a variety of interpretive methods that allowed the student-researchers access to vast local knowledge and that were more inclusive of a wider range of participants and knowledge than empirical-analytic approaches based solely on technical or instrumental knowledge. The variety of methods chosen meant student-researchers could access knowledge of the White Pass area as a place in a variety of ways: a community forum, individual and group interviews, brainstorming activities, joint meetings between the Committee and the student-researchers, collection and analysis of documents, photography and mapping activities.

This multi-method approach accommodated the wide range of skills, abilities and interests found within the group of 14-17 year olds. Dale and Lane (1994) recommended flexibility in choosing methods to use in participatory processes, recognizing that ability to participate and participation effectiveness varies according to ethnicity, class, gender, age, literacy, experience and knowledge.[6]

a. Storytelling. The research facilitators found it helpful to use storytelling as a method which recognizes the value of narrative in our culture as both a process of communication and a way in which we create and re-create place (Brown 1991; Schneekloth and Shibley 1995; Tuan 1991).

Storytelling, in and of itself, is a powerful enactment process (Schneekloth and Shibley 1995; Stankey 1996; Wondolleck and Yaffee 1994). We are a storytelling people. We record our experiences through stories. We remember and share our history and learn about our present through stories. Katherine Baril, a Cooperative Extension Agent on the Olympic Peninsula, often refers to a Russian proverb that says, "You don't know me until you know my stories." Sharing stories of place is especially empowering to the storyteller as places "through their commonality and commonliness, allow people to be meaningful and their 'small stories' to be important" (Winchell 1991). The opportunity for student-researchers to tell their own stories of the slide and of other personal experiences and to re-interpret and re-tell stories of floods and other events they learned about through the research process was empowering for the student-researchers. Student-researchers gained a sense of personal power that comes from gaining a better understanding of your community and how you fit into it.

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[6] This is of particular note to anyone considering replicating the study. Student-researchers were high school students, 14-18 years of age, with little job experience and minimal communication skills. As mentioned, participants including adults were primarily female. Local adult supervisors were teachers, with a strong orientation toward job and career skills. Of the 25 students in the program five were classified as "at-risk." Interestingly they proved to be some of the hardest workers and most successful in terms of personal growth. This project demonstrated the value of this type of program with high school students and identified the types of projects that the at-risk students were able to excel at.

The narratives developed by the student-researchers during the project were collected in a notebook. One of the teacher-supervisors described the notebook as an impressive accomplishment that recorded what student-researchers learned about their communities. Student-researchers and teacher-supervisors took great pride in seeing their work in print. The notebook is the physical representation of what was accomplished in 80 hours.

Recognizing the potential for empowerment associated with choice, the research-facilitators wanted the student-researchers to choose which stories to tell. Thus, the generation of story ideas and leading questions was built into a round robin exercise on the first day.

2. The transformation of high school students into lay-social scientists

a. Group name and mission statement. The research facilitators' second responsibility was to help transform the students into researchers. Encouraging them to create their own name and mission statement was a step in that transformation process.

Establishing a group name and mission statement become a critical week one activity. After only a couple of days of working, students found that they were having difficulty explaining to family and friends what it was that they were doing and why. All involved were challenged with what to call the student research effort. Creating a name and mission statement became a group activity. Student-researchers worked individually and then in small groups to come up with possible names. After agreeing on the *White Pass Discovery Team*, they developed a mission statement to describe their activities:

> We are a team researching and interviewing the White Pass area
> and the surrounding communities about the past, present, and
> future.

b. Research notebooks. On the first day student-researchers each received a research notebook. This notebook was for recording important information from the

week-long training activities, reporting the hours they worked, and, during the last few minutes of each day, reflecting back on what they had done and what they had learned that day. There was also room in the notebooks for note-taking during interviews, and recording important names, phone numbers and other information. Research facilitators hoped the research notebooks would help the student-researchers make a mental leap into thinking like a researcher, a lot to ask of 14-17 year-olds, especially when the work place was a high school classroom.

c. *Research based in the school.* Working in the school made it hard to break the mold of school-day patterns. Not only was the project located at the school but the teacher-supervisors played much the same role they play during the school year. For all involved it was hard not to think of the process as summer school.

d. *Reflective time and production plans.* Research facilitators used various techniques to attempt to get students to think like researchers. "Reflective time" was set aside at the end of each day to allow student-researchers to reflect on what had been learned and what new questions had been surfaced. For each component of the assessment students wrote study plans, which were referred to as "production plans." These plans identified what student-researchers hoped to learn, what questions they would ask to gather information to illuminate their original question or idea and who they would interview and in what other ways they would gather data.

e. *Introductions and round-robin brainstorming.* The research-facilitators lead the first day's session – and continued in somewhat of a leadership capacity throughout the 4-week process.[7] One of the focuses of the first day was on engaging

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[7] While the research facilitators anticipated that the teacher-supervisors would "take over" following the training week this never happened. Maguire (1987) discussed her frustration when groups she worked with refused to allow her to step back and relinquish the leadership role. Just as in her cases, in this case no one else would step forward to take the responsibility on. Maguire found that once you demonstrate competence in organizing and mobilizing an effort, others involved can be reluctant to take responsibility onto themselves. The research facilitators found, as did Maguire, that transfer of control can be quite challenging. The research facilitators' concern, throughout the project, was how to avoid playing too much of a directive role in what was supposed to be the community's project. In line with Hall's (1993) final criteria of participatory research, the research facilitator must be conscious of the impact of her involvement. This wasn't taken lightly, but it was mediated by the personal responsibility the research facilitators felt to make the most of the experience

students in taking ownership of the process. The day began with an introduction exercise where adults and student-researchers drew names out of a hat to select someone to introduce, and proceeded to interview and then introduce that person to the group. Students then engaged in a discussion aimed at identifying questions and contacts in both the subject areas of the questions, and in the geographical locale. "What do you care about?" "What do your parents care about?" "What do we want to learn?" Research-facilitators wrote the student-researchers' responses on a big sheet of yellow butcher paper and hung it prominently in the middle of the room. Over the course of the process additions were made to the list. Many of the student-researchers' reports, and questions for interviews and the questionnaire came from this list.

The introduction process continued throughout the first week. Student-researchers answered a different question each day as they introduced themselves. As they became increasingly more comfortable and self confident in speaking in front of the group they also became more aware of themselves and those around them.

f. Training and field trip. In addition to preparing the notebooks, the research facilitators developed a full week of training and activities that included a visit to a research university, the University of Washington, and the PNW Research Station facilities co-located with the University.[8] Student-researchers and teacher-supervisors toured the campus, met with a climatologist, with a forest scientist using computer imagery in landscape analysis, and with social science graduate students. This field trip closed out the training week by providing student-researchers with a view of

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for the student-researchers. If this meant taking the lead, then they resigned themselves that it would be that way.

[8] Additional training included presentations by a survey researcher from a small research company in Portland, OR, and by an anthropologist from Washington State University in Vancouver, WA. These two researchers compared and contrasted survey research using questionnaires with interpretive research using ethnographic and participant observation techniques. One of the Committee members from the Human Response Network spent a morning with student-researchers practicing communication skills, particularly phone and in person interviewing skills. Throughout the first week teacher-supervisors organized several team-building activities and discussed important aspects of team work with student-researchers.

another world -- in many ways remote from White Pass, but now closer and more accessible for their having been there.

Some students who had never dreamed of college began to think about it. Others' eyes were opened and their curiosity piqued by the technology being used and the researchers they met. Their world had been expanded and it was through the opening that was created that the research facilitators hoped to pull them out the other side as researchers. Four weeks is a short time to expect 14-17 year-olds to take on new identities and certainly some were more successful than others.

D. Learning about their world and themselves

During the Discovery Team's first week, as part of both training and research, Discovery Team members interviewed Committee members at the June Committee meeting. This joint meeting was an opportunity to create "new" knowledge, as individuals learned things they didn't know through engaging in conversation with others.

Prior to the June meeting, Committee members had been asked to prepare and bring to the meeting a list of questions they were interested in about the community and ideas about how answers might be sought. The assignment and opportunity to discuss their interests resulted in the largest attendance ever, with many first time "members" participating. Many individuals brought written questions and ideas. At the meeting student-researchers and adults discussed the questions and possible approaches to answers.

This meeting was an important product in itself as it brought together young people and adults, government, business, education, and other community interests, and demonstrated the ability and willingness of citizens to learn from and with each other. The engagement of citizens in this activity, and activities like this, can be seen as an essential ingredient in the maintenance of the White Pass area as a place (Wilkinson 1991). Citizens came together to discuss their visions and share and learn from each other as they redefined the White Pass as a place. The redefinition involved

reaffirming a commitment to community, education, and to working together for a common good.

The Discovery Team began formal interviewing and fieldwork during the second week. Student-researchers developed several categories to explore: business, tourism, special events, local history, family history, and how local residents think about the past, present, and future of the Big Bottom Valley. As civic science the students were involved in collecting data through interviews, participant observation, analysis of documents, and use of photography. With the exception of two photographic reports, most student-researchers developed narratives to convey what they learned. Several short reports were developed.

Student-researchers interviewed approximately 41 businesses for a business report. Having high school students make contacts with local businesses was a beneficial bridging activity that resulted in connecting the school with several new prospects for on-the-job-training opportunities.

The timber industry, actually working in sawmills, is a big part of the local job market. There are mills in Randle, Packwood, and in Morton, about five miles from Glenoma. Students interviewed the operations manager at Packwood Lumber and became aware of both the importance of the mills to the White Pass area and the way the mills connect the community to the world. This interview was important since relations between the school and the mills had not been good in the past few years. The interview, in a small way, helped to facilitate conversation between the school and the area's largest employer of graduating seniors.

For the tourism report almost every student-researcher interviewed visitors to the area. Interviews took place in local campgrounds or at restaurants or motels. Student-researchers developed and used a short questionnaire for their interviews. They interviewed 124 people and found 67 percent were from Washington State and about 27 percent had been coming back to the area for over 10 years. Many student-researchers were surprised at how many people return to the same place year after

year and that many of these return visitors feel a strong connection or attachment to the area.

Hearing visitors' perspectives about the area increased student awareness of and interest in the White Pass area as a place. Wilkinson (1991:7) noted that the "local importance of a community characteristic often increases with the extent of the extra-local significance." With the Discovery Team, a local characteristic took on new meaning and significance with the discovery that others viewed the characteristic as something special, whether the characteristic was Mt. St. Helens, Mt. Rainier, or another of the local attractions.

E. Challenges of civic science

Given that the students had limited verbal communication and writing skills and limited abilities to link ideas and concepts,[9] that the school had limited equipment (telephone lines, computers and printers), and that the project had limited authorized drivers to transport student-researchers to and from interviews, flexibility was necessary in scheduling research interviews. At times this meant the project appeared and felt chaotic and messy as teacher-supervisors and research facilitators struggled to match students, adults, and appropriate project work. However, such struggles are not uncommon in participatory research, even with adults (Maguire 1987, Park et al. 1993). This situation was uncomfortably ambiguous for some, especially Klattenhoff. She realized during the project that she was more comfortable when she was able to visualize a concrete product that would result from the research effort. Until such a product was identified, she could not relax with the emergent process.

The research facilitators had built in ambiguity by attempting not to pre-determine a course of action or define a product, even though they could easily have done so. The research facilitators saw the course of action and product design as

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[9] The students' conceptual skills were probably average for young people this age. The point here is that these were not your conventional graduate student or contract researchers.

emergent from the process itself. Enabling local participants, especially the student-researchers, to recognize and take the opportunity to make these decisions was critical in empowering them as lay social scientists. This approach was indicative of the research facilitators' stance in viewing themselves as students of this process. This effort was as much an experiment in deliberative democracy, civic science and social learning for the research facilitators as it was for the students-researchers and others.

When engaging in social learning, Korten (1981:613) warned that "efforts to eliminate error or to lay stress on detailed preplanning and central control would presume both existing knowledge and a capacity to utilize it that seldom exist in the social realm and would eliminate the very learning on which effective action depends." He specifically recommended using methods that "encourage local initiative and self-control" (Korten 1981:613). Other authors have also noted the importance of self-determination in studies involving people and their social lives (Schneekloth and Shibley 1995; Park et al. 1993).

The White Pass assessment demonstrated that as much as local communities resent outside control of research, they have become so accustomed to expert-driven processes that it can be challenging for them to adjust to the responsibilities and ambiguities of research when they attempt to take it on themselves. The aura that surrounds professionalized technical science gives the appearance that science isn't ambiguous, messy or chaotic. Learning the reality of science first hand by carrying out locally-driven research that really draws on the community's local knowledge and skills can take all who are involved time to adjust.

VII. GAINING A BETTER UNDERSTANDING OF PLACE AS A CULTURAL SYSTEM THROUGH CIVIC SCIENCE

A. The organizing framework used to study place as a cultural system

The framework for place as a cultural system (Table 9) is repeated here to introduce the analysis of the White Pass process, a civic science process, as a study of place as a cultural system. The categories are used to enable embedded meanings to be understood within a context of placemaking.

Table 9. Categories of place as a cultural system

CATEGORIES OF PLACE AS A CULTURAL SYSTEM
Civic engagement (1) practices of commitment (2) intermediate institutions (3) governance
Civic friendship (1) community of memory (2) community of hope
Individual and group identity (1) impression management (2) self-worth (3) group identity (4) quality of awareness (5) inhabitance

The framework categories are not meant to be used as analytic categories. They are only meaningful when kept "close to the ground" (Geertz 1973) i.e., not

taken out of their context, and considered in light of how they interrelate both with each other and with the process of study. It may be helpful to think of the categories more as the threads of a tapestry than as a linear listing as they are interwoven and interdependent much as the weft and warp of fabric.

As an analytic category one could count the number of intermediate institutions and their membership levels to tell something about intermediate institutions. In this study, however, the categories are used to help make visible meanings and symbols that are made evident through social action. The categories provide an organizing framework that enables the White Pass area to be understood in the ways the White Pass people experience and construct place through social interaction.

The categories in the framework are interrelated. Thus many of the stories and events arguably fit within more than one category. The categories are neither exclusive nor exhaustive. Indeed the webs of relationships which cross categories are important to understanding the social actions from the perspective of a cultural system. These categories allow explication of the White Pass process as part of the enactment rituals creating and maintaining place as a cultural system. This framework ties the public philosophy of deliberative democracy to interpretive-participatory theory and methodologies for examining place as a cultural system. Thus, by using this working framework of place as a cultural system the meanings, symbolism, and metaphors embedded within a local community initiative can be understood within a larger context of place creation.

One purpose of this discussion is to demonstrate the usefulness of expanding beyond the usual understanding of place as "thing," which can be best studied by aggregating employment figures, housing starts, wages, crime statistics, school lunches, or hospital beds. The concept of a cultural system (Geertz 1973) allows meanings, symbols and metaphors to be studied empirically leading to an understanding of the processes – as evidenced in the categories – that create and sustain place. Both approaches to knowledge can be useful but quantification alone is

unlikely to build civic friendship and civic responsibility or maintain the processes of social meaning which define places. The remainder of this chapter is devoted to a discussion and analysis of the White Pass process using the categories in Table 9.

> *1. Civic engagement through practices of commitment, intermediate institutions, and governance*

> *a. Practices of commitment* Practices of commitment include rituals, aesthetic and ethical practices engaged in by churches, families, and other social groups. In early 1996, as the result of the process, the Forest Service Adaptive Management Area (AMA) signed a memorandum of understanding (MOU) with the Economic Development Council, the White Pass School District, County Commissioners, and the White Pass Community Coalition -- collectively recognized as the Committee -- based on the goals set by the Committee. The MOU enables the Forest Service to share equipment and technical knowledge with the group and individual members. The willingness of the Forest Service to initiate this agreement, and the willingness of others to sign on, increased community capacity and can be understood as a practice of commitment that strengthened their group identity by demonstrating the Committee's ability to cooperatively pool their resources.

There have been no major actions, like the bond issues, new swimming pool, or library that resulted in Montana Study communities. However, the many small steps taken by the Committee can be understood as enactment of citizenship, development and maintenance of civic friendships, and civic engagement necessary to maintain community as a vital cultural system, or place.

The Discovery Team process itself can be understood as an ethical practice of investing in local youth by providing both training and job opportunities. Some would also see civic science, a participatory research process, as a more ethical approach to research as it invests control over the process with the local residents who will use the knowledge created.

The Discovery Team identified a number of practices of commitment, including numerous community festivals and other celebratory events that require considerable commitment from area residents. The experience of working together to make these events happen maintains the networks necessary to see people through the hard times of fires and floods that can wreak havoc in rural areas like White Pass.

> Randle's Big Bottom Blast was established in 1963 and has
> been conducted almost every year since its beginning.
> (Discovery Team 1995)

The Blast is a Fourth of July celebration that incorporates the symbolism of the national holiday -- freedom, liberty, patriotism -- with enactment of community and citizenship at the local level.

> We talked to . . . Kenny Cheeseman [who] has been involved
> with this project for 10 years. He said he got involved,
> "because it is fun and the people like it." He also said it
> affected the community in a positive way. (Discovery Team
> 1995)[10]

Twenty-eight people were interviewed by student-researchers at the Blast. Half of those interviewed said that they attend the event every year "because they like it and enjoy supporting the community." The event requires the dedication of many volunteers and is supported by donations from many local businesses.

Student-researchers learned about the behind-the-scenes investment of time and resources that go into this event and the meaning it has beyond simply being a fireworks display. Local residents invest their time and money in this event as the event symbolizes the vitality of the community and demonstrates the capacity for organization and social action that creates and recreates place.

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[10] One of the frustrations as researcher facilitators was that many of the students did not "follow-up" on responses that may have provided additional useful information. For example, Kenny mentioned that he helped with the Blast because "it affected the community in a positive way." We are left wondering what he meant by that.

Discovery Team student-researchers interviewed several community members who, as part of families that have lived in the valley for generations, have engaged in ongoing practices of commitment. Hank Young, an 80 year-old, was born in the valley.

> In 1886 Charles Young arrived in the Big Bottom. On
> December 30, 1898 his homestead claim was signed by
> President William McKinley. On November 5, 1915 [Hank
> Young] was born.
>
> We asked him why he stays so active in the school district and
> he said that he got started in it when his kids were in school.
> He volunteered to announce at school games, keeping score,
> and being on the school board. Even now he rarely misses a
> game, school board meeting or any other extra curricular
> activity that involves the school. He graduated from Randle
> High School in 1934. When asked why he stayed in the valley
> he said it was because of the farm. (Discovery Team 1995)

Young's parents donated the land for the community cemetery and in addition to his school activities Young served on the cemetery board for 32 years. During the summer this study took place, Young was busy at the high school installing a large black panther – the school mascot -- near the front entrance. Young, while exceptional in his level of civic engagement, was not alone in his commitment of time and energy to civic endeavors. Many local residents demonstrate high levels of civic responsibility in their work with an assortment of civic and social service volunteer organizations, including the food bank, rescue squad, and fire departments.

Another long time family, the McMahans, also arrived in 1886. Bill McMahan shared stories of several generations of his family with one of the student-researchers. The stories demonstrated that many family stories are community stories as well.

> May Randle married Jim McMahan in the first wedding in
> Randle in 1891. Jim and May started the dairy that is now run
> by Bill and his brothers.

> When the Methodist Church (in the 30's) was a cheese factory
> they were part owners along with all the other dairy farmers.
> All their milk was sent to the factory to make cheese.
> (Discovery Team 1995)

Several families in the valley, like the McMahans, go back four or five generations. These residents have an infinite amount of history to share and form a large reservoir for community of memory. Most, if not all members of the Discovery Team members were surprised to learn that the local Methodist Church had been a cheese factory. Johnston (1994) referred to community changes like this as "layers of investment." For the student-researchers, at 14-17 years-of-age, this knowledge of unknown layers helped them understand change as an ongoing process that in itself need not be threatening to a community with the capacity to adapt as change occurs. Through the sharing of memories student-researchers were able to better understand processes of change and transition creating a sense of place as dynamic.

"[Bill] said the reason he stays in the valley is because it is a way of life" (Discovery Team 1995). This sentiment was echoed by many people who couldn't imagine moving away from the valley, and others who had moved but had returned. The research facilitators attended a Senior Center Potato Feed in Morton, soon after arriving in the valley, and were told by several seniors that whenever people leave they usually return. Local residents attribute this to the area's relatively inexpensive lifestyle, beautiful scenery, and friendly people — a way of life made visible by looking at place as a cultural system.

b. Intermediate institutions. As described in Chapter 3, an intermediate institution is a group or organization that mediates between private life and public life (Schneekloth and Shibley 1995). The Committee itself can be understood as an intermediate institutions as it provided an opportunity for individuals to get involved as citizens at the local level. The establishment of the Committee demonstrated the ability to create a new organization. This ability to create a new organization that can engage citizens in responding to changing issues and needs is important in maintaining

the quality of public life (Putnam 1995). Intermediate institutions influence the maintenance and re-creation of place as the organizations that are active in an area play an important role in defining the kind of place it is and how it becomes known. This is addressed again in the discussion of impression management.

The Volunteer Fire Departments of both Randle and Packwood can be understood as intermediate institutions. Fire departments not only provide response to fires and other emergency situations, they also provide social networks for members, opportunities for citizens to enact citizenship, and outreach through sponsored events such as bingo, pancake breakfasts, community barbecues, and through the use of their buildings and grounds by other organizations. In Randle the Senior Citizens meet in the fire hall. Other intermediate institutions are the school and school sponsored activities such as athletics, slow-pitch soft ball teams, the Mt. Adams' Trail Riders (a horse rider's club), senior centers in Packwood and Morton, and the senior group in Randle. These institutions provide opportunities for citizens to engage in and maintain the White Pass area as a place.

c. *Governance.* As it evolved the Committee became a catalyst for networking among members and demonstrated the desire of citizens to engage in local *governance* as they joined the Committee and made extra efforts to participate in sub-committees to draft goals and take other action. Governance, as described in Chapter 3, is the act of engaging in dialogue to define and resolve issues (Shannon quoted in Bates 1993; Friedmann 1987). The Committee's engagement in goal setting demonstrated the ability and willingness for a group of individuals to come together in an act of civic engagement and achieve a working relationship indicative of the relationships necessary for building and maintaining place.

Much like the study groups in the Montana Study (Poston 1950), the Committee has no official standing and has been unable to apply for grant money or take other types of direct action. However, initiating the Discovery Team project can

be understood as social action — a component of social learning (Korten 1981). This action can also be understood as an aspect of governance.

2. *Civic friendship*

a. *Communities of memory and hope.* Expressions of memory include reflections on the changes in the social landscape over time, stories of the history of the area, including people important in its past. Meanings, memories and sentiments that are shared entail aspects of history and ties to family, community, and special places. Stories of hope are oriented toward identifying and connecting the aspirations of individuals, smaller and larger social groups. As these are closely related and often intertwined they are discussed together in this section.

On the first day of the Discovery Team project a brainstorming exercise to identify what was interesting about the community resulted in at least six variations on the theme of the mud slide that had blocked U.S. Highway 12 on November 20, 1994. There was the slide and school, the slide and sports, the slide and businesses, the slide and getting to Morton, Chehalis, Centralia, etc. The slide, as events like this tend to do, galvanized the community. Student-researchers and teachers-supervisors spoke of families who opened their homes to students from families living across the slide so the students could attend school or sports practices. The school newsletter commended everyone for their civic spirit.

> There are so many people who need a well deserved pat on the
> back for the part they played during the Randle slide. The
> White Pass community, the school staff, and students for their
> tremendous amount of "can do" spirit during the landslide
> blockage of Highway 12. (White Pass School News January
> 1995).[11]

The slide was a major event in the student-researchers' lives and created a community of memory among them. It was a recent occurrence and had affected them

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[11] Unpublished, informal school newsletter.

personally. Each had an experience he or she could share, and each was more easily able to relate to the experiences of others. For the research facilitators, and thousands of others who come to the White Pass area every year, a much more impressive event was the Mt. St. Helens' eruption which occurred in 1980. However, the eruption was not within the experience of these students' lives. Although they had heard and read about it this event did not rate much consideration by student-researchers – there was no community of memory for the students and they had to depend on others for their memories of the experience.

The Community Forum, held at the White Pass High School on Wednesday, July 19, 1995, was planned as an opportunity for sharing memories. On this special evening in July, "old-timers" sat with student-researchers and told them stories of local history which ranged across Native American history, local events such as family reunions and floods, and other local stories which serve to make the White Pass area the place it is.

This chance to come together created a community of memory among those in attendance. The forum was especially symbolic because it was able to bridge across several generations of local citizens – three generations from one family attended. Adults and student-researchers alike learned about the history and culture of the community and learned that they could communicate with and learn from each other.

One of the more memorable stories told by Warren and Ula Coleman was printed in the Centralia-Chehalis newspaper:

> Randle – Warren and Ula Coleman remember a sign that existed
> before Highway 12 was built in the 1950's. The sign was
> located near the top of the hill where the old highway entered
> Randle, and it read "Entering Big Bottom Country. Drive
> carefully. We love our children." Warren Coleman hastened to
> add that "Big Bottom Country" referred to the flat land of the
> Cowlitz River Valley from Randle to Packwood, and it was not
> a description of the people living there. (*The Chronicle*,
> Centralia/Chehalis, WA., Saturday, July 22, 1995)

Shared at the forum were stories of past floods like the 1933 flood when " kids climbed up on the top of the hill and watched parts of Randle float by" (Discovery Team 1995), the good fishing that existed before the dam was built, the flooding of the community of Kosmos during development of the dam, and personal stories of the eruption of Mt. St. Helens.

Of her experience at the forum, one student-researcher wrote,

> I learned how closely knit it used to be. Everyone knew each
> other and they were all friends. I thought it was really neat how
> they could invite strange people into their homes and trust
> them. Another thing I learned was the way people used to live.
> No electricity, no phones, no running water, no bathrooms. We
> think we have it bad because we don't have a car, or phone, or
> some other modern thing but they used to live like that and they
> made it.

Active participation in creating and passing down this common culture through communities of memory is an essential element of *placemaking* — the act of creating and maintaining place and community (Poston 1950, Schneekloth and Shibley 1995, Tuan 1991).

We learn things from stories of the past that help us deal with challenges that we will face in the future (Bateson 1994). In Lonepine, one of the Montana Study sites, a major accomplishment of the study group, according to Poston (1950:48), was that it "crystallized" their history and "gave them a better understanding and greater appreciation of their own community."

Appreciation for the local area developed among participants in the White Pass process as well — at least for student-researchers and teacher-supervisors engaged in the project.

> It gave me a new understanding and appreciation of the rich
> history that our community was based on. . . . It really made me
> open my eyes to the beauty of our surroundings, I guess I have
> been taking for granted living in the mountains amid such a

great community. I never did comprehend before this summer, what a huge difference the mills and tourism were. I mean if we didn't have them there almost wouldn't be any towns here at all. (Student-researcher evaluation)[12]

Working with the Discovery Team hasn't changed how I feel about my community, but it has strengthened how I have always felt about where I was born, raised, schooled, married and am now raising my children. The valley is open, friendly, always offering a helping hand to locals as well as strangers, ... beautiful lands. I sometimes take it all for granted. (Teacher-supervisor project evaluation)

Family reunions also provide important opportunities for sharing stories. As a cultural ritual, family reunions are important to the fabric and maintenance of both community and family life. Families are important networks for everything from sharing resources to getting family and local news.

Hank Young told me that his family reunion last year ... [had] about one hundred people from as far away as California and Hawaii attend.

Jim LaChine told me that his family reunion started to be an annual event twelve years ago because it seemed like the only time the family got together was at a family members funeral. They decided it was time to get together for a happy occasion instead of a sad one. So now on the third weekend in July the family gathers at a park built as a memorial of the family, built on the original homestead. (Discovery Team 1995)

Gail Mullins told me about the Beeks reunion. She told me that they always camp somewhere on the south slopes of Mt. Adams because the Beeks ancestors were sheep herders and they raised and grazed their sheep there. (Discovery Team 1995)

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[12] During the last week of the process student-researchers and teacher-supervisors completed written evaluations of the process and participated in small focus groups to discuss the process.

An estimated 7 million Americans attend over 200,000 family reunions every year (*The Seattle Times*, April 21, 1996). Reunions help keep families together, especially as they move geographically farther apart. Reunions can lead to activities such as making improvements to a homeplace, donating to charity, establishing scholarships, or working on community oriented projects such as litter clean-up. In rural areas, such as White Pass, family networks are an important part of the fabric that holds the community together.

There is a security in learning about and knowing "your place" - whether that's your home, neighborhood, or community. *Place identity* develops as a person learns about and identifies with a particular place and, over time, "acquires a sense of belonging and purpose which give[s] meaning to his or her life" (Proshansky, Fabian, and Kaminoff 1995:90). Place identity is strengthened through communities of memory and hope. Based on comments of several student-researchers, teacher-supervisors, and other people attending the Community Forum, hearing stories about the community, becoming part of a community of memory, enhanced their quality of life.

3. Individual and group identity

a. Impression management. Impression management plays an important role in placemaking. Many processes and events and a wide variety of media affect the creation and re-creation of place. Access to the media can be a powerful force and the Committee was fortunate to have two reporters as members. Diane Evans, a reporter with the Morton *Journal,* and Cap Pattison, a reporter for the Chehalis-Centralia *Chronicle* were regular Committee members and frequently contributed articles about the process to their respective newspapers. To Evans, and thus the *Journal*'s readers, the self-assessment project was news.

> [We're a] small town community newspaper. . . . We don't
> want the AP wire. We're . . . the cub scouts, field trips, in
> there. So [the Discovery Team] is really interesting for us.
> (personal communication)

Both Evans and Pattison provided excellent coverage of the Discovery Team process. Through newspaper articles residents throughout Lewis County were made aware of the initiative taken by the Committee and the opportunity being provided to White Pass students to participate as lay social scientists in learning about themselves and their community. Articles provided contact names and numbers for anyone interested in information about attending a Committee meetings or being interviewed by a student-researcher. Readers were alerted that they might be contacted by a student-researcher and they were encouraged to complete and return the survey questionnaire the students developed. The message that was conveyed was that this was a community that cared about its past, present, and future and was doing something to demonstrate their caring and sense of responsibility.

The initial questionnaire that Klattenhoff developed prior to the start of the Discovery Team process can be understood as *impression management*. For the Committee it was its first notification to the community that there was a group of citizens that was working on an assessment. The questionnaire was one of the early indications, to the Committee and those outside the Committee, that the Committee was an entity and as such the questionnaire also can be understood as an expression of group identity.

The Packwood Flea Market can be understood as impression management. Thousands come to Packwood every Labor Day weekend to browse and buy goods proffered by hundreds of vendors who set up booths along Highway 12 right through the middle of town. The event is a fund-raiser for the Packwood Senior Center. The flea market has become a major part of Packwood's identity and Packwood has become known around the region for its flea market. A Memorial Day flea market, while much smaller than the Labor Day event, has also sprung up in recent years. While bringing money into the community the Labor Day event also gives the

community an sense of pride to be able to "pull off" such a big event. Like Randle's Big Bottom Blast the Packwood Flea Market is a practice of commitment. Thousands of volunteer hours go into the event every year.

Based on their studies of timber dependent communities the Kaufmans (1946) identified the importance of community traditions and rituals like the Flea Market and "the Blast." "A meaningful tradition is always an important part of the life of a stable community" (Kaufman and Kaufman 1946:30). The Kaufmans (1946:30) found that in forest dependent communities "a tradition is needed. . . which magnifies the significance of the forest and portrays the relationship of forest and people." The Logger's Jubilee in Morton is this kind of tradition. A ritual that romanticizes the "good ole days" of logging, the Jubilee can be understood as civic engagement, a practice of commitment, and community of memory and hope. It serves the same impression management and identity functions as Randle's Big Bottom Blast and Packwood's Flea Market.

Held annually, the Jubilee "was started in 1937 or 1938 by older men who wanted to show the younger generation how to log and lumber 'the right way'" (Discovery Team 1995). Jubilee activities certainly are not limited to Morton. During the summer of 1995 two student-researchers were candidates for Jubilee Queen. Jubilee is truly a regional festival demonstrating and maintaining the bonds between the neighboring communities.

In addition to perpetuating a connection to logging and the forest, early Jubilee activities reflected on a strong attachment to the homeland that many residents had left when they moved to the Northwest.

> A colorful "hillbilly" band advertised Jubilee by touring nearby towns, including Tacoma, Chehalis and Centralia. A mock "hillbilly" wedding on Main Street was a feature of the early shows, with plywood axes sold as souvenirs (Discovery Team 1995).

Jubilee provides an opportunity for businesses to demonstrate their sense of commitment to, and identification with, the community by donating goods and services. The Jubilee, in addition to dedicating revenue to the sponsoring Morton Chamber of Commerce, provides scholarships and support to White Pass, Mossyrock, and Morton school district students (Discovery Team 1995).

b. Self-worth, self-identity. It was one thing for the research facilitators and teacher-supervisors to notice changes in the students as they worked with student-researchers daily. However, parents would occasionally say things like, "You know, [my daughter] has gained self-confidence. She can go out there and do this. I've really seen a change in her." Several parents commented on the improved levels of responsibility and communication skills in their children.

Initially conceived of as a means to an end, the Discovery Team quickly earned the respect of Committee members, teacher-supervisors and parents as having significant value as a process in and of itself.

> In reality the final 'products' are these students and the impact
> this project has had on their lives. (Teacher-supervisor)

The Committee recognized the value in continuing the Discovery Team as an ongoing process.

> Participants in a self-assessment learn and benefit. In this
> project the participants were students. They learned and got a
> lot out of it. They were exposed to different perspectives and
> learned new skills. (Committee member)

> Now that we've learned how to do this kind of project with our
> kids we don't want to lose that. (Committee member)

While the student-researchers had limited power, they increased their sense of personal power, confidence and self-worth over the course of only four weeks on the project by becoming storytellers. One of the student-researchers, kept an especially complete journal of her experience. At the end of the project she reflected on her

participation as a student-researcher. She highlighted learning about community history (community of memory) and learning to understand adults better (civic friendship) – both Committee goals.

> Working with the Discovery Team was fun . . . I enjoyed it because I got to learn a lot about our town and everything around it. We also did a lot of projects so that the kids could understand the grown-ups better. It was a lot of fun to do these projects. I did a project about the slide. I got to meet a lot of different people and listen to their stories. The stories were cool. So all in all what we did was find out more about our community history. (Discovery Team 1995)

During the Discovery Team's final week the research facilitators held focus group sessions with small groups of 3-5 students-researchers. Some of the student-researchers' comments allude to the impact the project had on their personal identity and sense of self worth.

> I can look back and say "Look what I did!"

> The hardest, most challenging part of the project for me was working with a group of people and then having them drop off the project like dead flies. That's when I had to pull myself together and tell myself I could manage.

> I learned that I can work under pressure without collapsing.

> I learned that it is easier to depend on yourself rather than depending on someone else.

> I work well alone.

> I learned that I can work with a lot of people to come up with a lot of information and put it into one [report].

In addition to the focus groups, each student-researcher wrote a short evaluation of the project. Student-researchers wrote:

> I learned that I could go up to people and interview them
> without being shy or embarrassed.
>
> I learned that I could go up to people and talk to them without
> being afraid of what they think of me.

Two teacher-supervisors and four student-researchers met with the Committee at their September meeting to provide a final summary of the Team's findings. September Committee meeting notes reflect what the team told the Committee that they learned:

- [They learned] to appreciate the Valley, not just to think of this as a place to leave.

- [They were] surprised at the lack of knowledge of this area by our county officials and organizations, and the frustrations on both our parts at realizing these gaps in knowledge.

- [They] learned most from the roadblocks and barriers [they] encountered.

- [They] learned what is available from the Human Response Network.

- [They] learned that people are very kind and helpful.

(Committee notes September 1995)

After the program ended and students returned to their classes some of the student-researchers took individual action that their teachers said they never would have taken prior to the project. Two of the "at-risk" students took positions working in the school store, with one of them taking over the responsibility for bookkeeping. Other Discovery Team members have set goals for college and have improved their grades and attitudes toward that end. Teachers and parents have commented that many of the students display more self-confidence, assertiveness, determination, and responsibility.

Klattenhoff and Mullins have both mentioned that the project "opened many doors" both for the school and for their work in career and vocational education. There have been many invitations both in the community and from outside the community for presentation of the project. This outside recognition has helped build the confidence and identity not only of the individuals involved in the project, but of the school and the Committee as well.

c. Group identity. Identity develops and evolves as individuals and the collective group identify with a particular issue, mission, project, or location and over time develop a sense of affiliation, belongingness and social connectedness that adds meaning and purpose both to the lives of the individuals who are involved and to the group as a whole (Buttimer 1980; Putnam 1995; Relph 1976; Tuan 1980).

The Committee's development of a set of goals was an act of defining group identity. Through the goals the Committee members defined how they wanted to be thought of in relation to the work of this Committee as an intermediate institution. The goals themselves make a significant statement about place and the process of developing them is indicative of the processes that are necessary for building and maintaining place as they define the actions that people feel are important to make the place as they would like it to be (Schneekloth and Shibley 1995). For example, the goal of establishing a local data base, maintained by and accessible to local residents, defines this as a place where people care about the information that is gathered about them and what to be active in making decisions related to what that information is and how it can be used. It demonstrates a caring about learning for themselves as they create the White Pass as a place.

The goals illustrate aspects of *place-identity*. Place-identity is the importance of understanding why people stay in the area and what it is that people who live in the area and those who visit identify with. What is it that makes the White Pass area the kind of place that people want it to be? Who are the people who want to live in this

place? The Discovery Team through their interviews and questionnaires began to develop answers to these questions.

The Committee has extended itself beyond the boundaries of White Pass thus creating an image of itself beyond that of simply a local entity. The Committee has set a 2-year goal of having all East Lewis County schools linked by a computer network. As the first step the Committee gathered East Lewis County school superintendents and a variety of school staff members, social workers and health care providers to discuss telecommunications issues. The first meeting was a success with over 25 people attending. A follow-up meeting was scheduled. The success of this initiative may work to strengthen the Committee's confidence and result in additional action.

In addition to the telecommunications project, the Committee also supported the school's application for grant money to continue the Discovery Team process in 1996. Funding was awarded and the program was continued for a second year with teacher-supervisors taking responsibility for the process.

The concern over the proposal to close the Glenoma school that may have played a role in the non-renewal of Schmidt's contract can be understood as group identity. This reflects the finding by Pearson and Pearson (1980:31) that "what the family is for the individual, the local school is for the community. It's emblems, teams and accomplishments inspire more loyalty in the populace than does the nation state." This identity with the school, its teams and activities was a common theme.

d. Quality of awareness. Quality of awareness is about knowing "your place," knowing about its history, who lives there and why, and what future opportunities there are. Networking with other Committee members, Bill Marshall, the Economic Development Specialist for east Lewis county, developed an awareness of the extensive nature of harvest and sales of special forest products, especially mushrooms and bear grass, from the local forest. He began working with others interested in a public development authority that would focus on processing and marketing special forest products thus creating local jobs. The project would involve

the Cooperative Extension Service, Centralia Community College, the Forest Service and others. In a small way interest in pursuing this project was stimulated by Committee deliberations.

Quality of awareness was increased especially in Discovery Team and Committee participants. Poston (1950), in writing of the Montana Study project in Lewistown, could have been writing of the White Pass process when he wrote that even though there were many who were unaware that the study ever happened,

> according to those who participated in that study, there has
> been left the permanent results of a rich educational experience
> that has better equipped them to analyze and understand the
> significant social and political issues that face the community
> and the nation in which they live. For these people there is a
> new community consciousness, an articulate awareness to the
> need for an alert American citizenry. (Poston 1950:112)

As evidenced by their written evaluations and focus group comments Discovery Team members gained insight both into their community and how it works, and how they can keep themselves informed, and how they can become involved in the processes that maintain the community as a place.

e. *Inhabitance.* Civic science, as used in this study, is based on the premise that people have a desire to live with intention, with a sense of awareness and to be *inhabitants*. The idea of inhabitance goes beyond merely residing somewhere. It is "an art requiring detailed knowledge of a place, the capacity for observation, and a sense of care and rootedness" (Orr 1992:130). It is this capacity for observation, knowledge of place, and sense of care that are important to the enactment of civic science.

During the Discovery Team process conversation was emphasized among and between Committee members, student-researchers, the teacher-supervisors, research facilitators, and members of the community. Conversations took place at formal and informal meetings, individual and group interviews, in person and over the phone.

This emphasis on conversation builds on John Dewey's (1946, orig. 1927) ideas that facilitating opportunities for dialogue is important in that dialogue allows people to increase their awareness of their ability to take action. Action thus provides a link between sense of awareness and social learning.

The AMA collaborative learning process that McHugh and Graham were actively involved in, concurrent with the Discovery Team process, can be understood as both inhabitance and quality of awareness. At an early collaborative planning meeting a participant expressed the idea of re-establishing huckleberry fields that had been taken over by forest under Forest Service management. In earlier times, fires, wild or set by humans, had kept the brush and trees down and encouraged lush growth of berries. "Why couldn't the agency 'reclaim' the berry fields?" he asked. The man who inquired and the long-term Forest Service employees who also recalled the berry fields shared their knowledge with others who could learn from and act on this "new" knowledge. The man who had the initial idea volunteered to work with the agency to make the project happen.

An ongoing monitoring project can also be understood as quality of awareness. High school science students are involved in bio-physical monitoring activities on some of the watersheds within the AMA. The students collect data according to a schedule and using techniques they learned from AMA employees and using equipment provided by AMA staff. This is a cooperative effort between the school and AMA staff.

B. Summary

The White Pass process brought together 25 high school students, three teacher-supervisors and two research facilitators to engage together in civic science. Conceiving of place as a cultural system and the using interpretive research methods enabled the expression of and access to meanings and symbols important to understanding place resulting in numerous benefits and opportunities for social action.

The working framework for place as a cultural system developed in Chapter 3 enabled an understanding of the process as a placemaking ritual.

CHAPTER 5
COMPARISON OF A STANDARD
SOCIAL IMPACT ASSESSMENT
AND THE WHITE PASS CIVIC
SCIENCE PROCESS

> The question remains whether human society or social action
> can be successfully analyzed by schemes which refuse to
> recognize human beings as they are, namely, as persons
> constructing individual and collective action through an
> interpretation of the situations which confront them.
>
> Blumer, *Symbolic Interactionism:*
> *Perspective and Method*

I. INTRODUCTION

A. Environmental and resource conflicts: the importance of meanings and values

There is increasing recognition that environmental conflicts are social in nature, dealing with questions of production and distribution of values (Bates 1993; Bengston 1994a,b; Daly and Cobb 1989; Inglehart 1990; Koch and Kennedy 1991). Rather than being technical or scientific in nature, the factors underlying resource conflict and controversy are often questions of who holds what values and how they are expressed (Bengston 1994a; European Forest Institute 1995; Greider and Garkovich 1994; Johnston 1994; Sagoff 1992a,b; Stankey 1995). Values are social constructions (Kennedy 1985; Koch and Kennedy 1991; Stankey and Clark 1992) based on the meaning something has for someone. Thus, values are especially important in considering place.

Johnston (1994) posited that the essence of social value is found in the meanings people associate with place. These closely held meanings often lurk as invisible trip wires for management no matter how technical or scientific a study or the

decisions based on it are (Johnston 1994). The singular use of technical approaches, common in standard resource planning and standard social impact assessment (SIA), demonstrates a failure to understand that places are meaning-laden and thus value-laden. When people who value a place perceive the meanings and values associated with the place as being threatened conflict and controversy over competing meanings is often the result (Buttimer 1980; Williams 1995).

Recognizing the value-orientation inherent in resource management, some social scientists and resource managers have called for multi-faceted, pluralistic, and innovative approaches to social inquiry that can better uncover place-based meanings (Bengston 1994a; Krannich et al. 1994; Shannon 1991a,b; Williams 1995). However, most resource planning and SIAs identify and measure only *instrumental or utility values* (Bengston 1994a; Sagoff 1991) such as resource commodity values, employment/unemployment and wages.

Focusing on jobs and wages has limited our understanding of the broader world and our relationship to it (Bengston 1994a,b; Koch and Kennedy 1991; Krannich et al. 1994; Williams 1995). This utilitarian bias is especially noticeable in forestry planning and assessment. Traditional forestry is based on strong utilitarian roots, heavily influenced by neoclassical economics (Bengston 1994a; Kennedy 1985) and the premise that "science provides a comprehensive basis for management action" (Binkley 1996). These roots prescribe a unidimensional view that assumes that all values can be expressed in a single dimension, usually dollars. This orientation is based on a competitive pluralist public philosophy tied to the market economy (Stanley 1988/1). In SIA, depending on utilitarian value as the singular measure of values of a place, can be equated to using calories alone as the singular measure of the value of food (Bengston 1994a). A utilitarian bias is evident in SIA in the variables that are used and the data that are analyzed and presented.

B. Social values as multidimensional

A more recent view of social values suggests that instead of being unidimensional values are *multidimensional* (Brunson and Kennedy 1995; Rolston and Coufal 1991; Shands 1991; Stankey and Clark 1992). As an example, one view of this multidimensionality is a typology of values developed by Stankey and Clark (1992). This typology includes the following types of values: commodity, amenity, environmental quality, ecological, public use, spiritual, health, and security (FEMAT 1993). Other typologies have been developed. Rolston (1988) developed a typology containing 15 types of values that overlap and are encompassed by the grouping developed by Stankey and Clark (1993). Klemperer (1993) developed a literature review highlighting contemporary thinking about social values on an international scale and demonstrating that the interest in social values and their relationship to resource conflict is fairly universal. This was also a finding of a study of social values conducted in several countries and recently completed by the European Forest Institute (EFI 1995).

The Forest Ecosystem Management Team (FEMAT) social science team reported that "the paradox is that those social values for which our ability to define and measure is poorest, are the very ones that appear to be of increasing importance in our society" (FEMAT 1993:VII-33). Studies by Vining and Schroeder (1987) and more recently by Bengtson and Xu (1995) confirm this observation. Bengston and Xu (1995) suggested that values held by society have shifted from those that are primarily utilitarian and lend themselves to definition and measurement by empirical-analytic methods – jobs and wages for example -- to those that are more "life-support and moral/spiritual" in nature.

Science has done a fair job of identifying and measuring commodity/utility values however, these other social values have eluded identification and measurement (Bengston 1994; Koch and Kennedy 1991; Williams 1995). In contrast to utilitarian values, these "new" values do not lend themselves to the traditional empirical-analytic

approaches used in SIA (Bengston and Xu 1995; Ingelhart 1990; Stankey et al. 1992). Therefore SIA does not enable resource specialists to identify, "measure," and learn about these values and associated meanings.

Schroeder (1994) suggested that the failure to reflect cultural values can lead to citizen action against an agency.

> Experiential values that do not lend themselves to this kind of measurement and valuations (for example, sense of place and spiritual values) have often been disregarded. Yet it is precisely these kinds of values, rooted in intuitive and emotional experiences, that have motivated many people to take legal and political action against forest managers. (Schroeder 1994:3)

Koch and Kennedy (1991:333) also cautioned that "in what they do (and fail to do) foresters can usually intensify or dampen social conflict over forest values." Thus it appears important to find ways to access the meanings and values people associate with places. Alternatives to SIA and other standard approaches that fail to facilitate the expression of and access to these aspects of place are needed.

C. Accessing meanings and values through social knowledge

Meanings and values are expressed and accessed as social (Korten 1981) and interpretive (Habermas 1972; Maguire 1987; Park 1993) knowledge using interpretive methods (Rabinow and Sullivan 1979, 1987). These meanings and values are made visible through social action (Geertz 1973). Meanings and values of places are embedded in the process of placemaking. A limited utilitarian view of value and the singular use of empirical-analytic methods adds to the inability of planning and assessment to accommodate social knowledge of place. Social knowledge of place encompasses meanings and *multidimensional values* (Bengston 1994a,b; Sagoff 1991; Schneekloth and Shibley 1995; Schroeder 1994) that are not recognized by a utilitarian (competitive pluralist) perspective. The inability of agencies to express or access this

knowledge often results in the disregard of the knowledge citizens bring -- or could bring -- to the resource discussion. The result is that social knowledge is frequently not considered "appropriate" to planning and assessment because it is perceived as "value-laden" often wrapped in emotions and based on personal experience rather than scientific inquiry (Larsen et al. 1990; Lee n.d.; Schneekloth and Shibley 1995).

Social knowledge has been difficult for agencies to deal with (Kennedy 1985; Lee n.d.). Utilitarian values can be aggregated and analyzed using the complex linear programming models that agencies are fond of using (Larsen et al. 1990). Instrumental values can be measured using the empirical-analytic theories and methods commonly used in forest planning and management and have an aura of being "value-free" measures. However, other meanings and values cannot be measured in the same way as jobs, wages, and other utilitarian values. Meanings do not fit into computer models designed for aggregated numerical data. Therefore, it has been easier for agencies to label multidimensional citizen knowledge as "anecdotal" or "subjective" and thus avoid incorporating it into planning and decision-making (Lee n.d.).

In contrast, in their placemaking work with communities, Schneekloth and Shibley (1995) found social knowledge of place to be very valuable and labeled it "subjugated knowledge."

> People know many things about the places in which they live, although this knowledge is often unstructured, informal, and hesitant. It is not the kind of information given voice in professional arenas and could be called a form of subjugated knowledge. (Schneekloth and Shibley 1995:5-6)

D. Implications of failure to access meanings and values

Failure to use methods that allow the expression of and access to the meanings and values inherent in social knowledge, has many implications. Socolow (1976) suggested that technical studies, like SIA, are unable to help resolve resource controversies because of the issue of failed discourse about social values. Socolow

(1976:2) said, "The public debate is cloaked in a formality that excludes a large part of what people most care about." Formal comment processes, public hearings, the use of secondary data, and impersonal surveys all shield resource managers, planners, and researchers from *learning with* those who are affected by resource management decisions (Krannich et al. 1994; Socolow 1976; Williams 1995).

Depending solely on instrumental values (Sagoff 1991) and the use of cost-benefit analysis "short circuits political discussion, not to mention participation" (Bellah 1983:49). Standard approaches forgo opportunities for creating and sharing knowledge, and developing interests and values. An additional implication is increasing agency distrust. Williams (1995:6) suggested that the "explicit marginalization by resource professionals of symbolic meanings as irrelevant [has] contributed much to the distrust of agencies and professionals involved in public land management."

E. Finding methods that facilitate the expression of and access to meanings and values

By conceiving of place as a cultural system the White Pass process demonstrated that it is possible to illuminate multidimensional meanings and values using civic science. Civic science, using an interpretive-participatory approach, assumes that "it is through civic conversation that citizens invoke and create a vision of a shared future, which can serve to guide difficult decisions" (Shannon 1991b:29). Grounded in a deliberative democratic public philosophy civic engagement is facilitated rather than avoided. "Process can have a profound effect on perceptions and, hence, on individual preferences" (Reich 1985:1625). Therefore the choice of methods and theory when dealing with issues of placemaking is critical.

F. Comparison of the White Pass process and the Gifford Pinchot social impact assessment

1. *Organization of the comparison.* The purpose of this chapter is to compare the White Pass process as civic science with a social impact assessment that is representative of planning and assessment using a standard SIA approach. The goal of the comparison is to demonstrate the qualitatively different outcomes achieved by using these different approaches in terms of knowledge/learning, benefits, and opportunities for social action. Through the comparison the implications of choosing one approach or the other are made evident.

First, SIA as a social inquiry process is described and critiqued. Next, a specific SIA, the social and economic analysis from the Gifford Pinchot National Forest Final Environmental Impact Statement (FEIS), is presented. Both a description of the Gifford Pinchot environmental impact statement (EIS) planning process and data from the FEIS social and economic analysis (FEIS-SIA) are provided. Next, the processes and results/outcomes of the Gifford Pinchot SIA and the White Pass process are compared.

2. *Basis of the comparison.* Forest planning is a formal technical process required at the Forest level every five to 15 years. The planning process is specified in the implementing regulations of the National Forest Management Act of 1976 (NMFA). An environmental assessment (EA) or environmental impact statement (EIS) is required by the National Environmental Policy Act of 1969 (NEPA) to disclose potential environmental effects of proposed actions. A social and economic assessment (SIA) is also completed as part of an EA or EIS. The purpose of the Gifford Pinchot EIS process was to evaluate and compare the potential environmental and social effects of alternative forest plans. The purpose of the SIA was to analyze the potential social and economic effects of each of the alternatives.

The White Pass process did not evaluate the potential impact of a policy decision. However, the two processes can be compared based on the shared purpose

of expanding the understanding of the social world. They also provide concrete examples of the two opposing public philosophies – competitive pluralism and deliberative democracy.

A proposition of this dissertation is that social assessment, when understood as placemaking, can be designed as civic science such that the process itself can result in added benefits and opportunities for social change. The comparison presented here rests on the analysis in this dissertation that interpretive-participatory approaches of civic science enable the expression of and access to aspects of place as a cultural system.

However, at the heart of this comparison is the conundrum that depending on one's choice of theoretical and methodological orientation, what a "social assessment" is varies significantly. Dale and Lane (1994:253), in a review of planning and assessment literature, found SIA following two parallel tracks.

> Differences have emerged between those who view social impact assessment (SIA) as a formal inquiry and assessment process within a specific legislative framework and those who see SIA as a means of empowering communities to participate effectively in the highly political arena of resource development decision making.

Central to grasping the differences between these two orientations to SIA are the issues of "whose knowledge" and "knowledge for whom." When social assessment becomes an opportunity for civic engagement, then those who participate in creating and using the knowledge act as social researchers, or lay social scientists, and this knowledge is theirs and for them.

Poston (1950:114) summed up this difference well when, reflecting on the Montana Study, he noted that,

> [Scientists] could have done a more expert job of research . . . [had they] made the usual professional surveys to determine community needs, written up some high-sounding scholarly

reports, and let it go at that. But the results would have had
little influence on people living in the communities, and like
most expert surveys [the reports] would have wound up in a
dusty filing cabinet of the University.

The White Pass assessment was in keeping with John Dewey's ideas of
learning by doing. Dewey wrote, "*Democracy must begin at home, and home is the
neighborly community*" (1946; orig. 1927:213; emphasis added). Louis Mumford
(1938), strongly influenced by Dewey's ideas about social learning, believed that
people should not rely so heavily on experts, and that they could and should do more
for themselves. To this end, the White Pass process provided an opportunity for
citizens to become the lay social scientists espoused by Stanley (1988/2). The analysis
provided here reveals that the White Pass process was enactment of civic science and
demonstrates that social assessment, when conducted as civic science, democratizes
scientific research as discussed by Shannon and Antypas (1996). The comparison with
SIA demonstrates the inability of standard approaches, based as they are on a
competitive pluralist public philosophy, to facilitate forums that can enable civic
science to occur.

II. OVERVIEW AND CRITIQUE OF A STANDARD SOCIAL IMPACT ASSESSMENT PROCESS

A. Overview of a standard social impact assessment

Social impact assessment (SIA) is part of the process of developing an
environmental impact statement (EIS), and thus part of Forest planning. When
developing an EIS, Forest Service planners and specialists form an interdisciplinary
team (IDT) representing disciplinary or specialty areas (Larsen et al. 1990) such as
silviculture and hydrology. The IDT develops a number of alternative management
plans that become part of the draft environmental impact statement (DEIS). The

DEIS developed by these experts consists of biophysical and socioeconomic data and an analysis of the alternatives using a variety of variables. Standard social impact assessment (SIA) commonly analyzes the differential effects of the alternatives on jobs for example. SIA may be done through a contract with a social science consultant or may be assigned to a planner, landscape architect or other employee who may or may not have a social science background.

The terms social impact assessment and social assessment are often used interchangeably to describe assessment processes (Burdge 1993). Even when social assessment is differentiated from SIA, fairly standard SIA methods are most frequently used (Burdge 1993). Hereinafter such methods are referred to as standard SIA (SIA). The discussion presented here is specific to SIA and planning as practiced by the US Forest Service. However, most social assessments and SIAs are similar and this discussion may apply more broadly to SIAs and other planning processes practiced by other resource management organizations. The following summary of SIA will orient readers unfamiliar with this assessment process.

The four steps applied fairly consistently in a SIA, as described by Burdge (1993), are:

1. Identification. In this step two questions are asked: What is being proposed? Who might be affected and where?

2. Scoping. Scoping involves gathering and analyzing data on present conditions and historical trends.

3. Data collection. Data are then gathered specifically for variables determined to be important to the situation.

4. Analysis of project effect. The data are analyzed to identify potential impacts.

Burdge (1993) identified two additional steps: (5) mitigation, enhancement and monitoring, and (6) follow up, which consists of a retrospective review of the assessment process. Despite his optimism that these last two steps would be

accomplished as part of each SIA these steps are not applied as consistently as the first four.

In his handbook on social impact assessment, Burdge (1993) described standard social variables and infrastructure. He provided 26 standard social variables organized into five categories. The categories are: population impacts, community/institutional arrangements, conflicts between residents and newcomers, individual and family level impacts, and community infrastructure needs. Examples of standard variables are population, employment by job class, unemployment, and wages. Aspects of infrastructure include numbers of police, patrol cars, hospital beds, libraries, and teachers (Burdge 1993). The sources for most data that provide measurements of these variables are the Federal Census and state labor, revenue and social service reports (Interorganizational Committee on Guidelines and Principles for Social Impact Assessment 1984). Data on land ownership and taxes are available from counties.

The information gathering and analysis process in this type of assessment is a technical exercise, carried out by a researcher as a technician. This approach assumes that if the methods used are technically and professionally "sound" the public will support the outcome (Hays 1959; Wondolleck 1988). This assumption is unfounded (Williams 1995; Brunson et al. in press). More important may be the question of how "sound" or appropriate the SIA process itself really is in any particular situation.

As part of Forest Service planning, SIA has been based on the assumption that planning is a technical process that can find the "right" answers to solve resource problems (Larsen et al. 1990). The focus and thus the variables selected and the data reported in an SIA usually reflect the economic and technical aspects of a proposed development or administrative proposal and rarely address social and cultural considerations (Gold 1985; Meidinger and Schnaiberg 1980). Maintaining this narrow view of social assessment fails to incorporate place as a cultural system, and thus

cannot adequately inform an understanding of social systems and social concepts of well-being and quality of life (Kusel and Fortmann 1991; Williams 1995).

The information obtained through SIA may be necessary in order to answer important questions. However, depending on the context within which planning and SIA occur SIA is not always necessary, often not sufficient, and, at times, may work at cross-purposes to management's needs (Dale and Lane 1994). This dissertation proposes that in some situations taking a civic science approach to increase understanding of place as a cultural system may be more beneficial than a standard SIA. In other situations combining the two approaches may an even better approach.

A critique of the SIA process may help illuminate how the choices of theories, methods, and variables are made, why the standard approach is so narrow, and what some of the implications of using the standard approach are. Concerns with SIA are not limited to the Gifford Pinchot FEIS-SIA or the Forest Service's use of the SIA process. This critique, developed from written analyses of SIA by Meidinger and Schnaiberg (1980) and Schnaiberg (1980), is meant to draw attention to the broader issues surrounding the use of SIA.

B. Critique of a standard social impact assessment

The SIA process is portrayed by SIA practitioners as being value-neutral (Dale and Lane 1994; Meidinger and Schnaiberg 1980) since scientists, detached from the object of study, interpret statistical data as "facts." However, to be value-neutral would require sampling all possible effects of a proposed project or policy decision which is impossible (Meidinger and Schnaiberg 1980). SIA, according to Meidinger and Schniaberg (1980:512) cannot achieve a value-neutral state because (1) existing science is both inadequate and biased in that "the available science base has major gaps, systematic gaps that frequently correspond to the indirect negative effects of projects"; (2) ideological traditions result in a relatively small number of the effects

associated with economic expansion being addressed (e.g. employment and wages);
and (3) funding and time for research are extremely limited.

Based on their analysis of SIA, Meidinger and Schnaiberg (1980) found that an
agency's mission and purposes for doing an EIS condition a variety of choices made
within the SIA process.

> Not only are discretionary modeling decisions likely to be made
> in ways convenient to the agency, but the questions addressed
> are formulated from its perspective. The absence of rich data
> on actual consequences facilitates both tendencies. Projections
> are difficult to challenge concretely, and analytical biases
> difficult to pinpoint, for lack of a full picture of the actual
> consequences of projects.
>
> . . . .
> The paucity of empirical information on actual effects has
> facilitated the tendency for agencies to portray their impacts in a
> favorable way through assumptions and projections of benign
> effects. Past biases, conceptual difficulties, ideological
> blunders, and inadequate empirical research thus all contribute
> to the continuity of a stable picture – perhaps largely illusion –
> of impacts. (Meidinger and Schnaiberg 1980:515-516)

"Many agencies act as advocates rather than scientific observers within the EIS
context . . . . Advocacy, after all, implies that drafters emphasize the socioeconomic
gains of a project and minimize the ecological losses" (Schnaiberg 1980:320).
Schnaiberg (1980) found that not only does an agency's own political agenda affect its
development of an EIS, but some of those involved in developing SIAs also have
political agendas. Schnaiberg (1980:325) found that "professional economists have a
stake in presenting a facade of science even where it is unjustified".

These agency and professional biases are played out in "a continuum of a priori
procedural decisions that agencies and analysis can make" (Schnaiberg 1980:331).
Schnaiberg (1980) noted that the spectrum of possible results runs all the way from
listing only the most obvious and significant impacts to listing every conceivable

outcome. Most analyses go with the shorter list of major effects (Schnaiberg 1980)

thus giving the advantage to the proposed activity.

> It tends to be the most socially conservative approach . . .
> [which] maximizes the likelihood that past decision-making
> criteria will be upheld in the name of 'social progress.' In short,
> it is maximally congruent with the production treadmill and
> minimally congruent with major socioeconomic change.
> (Schnaiberg 1980:331)

Identification and analysis of "immediate socioeconomic gains from a project"

(e.g. jobs and wages) are more likely than identification and analysis of probable

impacts to community well-being or quality of life. There are two reasons for this.

Data on jobs and wages are more readily available and the science involved in these

calculations is more advanced than calculating measures of well-being or quality of life

(Schnaiberg 1980). "The shorter the list presented, the more EISs are biased in favor

of past production practices, for the least documentable ecological and social

externalities or production are likely to be dropped from review" (Schnaiberg

1980:331). Quantifiable data are favored "at the expense of those [data] which may

be as meaningful but less easily measured" such as measures of quality of life and well-

being (Knetsch 1970:572). Knetsch (1970:568) went so far as to suggest that

"projections . . . [are] made to legitimize increases in the current means of providing a

resource service." According to several reviewers of SIA, SIA has traditionally

favored "social progress" and economic growth through increased production and

development (Knetsch 1970; Gold 1985; Meidinger and Schnaiberg 1980; Schnaiberg

1980). Thus SIA is not value-neutral.

In Schnaiberg's (1980) analysis he examined a benefit-cost model a common

component of SIA. In SIA a benefit-cost model compares the ecological costs and

socioeconomic benefits and costs of a proposed project with those of an alternative.

Usually the alternative represents taking no action. In a Forest Service EIS-SIA

several alternatives are compared, including a no-action alternative and an alternative reflecting continued operation at current levels.

Schnaiberg (1980:322-323) explained that in a benefit-cost analysis environmental impacts for a proposed project are usually underestimated due to lack of science and data.

> Since the EIS and the benefit-cost analysis model both emphasize quantifiable impacts, this weakness of the social intelligence base in turn lowers the estimates of [ecological costs]. In effect, this biases the evaluation in favor of the treadmill of production, and against environmental impact aspects. (Schnaiberg 1980:322)

Schnaiberg (1980:322) went on to say:

> The socioeconomic benefits and costs can be of two types: direct and indirect. Direct costs are expenditures, which many agencies have long underestimated (Morgan 1971; King 1978) in order to improve the attractiveness of projects. Indirect costs include opportunity costs – the loss of potential gains from equivalent expenditures in other projects. . . . Other indirect costs include the socioeconomic effects of ecological impacts. These are understated, since (1) [ecological costs are] an underestimate and (2) we have had little social scientific data on the socioeconomic dimensions of [ecological costs]. Taking all these factors together, [socioeconomic costs are] generally underestimated.

These major biases only occur on the cost side of the ledger. Schnaiberg (1980) noted that economic research has focused on identifying benefits of development. Thus, models are available to assist with analysis and data on socioeconomic benefits are frequently available from agencies involved in the project. For a no-action alternative there may be no ecological costs as there would be no development or change from existing conditions. When there are a number of alternatives a variety of cost estimates are provided relative to the action proposed in each alternative. While socioeconomic benefits for the proposed project are often

given in terms of increased jobs and wages, for the alternatives socioeconomic costs are often stated as decreased jobs and wages. Socioeconomic benefits of a no-action alternative are often the preferred alternative's costs, i.e. no action results in preservation of the environment which is portrayed as a socioeconomic cost to going ahead with the proposed development. One of the effects of this approach is that it "furthers the presumption . . . that there is an inexorable tradeoff between employment and pollution" (Meidinger and Schnaiberg 1980:517-518) or, more broadly, between jobs and the environment. Meidinger and Schnaiberg (1980:518) noted that "this approach does nothing toward understanding the real subjective changes experienced by groups affected by the development."

One additional source of bias lies in the selection of variables, or indicators. (The terms variable and indicators are used interchangeably.) Several social scientists, including Gold (1985), Krannich et al. (1994), Meidinger and Schnaiberg (1980), Palinkas, Harris and Petterson (1985), Shannon (1981) and Williams (1995) recognized the choice of variables to be measured and analyzed as a strategic choice reflecting the assumptions and values of the researcher/research team.

Social scientists do not agree on a standard set of variables for social assessment, or even if there should be one "approved" set (Krannich et al. 1994). However, many social scientists agree that there has been a bias in favor of quantitative methods and quantifiable data (Bengston 1994a; Krannich et al. 1994; Meidinger and Schnaiberg 1980; Williams 1995). Even with this emphasis on quantification, "the relative paucity of appropriate data has required those relying on quantitative methods to rummage around in the odds and ends of existing data in order to fix upon whatever 'statistical' relationships they could pick up" (Meidinger and Schnaiberg 1980:514). This means that "the almost arbitrary availability of data begins to define the question of *which* effects are examined" (Meidinger and Schnaiberg 1980:514). Use of quantitative methods and existing data has been found

to result in incomplete information, neglect of important effects, and the use of inadequate variables (Meidinger and Schnaiberg 1980).

> The use of inappropriate or inadequate indicators to predict
> effects of interest is paired with a tendency to equate resultant
> projections with constructs they do not in fact constitute. For
> instance, projected change in average local income plus service
> sector growth is often presumed to depict the change in overall
> standard of living. (Meidinger and Schnaiberg 1980:518)

Relying on limited socioeconomic variables, such as employment and wages, to represent effects of a policy decision or management action on well-being and quality of life can be misleading as these variables address only limited dimensions of these multidimensional social constructs (Krannich et al. 1994; Kusel and Fortmann 1991). Krannich et al. (1994:39) noted that:

> Inevitably such an approach restricts the adequacy of an
> assessment due to limitations in the array of social processes
> and conditions for which data are available, inconsistencies
> between desired scale for the assessment and the units of
> analysis represented in available data, insufficient data that are
> pertinent to particular social and stakeholder groups, and lack
> of access to data pertaining to subjective dimensions of well-
> being or the symbolic meanings or particular social and resource
> contexts.

The methods and data of SIA reveal little about place as a cultural system. Krannich et al. (1994) found that "socially-constructed interpretations of and meanings attached to resource conditions and uses and their relationships to established social structures and life ways" are not revealed through SIA. These attachments and relationships are much harder to measure than employment and wages. However, they may be just as important or even more important in understanding the multidimensionality of place including the relationships and actions that define and maintain a place as a cultural system. SIA reveals little about why people live in or near the forest, what people view as issues and concerns, or what citizens' preferences

are for management. There is little or no consideration of the benefits of facilitating forums for civic engagement, civic conversation, and civic science – or the costs of not facilitating these forums – as part of SIA (Dale and Lane 1994; Palinkas, Harris and Petterson 1985).

An added complication is that most indicators reflect multiple causation rather than simple cause and effect relationships.

> The simultaneous influence of many factors may only operate
> with particular combinations of levels of each factor: e.g.,
> unemployment may be a result of age structure of a population,
> in combination with education and skill levels, ethnicity, and the
> like. (Schnaiberg 1980:333)

Schnaiberg (1980) suggested that more effort goes into assessing the probable benefits of a proposed project (or preferred alternative) than the costs.

> Benefits (e.g. profits and jobs) are likely to be well (if perhaps
> over) estimated and characterized. Costs, on the other hand,
> given the incomplete and largely invalid models in use, are far
> less likely to be either enumerated or enumerable. (Schnaiberg
> 1980:328)

SIA projects potential social and economic effects (Meidinger and Schnaiberg 1980). This is referred to as an *ex ante* approach (Krannich et al. 1994). With the complexity of sociocultural systems predictions are difficult at best (Dale and Lane 1994; Krannich et al. 1994; Meidinger and Schnaiberg 1980; Schnaiberg 1980). Projections of costs are based on evaluating impacts of similar projects developed in the past (Schnaiberg 1980). However, Schnaiberg (1980) found that because of the lack of attention to monitoring socioeconomic impacts data from which to estimate potential impacts are limited. Lack of data on potential impacts has resulted in underestimates of the range of possible impacts (Schnaiberg 1980). Thus, social scientists have suggested that assessment processes oriented at monitoring and

assessing change over time would be useful (Dale and Lane 1994; Krannich et al. 1994).

SIA is a competitive pluralist process based on measuring values and preferences through the marketplace thus depending on benefit-cost analysis while viewing public involvement as less necessary for identifying values and preferences. As a technical exercise SIA requires very little interaction with citizens and minimal interaction is facilitated. Citizens are simply reviewers of what appear to be mostly final decision documents. Dale and Lane (1994) suggested that SIA could be designed to enhance the capacity of citizens to participate and collaborate on shared priorities. However, the SIA processes analyzed by Meidinger and Schnaiberg (1980) and others including Dale and Lane (1994), Gold (1985), and Palinkas, Harris, and Petterson (1985) consistently depicted a competitive pluralist orientation focused on analyzing benefit-cost relationships that supported the proposed development. For these SIA processes enhancing citizenship simply was not seen as a goal.

Burdge (1993) acknowledged the opportunity for public involvement to occur throughout the assessment process. However, he defined public involvement very narrowly as "the process whereby the community or larger society provides systematic input" (Burdge 1993:202). In practice, providing support for Burdge's view, Gold (1985) found SIA was most often simply an exercise in fulfilling a legal obligation rather than an opportunity for civic conversation or civic engagement. Instead of promoting or facilitating civic conversation or civic engagement, the four reasons Burdge (1993:203) identified for doing public involvement were that: (1) sometimes local suggestions are helpful and can save time or money, (2) it is good public relations, (3) enabling legislation often requires that citizens be consulted, and (4) NEPA requires it. He went on to say, "In other words, *we see the public involvement process as a way to gather data* on social impacts" (Burdge 1993:204, emphasis added).

Defining the role of public involvement in this way builds on a competitive pluralist view. This view perceives of citizens as aggregates of individuals with pre-formed wants, values, and priorities (Sandel 1996; Stanley 1983). SIA provides for citizens to comment in writing or in person but there are rarely opportunities for citizens to explore priorities together and to work through these priorities to identify a common good.

The Gifford Pinchot FEIS, and the literature reviewed for this dissertation demonstrate how little has changed since Meidinger and Schnaiberg (1980) reviewed the state of SIA in 1980. At the time of their review these social scientists recommended developing "a much richer – qualitative and quantitative – data base" for SIA(Meidinger and Schnaiberg 1980). The analysis of the FEIS demonstrated that this continues to be a desperate need.

III. THE GIFFORD PINCHOT NATIONAL FOREST ENVIRONMENTAL IMPACT ASSESSMENT AS AN EXAMPLE OF A STANDARD SOCIAL IMPACT ASSESSMENT

A description of the process and some of the findings from the SIA completed as part of the Gifford Pinchot National Forest Final Environmental Impact Statement (FEIS) for the Forest's Land and Resource Management Plan (1990) are presented. The social and economic sections from the FEIS are provided in Appendix 3.

A. The Gifford Pinchot National Forest Environmental Impact Assessment Social Impact Assessment: Process

The "primary area of influence" covered by the Gifford Pinchot environmental impact statement (EIS) encompassed five rural counties, including Lewis County. A secondary area of influence was identified as the Portland and Puget Sound

metropolitan areas. Most social and economic data in the FEIS-SIA were taken from the Federal Census and from reports by the Washington State Office of Financial Management and Washington State Employment Security Department. The data are scant. They essentially define the social arena as one of jobs, wages, and payments to counties.[1]

As in most SIAs, professional planners and other experts on the IDT collected data, developed set of alternatives, and conducted a technical analysis. Alternatives included "no change," and "no action" alternatives, along with alternatives that favored special interests such as timber; amenity and non-commodity values; and recreation, old growth, wildlife, fish, and water quality. The alternative preferred by the Forest Service proposed to maintain timber harvest at close to historic levels while improving fish and game habitat and opportunities for recreation.

Following the development of seven alternatives, IDT members compared potential effects of each alternative on a variety of resources and values, including geology, soil, vegetation, wildlife, fish, roadless areas, recreation setting, cultural resources, treaty rights, old growth, visual resources, transportation, minerals, energy, water, wild and scenic rivers, air, land ownership, native plant communities, wilderness, and social/economic aspects. Data collection and analysis were thus removed from citizen life as the researchers and technicians stood apart from their objects of study.

The primary purpose of the SIA was to compare costs and financial benefits of the alternative proposals. Variables used to calculate costs were limited to social and economic variables that were both quantifiable and had existing data available. The variables selected for analysis in the Gifford Pinchot SIA were employment, wages, revenue to counties, and costs and financial returns to the agency. Data was removed

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[1] Counties receive revenues based on revenues from the harvest of timber in lieu of the property taxes they would receive if the land was privately owned. For some rural counties this makes up a substantial portion of the county's operating budget.

from any association with a particular place and aggregated across the five county area for use in a highly abstract Input-Output computer model. The model, IMPLAN, was used to analyze data in order to produce a "picture" of the area's economic structure at the time of study (FEIS 1990).

After the DEIS was completed in 1987, it was released for public comment along with the preferred alternative that had been selected by the agency. The public was given a 127-day review period to evaluate the alternatives. The SIA itself had no separate process to facilitate civic engagement. However, the public involvement component mandated as part of the overall EIS process included open houses held at Ranger District offices, including Packwood and Randle, and a number of other communities lying within the outermost Forest boundaries. IDT members were available at each open house to present an overview of the process, to answer questions and to provide information. Agency employees also recorded questions and comments made by those attending. In addition to the open houses IDT members made presentations at special interest group meetings, including meetings specifically related to the White Pass area. These included meetings with the Lewis County Economic Development Board, Mt. Adams Snowmobile Club, and the Cispus River property owners.

The FEIS document is about 2" thick and contains technical information covering an array of disciplinary and administrative specialty areas. Even with this daunting document, 3,800 written comments were received by the agency.

Following the comment period, public comments were reviewed and minor changes were made based on the comments received (FEIS 1990-S-7). Examples of some of the changes are: incorporation of best management practices (BMPs) for water quality, reduction in timber inventories due to inventories and spatial location accomplished between the time of the DEIS and FEIS, adjustment in the old growth inventory using more recent inventory figures, adjustment of trail management strategies to address motorized and non-motorized conflicts, and adjustment to the

viewshed corridor inventory to accommodate scenic values from trails. The plan was then approved by the Forest Supervisor, the Record of Decision (ROD) was signed by the Regional Forester, and the FEIS was released as the prevailing Forest plan.

B. Gifford Pinchot National Forest Environmental Impact Assessment Social Impact Assessment: Findings

The data presented in this discussion are specific to the Gifford Pinchot National Forest FEIS-SIA. However, most SIA approaches used in forest planning are similar in nature and any one of a number of reports could have been used to provide a suitable contrast to the White Pass process.

The social and economic data provided in the FEIS scoping section (FEIS III-140-148) are very limited. Data include payments to counties and direct, indirect, and induced jobs and income related to the forest for timber and recreation. As is frequently the case in SIA jobs and income were the variables of choice.

The section of the FEIS that compares social consequences of the seven alternatives, is only slightly over four pages long in a document over two inches thick! (FEIS IV-128-132) One of two tables in this section reports timber and recreation-related jobs, income, and payments to counties. The table compares the estimates developed for each alternative with the situation at the time of the analysis. The second table also focuses on jobs, reporting timber and recreation-related employment opportunities (FEIS IV-130).

The FEIS-SIA found that "there were over 55 percent more people employed in 1980 than 1971, a larger percent increase than the population growth for the same period. The major increases were in services, wholesale and retail trade, construction, and other manufacturing" (FEIS III-143). No further analysis is provided as to how or whether this is somehow related to the alternatives.

The report found that "the major downturn in the wood products market during the 1980s resulted in high unemployment rates for the more rural counties"

(FEIS III-146). Unemployment reached a high in Lewis County of 17 percent in 1982 (Table 10). In 1983 it declined to 14.9 and by 1985 was down to 12.5 percent. These statistics raise many questions. There is no indication of what happened to the unemployed people. Who were they? What skills and education did they have? Did they leave the county? Did they re-train and find new jobs? Did some of them go into business for themselves? How were social and cultural networks and relationships affected? How were people able to get beyond the situation and move on with their lives? Relative to these questions little interpretation of the data is presented.

Table 10. Unemployment rates
(percent per year, from Figure III-91, FEIS)

County	'74	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85
Lewis	9.2	13.8	9.6	11.4	9.0	9.5	11.4	13.5	17.0	14.9	13.8	12.5

The primary social variables analyzed in the FEIS-SIA were jobs, including both employment and unemployment, as well as income, yet the FEIS-SIA down-played the role of the Gifford Pinchot National Forest:

> The area's economic health is greatly influenced by national forces. *Inflation, interest rates, conditions in the housing market, and individual preferences for recreational opportunities and living environment have more of an influence on local jobs and incomes that does the Gifford Pinchot National Forest* (FEIS IV-128-129, emphasis added).

The FEIS-SIA identified timber products and recreation as the "two primary social and economic ties between the Forest and its surroundings" (FEIS III-147). An obvious economic tie for both timber and recreation is jobs. In the FEIS-SIA jobs were "averaged out" over a five county area. Through a homogenization process one

job in timber or recreation became interchangeable with any other job in timber or recreation, respectively, across the entire study area masking any sense of particularity of job or location.

The FEIS-SIA also documented estimated recreation use (FEIS III-145). The level of dispersed recreation on the Forest in 1984 was reported at approximately 1.3 million *Recreation Visitor Days* (RVDs). This measurement included those visiting the Forest to hunt, fish, camp, hike, sightsee, pick berries, snowmobile, horsebackride, and participate in a number of other forms of recreation. Developed recreation sites received 745,000 RVDs of use in the same period (FEIS III-145). Rich and varied hunting, fishing, and berrying experiences became homogenized as RVDs. Aggregated data masked any particularity of user, location or experience.

IV. COMPARISON OF THE WHITE PASS PROCESS AND THE GIFFORD PINCHOT SOCIAL IMPACT ASSESSMENT

A. Approaches to social assessment

The categories in Table 11 frame the comparison between the Gifford Pinchot SIA as a standard SIA and the White Pass process as civic science. The framework categories illuminate the differences in both process and outcome between the two approaches. The Gifford Pinchot SIA is explored first. The participatory White Pass process is then compared to the SIA. The SIA provides a good example of a methodology based on ideas found in a competitive pluralist public philosophy, while the White Pass assessment was designed to facilitate a deliberative democratic process. The comparison of these two processes adds practical illustration to the categories of the public philosophy framework developed in Chapter 2. For managers and researchers the comparison illustrates the implications in practice of using a particular theory and method, and the importance of asking the question: Which (whose) interests does a particular method serve? (Meidinger and Schnaiberg 1980).

Table 11. Alternative approaches to social assessment

Orientations to social assessment	Standard social impact assessment	Civic science
Underlying public philosophy	Competitive pluralist	Deliberative democratic
Nature of problems	Technical/scientific	Social/place-based
Nature of knowledge	Scientific, objective, knowable, detached from practice	Social, interpretive, socially constructed, historically-embedded, value-based, embedded in practice
Source of knowledge	Experts and specialists, knowledge	Participants, citizens and experts working together.
Planning orientation	Technical/rational, "professionalized"	Participatory, social learning and civic science
Role of participants	Citizens as external to process, individuals with pre-formed individual interests; experts as distant, removed from object of study	Citizens as lay social scientists, researchers as research facilitators, mentors, catalysts for learning
Values recognized	Instrumental/utilitarian, marketplace	Multidimensional
Data/variables	Date gathered using empirical-analytic methods; e.g., employment/unemployment, wages	Meanings, metaphors, values, myths,

B. Gifford Pinchot social impact assessment: a standard social impact assessment

1. Underlying public philosophy.

Through the EIS process seven alternative forest plans were developed by agency experts. The purpose of holding open houses and releasing the DEIS document for public review was to meet legal requirements for public involvement but also to educate people about the predetermined options offered by the agency. The

open house and public review process provided minimal opportunity for citizens to come together to build a shared vision for forest management. Since a competitive pluralist public philosophy views people as having pre-formed preferences based on their own self-interest, there was no reason to provide forums or encourage civic conversation.

   2. Nature of problems. Forest management, EIS and SIA are based in a tradition that views problems as technical in nature. In an attempt to depoliticize and professionalize resource management forest planning has been cast as a technical, rational process to enable the discovery of "objective" value-free technical solutions. The result removes science and planning from day-to-day life while assuming technical solutions exist for every problem. In the Gifford Pinchot SIA, as in most SIAs, the problem and solution were framed in the economic terms of a benefit-cost model. These standard methodologies consistently show an outside influence as most important while minimizing recognition and acceptance of the moral responsibilities of the Forest Service as a powerful placemaking actor.

   3. Nature and source of knowledge. Defining forest planning and SIA as technical exercises predefined necessary knowledge as being technical and scientific. This in turn predefined the source of this knowledge as experts. In the Gifford Pinchot SIA the development of the seven forest plan alternatives and the selection of a preferred alternative occurred "in-house" among IDT members and other agency employees *prior* to the public involvement process. This indicates that the SIA viewed the nature of the appropriate and necessary knowledge as being technical and scientific and the source of that knowledge as being experts and specialists. This is a competitive pluralist perspective that views scientists as "professionals whose specialized training gives them the authority to create scientific knowledge which is separate from the knowledge of experience and practice" (Shannon and Antypas 1996:67). In the SIA the IDT and other agency staff developed knowledge of employment, unemployment, payments to counties, and recreation users from

statistical reports that were detached from day-to-day life. This is the knowledge that was deemed necessary and sufficient for the SIA.

4. Planning orientation. Based on the perspective that problems are technical and for every problem there is a technical solution the knowledge to solve these problems is technical and scientific. Thus professionalized processes are necessary and appropriate to the task at hand.

In this SIA, as happens frequently in Forest Service planning, agency professionals, enamored with technical tools such as FORPLAN, a linear programming model, and IMPLAN, an input-output model shortchanged social and cultural considerations of planning (Larsen et al. 1990). These complex computer models produce outputs that are difficult to comprehend and have little meaning for non-professionals (Williams 1995). They effectively detach experts and their technical processes from citizens.

> Technicist discourse . . . makes experts hierarchically superior
> to and more competent than citizens . . . . The discourse of
> positive science . . . easily expands to include more and more
> social life and experience. It thereby leads us to ignore history
> and tradition, to turn political and moral questions into technical
> or instrumental ones, and to treat every 'problem' as though it
> had a 'solution.' (Brown 1991:325)

The technical issues the SIA focused on were the economic benefits and costs of alternative forest management activities. FEIS-SIA identified "two primary social and economic ties between the Forest and its surroundings: timber products and recreation" (FEIS III-147). A critical potential "primary tie" remains undeveloped. The Forest Service has the opportunity to become a leader in creating forums that connect and reconnect people to the forest and the world around them through civic conversation, civic engagement, and civic science.

Civic conversation in this sense is more in line with Aristotle's view of conversation as a means "to help citizens enact morally defensible positions" rather

than as a way to educate "them" by presenting technical discourse (Brown 1991:325). This process of "educating them" is the current practice used in SIA. The open houses held in the EIS process are examples of this education orientation.

Civic conversation was not facilitated through the formal comment periods that functioned as public involvement. Following the release of the DEIS there was a 127-day comment period. Thus the public was given an opportunity for "involvement." However, "relying upon formal, written techniques for public participation" favors those who are articulate and who have been socialized to read and respond to technical documents through formal processes, thus "exacerbat[ing] social class differences" (Shannon 1991b:29).

5. Role of participants. The researchers involved in the EIS took on the role of technician or expert. They remained distant and detached from the people who would be affected by objectifying them as employment or wages. The role of the researcher in SIA is to direct and control the study process with the goal of producing technical, instrumental knowledge.

In the SIA, instead of decision makers, or lay social scientists, people became statistics, simply "aggregates of individuals." Rather than social beings with interests, values, and meaningful lives, people were dehumanized by reporting them as aggregates of individuals represented by jobs, wages and "RVDs." The FEIS-SIA classified people who live in the Portland metropolitan area as people who "see the forest as a place to get away from the urban environment" (FEIS 1990 III-142). This simplistic view sets up an "us versus them" situation, making it appear as though these people are only escaping **from** something rather than escaping **to** something that they might value. This view also obscures any understanding of shared values or meanings between those from urban areas and rural residents.

"Public involvement" included formal written comments, open houses and interest group meetings which provided limited opportunities for citizens to learn about the alternatives, about their communities, about themselves and their interests

and priorities, or about how to work together. The assessment process did not recognize citizens as policy makers or partners in the learning process. In SIA processes to involve citizens to any greater degree than required by law are perceived as unnecessary. This competitive pluralist perspective sees the public as having neither the skills or the responsibility to be involved (Bryan 1996). Thus participation is assumed to be unnecessary, chaotic and often something to be avoided (Sandel 1996; Stanley 1998/1).

6. *Values recognized.* The SIA, as a product, recognized unidimensional utilitarian values. These values were reflected in benefit-cost tables presented in the FEIS (II-102-103; IV-129). The SIA, as a process, was seen as technical and scientific having little value beyond meeting the legal mandate that required it and making somewhat useful estimates of possible future change due to forest management activities.

7. *Data and variables used.* Most of the data in the SIA came from the Federal Census, state employment records and other state and federal reports. No data were generated through public processes. The variables and levels of abstraction used in the EIS-SIA created "a decontexualizing process that result[ed] in a loss of meaning. The everyday experience or meaning of place [was] easily lost in [the] scientific and rational discourse" (Williams 1995:9). The information gathered in a SIA, while useful to research, is irrelevant to resource managers who wonder how they can use it to deal with the problems they are faced with daily.

In the FEIS-SIA jobs were "averaged out" over a five county area. One job in timber or recreation was viewed as interchangeable with any other job in timber or recreation, respectively, across the entire study area. This type and level of generalization resulted in the loss of the particularity of the place. This generalization also gives the impression "that places are theoretically interchangeable, even reproducible, given that the replacement provides a similar combination of goal-

fulfilling attributes" (Williams 1995:13) and demonstrates one reason why this method cannot understand place as a cultural system.

8. Summary. Thus, the Gifford Pinchot SIA process, based on ideas found in a competitive pluralist public philosophy failed to provide opportunities for civic conversation and engagement and failed to facilitate the expression of or access to place as a cultural system. This limited approach gives the impression that people and their knowledge are unimportant, that places are inter-changeable, that the only important values are economic in nature, and that problems and solution are technical requiring professionalized processes.

C. White Pass as civic science: expressing and accessing place as a cultural system

1. Public philosophy. Civic education and experiential learning were important educational outcomes of the White Pass assessment as a civic science process. The underlying deliberative democratic public philosophy enabled civic science to occur. A deliberative democratic public philosophy views citizens as having an inherent obligation to the common good that supersedes their individual interest and enables them to come together in civic conversation and engagement. Citizens took responsibility for the White Pass process, enabling themselves as lay social scientists. The Discovery Team itself resulted from a vision created and carried to fruition by the Committee.

By acting as they did in promoting civic conversation, White Pass citizens took responsibility for the creation of a common vision. Citizens did not take responsibility for developing a common vision as part of the EIS-SIA. Some will counter that it is not the agency's role to promote civic conversation, civic friendship, or civic science. However social and political scientists have suggested that failing to engage citizens can be "fundamentally disabling" and rather than having no effect, these methods can result in negative effects on community and citizenship (Appleyard 1979; Brown 1991;

Bryan 1996; Putnam 1993, 1995; Schneekloth and Shibley 1995; Wilkinson 1991; Wondolleck 1988).

> The failure of conventional techniques . . . to permit civic
> discovery may suggest that there are no shared values to be
> discovered in the first place. And this message – that the
> 'public interest' is no more that an accommodation or
> aggregation of individual interests – may have a corrosive effect
> on civic life. (Reich 1985:146-147)

Thus, the use of standard assessment, based on a competitive pluralist public philosophy, may weaken quality of life and well-being, local communities, citizenship and thus the very foundation of democracy (Kemmis 1990; Poston 1950; Schneekloth and Shibley 1995; Shannon and Antypas 1996; Wilkinson 1991).

2. Nature of problems. The White Pass process was oriented around the social nature of problems. One of four goals of the White Pass process was to increase the social and economic database – a goal with a technical orientation. Other goals were: to increase the understanding of area history and culture, to improve relationships among different sectors of the community, and to identify and improve training and education opportunities. These goals reflected the social nature of the problems the White Pass citizens were interested in. Thus, the White Pass process was designed to allow citizens to come together to define issues and concerns and identify opportunities for social action that were meaningful to them.

3. Nature and source of knowledge. In the White Pass process knowledge was socially constructed through the process itself and thus citizen involvement was imperative in order to construct knowledge that would be perceived as valid by and useful to the community. Members of the community saw their involvement in the assessment process as critical.

> It was felt that the community itself must be involved in
> deciding what data would be collected, to insure that the
> information was pertinent and of value to the residents.
> (Klattenhoff, Unpublished Report, 1995)

Knowledge was, for the most part, interpretive and social rather than technical. The Discovery Team report is a collection of narratives in contrast to the statistical tables provided in the FEIS-SIA. Knowledge of place as a cultural system was created through the placemaking process of civic science. Rather than data waiting to be collected the stories of place were created by participants through the process of inquiry.

Citizens engaged in civic science as lay social scientists and participated along with researchers in the creation of knowledge through an experiential inquiry process. White Pass citizens were interested in research "with" rather than "on" them. The interpretive-participatory orientation of the process resulted in construction of multidimensional knowledge. Participants learned: about the community, about other citizens' interests and concerns, about appreciation for the area, about gaps in knowledge and about themselves and their interests and priorities. They learned how to be lay scientists, how to collaborate and how to work together for a common good.

The White Pass process demonstrated that citizens, even student-researchers, can construct useful knowledge as lay social scientists. In the White Pass process the research facilitators were reflective and sensitive to their roles as catalysts for social learning and as mentors, especially for the at-risk and younger students and the teacher-supervisors.

It was through the process of being participants in the White Pass process that the research facilitators learned about the doing of civic science and social learning, about place as a cultural system, and communication that is relationship-based rather than information-based, about themselves (self-knowledge), and about the integration of these three aspects of research – substance (theory), method, and self-knowledge. The learning that took place could not have been gained by taking any other stance or using any other method.

4. Planning orientation. As an experiment in governance the White Pass process demonstrated the potential for enhancing citizenship, civic engagement and civic conversation through civic science and social learning. This potential can be realized based on an understanding of citizens as complex social beings who develop their values, interests, and priorities as they learn about themselves and others (Reich 1985; Sandel 1996; Shannon 1991a; Stanley 1988/1).

Shannon (1991a:52) suggested however that when opportunities are not provided that allow interests "to be defined within the planning process and when the view of the agency is simply one of filling another column on a huge matrix of information, then open, public deliberation cannot and does not occur." Thus, without a deliberative democratic orientation, learning through civic science, such as the learning accomplished in the White Pass assessment, cannot occur.

The technical approach used in the Gifford Pinchot SIA provided no opportunity for citizens to work toward a shared vision of forest management. There was no equivalent to the opportunity for civic engagement, civic conversation, and civic science provided by the White Pass assessment. Such an opportunity would have allowed citizens to develop and share their preferences, develop a common vision, learn about themselves and others and about the area while creating a sense of identity with the forest/area, other people, or the process (Reich 1985). However, from a competitive pluralist perspective preferences can be determined through the marketplace and thus forums are unnecessary (Sandel 1996; Stanley 1988/1).

A civic science process facilitates an ongoing narrative that provides citizens with opportunities to define a common vision built over time on a shared story. At monthly meetings Committee members deliberated in the pursuit of a common vision about concerns and needs of the community. The Discovery Team process engaged students in the community through interviews in the business community, with visitors to the area and with local residents.

As a way to involve students in our community this has been
tremendously successful. (Committee member)

The Committee designed opportunities to engage others in collective action.
In addition to its own meetings, it arranged meetings with other groups. The
Committee scheduled joint meetings with social and health care workers to discuss
shared concerns and with school superintendents and others from east Lewis County
to investigate telecommunications possibilities.

Murphy and Pilotta (1984:23), in a review of community-based research, found
that:

> If valid information is to be garnered about a community, the
> researcher must tap into its "*domain of commitment*," or using
> Marcuse's term, its "*aesthetic dimension*" which is composed
> of the values (human action) that hold the social world together.
> *This source of social life . . . can only be reached by revealing
> the underlying commitments that unite a group of people into a
> community.* (Emphasis added)

Civic science provided the means to gain a better understanding of the White
Pass as a cultural system by facilitating the expression of and access to the meanings
that make up the aesthetic dimension mentioned by Murphy and Pilotta (1984).

5. Role of participants. In the White Pass process the research facilitators
were reflective participants (Murphy and Pilotta 1984). Rather than directing the
research process, they were facilitators, mentors and catalysts for learning
(Schneekloth and Shibley 1995; Shannon and Antypas 1996). The research facilitators
came as outsiders, from another world, not to teach or direct "but rather to learn *with*
the people, about the people's world" (Freire 1988:181; orig.1970, emphasis added).

Paraphrasing comments McHugh made at the end of the summer, she said,

> Your report is icing on the cake because what you've done is to
> be here. And you did not come as outsiders, you have
> participated right along with us. The way you participated in
> the community, was, for this community valid research in ways
> that other research was not valid. The community rejected

other research and they did not reject you because you fit in.
You did not come with preconceived notions, preconceived
ideas, you came and rolled up your sleeves and were elbow to
elbow with us. You were unassuming but you also said here is
what I'm seeing or here's what I'm able to read back to you,
and that was an important part of your being there, was just that
you spoke up and said what you were thinking.

The research facilitators wrestled with not taking control over the research
process – the standard research role – instead maintaining a role as participants,
facilitators, and catalysts. Referring to themselves as project assistants, they
recognized that though they brought knowledge and skills of process and method, they
knew little about the particulars of the community. It was the student-researchers and
the teacher-supervisors who were the experts in that area. Thus each participant was
valued for the knowledge and experience he or she brought to the effort. To
paraphrase Maguire (1987:37-38), we all know some things; however none of us
knows everything. By working together we will all know more, and we will all learn
more about how to know. One of the things all participants in the White Pass process
gained was a better sense of how to know.

In the White Pass process citizens were seen as complex social beings with an
obligation to a common good that exceeded their individual interest (Sandel 1996;
Stanley 1983). Citizens were perceived as lay social scientists able to construct useful
knowledge through civic science processes. In many way citizens became teachers
and the research facilitators became students learning from the interaction with the
citizens and from the process itself. Those who participated benefited personally from
their experiences.

However, benefits accrued only to the degree citizens participated. Only a
fraction of the citizens of the White Pass area participated in the assessment. Citizens
who participated benefited personally much more than those who did not participate.
The important aspects of partnership, cooperation, and collaboration developed
through the White Pass process are the same characteristics identified as critical for

civic conversation, community capacity for responding to change, and democracy (Korten 1981; Putnam 1995; Reich 1985; Shannon 1991).

6. Values recognized As an experiment in civic science the White Pass process recognized the multidimensionality of values. While interested in socioeconomic data, the Committee also valued process. The Committee recognized the value in facilitating opportunities: for practical experience, for building relationships, for training and education, and for learning about the history and culture of the White Pass area. So while the EIS-SIA identified utilitarian values the White Pass process resulted in creating many values.

Student-researchers created a shared narrative drawing from their own experiences and the experiences of those they interviewed. They constructed several layers of identity: self-identity – of themselves as individuals who could construct valid knowledge; group identity – of the Discovery Team as a collection of individuals who could work together as a team to research "the past, present and future"; and place-identity – of the White Pass area as a friendly place (communities of memory and hope), committed to education and life-long learning (the Adaptive Management Area collaborative learning process understood as a practice of commitment and inhabitance), and an area appreciated by tourists and locals alike (illuminated through an understanding of impression management).

Individuals and the community as a whole were not the only beneficiaries. The Forest Service benefited by having employees such as Margaret McHugh and John Hawkins participate in regular monthly meetings and on sub-committees. Other Forest Service employees worked with the students-researchers. The agency benefited from increased visibility, increased levels of communication, and trust that developed between the agency and the greater community. The agency's identity became more that of an agency willing to engage in conversation and collaboration for the common good as a member of the community.

> The Forest Service has benefited from the assessment
> information which can be used in the Cispus AMA Plan, but the
> greater benefit is our developing partnership with the
> community. There has been a discernible and positive change in
> how we are viewed by the community since our involvement in
> the Community Self-Assessment began. (McHugh personal
> communication)

As demonstrated by the White Pass assessment, taking a civic science approach can increase local capacity and improve participant skills. These outcomes also benefit an agency like the Forest Service as citizens are more willing and able to come to the table to discuss complex issues. Standard planning and SIA methods provide no mechanisms for a comparative outcome to occur.

A group of White Pass citizens were willing to come together to work on the self-assessment. Civic friendships developed and were maintained as people came together, despite their diverse positions on political issues, to participate in the assessment. The Cispus AMA collaborative learning process also can be understood as a civic engagement, illustrating civic responsibility and willingness to participate in civic science. These opportunities, and others like them, allow citizens to enact citizenship. Several social scientists have suggested these activities are the foundations of democracy (Kemmis 1990; Putnam 1995; Stanley 1983). "The core principle of democracy is that educated citizens should make decisions about how to govern themselves . . . and the separation of science and education from community life threatens the foundations of a self-governing society" (Shannon and Antypas 1996).

7. Data and variables used. The Gifford Pinchot SIA depended on the utilitarian value of employment, as an almost singular measure of social conditions. In contrast student-researchers explored and learned about the White Pass area as a cultural system. Data consisted of social actions and the meanings and values made visible through these actions. Student-researchers uncovered layers of investment when they learned that the Methodist Church was once a cheese cooperative owned by local farmers. Student-researchers learned how, over time, a place is created and

recreated as social and economic conditions change, often in response to ecological change. With the eruption of Mt. St. Helens, and subsequent creation of Mt. St. Helens' National Volcanic Monument, the White Pass area went from a relatively unknown, "off-the-beaten path," rural area where most forest users were local hunters and fishers to an international recreation attraction (FEIS 1990).

> We have a lot of tourists coming through this area every year
> just to see Mt. St. Helens. (Student-researcher evaluation)[2]

The student-sponsored community forum can be understood as a community of memory. Many local residents shared stories of past floods, and how people under a variety of circumstances pulled together in civic friendship and transcended adversity. The student-researchers themselves shared their first hand experiences with the 1994 mud slide that blocked US Highway 12.

Student-researchers learned how traumatic and sometimes tragic events can bring citizens together in civic friendship to share their experiences, easing the pain of loss and sharing hope for a better future through conversation and social action. Student-researchers jumped at the chance to investigate and write about the "Gift of Life," a project that high school students had initiated in 1994. The project can be understood as civic friendship, civic engagement, and individual and group identity. Important to the fabric of this community, demonstrating how community well-being and community capacity are tied to social action, this story would never have been considered useful data for an empirical-analytic report like the FEIS-SIA.

> About 3 years ago, Brad and Toni Nelson moved to this area
> with their daughter Ashely. Toni suffers from Chronic
> Lymphatic Leukemia. . . . On September 8, 1994 The Gift of
> Life Foundation officially began. The goal of the foundation

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[2] During the Discovery Team's last week, student-researchers participated in focus group discussions about the research experience. Student-researchers also evaluated the Discovery Team process in writing. Many of the quotes here are drawn from these sources.

> was to at least raise $4000.00 dollars and get 200 East Lewis
> County residents to be tested as potential bone marrow donors.

> Students and community member joined together to raise
> money by sponsoring a wide variety of events. . . . In the middle
> of November when all the fund-raisers ended we had an
> estimated total of $12,000.00. We ended up testing 450-500
> people at the bone marrow drive. (Discovery Team 1995)

From the informal survey on needs and concerns, student-researchers learned,
much to their surprise, that adults and teens have many of the same ideas and
concerns.

> Many people want the same thing for the community. (Student-
> researcher focus group)

> Lot's of people like it the way it is and don't want it to change -
> - both local people and tourists. (Student-researcher evaluation)

Adults and teens alike were concerned about jobs for adults and activities for
teens. Both groups expressed a desire for a shopping mall. Adults saw a need for
people to pull together to work on community problems. Teens were concerned with
vandalism, dumping garbage, and littering. Adults were worried about drugs, tobacco,
and teenage drinking. Both groups expressed concern over the uncertainty of the
timber industry. Many respondents indicated the need for recreation facilities and
activities for all age groups, not unlike the needs identified in the small rural towns of
the Montana Study (Poston 1950).

The student-researchers, in a presentation to the Committee in September
1996, said that one of the things that they learned was "to appreciate the valley, not
just to think of it as a place to leave" (Committee meeting notes).[3] This can be
understood as quality of awareness. One student-researcher wrote,

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[3] Meeting notes from the September 1995 White Pass Community Self-Assessment Committee Meeting.

> It really made me open my eyes to the beauty of our
> surroundings. I guess I have been taking for granted living in
> the mountains amid such a great community. I never did
> comprehend until this summer what a huge difference the mills
> and tourism were. (Student-researcher evaluation)

For participants in the Discovery Team the process itself was an opportunity to learn how to learn. Student-researchers had to learn how to figure out what questions to ask, where to go to find information, and who to interview. This process of experiential learning is not possible within a competitive pluralist approach, and thus these benefits were not realized in the SIA.

    8. Summary. In the White Pass process local citizens took responsibility for creating a common vision of what a social assessment was and how to accomplish it. They recognized the social nature of problems and socially constructed knowledge through civic science as a placemaking process. Citizens became lay social scientists which allowed their interests and preferences to be formed through the process of learning together. By engaging in the study process as a practice of commitment individual and group identities were strengthened and opportunities for collective action were developed. The process recognized both knowledge and values as multidimensional and facilitated the expression of and access to meanings. There were additional benefits and opportunities as well.

V. WHITE PASS COMMUNITY SELF-ASSESSMENT AS SOCIAL LEARNING

A. Benefits and opportunities for social action as outcomes of the White Pass process

The White Pass process was also an experiment in social learning resulting in benefits and opportunities for action. The nature of SIA as incorporated in the Gifford Pinchot planning process did not have comparable outcomes.

176

The White Pass process resulted in increased trust and new and strengthened relationships among participants and between the Forest Service and participants. There was evidence of increased collaboration between individuals and among the Forest Service, businesses, and the school. Several Committee members commented on the improved relationships.

One of the Discovery Team projects was revising a resource guide for the county Human Response Network, an organization that operates hot-lines for teens and adults who need counseling and other social and health services. Students-researchers traveled to Chehalis to work in the organization's office making phones calls to confirm phone numbers and addressees and update services offered by the references listed in the resource guide. Some of the student-researchers really became engaged in this activity. One student-researcher even followed up to see about volunteering to staff a hotline.

Klattenhoff, as Vocational Education Director for the high school, noted that:

> Working with the "Discovery Team" project was one of the
> most valuable experiences in my educational career. It
> confirmed for me the valuable resources available within our
> own community that could be accessed by the "educational"
> community as we prepare students to meet their futures. It also
> made me aware of the need to provide ways to bring all aspects
> of the community and the school together to meet the needs of
> our students.

The Discovery Team process resulted in an increased sense of personal worth and personal power for participants. After school resumed in the fall the research facilitators interviewed Chris Kahn, the special education teacher at the high school, to see if she had noticed any changes in the "at-risk" students who were Discovery Team researchers. The following quotes are drawn from that interview. Kahn said she had noticed a dramatic change in the self-confidence of all of the at-risk-students involved in the project. While some change might be attributed to them being a few months older, she observed the change to be much more than that. One student-researcher, a

quiet loner at the beginning of the Discovery Team process had wanted to be a heavy
equipment operator before the Discovery Team experience. Now he had set his sights
on college, rather than technical school, and had become more academically oriented.

> He is interested in people recognizing him and taking him
> seriously. He has become a very determined student.

Kahn also noted that:

> Dealing with the public did wonders for them. It showed them
> that they could do something.

> [One student-researcher] really learned people skills and gained
> significantly in her self-confidence. She has taken responsibility
> for the new school store. Before the Discovery Team she
> would not have considered trying that.

> [Another student-researcher] is also working in the school store
> and demonstrating her confidence and assertiveness in dealing
> with people.

And of yet another student-researcher Kahn said,

> There is much less excuse-making and more accepting
> responsibility for things.

Mullins (teacher-supervisor) and Kahn both agreed that the Discovery Team
project had led to a sense of pride in the students themselves, community awareness
and pride in their community. Mullins and Kahn suggested that all high school
students would benefit from a similar experience.

The Discovery Team process resulted in an increased sense of group identity.
Mullins described the Discovery Team project as "a springboard" for other programs
at the high school.

> People came to us asking to see our stuff. Both funding
> agencies, the Continuum of Care and JTPA, are excited about

the employability skills and communication skills the students
learned and used.

Klattenhoff referred to a "ripple effect."

> People have heard about the project and we are experiencing
> this ripple effect. A representative from the House Education
> Committee wants to come to the school and discuss the project.
> This was an experiment and we all learned!

The Discovery Team was invited to give presentations at local senior centers
at a VFW meeting, and at other local organizations' meetings. As part of Vocationa.
Technical Education Week student-researchers were invited to exhibit their display
panel at a special statewide technology exhibit at the Capitol Rotunda in Olympia.
The display has also been used by Forest Service employees in talks around the regio·
The high school was one of a handful of finalists for a Northwest Regional Educatior
Lab five-year program aimed at connecting students with their community. The Lab
interest in the school was attributed to the Discovery Team process.

In addition to strengthening individual and group identity, strengthening
relationships, and building trust, the White Pass process can be understood as a
community of memory and hope in linking young and old in opportunities for sharing
experiences. The joint Committee meetings and the community forum spanned seve:
generations. Group interviews at businesses and with tourists also mixed young and
old in conversation. It was valuable for adults to touch base with the young people
and good experience for the student-researchers to find out that they could carry on :
conversation, and even learn something interesting from adults.

> I enjoyed talking to community members and learning about my
> town. (Student-researcher evaluation)

> I really enjoyed talking to people and finding out what they
> know. (Student-researcher evaluation)

VI. SUMMARY

This chapter addressed the implications of the social nature of resource issues. This discussion was followed by a critique of standard social impact assessment. Then the differences in approach and outcome between the White Pass process and a SIA were examined. The social analysis from the FEIS for the Gifford Pinchot National Forest was used as an example of a SIA. The analysis illuminated the implications of choice of theory and method in doing social assessment.

As seen in this comparison the use of SIA has many limitations and implications. As it relates to the focus of this dissertation the Gifford Pinchot SIA did not address cultural aspects of place or facilitate civic conversation or civic engagement. The White Pass experience, however, demonstrated that civic science and social learning processes can facilitate the coming together of people willing to learn about and articulate their own values and interests and also learn about the values and interests of others. These processes lend hope to the possibility of improving democratic deliberation through forums like civic science and social learning that help citizens identify and act on a common vision.

CHAPTER 6

DISCUSSION AND IMPLICATIONS

Finally, what is important is that human inquiry is a process of human experience and of human judgment. There are no procedures that will guarantee valid knowing, or accuracy, or truth. There are simply human beings in a certain place and time, working away more or less honestly, more or less systematically, more or less collaboratively, more or less self-awarely to seize the opportunities of their lives, solve the problems which beset them, and to understand the things that intrigue them. It is on the basis of this that they should be judged.

Reason, *Human Inquiry in Action: Developments in New Paradigm Research*

I. PLACE AS A CULTURAL SYSTEM: AN OVERVIEW

A. Review of the underlying premise and purposes of this dissertation

This study was based on the premise that the parallel goals of improving community capacity and well-being and making resource planning more responsible and more responsive can be integrated if place is understood as a cultural system and community building and resource planning are understood as placemaking. The Whit-Pass process demonstrated that, when approached as a civic science/social learning process oriented at understanding place as a cultural system, social assessment can create and strengthen individual and group identity, enhance citizenship, facilitate empowerment of individuals and groups, and create a common vision. In this way, democratic participation is strengthened rather than weakened. This is important as democracy depends on a strong and active civic society (Putnam 1995; Wilkinson 1991). These outcomes are possible only from methodologies based on ideas found in a deliberative democratic public philosophy.

There is no best process or framework. Appropriate focus, content and method depend on the purpose of the process, proposed action or decisions to be made (Becker 1993; Branch et al. 1994; Bryan 1996). However, using methods grounded in a democratic public philosophy and oriented to the particular needs of the community and the purposes of the study demonstrates responsiveness to the community.

Most standard approaches to resource planning fail to recognize that resource conflicts are often symbolic and involve meanings threatened by development or change (Appleyard 1979; Bengston 1994a,b; Brandenburg and Carroll 1995; Hester 1985; Mitchell et al. 1993; Williams 1995). While the information that standard approaches provide is useful for research, the singular use of standard approaches short circuits opportunities for citizens to enact citizenship and engage in democratic deliberation. Use of expert technical approaches can result in the failure of management to understand and be able to respond to the relationships that create and recreate places (Appleyard 1979; Lee n.d.; Schroeder 1992; Williams and Carr 1993). These technical processes can alienate and disempower people who care about the places they live, work and play (Dale and Lane 1994; Murphy and Pilotta 1984). Standard efforts to study and plan for places have often: subordinated people to science and management, undermined efforts to resolve resource-community conflicts, contributed to distrust of resource agencies and professionals (Larsen et al. 1990; Lee n.d.; Williams 1995) and polarized public values (Wilkinson 1992).

Williams (1994:5) noted that our standard social assessment approaches are "antithetical to capturing the multiple realities through which we experience and value place." A proposition of this dissertation is that social assessment, when broadened to encompass place as a cultural system, can provide a more complete understanding of social systems, and can illuminate elusive conceptions of quality of life and well-being that are closely related to place. This proposition builds on the assumption that "people know and care about their immediate surroundings" (Petrich 1984:65-66) and

"when approached as participants, as human beings with curiosity and considerable knowledge," they will grasp the opportunity to create knowledge, benefits and new opportunities for social action (Kaplan 1984:48).

To review, the purposes of this dissertation were :

1. To increase understanding of what it means to conceive of place as a cultural system, rather than just as a geographic location or setting, a complex of resources, or an abstracted set of social categories;

2. To provide insight into the relationships between public philosophy and the theoretical and methodological implications of social inquiry because these relationships influence how place is conceived of and studied;

3. To increase understanding of what it means to do civic science within a social learning framework, as a component of social assessment; and

4. To expand the methodological approaches available for social assessment and public participation.

B. Recap of research process and outcomes of community assessment

This dissertation demonstrated that place can be studied as a cultural system, within a deliberative democratic framework, using civic science and social learning processes that engage citizens as researchers. A working framework based on conceiving place as a cultural system was developed to enable the meanings and symbols embedded within the White Pass assessment to be understood within the larger context of placemaking.

As cultural systems are understood through narrative, this method was used in the White Pass assessment. Narrative inquiry is a scientific method that is accessible to citizens and doesn't require technical training or "higher education." Thus narrative puts civic science within the reach of high school students. The 25 high school student-researchers who made up the Discovery Team were able to gather and document stories elucidating the White Pass area as a cultural system while they

themselves experienced communities of memory and hope and the construction and maintenance of civic friendships as part of placemaking.

Throughout the discovery process, participants learned about the White Pass-Big Bottom Valley area, about themselves and each other, and about how to do research. New knowledge, new benefits, and new opportunities for action – the outcomes of social learning – were products of the discovery process. Specific outcomes included:

- knowledge of historic events such as floods and how people coped with misfortune (understood as civic friendship and quality of awareness);

- knowledge of the "layers of investment," such as the cheese factory turned into a church (understood as community of memory, and quality of awareness);

- knowledge of the interests and concerns shared by teenagers and adults in the community; and knowledge of social service resources that are available; (understood as quality of awareness and group identity)

- procedural knowledge of how to investigate, observe and interpret something to create new knowledge (understood as governance and inhabitance). This procedural knowledge was demonstrated in their research work. Among the studies student-researchers engaged in was an investigation of the Big Bottom Blast. Students observed the activities of workers and those attending the event, conducted interviews and were able to understand the event as a placemaking activity that helped define the Big Bottom Valley for local residents and provided an opportunity for residents to invest themselves into their community as a special place. Within the framework of place as a cultural system this event can be understood as a practice of commitment, civic engagement, and impression management.

- self-knowledge included learning how to work with others, whether one worked better on a team or independently, and what biases and stereotypes a person held (understood as self-identity). Teacher-supervisors learned about how to proceed with a civic science process.

- benefits included educational and training opportunities for student-researchers (self-worth); increased awareness and appreciation for the area

(quality of awareness and inhabitance); increased community capacity that comes with establishment of an intermediate institution and additional opportunities for civic conversation and enactment of citizenship.

- opportunities for social action included continuation of the Discovery Tean process for a second year, organization of a East Lewis County-wide telecommunications group aimed at computer networking, work toward th establishment of a public development authority for processing and marketing special forest products, and a memorandum of understanding enabling the sharing of a variety of resources. (understood as intermediate institutions and governance)

The White Pass process demonstrated that viewing place as a cultural syster can be useful in creating information about local history and culture. It also illustrate that social assessment through civic science can increase understanding among and improve relations between government, business, and education segments of the community. Most distinguishing is the potential to increase citizens' understanding and appreciation of themselves and their place. Improved understanding and relation and understanding and appreciation of self and place are factors important to quality · life and well-being (Kusel and Fortman 1991).

The study of the White Pass process provided an opportunity to compare a study grounded in a deliberative democratic approach based on an understanding of place as a cultural system with a study based in a competitive pluralist public philosophy using standard socioeconomic variables and a standard social impact analysis (SIA) process.

C. Studying place as a cultural system

To study a cultural system requires methods appropriate to the study of cultural systems. An interpretive methodology is appropriate as it enables the researcher to access meanings, symbols, and metaphors. Accessing meanings, symbc and metaphors requires engagement by the researcher with that being studied. Civic science takes this a step further requiring engagement of the researcher as an *active*

participant and the participants as active researchers, or lay social scientists. This level and form of engagement – enabled by combining theory and methods of interpretive and participatory science – is required in order to understand place as a cultural system because meanings are constructed and negotiated by those living as part of the system being studied (Eyles 1985).

It is imperative that participants become researchers because the study process is a placemaking activity. The White Pass process demonstrated that it is the "doing of it," the process of inquiry as social action, that enacts place and can provide the possibility of civic engagement. This enactment was made possible by the theories and methods used in the White Pass process. The enactment of place is not an outcome of approaches based on a competitive pluralist public philosophy using empirical-analytic methods to measure how many events, how many people, how many jobs, etc. A comparison of the White Pass process with a standard social impact assessment (SIA) supported the assertion that the placemaking experience of civic science and the outcomes that result have no equivalent in a standard social assessment. SIA does not provide comparable opportunities for citizen participation in civic conversation or civic science, and therefore deny citizens the ability to participate in placemaking. The study found that this lack of opportunity for citizen engagement results from the selection of theories and methods that are founded on competitive pluralism, a public philosophy that does not recognize citizens as active participants.

Many of the methods used in this study are referred to in social science literature as "non-traditional" methods, "alternative" methods, or examples of "alternative paradigm research" (Harding 1987; Lather 1991; Reason and Rowan 1981; Reinharz 1992). These methods, commonly used in participatory action research and feminist research, expand the ways of knowing, those who can know, and the knowledge that is possible. These alternative processes, though not based in positive science, are well situated within science, and grounded in a deliberative democratic public philosophy. Systematic procedures are used. The evidence (data),

methods used in data collection and analysis, and the interweaving of theory, interpretation, and practice are presented for review by both participants and the science community (Fahy 1995; Harding 1987; Rose 1983).

This study sought to explicate the White Pass community self-assessment process as an inquiry of a place as a cultural system. Study of the assessment process provided a unique science opportunity for researchers to participate in an experiment in civic science and social learning. This study was also an opportunity to substantiate the processes of civic science and social learning through praxis, "test[ing] examples against lived experience, practical application, and the rigorous test of focused conversation" (Stewart 1994:74).

The interpretations stated here are based on the experience of the researcher as a participant in one assessment process. Interpretations were arrived at through reflection on the process, thoughtful conversation with other participants (especially the other research facilitator), and review of related empirical and theoretical studies. Heron (1988:43) suggested that interpretations of research should be "consistent with each other, interdependent and mutually illuminating" and that co-researchers should agree among themselves about their interpretations. Interpretations based on the study of the White Pass assessment are in many ways consistent with outcomes reported for the Montana Study (Poston 1950). The research being conducted simultaneously by the other research facilitator helped illuminate aspects of this study, particularly in relation to understanding communication as engagement in a two-way exchange of information. Having the insight of a co-researcher proved helpful throughout the study; and especially in the final writing of this dissertation, our discussions helped provide focus and clarity and helped draw key points to the surface.

II. DISCUSSION OF THE RESEARCH PROCESS

The knowledge created in interpretive-participatory processes is qualitatively different from that collected in standard social assessment studies and the benefits for citizens, managers, and the research community far different. Someone looking for charts and tables of statistically significant findings may be disappointed. Research facilitators found that citizens have been conditioned to anticipate a standard looking report or study. When faced with an alternative assessment method, where the end product had not been clearly defined, they were initially uncomfortable with the ambiguity.

The outcomes of the White Pass assessment were non-traditional. The White Pass process was an act of placemaking. Rather than statistical tables outcomes included: improved community relations; increased connectedness among residents from different generations and among business, education, social service and government sectors; improved understanding of social processes and relationships; individual and social transformation; emancipation and increased self-confidence; and new capacity of social action (see pages 169-170 for examples). These products are common outcomes in participatory research (Maguire 1987; Park 1993). This outcome demonstrates that the White Pass process was as an *enabling practice*. What this means is that "relationships between people and between people and their place" were facilitated through the process of placemaking (Schneekloth and Shibley 1995:6).

The benefits achieved through the White Pass process made the process successful and valuable in the eyes of participants, parents of student-researchers, and funding agencies. Committee members were pleased with the products of the Discovery Team process and accepted the Discovery Team report as credible and legitimate because the Committee members themselves had been involved in every step of planning, initiation, and implementation. Funding agencies and parents were pleased with the progress students made in learning new skills, taking on

responsibility, and demonstrating self-confidence. Student-researchers were proud of

the Discovery Team Notebook and pleased with the learning experience they had.

Heaney (1993:45) wrote, "Participatory research is credible and legitimate

when the action to which it leads brings about better conditions for life. Period."

Achieving better conditions for life is implicit in the categories that illuminate place as

a cultural system – civic friendship, communities of memory and hope, self-identity,

civic engagement, practices of commitment, quality of awareness and inhabitance.

This is because "the making and sustaining of place is about living – about places,

meanings, knowledges, and actions" (Schneekloth and Shibley 1995:18). Placemaking

is also about making, renewing and maintaining relationships among citizens as

inhabitants and their world.

A. Education outcome: Creating useful knowledge

> An essential reason for the people's participation in research . . .
> is not just so they can reveal private facts that are hidden from
> others but really so they may know themselves better as
> individuals and as a community. (Park 1993:12-13)

The White Pass process substantiated the proposition that citizens can come

together to participate in civic science that produces useful knowledge of place. High

school students proved that they were capable of engaging in civic science. Examples

of the knowledge they created are described in the section of this chapter on process

and outcome of social assessment (pages 183-184). Student-researchers created

knowledge about place as a cultural system. This knowledge was useful to Committee

members. One Committee member commented:

> This gives us a picture of . . . the community's perception of
> itself and its history. You can't pay an outside researcher to get
> this.

Student-researchers also created knowledge about themselves and each other, about the processes involved in learning together, the roles and responsibilities of citizens, and how social systems work in their community.

Teacher-supervisors gained useful knowledge about students.

> One thing I really noticed was the lack of ability on the students part to apply their classroom learnings in reading, writing, and communication skills to the project. . . . These kids have to get more writing. (Teacher-supervisor)

Knowledge about the potential for skill development through a civic science process like the Discovery Team process was valuable information for Committee members, teacher-supervisors, and funding agencies.

> It is truly the only way to provide applied learning of the concepts that are taught in the classroom. . . . It is my belief that when you [bring together] the resources of the school, community, business and industry you truly have a total learning environment. (Teacher-supervisor)

As civic science, the multidimensional learning that occurred through the White Pass process was significant. This outcome is consistent with other studies that have found the most significant result of participatory community assessment to be participants' learning – about themselves, and their preferences and values, about the preference and values of others, about their community, and about working together (Kusel and Fortmann 1990; Vicky Sturtevant, personal communication).

B. The relationship between choice of theory and method and the type of consensus that can be achieved

When understanding meanings – and thus social action and relationships that make meanings visible – is important, combining participatory and interpretive theory and methods is necessary. Civic science is an interpretive-participatory process grounded in a deliberative democratic public philosophy. This public philosophy views

participants as complex social beings who are interested in working together to define a common good and to shape their common future (Sandel 1996). Based on this public philosophy, civic science can overcome the limitations of a technical, narrowly defined empirical approach and facilitate civic engagement, which can be rewarding and empowering for those involved.

In the White Pass process, responding to the opportunity for a forum, individuals came together to engage in civic science and social learning processes aimed at identifying and acting on common goals. Similar mechanisms for civic engagement are not available within SIA and other approaches grounded in a competitive pluralist public philosophy. Competitive pluralism views citizens as aggregates of individuals competing for their own individual interests, and thus unable to come together for a common good (Sandel 1996). From this perspective values are private and public forums unnecessary (Kemmis 1990). Use of theory and method based on a competitive pluralist model can disempower and disenfranchise participants, delegitimize the knowledge they have, dehumanize place, and potentially undermine citizenship and democracy as demonstrated by Committee members' attitudes toward the Federal Census and the SWOT study. The analysis presented here supports the proposition that public philosophy drives the choice of theory and method.

The White Pass process demonstrated that methodological choice is not neutral and carries significant implications for research outcomes supporting the theoretical work of Meidinger and Schnaiberg (1980). Comparing the White Pass process with a standard social impact assessment demonstrated that the choices a researcher makes regarding theory, method, and variables have important implications for:

- What kind of knowledge can be created, and for whom;
- Who can participate and in what roles;
- Whether citizens will become engaged as participants or become disenfranchised;

- Whether research will be accepted or rejected by affected citizens; and
- Whether civic conversation, civic science and social learning can occur.

C. Experiential analogy: Challenging stereotypes and developing civic friendship

Through participation in civic science, working side by side with people who brought different perspectives, participants became aware of -- and challenged -- biases and stereotypes that had limited their thinking and acting. Student-researchers, teacher-supervisors and research facilitators became aware of and challenged stereotypes about themselves, other people, and the Big Bottom Valley.

The most striking change involved "at-risk" students' improved sense of self-identity and the recognition of the teacher-supervisors of the effects of their own biases against these students. The participation of the "outside" research facilitators, who did not bring these same biases, was an important factor in being able to recognize and challenge the stereotypes. Another stereotype that was challenged was that of the Big Bottom Valley area as "isolated." Student-researchers learned of many ways in which the area is connected to the global society. Among these are the visitors who pass through the area, the logs that are shipped in to the mills, and the lumber and other products that are shipped out to destinations around the world. Student-researchers were also exposed to the University of Washington and University and Forest Service researchers challenging their stereotypes about research and researchers, and bringing the possibility of a college education into the minds of several students.

The proposition that social learning and civic science processes can bring citizens together, such that they can transcend their differences, and create a shared meaning of place that is responsive to the civic good was substantiated. One of the teacher-supervisors commented,

[I gained] the understanding that "shared vision" means seeing
through the eyes of all the players and understanding that
vision.

Stanley (1983) referred to this as building civic friendship. In the White Pass
process citizens came together to participate in civic conversation, civic science and
social learning. Results included: increased social connectedness and civic trust;
reinforced citizen commitment to the Committee, to the community, and to the
process of civic science; and increased connectedness to the White Pass area as a
place. The White Pass process in many ways mirrored The Montana Study (Poston
1950). In the Montana Study:

> community study groups were a form of research in which the
> people most concerned could for once participate. It was their
> research. They did the investigating, they discovered their own
> needs, they became self-educated by studying those needs, and
> by thus making themselves aware of their own problems they
> inspired themselves to formulate and prosecute the action
> necessary to deal with those needs. . . . [The groups] had served
> their purpose when they helped ordinary men and women build
> a more vital community life. (Poston 1950:114)

D. Role of participants

Participation in the White Pass process illustrated the importance of the
researcher taking the role of research facilitator, catalyst, mentor, and guide. This role
is also one of student — learning *with* in addition to learning about. Civic science
recognizes scientists as citizens " bringing their special knowledge and skills to the
enterprise" (Shannon and Antypas 1996:68). Taking this approach was critical as
McHugh noted:

> The way you participated in the community, was, for this
> community, valid research in ways that other research was not
> valid. The community rejected other research and they did not
> reject you because you fit in. You did not come with
> preconceived notions, preconceived ideas, you came and rolled

up your sleeves and were elbow to elbow with us. (personal communication)

Actions of the Committee demonstrated that, when empowered to do so, citizens will engage in civic science and social learning processes that benefit themselves individually and as a group. People were found to be not merely aggregates of individuals with pre-formed, individualistic wants, but participants who were willing to come together as "an active, deliberate citizenry" (Landy and Plotkin 1982:8). This commitment to citizen engagement for a collective good was also found in the Montana Study (Poston 1950), work with Australian Aboriginal communities (Dale and Lane 1994), and has been suggested by others including FEMAT (1993); Kaplan (1995); Krannich et al. (1994); Murphy and Pilotta (1984); Preister (1981); Reich (1985); Sandel (1996); Shannon (1991a,b); Shannon and Antypas (1996); Stanley (1983, 1988/1); and Stanley (1988/2).

III. IMPLICATIONS FOR CITIZENS, RESEARCHERS, AND MANAGERS

Professionalization (Schneekloth and Shibley 1995) has been implicated in the reduced strength and vitality of communities. This study suggests that a professionalized, technical SIA creates a barrier to social interaction that denies citizens the opportunity for collective action that could lead to an improved quality of life. Wilkinson (1991:10) noticed that "when barriers to community interaction are reduced. . . the quality of life tends to increase." One of the barriers he identified was lack of "channels for collective action." Durkheim (1951) and Mead (1934) both suggested that it is through collective action that the self emerges and becomes meaningful as one validates the self as an active contributor to the process of improving shared life.

Many in the field of rural sociology and community development have called for opportunities for social action that can draw people together for the collective

good (Kemmis 1990, Krannich et al. 1994, Murphy and Pilotta 1984, Poston 1950, Preister 1981, Putnam 1995, Schneekloth and Shibley 1995, Wilkinson 1991, Wilkinson 1992). The White Pass process demonstrated that an opportunity for collective action can be provided by approaching place as a cultural system through civic science.

Democracy requires continuous education about ourselves and the world and people around us to enable us as citizens to participate in decision making (Dewey 1946, orig. 1927; Poston 1950). Learning together about who we are creates where we are. "Acts of placemaking embody a vision of who we are and what we hope ourselves and our places to be" (Schneekloth and Shibley 1995). As understanding ourselves and making and sustaining our places is about living and accepting responsibility as decision makers the separation of social science and education from daily community life can be threatening to democracy (Poston 1950; Schneekloth and Shibley 1995; Shannon and Antypas 1996; Stanley 1988/2).

Civic conversation is necessary for social learning to occur (Shannon 1991b). Therefore, resource managers and social researchers must be willing to facilitate opportunities for civic conversation in order to engage citizens as policymakers (Reich 1985; Sandel 1966; Stanley 1988/1). An environment that can facilitate forums enables the use of civic science in social assessment. Forums are needed through which meanings (Greider and Garkovich 1994) and preferences (Reich 1985) can be negotiated. These forums can be build on what Wilkinson (1991:7) referred to as a sense of community/place that emerges "when the latent bond of common interest in the place – the shared investment in the common field of existential experience – draws people together and enables them to express common sentiments through joint actions."

Place provides a focus people can orient themselves around. Wilkinson (1991:37) suggested that there is a "tendency for people who live together to interact with each other on place-relevant matters irrespective of the fact that they are involved

simultaneously in multiple special interest fields." Thus a connection to place can supersede other interests, provide a reason for people to come together as citizens, and clear the way for civic conversation.

The use of civic science in social assessment will not be appropriate in all situations, however. First, civic science and other participatory approaches may not be possible if legislative mandates require the resource agency to retain total control of the social assessment process, or administrative policy limits process. Second, civic science will only work when there is local interest in "self-study" and a willingness of resource managers and citizens to work together. In the White Pass process local residents took the initiative to organize the Committee and to acquire funding for the Discovery Team process. McHugh, a Forest Service manager, was willing to accept a role as a citizen rather than as a manager, expert or director of the research effort. Civic science is not agency driven. However, the White Pass process demonstrated that an agency can help initiate and facilitate a civic science process without controlling it.

A. Civic engagement

Citizenship requires engagement as citizens in knowledge creation (Poston 1950). This study demonstrated that civic engagement in science can occur through social assessment as civic science if citizens take initiative. Brown (1991:324-325) argued that citizens must "reclaim the space for public discourse from scientific experts, and expand it for participation by citizens" in order to "help citizens enact morally defensible decisions." Brown (1991:324-325) recommended:

> a technically informed civic narrative discourse would fuse the
> 'how' and the 'why.' Thus, it would help humanize technicians
> and, much more importantly, it would enlighten and empower
> citizens."

Citizens, resource managers, and social scientists share responsibility for participating in an ongoing narrative aimed at defining a common vision. An ongoing narrative may increase the ability of citizens, resource managers, and social scientists to come together in civic friendship that can result in an easier transition in times of change and a greater capacity to work together in times of conflict and controversy. Democratic governance is based on processes of civic conversation, civic science and social learning as *ongoing* activities (Cortner 1996).

B. Role of science and the professional researcher

The White Pass process reinforced the proposition that science is not neutral. "Scientific inquiry is a communal, social and historical *activity*" (Brown 1991:320). Research is not a value-free activity, but rather a process that involves making choices, from choice of theory and methodology to what counts as data, which variables to look at, which variables to ignore, and how to gather or measure data. This study substantiated the proposition that a public philosophy underlies researchers' choice of theory and methodology. Critical reflection on these choices and their implications is necessary for science as applied to matters of resource policy and management.

Many social researchers, including Cortner (1996), Murphy and Pilotta (1984), Krannich et al. (1994), Kusel and Fortmann (1991), Shannon (1991a,b); Shannon and Antypas (1996); and Williams (1995) have called for research methods that are more than data collecting devices. These researchers have called for forums to facilitate civic conversation, to build civic friendship, and to conduct civic science and social learning. Frameworks are needed that are sensitive to and that can illuminate place as a cultural system. Such frameworks would facilitate civic science which would allow expression of and access to social and interpretive knowledge. This social and interpretive knowledge can then be incorporated with technical knowledge to form a more complete picture. Use of such forums and frameworks would ground the data collected by standard social assessment in lived experience, and place, resulting in

more meaningful, and thus more useful knowledge, while realizing the additional benefits of an interpretive-participatory approach. A small sample of the knowledge, benefits and action opportunities resulting from the White Pass process is described on pages 182-183.

To use civic science to understand place as a cultural system requires that researchers are willing to accept a more inclusive view of science that embraces the role of scientists as active participants and citizens and the role of citizens as researchers. Brown (1991) argued the importance of this expanded view for science and technology in general.

> To preserve science and technology as well as freedom and dignity . . . we must reformulate science and technology to include moral agency and praxis, and expand our conceptions of individual freedom and dignity to include civic competence and communal empowerment. (Brown 1991:326)

This expanded view means challenging the socially constructed boundaries between social work, extension work, and social science. An underlying purpose of broadened research may be to dissolve these limiting boundaries. This broadened research is necessarily boundary-spanning, located on the margin where truly integrative work can occur.

To understand place as a cultural system requires that researchers are willing to trade statistical validity for practical validity. While statistical information can be useful it is not always necessary, sufficient or appropriate.

There will be occasions when there is more value or a higher priority, for any number of reasons, in putting what is of interest and importance to citizens ahead of what is of interest to the research community. In the Discovery Team process the research facilitators were interested in social and cultural change that resulted following the Mt. St. Helens eruption. The White Pass community provided an appropriate venue for such a study. However, this was not of interest to either the student-researchers or the Committee. By focusing instead on events such as the mud

slide of 1994 student-researchers developed a community of memory themselves that they would not have achieved by investigating the eruption.

Civic science and social learning broaden the scope of research beyond the creation of new knowledge, to embrace simultaneous processes of "education and development of consciousness, and [in the case of social learning] mobilization for action" (Gaventa 1993:24). With a broadened perspective of what research is, the researcher can contribute to civic conversation and civic science as a facilitator and catalyst for citizen engagement.

Implications of civic science and social learning as participatory research processes evidenced in the White Pass process include the following: demystifying the "myth of expertise" (Park 1993), reducing citizen dependency and increasing self-reliance, increasing and expanding ownership of knowledge, helping to clarify strategies and achieve a greater consciousness, and changing what constitutes knowledge (Gaventa 1993; Korten 1981; Maguire 1987; Park 1993; Poston 1950; Shannon and Antypas 1996). The researcher must be willing to "hand over the stick" (Chambers 1992), be respectful of stumbling attempts (Poston 1950), and not rush the process or participants (Maguire 1987). Civic science and social learning approaches assume an ethical and civic responsibility to enable people to become lay social scientists and policymakers by providing appropriate forums.

C. Role of resource managers

To facilitate civic science and social learning requires resource managers to accept greater responsibility in identifying opportunities for and providing the forums necessary for these processes. Clarity is needed to identify the kinds of knowledge and processes necessary to meet management needs. Identification of opportunities for forums to enable civic science and social learning will require a redefinition of management needs. Management needs must be redefined to enable managers to see civic process as necessary to achieving management objectives. This will require that

managers abdicate a competitive pluralist public philosophy and adopt a deliberative democratic public philosophy in order to see themselves, citizens, and their relationships to each other differently.

While technical, professional processes are necessary in order to provide information useful for research, these processes make expert knowledge superior to citizen knowledge. In this way, they dehumanize people and homogenize places by using analytic variables that ignore meanings and symbols, historical and cultural context, and the particularities that make places and people unique.

An equally important consideration is the affect using a technical approach has on stakeholders/constituents. SIA and other technical processes are unable to illuminate the impacts resulting from their own methods, impacts that can be substantial. In situations in which local residents and resource managers are willing to take the initiative to work together the civic science approach used in the White Pass process is an alternative that may prove to be a more appropriate approach. When relationships are important, methods which facilitate relationships are called for. When there is a need for the knowledge that can be gained only from empirical-analytic approaches and this is coupled with recognition of the importance of relationships and the moral obligation the resource agency has as a placemaking force some combination of the two approaches compared in Chapter 5 might offer the greatest benefit.

Resource managers can choose social science methods which facilitate citizens engaging in ongoing civic conversation and result in civic science outcomes. The White Pass process demonstrated the benefits that can be achieved by conceiving of social inquiry processes as forums for civic conversation and civic engagement. Thus, within a deliberative democratic public philosophy social science methods are used to create forums not just "facts."

Resource managers can also act as research facilitators learning side-by-side with citizens. As demonstrated in both the White Pass process and the concurrent

AMA process, when managers join with other citizens in shared learning processes trust and civic friendship are improved and all learn. Managers are place-makers. Their decisions, both large and small, create and re-create places. Within a deliberative democratic public philosophy managers have a moral responsibility to engage citizens in placemaking processes that can facilitate community well-being and connectedness to place.

IV. CONCLUSIONS

In the White Pass process the key to understanding the study of place as a cultural system was recognition that the essence of place is expressed through the processes that occur as people come together to study and plan for, and thus simultaneously create, place. The White Pass area, when understood as a cultural system, emerged through the social action of the Discovery Team as civic science and Committee engagement in social learning. The study demonstrated that social assessment through civic science empowers the community with the responsibility for identifying issues and concerns, developing visions for the common future, and planning how to achieve shared objectives.

The results of this study suggest that civic science and social learning hold significant potential for expanding the usefulness and benefits of social assessment when understood as a study of place. These participatory processes can increase the meaningfulness of social assessment for citizens and resource agencies by contributing to an understanding of place as a cultural system. This study also suggests that when social assessment becomes the study of place as a cultural system and opportunities for forums are provided that enable civic science processes, these processes can enhance social life by facilitating civic conversation, civic friendship, and civic engagement (Durkheim 1951; Mead 1934; Poston 1950; Reich 1985; Stanley 1983, 1988/1; Wilkinson 1991). However, social assessment can also create barriers, diminish the

quality of social life and destabilize sense of community, community well-being, and connectedness to place when forum opportunities are not provided (Krannich et al. 1994; Murphy and Pilotta 1984; Putnam 1995; Reich 1985; Schneekloth and Shibley 1995). The costs of not providing opportunities for forums can include impacts on individual and community well-being, community capacity and on a variety of other aspects of social life. Kaplan and Peterson (1993) recently found that human health can also fall victim to a limited decision making approach that fails to provide opportunities for social action.

The Forest Service, along with other resource managing agencies, is not a neutral actor, but rather an active participant in creating meanings of place. Placemaking carries a moral responsibility. Thus, as a long term actor in placemaking the agency has responsibilities as a moral actor that cannot be eluded. This study has demonstrated the implications of choice of theory and method based on two opposing public philosophies. In the end, there is no neutral ground, only choices to be made.

> Scientists [and managers] firmly believe that as long as they are
> not conscious of any bias or political agenda, they are neutral
> and objective, when in fact they are only unconscious.

> Namenwirth 1986:29

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216

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APPENDIX 1 WHAT A COMMUNITY SELF ASSESSMENT IS AND IS NOT: MEMO TO WHITE PASS COMMUNITY SELF-ASSESSMENT COMMITTEE

MEMORANDUM

To: Betty Klattenhoff and the White Pass Self-Assessment Team

From: Amanda Graham, University of Washington
        Linda Kruger and Roger Clark, USFS-PNW

Re: Defining "Self-Assessment"

Date: May 10, 1995

At the most recent White Pass Self-Assessment Team meeting on April 27, 1995, the group expressed an interest in learning more about what "self-assessment" can mean. This memo offers some ideas about what self-assessment is and what it is not, and is intended to serve only as a guide for the White Pass Self-Assessment Team in your discussions with each other and with the White Pass community. The ideas outlined in this memo should not be viewed as definitive statements, but rather as guiding principles to help you tailor the self-assessment to the concerns and interests of your community.

The suggestions outlined below reflect the discussions on April 27 as well as a subsequent conversation between Betty and Amanda on May 5 and a review of the past meeting notes of the Self-Assessment Team. As you consider these suggestions, there are several questions it will be important to keep continually in mind:

1. Why is this assessment being conducted? What purpose is it serving for the community? These very basic questions will have a powerful effect on both the process of conducting the assessment and on the information which is gathered.

2. Who is "the community"? Who is -- and who is not -- participating in various self-assessment activities defines the accuracy and completeness of the self-assessment. The critical importance of this question cannot be overemphasized.

3. Will this assessment be relevant and useful? The usefulness of the assessment depends on achieving a good fit between assessment activities and the concerns, interests and skills of the community.

In short, clearly stating the questions and issues which are of greatest concern to the community is of fundamental importance to the self-assessment process.

Community self-assessment is driven and directed at all stages by the interests, concerns and skills of the community.

Community self-assessment is also . . .
> . . . a partnership in learning among members of the community
> . . . a continuing process of working together to learn about the community
> . . . based on listening and clear, two-way communication
> . . . relies on the understanding and knowledge that citizens have about their community
> . . . open to ideas and information from all members of the community
> . . . aimed at producing useful and timely information

Community self assessment is <u>not</u> . . .
> . . . driven by a formula, cookbook or checklist
> . . . driven by researchers or outside interests
> . . . a process which ends with the completion of a document or report
> . . . a closed process
> . . . easy

What issues are currently of concern to members of the White Pass Community?

> Identifying the questions and issues that are important to community members will lead to the questions to be asked throughout the self-assessment process. Questions such as those listed below may begin to "tap into" community concerns.
>
> How do we "do business" as a community?
>
> How can we learn about ourselves?
>
> Where are we? Who are we? How do we define our "community"?
>
> Why are we here? Why do we stay?
>
> Where have we come from? How have we changed? What events have caused important changes in our community?
>
> Where do we want to go?
>
> What do we value about this place? What is important to us about this place?
>
> What would it take to make a play about this town?
>
> What are the "markers" of life, or important events in the passage of time, in this community?

There are many ways to answer these questions and learn about how and why the community is the way it is. Self-assessment can use many approaches, and in fact using more than one approach is likely to achieve a broader understanding of the community. In addition to surveys, self-assessment activities can include informal conversations with community members, review and analysis of demographic and historical documents, field trips to specific places in the community, and the development of a creative project about the community, such as a video or a play, to name just a few possible activities.

APPENDIX 2 LIST OF MEMBERS OF THE WHITE PASS DISCOVERY TEAM

Members of the White Pass Discovery Team
Summer 1995

Students

Van Anderson	Robyn Anthony	Mandie Blankenship
Toshia Brown	Dora Carleson	Norma Clark
Catie Collier	Tammy Elledge	Andrew Farrish
Amy Gall	Erica Hurtado	Linnaea Jablonski
Michelle Magnuson	Julie Mullins	Julianna Neice
Erin Niemi	Jessica Palmer	Aaron Rashoff
Rebecca Reed	Meredith Rose	Kris Schmidt
Tony Schmidt	Cory Spradlin	Joel Swenson
Jessica Walker	Rena Wright	

Adults

Betty Klattenhoff, Project Supervisor and Vocational Education Coordinator, White Pass High School

Gail Mullins, Project Supervisor and Educational Para-Professional, White Pass High School

Laurie Judd, Project Supervisor and Classroom Instructor, White Pass High School

Amanda Graham, Project Assistant and Graduate Student, University of Washington

Linda Kruger, Project Assistant and Graduate Student, University of Washington and Research Social Scientist, Pacific Northwest Research Station, U.S. Forest Service

APPENDIX 3 EXCERPTS FROM THE GIFFORD PINCHOT NATIONAL FOREST FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS) FOR THE FOREST'S LAND AND RESOURCE MANAGEMENT PLAN (1990)

Social and Economic Outputs/Effects

While social and economic effects are not identified as a specific issue, consideration of the social and economic consequences was a key consideration in the resolution of the issues. Table II-5f displays several key economic and social variables. All dollar values in this table are expressed in 1982 dollars.

The Forest budget is displayed in two categories. Capital investment includes roads, reforestation, and facilities construction. The balance of the budget is operations and maintenance. Estimated Returns to Government is a measure of receipts which are primarily revenue from timber sales. Payments to counties is estimated to be twenty-five percent of Returns to Government and is used by counties to finance roads and schools. Estimated jobs and income associated with timber harvest and recreation use on the Forest are displayed for the first decade. The Human Resource Program is an estimate of the number of enrollees in workforce and youth training programs.

FIGURE II-5f

ANNUAL SOCIAL AND ECONOMIC OUTPUTS AND EFFECTS AND BUDGET REQUIREMENTS BY ALTERNATIVE

Outputs/Effects	Unit of Measure	NC No Change	D	A No Action	K	S Preferred	I	J
Operational Costs 1/	Million $							
First Decade		15.1	17.1	17.0	16.7	16.5	15.9	13.9
Second Decade		15.1	19.5	18.8	16.6	17.8	17.5	14.3
Fifth Decade		14.9	19.9	19.4	17.2	18.9	18.0	14.9
Capital Investment Costs 2/	Million $							
First Decade		12.8	14.6	11.5	11.0	10.7	9.5	3.7
Second Decade		10.6	8.7	7.2	8.9	7.5	7.7	3.0
Fifth Decade		12.2	10.7	8.2	10.2	8.1	9.0	3.3
Total Budget 3/ (1984 – 33.4)	Million $							
First Decade		27.9	31.7	28.5	27.7	27.2	25.4	17.6
Second Decade		25.7	28.2	26.0	25.5	25.3	25.2	17.3
Fifth Decade		27.1	30.6	27.6	27.4	27.0	27.0	18.2
Return to Government 4/ (1985 – 32.0)	Million $							
First Decade		5/ 64.4	63.6	51.9	51.1	49.0	41.9	13.7
Second Decade		68.7	72.4	60.0	59.6	56.7	49.3	15.4
Fifth Decade		72.7	98.6	78.3	76.6	73.6	62.7	18.6

* In order of decreasing suitable acres.
1/ Operational costs: Costs involved in the operation and maintenance of the Forest.
2/ Capital Investment Costs: Costs of improvements.
3/ Total Budget: Operational and capital investment costs.
4/ These figures are estimates and should not be used by other public agencies as exact projections.
5/ Estimates for the No Change Alternative are based on the assumption that the potential yield would be harvested.

FIGURE II-5f

ANNUAL SOCIAL AND ECONOMIC OUTPUTS AND EFFECTS
AND BUDGET REQUIREMENTS BY ALTERNATIVE

Outputs/Effects	Unit of Measure	NC No Change	D	A No Action	K	S Preferred	I	J
Payment to Counties 1/ (1988 - 14.6)	Million $							
First Decade		2/ 16.1	15.9	13.0	12.8	12.3	10.5	3.4
Second Decade		17.1	18.1	15.0	14.9	14.2	12.4	3.8
Fifth Decade		19.4	24.6	19.6	19.1	18.4	15.7	4.6
Direct, Indirect, and Induced Jobs, First Decade, Related to Forest:	Jobs							
Timber Related Direct, Indirect, & Induced Jobs (1979-88 Avg.):3030 3/		4,110	4,540	3,620	3,640	3,490	2,960	870
Recreation Related Jobs Current Level 3020	Jobs	3,490	3,560	3,500	3,590	3,490	3,490	3,500
Total Jobs 4/ Current Level 6050		7,600	8,100	7,110	7,230	6,980	6,450	4,370
Direct, Indirect, and Induced Income, First Decade, Related to Forest:	Million $							
Timber Related Direct, Indirect & Induced Income (Million $) (1979-88 Avg.): 70		95	105	83	84	80	68	20
Recreation Income 4/ Current Level $52 Million		59	60	59	61	59	59	59
Total Income Current Level $122 Million		154	165	143	145	140	128	79
Human Resource Program 5/ (1985 - 25)	Person Years							
First Decade		25	26	26	26	26	26	15
Second Decade		23	24	24	24	24	22	14
Fifth Decade		24	25	25	26	26	24	14

* In order of decreasing suitable acres.
1/ These figures are estimates and should not be used by other public agencies as exact projections.
2/ Estimates for the No Change Alternative are based on the assumption that the potential yield would be harvested.
3/ The figure represents jobs based on cut.
4/ Tables may not add up due to rounding off of numbers.
5/ Includes older Americans, volunteers, YCC, rehabilitation program.

Social/Economic Setting

This section provides a brief overview of the social and economic characteristics of counties around the Forest. It provides a basis for evaluating the socioeconomic effects of Forest management alternatives.

This Forest most directly affects social and economic conditions in a five-county primary influence area in southwestern Washington. This zone of influence includes Clark, Cowlitz, Lewis, Skamania, and the western portion of Klickitat Counties. This local area affects and is affected by management of the Forest. A secondary influence area includes the Portland, Oregon, and Puget Sound metropolitan areas, northern Oregon communities in the Columbia River Gorge, and the Yakima Indian Reservation (see Figure III-83).

FIGURE III-83

PRIMARY INFLUENCE AREA

National Forest

Primary Influence Area

Current Conditions and Historic Trends

Social Conditions: The 1985 population of the primary area was 353,268, or 8 percent of the Washington state population (Figure III-84). More than half (203,400) live in Clark County. The Vancouver and Hazel Dell metropolitan areas of Clark County had an estimated population of about 142,000 in 1985 (Legry, April 1986).

FIGURE III-84

AREA POPULATION
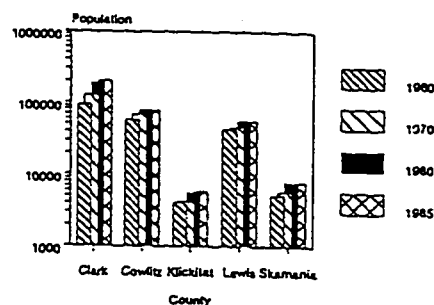
Other cities in the area with populations greater than 10,000 include Kelso, Longview, and Centralia which totaled 53,040 in 1985. In 1980, 64 percent of the primary area's residents were classified as urban (Figure III-85). This urban population (in towns and places with more than 2,500 people) is almost entirely located along the Interstate 5 (I-5) corridor. The remainder live in rural communities dominated by forest products and agriculture.

FIGURE III-85
POPULATION--URBAN/RURAL DISTRIBUTION: 1980*

County	Total	% Urban	% Rural	Popula-tion/ Square Mile
Clark	192,230	74	26	306.5
Cowlitz	79,550	67	33	69.5
Klickitat**	5,560	33	67	8.3
Lewis	56,020	36	64	22.6
Skamania	7,920	0	100	4.7
Total Influence Area	341,280	64	36	45.0

* Urban/Rural distribution unavailable for 1985.
** White Salmon division only.

Source: U.S. Department of Commerce, Bureau of the Census, February 1982.

FIGURE III-86
POPULATION FORECASTS

County	1990	Percent Change in 80-90	2000	Percent Change in 1990-2000
Clark	258,503	34	319,309	24
Cowlitz	90,652	14	102,479	13
Klickitat	18,514	17	20,750	12
Lewis	66,075	20	76,425	16
Skamania	9,666	22	10,887	13
Total Influence Area	443,410	26	529,850	19
State of Washington	5,068,446	23	5,965,498	18

Source: Washington State Office of Financial Management, 1980, August 1981, and May 1981.

Population of the secondary influence area was slightly more than 3 million in 1980. This includes about 1 million people in the northwestern Oregon counties and about 2 million in the southern Puget Sound area.

Population growth in the primary influence area was 24 percent during the 1960s, jumped to 35 percent during the 1970s, and declined to 4 percent between 1980 and 1985. Population increases are projected to average 26 percent for the 1980s and drop to 19 percent for the 1990s (Figure III-86).

Clark County will experience the highest rate of growth in the primary area. The relatively high rate of growth forecast for Clark County lifts projections for the primary interest area to a level slightly higher than those for the state as a whole. Other counties in the area are expected to grow more slowly than the State average. The growth rate for the Portland metropolitan and Puget Sound areas is expected to be over 20 percent during the 1990s.

Seventy-three percent of the population change in the primary area during the 1970s was due to immigration. These newcomers were mostly in the working age group of 24 through 64 years of age. They were primarily attracted to smaller communities with rural settings (Washington State Office of Financial Management, August 1981). This trend reversed between 1980 and 1985, with net emigration occurring in some rural areas (Cowlitz, Lewis, and Skamania Counties). After 1980, natural increases (births over deaths) outstripped migration in all five counties (Washington State Office of Financial Management, August, 1985).

The primary influence area is predominantly white (Figure III-87). Only 4 percent of the area's population was classified as minority in 1984. Most of the minority population (71 percent) resides in Clark County.

Within the primary influence area, there are three types of communities based on size, location, and the kind of industry and employment. These characteristics help to determine the lifestyles and values of the residents and their social relationships to the Gifford Pinchot National Forest. The community groups are very broad

and are not intended to represent the views of all the people in a given community. They are only used to give an indication of how certain types of people may be socially affected by the alternatives. The three community "groups" are: (1) the Vancouver area, (2) the I-5 corridor, and (3) rural

The Vancouver area is by far the largest community and is part of the fast-growing Portland metropolitan area. Completion of the Glenn Jackson Bridge (I-205) across the Columbia River is increasing the attractiveness of the area as a place of residence for people working in the Portland area.

The Portland metropolitan area has a diverse economy based on services and trade as well as manufacturing. It is less directly tied to the resource outputs of the Forest, although certain mills do rely on Forest timber as a source of supply. People in this area generally have metropolitan lifestyles and rely on the Forest for various recreation activities. They see the Forest as a place to get away from the urban environment.

FIGURE III-47

PERSONS BY RACE AND OF SPANISH ORIGIN 1980

Interstate 5, the major north-south route along the west coast, cuts through the western portion of the influence area. The areas adjacent to the interstate, within an approximate 5- to 10-mile radius, have become known as the I-5 corridor.

Most of the population and economic activities for Clark, Cowlitz, and Lewis Counties are concentrated in

communities along the I-5 corridor. For example, approximately 80 percent of Cowlitz County's population is located within a 5-mile radius of the Longview-Kelso area.

Relative to the rest of the influence area, the I-5 corridor is more populous, has significantly lower unemployment, and has a more industrialized economy.

Although heavily dependent on the timber industry, communities in the western part of the influence area (i.e., the I-5 corridor) generally rely on privately-owned and State of Washington timber for their timber supplies. One reason is timber export, which is a major industry in the port communities. Also, private and State timberlands are closer to these communities, facilitating transportation of the logs to the mills.

There has been considerable interest in the I-5 corridor to increase development of the tourism industry, particularly associated with the Mount St. Helens National Volcanic Monument. In spite of the attractiveness of the region to tourists, even before the eruption of Mount St. Helens, the tourism industry in this area has remained relatively undeveloped. Communities within the I-5 corridor are conveniently situated to cater to travelers, and recognizing this, they are interested in meeting tourism needs.

With the exception of southwestern Clark County and the communities along the I-5 corridor, virtually everything in the primary influence area is rural. There are rural communities adjacent to the Forest on all sides. In most of the rural communities in the influence area, the wood products industry is the main source of employment, and in many instances, the local industry relies on timber from the Forest. In these rural communities, while the Forest is appreciated for things such as hunting and fishing, timber production is viewed as the Forest's primary function, with other uses of secondary importance. Multiple-use management of the Forest is often seen as being in conflict with this primary function of the Forest, and thus can serve as a source of conflict between the Forest Service and local residents.
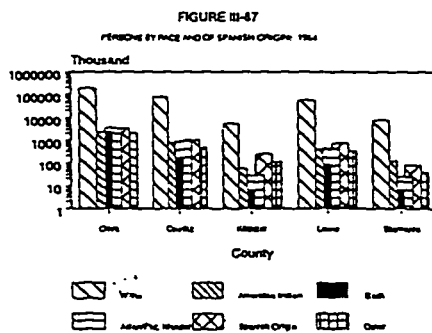
Traditionally, the people in these communities have been described as self-reliant and individualistic; at the same time, however, most everyone knows and helps each other. Many of the residents descend from families who have lived in the area for generations, and the values and lifestyles of these people still prevail; people of these rural communities are still characterized as very independent, hard-working, and fairly conservative. They generally are reluctant to accept change to the community, and are often uncomfortable with new people coming into the area.

There is an interesting dichotomy that exists in these rural communities today. On the one hand, people realize that strong dependence on one industry, particularly one that fluctuates as widely as the wood products industry, leads to economic problems, and they recognize positive aspects in a more diverse economy. On the other hand, they are reluctant to put up with the change that must inevitably occur if they do attempt to broaden the economy with new industry such as tourism, or a new type of manufacturing plant.

The kinds of industry found in rural areas, such as lumber mills, agriculture, and tourism, are generally characterized by highly seasonal employment. Although most people don't look forward to the lay-off caused by the seasonality of a job, others actually prefer this lifestyle, and purposely seek out jobs that will allow them to live the rural life they are after and pursue other interests during the time they are unemployed.

Inherent in the communities near the Forest is a sense of ownership in the Forest; local residents tend to be very possessive of the National Forest land. They generally see it as "their right" to use the land, and are very sensitive to any kind of management that restricts their use. Often tied to this sense of ownership is a resentment of "outsiders" coming into the area for recreation activities such as hunting, fishing, and cutting firewood.

Economic Conditions: In the primary influence area, the 1970s were a period of economic expansion and diversification. There were over 55 percent more people employed in 1980 than in 1971, a larger percent increase than the population growth for the same period. The major increases were in services, wholesale and retail trade, construction, and other manufacturing (Figure III-88).

FIGURE III-88			
ANNUAL AVERAGE COVERED EMPLOYMENT - PRIMARY INFLUENCE AREA			
	1971	1975	1980	1984
Agriculture	272-*	584- 1%	1,476- 1%	1,944- 2%
Mining	267-*	613- 1%	847- 1%	812- 1%
Construction	4,806- 8%	5,016- 7%	7,320- 7%	5,869- 6%
Manufacturing				
WoodProducts	18,005- 29%	19,200- 25%	18,140- 17%	16,1547- 15%
Others	9,138- 14%	9,863- 13%	12,652- 12%	14,436- 13%
Transportation, Communications,				
and Utilities	3,008- 5%	3,737- 5%	3,917- 4%	4,200- 4%
Trade	12,553- 20%	15,775- 12%	22-269- 20%	21,891- 20%
Finance, Ins., and Real Estate	2,117- 3%	2,567- 3%	3,914- 4%	4,188- 4%
Services	6,789- 11%	11,631- 15%	16,169- 15%	17,123- 16%
Government	6,040- 10%	6,960- 9%	1/ 20,509- 19%	20,551- 19%
Total	62,995-100%	75,946-100%	107,213-100%	107,161-100%

* = less than 1%

1/ The significant increases in employment are due to reporting changes. Previously, many agricultural and
Government employees were not included by the State as covered employment.

Source: Washington State Employment Security Department, Research and Analysis Branch.

There was a minor increase in Government employment, but this was obscured since most of the increase displayed was a change from previous reporting methods. Employment leveled off after 1980 in response to the economic recession.

Employment in wood products manufacturing remained relatively stable during the 1970s even though the sector's share of total employment dropped from 29 to 17 percent between 1971 and 1980. From 1980 to 1984, the effects of economic recession were particularly strong in the wood products sector; employment declined by 11 percent.

In 1984, trade, government, and all manufacturing comprised 67 percent of total employment. Although the wood products sector had dropped in significance in relation to total employment, it continued to rank first (23 percent in 1984) in wages and salaries paid in the

primary area (Figure III-90). Clark County, with the largest population and the most diverse economic base, was the least dependent on wood products (Figure III-89).

FIGURE III-89		
PERCENT OF TOTAL WAGES IN THE WOOD PRODUCTS SECTOR		
County	1980	1984
Clark	15	14
Cowlitz	37	40
Klickitat	25	23
Lewis	26	22
Skamania	19	41

Source: Washington State Employment Security Department, Research and Analysis Branch.

FIGURE III-90							
COVERED EMPLOYMENT AND WAGES - PRIMARY INFLUENCE AREA							
	Employment (Number)		Total Wages (S)		% of Total Wages		Average Wage/Job (S)	
	1980	1984	1980	1984	1980	1984	1980	1984
Agriculture	1,476	1,944	12,402,167	15,550,542	1	1	8,402	7,999
Mining	847	812	20,705,645	26,063,022	1	1	24,446	32,097
Construction	7,320	5,869	170,138,334	124,363,779	10	6	23,242	21,190
Manufacturing								
Wood Products	18,149	16,147	404,591,666	452,186,255	24	23	22,304	28,004
Other	12,652	14,436	236,407,577	328,959,629	14	17	18,685	22,787
Transportation	3,917	4,200	82,426,209	102,400,937	5	5	21,059	24,381
Wholesale/ Retail Sales	21,408	21,891	220,917,772	241,360,632	13	12	10,319	11,026
Finance, Ins., Real Estate	3,914	4,188	48,597,484	62,274,182	3	3	12,416	14,870
Services	16,169	17,123	165,070,457	198,785,295	10	10	10,209	11,609
Government	20,505	20,551	320,779,935	398,173,720	19	20	15,409	19,375
Total	107,213	107,161	1,682,037,246	1,950,117,993			15,688	18,198

Source: Washington State Employment Security Department, Research and Analysis Branch.

Prior to the eruption of Mount St. Helens, recreation on the Forest consisted primarily of hunting and fishing by local residents. Creation of the National Volcanic Monument and increasing interest in the Columbia River Gorge have transformed the Forest into an international recreational attraction.

These developments make it possible for local communities to expand their recreation-associated economies. The recorded level of dispersed recreation on the Forest in 1984 was approximately 1.3 million Recreation Visitor Days (RVDs). This included those visiting the Forest to hunt and fish. Developed recreation sites received 745,000 RVDs of use in the same period. The direct, indirect, and induced employment provided by recreation is approximately 3 percent of the area's total employment.

Timber-related employment in Skamania County also appeared low in 1980 (19 percent), but this was primarily due to short-term increases in construction because of work on the new Bonneville power plant. By 1984, 41 percent of all wages and salaries were related to wood products manufacturing in Skamania County. Wood products manufacturing has one of the highest average salaries (more than $28,000 in 1984), surpassed only by mining (Figure III-90).

Currently, the tourism industry is underdeveloped in the rural portions of the primary influence area. Its expansion can lessen dependence on the wood products sector. Unfortunately for most rural communities, recreation is highly seasonal, which contributes to fluctuations in employment which already exist.

County	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
FIGURE III-91												
UNEMPLOYMENT RATES												
Clark	4.8	8.1	6.9	7.0	5.9	6.3	7.1	8.7	11.9	11.8	9.2	8.5
Cowlitz	6.7	8.4	7.9	9.7	8.1	9.0	10.8	12.9	17.5	14.0	11.8	11.9
Klickitat	11.9	15.9	13.5	15.3	12.3	12.2	14.5	15.6	22.4	17.2	14.6	13.9
Lewis	9.2	13.8	9.6	10.4	9.0	9.5	11.4	13.5	17.0	14.9	13.8	12.5
Skamania	12.0	15.2	11.8	13.7	11.5	9.6	12.8	18.3	27.1	23.1	21.6	20.8
Washington State	7.1	9.6	8.6	8.8	6.9	6.8	7.9	9.5				

Source: Washington State Employment Security Department.

The increases in population and jobs in the primary area during the 1970s were concentrated in Clark County and along the I-5 corridor. The more rural areas of Lewis, Klickitat and Skamania Counties did not gain from the expanding job markets. The major downturn in the wood products market during the 1980s resulted in high unemployment rates for the more rural counties (Figure III-91).

Human Resource Programs: The Forest has been actively engaged in a wide variety of workforce and youth training programs. The Youth Conservation Corps (YCC) Program provides employees between the ages of 15 and 18 with employment and experience in a natural resources environment. The Senior Community Service Employment Program (SCSEP) provides part-time employment for senior citizens whose incomes are within poverty levels. Other programs the Forest has been active in include: The Comprehensive Employment Training Act (CETA), and College Work Study.

The Volunteers in the National Forest Program has become increasingly important as funding levels decrease for some of the above programs.

This program, authorized in 1972, has been used extensively to accomplish necessary resource activities such as campground host work, trail construction,

Wilderness patrol, and many other jobs. Many volunteers are highly-qualified individuals who are retired or young people unable to find jobs in their profession, trade, or area of interest because of current economic conditions and the lack of employment opportunities. Volunteer programs are expected to increase.

The Forest has the ability to utilize Human Resource Programs to accomplish many Forest projects. For example, there is a continuing need to bring buildings, campgrounds, and trails up to standard; to improve young timber stands through thinning and pruning; and to accomplish soil and water improvement programs. Although there is a backlog of projects that can be accomplished, the funding for these programs varies from year to year because of national budget priorities. Because of this, these programs are not always available when needed. In 1985, the Forest had an enrollment in these programs that amounted to 28 person years.

Various programs to benefit both the Forest and the individual have been implemented for minorities and women. This effort is reflected in Forest Service hiring, supervisory, and contracting procedures.

Native American treaty rights, land uses, and concerns were described earlier in this chapter.

Anticipated Conditions

This region will continue to be influenced by the wood products sector due to the inherent capability of the land to profitably grow commercial timber. However, while timber harvest will remain important, there will be more competition between harvesting and other Forest uses in the future.

A major objective of community economic development has been to reduce annual employment fluctuations due to dependence on the wood products sector. Seasonal employment fluctuations are also related to the climate. The wood products dependency has lessened in the last decade. The economy has expanded in the trade and service sectors and in the manufacture of other products. Most of these changes have occurred along the I-5 corridor. Communities in Klickitat, Skamania, and the eastern portion of Lewis Counties are expected to remain small and rural with persistent unemployment problems.

The demand for recreation on the Forest will continue to increase because of population growth and overcrowding in recreation areas closer to the Puget Sound and Portland metropolitan areas. The Mount St. Helens National Volcanic Monument alone is expected to attract 2.3 million visitors annually. Seventy-six percent of these visitors will come from out-of-State and require services such as lodging, food, and fuel.

Role of the Resource

Timber outputs from the National Forest have traditionally been especially important to rural areas and, to a lesser extent, those living within the I-5 corridor. Employment in the wood products industry has been relatively high paying and provides the economic base of these economies. Rural residents depend heavily on the Forest for both timber-related livelihoods and recreation, primarily dispersed activities like hunting and fishing. The economy within the I-5 corridor has been somewhat more diversified, as a smaller proportion of residents look to the forest for employment and more people see it primarily as a recreational resource.

Between 1970 and 1980, the number of wood processing facilities in the state declined by 20 percent. During the 1970s the northwest lost a substantial portion of its market share in all regions nationally except the west coast. Softwood lumber and plywood, the backbone of the northwest timber products industry, had fallen 29 and 38 percent, respectively, by 1980.

Much of the decline in the area's competitive ability is attributable to developments outside Washington state. Timber resources in the southeast have recently matured and that region enjoys transportation advantages and lower labor costs.

Interactions

There are two primary social and economic ties between the Forest and its surroundings: timber products and recreation. Both have national, regional, and local importance, but the significance of timber products is greatest locally.

Timber: Nationally, the 1980 RPA program assigned 3.7 percent of all National Forest timber sales to this Forest, which is 8.6 percent of the volume from the National Forests in the Pacific Northwest. Currently, the Forest supplies 5 to 7 percent of all timber harvested in the state of Washington. About 85 percent of this receives initial processing in the primary influence area. Figure III-92 shows the portion of the Forest's timber supply used in each county.

| FIGURE III-92 |||
| PORTION OF TOTAL LOG CONSUMPTION OF ADJACENT COUNTIES PROVIDED BY THE FOREST ||||
County	Year	Percent from Forest (%)	Total Board Feet (MBF)
Clark	1978	44	151,285
	1980	29	129,943
	1982	59	119,339
	1984	42	126,441
Cowlitz	1978	1	1,106,453
	1980	0.5	948,712
	1982	1	1,051,528
	1984	3	967,851
Lewis	1978	44	286,785
	1980	42	183,225
	1982	35	195,446
	1984	47	307,344
Skamania	1978	45	187,722
and	1980	39	155,212
Klickitat	1982	39	149,620
	1984	45	176,592
Source: Washington Mill Survey, 1978, 1980, 1982, 1984; Dept. of Natural Resources Timber Sale Revenues.			

FIGURE III-93						
COMPARISON OF COUNTY OPERATING REVENUES AND PAYMENTS TO COUNTIES						
Clark	30,986,610	10,194	1%	35,325,446	6,529	1%
Cowlitz	23,683,252	145,440	1%	26,325,223	117,317	1%
Klickitat	5,507,429	64,272	1%	6,004,022	51,187	1%
Lewis	16,782,971	2,637,902	16%	16,390,651	2,100,882	13%
Skamania	6,445,957	5,791,374	90%	5,742,043	4,624,036	81%

Historically, the Forest's supply has stimulated about 15 percent of the employment in primary wood processing, which includes sawmills, plywood mills, and pulp mills in the five-county influence area. Currently, the Forest's supply of timber contributes about 3 percent of the primary area's total employment. In addition to harvesting and primary wood manufacturing employment, other associated jobs are found in replanting trees and road construction.

The sale of timber from Forest lands also provides revenues to the counties (Figure III-93). National Forest land in each county is removed from the county's tax base. To compensate for lost tax revenues, 25 percent of the revenues collected by the Forest are returned to the counties. This includes monies from timber sales, recreation, minerals, and other land use charges. More than 99 percent of these revenues are generated by timber sales.

Each county's share is based on the amount of National Forest land it contains. The monies returned to the counties must be used for public schools and roads. In 1981 and in 1983, the total 25 percent fund payments to the counties were $8.9 and $7.1 million respectively.

In 1982, timber from the Forest represented less than 1 percent of the total log consumption in the Puget Sound area and approximately 2 percent in the Portland area.

These trends will increase the importance of the Forest's amenity values. Providing natural-appearing landscapes, roadless recreation opportunities, and old growth can conflict with timber harvesting objectives. The consequences of replacing timber-related employment with jobs in the service and trade sectors is difficult to assess. Total income may be reduced because timber-related employment is typically paid at a significantly higher level.

Recreation dominates social and economic interactions between the Forest and the secondary influence area, Portland and Puget Sound metropolitan areas. Cultural resources on the Forest are also of social and economic significance to the Yakima Indian Nation and other Native Americans.

Social/Economic

As discussed in Chapter III, different levels of timber production and recreational opportunities on the Forest would bring about social and economic effects, especially within the primary influence area (Clark, Cowlitz, Klickitat, Lewis, and Skamania Counties).

Economic effects analyzed in this section include direct, indirect, and induced employment, total income, and payments to counties in lieu of taxes. These economic effects are accompanied by social effects in local "communities" (metropolitan, I-5 corridor, and rural areas). Social effects include changes in local lifestyles and values and in community identity (cohesion).

There are other socioeconomic effects that can be identified by alternative, including employment effects related to commercial harvest of anadromous fish, employment and community effects related to future Forest budget levels, and secondary employment and community effects stimulated by changes in Forest payments to counties. These effects are either minor, difficult to predict, or can be tied to other effects. Anadromous fish spawned in Forest streams will continue to make relatively minor (less than 1 percent) contributions to total direct employment in commercial fishing. Forest Service employees and their families often constitute a significant portion of small rural communities surrounding the Forest. Future reductions in Forest Service budgets may induce substantial socioeconomic effects on these small communities, but future levels and distribution of actual funding are difficult to predict. Payments to counties induce secondary effects in rural areas by impacting employment tied to county road maintenance and schools. Direct future levels of county payments are identified by alternative.

Overall, population changes in the primary influence area are also expected to be minor in response to the alternatives. The largest change in employment of any alternative potentially affects about 2 percent of the total employment. There may be some dislocation of individuals as alternatives shift between recreation and timber opportunities, resulting in minor amounts of immigration and emigration.

Direct and Indirect Effects

Metropolitan areas have complex economies and rely less on timber. For most urban residents, the Forest is primarily a recreation area. Alternatives with rapid first-decade changes from current timber and recreation levels would create more important and larger effects on residents of rural areas which would receive the most noticeable effects of any major changes.

Average socioeconomic effects for the first decade are projected, by alternative, for the primary influence area. These are not total employment and income figures within the primary influence area, but represent projected first-decade estimates of jobs, income, and county payments within the primary influence area resulting from Forest timber- and recreation-related outputs.

The average level of timber harvest from 1979 to 1988 was 303 MMBF, which provided for approximately 3,030 direct, indirect, and induced jobs, and $70 million in total income. The recreation use, including wildlife- and fish-associated recreation, was about 2.02 million RVDs and WFUDs, which provided for approximately 3,020 direct, indirect, and induced jobs, and $52 million in total income. Projected changes in timber harvest and recreation by alternative are assumed to induce varying levels of jobs, wages, and county payments within the local area during the first decade. The projections are based on the Gifford-Pinchot 1977 IMPLAN model. These estimates have not been adjusted to account for recent advancements in sawmill technology which have reduced labor intensity from 20-40 percent. Caution should be exercised when interpreting the results of the input/output model (IMPLAN) used to make predictions. The model uses a 1972 data base, updated to 1977, to determine linkages between industries. No substitutes for any products are assumed to exist and complete consumption of all available products is assumed. The area's economic health is greatly influenced by national forces. Inflation, interest rates, conditions in the housing market, and individual preferences for recreational opportunities and living environment have more of an influence on local jobs

235

and incomes than does the Gifford Pinchot National Forest. However, the projected outcomes are useful for evaluating relative differences between alternatives.

The IMPLAN model is described in Appendix B. Total projected jobs, wages, and county payments are presented in Figures IV-43 and 44.

FIGURE IV-43

TIMBER AND RECREATION-RELATED JOBS, INCOME, AND PAYMENTS TO COUNTIES IN THE PRIMARY INFLUENCE AREA : FIRST DECADE

	(1979-88) Current	NC 1/ No Change	A No Action	D	I	J	K	S Preferred
Total Number of Direct, Indirect, and Induced Jobs:								
Timber	3,030	4,110	3,620	4,540	2,960	870	3,640	3,490
Change from Alt. A.	-590	+490	0	+920	-660	-2,750	+20	-130
Recreation	3,020	3,490	3,500	3,560	3,490	3,500	3,590	3,490
Change From Alt. A.	-480	-10	0	+60	-10	0	+100	0
Total, Timber and Recreation Jobs 2/	6,050	7,600	7,110	8,090	6,450	4,360	7,230	6,980
Change From Alt. A.	-1,060	+480	0	980	-670	-2,750	+120	-130
Total Direct, Indirect, and Induced Income (Million$):								
Timber	70	95	83	105	68	20	84	80
Change from Alt. A.	-13	+12	0	+22	-15	-63	1	-3
Recreation	52	59	59	60	59	59	61	59
Change from Alt. A.	-7	0	0	+1	0	0	+2	0
Total Timber and Recreation Income 2/	122	154	143	165	128	79	145	140
Change from Alt. A.	-21	+11	0	+22	-15	-64	+2	-3
Payments to Counties (Millions $):	10	16	13	16	11	3	13	12
Change from Alt. A.	-3	+3	0	+3	-2	-10	0	-1

1/ Timber-related jobs, income, and payments to counties for Alternative NC are based on the harvest of the total potential yield.

2/ Totals may not sum because of rounding.

These levels are directly related to the outputs in the Forest timber sale program quantity and in recreation use. Methods used for socioeconomic projections are described in Appendix B.

FIGURE IV-44
Timber and Recreation-Related Employment
Opportunities in the Primary Influence Area
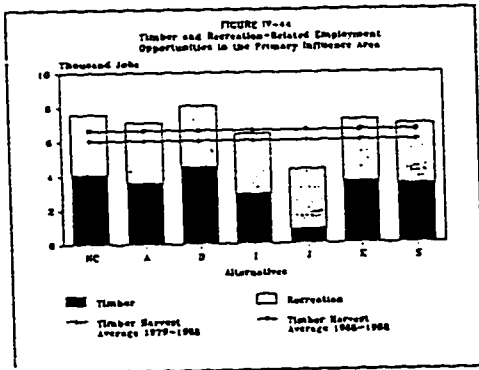
It is important to understand the intent of these projections; they are estimates based on a number of assumptions. The purpose is to compare alternatives. The numbers are not intended to be precise estimates of future employment and income levels. These projections assume that the timber cut will be equal to the timber sold. Also, in all alternatives, there is an increase in recreation employment and income due to increases in recreation use resulting from natural population growth.

In the following discussions, alternatives are compared to Alternative A. First-decade total employment in Alternative A is estimated to be about 130 jobs above existing conditions. This increase is because of growth in recreation (including wildlife and fish) use. Timber harvest would decline in Alternative A from current levels. Total recreation (including wildlife and fish) use varies only about 2 percent across the alternatives in the first decade because recreation use is only allowed to expand to project demand estimates. The range of employment opportunities provided among alternatives varies slightly more because of expected

differences in the composition of recreation use among Recreation Opportunity Spectrum (ROS) classes.

Alternatives NC and D: These alternatives provide timber outputs above current levels. Total first-decade Forest-related timber and recreation jobs and income would be about 490 and 920 higher, respectively, than the level in Alternative A. Of this total, timber would provide about 54 and 56 percent of total jobs and 62 and 64 percent of total income. The increased timber harvest would increase payments to counties by about $3 million per year over Alternative A, helping local counties support roads and schools.

Increases in both timber harvest and recreation use above current levels would increase potentials for friction between primarily urban recreational users and rural residents whose livelihoods are tied to Forest timber harvest. Metropolitan recreational users would experience simultaneous increases in roaded recreational opportunities and decreases in unroaded recreational opportunities and in visual quality. Rural residents would experience growth in jobs and income stimulated by increased Forest timber harvest, but would also perceive losses in unroaded recreation accompanied by increases in urban recreational users. Wood products firms would also have the potential to expand in rural areas. These increases in both urban recreational users and wood products manufacturing would probably act to decrease community cohesion in rural areas.

Alternatives A, K, and S: These alternatives provide timber outputs which are lower, but within the range of current levels. Timber-related jobs for Alternatives A, K and S (Preferred) would be about 3,620, 3,640, and 3,490 jobs, respectively. Recreation (including wildlife and fish) jobs for Alternatives A, K and S are 3,500, 3,590 and 3,490, respectively. In these alternatives about half the total jobs would be provided by timber and half by recreation.

Payments to counties would be about $12 million for Alternative S (Preferred) and $13 million for Alternatives A and K. This is $2 and $3 million higher, respectively, than the average of the past 10 years.

The maintenance of timber harvest near current levels and the expansion of recreation use would probably continue present levels of competition for limited Forest resources. Except for those most concerned on either side of the roadless and commodity production issues, Forest management practices would generally continue to remain consistent with Forest users' beliefs and values, contributing to community cohesion in rural areas.

Alternative I: With less emphasis on timber, the balance between employment induced by timber and recreation activities changes in this alternative. Employment generated by timber activities accounts for 46 percent of total jobs provided by Alternative I. However, because jobs in the timber industry pay better wages than recreation-related jobs, timber employment in Alternative I would still account for over half the total income generated. About 2,960 jobs and $68 million in income would be induced by timber, while 3,490 jobs and $59.0 million would be added by recreation. Compared to Alternative A, 670 fewer jobs would be associated with timber. The level of recreation jobs would be similar to that provided by Alternative A.

These changes would also be reflected in an $11 million in payments to counties, $2 million less than in Alternative A.

The reduction in timber harvest would have significant social impacts, especially in rural areas, and secondarily to residents within the I-5 corridor whose jobs depend on timber harvest. The net social effect on rural residents would be a loss in community cohesion. Residents within the I-5 corridor, whose jobs are not tied to Forest timber harvest, would experience higher-quality recreation opportunities in a more natural-appearing environment.

Alternative J: Total Forest-related employment would be 4,360 in Alternative J, compared to 7,110 jobs in Alternative A. Total income, $79 million, would be $64 million lower than total income for Alternative A. While 49 percent of the total jobs in Alternative A would be recreation-related, 80 percent of the total would be stimulated by recreation (including wildlife and fish use) in Alternative J. Payments to counties

would be $3 million compared to $13 million in Alternative A.

The large and rapid shift would cause economic dislocations, especially in rural and I-5 areas. Wood products manufacturers within the I-5 corridor would increase their dependence on timber from state and private lands. Rural wood products manufacturers would experience shortages in timber and would be forced to compete more for private and state timber supplies.

Unroaded recreational opportunities would increase dramatically from the present, benefiting all recreational users within the primary influence area. However, large and rapid drops in Forest timber harvest during the first decade would cause major social disruptions among both rural and I-5 corridor residents. Losses in jobs and wages from reduced Forest timber harvest would contribute to higher levels of unemployment, causing reductions in community cohesion within both of these areas. Rural and I-5 residents would feel that productive Forest resources were being "locked up" to the detriment of these local areas, which is counter to deeply-held values.

Some jobs lost due to the reduction in timber harvest would be replaced with jobs servicing dispersed recreationists. These jobs would be lower paid and require different skills than those presently in timber harvest and manufacturing. These positions would often be filled from outside the existing communities by persons with different values and lifestyles.

Cumulative Effects

The effects of Forest management and the associated outputs on local communities depends on the management and outputs of other ownerships within the area of influence. For example, the increases in lumber and wood product employment projected for the Forest might be offset by a decrease in employment opportunities associated with a reduction in harvest from other ownerships. In the previous section, Figure IV-47 displays the positive or negative employment and income effects of each alternative without considering the effects of other supply sources.

In 10 years, the wood products industry is projected to face a shortage in timber supply from Southwest Washington. The publication *Timber Supply in the Pacific Northwest - Aggregate Implications of Forest Plans* (USDA Forest Service 1989) presents estimates of available timber supplies in Washington and Oregon under the preferred alternative scenarios from the DEISs for Forest Plans. The study found that for the region of southwest Washington the historical harvest level can only be sustained for the next decade. Beginning in 10 years, the economic supply from private industrial owners is expected to decline over one billion board feet. This represents a reduction in regional timber supply of about one third. Supply capability from private owners would not rebound until the fourth decade of the Plan. Forest Service and state supply potentials are relatively stable throughout the period.

Summary of Public Participation Activities

With the release of the DEIS and Forest Plan, a 127-day review period began. During this time, the Forest hosted a series of open houses and gave presentations to several interest groups. A list of meetings and attending groups follows:

DATE	GROUP
10/06/87	P.L.U.S. Public Land Users
10/10/87	Society of American Foresters
10/12/87	Lions Club
10/15/87	Lewis County Economic Development Board
11/03/87	Greater Vancouver Chamber of Commerce
11/04/87	Vancouver Wildlife League
11/11/87	Senior Citizens, North Bonneville
	Mt. Adams Snowmobile Club
	Kelso-Longview Rotary Club
	North County Emergency Medical Service
11/11/87	SW Washington Angler
11/11/87	Washougal 4-Wheelers
11/16/87	Skamania County School Board
	Rocks and Minerals Society
	Mossyrock Horsemen's Group
	Onalaska Horsemen's Group
	Longview-Chehalis Horsemen's Group
11/17/87	Seattle Environmental Groups
12/03/87	Tom Kruikshark (Environmental Group, Kirkland, WA)
12/09/87	Cowlitz County Economic Development Council
12/10/87	Industry
12/19/87	Cispus River property owners
01/14/88	Washington State
01/14/88	U.S. Environmental Protection Agency

Open houses were held at:

Carson, WA
Longview, WA
Mt. Adams Ranger District
Packwood Ranger District
Randle, WA
Stevenson, WA
Wind River Ranger District

Newspaper and radio announcements were used to encourage comments on the Plan and DEIS.

The Forest received almost 3,800 responses during the review period, containing over 38,000 comments on the Proposed Plan and DEIS. Appendix P of the FEIS contains a recap of public participation activities, Forest Service responses to public comments, and a list of agencies and individuals who commented on the DEIS. The original letters are on file with the Planning Records in the Gifford Pinchot National Forest Supervisor's Office. These records are available for viewing by the public during regular office hours.

Although no "new" issues were unearthed by public comment, several issues were found to have new facets; often, public input shifted the focus of an issue and changed the way it was viewed by the Forest. Chapter 3 of the LRMP discusses the Forest's response to Issues, Concerns, and Opportunities.

The Forest has continued to inform the public since the review period ended. Meetings with interest groups and agencies took place on the following dates.

06/16/88	Timber Industry
07/15/88	Yakima Indian Nation
09/15/88	State of Washington
09/23/88	Cispus River Concern Citizens
10/28/88	Cispus River Landowners
12/20/88	Timber Industry
12/21/88	GP Task Force
12/21/88	State of Washington
02/15/89	Washington Department of Ecology
11/28/89	Timber Industry
12/21/89	Washington Dept. of Parks and Recreation
02/20/90	Timber Industry Representatives
02/20/90	Environmental Organization
02/21/90	Gifford Pinchot Alliance
02/21/90	Gifford Pinchot Task Force
02/25/90	State of Washington
03/05/90	Mason, Bruce, & Girard
04/24/90	State of Washington

Summary

The above ICOs are those which have been used to drive the planning effort on the Gifford Pinchot National Forest. The range of solutions used to resolve these issues are displayed in Chapter II. The process which was used to develop these ICOs is described in Appendix A.

Social and Economic Impact Analysis

Overview

Introduction
Different levels of timber production and recreational (including wildlife) opportunities on the Forest would bring about social and economic effects, especially within the primary influence area (Clark, Cowlitz, western Klickitat, Lewis, and Skamania Counties).

Economic effects analyzed included changes in direct, indirect, and induced employment and in total income. Payments to counties in lieu of taxes would also vary. These economic effects are accompanied by social effects in local "communities" (metropolitan, I-5 corridor, and rural areas). Social effects included changes in local lifestyles and values, and in community identity (cohesion). The framework of the economic and social analysis was developed under the guidance of the Regional Sociologist and FSH 1909.17, "Economic and Social Analysis."

There are other socioeconomic effects that can be identified by alternative, including employment effects related to commercial harvest of anadromous fish, employment and community effects related to future Forest budget levels, and secondary employments and community effects stimulated by changes in Forest payments to counties. These effects are either minor, difficult to predict or they can be tied to other effects. Anadromous fish spawned in Forest streams will continue to make relatively minor (less than 1 percent) contributions to total direct employment in commercial fishing. Forest Service employees and their families often constitute a significant portion of small rural communities surrounding the Forest. Future reductions in Forest budgets may induce substantial socioeconomic effects on these small communities, but future levels and distribution of actual funding levels are difficult to predict. Payments to counties induce secondary effects in rural areas by impacting employment tied to county road maintenance and schools. The direct changes in future levels of county payments are identified by alternative.

Overall, population change in the primary influence area, is also expected to be minor in response to the alternatives. The largest change in employment of any alternative potentially affects about 2 percent of the total employment. The positive and negative employment effects would tend to be only reflected in the unemployment rates in the near future. There may be some dislocation of individuals as alternatives shift between recreation and timber opportunities, resulting in minor amounts of in-migration and out-migration.

Forest Influence Area
Forest planning decisions on the Gifford Pinchot affect economic and social conditions in areas surrounding the Forest. In general, effects of Forest management will continue to be strongest in the immediate area, called the "Primary Influence Area" which includes Clark, Cowlitz, Lewis, Skamania, and western Klickitat Counties. The Forest secondarily influences the Portland, Oregon, and Puget Sound metropolitan areas. The distinction between the primary and secondary influence areas was defined based on:

- Review of public comments on past plans and the ICOs to determine what the public conceptualizes as the local area.

- Determining the area where the majority of Forest outputs flow.

- Determining areas with identifiable political boundaries for which data is available.

To estimate social effects, three general types of "communities" can be roughly identified within the primary influence area: metropolitan areas (Portland and Vancouver), the I-5 corridor, and rural areas.

Economic Factors
Future supplies of Forest timber will continue to be especially important to rural areas within the primary zone, and to a lesser extent, to communities within the I-5 corridor. Local metropolitan areas have more diverse economies so will continue to rely on the Forest primarily for recreation. Currently, the Forest's timber supply contributes about 3 percent of local total employment. Since 1980, annual payments to counties have varied between

six and nine million dollars. Local counties, and particularly rural areas, will continue to depend on Forest timber supplies. The tourism industry currently remains relatively undeveloped in rural areas, and local communities have the capabilities to expand their recreation-associated economies. Present levels of Forest recreation support about 3 percent of the area's total employment, and are expected to continue to expand. Development of tourism could help lessen overall local dependency on wood products.

Social Factors

The metropolitan area has a diverse economy that is less directly tied to Forest timber. Metropolitan residents rely primarily on the Forest for recreation away from the urban environment. Most remaining population and economic activities in the primary influence area are concentrated in communities along the I-5 corridor. While the timber industry remains very important within this corridor, log supplies come primarily from State and private lands, rather than from the Forest. There is an interest in expanding the relatively undeveloped tourism industry to cater to travelers along I-5. The rest of the primary influence area is virtually all rural. The wood products industry predominates and employment is especially dependent on Forest timber. Local rural residents, therefore, depend on the Forest for both their livelihoods and for primarily dispersed recreational experiences. Such close ties between rural residents and the Forest tend to lead to strong proprietorial feelings about nearby Forest lands. Continued growth in both the demand for Forest timber and recreation will probably lead to increased conflicts between protecting amenity values and timber harvesting activities, particularly between metropolitan recreational users and rural residents whose jobs are tied to Forest timber outputs.

Economic and Social Analysis

Economic Impact Analysis

1. Introduction: Input-Output analysis was used to help evaluate the employment and income impacts associated with the proposed output and activity levels for each of the land management planning alternatives.

The impacts were primarily estimated for the first decade based on the timber, recreation, and wildlife outputs for each alternative. The quantitative employment and personal income impacts were qualitatively augmented with an assessment of the social consequences which could accompany the implementation of each alternative.

The IMPLAN model (Alward et al., 1980) was used to perform the economic impact analysis. IMPLAN is an Input-Output model software program which resides on the UNISYS computer at Fort Collins Computer Center.

Economic Input-Output (I-O) analysis is a procedure for describing the structure of inter-industry dependencies in a regional economy. I-O analysis is based upon the interdependence of the production and consumption sectors of the economy for the area being studied. Industries must purchase inputs from other industries, as well as from primary sources (i.e. natural resources), for use in the production of outputs which are sold either to other industries or to final consumers. A set of I-O accounts can be thought of as a "picture" of an impact area's economic structure at one point in time. For the analysis conducted for the Gifford Pinchot, the most recent available data was from calendar year 1977.

The proposed output levels associated with each alternative are represented as changed in the current levels of final demand for the outputs in the IMPLAN model. The resulting production requirements needed to satisfy the changes in final demand and the flow of industrial inputs and outputs can then be traced via the I-O accounts to determine the impacts on the different industries composing the regional economy. Through mathematical matrix manipulations, the estimated direct, indirect, and induced impacts can be evaluated. The impacts concerning most people in the local economy are changes in employment and personal income.

Also of interest are the changes in the amount of payments to counties in lieu of taxes resulting from the implementation of an alternative. The IMPLAN I-O model was not used to analyze changes in county payments. The process used will be discussed after the following brief review of the data and information used to construct and calibrate the Gifford Pinchot I-O model.

2. **IMPLAN Data Base:** The IMPLAN model has a data base consisting of: (a) a national level technology matrix, and (b) a file of estimated activity levels for total gross output, six final demand components, three final payment indicators, and employment estimates for 466 industrial/business sectors (Alward et al., 1985). The national level technology matrix is based on a 1972 Department of Commerce I-O model converted to an "industry-by-industry" basis and updated to 1977. Unreported data were estimated using the RAS procedure (Stone et al., 1962).

The county level information is based on a 1977 data set constructed by Engineering Economic Associates of Berkeley, California. Utilizing the national technology matrix and the control totals for the Clark, Cowlitz, Lewis, and Skamania Counties, a data reduction method was employed to develop the Input-Output table for the economic impact area. The method used exploits the property of "openness" displayed by smaller regional economies when compared to the national economy (Richardson, 1972). Smaller regional economies exhibit much greater tendencies to import and export goods and services than the national economy. Therefore, they are more "open" than the national economy. Assuming trade balances are the principal difference between national and regional purchase patterns (i.e., industry production functions are identical but regional imports and exports make local inter-industry transactions different), the supply-demand pool technique for data reduction was adopted (Schaffer et al., 1969).

Comparisons indicated the Gifford Pinchot's IMPLAN model did a reasonably good job of reflecting the "picture" of the county economy as it was in 1977. However, the local economy has changed since then. While the changes tend to make the employment and income predictions based on the 1977 I-O model of the counties less reliable, they are not meaningless in the presence of some knowledge of how the recent changes would affect the predictions if they were made with a more current model of the economy.

There have been significant changes in the structure of the wood product industry brought about by advances in sawmill technology since 1982. These technological advancements have reduced the labor intensity of lumber production. The IMPLAN model has not been revised to account for these changes.

3. **Final Demand Expenditures:** For each alternative, the I-O model was used to translate proposed changes in timber, wildlife, and recreation resource output levels from recent average levels of production into changes in employment and personal income for the four-county area as a whole.

An intermediate step in the process was to equate the changes in the respective resource outputs into changes in final demand expenditures by sector. Final demand expenditures are different from the values used in the PNV efficiency analysis. The PNV efficiency analysis examines only the market value of the raw material leaving the Forest. For timber outputs, the market values are the stumpage values. On the other hand, final demand expenditures represent the dollars spent by the ultimate consumer at the point of final consumption. The point of final consumption is the sector from which the ultimate consumer purchases a product or the sector beyond which the output is exported from the region. For example, the point of final consumption for an output of timber might be in the New Construction sector because the timber is

used in the construction of a house which a consumer may purchase. However, if the timber is exported following processing at the sawmill, the point of final consumption is the Sawmills sector. By identifying the final consumption point, the transactions of all industries involved in processing the output are considered. For more detail regarding how the final demand expenditures are calculated, refer to the IMPLAN, Version 1.1": Analysis Guide (Palmer et al., 1985).

For purposes of assessing the potential economic impacts which may result from the implementaton of an alternative, output levels for timber, wildlife, and recreation were tracked. The outputs were selected because they reflect the primary differences in the resource production levels between the alternatives, and they also have the most significance to the local economy.

4. **Returns to the Local Government and U.S. Treasury:** Predicted returns to the U.S. Treasury and local governments were calculated for each alternative. The return illustrates the potential impacts of Forest management decisions on both the federal government receipts collected as a result of revenue producing programs on the Forest and the resultant change in revenues passed on to the local governments.

Returns to the U.S. Treasury were calculated by deriving the revenue of income producing programs on the Forest. Virtually all cash returns to the U.S. Treasury from the Gifford Pinchot are generated by timber. Returns to local governments are calculated as 25 percent of the returns to the U.S. Treasury funds. The funds are paid to the State of Washington and eventually passed on to the local county governments based on the percentage of the Forest acres located within each county. The returns to the local counties are often referred to as payments in lieu of property taxes, since the U.S. Government, as a landowner, does not pay local property taxes. In 1981 and in 1983, the total 25 percent fund payments to

counties were $8.9 and $7.1 million respectively.

The projections of the revenues for each alternative were based on their respective proposed output and activity levels. The stumpage receipts, which account for over 99 percent of the total returns to the government, are based on the FORPLAN harvest scheduling solutions for each alternative.

Social Impact Analysis

1. **Introduction:** Once the economic impacts in terms of jobs, personal income, and the returns to the government were completed, the anticipated social impacts that would result from implementation of each alternative were assessed. Social impact analysis is the process of assessing how Forest Service management decisions affect human social life. Social impacts revolve around attitudes, beliefs, and values among various Forest user groups, and their expectations of the availability or permitted uses of National Forest resources. As described earlier, economic effects stem particularly from alternative levels of timber, wildlife, and recreation resources, which in turn affect lifestyles and values, and community cohesion in the local area, especially in terms of perceived changes in Forest-related work and leisure opportunities. Alternatives with rapid and large first decade changes from current timber, wildlife, and recreation levels would create more important and larger effects. The residents of rural areas would receive the most noticeable effects of any major changes.

2. **Performing Social Analysis:** The identification of social impacts by alternative were qualitative rather than quantitative. For each alternative, statements were developed regarding how some management practices and output levels would affect lifestyles and values, community cohesion and stability. This analysis particularly considered changes in quantitative outputs, resulting in perceived shifts in Forest-related work and leisure opportunities, and the

social impacts on the three communities within the primary influence area.

Findings From the Social and Economic Analysis

1. **Social Impacts:** With regard to social impacts, different groups will be affected differently depending on the nature of the alternative being considered. Commodity-oriented alternatives tend to do well in maintaining the economic aspects of the social structure in the area. Increased supplies of timber, in particular, provide the raw material for the local wood processing industry to respond to regional and national markets, which in turn means more, relatively higher paying jobs. Communities which are more dependent upon the wood products industry than others will benefit from higher volumes offered. In addition, more timber means more revenues to the counties.

   Other types of Forest Service decisions can influence the social well-being of Forest-dependent communities. The groups of communities which view or use the Forest from an amenity standpoint are positively impacted by amenity-oriented alternatives and negatively affected by alternatives with a commodity emphasis. Decisions regarding whether or not to develop Roadless Areas for timber harvesting, and how much timber should be harvested at the expense of scenic quality, wildlife, and other noncommodity types of resources will tend to polarize groups with different values and pull together groups with common values. Different issues may change the composition of the groups.

   The implications apply to communities as well as to groups within the communities. While most social groups can be found to some extent in each community, different groups may dominate in certain communities.

   Almost all groups and communities can adapt to slow changes in their environment. However, rapid and dramatic changes in the way the Forest is managed are likely to bring about broad levels of social disruption.

   A more detailed discussion of the effects of each alternative upon the social components of the environment can be found in Chapter IV of the FEIS.

2. **Economic Impacts:** The modeling of economic impacts was based on the proposed changes in resource output levels between the respective alternatives and the output levels upon which the current economy is based. The output levels in three resource areas were used to determine the impacts on employment and income within the four-county area. Response coefficients were derived using the IMPLAN model which estimated the change in the employment and income per unit change in output of the resources. Figure B-14 displays the response coefficients used for the resource areas.

FIGURE B-14

EMPLOYMENT AND INCOME RESPONSE
COEFFICIENTS BY RESOURCE

	Output Units	Empl Resp Jobs	In-come Resp MM
Timber	MMBF	9.99	0.231
Dispersed Rec. Motorized Nonmotorized	MRVDs MRVDs	1.41 1.17	0.024 0.018
Developed Rec. Big Game Hunting Small Game Hunting	MRVDs MWFUDs MWFUDs	0.94 1.65 1.22	0.015 0.030 0.023
Sport Fishing	MWFUDs	1.66	0.030
Nonconsumptive Wildlife Use	MWFUDs	3.40	0.058

Chapters II and IV of the FEIS present the details of the anticipated socio-economic impacts associated with the implementation of each alternative. In particular, Figure II-5f displays the estimated impacts associated with each alternative for the first decade with regard to jobs, personal income, total returns to the U.S. Treasury, and the payments to counties in lieu of taxes. To avoid redundancy, the economic impacts estimated for each alternative will not be discussed here. The reader is referred to Chapters II and IV of the FEIS for specific estimates.

VITA

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EDUCATION

University of Washington College of Forest Resources, Seattle, Washington.
Ph.D., 1996   Forest Resource Management, Specialization: Social
                      Science

University of Michigan School of Natural Resources, Ann Arbor, Michigan.
B.S., 1974   Specialization: Natural Resource Management and
                      Conservation Education

Olivet College   Liberal Arts Program, Olivet, Michigan.
1969-1970   Major: Physical Education and General Science

WORK HISTORY

1991 - Present   **Research Forester in Social Science**
                        US Department of Agriculture, Forest Service, Pacific
                        Northwest Research Station, Seattle, WA, People and
                        Natural Resources Program

1991, Winter   **Teaching Assistant**
1992, Fall   College of Forest Resources, University of Washington,
                        Seattle, WA

1992, Fall   **Teaching Assistant**
                        College of Forest Resources, University of Washington,
                        Seattle, WA

1989-1990   **Research Assistant**
Summer, Fall,   College of Forest Resources, University of Washington,
Winter, Spring,   Seattle, WA. Assessment of non-economic impacts to
Summer, Fall   recreation and tourism from oil and gas development.

WORK HISTORY (continued)

1975-1989

State of Alaska, Department of Natural Resources, Division of Parks and Outdoor Recreation

Regional Manager (1981-1989)
Southeast Alaska Region, Haines/Juneau, Alaska. Supervised ranger staff in managing and operating campgrounds, day use facilities, historic sites, trails, wildlife preserves in four communities. Reviewed environmental impact statements, coastal permit requests for potential impacts to recreation and other social and cultural values. Assisted on team to select state entitlement lands from Federal Government. Assisted in creating extensive marine park system. Established and worked extensively with citizen advisory boards in four communities. Worked collaboratively with federal, state, and local agencies including National Park Service, U.S. Forest Service, U.S. Fish and Wildlife Service, Alaska Department of Fish and Game, Alaska Department of Environmental Conservation, and local governments in Juneau, Sitka, Haines, Ketchikan, and other Southeast Alaska communities.

Park Ranger (1975-1981)
Haines, Alaska. Managed several state campgrounds, picnic areas, trails, wildlife preserve. Supervised Youth Conservation Corps and Young Adult Conservation Corps programs. Worked closely with small rural communities.

1975-1976
Alyeska Ski Resort,
Girdwood, Alaska.

Lift Operator, Aide Room Coordinator

Operated ski lift. Designed aide room facility. Coordinated scheduling and operation of lifts and ski patrols.

1969-1974

Park Ranger
Michigan Department of Natural Resources, Division of State Parks. Involved in routine maintenance and administration of campgrounds, day use and beach facilities. Developed and presented interpretive programs.

SCHOLARSHIPS

Terry Miller Scholarship, Southeast Alaska Tourism Council - 1991
Southeast Alaska Tourism Council Scholarship - 1990

PUBLICATIONS

Brunson, Mark W., Linda L. Kruger, Catherine B Tyler, and Susan A. Schroeder, Technical Eds. In press. Defining social acceptability in ecosystem management: A workshop proceedings. June 23-25, 1992; Kelso, Washington. PNW General Technical Report - Portland, OR. USDA Forest Service Pacific Northwest Research Station.

Clark, Roger N., George H. Stankey, and Linda E. Kruger. In press. A social science perspective or New Perspectives in forestry. *A struggle to adapt: The social ecology of natural resource organizations in the 1990's*, edited by W. R. Burch.

Kruger, Linda and Graciela Etchart. 1994. Forest-based economic development in Native American lands: Two case studies," pgs. 191-222, In *American Indian policy: Self-governance and economic development*. Contributions in Political Science, #329, edited by Lyman H. Legter and Fremont J. Lyden. Westport Connecticut: Greenwood Press.

Kruger, Linda E., Darryll R. Johnson, and Robert G. Lee. 1994. Assessment of non-economic impacts to coastal recreation and tourism from oil and gas development: A review of selected literature and example methodology, May, 1994. OCS Study MMS, 91-0045, U.S. Department of Interior, Minerals Management Service, Pacific OSC Region.

Kruger, Linda E., Robert G. Lee, and Jan Zientek. 1994. Off-shore oil and gas development: Does a community's sense of place play a role in risk assessment?" In Assessment of non-economic impacts to coastal recreation and tourism from oil and gas development: A review of selected literature and example methodology, Appendix B. May, 1994. U.S. Department of Interior, Minerals Management Service, Pacific OSC Region.

Kruger, Linda E. and Catherine B. Tyler. 1995. Management needs assessment for the Copper River Delta, Alaska. PNW-GTR-356. USDA Forest Service Pacific Northwest Research Station.

PUBLICATIONS (con't)

Shindler, Bruce, Jim Peters, and Linda Kruger. 1995. Social values and acceptability of alternative harvest practices an the Tongass National Forest. Corvallis, OR: Oregon State University College of Forest Resources.

Steel, Brent S., Dick Hansis, Randy Kleinhesselink, Mark W. Brunson, and Linda E. Kruger. 1992. Pacific Northwest survey of forestry issues: Rural, urban, and visitor views of the Gifford Pinchot National Forest. October, 1992. Unpublished report.

CONFERENCE AND WORKSHOP PARTICIPATION

Co-Organizer and Facilitator: Breaking The Mold: Global Change, Social Responsibility, and Natural Resource Policy, May 13, 1994. Monterey, CA.

Co-Facilitator, Breakout Session: Human Dimensions of Global Change, November 15-19, 1993, Seattle, WA.

Facilitator: MINFORS Conference, October 24-26, 1993, Corvallis, OR.

Co-Leader: Field Trip: Forests for the 21st Century, August 24-27, 1993, Portland, OR.

Designer: Poster: Forests for the 21st Century, August 24-27, 1993, Portland, OR.

Panelist: Ecosystem Management Socio-Economic Roundtable, June 14-18, 1993, Cable, Wisconsin.

Training Developer and Trainer: Integrating Social Values Into Resource Management, May 27, 1993, Petersburg, Alaska.

Planner, Organizer, Facilitator: Pacific Graduate Student Conference on Social Science and Natural Resources, November 11-14, 1992, Pack Forest, Eatonville, WA.

Presenter: Paper: "Management Needs Assessment for the Copper River Ecosystems," Critical Forest Habitats of Prince William Sound, November 1-4, 1992, Cordova, Alaska

Invited Speaker: First National Landscape Architects Workshop, October 26-29, 1992, Denver, CO.

CONFERENCE PARTICIPATION (continued)

Co-Organizer, Facilitator: Defining Social Acceptability of Forests and Forestry Practices, June 22-25, 1992, Kelso, WA.

Co-Chair: Round Table: "A Framework for Integrating Ecological and Social Factors in Land Use Planning and Management." Fourth North American Symposium on Society and Resource Management, May 17-20, 1992, Madison, WI.

Presenter: Paper: "Integrating multiple social values in natural resource decision making and management," Fourth North American Symposium on Society and Resource Management, May 17-20, 1992, Madison, WI.

Organizer of US Participation: Forest Land Use Liaison Committee Workshop and Field Trip, April 24-26, 1992, Vancouver B.C.

Facilitator: Pacific Northwest Workshop in Public Communications and Interactions, March 31 April 2, 1992, Portland, OR.

Co-Facilitator: Closing Discussion: Seeking Common Ground: A Forum On Pacific Northwest Natural Resources, February 24-25, 1992, Portland, OR.

Designer: Poster: "Alaska Wildlands Research Needs." Symposium on Social Aspects and Recreation Research, February 19-22, 1992, Ontario, CA.

Moderator: Round Table: "Sense of Place," Symposium on Social Aspects and Recreation Research, February 19-22, 1992, Ontario, CA

Presenter: Region 10, Recreation Information Needs Workshop, November 6-8, 1991, Juneau, AK.

Co-Facilitator: Implications of Global Change for Pacific Northwest Forest Management Workshop, October 23-25, 1991, Seattle, WA.

Participant: IUFRO International Student Excursion on Multiple Use Forestry and Landscape Management, October 12-20, 1991, Denmark.

Developer, Organizer, and Facilitator: Social Values and Natural Resources Workshop, September 26-29, 1991, Hood River, OR.

Participant: "Pulse"— Wind River Field Research, September 21-25, 1991, Stevenson. WA.

CONFERENCE PARTICIPATION (continued)

Co-Facilitator: Copper River Delta Institute Management Issues Workshop, April 29 - May 1, 1991 and September 3-6, 1991, Anchorage, AK.

Planner and Coordinator: Forest Land Use Liaison Committee Workshop and Field Trip, June 21-23, 1991, Seattle, WA.

Co-Facilitator: Social Values and New Perspectives in Forestry: A Workshop, July 16-20, 1990, Wind River, WA.

Presenter: Paper, "Off-shore Oil and Gas Development: Does a Community's Sense of Place Play a Role in Risk Assessment?" Third North American Symposium on Society and Resource Management, May, 1990, College Station, Texas.

SPECIAL SKILLS

Meeting and conference design, planning, organization, and facilitation
Small group process facilitation
Public speaking

UNIVERSITY SERVICE

1991   Student Representative, Recreation Search Committee, University of Washington, College of Forest Resources.