

AN ABSTRACT OF THE THESIS OF

Jennifer S. Gibson for the degree of Master of Arts in Applied Anthropology
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^ARedacted for privacy

Courtland L. Smith

On the national level, landowners demand for conservation programs like EQIP and WRP has far outstripped federal funding in 2001. Yet within Oregon's Willamette Valley, both EQIP and CREP have had a rough time gaining momentum. Much of the past research on rural landowners' conservation participation has relied on surveys collecting quantitative data on economic incentives, socio-demographic and farm structure characteristics and the traditional adoption-diffusion model.

These past research factors provide a limited understanding of landowners' decision processes. Through the use of participant observation, in-depth interviews, a focus group and cognitive techniques, this study complements past research by 1) exploring southern Willamette Valley landowners' perceptions of conservation programs and 2) better understanding lesser known and obvious influences on landowners' decisions whether to participate in such conservation programs.

Half of the landowners in the study sample represent grass seed growers, another quarter represent other farmers and ranchers and the last quarter represent non-farming rural residential. Grass seed farmers were of particular interest because they manage half of the 900,000 acres in production in the Willamette Valley and thus have significant impact on the regional landscape.

Landowners approach conservation programs with a world view based on a utilitarian conservationist perspective of natural resources and a strong belief in private property rights. Local conservation agency representatives have an understanding of local landowners' world view, but lack the time to develop the personal rapport and technical skills needed to increase their effectiveness and help rural landowners negotiate the socially complex process of securing permits and financial support. In sum, structural problems are having a significant effect on participation in the southern Willamette Valley.

Opportunities also exist for increased education on differing world views between urban and rural peoples. Due to misunderstandings between the two groups, rural landowners feel they are unfairly held accountable for environmental degradation and at the mercy of an unknowledgeable voting majority and therefore often do not even try to participate in public supported conservation programs.

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Conservation Programs from the Farmers' Perspective:
Where is the Greener Grass?

by
Jennifer S. Gibson

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APPROVED:

Redacted for privacy

Major Professor, representing Applied Anthropology

Redacted for privacy

Head of Department of Anthropology

Redacted for privacy

Dean of the Graduate School

I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

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Jennifer S. Gibson, Author

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LIST OF ACRONYMS

CREP	Conservation Reserve Enhancement Program
CRP	Conservation Reserve Program
CSP	Conservation Security Program
EPA	Environmental Protection Agency
EQIP	Environmental Quality Incentives Program
FSA	Farm Service Agency
NCP	National Conservation Program
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
ODFW	Oregon Department of Fish and Wildlife
OWEB	Oregon Watershed Enhancement Board
SCS	Soil Conservation Service
SWCD	Soil and Water Conservation Districts
USDA	U.S. Dept. of Agriculture
USFWS	U.S. Fish and Wildlife Service
WHIP	Wildlife Habitat Incentives Program
WRP	Wetland Reserve Program

Conservation Programs from the Farmers' Perspective:
Where is the Greener Grass?

CHAPTER 1: INTRODUCTION

During the last few decades, humans have emerged as a new force of nature. We are modifying physical, chemical and biological systems in new ways at faster rates, and over larger spatial scales than ever recorded on Earth (Lubchenco 1998: 492).

The Willamette Valley is a special place, running between the Coastal and Cascade mountain ranges. The Willamette River provides for agriculture, recreational opportunities, diverse habitat and a source of pride for Oregonians throughout the state. Future changes in the landscape of the Willamette Valley, be they in the next 15 or 150 years, will be determined through the complex interaction of humans and their natural environment. Stimulated by the concerns of many community members, policy makers and scientists regarding the long-term, possibly irreversible impacts of landscape modifications, my thesis has been designed to improve understanding of the human decision making process behind various land-use patterns along the Willamette.

One way to explore future Willamette Valley landscape scenarios is through examination of conservation programs available to rural landowners, especially farmers. While the number of farms is shrinking, farmers and ranchers still own and manage 50% of land in the U.S. (Boody 2002:262). Farm policies designed in Washington, DC influence individual land use decisions thousands of miles away, which in turn affect the health and diversity of the natural environment and rural landscape—the quality of life now and in the future. Conservation programs provide private landowners with financial and technical assistance to implement current best management practices on the ground to decrease environmental degradation and meet regulation standards.

Conservation programs serve as a feedback loop between policy and practice to improve understanding of what farmers perceive as good programs and what influences their adoption of particular programs. That knowledge can then inform government and non-governmental organizations to produce, market and administer more effective policy and programs to guide and protect the Willamette Valley community and its natural resources into the future. The implications of this study will improve understanding of the dynamics between people, their environment and their government not only locally, but in watersheds throughout the country.

STATEMENT OF PROBLEM

The Conservation Reserve Enhancement Program (CREP) is struggling in Oregon. This announcement came from the *Capital Press*, the Northwest's agricultural weekly (Ricker 2002). The article went on to say that Oregon enrollment in CREP has reached only five percent of the state goal. The program rents land from farmers to put into easements. Implementation of CREP began in Oregon in 1988 when the state joined forces with the U.S. Department of Agriculture (USDA) to enhance riparian habitat on agricultural lands along streams important for species listed under the Federal Endangered Species Act. The goal was to enroll 100,000 acres but after three years, only 3,557 acres had been signed up (OWEB 2002:7).

The U.S. Environmental Protection Agency (EPA) has also taken notice of the low participation rates in CREP within areas of the Northwest. They funded a study to research farmers' perceptions of CREP in the neighboring state of Washington (Breslow 2001). The contract between the EPA and the researcher states as its purpose:

...to describe how farmers in selected areas of western Washington view the CREP program, and, in turn, how these views affect farmers' decisions about whether to participate by enrolling their land. Protection of riparian habitat depends heavily on the involvement of private landowners, and a voluntary program with financial incentives

would appear, at least on the surface, to offer landowners an attractive alternative to regulatory compliance. To date, however, very few farmers have decided to take part in the CREP program... (ibid: 10).

CREP is just one example of numerous voluntary programs that provide land owners with “a sound financial package” and technical assistance to implement conservation practices (USDA 2001). The existence of conservation programs and economic incentives however, does not guarantee participation. Better understanding of landowners’ perceptions and how they affect land use patterns will improve effective allocation of resources, restoration efforts and relations between various stakeholders.

The purpose of this study is to 1) explore farmers’ perceptions of conservation programs and 2) better understand lesser known or obvious influences on farmers’ decisions of whether to participate in such conservation programs. Improved understanding of landowners’ perceptions of the conservation programs available to them can lead to improved program effectiveness through increased participation and therefore environmental restoration, improved allocation of scarce funds and improved relationships between government, landowners and scientists. The Willamette Valley, already a leader in progressive land use policy, has the potential to serve as a model for similar areas rich in agriculture and wildlife and home to both urban and rural communities. Voluntary conservation programs can provide opportunities to ward off regional threats to wildlife habitat, water quality, public health and quality of life in general.

RESEARCH SITE AND FOCUS

Programs relevant to the Willamette Valley include those administered by government agencies like the USDA and Oregon Department of Fish and Wildlife (ODFW), land trusts and watershed partnership projects. This study focuses on the largest sponsor of conservation programs, the federal government while recognizing that programs run by the USDA, for example, are in reality often

implemented through partnerships between a number of agencies, like the conservation districts and watershed councils.

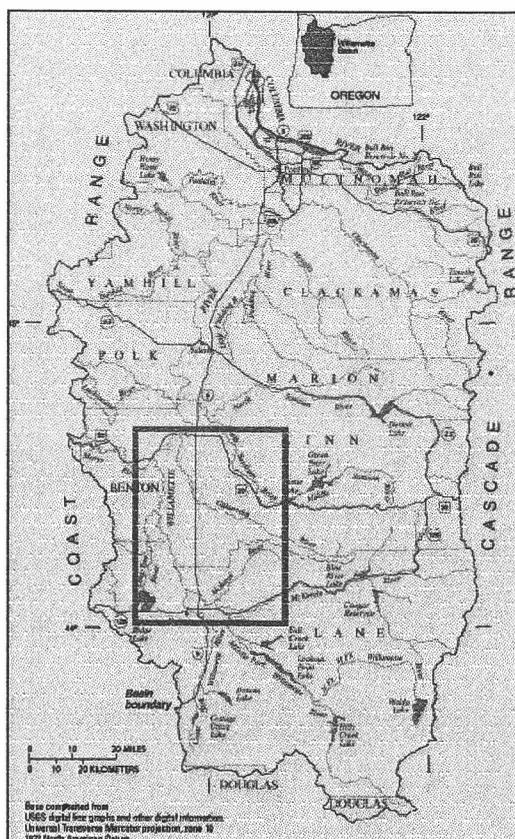
More than one-fifth of the Willamette Valley is agricultural lands (WRI 2001). Not only do farmers manage much of the Valley, they are also held accountable for much of the non-point source pollution, now thought to be the biggest threat to water quality. While pollution from “point” sources can be easily identified (e.g., sewage or factory effluent), contributors of non-point source pollution are less easily identified. Examples of non-point source pollutants include run-off from agriculture, livestock grazing, mining, municipalities and timber harvesting. The difficulty and expense of monitoring individual farms makes the regulation of non-point source pollution problematic. Legislation like Oregon’s Agricultural Water Quality Management Act, also known as Senate Bill 1010, seeks landowners’ voluntary participation to craft and comply with a menu of solutions to prevent or manage pollution under the Federal Clean Water Act. Water quality management plans made under Senate Bill 1010 look to the financial and technical resources of agriculture related agencies (e.g., Natural Resource Conservation Service and soil and water conservation districts) to work with landowners before regulations and civil penalties are required.

Agricultural production in the Willamette Valley presents the face of farming that is no longer driven by the charge of feeding and clothing the populace. The top commodity sales in the Willamette Valley come from nurseries and grass/legume seed production (OSU Extension Service 2001). The days of the small farm producing food and fiber for the regional community have given way to global trade and local farm survival has benefited from a strong market demand for landscaped lawns, exotic plants, golf course greenways, premium wines and Christmas trees. Grass seed is bought for turf or forage and Oregon leads the world in the production of fescue, ryegrass and bent grass and orchard grass. While nursery production dominates sales in the Willamette Valley, if we look at acreage in production within the Valley, nursery production constitutes less than one

percent of the total, whereas grass/legume seeds constitute more than half of total acreage in production (68% in the southern Willamette Valley) (ibid).

Grass seed farmers are responsible for the management of a significant segment of the southern Willamette Valley (see Figure 1 for study site boundaries). Their management style has, however, been notably independent of government subsidies or conservation program participation. Assessments and plans for the area's landscape must consider private rural landowners, especially grass seed farmers, as major stakeholders. The following chapter will take a closer look at the development of conservation policy and the factors believed to influence program participation among rural landowners, like grass seed farmers and their neighbors.

Figure 1. Map of study site



CHAPTER 2: LITERATURE REVIEW

THE EVOLUTION OF AGRICULTURAL POLICY AND PUBLIC OPINION

Government cannot own and operate small parcels of land, and it cannot own and operate good land at all...It is the individual farmer who must weave the greater part of the rug on which America stands -Aldo Leopold

Private agricultural land plays an important role in the United States. In our national anthem, the words *amber waves of grain* create a romantic picture of productive, bountiful open space and the farmer, the original steward of the land, provides a respite from the encroaching urban bustle and trips to the local Safeway. Private property rights and rugged individualism also play an important role in the United States. The U.S. government has traditionally promoted growth and development through distribution of productive land into the hands of individual, private landowners. Lovejoy and Napier's (1990) survey of farmers' attitudes toward government involvement in agriculture, however, showed significantly mixed feelings about farmers' land use rights, responsibility for conservation of natural resources and government regulations.

Historically, agricultural policies have been concerned with production and market issues, separated from policies focusing on natural resource and environmental quality issues. Conservation practices advocated by the government (e.g., the drainage of wetlands) increased "livability" and "productivity" at the expense of water quality and wildlife habitat. Implementation of practices relied on voluntary participation by private landowners. The past 50 years however, have seen the growing influence of non-agricultural interests on agricultural policy and a change in conservation policy directives to address public concern for water quality and wildlife habitat with the use of quasi-regulatory measures.

The evolution of conservation programs within agricultural policy has paralleled the progression of natural resource concerns within the general public, moving from the development of "good," productive land to the preservation of

non-agricultural areas to current imposition of conservation and regulation by the increasingly powerful interests of the general, non-farming public. While program goals and implementation procedures have evolved through the years, the target remains the individual farmer and while farmers are increasingly savvy business people with college degrees, rural landowners in general continue to hold strong beliefs in private property rights and remain suspicious of the motivations of government and urban environmentalists (e.g., Breslow 2001, Habron 2000, Lewotsky 2002). As we trace the evolution of agricultural policy to its present inclusion of public, nonagricultural interests, the importance of correlating public good (policy) with personal responsibility (management of private land) is clear.

Following is a discussion of the development of agricultural conservation policies in five separate stages (Weber and Margheim 2000:52): *perceived natural resource abundance, conservation for agriculture, divergent agricultural and environmental policy, convergent agricultural and environmental policy and stewardship transition*. Discussion of conservation policy's evolution is particularly useful in order to contextualize current policies within the changing relationship between farmers and conservation agencies, as well as between farmers and non-agriculture interests.

Pre 1930's: Perceived natural resource abundance pre 1930's

This era of nature's untapped potential awaiting settlement and economic development is characterized by two key pieces of legislation: the Homestead Act of 1862 and the Reclamation Act of 1902. The Homestead Act promoted settlement of the Western U.S. by subsidizing the purchase of federal land for private ownership. To help support successful settlement, the Reclamation Act provided for government subsidy of water resources development, including numerous irrigation projects and discounted water for farming.

1930-60: Conservation policy for agricultural interests

The dustbowl of the 1930's signified to the general public the damage caused by the current farming methods. Soil erosion and drought heightened awareness of limited resources available to agriculture and the government responded by trying to keep agriculture producing in the face such limitations. However, during this era, the primary benefit of conservation was for the producer, not the public.

The dominant assumption was that landowners possessed absolute rights to their land resources and had the right to use the resources in any manner to survive economically. Federal agricultural policy aimed for stable food and fiber supply, while it also supported farmers' livelihood and maintained their income. The Farm Security and Rural Investment Act (Farm Bill) was authorized in 1949 as a New Deal public support program to protect farmers and stabilize rural economies. The assumption of private property rights also required that programs be voluntary. Programs would try to persuade potential client's to adopt conservation practices of the day with relevant education, technical assistance and some cost-sharing.

Two new agencies were key in the persuasion of landowners to voluntarily adopt conservation practices: the Soil Conservation Service (SCS)—known today as the Natural Resource Conservation Service (NRCS)—and the statewide soil and water conservation districts led by locally elected farmers (both appeared in the 1930's). Most programs in this era were set-aside programs however, where land was taken out of production with little consideration of environmental impacts. For example, the Soil Bank—implemented in 1956—claimed to have conservation goals for the benefit of taxpayers, though many argue the real goal was to control the supply of agricultural commodities (Napier and Napier 2000a:85).

1960-85: Diverging agricultural and environmental policy interests

The publication of Rachel Carson's *Silent Spring* is often referred to as a harbinger of environmental policies to follow. Carson's examination of the effects

of agricultural chemical use along with her popularity among mass media audiences heralded the growing concern for the public good over that of agricultural interests. The divergent interests of agricultural and environmental policy were increasingly in conflict.

The impacts, responsibilities and priorities of federal actions were also reassessed. For example, the passage of the National Environmental Policy Act (NEPA) required projects receiving federal funds to assess the impact of projects on society and the natural resource base. New evaluations identified inconsistent policies that encouraged "fence row to fence row" production during the boom years of the 1970's, which increased the need for subsidized irrigation and wetland drainage while the government simultaneously made easement payments to take land *out* of production. The 70's also however, saw the beginning of some policy modifications. For example, criteria were implemented that ensured land the government paid to have taken out of production was actually threatened by soil erosion and cost-sharing for wetland drainage was brought to an end. The aim of agricultural policy was beginning to encompass the conservation of public goods rather than strictly meeting the needs of agricultural interests.

1985-95: Converging agricultural and environmental policy interests

In 1982, the USDA drafted the first National Conservation Program (NCP). The booming production of the 1970's collapsed and the public became concerned about the well-being of the small farmer while interest groups (e.g., environmental, public health, wildlife interests) not previously part of agricultural policy development continued to demand cleaner, more environmentally sensitive agriculture. New research also stressed that the economic costs of soil erosion were greatest for off-farm sites and not due to the loss of healthy, productive soil on the farm (e.g., Crosson 1982). The stage was set for increased involvement of natural resource professionals and policy that linked conservation and production objectives.

In 1985, the Food Security Act (FSA) was passed which realized a number of NCP recommendations and included the Conservation Title (XII). Key components of the Conservation Title were the Conservation Reserve Program (CRP), conservation compliance, swampbuster and sodbuster. The latter three components were the first quasi-regulatory incentives used by the USDA to increase implementation of conservation plans by producers and decrease production on erodible land and drainage of wetlands. Swampbuster and sodbuster rules basically say that farmers cannot transform wetlands or highly erodible land into agricultural production. Conservation compliance requires that owners of highly erodible land implement a government approved conservation plan. Federal farm program benefits would be denied to any farmers who either failed to implement a conservation plan, or defied swamp and sodbuster provisions. The CRP aimed to conserve soil, reduce surplus production, enhance wildlife habitat and maintain farm income by government rental of highly erodible cropland to stop agricultural production for ten years.

Present into future: Stewardship transition

Since 1985, a number of other conservation programs have been added to the Conservation Title (e.g., see Table 1). Conservation programs relevant to the landowners interviewed for this study include: the Wetland Reserve Program (WRP), to restore wetlands through easements and cost-sharing; Environmental Quality Incentives Program (EQIP), to help producers address natural resource concerns through cost-sharing; and Wildlife Habitat Incentives Program (WHIP), to establish and improve fish and wildlife habitat on private lands. A number of these government programs now include emphasis on projects that provide protection specifically for species on the Federal endangered list.

Funding for the programs above has been continued, and in many cases significantly raised, through the 2002 Farm Bill until 2007. The increase in federal dollars allocated toward conservation programs support Weber and Margheim's

(2000:54) argument that the present era of agricultural policy represents the start of a movement from commodity driven conservation programs to policy determined by sustainability of the natural resource base. Weber and Margheim also cite the Federal Agriculture Improvement and Reform Act of 1996 (FAIRA) which established a seven year phase out period for subsidies and maintained that, to be eligible for annual payments, farmers must meet conservation compliance. Such policies acknowledge that farms can produce more than commodities. An example is the production of environmental benefits for society as a whole.

Finally, an addition of the 2002 Farm Bill, the Conservation Security Program (CSP), has a number of environmentalists and producers commenting on the potential to realize ecological benefits while supporting producers' bottom-line. The CSP is voluntary and provides payments for producers who practice "good stewardship" on their agricultural lands and incentives for those who want to do more. Three tiers of treatment or management are available giving the landowner "enhanced payments for treatment that exceeds the minimum criteria" (NRCS 2002). Conservation programs are integrating increasingly flexible measures with which landowners—both producers and rural non-farming—can stabilize soil, protect water quality and most recently, provide habitat for endangered species. Not only is the USDA definition of "producer" rather inclusive under conservation program guidelines (e.g., it could include a rural landowner with two goats) but producers are also being targeted by other non-agriculture governmental agencies like the Fish and Wildlife Service.

Focus on individual programs

A number of government programs appeared to be particularly applicable to landowners in the southern Willamette Valley after conducting pilot interviews with local farmers and conservation agency personnel. The following table presents key elements of the more relevant programs available to landowners through the USDA and the ODFW (Ecological Services, Inc. 2000).

Table 1.
Primer of current government-run conservation programs relevant to the Willamette Valley

Program	Goal	Agency	Incentives	Eligibility	Payments & Contracts in SWV*
CREP	To improve stream habitat water quality that cross agricultural land for salmon and other native fish listed under the Federal Endangered Species Act through a voluntary incentive program to change farming and ranching practices.	USDA (NRCS & FSA) in partnership with OR State	-Rental payments -Cost-share -Technical advice -Sign-up bonus	Landowner must follow a conservation plan. Private cropland to be taken out of production, must have been cropped at least 2 of last 5 years or marginal pasture if suitable riparian buffer- not enrolled in CRP. 10-15 yr contract.	\$60,156 66 contracts
EQIP	Conserve soil, water and related natural resources in priority areas designated by local Conservation District or in other strategic areas via long term agreements to install or implement structures, vegetation and management.	USDA (NRCS & FSA)	-Cost-share -Technical advice	Landowner must be actively engaged in livestock or agricultural production (includes forest land) and complete a 5-10 year plan addressing soil and water conservation. 5-10 yr contract.	\$712219 39 contracts**
WRP	Restore and protect wetlands on private property via maximum 10 year cost-share restoration agreement, 30 year easement or permanent easement.	USDA (NRCS & FSA)	-Rental payments -Cost-share -Technical advice	Landowner must own land at least 1 year, follow restoration plan for wetland area and establish a permanent or 30-year easement or 10 year restoration agreement. Land must be suitable for restoration/wildlife benefits. Wetlands converted after 1985 not eligible. Minimum 10 yr contract.	\$2,322,031 11 contracts**
WHIP	Establish and improve fish and wildlife habitat on private lands not used for mitigation or enrolled in similar program.	USDA (NRCS & FSA)	-Grant ≤ 75% total cost, with cost share for remainder -Technical advice	Landowner agrees to implement a habitat development plan, maintain for 5-10 year contract period and allowing monitoring. 5-10 yr contract.	\$73604 11 contracts**
Partners for Fish & Wildlife	Help private landowners to voluntarily restore wetlands or other fish and wildlife habitats on their land.	FWS	-Grant for 50% of total cost, with cost-share for remainder -Technical advice	Landowner must agree to maintain project for up to 10 years. Emphasis on projects benefiting Federal and proposed listed species and declining migratory birds. Minimum 10 yr contract.	\$111,150 8 contracts

* Data for southern Willamette Valley (SWV) from FY 1996-2000, except CREP, which began in Oregon in 1999. CREP data includes FY 1999-2002.

**WRP, EQIP, WHIP data are for the *Central Coast/Upper Willamette Basin* and therefore include Linn, Benton, Lane and Lincoln County data.

Once programs are developed, the next step is implementation. Dicks and Grano (1988) suggest that government programs follow a three-step process: 1) *development*—examination of alternatives to achieving objectives; 2) *legislation*—choice of alternative actions in regard to social and political feasibility; and 3) *implementation*—execution of strategies by responsible agency. The importance of implementation cannot be overstated. The goals of policy and the success of legislation cannot be realized if landowners do not participate.

THE POLITICAL IS PERSONAL: FROM CONSERVATION PHILOSOPHY TO INDIVIDUAL ACTION

Some components are of economic importance to the community, but of dubious profit to the individual owner - Aldo Leopold

To increase program participation rates, we need to put people first, no matter the policy objective. In the midst of human dominated systems, we need to understand and apply culturally informed solutions through each step of the program process in order to have successful programs. Kottak (1999:33) wrote that we cannot effectively subordinate the “analysis of social forms to approaches that emphasize the environment at the expense of society and culture, and ecology over anthropology.” Similarly, we cannot effectively implement conservation programs if we subordinate analysis of the individual landowner’s perspective to conservation strategies deemed effective and responsible by the politically powerful community only.

Much of what we know about participation in conservation programs has come from surveys conducted throughout the U.S. The pioneering approach of the CRP inspired a number of studies and since its introduction in 1985, a number of other federal programs have been developed, though studied less. Many of the surveys have tested hypotheses regarding socio-demographic and farm structure characteristics, the traditional adoption-diffusion model and economic incentives.

The next section of the literature review will discuss the factors that have traditionally been thought to influence rural landowners' participation in conservation programs and argue that they have provided a limited understanding of landowners' decision process. In order to reconcile the responsibilities and rights of the "community" and the "individual owner," research needs to go beyond the deductive, rational approaches of adoption-diffusion and economics to situate landowners' knowledge in the context of their personal experience, their resulting world view and then, in the larger structural framework of conservation policy.

Influential factors of conservation program participation

Factors typically thought to influence individuals' conservation program participation include financial incentives, income, land value, farm size and tenure, age and environmental attitudes and values (Cooper and Keim 1996; Konyar and Osborn 1990; Lant 1995; Lohr and Park 1994). The traditional adoption-diffusion model explains adoption, or participation rates, in relation to attributes of both potential adopters (e.g., individual landowners) and innovations (e.g., conservation programs). While inconclusive results have emerged regarding the relationship between conservation program participation and socio-demographic characteristics or farm structure variables alone (Bultena et al. 1990; Cooper and Keim 1996; Lohr and Park 1994; Lovejoy and Napier 1990; Napier et al. 1988, Napier 1994; Swanson et al. 1990), adoption-diffusion theory has been helpful in predicting conservation program participation, and even more accurate when combining the model with farm structure variables, e.g., land value, farm size and tenure (Napier et al. 1988; Camboni et al. 1990; and Rogers 1995).

Literature on the adoption-diffusion model is extensive. Rogers' (1995) fourth and most recent edition of the classic *Diffusion of Innovation* is a thorough 500 pages summarizing research on principles that explain the myriad of influences on the creation, success and failure of innovations. In sum, variables affecting the rate of adoption-diffusion are of great interest to social scientists; variables include

the perceived attributes of innovations, the effects of communication channels and the nature of the larger social system.

A major vulnerability of the adoption-diffusion model is its use of deductive, causal predictors that overlook the complex construction of perceptions and social systems. Adoption-diffusion research often utilizes a structured, quantitative approach and its application would benefit from a more qualitative or interpretive approach (Habron 2000:94; Stephenson 2003). An interpretive approach and qualitative methods use inductive, dialectic processes to elucidate perceptions that are difficult to convey with quantitative methods (Strauss and Corbin 1990:19), or at least need to be identified before quantitative methods can be applied.

For example, a major tenet of adoption-diffusion theory says that adoption is predicted to be more likely if potential innovations are perceived to have the following characteristics: a *relative advantage*, to the current situation; *compatibility*, consistent with existing values, experiences and needs of potential adopters; *complexity*, relatively simple to understand and use; *trialability*, able to be experimented with on a limited basis; and *observability*, so that results are visible (Rogers 1995:204-51). Concepts like *advantages* and *compatibility* are subjective notions, shaped by individual values and past experiences. Direct interviews and participant observation are required to induce a deeper understanding of the influences affecting landowners' interactions with conservation programs.

Gale and Cordray (1994) addressed similar subjective variation regarding the concept of *sustainability*. Many people value the notion of sustainability, but vary in their definition of it. Gale and Cordray detailed nine different types of sustainability, measured by what is sustained, why it is sustained and how it is measured. Commercial farmers often fit the *dominant product sustainability* type and seek to sustain yield of high-valued products. Landowners not involved in commercial production as well as environmentalists are often characterized by different sustainability types. For example, the *dependent social system* type seeks

to sustain communities, families and occupations for the sake of strong lifestyle values. At the other end of the spectrum is the *ecosystem benefit* type of sustainability, where respect for the inherent rights of natural ecosystems is the driving force. Recognition of the various aims and definitions of *sustainability* can help clarify the diverse relationships of communities to natural resources to reveal resource management options and approaches.

Many of the current conservation programs available to landowners provide financial incentives but approach landowners from the *ecosystem benefit* sustainability perspective. Thus, adoption relies heavily on environmental values (e.g., habitat restoration, stream bank restoration) and on-site benefits to motivate adoption on private land. Napier and Napier (2000b:103) have argued however, that this approach is less effective because 1) the majority of rural landowners already value soil and water resources and perceive themselves as stewards of the land and 2) they recognize few on-site benefits can be achieved. The lack of adequate on-site economic returns for producers (and increased risk) from the adoption of most soil and water conservation systems has been suggested by several studies (Batte and Bacon 1995; Mueller et al. 1985; Putnam and Alt 1987). Two main points then emerge: 1) monetary incentives should increase conservation program participation because it decreases risk and addresses the vulnerable economic bottom-line and 2) the education-information approach begun in the 1930's is less effective because today's farmers are better informed (Napier 1990b).

In concurrence with the second point above, material with a specialized message addressing concerns and priorities of the targeted community proves more effective than general educational material. The first point however, takes us back to the importance of the economic incentive, which I argue is only a piece of a larger puzzle of values and priorities held by rural landowners. Breslow (2001) found that even though CREP offered landowners more than twice the going rental rate per acreage, their fear of government intrusion, as well as their fear of losing a viable farm and their personal identity as a farmer, was stronger than the financial

incentive. Kingsbury's (2000) Oregon study also found CREP's economic incentives were currently adequate and that allaying concerns about flexibility of land use after the contract period was of greater concern for landowners.

While the public attempts to influence individuals' land management, landowners fear losing control over their land and their identity to a majority rule. Etzioni (1988) framed the conflict landowners face as the "I/We" paradigm. To explore human stewardship of environmental resources, Etzioni argued that the landowner's behavior is influenced by both the economic needs (I) and the moral or societal/environmental implications (We). Human behavior includes a public responsibility motive and is *not* reducible to rational economic acts based on the economic bottom-line. Smith applied this to a human/natural resource interface, a stewardship model that argued we are free to maximize the yield of a given environment (I), but only to the point where what we do benefits and does not harm the shared (We) (Smith 1994:326). However, just as questions arise regarding the measurement of *sustainability*, how is *harm* identified and defined and which perception constitutes reality?

World views

...even though we gather together and look in the same direction at the same instant, we will not—we cannot—see the same landscape...any landscape is comprised of not only what lies before our eyes but what lies inside our heads (Meinig 1979:33).

Using Etzioni's model, individual landowners can be thought of as numerous "I's" and the concern for the public good as the "We." For conservation programs to successfully satisfy and protect the "We," they need to address the realities of individual landowners. Due to the complexity of modern society, at any given time there is a plurality of definitions, meanings and contending points of view regarding what constitutes reality (e.g., *sustainability* or *harm*) for the numerous "I's."

Symbolic interactionism explains reality as a human creation. Individual “I’s” create their reality—their individually held definitions and meanings—through interaction with each other and their natural environment. Hallowell wrote a half a century ago that human perception,

...does not present the human being with a ‘picture’ of an ‘objective’ world which, in all its attributes, is ‘there’ only waiting to be perceived, completely unaffected by the experience, concepts, attitudes, needs and purposes of the perceiver (Hallowell 1955:83).

A contemporary of Hallowell’s, Redfield (1953) used the term “world view” to discuss humans’ perception of reality. He defined world view as, “the way a people characteristically look outward upon the universe. If ‘culture’ suggests the way a people look to an anthropologist, ‘world view’ suggests how everything looks to a people...”(ibid:86). Redfield went on to write that, “Every world view starts from the man who is the viewer” (ibid:91). This study starts by learning from the individual viewers about their own perceptions, with the goal of identifying the shared components of the individual realities that constitute farmers’ world view.

From the symbolic interactionist perspective, the world view of farmers is important to understand because it influences landowners’ actions, their decision making processes and behaviors; humans define a situation and act accordingly. A change in external conditions does not necessitate a change in definitions or behavior. For behaviors to change, a person must perceive a situation as problematic and redefine the situation and modify behavior. Social change must be understood in the context of the existing world view that interprets, guides and legitimizes behavior and thus, in order to better understand why an action was taken, a decision made or an innovation judged *compatible*—a culturally informed interpretation of human experience is useful.

A more recent discourse of world view, Kearney (1984:53) built on Redfield’s work and defined world view as, “basic cognitive orientations.” Later Kearney characterized world view as, “the mental basis for acting within the total environment” and summarized the link between world view and action below:

Before action can occur the perception of this environment must occur at some level of consciousness or unconsciousness. Invariably there are alternative possible means, modes, and ends of action and choice among them depends on whether and how they are perceived and on existing values. The values affecting choice making are themselves dependent not only upon perception of alternatives present, but also upon underlying world view attitudes about such things as the good life and ways to achieve it, i.e., attitudes about such things maximize security and happiness, as well as notions about security and happiness themselves (ibid:120).

When a grass seed farmer and a wildlife biologist stand side-by-side and look out over the southern Willamette Valley, the rivers and fields are viewed through different lenses that lead to different actions. Conklin (1961:6) used the term “ethnoecological factors” to describe the way environmental components are categorized and locally interpreted. The prefix *ethno-* has come to signify the inclusion of the local perspective, the local realm of experience (Nazarea 1999:3). Ethnoecology as a study seeks to understand the perception, cognition and use of the natural environment in a historical and political context. Ethnoecology as a concept is defined by Kottak (1999:26) as a “society’s traditional set of environmental perceptions—its world view of the environment and its relation to people and society.” Kottak’s ethnoecology is comparable to the concept of Redfield’s world view and I borrow heavily from the study of ethnoecology and Kottak’s work but continue to use the more familiar term “world view” to decrease jargon and increase readability. The important point here is ethnoecology’s focus on the historical and political context which reminds us that, just as subjective meanings react, connect and interpret perceptions within the individual mind, differing world views interact, challenge and transform each other within increasingly complex and diverse communities, countries and cultures.

The conservation program participation decision is often approached through the determinism of rational choice and a quantitative assessment of the adoption-diffusion model. The simplified picture developed by such approaches is incomplete. This study integrates the idea that actions are governed by world

views, the equivalent to what Bloch (1998:25) calls, "lived-in models" which are "based as much in experience, practice, sight, sensation as in language."

Understanding of farmers' world view will lead to a more comprehensive knowledge of their vantage point and the behaviors that view motivates. World views cannot be studied using surveys or designing educational or incentive programs alone; to understand world views we need to talk with the people involved.

Exploration of world views

Congruent with symbolic interaction theory, Kottak (1999:28) found individuals' perceptions of a risk or problem "does not arise inevitably from rational cost-benefit analysis, but from a cultural, political and economic context shaped by encounters among local ethnoecologies and changing circumstances." The strength and complexity of the linkages that exist today between the people, technology, institutions and information of various cultures and communities has led to the need for anthropology to alter its traditional study of unique, isolated cultures and explore the embedded nature of communities in multiple systems of different scale. Examination of landowners' participation in conservation programs needs to address the local details and the multiplicity of effects on their world view from the global, national, regional and local levels. Study foci range then from securing the cooperation of the local community and understanding their needs and wishes while simultaneously exploring the larger structural framework or context within which the power and means available to implement change (or conservation) are controlled.

This study employed a methodology that gathered qualitative data to explore the local world view and its linkages with influencing factors like neighboring rural and urban communities, global markets, conservation agencies and government regulations. Qualitative studies are especially useful when research attempts to understand 1) the meaning for study participants, of the events and

actions they are involved with and the accounts that they give of their lives and experiences and 2) the particular context within which participants act and the influence this context has on their actions (Maxwell 1998:75). The relatively small number of individuals usually sampled in qualitative data help to preserve the individuality and unique circumstances that shape the actions and meanings of participants. This focus on meaning is central to symbolic interactionism and its use of what anthropologists call the “interpretive” approach (Geertz 1973; Rabinow and Sullivan 1979).

Research regarding the interaction between humans and their environments must look inward and outward. To look inward, I relied on in-depth interviews using semi-structured open-ended questions to elicit comparable data, while giving landowners the freedom to guide conversation into the areas they deemed important regarding their concerns as landowners, their land management practices and their views on natural resource issues and conservation programs. As Bernard (2000:195) said, “Get people on a topic of interest and get out of the way. Let the informant provide information that he or she thinks important.” My inquiries were guided by the idea that qualitative research questions are most effective when they focus on process rather than variance—in other words asking *how* and *why* things happen through an open ended inductive approach to phenomena within its social and physical context; questions of variance—*whether* a particular result is causally related to another variable and to what *extent* these are related—are more useful after process questions have been answered (Maxwell 1998:84). Further cognitive data were gathered through the use of guided tours, cognitive maps and land use histories to gain varied access to landowners’ world views. To look outward to the connecting systems within which farmers of the southern Willamette Valley operate, I utilized components of what Kottak (1999:31) calls the “linkages approach.” multiple sites were drawn from the same region; research included interviews and documents from the policy level; and collaborative relationships with local experts and people with common research interests were developed.

CONCLUSION

Review of the literature helps to inform the methodologies and underlying theoretical approach taken by an anthropologist. The rest of my thesis will detail the approach I took to evaluate farmers' ideas of conservation programs in the context of their world view. The world view concept used here embodies symbolic interactionism and ethnoecological theory in order to acknowledge and integrate the social construction of reality that affects the assembly of landowners' world views and the cultural relativism inherent in individual's decision making process. Under the broader umbrella of world view theory, ethnoecology homes in on the ecological/cultural connections within the world view and offers an approach that stresses the context—the linkages or levels—of interaction that affect conservation program participation (e.g., local, regional and national). My hypothesis is that better understanding of farmers' world view will complement the literature which has evaluated the limited degree to which conservation program selection is influenced by conformation to the adoption-diffusion model, socio-demographic variables, and rational cost-benefit analysis.

CHAPTER 3: METHODOLOGY

GENERAL APPROACH

This study was conducted as a *natural experiment*, an “evaluation of something about human behavior and thought that is going on around us all the time” (Bernard 2000:126). To learn about the world view of farmers and why they participated in, avoided or ignored formal conservation programs available to them, I employed participant observation, in-depth interviews, a focus group and cognitive techniques to collect qualitative data. Qualitative data illuminate landowners’ experiences by adding necessary depth and complexity to the deductive, rationalist approach used by economic evaluations and sociological surveys to collect quantitative data. Through communication with farmers, I learned from their words and actions about their world view: their perceptions of the land, societal values and their place within the bureaucratic structures surrounding conservation programs.

My analysis used the interpretive approach of symbolic interactionism to better understand farmers’ world views. My goal was not to judge the model as true or false, but to better understand the meaning and context of the model as part of the landowner’s reality. This research did not seek to objectively determine causal explanations, but rather to identify important phenomena and influences surrounding landowner participation in conservation programs from a purposive selection of rural landowners to guide more effective conservation policy and resource allocation.

INTERVIEW SAMPLE

The findings of this study are based on interviews with 10 agency representatives and 28 landowners. Agencies were chosen due to their relationship with conservation programs available to local land owners. Interviews with agency

representatives served as background research to provide context and further educate myself about the issues surrounding landowners and conservation programs from the structural perspective. The following agencies contributed directly to my research: Mohawk Watershed Partnership, NRCS, Oregon Watershed Enhancement Board (OWEB), ODFW, Oregon Wetlands Conservancy, OSU Extension Service, McKenzie River Trust, McKenzie Watershed Association and Linn County and East Lane County soil and water conservation districts (SWCDs). Each of the above organizations helped to guide, direct and hone my study.

The majority of landowners in my sample were drawn from the grass seed farming community for several reasons. First of all, grass seed farmers are responsible for nearly half of the 900,000 acres in production in the Willamette Valley and thus have significant impact on management of the regional landscape (OSU Extension Service 2001:12). Second, the new Farm Bill is targeting conservation programs toward commercial producers and grass seed farmers prove an interesting case study in the face of participation research findings as the grass seed industry does not have a strong history of government program participation though they have recently faced increasingly tough markets and financial strain. Third, few anthropological studies of grass seed farmers have been conducted (the only study I found was done by Moser in 1975). With the invaluable help of an OSU Extension agent, we combed the list of certified grass seed growers for a non-random but purposively representative sample of farmers in the southern Willamette Valley (i.e., Benton, Lane and Linn counties). Fourteen grass seed farmers were selected from the list and all farmers chosen agreed to be interviewed.

To provide a comparison to the grass seed industry perspective, landowners from two other communities within the southern Willamette Valley were also included in my sample. Interviews with residents in the Mohawk Valley and Mary's River watershed helped me gauge the range of rural landowner perceptions regarding conservation programs within the southern Willamette Valley (see Table

2 for a breakdown of landowner types and participation levels in my sample.) Convenient lists or sampling frames of individuals eligible but not participating in conservation programs were unavailable and though the confidential lists of program participants kept by the FSA and NRCS have been solicited through mass mailings, the intimate nature of my fieldwork relied upon non-randomized, purposive snowball sampling within the Mohawk Valley and Mary's River watershed. I stopped interviewing in the Mary's River watershed and in the Mohawk Valley when I could elicit no new contacts or distinctive perspectives.

Table 2.
Landowner Interviewees

Landowner Type	No. in sample	No. CP Participants
Grass seed farmer	14	1
Other farmer/rancher	8	5
Non farming rural	6	4
Total	28	10

The Mohawk Valley sits south of most grass seed farms, at the foothills of the Cascade Range. The site provides an interesting contrast to that of the grass seed community because for the last three years, conservation agencies have been actively and successfully promoting EQIP among local landowners. Interviews in the Mohawk Valley area commenced from agency referrals and snowballed through landowner contacts. The Mary's River site (specifically Muddy and Beaver Creeks) came to my attention through related research. I began by interviewing (and getting referrals from) a farmer participating in the WRP and a non-farm residential landowner in the same area who was hoping to do a project with ODFW. The inclusion of ODFW projects offers the opportunity for exploration of the effects of landowner-agency relations on participation decisions. For example, did landowners perceive a difference between the goals and personalities of ODFW and NRCS and if so, how did that affect participation in each agency's programs?

COMMUNITY PROFILES

Grass seed farmers

The grass seed farmers I interviewed were predominantly male (I spoke with 3 spouses) and ranged in age from 42 to 60. Composite acreage owned or leased totaled nearly 16,650, with individual farms ranging from 500 to 5000 acres. I have included leased land in the total because the land is managed by the farmers, the leases are usually long-term agreements and landlord relationships are important due to the shortage of land (as several farmers told me, "it's the one thing they're not making anymore"). All of the farmers in my sample come from farming families and thus, much of the land is leased through contracts with relatives or farmed as part of a family corporation. Annual net household income, a difficult thing to estimate in the cyclical world of agriculture and farm investment, ranged from \$30,000 to \$100,000. (Notably, one farmer mentioned he had a negative income for the last three years.) Grass seed production accounted for 100% of household income for the majority.

Mohawk Valley

The Mohawk Valley was designated an EQIP Geographic Priority Area (GPA) beginning in 1999 through a partnership between the Mohawk Valley Partnership, the NRCS and the East Lane County SWCD. The status of GPA meant that the area had designated funds for EQIP projects and did not need to compete in a national or even regional pool. Currently, most project contracts are in the implementation stage.

The Mohawk Valley was described to me a number of times as a bedroom community to Springfield and Eugene. Within the Mohawk, there are four large agriculturally based landowners and small acreage lots for residents working "in town" are on the rise. Land owned by informants ranged from 10 to 2000 acres. Four of my informants relied on the income from their full time jobs as farmers/ranchers/loggers, while the other two depended on non-land based income.

Of the six Mohawk residents, only one had not participated in EQIP. Though the initial sign-up for EQIP was slow, after three years of being a GPA 1779 acres were enrolled and of the eligible Mohawk landowners, non-participants consisted of only some small two acre projects and “the real hold outs” (personal communication, Mohawk Valley Partnership and NRCS agent). My interviews in the Mohawk Valley ended when I spoke with the largest land owning “hold out” in the area and was unable to get names of eligible but non-participating residents.

Mary's River Watershed

I spoke with seven households along Beaver and Muddy Creeks. The landowners I met in this cluster were increasingly looking to the ODFW for technical and financial assistance, which made the area a beneficial triangulation site to compare landowner networks and agency relations. Three households had participated in a formal conservation program. Two were frustrated but interested in participating and one was adamantly opposed to government run conservation programs in general. Half of the households were dependent on land based income while the other half was non-farm residential.

A very large agricultural landowner for this area (12,000 acres) was referred by some of my interviewees though they refused to be part of the study. I believe the loss of their input will be compensated sufficiently by the grass seed growers' input as the motivations of this particular landowner would be more likely to mirror the motivations of commercial producers (the grass seed farmers), than their small farm and non-farm residential neighbors.

GATHERING DATA

Most of the data used in this study were collected between May and December of 2002. Due to my goal of gathering qualitative data that represented the landowners' voices, this study relied on in-depth, semi-structured interviews, participant observation and cognitive or annotated maps from landowners. I tried to include all decision making adults from each household in my research. Previous

farm family research has noted gender specific divisions of labor and decision making roles, which make this level of inclusion difficult and time consuming, though very illuminating (Salamon 1990; Barlett 1990). In the end, 9 of the 28 in-depth interviews I conducted with landowners included spouses.

Semi-structured interviews were conducted using mostly open-ended questions as a general guideline with 28 households (see Appendix A for a detailed list of questions). Thus all questions were not necessarily asked of all people and questions were not asked in the same order. The open-ended approach was intended to encourage interviewees to lead the conversation into topics they considered most significant to conservation program participation. "Language is the data of in-depth interviews, enabling the researcher to capture the complexity of individuals' thoughts, feelings and perceptions; what people say reveals their mental worlds and the logic they bring to experiences" (Goodman 2001:310). Questions asked varied somewhat with time, as interviews ranged in length from 45 minutes to 6 hours, and the majority (20) was tape recorded.

Interviews were supplemented with participant observation methods to collect data regarding residents' "social construction of space" (Fitchen 1990:20). I also made use of guided tours, cognitive maps and land use histories to gain varied access to landowners' world view. Participant observation and cognitive tools helped to triangulate information gathered from interviews and minimize any response or deference effects stemming from my interviewee/interviewer biases.

Participant observation is sharing activities of the people studied, therefore giving the researcher a chance to listen and inquire about informal patterns, contexts and dynamics and at the same time, build rapport. Examples of activities during the seven months of my participant observation included: riding along side on the tractor; having lunch with informants at a local cafe owned and patronized by area farmers; and attending various community events including watershed and grange meetings, SWCD workshops and a focus group for grass seed farmers hosted by the NRCS.

Techniques used in cognitive studies provided another kind of data addressing hard to get at, not clearly verbalized variables comprising one's world view (Fitchen 1990). A guided tour entails the landowner leading the researcher on an excursion of his land and often neighboring lands or fields and forests. I was able to go on seven guided tours and gained many insights by noting the informant's focus and accompanying descriptions. Cognitive maps entail the landowners' drawn representation of their property. I was able to collect nine maps, which I coded as another source of data to learn about the way landowners represent their land. For example, I looked at how they labeled land (e.g. according to land use patterns, roads or natural features). Even when landowners were unwilling to draw a map, I gained valuable insight into their relationship to the land. Larger landowners, specifically commercial farmers for instance, found cognitive maps to be a laughable activity and most pointed to a collage of aerial photos. The amount of land owned or leased by grass seed farmers I spoke with ranged from 500 to 5,000 acres and often the land is disjointed, comprising a number of separate fields.

Finally, a focus group consisting of 10 representatives from the NRCS, FSA, Extension, SWCD and 10 grass seed farmers served to add a few voices to my study and test reliability of information gathered through interviews. I had previously conducted in-depth interviews with 7 of the farmers present and 2 of the agency representatives at the focus group.

VARIABLES

Landowner descriptors

Landowners were classified as either commercial farmers or non-farm rural residential, depending on the amount of household income generated by land-based activity on either owned or leased property. In my sample, commercial farmers had at least 70% of household income from land based activity while non-farm

households received the majority of household income from what many called, “work in town.”

The term *conservation programs* for this study means formal conservation programs administered by a government agency. My sample homed in on communities working with ODFW and USDA programs under the Farm Bill Conservation Title (XII). Thus, landowners can also be classified as *participants* or *non-participants*. Participants could have worked with government on a number of levels, from putting in a duck pond with ODFW funds to enrolling 100 acres into CREP. About one-third of landowners I spoke with were conservation program participants. This larger number of non-participants is due to my focus on *non-adopters*, (e.g., representative grass seed growers who have generally not participated in formal conservation programs).

Non-participants include people who have not participated in conservation programs as well as landowners who may have attempted to participate in a program but are not currently enrolled. I separated participants of NRCS or ODFW programs from those who are in the process of trying to get funding from ODFW or NRCS, because there is still some reason that they have not yet signed a contract with the relevant agency, even though they express willingness. Asking why they have not been able to come to an agreement with the funding agency is as informative as asking why someone would shun an agreement with the government all together.

Participation decision factors

My investigation of factors affecting landowners’ decisions to participate in conservation programs relied heavily on interviews. Alternate methods of data collection for the most part supplemented interviews and served as a test for triangulation. Therefore, here I will describe in more detail the development of the interview questionnaire and the variables it sought to observe.

To expand the generalizability and validity of findings, my inquiries build on the questionnaire from Breslow's (2001) previous study of neighboring farmers' perceptions in Washington as a template. Eventually, I developed three separate questionnaires, each based on the same set of questions but modified for agency representatives, landowners participating in conservation programs and non-participating landowners.

The nature of this study and open ended inquiries sought to draw out landowners' conservation concerns and needs rather than predict the influence of specific variables. Exploration of background literature and similar research however, led me into interviews hoping to gain insight regarding landowners' perspectives on the following topics:

- Independent voluntary (landowner defined) conservation practices (CPs)
- Family traditions of land stewardship
- Experience with CP outreach efforts
- Perceived support for conservation from neighboring urban community
- Perceived support for conservation from neighbors within rural community
- Perceived support from agency administering CP
- Landowners' perception of CPs' scientific merit
- Landowners' perception of CPs' fairness to landowners
- Landowners' perception of CPs' economic benefit
- How judgments, perceptions above are developed

My line of questioning was generally direct—I asked about conservation practices, land use patterns (current and past), experience with urban and rural neighbors and so on. Socio-demographic data were also collected, though mainly for background information as the literature does not show socio-demographics to have a strong influence on conservation program participation. Specific questions came under one of the following headings:

- Land Management
- CP Awareness
- CP Participation
- Perceived Need for CPs
- Perceived CP Effectiveness
- Agency Relations
- Referrals

PREPARATION OF DATA FOR ANALYSIS

After organizing my notes, interview transcripts and landowner maps, I analyzed materials to find the range of response regarding conservation programs and practices within individual experience. I then analyzed individual experiences for shared perceptions to discover the farmers' world view and its effect on landowner participation in conservation programs. Initially, I conducted a cursory coding of all materials using key variables, or interview topics (e.g., awareness of, participation in, need for conservation programs), and then transferred coded text into data matrices: one matrix delineated responses by individual landowner and the other compared responses by specific community (i.e., grass seed, Mohawk Valley, Mary's River watershed). While I examined landowners' personal perceptions, in order to increase generalizability, I often also asked interviewees to describe their neighbors' opinions and act as local "experts." Similarly, once I compiled the data into findings, I conducted *member checks*, soliciting the views of some study participants to cross-check the validity of my data and themes found during analysis (Maxwell 1998:94). In the Findings section that follows, I share the emergent farmers' world view that influences their conservation program participation decisions.

CHAPTER 4: CONTROLLING WORLD VIEWS

I interviewed rural landowners from three different communities in the southern Willamette Valley in order to 1) learn about their perceptions of government run conservation programs and 2) better understand the influence of their world views on the participation decision. This chapter describes the world view of farmers and ranchers in the study area as it pertains to their perceptions of, and thus participation in, conservation programs.

I attribute to *farmer*—not rural landowners in general—the common world view I found among landowners interviewed because the focus of my research and the majority of my sample are farmers and ranchers. I found both individual variation (whether I spoke with grass seed farmers, ranchers, or non-farming rural landowners), as well as common patterns among rural landowners' perceptions of, and relationships with, their environment. Researchers before me have argued that the common patterns constitute what can be discussed as a single world view, especially in the western United States (Breslow 2001, Habron 2000, Leaver 2001, Lewotsky 2002, Smith et al. 2002). Although *rural landowners* is a conventional term in relevant literature and all of the landowners I interviewed live in areas defined by census data as rural, the term is often broad and imprecise. Therefore, throughout the following chapters, I have tried to be cautious and minimize generalizations about *rural landowners* in the southern Willamette Valley that go beyond my sample's limitations.

For landowners depending on their land for their livelihood, economic survival was a more prominent feature of our discussions than it was during interviews with rural landowners who secured their income from sources not based on land use. However, distinctions between the world view-related responses of agricultural, ranch and rural residential landowners interviewed were not significant for the purpose of this study. Common themes in the world view of rural

landowners I spoke with in the southern Willamette Valley, regardless of their livelihood, were typical of what some call *wise use* or *landowners' rights* movements. Principle values include private property rights and the landowners' independence to manage one's land as he or she sees fit. A conservationist philosophy predominated among farmers, which views natural resources with a utilitarian lens, for use by, and the economic benefit of, humans. The conservationist ideology is often framed in contrast to the preservationist philosophy, which advocates for nature "unaltered by man" (Nash 1967:129).

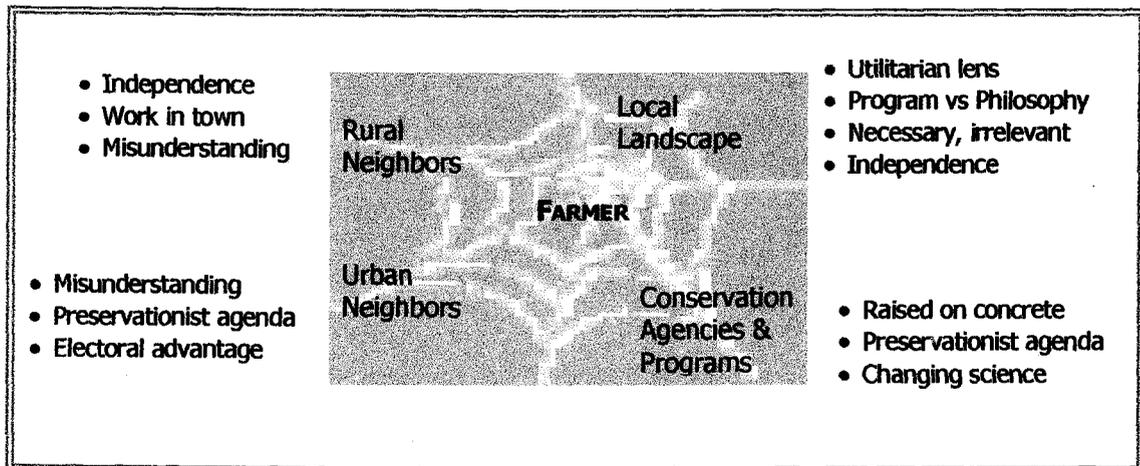
Landowners also made a distinction between *conservationists*, people who want to see the land cared for, and *preservationists*, people who want to see the land locked-away from human use. All of the landowners I spoke with considered themselves conservationists who cared about the environment. The model of nature for participant and non-participant alike, included a dominant human presence and a strong utilitarian view of natural resources. Preservationists on the other hand were seen by the landowners as people who want to lock up the land for the sake of "one or two critters" and more national parks. As one landowner asked me, "Why do we need all that land preserved? Why not use it to help people survive?" (91002). A non-farm rural landowner echoed his neighbors' sentiments when he said:

I look at myself as a conservationist but conservationist... I think a lot of folks look at it as preservation and conservation of resources is not necessarily preservation. I look at conservation as keeping things from going to waste. You know, timber dies and blows over. I think its conservation to salvage and make the most of it. So I guess it's a confusing term. I am reluctant to be labeled a conservationist because it has bad connotations. Some people relate that to preservation. [So when you hear it in the context of programs does it make you wary of the program?] I—yeah, it does because it has connotations of preservation and in some instances preservation is warranted and sometimes its not (80702).

The theme of *control* permeated the world view of farmers in the southern Willamette Valley. Landowners' views of the environment were based on the

control and management of natural resources for human benefit, while they simultaneously struggled to defend themselves against *being controlled* by the alternative world view of “environmentalists” attempting to impose a “global ecological morality” (Kottak 1999:26). Environmentalists symbolized the increasing power of urban interests and the non-agricultural general public’s preservationist ideals. Anthropologists in the symbolic interactionist tradition speak of a “web of significance” which surrounds humans (Geertz 1973:5), i.e., factors that influence a person and factors influenced by a person. Talking with farmers about conservation programs elicited the important effects of two-way forces of influence that constitute the web strands surrounding their world view. These strands link farmers’ world view with five major factors: the local landscape, rural neighbors, urban neighbors and (often nationally developed) conservation programs, as well as the agencies that oversee those programs (see Figure 2 for a summary of each relationship’s characteristics).

Figure 2. Farmer’s Web of Significance



LOCAL LANDSCAPE

When farmers look out over the Willamette Valley, they often see the beneficial effects of human control and influence on natural resources. Their conservationist world view included humans as integral players in the landscape, an integral player with a responsibility to manage the land:

My goal is to have all the land be productive or useful and you know, not necessarily earning money but being put to good use...I feel that anyone that's fortunate enough to have land should take good care of it. Be a good steward. My personal goal is to see more of the land productive—being used for farming, grazing or trees. I just—it bothers me to see this brush (80702).

A landscape that does not take into account human control was seen as a kind of myth and not a particularly attractive myth to farmers: “There’s no such thing anymore as a natural state. If you want to create something that makes people happy, you know you have to do things to *create* that situation, so [maintenance is] continuous” (91702). The changes, or creations, that humans have made are often perceived as beneficial adaptations that have improved life for humankind. One landowner exclaimed, “[Environmentalists] want to let land go back to before man came here—it would be a wilderness!” (101102).

The adaptations humans have made (e.g., honorable mentions from the view of farmers include drainage projects, dams, pasture land and hayfields) transformed the Willamette Valley—once a flooded wilderness, a “wet wasteland,” a useless “mud hole”—into a productive, livable home for nearly two million people. The preservation of nature for nature’s sake was seen as wasteful and unfair to the human population that relies on natural resources for their survival:

You have groups that are anti-change, they preserve everything as it is and don't let any harvesting take place,... you have a whole spectrum, but I think you...I think the land was put there—and that's the charge of the Forest Service—the original charge of the Forest Service...the greatest good for the greatest number of people for the greatest length of time and that statement needs to be revisited because that's not doing everybody good by locking it up and not allowing any change or any harvest (80702).

When we trace the development of conservation policy, public attitude appears to be following the legacy of preservationist John Muir. However, farmers hold fast to the right to control their own land with Pinchot's conservationist philosophy that natural resources should be managed to benefit the greatest number for the greatest length of time. Private property and landowners themselves were perceived to be under constant threat from government mandates and fees that increasingly eat away at landowners' rights. Napier et al. (1988) have argued that efforts to change landowners' beliefs in absolute rights over their land could be very effective in decreasing landowners' aversions to conservation programs. Similarly, one landowner told me he did not participate in any conservation programs because he did not want to be "indebted" to anyone. Landowners were divided by private responsibilities and public demands; program participation can leave the landowner with increasing responsibilities to manage their own land under the dictates of the less knowledgeable urban environmentalists.

As it stands now, farmers resist programs and initiatives that appear to take control of their land, their "first born," away from them. An independent streak runs through the agricultural community that wants to see conservation programs that adhere to a "survival of the fittest" philosophy and remain independent of price supports and market controls. For farmers, ranchers and loggers, the recent change from voluntary participation to conservation compliance signals a growing threat of mandates also:

[Regulations are okay] if the controls stay reasonable...you know, and if people are allowed enough latitude to put their individual ideas into managing the land. For instance I see nothing wrong with clear cutting a Douglas fir forest you know, and starting over. And some of my neighbors only want to partial cut the forest and that's fine, and I feel that a landowner—within bounds—should be able to do whatever he wants with his land as long as it doesn't really harm the long term fish and wildlife and water quality...(80702).

Every world view labels *good* programs and *bad* programs. From the view point of rural landowners I spoke with, *good* programs were voluntary and

supported projects that control and manage nature's excess to make the area productive and livable, e.g., drainage ditches, flood irrigation, culverts, riprap and tiles:

... all the creeks and out thru the Valley have been re-dug and drained out...and as far as making the Willamette Valley livable in that area, it did more good for everybody [not] just the farmers because that area is just—in the winter time was a real swamp—and now you drive thru that area and its livable (102902).

Good programs could also be described as programs that are sensitive to the personal needs and values of landowners. The following story illustrates how farmers often feel about being asked to participate in a program, to personally take action on their land to support causes that do not match their personal experience or values:

...somebody, from some organization wanted [grass seed] growers to start putting up bird houses for some...probably an endangered bird I'm gonna guess. It was just after she'd got done talking and saying what we need to do and I'm sittin' there thinking—and so what's the benefit to me? You know, besides having more birds in my back yard, what do I want to go out and do that for? To me it was somebody who wanted to save a bird but didn't really care how much it was gonna cost me to do it. (Laughs) I'm not sure its my—you know—my duty to go out and save all the red headed marbles...you know if its gonna help me and there's not a lot of expense to it, that's great, but I'm not gonna spend a whole bunch of time and money for something I'm not interested in (103002).

This farmer did not share the speaker's concern for the particular bird species. He found her pitch insensitive to his needs to maintain an economically viable farm and insensitive to his perceptions of what makes a healthy landscape. He felt she was asking him to take responsibility, to spend valuable time and money, to support a bird population that had no benefit and was of no concern to him.

Studies have shown that participation in conservation programs increases with the perception of a conservation problem on one's own land and when the program produces personal rewards for landowners themselves (Napier 1990a;

Lovejoy and Napier 1990). These same findings were confirmed by landowners in my study. In the struggle to maintain independent control over one's land, government can be viewed as a threat, or under the right circumstances, can be viewed as an aid to individual land management. Of the people I talked to who were either signed-up or attempting to sign-up with a conservation program, most cited a need for technical or financial assistance from agencies with resources and power to endorse and realize the landowner's objective. They wanted to find out what they could *do* in the daily battle against brush and stream bank erosion. Most people took individual actions of their own to become involved with a conservation program. This phenomenon is consistent with what I was told by NRCS representatives: most people come into their office with a particular issue to be addressed and NRCS then assesses the property and attempts a more holistic management plan.

Often landowners do not agree with all of the techniques used in government conservation plans. For example, one farmer told me he thought that riprap, concrete and dams were what the Mohawk River really needed, though he was fairly optimistic about the more recent trend of barbs implemented on a stream bank he owned. If a conservation plan addresses the landowner's concerns adequately, some conservation program participants were willing to implement additional project components that they did not fully believe effective themselves. For example in the EQIP GPA, a rancher contested the damage done to streams by cattle, though he did not mind fencing along the stream as long as he had financial assistance and benefited from other program aspects like the planting of a "tree crop that is now mine" (100202). The conservation practices led to a net increase in land control, not a loss; landowners gained crops, or plantings, and financial assistance to appease the societal goal of clean, cattle-free water.

RURAL NEIGHBORS

Many studies (e.g., Habron 2000, Leaver 2001, Smith et al. 2002), including this one, have found that we can talk about rural landowners' individual perceptions of the environment as a single world view; variation in individual environmental models is affected by economic operations and agricultural activity, though the overarching perspective of the freedom associated with owning rural land is common among farmers, foresters and urbanites who want to relocate with a dream of a few acres and a cabin in the woods. Among each other though, rural residents differentiated between themselves and "others" and a common source of separation stems from whether income is dependent on land-based production activities (farming, forestry, or ranching) or "working in town" as well as numbers of acres owned.

For example, when I asked landowners who they thought typically participated in conservation programs, farmers thought non-farm residents did and vice versa. Each thought the other had more time to research program options and was more familiar and thus comfortable with conservation agencies. I asked a landowner with a completed restoration project how his neighbors felt about the project, he replied, "A lot of the neighbors are small landowners, [they] predominantly work in town so they, you know, they don't have an opinion" (91702-1). Another landowner told me that landowners who work in town, "They're in different occupations and they don't butt heads with the self-proclaimed environmentalists, tree-huggers, stuff like that" (80702).

The increase in rural residents who spend most of their work week in town and have little or no experience managing their rural estate was another source of contention I often heard. The widespread belief was that undeveloped natural areas not managed will go to invasive species and brush, which are an eyesore, a fire hazard and a possible contaminant for grass seed fields. Additionally, if small acreage landowners get livestock, especially horses, the inexperienced landowners will often produce mud fields; it is not enough land to live off, yet too much for

them to manage. One rancher described the lack of experience many of his new neighbors have, "First thing they do is go and get 10 horses to put in their front yard—awful...stupid to me" (101102).

Interpersonal communication channels among rural landowners are often the key to the local success of a conservation program (Rogers 1995; Stephenson 2002). The number of landowners signed-up to participate in the EQIP program in the Mohawk Valley was too low to qualify for GPA funds until a local rancher picked up the phone and made numerous phone calls. Within the sample of those eligible for EQIP in the Mohawk, two-thirds have additional experience with conservation programs as active watershed partnership members, yet half of those did not remember which programs they signed up with, or what some of the specific terms of those sign-ups were (e.g., length of contract). They learned about the programs from their neighbor or friends on the MWP and enrolled due to the confidence in their neighbors' words. Hearing about the program from a trusted neighbor and member of the community eased landowners' apprehensions.

Within the grass seed farming community, word travels fast regarding positive and negative experiences with conservation practices, programs and agencies. They gather at the regional cafe to exchange advice, keenly observe each other's fields and congregate at seed growers meetings. Within their social network however, participation in government run conservation programs is low and their key sources of information give little attention to conservation programs. There did seem to be an "ag loop": three-fifths of the households I specifically asked belong to the ASCS, SWCD, FSA board, or local watershed. Whether this leads to education regarding availability and eligibility for conservation programs is less clear. Only 1 of the 13 in the "ag loop" was currently participating in a conservation program, and he had forgotten about his participation until his wife reminded him.

Habron (2000) found that rural landowners trust other landowners because they share struggles and motivations though they hesitate to share information

about conservation practices because they do not want to appear to be challenging the private property rights of neighbors. For grass seed farmers though, keeping tabs on each other's land management techniques helps them to gain or maintain an edge in an increasingly competitive market. So far, farmers do not see their neighbors participating in conservation programs let alone gaining an edge through the programs.

URBAN NEIGHBORS

Kottak wrote that the spread of a particular world view is always influenced by “national, regional, or local ethnoecologies and their power of adaptation or resistance” (1999:26). Farmers adapt to or resist the loss of control of their land to urban environmentalists' global ecological morality: they are losing control of their communities, which are being sub-divided and developed as bedroom communities, and they are losing control of their identities as caretakers of the land. I heard from several landowners a sense of bitterness regarding the demands made on them by urban environmentalists. A conversation I had with one farmer turned to his views of the urban-rural connection. He expressed a lack of empathy rural landowners get from “concerned” activists:

You know, people don't care... until it affects them you know—once it gets in their back pocket that's when they start. And it's easy to say 'we need them to go out and start doin' all this stuff to save (cites a fictitious animal). ' They [urban environmentalists] don't want to do anything, they just want me to do it all (103002).

A new definition of sustainability is being imposed on rural land for the interest of the public good. Rural landowners told me they feel unfairly targeted, while urbanites freely pollute and denigrate natural resources. My use of the term *urban* here represents the descriptions and the perceptions I heard from landowners interviewed, not necessarily a specific geographic location or population category. People making policy and working for conservation agencies are increasingly urban educated, “raised on concrete” with limited, textbook knowledge of the local

landscape. These stereotypes stem from a notion of losing control to urbanites and being the unfair focus of regulation. A backlash then ensues perpetuating the divide between urban and rural, even though both share similar goals and concern for natural resource health (Leaver 2001, Lewotsky 2002, Smith et al. 2002).

For example, the urban majority has shown support through their votes for conservation programs. Similarly, when I asked rural landowners what kind of priority conservation programs were for them, they would first say “well below paying the bills...” but follow-up with a discussion of the difference between formal conservation programs and personal conservation philosophy: “I guess I would say its [conservation programs] very low, you know conservation programs, [but] conservation as a personal landowner and a steward of the land, I would say very high” (103002).

Conservation—being a steward of the land—is a high priority and intricately linked to financial survival, let alone financial success. I was told that “in a good economy we can afford to do things we can’t in a poor economy” (100802). Another typical reference to personal philosophy was expressed by this rancher, who echoed the exasperation that people living by the land feel about their perceived treatment of natural resources: “We’re not going to kill the goose that lays the golden egg” (100202).

Landowners said that labeling a program a *conservation* program carried an association with the environmentalist movement, which is not considered a friend of farmers. Even though they consider themselves conservationists (in contrast to preservationists), when a program is labeled “conservation,” it is the environmentally co-opted definition of conservation they see. Many people I spoke with, like the two ranchers quoted below, live close to, and have a history with the land and feel resentful about the lack of recognition they get as the real or original environmentalists—the long-standing stewards of the land:

I’m not an environmentalist, but I believe in the environment. We’re more environmentalist than the environmentalists are. We’ve been caretakers of the land for years and land hasn’t changed

much...Landowners I know have been angry about the coming of environmental movement because they all feel just like I do—that they're [rural landowners] environmentalists. They're just the protesters, and government listens, and implements programs that hinder us and cost us money (101102).

In other words, urban environmental input has made government unjust for the rural landowner. Farmers and ranchers referred to themselves as a dying breed with an ever shrinking influence on policy:

There's less than a quarter of the area of the state that votes for the rest of us—Portland and Eugene. Rural people have no say. Rules are put in by cities. We can't go into the cities and vote. They out-vote us on everything (101102).

Government is making decisions for us, but they don't know what they're doing. We all want clean air and water, to protect the environment...but we really do it...they think we're biased but...outside people, radical criticizers, don't understand what's happening out here...we have regulations, [they are] numerous... (102502).

The perception was that, because the urban majority is in control, unregulated pesticide use on residential yards and the polluting effects of automobiles and parking lot run-off are condoned. Many rural landowners mentioned frustration with what they perceived as unfair limitations imposed on the activities of rural but not urban communities:

It pisses me off when I sit in a parking lot in Corvallis and see all the oil and runoff going straight into the river. And we are worrying about an angling license...[we've] missed what's driving the decline... (82602b).

My opinion is that if you lumped all the grass seed farming in the area, they are probably a net air cleaning thing, not polluting problems. In other words grass that we grow probably cleans the air more than we pollute. Whereas you go in the urban areas, they're a net polluting issue with all the automobiles and factories and so on but do we deal with those issues? No we try to regulate the things that are visible and can be easily regulated and have less economic impact on the masses so, you know that's just a political climate (101402)

Farmers thought much of the general public was ignorant of the reality of farm life; the populace supports the regulation of something they do not understand and have not experienced first-hand:

I think the public conception is probably way off. I think when people hear we're using pesticides, they see in their minds this great big fog, rolling across the land and killing everything in sight, they don't realize, you're putting on a quart of Round Up per acre and they're standing there thinking hundreds of gallons are flying everywhere. They just don't understand and it's because they're not involved with it. They don't know. Somebody gets a fear in their mind and everybody's freaked out (103002).

In addition to feeling politically dominated by urban interests, rural landowners I heard from perceived a general sense of disrespect from their neighbors living in more populated areas. When I asked about the current issues facing landowners, several people mentioned encroachment, trespassers, poachers and litter. Below a landowner reflects on his interactions with visitors in from the city:

They come out here to hunt, they come here to fish, and when they do that they feel they have a right. You never find me with a shotgun in their backyard in town—I'd get in trouble for it. But they feel they have a right to come down the hill and start shootin' your place up. Just because they own a shotgun or just because they have a hunting license and that's part of the experience—that's not just me but my father had and so on and so forth with the city folks. They come out at certain times of the year and they feel they have a right to and that causes you to think, so...other than that I don't have much contact with them (91702-1)

Although this particular landowner contrasted the benign effects of birders and bikers with poachers, in general, programs that entailed public access to one's property were much less attractive than programs that maintained a landowner's right to privacy. Landowners who had completed projects spoke with pride about allowing their rural neighbors to enjoy the area, to take walks with their kids and their dogs. However, past experiences with disrespectful visitors from the city can make rural landowners apprehensive and mistrustful of their urban neighbors.

Breslow (2001) too, found that conservation programs were often perceived to have a hidden purpose to increase government control of land and strengthen a growing environmentalist agenda. Landowners also questioned the effectiveness of conservation techniques (i.e., stream side buffers) and the blame assigned to agriculture for declining salmon populations. Instead, landowners (mostly farmers) pointed to the effects of sedimentation from logging, over-fishing and increasing threats of urban sprawl.

CONSERVATION PROGRAMS

If world views direct the conservation program decision-making process and farmers share a world view, then why do some participate in conservation programs while others do not? Concurrent with past research (e.g., Kottak 1999; Lovejoy and Napier 1990; Rogers 1995), this study found landowners participate when they perceive a need for a program and/or a benefit to participating in the program. The world view of farmers in the southern Willamette Valley assesses “need” and “benefit” in terms of how a practice or program affects their ability to independently control their land and manage natural resources for human use. However, if farmers perceived a need or a benefit to participation, but felt participation would threaten their rights to control their private property, participation would be unlikely.

Landowners stressed a desire for programs that were flexible and used common sense. While some landowners identified conservation programs as a tool of government and environmentalists to attack landowners’ rights, their rural neighbors, who are more agreeable to program participation, identified programs as a tool available to them to better manage their own land. Participants still felt some vulnerability and apprehension regarding the aptitude for government control but the benefits perceived and the level of trust outweighed the liabilities.

Conservation programs as tools that aid farmers

Why farmers participate in conservation programs

Conservation programs can be a useful tool for farmers, because programs can assist them in the kind of active management they idealize; programs can help them control erosion and invasive weeds, by actively planting, building and installing solutions. Conservation programs also provide technical and financial assistance to landowners that can lead to increased land value, compliance with societal values regarding environmental protection and support to implement practices voluntarily that may soon be mandated.

Of the people I talked to who were either signed-up or attempting to sign-up with a conservation program, most cited a need for technical or financial assistance from agencies with the resources and power to endorse and realize the landowner's objective. Participation may also occur due to instigation by a trusted neighbor and perceived personal benefits that serve economic needs and/or concerns about future mandates. An EQIP participant was using cost-share funds to install fencing along the river and hoped to run water lines to his barn even though he did not own any livestock. He viewed the fence as something he should put up while the funding was available because "pretty soon it'll be mandatory" and he has "always planned to [get livestock], but if not, if it doesn't happen then it don't—at least the fence is there" (101002). Another conservation program participant explained his involvement in economic terms: "CREP paid 100%—more than I can lease for, and paid to plant trees too" which he can later harvest (100202).

In addition to the need for financial and technical help, some landowners mentioned the importance of securing agency approval for their plans. Most landowners had an idea about what would help address their specific issue, but they were concerned about the consequences of disobeying a law or regulation:

And all I wanted was someone to wave a hand over the project and say ok, you can cut down that willow, and put it over here. I didn't know how small a scale you needed to go before you no longer

needed permission. The way things are written it sounds like you couldn't take a twig off (91002).

A few people I talked to were interested in conservation programs but had not yet been able to sign any contracts. The hold-up stemmed from either disagreement with the supervising conservation agency about the management plan or disagreement with a potential supervising conservation agency about the priority and environmental impact of the project. To say it another way, while landowners may see a need or a benefit and claim willingness to engage with government through conservation program enrollment, rural landowners maintained strict compliance with their personal goals and scrutinized the focus of the agency's technical assistance.

The following quote is from a farmer who has been trying to enroll in a variety of conservation programs for the past five years. He eventually worked with an OSU Fish and Wildlife class to develop a habitat restoration plan, in which his priorities were acknowledged and incorporated:

And they [students] did a wonderful job and they basically developed a plan that I wanted. It had nothing to do with anything that NRCS or ODFW or anybody else wanted to do. It was what I wanted to see happen to the land, and what I could afford to have happen to the land. There just has to be this problem, I still have to make a living (82902).

He was trying to get financial and technical support for this plan from conservation agencies, with the goal to lease rights to a hunt club after restoration occurs. This landowner trusted the government enough to act on his perception of a program need and benefit, yet he was driven by personal goals within his world view that were incongruent with public objectives directing conservation agencies.

Government conservation programs as a good idea

A section of my questions inquired about landowners' perceptions of conservation programs, for example whether they were effective or a good idea. Most landowners thought that government run conservation programs were a kind

of necessary evil. Despite the skepticism rural landowners expressed to me regarding the influence of misled environmentalism on conservation policy, all of the landowners thought that at some level conservation programs were needed. Even a landowner who considered himself a libertarian agreed that only the government has the resources, the money and the power needed to develop and implement conservation programs:

A private company or individual doesn't have the strength that the government has—here I am praising government!—but government has the resources because they can draw the money from everybody to coordinate things and standardize what needs to be done where. They've got the resources and the research to know what to do and where to do it (91002).

I'm sure there's lots of abuses, I'm sure it doesn't work sometimes, but I think it's a genuine effort...you look at the way government spends money and this is a good way (91702).

Government-run conservation programs were a good idea if they met the following criteria: they were voluntary; they guarded against the abuse of taxpayers' dollars; they assisted individuals in the face of mandated demands and societal pressure to implement conservation practices; and they addressed the specific needs of the area. Landowners believed the programs should remain voluntary and allow leeway for landowner control. If there are mandates, then the government should have programs available to assist with compliance. As one farmer told me:

Society thinks they need [conservation programs], so if they want it and they are willing to pay for it then there's a need...if you want a buffer then pay for it (100902).

In the minds of rural landowners I spoke with, abuse of conservation programs occurred when someone who could afford to do a project with his or her own financial resources took “government payments” instead. As independent people, rural landowners expressed the ideal that projects worthy of tax-payer money should be large enough in scope to be beyond what an individual landowner

could accomplish alone, financially or physically. Some landowners, mostly non-participants, also expressed dismay regarding the use of government funds to complete “backyard landscaping projects” or private hunt clubs. These projects were thought to use tax-payer dollars to benefit the landowner exclusively, not the greatest good for the greatest number.

Most interviewees acknowledged extreme changes made to the Willamette Valley landscape in the last hundred years and the difficulty humans have in general making changes, integrating new knowledge, looking for alternatives and taking chances. One landowner, who very recently began to consider conservation program participation, told me he thought conservation programs “cost landowners a lot of money and a big percentage are worthless,” but that conservation programs were needed because, “probably not all landowners are as conscious as some of us are...lot are more maybe” (101102). While rural landowners considered themselves to be stewards, they recognized a spectrum of stewardship among their neighbors.

Many landowners thought some projects would be easier to complete on their own to avoid government bureaucracy, though some had experienced negative effects of downstream neighbor’s independent stewardship. One farmer expressed a need for conservation programs on his land because his neighbor, “Just without a permit or anything [he] fixed the river and he didn’t do it right and that’s why it’s eaten our side now. We’re having to go in and fix it now” (101502). Conservation programs used as a tool for better management of one landowner’s property can have positive effects for property owners downstream.

Drawbacks of conservation programs as tools

I asked all interviewees, who had first-hand experience using conservation programs as a management tool, to tell me about the benefits and drawbacks of their participation. While a few people said they experienced no drawbacks, other responses often included the following topics which illustrate participating landowners’ dependence on and opinion of, conservation agencies:

Lots of paper work: no one seemed surprised that working with the government entailed a lot of paper and a lot of signatures. Relationships with neighbors or agency representatives was again key when they raised landowners' comfort levels to a point where landowners did not need to read every letter on every sheet, but felt confident about maintaining personal security and control after signing the conservation program agreements.

"Draining process": these words were used by one landowner to describe the enrollment and implementation process of his large restoration project. He was not interested in doing any further restoration activity, because it was such exhausting work. Other conservation program participants also mentioned the stress of dealing with multiple agencies, contractors and the operation of heavy equipment on their land, even with the help of a coordinating agency like NRCS.

Maintenance: once projects are done, maintenance made further demands on the time and finances of landowners. Participants felt that there should be an increase in funding and education to maintain and protect the project's initial investment. Understanding of the utilitarian world view of farmers makes this point even more significant.

Inflexibility of bureaucracy: once a contract is signed, the agreement is cemented. I heard directly and indirectly about the aggravation that occurs when rates and minds change but contracts do not. One landowner told me how he signed up for CREP and then a day later wanted to extend his contract from 15 to 30 years. No work had yet begun on the project and he sought help from local and then state representatives, but he was not allowed to change the length of the contract. This seemed ridiculous to him and was very frustrating for him. Other landowners had heard stories of people signing up and finding that next years' payments were significantly higher, but no adjustment would be made for earlier enrollments. The inability to take advantage of increased economic incentives seemed a kind of disincentive for landowners to sign-up for conservation programs any time soon.

Frustration with inflexible bureaucracy stemmed from other rate and labor details. For example, the process for paying a hired contractor was less demanding on the landowner than if one had to document labor done by him or herself. A landowner expressed his frustration with the project implementation and the mistrust he feels from the conservation agency:

If I build the fence myself, I have to keep track of everything as a bill—every staple every hour, etc. If I hire a contractor, he can turn in a bill for \$2.20 per foot. They trust the contractor more than the landowner. Why not give the same rate? We own the land and have a big investment here—some guy shows up with a lunch pail for one day, drives up and leaves... (100202).

Some participants also expressed disappointment regarding what the programs were willing to fund. Landowners were concerned about quality during the implementation process and they felt that cost-share rates did not reflect the real costs they incurred or the use of machinery. A couple of landowners told me they thought cost-share should compensate for special tools pulled by a tractor, which made for more successful restoration in the long-run. When I asked this rancher about drawbacks to program participation he said:

Rates are too low—for fencing material, tractors, trees... They pay 50 cents a tree and we pay 38 cents for them, then 30 cents to plant. And I hired good planters... They don't allow (reimbursement for) equipment behind the tractor, though you're wearing out what you're pulling ...I go through and shank so its easier to plant... its important to have professional planters... Another pet peeve of mine, they wouldn't allow anything for chiseling so I added it as planting, but they said it was site prep. I argued it made it easier to plant, I was there the same day as planters... you can get j-rot when the roots don't get to extend so I went through with a ripper (on planting day) (100202).

This landowner was doing what he thought should be done to constitute a good quality job and assure the health of the trees he's planting. From the farmers' world view it was a waste of time, energy and taxpayers' money to buy trees and hire laborers if the job was not going to be done right. Mistrust of conservation

programs stemmed from examples like those above, when landowners perceived conservation programs to be administered with stringent bureaucracy, devoid of “common sense” that limits landowners’ control over their own projects and contracts.

Conservation programs as tools that aid government control

While most landowners saw a need for government’s conservation programs, they did not necessarily see a personal need to participate in those programs. Non-participant landowners thought that current available programs were incongruous with the local needs and landscape, and that programs were developed on the other side of the country to address problems in the Midwest, not flat valley bottom land. Past generations had benefited from participation in relevant programs that helped to make the Valley livable and productive, but today’s programs were imposed on local landowners, not tailored to their priorities. Required government contact was too much for some landowners, thus the opportunity to voluntarily invite the government on to your land, to map the area, to get your name “in the computer,” was suspect.

Irrelevance: Another place and another time

I asked landowners what they thought of when they heard the words, “conservation program.” Nearly everyone mentioned crop subsidies and then their irrelevance for the southern Willamette Valley explaining that subsidies are for the big grain crops in the Midwest. Landowners also commonly mentioned the “old land banks” and the “wheat program.” Following is a typical dialogue with farmers when I asked about their perceptions of conservation programs:

[What do you think of when hear the words conservation program?]
...I don't know. I think a lot of the older guys think of the old soil bank program back in...it was actually back in the 50s I believe, 50s and 60s maybe—and that was a big success. There was a lot of ground around here that was set aside. It was a lot like the CRP program. And uh, I remember, I kind of remember the tail end of that. And that's what the older people think of uh, you know we

really haven't had a program for my generation that was really workable. The CRP program is big in the Midwest and over in Eastern Oregon, but there's gotta' be erodible land and this is flat out here, nothing's erodible so it doesn't qualify for that.

[What about some of the newer programs like CREP that look at stream habitat?] *Um, that I think is good, but I'm not very familiar...I don't see much of that going on (101002).*

Soil erosion was seen by interviewees as a major environmental concern, though mainly for large grain farms with several thousand acres in production. In contrast, farms of the southern Willamette Valley are significantly smaller and flatter, with vegetation stabilizing the soil during the most vulnerable time of the year. Thus programs were thought to be developed more for industries and topography dominant in other areas of the state and country. Newer conservation programs that may be more relevant to agriculture in the southern Willamette constituted unfamiliar territory for most farmers. They do not perceive a problem and therefore do not take the initiative often needed to learn more about available conservation programs. One landowner described this phenomena as, “one the those pitchfork ideas—you see it coming at you and instead of absorbing it, you put it on a pitchfork and throw it at somebody that you think it applies to” (91002).

Imposition of Irrelevant programs

If traditional resources are to be destroyed, removed or placed off limits (for development or conservation) they need to be replaced with culturally appropriate and satisfactory alternatives (Kottak 1999:26)

Most non-participants think conservation programs of the current era are culturally and ecologically inappropriate and provide unsatisfactory alternatives to the old programs that addressed farmland productivity and respected private property rights. One of the farmers resigned from his position as a board member for the SWCD when “some of the things I was having to advocate as a board member I really couldn't go along with on my own farm” (102902).

Tiling procedures present an example of the newer policies that significantly affected farmer interest in conservation programs: new wetland policies went “against the grain of those raised to drain” (Conrad 2000). Within one generation, a change occurred where farmers who had received cost-share funds to put in tiles and drain land for agricultural production were then subject to swampbuster regulations and public disapproval of tiling, due to its effect on water quality. The imposition of swampbuster regulations is still seen by some farmers as having unfair implications for their personal land management. As the past SWCD board member told me:

... the wetlands program was not, not designed for this area and there was no—at that time there was no provisions to ...for...you know this type of soil and the tiling program, and I felt that they—what we were tiling off was not really a wetland—it seeps out of the hill. I had a real problem with the tiling policies at that time.

He continued to describe good programs that helped develop and drain the area, that eventually “just went out the window and all the projects were all river projects—there was nothing for the farmer.”

What does remain for the farmer is often a feeling of control loss and increased mistrust and fear of threatening consequences. Landowners worried about the government using information about their land against them after the conservation program contract term ended or as new research and new policies surfaced. Changing policy and program goals pointed to the government’s unpredictable and inconsistent land management objectives. Farmers continue to install tiles at their own expense, only now they hesitate to tell anyone about it. One farmer told me they had not participated in any conservation programs since the 1980’s, when he put in tiling. His wife interrupted, “actually you might not want to say a whole lot about the tiling because...” and he finished for her, “we’re not supposed to do all that” (102402). Future participation in conservation programs is affected by the fear of repercussion that could come from another change in policy that leaves farmers vulnerable to negative ramifications with a field full of

stigmatized implementations. Swampbuster compliance was the focus of this comment, but the fear of consequences could pertain to any number of land management practices:

If you fill out a pothole out there, even the size of the office here or bigger and you're participating in a program you can lose all your benefits and have to pay everything back and the consequences are really, really tough... (102902).

Consequences of government association

Conservation programs run by the government were associated with formidable regulations enforced by the government. If you participated in a program, but for whatever reason you did not do what the government wanted, the way the government wanted, the perceived consequences were very high (e.g., fines, future harassment and jail time):

There's no way you can, no way—there isn't a farmer in the state of Oregon that is legal as far as all the regulations. You could never comply with everything and everybody. Seems to me we might just as well hand them the keys and walk away (102402).

Another farmer echoed the above sentiment and added the belief that landowners had to be dishonest in order to deal with governmental conservation agencies:

Incompetent or corrupt, that's what someone said about new farmer programs. He didn't see how any could qualify if they filled things out honestly...and if you take the money they can tell you when to stand up and sit down (101602).

When I asked a program participant which concerns he had weighed in his decision process, he told me, “the biggest concerns were government control... you know, and how long is the government gonna tell you what to do?” (80802).

Farmers saw themselves as stewards of the land—natural resource managers who are open to learning from new research and past mistakes under circumstances that are not belittling or threatening. They resent being controlled, being told when to sit down and stand up. Government policies and programs can

be seen to decrease landowners' independence, while they increase landowners' responsibility. If you participated in government programs, some grass seed farmers told me, you had to ask the government for, "permission to do all kinds of stuff... you can't be very aggressive and *progressive*" (102402). They agreed that programs helped the "small woodland people and reforestation [efforts]," but would not benefit them as farmers, and they already had a lot of responsibility:

...everybody and their brother lookin' over your shoulder making sure you're dottin' your i's and crossin' your t's and doin' all the paper work and jeez—we're livin' here, we've lived here forever and we're trying to maintain—we're trying to do a better job than our parents did, as far as the philosophy—and I think the farm is across the board way better than when I came on (102402).

To substantiate "better" he told me, "phosphate potash levels are high, lime levels are high, [they are] rotating [crops], got a lot of drain tile in allowing us to farm a lot of things." This statement provided support for Kottak's (1990:26) claim that "...projects [or programs] often fail when they try to replace native forms with culturally alien property concepts and productive units." Environmental indicators imposed by the global ecological morality do not match the experience and values of many southern Willamette farmers.

AGENCIES

Conservation agencies were often viewed by rural landowners as carriers of the ecological morality message. The programs administered by the conservation agencies were a low priority and a perceived hassle, but conservation actions in the context of a stewardship philosophy, were of high priority to landowners. For the most part, landowners did not feel like conservation programs were relevant to them, whether they were small acreage landowners or commercial farmers. The various agencies, their responsibilities and goals were also not common knowledge for the average landowner. To increase landowners' perceptions of conservation programs as a tool available to assist them in meeting their goals, landowners expressed the need for: 1) an increase in landowners' understanding of

conservation programs, 2) improvement in landowner relationships with administering agencies and 3) utilization of new avenues for education and relationship building.

Increasing landowners' understanding of conservation programs

People cannot be expected to participate in programs they do not know exist. Additionally, knowledge of existing programs needs to be coupled with landowners' perception of the program's applicability to personal land use goals and geographic area. Landowners often lacked an understanding of program names, let alone goals, applications and eligibility requirements. Similarly, Camboni et al. (1990) found conservation participation rose with the use of information that increased landowner knowledge of program eligibility and outreach that is tailored to address the targeted community.

Outreach should address misinformation about conservation program rules and regulations and out-dated programs. Examples of rules and regulations include the wetland designation, agency access to land, potential measures for "disobeying the law." Addressing outdated programs includes bringing landowners up to date on the goals of current Farm Bill conservation programs and then linking those goals to local concerns and activities. If agencies want to target programs toward agriculturists, they need to address the length of the contract and the dollar amount of the contract. Shorter is better in the ebb and flow of the agricultural markets and larger farms can view projects with caps of \$10,000 as not worth the effort. Projects of that size would be easier to do themselves. Furthermore, if agencies want to target agriculture in the southern Willamette Valley, they need to address conservation program compatibility with commercial production of grass seed on flat wet land and a recent history of little government interaction, beyond the still tender topic of field burning.

Even among landowners who made the decision to participate in a conservation program, apprehensions about future consequences existed.

Swampbuster compliance for example, was often a concern for landowners in the low lying valley of the rainy Northwest. People were unclear about what defined a “wetland,” and if they planted ash and other native wetland vegetation, at the end of the program’s contract would they be unable to alter that area, now a designated wetland? The planning of a conservation project left the government with a lot of information about one’s land and personal situation. The inherent lack of assurances and misunderstandings regarding government jargon could be quelled by giving a personal face to the looming anonymous bureaucracy of government.

If landowners have a face and a name, this can override feelings of mistrust for an agency. For example an ODFW employee told me how landowners will differentiate between the “ODFW headquarters” which they dislike, and the field guys, who are okay. He attributed this distinction to the personal experience of landowners with those working on the ground, in the field and the lack of personal experience with the anonymous “headquarters.” When I asked one landowner about his experience working with conservation agencies while implementing a restoration project, he quickly responded:

It comes down to the people in the agency. It just comes down to the people and that’s all there is to it. There are good people and there are people who are not so good. It really doesn’t have much to do with the agency per se, it’s the people and I’ve ran into good people and I’ve ran into people that weren’t as responsive (91702).

Relationships with Agencies

Landowners’ opinions of and experience with (perceptions of) conservation agencies and the government in general have also been shown to correlate with conservation program participation (Napier 1990a; Esseks and Kraft 1990; Weber and Margheim 2000). Landowners’ relationships with agencies overseeing conservation programs can be key to both increasing public knowledge of conservation programs and moving the public from knowledge to action (participating in a conservation program). In order to improve relationships between agencies and landowners, major issues to be addressed include

misinformation regarding program details and the perception of various agencies as a threat to landowners and their way of life:

People don't have a clue about agencies. I don't know what the Water Resource Department guy really does and how it helps me as a citizen...it takes time to research [agency roles]... (82602).

That statement came from a landowner who had completed a restoration project on her land, was married to a retired Fish and Game warden and had completed a master's degree. She is educated, connected and experienced with conservation programs—attributes which the literature (e.g., Rogers 1995) shows to be helpful in understanding and cooperating with conservation agencies—yet she summarizes her own frustration in understanding agency roles. In order to develop trust and assist or guide landowners through a conservation plan, an understanding of the goals and responsibilities of the various conservation related *agencies* is as important as an understanding the goals of the specific conservation *programs*. Acronyms of conservation programs and agencies can be an alphabet soup for the landowner interested in learning more, and an irrelevant and unpalatable stew for the apprehensive landowner in need of more assurances.

Agencies gain reputations among landowners through first-hand experience and second-hand stories passed between neighbors and generations. Citations I heard were pulled from conservative journals like *Stewards of the Range*, experiences of friends, neighbors, family and the individual him or herself. For the most part, I heard about the lack of common sense that accompanies bureaucracy, be it in the science behind the conservation program or the inflexibility of the contract with the conservation agency.

One farmer contrasted the attitude of conservation agencies he had observed in the Midwest with those in the Willamette Valley. The Midwestern representatives had a “make it work” attitude. When I asked him if he thought conservation programs were effective, he said:

...In other areas of the country. No reason they couldn't be here, but [we] need the staff to make it work for us. There's the objective, and

we can get there this way or think NRCS technicians are so damned scared of losing their jobs—no risk or they'll get bumped (100902).

Another farmer put it succinctly at a focus group with various conservation agency representatives: “As I see it, looks like you get one shot per generation and if you blow it, you gotta’ wait another 30 years” (110602). At this particular meeting a number of farmers I had previously interviewed were present. Many of them shared stories of their own personal interactions with the various agency representatives to explain their frustrations and lack of interaction since. I had heard during my interviews each story told at the meeting: no new stories surfaced. This phenomenon seems to support the farmer’s perception of the “one-shot” or at least, the need for major damage control since once the landowner has a negative experience with an agency, that experience is carried in his memory and shared with neighbors (and interviewing anthropologists) until a new experience can restore confidence and trust in that agency. Neighbor-to-neighbor communication has a strong influence on decision-making and the frustration of just one landowner can seriously impede conservation opportunities.

The theme of trust also emerged from my interviews, and was confirmed as a necessity during the meeting of farmers and agencies. Participants in conservation programs need to trust the implementing agency, not only to subdue feelings of vulnerability during the sign-up—the decision to enroll, but also to shepherd the participant through the paper work, permits and maintenance that follow. Key for trust to ensue is a relationship between a landowner and an agency representative. At the beginning of the meeting between grass seed farmers and agency representatives, I heard many farmers making humorous and cynical comments about someone arriving at their farm to “help.” At the end of the meeting, I heard a few of the previously frustrated and skeptical farmers making arrangements with agencies to come and visit their farms to talk about relevant projects.

Conservation program participation depends on a balance between landowners’ desire to protect private property rights with the “necessary evil” of

government agencies like the NRCS. The following comment from a participant expresses the perception of non-threatening programs that incorporate flexibility and common sense:

Well, you certainly have to have adequate regulations so we don't have anarchy and everybody doing their own thing, ...I like to see government working like NRCS does, cooperative, flexible, they don't tolerate anything that's really harmful to the environment ... [they maintain] flexibility within the desires of the landowner as long as its not damaging the resource... the soils and conservation service has a pretty good reputation too, that helps. Not usually—you know it's a non-threatening government entity. [And why do you think they are non-threatening?] Non-threatening because all the programs are optional. They're not trying to—what's threatening is the regulatory portions of them and its not regulatory. Its just—trying to help the farmers (80702).

LANDOWNER CONTROL THROUGH EDUCATION AND RELATIONSHIP BUILDING

In order to increase public knowledge of conservation programs and build trust between government agencies and landowners, a few avenues are in need of travel and most of them lead to the informal farmer networks. After examining the way information is shared between landowners and their favored sources of information, informal networks appear to be the most direct route if the target is the agricultural community in the southern Willamette Valley. Outreach needs to address the issue of applicability (of conservation programs to the local area) and trusting relationships.

Signage on projects can increase visibility of conservation programs being implemented locally to people passing by. Increased visibility can help to generate discussion about programs, which is not happening now, and model potential projects for the surrounding area:

...a Bureau of Land Management woman said at the (watershed) meeting that people don't know if programs are being done. Public should realize, [see] signage when [they] drive by—information to advertise. [You'd be willing to do that?] I think it's a good idea.

Neighbors don't know about programs...don't know their money paid for it (100202).

By seeing neighbors' completed projects, landowners feel their own participation in conservation programs is safer and has a greater effect on the area. People do not want to be isolated; they want to feel that they are part of a bigger plan of action. "It'd be nice if I could see that I was part of a, part of a master plan. I'm not just this island sitting here and it doesn't—it just sits here" (91702-1).

A number of grass seed farmers told me they simply did not know of or see any conservation programs going on in the area. One farmer suggested there be demonstration projects where people could see how different management practices "could" be implemented, stressing the distinction between projects that were mandated:

...Once you get a few projects and in some places they are more established than here, get a few things going that are visible. I and others just get a clue as to what's possible—establish a beachhead that's what needs to happen and its up to some of us to forge ahead, be a demonstration if not an example. Yeah I guess I'd say be a demonstration, say this is a possibility, not way it should be... I testified when they were trying to make environmental programs more accessible to farmers and I said as long as they're voluntary, I think government support it's great. Some things have to be mandated and then it's essential to offer education to help make it happen (100802).

Increased visibility would allow interested landowners to talk to participating landowners about their experience with conservation programs. One of the "long-time hold-out" landowners in the Mohawk Valley recently began to explore program options because he has seen his neighbors participate with no negative consequences.

Interviewees suggested that more active outreach should work through already established organizational networks (of the target population), for example grower meetings and respected individuals from related organizations. In the southern Willamette Valley's grass seed community, a particular OSU Extension

agent is very active with, and respected by, the farmers. He is a key contact for any agency hoping to target that particular community:

I don't see a big need for more programs, so—I just don't think—probably most people in grass seed just aren't affected by it because there's not somebody out here hammering on our door saying 'You gotta' do this.' There isn't a [for example, Agent's name] or anyone from Extension saying, 'You guys gotta' get involved in this program.' Its just not out there. If a [for example, Agent's name] stood up and said, 'We need to start getting into this more,' I think people probably would start listening, but there's nobody out there. And I go to all the meetings and, I guess I just don't care (103002).

Trust and credibility may overcome indifference and unfamiliarity more quickly by association with already trusted and credible people or organizations.

A final example, the suggestion of a “shop meeting,” came out of the focus group of grass seed farmers and conservation agencies. At a “shop meeting,” area farmers or landowners would be invited to convene in a neighbors “shop” or office, with an agency representative, to talk about available conservation programs. The farmers seemed to appreciate the effort to visit them on their own turf, where they could also view the area under discussion. By choosing a slow time of year for the growers and enlisting the assistance of an established, key trusted figure in the community, the basic foundation can be laid for positive relations between conservation programs and farmers.

SUMMARY OF FINDINGS

Landowners' world views are based on interactions with both cultural and ecological factors, at the global and local level. If we visualize farmers' interplay with their local landscape, their rural neighbors, regional urban communities and national policy as their “web of significance,” we can characterize farmers' world view as a driving force that keeps them spinning the web, resisting the threat that they will eventually be merely *caught* in the context of sticky strings that are misunderstanding between urban and rural world views, conflict between conservationist and preservationist philosophy and incompatibility between

individual rights and public responsibilities. Farmers felt they were on the receiving end of restrictions that stem from opposition between what is good for the public commons and what is good for the survival of the individual farmer's identity and livelihood. The world view of farmers is being challenged by the increasingly powerful world view of urban environmentalists in both the political and personal realm. From the vantage point of agriculture, preservationists are characterized as urban environmentalists who are increasingly powerful politically, yet unfamiliar with the challenges farmers face.

Understanding the world view of farmers can help mediate the divide between the potential of conservation programs to show support for landowners' rights and increase landowners' responsibilities to address public concerns. Potential for increased conservation program participation and decreased animosity between urban and rural, and between landowners and agency representatives, lies in personal connections that acknowledge what farmers' world view defines as a threat and what they perceive as valuable.

CHAPTER 5: DISCUSSION

Conservation programs are considered by legislators and the general public to be useful tools that help protect the health of natural resources and human communities. Funds allocated to conservation programs through the USDA are at their highest level in history. A study by the American Farmland Trust (2001) found that 75 percent of American voters feel government payments to the American farmer should require them to apply "one or more conservation practices," such as protecting wetlands or preventing water pollution. Furthermore, 63 percent polled said they would be willing to spend their own money to help farmers protect the environment. However, what seems like a mutually beneficial situation for conservationists, agriculturalists and policy makers, has been less attractive to farmers. Farmers questioned why they are the ones that must make the difficult changes. They believed the general public's claims of financial support were dubious, and the demands that may be attached to participation were too burdensome.

Farmers approached conservation programs with a world view based on a utilitarian conservationist perspective of natural resources and a strong belief in private property rights. Promises of government and societal support were tainted by landowners' historical experiences with unpredictable science and the conflicting world view of urban preservationists. Landowners, especially agriculturists, felt an unfair amount of blame is placed on them for environmental degradation. They also felt pressure to assume an unfair amount of responsibility for the environmental clean up, which includes personal, behavioral and attitudinal changes, as well as economic and physical demands. At the same time, they expressed belief in the spirit of competition and would prefer to be free of subsidies. Farmers' pride in their independence and ability to compete makes the decision to participate in conservation programs much more than an economic cost-benefit analysis.

Cultural change is typically a slow process, whether one lives among sky scrapers or silos. However skeptical and slow to change though, landowners were not inflexible in their conservation practices—especially when they perceived personal benefits to changes. Rural landowners I talked to saw themselves as both, private property owners with rights to independently manage their land, as well as stewards of the land with responsibilities to manage it the best they can. Contextualizing their behaviors and attitudes within a larger framework of societal behaviors and attitudes is a key step to changing landowners' conservation practices. Also important to recognize is that not only were landowners skeptical, but they were rarely familiar with personally applicable programs, be they commercial farmers or small acreage owners who work in town. They thought conservation programs were necessary, specifically government conservation programs, but their pitchforks were ready to toss the program back to another geographic area or type of landowner, where they perceived the program to be more applicable. While agricultural and non-farming residents I interviewed shared an aversion to advice and regulations “imposed from on-high,” they differentiated between each other and saw the “other” as having more need to participate in conservation programs.

Yet, this is not to say that the actions of rural landowners' neighbors did not affect their behavior. Landowners watched what others were doing and may have adopted conservation practices seen on other's lands, if the project appeared applicable and beneficial and the participant appeared to make it through the conservation program process unscathed. Neighbor-to-neighbor influence was especially relevant in the competitive realm of grass seed growers. Neighbor influence is in part due to the idea that a program (or agency) gains popularity as more landowners successfully interact with and reap benefits from participation, as well as the idea that a neighbor's word is more trusted when the landowners share similar priorities and challenges.

The larger context within which landowners operated was not only a social one, but also economical and historical. Productive land has been consumed and is no longer being produced, while at the same time, the pressure on today's agriculturists is for bigger farms to maintain an economically viable production unit as well as an agriculturally based identity. Kingsbury (2000) and Breslow (2001) both found that raising economic incentives is not the most effective way to increase participation. Many farmers told me that ground is just too valuable to think about conservation programs, which are dominated by an association with easements. This may be due to the fact that over 70% of conservation program dollars spent since 1988 have been to take land out of production (Claasen et al. 2001). Claasen et al. also noted though, that land taken out of production has added \$704 million into rural economies with increased wildlife populations (e.g., viewing and hunting). The problem, however, is not just economical. Even if landowners profit from the lease of hunting rights, for example, the type of land use that depends on wildlife viewing and hunting needs to account for the importance a landowner's world view places on the maintenance of an identity tightly coupled with farming or other land-based activities as well as the way the world view interprets projects that increase strangers' access to private land. Farmers remembered popular pre-Conservation Title programs as projects that actively built, drained, dammed and rip rapped to control nature and help the farmer, while also benefiting the general population by making the landscape more productive. Current programs were thought to be more useful for endangered species and small acreage residents, and offer little for large producers.

In the following section, I explore in further detail the main obstacles to landowner participation in conservation programs, namely the urban-rural divide and the reconciliation between landowners' rights and responsibilities. I then discuss how better knowledge of these issues may be used to more successfully inform policy development in the Willamette Valley.

URBAN-RURAL DIVIDE

Landowners agreed that policy at the national level should depend on science and past research, but that local control over implementation is necessary for the greatest success. Research has suggested that local concerns motivate participation more than federal concerns (Kuch 1990:339). Policy needs to be guided by credible, science-based facts and standards (Weber and Margheim 2000), yet "facts and standards" that place blame on and contradict the world view of those in agriculture and rural communities will be less well received. The greater the distance is between landowners and the source of standards and regulations, the greater landowners' resistance is to them. I heard landowners at a watershed meeting express, for example, that pressure to change is "easier to stomach" when it comes from your neighbor (and similarly, easier to stomach from Salem than from Washington, DC) (12803).

Many of the rural landowners I observed operated in a defensive posture against government and associated federal concerns with urbanites and environmentalists who they thought were not only ignorant and unsympathetic of rural life, but who also had an unfair electoral advantage and received less blame for their negative environmental impact. Farmers perceived increasing pressure from, and expressed increasing resistance to, the preservationist world view. While not all urbanites were perceived as preservationists by farmers, people espousing what farmers consider preservationist philosophy were often associated with the same characteristics attributed to urbanites (i.e., ignorant and unsympathetic of rural life, part of an electoral majority and unaccountable for their own negative environmental impact).

The Oregon Environmental Council (OEC) recently decided to address the animosity between rural agriculture and urban environmentalists. After interviewing farmers throughout Oregon, the OEC found that farmers feel misunderstood and "paranoid" when dealing with environmentalists, who are thought to lack scientific and technical knowledge, be elitist, arrogant and

untrustworthy and live in cities (Lewotsky 2002). When farmers were asked how environmentalists could be of help to them, farmers thought real potential for help would come from sympathetic environmentalists using their bureaucratic connections to enlist the assistance of conservation agencies. Farmers wanted help to secure financial support for conservation practices, coordinate regulatory regimes and set environmental goals that would allow local people to develop locally relevant methods to achieve those goals.

In the farmers' world view, environmentalists are allied with government agencies and conservation programs. The urban, non-agricultural portion of the U.S. population is growing in size and power, and rural landowners perceive that the urban world view is dominating policy. Their fear that program participation will lead to a further decline in their personal control—their personal property rights—was not sufficiently diffused by the dollar amount providing conservation incentives. Napier et al. (1988) found that landowners were more supportive of conservation programs if the individual believed that landowners should not be responsible for the cost of conservation implementation. Thus, conservation programs can be viewed as a right that society buys in order to have input into a private land management plan: if society wants an easement, wetland, streamside fencing, etc., then, to quote one farmer, "Let society pay for it."

RECONCILIATION OF RIGHTS AND RESPONSIBILITIES

A divide existed between a landowner's private property rights and a landowner's personal responsibility to adapt individual attitudes and behaviors to comply with larger public opinion. Conservation programs appeared to be a potential bridge—a way to distribute funding from the general public (taxes) to support rural landowners' voluntary decision (mandates are much less popular with landowners) to protect natural resources and the public good in a particular sanctioned way. However, program success depends on landowners' perception of

a need, a benefit and a sense of security when deciding about participation and, "...its all about participation" (12803).

The quote above came from a landowner who helped draft the water quality management plan for his area. He spoke about the importance of local participation while he introduced the plan to neighboring landowners. Area water quality management plans ask local landowners to develop ways to meet state-wide requirements of SB1010. The landowner mentioned the significance of participation, while he stressed how important local control and personal relationships can be for conservation program success. Trusted neighbors and agency representatives who have the social skills to build rapport and the technical knowledge to gain the respect of rural landowners can play a crucial role in the participation decision.

Agency representatives I spoke with seemed to understand landowners' world view. They understood that the landowners' perspectives do not necessarily mirror societal values and environmental goals and they also understood that landowners associate agencies with the threat of government regulation and potentially damaging consequences. The problem for agency people is that, while Conservation Title funding has grown, allocations for agency personnel to develop and implement projects have not. Agency representatives acknowledged the power of "one-on-one-on-the-ground" (Lewotsky 2002:33) and giving government "a face," but at the same time they stressed that the "government funds projects, not people...its as if projects occurred without people" (73102). On the other side, landowners recognized agency personnel carried a heavy workload and worried about job security, but most people face the same challenges in their lives and their acknowledgement of agency stressors actually seemed to make agencies appear less approachable.

The success of completed projects depended on a dynamic, knowledgeable agency representative who could personally shepherd landowners through the bureaucratic hoops and moments of insecurity and mistrust that occur during

program enrollment. The shepherd role can be critical even when the rare driven, energetic, trusting landowner strikes out independently in search of conservation support. Program participants described the participation process as “exhausting,” due to the stress of dealing with multiple agencies, contractors, a myriad of permits and paper work. Knowledgeable, trusted neighbors facing similar challenges and effective, understanding agency representatives can be indispensable in breaching landowners’ world view and the larger external structural barriers that surround policy implementation.

POLICY IMPLICATIONS

A discussion of landowner participation in conservation programs needs to include the context of landowners’ world views, as well as the structural barriers (e.g., policy and program details, limitations, requirements) that impede participation rates. Swanson et al. (1986) and Bultena and Hoiberg (1986) suggested nearly 20 years ago, that exploration of structural barriers to conservation program participation proves more successful than past efforts to change landowner behavior. Attention to the influence of larger structural factors on landowners’ participation is what adoption-diffusion theory calls *system blame* (Rogers 1995). System blame translates into policy implications that hold the larger system responsible for low conservation program rates in contrast to *individual blame*, which holds the individual responsible.

Adoption-diffusion has been criticized for focusing on innovator attributes (blaming the individual as the potential adopter) instead of the innovation attributes (blaming the system) (ibid:114) “The variables used in diffusion models then are conceptualized so as to indicate the success of the individual *within the system* rather than as indications of success or failure *of the system* (Havens 1975). This study did not set out with the assumption that conservation programs are good or bad, but that they are potential tools, which can provide a link between personal and societal goals and between urban and rural interests. However, in order to make

effective use of conservation programs' potential to address environmental issues, an understanding of local people's personal experiences and current world view needs to be applied to program development and implementation.

To learn more about how people perceive conservation programs, we can ask how they perceive innovation (conservation program) characteristics. In other words, how do program characteristics interact with the existing world view? A number of recent studies regarding landowner participation in conservation programs have focused on innovation attributes that landowners believe could be modified to increase participation rates and comfort with the conservation program process (Breslow 2001; Lev 2001; OWEB 2002). Two of these studies, conducted in the Washington-Oregon area, closely parallel the experiences of the participants I interviewed. In one, Breslow (2001) characterized Washington state farmers' interaction with conservation programs and policy as one of contestation and loss. In another, Lev (2001) described how participants approach conservation agencies with the understanding of a need and benefit to programs, but in order to embrace conservation programs as a tool, landowners' apprehensions about the loss of personal security and control need to be alleviated. Landowners' suggestions (listed below) illustrate that their world view is unfamiliar with the conservation program process, uncomfortable with conservation policies and mistrustful of government agencies.

In the following section, I summarize the suggestions Lev (2001) gave for enhancing the participation in conservation programs in her study of Oregon landowners. Immediately after each suggestion I provide a contrasting perspective, listing factors that inhibit the implementation of each suggestion. To increase participation, Lev writes that landowners need the following: a clearer outline of the conservation process, a more user-friendly enrollment process and access to agency staff that have the personality and expertise to reassure and guide landowners. However clear the suggestions may be, the solutions are more problematic.

Conservation process needs to be more clear: there should be an outline of the process from start to end; federal and state resources have conflicting programs and philosophies; and no central clearing house exists for landowner questions. (ibid:71).

In response, one may point out that federal agencies simply do not speak with one voice. Landowners see the federal government as a monolith, though in reality, the federal government is a hodge-podge of programs designed for specific interests. For example, environmental agencies trip over agricultural ones who trip over food safety ones.

Need for a more user-friendly process: examples include flexibility in project design, project target and project restrictions; more practical advice for a working farm; less agency jargon; and fewer meetings (ibid:71).

Of course, these require more support for people in the agencies to administer funds, and as the next suggestion points out, agencies are understaffed.

Understaffed agencies: program success depends on staff personalities and expertise and often staff is unavailable or lacks sufficient training for hands-on management (ibid:71).

Most people (including landowners I interviewed) think there is enormous government waste. The pursuit of reducing waste pits one interest against another and often results in crippling the ability of agencies to do the jobs they are assigned.

To address the above issues, we must face a number of daunting challenges and contradictions. Major changes are needed to synthesize the specific interests and goals of the various government agencies, to make government spending more efficient and find funding for agency representatives with the necessary technical and social skills. Some relief, however, can be found more immediately on a smaller scale. During my research, some readily available, key elements emerged

that seem to facilitate landowner participation in conservation programs by informing landowners about the existence of local projects and programs relevant to the area, increasing landowners' comfort with and knowledge of government agencies. Following are some of the examples of currently feasible activities this study recommends to increase landowners' conservation program participation without increased agency staff:

Meet with landowners in small, safe groups

Conservation agency representatives can make more efficient use of their time by meeting with small groups of landowners. Like the shop meeting I discussed in the previous chapter, small groups of landowners who are faced with similar challenges create a safe setting. Landowners feel more comfortable when they are surrounded by neighbors and feel more secure about the possibility of participating if neighbors are also taking the risk.

Enlist the help of already established trusted locals

Agency personnel can save some of the time required to build rapport with rural landowners by working with other agencies or individuals who have already secured a trusted and respected role in the targeted community. Examples include individuals within the community, like the rancher who personally rallied EQIP participants in the Mohawk Valley, or other organizational representatives from the extension service, commodity groups, or watershed councils.

Advertisements and outreach that require minimum effort from agency personnel

While my research showed that mailings from unfamiliar groups do not get much attention from landowners, I did hear about the power of road front signage and the influence of the informal social networks. Signs could be effective advertisement to gain the interest of local farmers driving around, checking on their neighbors' fields as well as the interest of other rural and urban residents out for a drive in the country or on their way to the coast or the mountains. Signage informs

people of the application of a program, the existence of a local participant and the function of conservation funding. More active examples include tours of completed projects and demonstration projects that present landowners with examples of how a practice could be implemented.

Alleviate blame

My research points to the need for increased understanding between rural and urban communities. Rural landowners I spoke with felt their rights were shrinking and their responsibilities growing. Collaboration between government conservation agencies and non-profit environmental groups like the OEC, the Nature Conservancy and the Farmland Trust of America could promote understanding of the various responsibilities, rules and regulations regarding different groups' (especially in this situation, urban communities) conservation efforts.

Start small

Grass seed farmers in the southern Willamette Valley have less experience with conservation agencies than farmers in other regions of the country, and even the state. Enrollment in a program like CREP, which takes land out of production, is a big step for them. Programs with less dramatic requirements of the landowner can serve as an introduction to the current world of conservation programs. For example, implementation of EQIP in the Mohawk Valley resulted in increased participation in other USDA programs such as the WRP, CREP and WHIP (personal communication, NRCS agent). If their initial experiences are positive, then the likelihood of future program participation with longer contracts or intensive restoration will increase, along with their trust of and comfort level with government. However, if the experience is negative, if the agency representatives seem to lack social and technical skills that appeal to farmers' world view, future participation will be severely hindered.

CONCLUSION: PEOPLE BREACHING STRUCTURAL BARRIERS

Examination of landowners' existing world view helps us to better understand their perception of conservation programs. An increase in low CREP participation rates in Oregon depends on landowners' knowledge of their program eligibility, as well as landowners' perceptions of the needs for and benefits from participation outweighing the perceived risks. National policy needs to adjust for local control over the application and implementation of conservation programs. Regional conservation agency representatives have an understanding of farmers' world view and can therefore have the greatest potential to be the personal shepherd that helps landowners bridge the participation decision and work through the intimidating enrollment procedure.

Conservation programs can be perceived as a tool for landowners to manage their land or as a tool for government to control private property. Government agencies can play a significant role to overcome structural barriers between policy and people. Person-to-person contact is key to gaining rapport and trust. Agencies need both technical skills to gain the respect of landowners and social skills to gain the trust of landowners. Some agency personnel have this, but they are just too overwhelmed to be effective. Conservation program participants gave a lot of credit to agency individuals who they believe have the skill and experience the individual landowner often lacks to jump the hoops of bureaucracy and contact the right people to get things done. A lot of the frustration I heard surrounded a perception that agency people are afraid of losing their jobs, are too quick to say "that can't be done," and lack the experience, time or energy necessary to shepherd a landowner through the program process.

When I asked landowners if they thought there were better ways of achieving conservation goals, most people stressed what they thought was important to continue or add to current efforts. They stressed the need to go back to early steps in the decision-making process or what adoption-diffusion theory labels *education* and *persuasion* (Rogers 1995:20). *Education* here does not mean telling

people that programs exist to provide government support for conservation practices, but to say what kind of support exists for locally relevant practices. Esseks and Kraft (1990) have argued that conservation program strategies should be redesigned to target a specific segment of the market, similar to commercial/industrial marketing. They add that landowners can be persuaded by direct agency contact in order to fill informational gaps with more precise, targeted details. Similarly, personal relationships are key to effective persuasion because they can communicate one-on-one about the details and applicability of a program.

To reiterate, national surveys conducted since conservation compliance and the CRP in 1985, have informed many of our assumptions about how landowners approach the conservation program participation decision. Some of the research has stressed structural changes that increase supports for agency staff and make conservation program participation more user-friendly and less risky for landowners. Many of the surveys have tested hypotheses regarding economic incentives, socio-demographic and farm structure characteristics and the traditional adoption-diffusion model. Results in general, support the claim that program participation predictions should situate landowners' knowledge in the context of the larger structural framework of conservation policy surrounding them. Landowners are more likely to participate when they have consistent and helpful relations with conservation agencies, are informed about conservation program eligibility and perceive benefits from the conservation program that outweigh perceived risks of participation.

While Congress and U.S. citizens are action oriented and have increased funds for the Conservation Title, they are currently restricting the social support necessary to make these programs more successful. More of the funding needs to go into the process of helping landowners, funding people that play a crucial role in the success or failure of any program. If increased support for people does not occur, more programs will go the way of Oregon's CREP, i.e., landowners will not participate because the sign-up costs are too great. The sign-up costs are not out-of-

pocket costs, but the sign-up costs are the time, knowledge and energy it takes landowners to participate and overcome personal fears.

I began my thesis by arguing that successful conservation programs depended not only on financial support, but also on knowledge of local landowners' world view. I found that conservation agencies have funds available and an understanding of local landowners' world view, but they lack the time to develop the personal rapport and technical skills needed to increase their effectiveness and help rural landowners negotiate the very socially complex process of securing project funding. As Swanson et al. (1986) and Bultena and Hoiberg (1986) suggested a generation ago, these structural problems are having a significant effect on participation in the southern Willamette Valley. While agencies generally know landowners' world view, opportunities exist for increased education on differing world views between urban and rural people. Due to misunderstandings between the two groups, rural landowners I heard from feel they are unfairly accountable for environmental degradation and at the mercy of an unknowledgeable voting majority and therefore, often do not even try to participate in public supported conservation programs.

CHAPTER 6: CONCLUSION

On the national level, landowners demand for EQIP and WRP has far outstripped federal funding in 2001. Yet locally, both EQIP and CREP have had a rough time gaining momentum. Landowners were unaware of their eligibility and once they saw a need for and personal benefit from participation, many landowners required additional assurances from a trusted neighbor or agency representative to feel secure about the “costs” of participation.

LIMITATIONS AND FUTURE RESEARCH

The goal of this study was to learn about the world view of farmers in the southern Willamette Valley in order to better understand their decision making process regarding conservation program participation. Through purposive sampling I targeted conventional farmers without a strong recent history of participation with government and conservation programs. An alternative viewpoint, for example that of organic farmers or growers seeking “salmon-safe” certification, is missing from my research. Future research might compare the results of a more randomized system of sampling that could make use of conservation agency lists of not just participating landowners but all eligible landowners. Also, I recorded a lot of people’s attitudes, or ‘what they say’, but less of their behaviors, or ‘what they do’. Analysis of landowners’ current conservation practices could add an enlightening component to the understanding of landowners’ world views and any cognitive dissonance between what they say they do, what they say they should do and what they really do.

Future research might also shift the focus to non-agricultural rural residential landowners. I focused on large, agricultural landowners because I understood that they were the target of struggling programs, like CREP, as well as a group that regionally has not participated. In contrast to commercial producers, a

rural residential focus would differ in the size of conservation projects, both acreage and funding, and the dependence of landowner livelihood on land base. While one may argue that rural residential and rural agriculture share a world view that affects program participation, contract and outreach details would vary for each group. For example, effective targeting of rural residential landowners would require numerous, contiguous, smaller projects instead of single, large landholders.

During the winter months, agricultural landowners are more available and more meetings occur within the farming community. Thus, I would recommend that future research with that community be conducted during the winter months.

My research is basically a snap-shot of farmers' interaction with government run conservation programs in the southern Willamette Valley in 2002. This has two implications for future study. One, further research could be conducted to learn more about the creation and modification of landowners' world views. I examined existing world views and policy, without delving into why that world view exists and what might be done to alter it. Two, by the time my research was done, another Farm Bill had been passed with new programs that implement some of the suggestions I propose here, (e.g., recognition of existing conservation practices of farmers and increased cost-share allotments for individual contracts). Future research could investigate the effectiveness of new outreach efforts and new programs. Examples include outreach to grass seed farmers, increased spending limits for individual contracts, government employment of third party contractors and the ability of the new CSP initiative (which pays farmers for their current conservation practices) to serve as a segue to more intense participation (e.g., easement enrollments).

Conclusions drawn from my research will be mailed to relevant agencies and all interviewees in the form of a handout. The goal of communicating my findings is to 1) contribute to bridging the gap between landowners' personal goals or rights and their public responsibilities and 2) support agency efforts to increase program participation of targeted landowners through avenues that increase

landowners' understanding of—and comfort level with—the complex bureaucratic process of participation.

SUMMARY OF APPROACH AND FINDINGS

The purpose of this study was to 1) explore farmers' perceptions of conservation programs and 2) better understand the influences on farmers' decisions to participate in such conservation programs. A majority of past research on rural landowners' conservation participation has been based on rational, positivist assumptions that underlie most economic arguments and historically, much of adoption-diffusion theory. While economic correlations are tenuous, the adoption-diffusion model has been a useful predictor of landowner participation, and I decided to build on that model, but complement it with a better understanding of the influence of farmers' world view on program participation.

Farmers' perceptions of conservation programs were filtered through a world view that sees natural resource management from a conservationist vantage point and judges conservation programs accordingly. Their participation in conservation programs was also influenced by an urban-rural divide. Policy was seen to be a product of the growing power of the urban environmentalist agenda.

I also found that landowners' lacked an understanding of the conservation programs available in their area, program goals and eligibility requirements. They thought government conservation programs were needed, but were more applicable in other areas. Most farmers believed that programs needed to be modified to fit the landscape and the landowners in the southern Willamette Valley.

Efforts to increase landowner participation in conservation programs do not necessarily entail increased economic incentives. Farmers in the southern Willamette Valley needed to know about their eligibility for particular programs and the existence of similar projects in the area. They gained comfort from knowing neighbors have safely participated with the government and seeing how the programs can be implemented without mandates that instigate resistance.

Landowner participation depends on strong personal relationships with neighbors or agency representatives who have the social skills and technical knowledge to successfully appeal to farmers' world view. Trusted individuals can provide the necessary assurances and simplify the complex procedure of program participation.

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APPENDIX

APPENDIX A: LANDOWNER QUESTIONNAIRE

Background: Land Management

- Would you draw me a map of your land, including land use patterns?
- Have you made changes on your land/in your management practices?
- What motivated you to make the changes?
- Where do you learn about new practices/techniques?
- What are some of the major issues you are dealing with now as a landowner (lo)?
- Do other los have similar issues?
- What kind of priority do you think CPs are for los?

CP Awareness

- What conservation programs are you aware of?
- How did you learn about those programs? (neighbor, agent, web, flyer, etc)?
- What do the words "conservation program" in the context of government programs, make you think of? What do you think fellow los would say to the same question?

CP Participation

- Are you signed up with any conservation programs or have you ever been?
If no: Have you ever thought about participating in any government run CPs?
What would need to change for you to participate in CPs?
- What made you decide (or not) to sign up with CPs?
What factors did you weigh in making your decision?
What do you see as the benefits/drawbacks of CP?
What has been your experience with CP implementation process?
Is CP working for you so far? Why/why not?
Would you recommend the program to other los?
How do your neighbors perceive your participation in the program?
- What kind of los do you see generally participating in CPs?

Need for CPs

- Do you think there is a need for conservation programs in this region?

CP Effectiveness/Success

- Do you think government run conservation programs are a good idea in general?
- Do you think the programs are effective in achieving their goals?
- What would make them (more) successful, in your opinion?
- Do you think habitat restoration or water quality/erosion control could be achieved in a better way?

Agency Relations

- What kinds of questions would you want to ask agency personnel or other los about CP?

Referrals

- Would you be able to recommend other people to talk to (los, agency folks, others) about their perceptions of CPs?
- Is there anything else you think I should know about CP at this point that would give me a better insight into how it's working or not working for people?