ECOSYSTEM WORKFORCE

BRIEFING PAPERS

The Role of Community-Based Workforce Assessment in Ecosystem Management

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The *Ecosystem Workforce Program Briefing Papers* series offers short papers designed to give a clear, brief, easy-to-digest introduction to key issues, innovation, lessons and findings about a variety of areas associated with the effort to build quality jobs in ecosystem management. The target audience includes public land management agency line officers and project managers, community organization leaders, and local community officials. A secondary audience is the broader community forestry constituency.

The Role of Community-based Workforce Assessment in Ecosystem Management, EWP Briefing Paper Number 1, presents case studies of three community assessment projects and a summary review designed to provide an understanding of the process, benefits and challenges in such assessments, and presents conclusions about conducting a successful assessment.

ECOSYSTEM WORKFORCE PROGRAM

BUILDING A SUSTAINABLE, HIGH-SKILL/HIGH-WAGE ECOSYSTEM MANAGEMENT INDUSTRY

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The Role of Community-based Workforce Assessment in Ecosystem Management EWP Briefing Paper, Number 1 Fall 2000

Rural communities in the Pacific Northwest, struggling to cope with declining resource-based employment, are turning attention to jobs in forest rehabilitation. Concurrently, federal land management agencies have been directed to support rural economic development (Farm Bill, annual programs of work, and the Community-based Approach to Watershed Restoration Memorandum of Understanding with the Governor of Oregon). Many communities, as a result, are seeking to build an ecosystem workforce, a system of workers and contractors, providing opportunities to strengthen the socioeconomic fabric of their community.

Several communities have conducted socioeconomic assessments to better understand their local situation and how it is changing. Their objective was to determine the potential local worker and contractor base, and/or the potential work for ecosystem restoration and management activities. Federal agency activities have been one focus of these assessments because they are a major local landowner.

This paper reviews three community-based assessments. The main conclusion is that community-based assessments can provide useful information to help communities and their partners understand the issues and local conditions of ecosystem management work availability and employment. The assessment process also helps to bring leaders from different components of the community together. Adequate planning and testing of the proposed assessment process is strongly recommended.

Case Study 1

A COMMUNITY-BASED ASSESSMENT OF THE DEVELOPING ECOSYSTEM MANAGEMENT INDUSTRY IN COOS AND CURRY COUNTIES, OREGON, July 1999, by Naida Hedgepeth, Labor Economic Action Project and Charles Spencer, University of Oregon.

<u>Purpose</u> - This assessment was conducted as a one-time activity, primarily to help watershed councils, resource managers and community economic development practitioners in the Coos and Coquille watersheds determine if and how a high-skill, multi-disciplinary contractor and worker base could be developed for sustainable resource management activities.

A secondary objective was to raise awareness of the opportunities and challenges for workers, contractors and resource managers.

<u>Collaboration</u> - The Labor Economic Action Project (LEAP), a community-based partnership in Coos County, Oregon, conducted the assessment in cooperation with Organization for Economic Initiatives, Inc. and the University of Oregon. The Oregon Economic Development Department provided funding.

LEAP organized a 13 person Advisory Board, with representatives from the forest industry, watershed councils, federal land management agencies, service contractors, the workforce, community college education and training, forestry and watershed extension education, and community and economic development organizations.

<u>Methods</u> - The assessment utilized a combination of existing data and personal surveys. The proposed geographic base was Coos and Curry Counties, although the location of existing contractors and the source of ecosystem work did not overlap well. The Advisory Board provided advice and counsel to the project, specifically in identifying information sources and contacts, identifying and validating the survey approach and questions, and identifying survey respondents.

A list of work type categories for ecosystem management work was developed for common reference because existing industry codes and categories were either inadequate or confusing. OEDD employment trend data was accessed to provide a comparison for the survey results.

Industry contacts were recommended by the Advisory Board. Contractor contacts were developed from the State of Oregon's list of licensed Oregon contractors, the Government Contract Acquisition Program, and Advisory Board members who contracted out work.

Separate questionnaires were developed for each survey component – resource managers, contractors, and workers. These surveys were first tested, using one-on-one interviews, with a sample of the potential respondents. Feedback from the Advisory Board and the test process was used to revise and refine the survey questions. Anonymity for the respondents and presenting data only in the aggregate, protecting individual responses, was important to maintain trust and credibility in the process and results. The final survey was conducted by trained volunteers meeting with individuals directly in an interview mode or by telephone to explain and administer the survey. Special efforts were made to interview all worker respondents in person, to assure complete understanding of the questions and responses.

Assessment Findings topics are Land Management, The Contractor Experience, and The Worker Experience.

<u>Findings</u> – Even though there was ongoing interaction with the Advisory Board and survey respondents, and direct contact when presenting the surveys, it was difficult to get complete responses and/or answers to all of the questions. The variety of reasons why included concern about how the information would be used by the public, concern about sharing information that may affect competition, lack of time devoted to the survey (perception of importance), worker apprehension, and because many questions were not understood, or ignored. Because of this the assessment results were not used for quantitative analysis.

Many land manager and contractor respondents actually completed the survey on their own, rather than at the contact meeting. Almost all of the 10 major forest land managers responded to most of the questions, but found it difficult to make quantity of work projections for future years. Of the 32 contractors initially identified, 17 were successfully contacted, and 5 agreed to take the survey. The contractors' responses provided little useful information about quantity of demand and quality of available jobs. The information from the 12 workers surveyed was more consistent and complete because of the direct involvement of peer advisors when administering the survey.

Benefits of conducting this assessment included increased awareness by contractors of the trained ecosystem management workforce, and an increased understanding of the cost of doing ecosystem work. Probably the greatest benefits were the relationships developed among advisory board

members, which were key to establishing understanding and trust for the process, thus increasing support and participation.

Case Study 2

COMMUNITY-BASED SOCIOECONOMIC ASSESSMENT AND MONITORING OF ACTIVITIES RELATED TO NATIONAL FOREST MANAGEMENT, by Cecilia Danks and Lynn Jungwirth, Revised July 1998 and Charts Updated August 1999, A Working Paper of the Watershed Research and Training Center, Hayfork, California.

<u>Purpose</u> - The reduction in federal timber harvest in Trinity County led the Watershed Research and Training Center to develop a picture of the current socioeconomic conditions and the effects of National Forest activities. They wanted to know about conditions in the recent past (assessment) and the local effects of forest management activities (monitoring). The objective was to develop information to share with agencies and officials capable of providing assistance. They believed this information could be used by the USFS to assess their progress in meeting agency socioeconomic goals, and by the USFS and contractors to help make decisions about structuring work.

This project was a comprehensive and ongoing effort, first collecting a wide variety of socioeconomic information and then focusing on key socioeconomic indicators and National Forest management activities. The socioeconomic assessment was begun in 1994 and updated annually. Monitoring local economic effects of Trinity National Forest ecosystem management work was conducted for the sixyear time period 1991-1996.

<u>Collaboration</u> - The Watershed Research and Training Center led the assessment process, working in cooperation with other local organizations, government agencies and the University of California. The Center also led the monitoring process with funding from the USFS Pacific Southwest Research Station and help from USFS personnel and the University of California.

Methods - Assessment – The assessment focused on quantitative data from government sources, e.g. the 1990 Census, because it was available for the county and local communities, and was understood and accepted by agency and community members. Other sources included State and County governments and school districts. Results are presented as Key Findings, Insights, and Benefits. Data collected included social indicators, timber harvest, the labor force, contract bid sheets, and grants and loans. While the assessment strove to use community-level data, there was little available on an annual basis. County level data was deemed appropriate in this case because there is little economic diversity throughout Trinity County. National Forest Management is the dominant economic activity, there are no urban centers, and many services are countywide.

<u>Methods</u> - Monitoring – Monitoring data came primarily from USFS records and interviews with 15 USFS personnel and 21 contractors and timber sale purchasers. Data included information about USFS timber sale value, volumes, and purchaser location, and service contract value and contractor location.

Findings - Assessment -

Quantitative data for this assessment were collected from local, state, and federal sources. But finding accurate data for small forest communities was, and remains, a tremendous challenge. Conclusions about small communities cannot be drawn accurately from aggregate data describing larger areas, even aggregate county level data. Comparable data (consistent categories and measurement), gathered annually at the local level (thus allowing researchers to infer trends and patterns) are rarely available. Changes occurring over time at the community level are hard to determine from federal data sources due to collection intervals (e.g. U.S. Census every ten years). Tracking these changes requires reliance on local data sources (e.g. school districts). Thus, the study noted, quantitative data was not necessarily more useful than the qualitative assessments.

Some real benefits were realized by the assessment activity. The information has been used to describe Trinity County issues and conditions to outside agencies and policymakers and to help local residents understand more about conditions in their communities and the relationship to forest management activities. Capacity has been developed within the county to collect, enter and interpret data. The Watershed Center now has a substantial data library and the expertise to use and understand it. Data sets and graphs are in a loose-leaf binder, and are also suitable for presentations. The county, USFS, school district, and economic revitalization groups have used this information and several groups within the county are now collecting and using similar data for their own purposes.

<u>Findings</u> - Monitoring - Forest Service contracting records alone could not provide complete answers to some key questions, such as why most of those obtaining contracts were located outside Trinity County. Interviews are an essential adjunct to understanding the patterns observed in government records. Graphs and maps of the findings were used to help contract officers and other decision-makers understand the affects of their actions on workers and the local economy, and helped establish a shared information base. The researchers concluded that further work is needed to incorporate the concerns of agency personnel in future studies. This study pointed to the need to develop criteria other than timber harvest to identify benefits to local economies of forest management activities.

Benefits of the monitoring activity include increased knowledge by USFS personnel and local contractors of current situations and trends regarding ecosystem management work. This has helped to jointly identify problems and solutions in shifting work from timber harvest to ecosystem management. The information offers the USFS new criteria to determine if it is meeting agency goals for local community assistance. Findings of the monitoring project helped shape local stewardship contracting efforts.

Case Study 3

ECOSYSTEM WORKFORCE ASSESSMENT – DETERMINING TRENDS IN ECOSYSTEM WORK 1996-2006, Final Report by the Rogue Institute for Ecology and Economy – August, 1998

<u>Purpose</u> – The purpose of this study was to document changes in the natural resource management industry. The objective was to determine the future demand for high-skilled workers in projected ecosystem management activities in the Applegate Adaptive Management Area in Southern Oregon. It

included estimating the amounts and types of work expected, and the skills required for competency in that work.

<u>Collaboration</u> - The assessment was proposed and conducted by the Rogue Institute for Ecology and Economy (RIEE). RIEE had developed extensive partnerships with government agencies and other local and regional entities; however, circumstances during the assessment process prevented the level of collaboration originally intended.

Methods - The assessment describes and comments on the effectiveness of twelve methodologies that were explored, developed, tested and utilized to varying extents to obtain information about the changing nature and quantities of ecosystem management work within the Applegate River watershed. The final approach was a combination of some of these methodologies, plus additional efforts. A background information letter was used, including a one-page survey for each work activity, an explanation of survey terms, and an example of a completed survey. Existing data from federal agencies, state agencies, and local community groups was also used, along with interviews with federal and state land management professionals, forest industry representatives, contractors, and local residents. Information from interviews and other data is presented in Sections titled Current Context and General Trend, Resource Base, Workforce, Funding, Project Process, Contract Structure & Arrangement of Work, Technology, Expected Changes, and Workforce Categories.

<u>Findings</u> - The project was more complex than expected because of the many management, economic, ecological, and social issues, and some difficulty developing relationships with agencies and contractors. Total funding was less than originally proposed and the two staff members most involved in developing the plan left the Institute in the early stages of the project. Some of the information collected turned out to be not useful because it was incomplete or not comparable to other information. As a result, the product was less than envisioned in the initial proposal.

Benefits of the assessment include the ability to understand the information currently available on ecosystem management work, the testing of methodologies for using that information as an indicator of future possibilities, and the development of tools for collecting and documenting information for ongoing analysis of ecosystem work. In fact, the assessment resulted in establishing an Industry Development Committee and provided useful methodology for the Coos and Curry Counties Assessment. Overall, the interviews and the federal agency survey yielded some of the most useful data, often leading to insider views of what is and isn't changing.

CONCLUSIONS

The case studies suggest that public natural resource managers and community partners can benefit from a community-based assessment planned and conducted through a collaborative process. It is relatively easy to decide to collect information and conduct a community-based assessment. It is much more difficult to determine what information will actually be useful and available, and to determine how to collect that information. Review of the three Case Studies points to several major conclusions about conducting a successful assessment.

• In order to change how work is organized and accomplished, and how workers are compensated, as in all things new and different, time must be spent up-front to provide

understanding of the proposed changes. An assessment is one way to initiate that understanding, and documented information, rather than relying on intuition, provides a more persuasive case.

- In addition to information about socioeconomic conditions, and available and potential work, a workforce assessment provides a vehicle for bringing various segments of a community together. The potential benefits of a collaborative process include enhanced understanding among participants, improved working relationships, and better information. The benefits of collaboration may be as important a reason to conduct an assessment as the hard data results.
- Although it takes time to develop successful relationships, the understanding obtained through collaboration generates trust and support throughout the process.
- There is no cookie-cutter, one-fits-all approach. A clearly thought-through purpose and plan of action is key. The assessment may be comprehensive, covering a range of socio-economic variables, or more narrowly focused, centering on ecosystem workforce questions. Time taken to determine what will be most helpful to the community is time well spent.
- While federal agency and forest industry activities were a major focus of the assessments, the source of work can be expanded to include state agencies, small woodlot owners, watershed councils, and farmers.
- Once the scope of the assessment has been determined, a plan matching the proposed process to the time, resources, and available finances is essential.

Following are some specific considerations that were proven beneficial in one or more of the Case Studies:

Planning

Keep it simple. Separate nice-to-have information from the essential core information that will actually be useful and collectible. Challenge again and again - what information will this approach really produce? – will the information be useful?

Some thought should be given to the shelf life of the assessment, and whether a single effort will meet the objectives, or a future re-assessment or monitoring of some aspects will be useful. Knowing this up-front may affect the assessment design.

Accept that it will be difficult to get accurate predictions of future federal work, because of the uncertainty of predicting policy and budgets very far into the future. Also, forest industry managers may be reluctant to provide information because of uncertainty about how the information may be used.

Accept that it will not be possible to get full compliance with survey instructions, or complete understanding of survey questions. It's human nature. Plan for it.

The assessment manager should have the knowledge, skills, and ability to interact with a very diverse group of participants.

Collaboration

An advisory board or partnership may be very effective in establishing a collaborative process, including increased understanding, and for making local contacts and identifying survey participants, especially resource managers.

Methods

As seen by the three cases, workforce assessments can be organized in a variety of forms.

Consistently, throughout all three assessments, community level data was the most current, the most reliable, and the most valuable.

Buy-in about the desired information/data and the collection process (interviews, surveys, existing records and reports) from the proposed participants increases the chances of a successful process.

Before starting the full-blown project, test the information collection process on a small sample to see if the results match expectations.

Public and/or informal meetings or personal interviews may be as productive as questionnaires and surveys.

Make sure existing data sets fit the work categories and geographical areas of interest, or that bridges can be made for reliable interpretations.

Using Standard Industry Classification (SIC) codes is troublesome. There is a mismatch between what exists on the ground and available data categorized by SIC codes, which do not fit well with ecosystem management activities.