

**PROJECT NUMBER:** W192

**TITLE:** Rural Communities and Public Lands in the West: Impacts and Alternatives

**DURATION:**

October 1, 2001 through September 30, 2006

**STATEMENT OF THE ISSUES AND JUSTIFICATION:**

In the West, the management of public lands deeply divides rural communities affected by land management policies. Local people are in conflict over the general directions and specific actions of public lands policy. In addition, urban dwellers throughout the West and the nation have an increasing influence in the management of public lands for their benefit and enjoyment.

As the philosophy of public land management has shifted to ecosystem management, the proposed mix of uses for these lands has shifted as well. Traditionally, resource uses such as mining, timber, grazing and recreation were to be considered under a multiple-use paradigm. The domination of the mining, timber, and grazing interest groups over the outcomes of public lands policies is currently being challenged by many constituencies, at the local, state, and national levels. These constituencies are demanding different land management approaches that place more emphasis on the recreation, wildlife, and ecological values they feel have been neglected in the past.

Changing land management alternatives means changing the allocation of economic resources regionally and locally, and the alteration of the social and cultural importance of public lands to local communities. The redirection of resources away from traditional uses has been most controversial. The question of direct and indirect economic impacts to resource users, households, employment and earnings in rural communities, and state and local governments remains of key concern, especially to the citizens of rural communities in public land states.

Public lands are of vital importance in understanding the functioning of Western rural communities. Social values and the very fabric of these communities are changing as the direction of public lands management changes. This transformation is augmented by rapid growth in many areas of the intermountain West. Questions of direct and indirect social impacts to resource users, households, employers, local governments, and others remain of key concern to local, state, and national policy makers.

This proposal seeks to provide scholarship-based analysis of public land use alternatives with a focus on local social and economic impacts. Many studies have examined impacts on Western communities. However, much of this research treats society as exogenous to the economy, or vice versa. Plainly, this dichotomy obscures the linkages between economic activity and social life, diminishes their simultaneity and leads to an underestimation of their reaction to policy changes. This proposal attempts to bridge the gap by providing social and economic impact assessments.

Local impacts are to be evaluated comprehensively including those related to community issues, natural resource-based industries, and environmental concerns. More specifically, a methodology is proposed that will gather firm-level economic, and community-level social data

as a basis for evaluating the social and economic impacts of changing public land management policies across the West.

The furor over recent proposed legislation, including the renewal of the Endangered Species Act (ESA), Rangeland Reform '94, the Public Rangeland Management Act of 1996, roadless areas, the 1872 Mining Law and other local, regional and national policy initiatives indicates that the management of public lands will continue to be controversial. The citizens of western rural communities, congressional representatives and policy makers have asked Western Land Grant universities to provide information about the potential impacts of these proposed policy changes. The response of the universities is hampered by limited case studies for selected areas. The general economic models needed to evaluate these policy changes have not been developed. While the tools for such evaluations, including ranch budgeting, linear programming, and regional input-output models, no one state has the budget, personnel and expertise to consider all parts of the analysis and to accomplish the analysis for the diverse ranching areas found in the western states.

Social values are also a consideration because there is a strong linkage between economic activity and the social structure of a community. Social processes in rural communities affect and help define the range and nature of economic activities. Economic activity is "embedded" in a complex arrangement of social networks, personal ties, and community contexts. The extent to which social values and structure will change as land use policies change is unknown.

Empirical tools are available for social and economic impact assessment. Conceptually, combining the tools of economics with those of sociology and related disciplines provides policy makers information from which to make decisions. In addition, building these tools so that information from the local level is fully incorporated at higher levels of aggregation is vital.

This research will not solve the public land management dilemma. Rather, it will provide scholarly research, extension and educational programs that will improve the knowledge base upon which public land management decisions are made. The potential impacts of alternative management options will be evaluated and educational programs provided to inform policy makers and the general public about the potential impacts to rural communities and regional economies. Consistent economic models will be developed for various western states so that future requests for impact assessment and input can be accomplished in a timely manner.

## **RELATED CURRENT AND PREVIOUS WORK:**

Western Regional Research Project W192 has been productive over the course of the past 5 years. Researchers involved in the project have cooperated in the development of a livestock budget generation program and the development of dynamic programming models for use in the estimation of ranch-level impacts of policy changes. These models are currently being tested in Idaho, Oregon, Nevada, Utah, Colorado and New Mexico (Rimbey, et al. 2001; Rowe 2000; Rowe and Bartlett 2001). Development of budgets is currently underway in Wyoming. Through the budget development and ranch-level modeling process, information has also been gathered to construct the agricultural sectors of regional Input-Output models. Livestock budget information, secondary data sources and local interviews have formed the basis for the modifications needed in IMPLAN models to fit local situations (Darden, et al. 2001; Holland and Pirinque 2000). Regional models have been developed and used by policy makers in Idaho and Nevada (Rimbey et al 1999a; Seung et al. 1999) to deal with local and regional land use policy issues. Development of county models is currently underway in New Mexico, Oregon,

Colorado, Utah and Wyoming. A social assessment has been completed in Idaho (Harp, et al. 2001).

These efforts have been enhanced by the ability to share personnel and other resources across state lines. For example Idaho, Oregon and New Mexico have used the expertise of Nevada researchers to assist in the development of regional models. Researchers from Idaho, New Mexico, Oregon, Colorado and Utah have lead the development of the ranch models that will be applied in other states. Resources needed to assess the sociological situation in the respective counties are being provided by Idaho, Wyoming and Colorado. Idaho and Nevada researchers jointly collected ranch budgets in those states. Nevada personnel assisted in the collection of Oregon livestock budget data. Social assessments in Idaho were cooperatively undertaken by Idaho and Wyoming researchers. None of the cooperating states has the personnel to address the different facets of this project in their respective states and sharing expertise is thus imperative.

The sharing of resources could not have been undertaken without the financial resources provided through a Fund for Rural America grant, administered by New Mexico State University. This grant allowed for the development of the Windows-based livestock budget generator (Rimbey, et al. 1999b), a survey to determine the goals and objectives of public land grazing permittees (Gentner 1999; Tanaka and Gentner 2001), the use of scenario analysis with a panel of experts to narrow the focus of future public land policy alternatives (VanTassell, et al. 2001), along with resources to start the case studies in each of the participating states. Multi-state collaboration has also taken place on projects dealing with issues ranging from public land grazing fees (Torell, et al. 2001) to charging fair market value for public land use (Godfrey 2001). This level of cooperative projects would not have been possible without the participation in a regional research project (W192) and a regional research coordinating committee (WCC-55).

A major procedural objective of the original W192 project involved the establishment of a Center that could address public land policy issues in the western states. This objective was achieved in 2000 with the establishment of the Policy Analysis Center for Western Public Lands (PACWPL), through funding provided by western deans and directors that is channeled through the University of Idaho. The funding provides a mechanism for the Center to operate for a trial period of three years. A governing board has been recruited and several meetings have been held. Operating procedures are in place and a director has been hired. Members of W192 serve as a technical committee to the Center. The initial project of the Center involves assessing the potential ecological, economic and social impacts of using Pinon and Juniper as a fuel source in generating energy. A project team has been recruited and is working on this issue. A Center white paper is expected shortly from the team.

Review of the CRIS database shows 7 current Agricultural Experiment Station research projects that are tied to the original W192 project. Current project research areas include the economics and profitability of rangeland use and policy analysis (Bartlett, et al. Colorado COLO0209<sup>1</sup>; Torell, New Mexico NM-1-5-27193; VanTassell and Rimbey, Idaho IDA01208; Godfrey, Utah UTA00007;) and the social and economic impacts of natural resource use to rural communities (Bartlett, et al. Colorado COLO0209; Harris, Nevada NEV05149; Holland Washington WNP00227). These projects deal with specific objectives of the original W192 project. The case studies being undertaken under the Fund for Rural America grant are attempts

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<sup>1</sup>/CRIS accession number for the project.

in 7 of the western states to use common methodologies and modeling approaches at the firm and regional levels and to develop social assessments of public land policy alternatives.

Studies are being conducted in seven states in the West: Colorado, Idaho, New Mexico, Nevada, Oregon, Utah, and Wyoming. These states were selected based on the interest and potential contributions that could be made by AES researchers and Extension specialists and the importance of public lands to these states. These efforts include case studies of selected communities in each state, social assessments and the construction of economic models for these communities, states and selected regions.

### **OBJECTIVES:**

1. Continue to develop and refine economic models and methodologies in Western States to analyze public land issues.
2. Assess the social impacts of public land policies on selected communities and households in western states.
3. Identify the constraints to policy alternatives mandated under existing and proposed federal legislation and policy.
4. Continue to support the Policy Analysis Center for Western Public Lands through membership on the Technical Committee and Project Teams, as requested.

### **METHODS (PROCEDURES):**

#### **Objective 1:**

Efforts will continue to develop representative ranch budgets and ranch-level economic models in the participating states. Models developed in Idaho, Oregon, Colorado and New Mexico will be used as the basis for those to be developed in the other states. Additional funding will be pursued to expand the case studies to additional counties, as specified in the original Fund for Rural America Project. This will allow project staff to test the economic models in different ranching areas, facing different policy issues and resource constraints. Regional I-O models that are functional in Idaho and Nevada will be updated using secondary data sources and local contacts. Regional models will be constructed and tested in the case study areas of Oregon, Colorado, Wyoming, Utah and New Mexico. Additional research will be done on the profit motive issue raised by Torell et al. (2001). Ranch sale data will be collected from ranch appraisers. Hedonic ranch value models will be developed for selected states. The goal of this effort will be to attempt to quantify non-livestock factors that influence the market values of western ranches.

#### **Objective 2:**

The application of a social organization model will be expanded beyond Idaho and Wyoming (Harp and Rimbey 1999; Harp, Rimbey and Darden, 2001; Harp, et al. 2000; Thompson, et al. 2001; Harp, Thompson and Krannich 1998). This effort will include community social organization research in pilot project communities. The recruitment of additional sociologists is paramount for this effort to continue and to expand. This objective

requires the application of two methods. First, face-to-face interviews with key informants in the pilot communities will be conducted. These are the foundation for understanding how these communities work and how public land policy will affect social relations. The second method is the implementation of community surveys. These surveys yield results allowing comparison between communities (see Harp, Rimbey, Darden 2001). This will involve the identification of the appropriate samples and the hiring of survey unit(s) across the region.

**Objective 3:**

Legal and policy constraints facing western communities, resource users and others will be identified through a review of existing legislation and federal policies. A paper summarizing this effort will be prepared during the first year of the project, with presentations made at the initial meeting of the project. This will insure that economic models and social assessments developed in the first 2 objectives adequately address the legal requirements and policy constraints facing communities and users of western public lands.

**Objective 4:**

The Policy Analysis Center for Western Public Lands is organized around a Technical Committee that oversees project-specific Project Teams. The Center was created under the aegis of W192, and members of W192 constitute all the social scientists on the Technical Committee. The work of W192 continues to be essential to the long-term research underpinnings of the Center.

The Center will provide an organizational structure for W192 efforts. Project teams will assist Cooperative Extension personnel in educating the public about how public lands affect rural communities. Specified audiences will be supplied with readily accessible educational materials outlining how rural communities function with respect to public lands. The computer-based economic models will be combined with a set of educational aids to develop an educational package for use throughout the West.

In addition to traditional bulletins, workbooks, and workshops, informational databases will be created as interactive learning tools for community members, policy makers, land managers, and others. These allow audiences to examine scenarios from other communities concerning potential ecological, economic and social impacts of proposed public land management policies. Much of this material will be made available through the PACWPL website (<http://agecon.nmsu.edu/center/Index.htm>), white papers and other output from the center.

**MEASUREMENTS OF PROGRESS AND RESULTS:**

This regional project will produce the following:

1. A regional committee of policy analysts to examine specific policy issues by applying the best research currently available. This committee can provide timely analysis of current public lands policy issues. Ties with the Policy Analysis Center for Western Public Lands will be maintained for technical support, project teams and long-term research efforts on public land policy.
2. A set of standardized social and economic impact assessment tools for evaluating the impacts of public land management policies on rural communities in the West will be tested. These tools will be standardized across states, and can provide a blueprint for further expansion of study areas. In addition, these tools will allow impact assessments to

be carried out from the regional level down to the local level. Study areas may be expanded, subject to the availability of external funds.

3. The success of this regional project will be evaluated by the capability of the models developed to assist public officials and policy makers in evaluating the social and economic impacts of proposed public land management alternatives on communities, states, and the region. In addition to developing an input-output model for participating states, each participating state will be assisted in developing a minimum of two community social assessments and county models for each of those communities.
4. A publication will be developed concerning the legal and policy constraints mandated under existing and proposed public land legislation and policy. This will assure that on-going economic modeling and social assessments address these issues.

**PARTIPATION (RESOURCES) REPORT:**

Rural Communities and Public Lands in the West: Impacts and Alternatives

<u>LOCATION</u>	<u>PRINCIPAL OR CO-INVESTIGATORS</u>	<u>COOPERATORS</u>	<u>AREA OF SPECIALIZATION</u>
<b>A. EXPERIMENT STATIONS</b>			
Alaska	Harry Bader		Legal/Policy
Colorado	E. Tom Bartlett		Ranch Economics
	Lou Swanson		Rural Sociology
Idaho	Larry VanTassell		Ranch Economics
	Neil Rimbey		Ranch Economics/Extension
Nevada	Tom Harris		Regional Economics
	Tim Darden		Ranch/Regional Economics/Extension
New Mexico	L. Allen Torell		Ranch Economics/Extension
Oregon	John Tanaka		Ranch Economics
Utah	E. Bruce Godfrey		Ranch Economics/Extension
Washington	Dave Holland		Regional Economics
Wyoming	Tex Taylor		Regional Economics

**OTHER PARTICIPANTS**

Policy Analysis Center for Western Public Lands

Aaron Harp Rural Sociology

Land Management Agencies

Selected individuals in federal land management and service agencies including BLM, USFS and the National Resource Conservation Service (NRCS) have been notified about the research

project and have expressed an interest in participating. Agencies will be encouraged to have individuals attend annual meetings and provide input to the research effort. The following individuals have been identified as potential project participants.

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Colorado	Mike Retzlaff, USFS	Economist
Idaho	John Martin, BLM	Economist
Nevada	Paul Myers, BLM	Economist
New Mexico	Bob Alexander, BLM	Economist
	Buddy Stuart, USFS	Economist
	George Chavez, NRCS	Economist
Oregon/ Washington	Tom Quigley, USFS	Economist
Utah	John Pederson, USFS	Economist
Washington	Roger N. Clark, USFS	Sociologist
Wyoming	Roy Allen, BLM	Economist
	John Young, BLM	Economist

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## APPENDIX E

### Format for Reporting Projected Participation

For each participant in this activity, include his/her name and e-mail address, employing institution/agency, and department; plus, as applicable:

- For research commitment, indicate the CRIS classifications [Research Problem Area(s) (RPA), Subject(s) of Investigation (SOI), and Field(s) of Science (FOS)], and estimates of time commitment by Scientists Years (SY) (not less than 0.1 SY), Professional Years (PY), and Technical Years (TY) [see Appendix O for CRIS RESEARCH PROBLEM AREA (RPA) CLASSIFICATION];
- For extension commitment, indicate FTE and one or more of the seven extension programs listed at <http://www.reeusda.gov/1700/programs/baseprog.htm> or <http://www.cesprograms.org/plc/BasePgm/Basepgm.htm>; and,
- Objective(s) under which the participant will conduct his/her studies.

**Project or Activity Designation and Number (if applicable):** W-192

**Project or Activity Title:** Rural Communities and Public Lands in the West: Impacts and Alternatives

**Administrative Advisor:** Dr. Donald L. Snyder

Participant Name and E-mail address	Institution and Department	Research						Extension		Objectives				
		CRIS Codes			Personnel			FTE	Program	1	2	3	4	5
		RPA	SOI	FOS	SY	PY	TY							
John A. Tanaka, <a href="mailto:John.Tanaka@orst.edu">John.Tanaka@orst.edu</a>	Oregon State University	605	6050	3010	.25	0.0	0.0			x			x	
David L. Rogers, <a href="mailto:daver@ext.usu.edu">daver@ext.usu.edu</a>	Utah State University	605	6050	3010				.2		x	x	x	x	
Harry R. Bader, <a href="mailto:ffhrb@uaf.edu">ffhrb@uaf.edu</a>	University of Alaska, Fairbanks	610 610	0799 0899	3050 3050	.1 .1	0 0	0 0				x x	x x		
Neil R. Rimbey, <a href="mailto:nrimbey@uidaho.edu">nrimbey@uidaho.edu</a>	University of Idaho	605	6050	3010	.1	0	0			x			x	



Larry W. Van Tassell, <a href="mailto:larryv@uidaho.edu">larryv@uidaho.edu</a>	University of Idaho	605	6050	3010	.05	0	0			x				
J.D. Wulfhorst, <a href="mailto:jd@uidaho.edu">jd@uidaho.edu</a>	University of Idaho	605	6050	3010	.05	0	0			x				
E. Bruce Godfrey, <a href="mailto:bruceg@ext.usu.edu">bruceg@ext.usu.edu</a>	Utah State University	605	6050	3010	.15	0	0			x	x	x	x	
Allen Torell, <a href="mailto:atorell@nmsu.edu">atorell@nmsu.edu</a>	New Mexico State University	605	6050	3010	.1	0	0			x			x	
Tim D. Darden, <a href="mailto:tdarden@cabnr.unr.edu">tdarden@cabnr.unr.edu</a>	University of Nevada, Reno	605	6050	3010	.1	0	0			x		x	x	
Thomas R. Harris, <a href="mailto:tharriscabnr.unr.edu">tharriscabnr.unr.edu</a>	University of Nevada, Reno	605	6050	3010	.1	0	0			x		x	x	
<b>Total SY, PY, TY and FTE</b>					1.1	0	0	.25						

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Director, Agricultural Experiment Station/Cooperative Extension/Academic Programs/Agency      Date

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Administrative Advisor      Date

## OUTREACH PLAN

A technical publication will be produced as a reference manual to the models for use by research and extension professionals throughout the region. Popular publications and teaching aids will be developed for public use. These materials will include a description of the importance of public lands to social change, economic growth, economic and social diversity, and economic dependency for each state. In addition, a publication will be developed concerning the legal and policy constraints mandated under existing and proposed public land legislation and policy. This will assure that on-going economic modeling and social assessments address these issues.

## ORGANIZATION:

The objectives of the research project can be broadly classified as 1) social impact assessment, 2) ranch impact assessment, 3) regional impact assessment and 4) legal constraints. Three subcommittees will be grouped based upon the first 3, with legal expertise being represented in each subcommittee. These subcommittees will develop work assignments, focus the research efforts and pursue external funding.

The need for more involvement by rural sociologists has been recognized and additional people have been contacted and expressed an interest in joining the project. Some do not have an Agricultural Experiment Station appointment and could not participate unless the project is well funded. Similarly, several additional agricultural economists have expressed an interest in joining the project. These include George Goldman at University of California, Berkley and Bruce Beatie, Arizona State University. Several range ecologists have also expressed an interest in the project and have cooperated with W192 in the formation of PACWPL. Those directly involved have included Kirk McDaniel at New Mexico State University and Carl Wambolt at Montana State University. Others have expressed interest in the project and PACWPL.

## AUTHORIZATION:

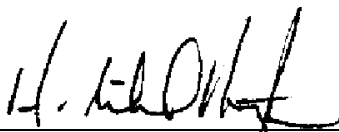
Regional Project Title: Rural Communities and Public Lands in the West: Impacts and Alternatives



Administrative Advisor

July 26, 2001

Date



Executive Director, WAAESD

August 8, 2001

Date

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Administrator  
Cooperative State Research Service

\_\_\_\_\_  
Date

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