

CONTENTS

Introduction	3
Monitoring basics	5
Modules	12
1. Employment results—procurement contracting	12
2. Employment results—government hiring	30
3. By-product utilization	34
4. Grants and other investments	48
5. Ecological effects	59
Acronyms	65
Glossary	65
Appendices	67
1. Defining local	67
2. Additional resources for procurement contracting monitoring	68
3. Additional resources for by-product utilization monitoring	80
4. Community-based monitoring resources	83
5. Proposed wildland fire performance measures	87

ILLUSTRATIONS

Suggested Measures	
1. Employment results—procurement contracting	13
2. Employment results—government hiring	30
3. By-product utilization	35
4. Grants and other investments	48
5. Ecological effects	59
Worksheets	
1. Questions for developing a monitoring program	10
2. Sample contractor survey	24
3. Sample worker survey	28
4. Sample survey of raw material purchasers	42
5. Sample survey of wood products businesses	44
6. Sample survey of grants and agreements recipients	56
Figures	
1. Adaptive management model of the Northwest Forest Plan	5
2. Types of monitoring	6
3. Selected Forest Service sale forms	37
4. Examples of value added wood products	38
5. Possible grant and agreement categorization	50

INTRODUCTION

Using this Guidebook

This guidebook offers suggestions about how to develop a multiparty monitoring program for:

- Employment results (quality jobs) of restoration and maintenance of public lands
- Utilization of by-products of ecosystem management
- Grants and other investments
- Ecological effects of fire restoration efforts

It is designed to help communities and their agency partners monitor activities related to ecosystem management and community forestry, especially implementation of the National Fire Plan. As such, it is primarily focused on public-lands issues, especially in the West. However, many of the indicators could be adapted to different contexts by using new data sources or modifying measures.

It provides examples of the types of questions a multiparty team may wish to ask when monitoring and how to go about answering them. The guide offers examples so that you can develop measures that respond to the needs, problems, and controversies in your area. We encourage you to select the ones that best fit your needs and develop additional measures to match your purposes.

Necessary Skills

We have sought to create a monitoring system that requires a minimum of data analysis skills; you do not need to have taken any statistics courses. But, monitoring requires time to gather data, analyze them, and write up results. And, you will need to be familiar with some data management computer program such as Excel and have access to the World Wide Web.

This guide presents methods of multi-party monitoring. Thus, it is a process of shared learning and discovery. To be successful, monitoring teams will likely need to build or enhance relationships with agency staff, key stakeholders, and others implementing restoration projects. By building trust early on, you will increase the effectiveness of your monitoring program and the chance that these key players will use your information to improve their future projects.

Organization of this Guidebook

The guidebook begins with a section on monitoring basics that provides preliminary information about monitoring and an exercise for groups to work through as they develop a monitoring plan. There is a worksheet that can be photocopied or adapted to meet your partnership's needs. The rest of the guidebook is broken into five major sections (modules) that focus on particular areas of monitoring—contracting, public employment, by-product utilization, grant programs, and ecological monitoring. In each module, there

are tables that list suggested indicators and why they might be monitored. These can be photocopied and handed out to help your partnership choose which indicators to monitor. The matrices are followed by instructions about where to get needed data and how to calculate results. This detailed information is designed for those who are going to collect and analyze the data. Finally, each section includes worksheets that are really sample survey forms you can use to gather information not available from other sources.

These worksheets and tables can be downloaded as separate documents from <http://ewp.uoregon.edu/guidebook> or <http://thewatershedcenter.org>. You can use these sheets as handouts during your meetings and modify them to fit your circumstances.

The Modules

The guidebook provides monitoring modules in five topic areas.

Employment results—contracting

This module suggests how to monitor federal procurement contracting for forest and watershed restoration and maintenance work. It describes ways to measure job quality, business health, and the types and amounts of contracts that federal land management agencies or other organizations are letting. The module suggests measures that involve compiling existing data or talking with contractors and workers.

Employment results—government hiring

This module provides measures to determine what kind of impact federal hiring has on your community.

By-product utilization

The by-product utilization module suggest ways to determine how much material removed from restoration projects is being used, how much is being used locally, and how much value is being added through local manufacturing. It also provides suggestions for determining the health of the businesses that are or could be using the by-products of restoration.

Grant and other investments

This module describes ways to track grant funds. It focuses particularly on Forest Service grants and agreements.

Ecological effects

The ecological module offers suggestions for program-level monitoring of the ecological effects of restoration, especially as it relates to fire-hazard reduction.

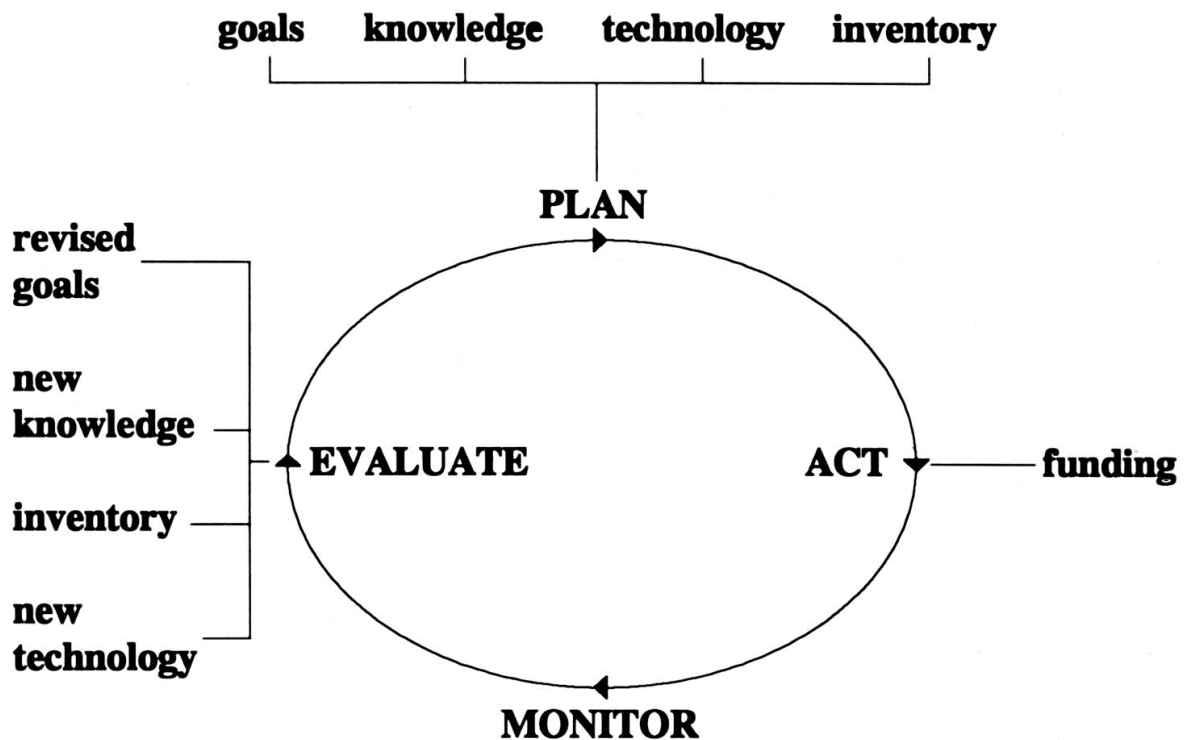
MONITORING BASICS

Monitoring activities related to ecosystem management and community forestry involves keeping track of the effects of these activities on local communities, organizations, businesses, and ecosystems. It also involves using this information to improve future ecosystem management and community-forestry projects and programs. Implemented effectively, monitoring can:

- Resolve controversy and disagreements
- Build trust
- Allow communities, agencies, and stakeholders to learn and adapt

As Fig. 1 shows, monitoring is a key part of the adaptive-management planning process. Experimentation and learning require understanding of the effects of actions taken.

FIGURE 1
Adaptive Management Model of the Northwest Forest Plan



Source: Forest Ecosystem Management Assessment Team, *Forest Ecosystem Management: An Ecological, Economic, and Social Assessment* (July 1993), figure VIII-5.

There are numerous types of monitoring and many different configurations of people who participate in monitoring (see Fig. 2).

FIGURE 2
Types, Scales, and Levels of Monitoring

Types

- Biophysical
- Economic
- Social/cultural
- Legal/administrative

Focus

- Input
- Output
- Outcome

Scales

- Project
- Program
- Community or county
- Region
- State/country

Focus

- Implementation
- Effectiveness
- Verification

Participation

- Single-party monitoring
 - Third-party monitoring
 - Multiparty monitoring
-

One can monitor any number of topics, including the biophysical, social, economic, or administrative consequences of activities. The modules in this guide focus primarily on socioeconomic monitoring and secondarily on biophysical monitoring. Biophysical monitoring might, for example, evaluate the soil compaction of a mechanical thinning operation. Counting the number of people working on a restoration project that received health insurance would be an example of socioeconomic monitoring.

One can also measure at different scales—the project, program (all the projects together), community, regional, or national levels. Project-level monitoring might involve counting the number of worker hours involved in implementing a single contract. One could also collect the total number of worker hours involved in all thinning contracts in a single year across one national forest. That would be programmatic monitoring. The Montreal Process, Criteria and Indicators for Sustainable Forestry was designed for national-level monitoring. These categories are fluid; one person’s program is another person’s community. This guidebook focuses primarily on program-level monitoring—across contracts, across businesses, across grants. However, you often have to gather information on the individual projects first and then aggregate those results to draw conclusions about the program.

Monitoring also varies by who is involved in the process. Single or first-party monitoring is implemented by those who develop and implement the project or program. For example, a tree-planting contractor counts and reports the number of trees planted per acre and then, a year later, returns to calculate survival. Or, the Forest Service creates its own standards for soil compaction and monitors the amount of compaction that occurs on each project. In third-party monitoring, the people who develop the protocols and collect the data are independent of the people performing the action. Most forest-certification programs include third-party monitoring to ensure that the certified companies are meeting standards. Finally, multiparty monitoring involves both the people that are implementing the projects and other interested parties. In multiparty monitoring, a diversity of people come together to develop questions and methods to answer those questions. For example, community residents and the Forest Service might develop a multiparty-monitoring process to determine effects of road closures on hunting access and stream sedimentation.

Each type of monitoring has its place; which one you use depends on your circumstance. This guidebook is written with multiparty monitoring in mind. We believe that the topics covered in this guidebook are best addressed through a multiparty monitoring process. Many different groups of people—from agency staff, to business owners, workers, residents, elected officials, economic development organizations, and community groups—have a stake in these issues and can contribute ideas, data, and insight to the development and implementation of the monitoring. Moreover, early involvement of diverse stakeholders makes it more likely that the results will be accepted by a large number of people and used in subsequent decision-making.

Getting Started

As you start forming your monitoring program, use Worksheet 1 to develop your monitoring plan. To create a multiparty-monitoring program, you have to decide who needs to be at the table, what you want to learn, where your data will come from, who will analyze the data, who will write up the results, and how the results will be distributed.

There are endless data that can be collected and analyzed. As a group, you need to decide upon the purposes of your monitoring project. As you develop the purposes of your monitoring program, consider:

- What are the goals of the program you want to monitor? How will you know if you succeeded or failed?
- What parts of the program are controversial?
- What parts of the program are new or involve unknown consequences?

Use the answers to these questions to direct your monitoring.

Selecting Measures

Once you and your partners have agreed upon program goals and issues that you want to track or learn about, you will have to develop “measures.” In general, measures are specific data you gather and analyze to determine if the desired outcome has been reached. Measures are used to track progress or gather information for learning. Finding a positive or negative impact of key measures may shed light on whether the goals and objectives are being met.

The challenge of choosing measures is that there are many different ways of getting at what you want to know and most of them are imperfect. Measures typically tell you some of what you want to know, but rarely will they reveal exactly what you want. Some measures tell you about inputs while others help you understand outputs and outcomes. An input is something that you do to achieve your goal. An output is what you get from your actions. Outcomes are the effects of your inputs and outputs. For example, perhaps you want to reduce soil erosion on a steep slope. Planting trees might be an input; seventy-five acres of growing trees might be an output; and reduced soil erosion might be an outcome.

Consider another example: the hypothetical Town of Brewery. Residents are concerned that young people are leaving the community after they graduate from high school. They believe the best way to address this is to help young adults prepare for working in the community’s major industry, chocolate making. They created a program to teach participants how to make chocolate and fix chocolate making equipment.

To monitor their program, Brewery residents decided to count the number of young adults that participated in it and the number of graduates who were hired by one of the town’s chocolate factories within three months of completing their program.

The first measure—the number of people participating in the training program—is a measure of the program’s inputs. The second measure—the number of people who found jobs at one of the factories—is an output. But if they stopped there, would they know if their strategy succeeded? Did they reduce the departures of young adults from the community? Tracking this information would be monitoring an “outcome.”

As you develop your monitoring program, think carefully about what each measure will reveal. Does it tell you about inputs, outputs, or outcomes? Be careful not to get too bogged down with this exercise. Rather, think about what you are trying to accomplish and whether the data you are gathering will answer your questions. Also, keep in mind what information you will be able to access. It often seems that you cannot find the data for your ideal measures; you may have to modify them to fit the available data.

One last note about selecting measures: Instead of using inputs, outputs, and outcomes, the Forest Service talks about implementation, effectiveness, and verification monitoring. Implementation monitoring asks, did we do what we said what we were going to do? It ties most closely to inputs. Effectiveness monitoring looks at outputs; it asks if your

actions help you meet your objectives. Validation monitoring asks, did your actions lead to the outcomes you expected.

Worksheet 1: Questions for Developing a Monitoring Program

Developing a Plan

- Q 1)** Who should be the “multi” in your multiparty monitoring program? That is, who do you want or need to involve in your project?

- Q 2)** What are the goals of the program to be monitored?

- Q 3)** What are the objectives of the program to be monitored?

- Q 4)** What activities will be undertaken to achieve the goals and objectives?

- Q 5)** What are the areas of disagreement about how goals or objectives should be met?

- Q 6)** What assumptions do you have about the purposes of the program you will monitor and the impacts it will have?

Selecting Measures

- Q 7)** How will you measure the inputs?

- Q 8)** How will you measure the outputs?

- Q 9)** How will you measure your outcomes?

Q 10) What measures will you use to address controversies?

Nuts and bolts

Q 11) What will be your data sources? (Can you use data already collected or will you collect new data?)

Q 12) Who will collect and compile the data?

Q 13) How will you analyze your data? Who will do this?

Q 14) How will you report the data and to whom?

Q 15) How will you incorporate your analysis into planning and future implementation?

Q 16) How much time and money will you need and where will it come from?

MODULE 1: EMPLOYMENT RESULTS—PROCUREMENT CONTRACTING

Purpose

This module describes how to evaluate the effects of federal contracting on local forest businesses and the development of quality work opportunities for forest workers.

General Approach

When developing your monitoring program, consider your goals for creating healthy businesses and quality jobs and how you plan to measure progress towards those goals. A quality job in ecosystem management can be defined as providing workers:

- Family-supporting wages and benefits
- A healthy and safe workplace
- Skill standards and opportunities for advancement
- Job durability
- The chance to work near where they live

Clearly, quality jobs depend on healthy contracting firms, so you may want to look at the effects of federal contracting on both workers and businesses.

You might consider how to measure whether:

- you and your partners are implementing a planned quality jobs program
- whether this is creating healthy businesses
- whether your approach is providing quality jobs opportunities
- who is receiving the benefits

Ultimately, the information you gather should help you determine if your project is having the desired effects and, if not, how you can make adjustments to be more effective.

The table below groups measures by objective. However, for simplicity, the detailed descriptions of how to gather data and calculate measures are grouped by the methods used for acquiring and analyzing information. The first section focuses on federal contracts and uses information that can be obtained from federal land management agencies. However, much key information about contracting businesses and workers is not available from the agencies and must be obtained directly from businesses and workers. Consequently, the other two sections of this module focus on how you might talk with contractors and workers to obtain data.

Suggested Measures

Objective #1: Economic benefit for distressed rural communities and businesses

(Measures that use information from contracting offices)

No.	Measure	Purpose
1.A	Amount and type of work procured	Determine quantity and type of work offered in recent years
1.B	Number of firms receiving federal contracts and total dollar amount captured by each firm	Determine who is capturing contracts and how concentrated/diffuse the contracting sector is
1.C	Percent of dollar value and contracts captured by small businesses	Determine if small businesses are capturing work
1.D	Percent of dollar value and contracts captured by local contracting firms	Determine if local firms are capturing work
1.E	Number of forest-related local firms registered in Pro-Net and the HUB zone program.	Determine how many local businesses are taking advantage of Pro-Net and the HUB zone program
1.F	Percent of National Fire Plan contracts and contract value that considered local benefit as part of the evaluation criteria	Determine if the agency is using local benefit authority
1.G	Percent of contract value and number of contracts over \$100,000 set aside for HUB zone certified firms	Determine if agency is directing contracts to firms located in economically distressed areas
1.H	Total contract value and number of contracts awarded to HUB zone certified firms	Determine if firms located in distressed areas are winning contracts
1.I	Percent of contracts advertised for and awarded to small disadvantaged businesses [8(a)]	Determine if agency is awarding work to firms owned by people from economically disadvantaged groups [8(a)]

Objective #2: High quality work in the woods that is rewarded

(Measures that use information from contracting offices)

No.	Measure	Purpose
2.A	Percent of contracts that considered best value to the government	Determine if the agency is considering skills and past performance when awarding contracts
2.B	Percent of request for proposals in which price is equal to or less important than other evaluation criteria.	Determine if the agency is considering skills and past performance when awarding contracts

Objective #3: Healthy forestry businesses
 (Measures that use information from contracting businesses)

No.	Measure	Purpose
BUSINESS OUTLOOK		
3.A	Number of firms that felt there was enough work for them last year	Identify firm's opinion about work availability
3.B	Number of firms that consider themselves to be better off than last year	Understand sense of business health
3.C	Number of firms that say the outlook for next year is as good or better than this year	Understand sense of business health
3.D	Number of firms that were awarded more federal contracts dollars than last year	Understand role of federal work in forestry firms
BUSINESS FOCUS AND CAPACITY		
3.E	Number and types of firms in the local community	Determine the extent of the contracting local contracting sector
3.F	Number of employees per firm	Determine business size and employment
ACCESS TO RESOURCES		
3.G	Number of firms that have adequate access to capital	Identify number of firms reporting need for capital
3.H	Number of firms that have adequate access to trained employees	Determine training needs
3.I	Number of firms that have adequate access to trainable employees	Determine workforce needs
3.J	Number of firms reporting that they offer at least some of their employees health benefits	Determine if workers have benefits
3.K	Number of firms reporting that at least one employee missed work because of an on-the-job injury or illness last year	Determine how safe the work is

Objective #4: Quality jobs for forest workers
(Measures that use information from forest workers)

No.	Measure	Purpose
JOB DURABILITY AND EMPLOYMENT OUTLOOK		
4.A	Distribution of the number of months worked in forestry work	Understand how long the season lasts for forest workers
4.B	Distribution of the number of months worked in all types of work	Determine what else people do to make a living and for how long
4.C	Number of workers that filed for unemployment claims last year	Understand job durability
4.D	Number of workers reporting that they worked as much as they wanted last year	Determine the need for additional work for existing forest workers
4.E	Number of workers reporting that they expect to have a job next year	Identify worker opinions about work opportunities
MOBILITY		
4.F	Number of workers that spent > 3 months "on the road" working	Determine how much workers move around to work in the woods; measure of quality of life
SAFETY AND HEALTH		
4.G	Number of workers reporting that they missed work because of an on-the-job injury or illness last year	Determine how safe the work is
WAGES AND BENEFITS		
4.H	Number of workers reporting that they were paid at or above the county average wage	Determine approximate wages
4.I	Number of workers reporting that their employer offered health benefits	Determine if workers have benefits
4.J	Number of workers reporting that they and their family have health insurance	Determine if workers have benefits
ADVANCEMENT AND TRAINING OPPORTUNITIES		
4.K	Number of workers reporting that they received work-related structured training	Determine if workers are receiving training
4.L	Number of workers reporting that they received unstructured, on-the-job training	Determine if workers are receiving on the job training
4.M	Number of workers reporting that they have opportunities for advancement	Determine if workers have career paths.

(Measures that use information from contracting offices)

No.	Measure	Purpose
4.N	Percent of contracts in which at least 50% of workers came from near by communities	Determine if local workers are being hired
4.O	Average and distribution of number of work days per contract	Determine if contracts are providing durable work opportunities
4.P	Distribution of average wages of those who worked on contracts	Determine if contracts are paying high wages

MONITORING USING INFORMATION FROM CONTRACTING OFFICES

The federal government collects considerable information related to the procurement of goods and services. By using this information, you can track what kinds of goods and services the government is buying and what types of firms captured those contracts. However, information about the effects of federal contracting on contractors and workers is not easily monitored using these data and is better captured through conversations and surveys with contractors and workers.

Likely Data Sources

Much of the data required for the analysis in this module will come from procurement offices of the local land management agencies.

For the Forest Service, two main existing databases contain information about procurement contracts. First, all federal agencies are required to enter into form SF-279 information about all contracts valued over \$25,000. This database includes, for example, contractor name, project type, dollars obligated to the project, whether the business that won the contract is a HUB Zone or 8(a) contractor and the like. Any contracting officer or procurement technician can retrieve the information in this database. Appendix 2 includes a list of items typically found on the SF-279 forms. To interpret the information in the SF-279 form, you will need to get the explanatory materials from <http://www.fpdc.gov/fpdc/rm2002.pdf>.

Second, each National Forest or contracting zone maintains a list of awarded contracts, variously called contracting registers, acquisition registers, or contract logs. Some Forests save these electronically in databases or spreadsheet; others hand write them (see examples in Appendix 2). The exact information recorded on these forms varies from Forest to Forest. These registers tend to be less accurate than the SF-279 forms, especially with respect to contract value, but are the only accessible source of information for contracts under \$25,000—important because firms in isolated rural communities tend to capture smaller contracts. Your local procurement technician will be able to explain the exact meaning of each column. The dollar amount in the award column is particularly likely to vary in meaning from one management unit to another, especially with the recent rise of indefinite quantity contracts. The appendix includes examples of contract registers.

The BLM and the Fish and Wildlife Service are also required to enter information into the 279 forms, but it cannot be as easily retrieved at the local or state level. They too have contract registers. The Oregon state office of the BLM also puts limited information about contracts over \$25,000 on the web at <http://www.or.blm.gov/procurement/>.

The data entered into the SF-279 can be purchased from the Federal Procurement Data Center for all agencies. See <http://www.fpdc.gov/>.

The success of contract monitoring requires building relationships with procurement staff including contracting officers and contracting technicians. They can be invaluable sources of information about what data is currently collected and what could be collected easily

with limited additional work. Soliciting their input early can save time and reduce misunderstandings later.

A word of caution: Contracting officers cannot provide information that would affect the competitiveness of particular contracting firms.

You may consider building a contract database that might include:

- dollar amount
- project description
- product service code
- contractor name
- town, county, zip code of contractor
- small business (y/n)
- HUB zone businesses (y/n)
- small disadvantaged business (y/n)
- average wage
- number of days worked on contract
- set aside for HUB zone business (y/n)
- set aside for small business (y/n)
- set aside for small disadvantaged business (y/n)

Monitoring Details

You will probably find it most productive to select the measures that best fit your particular circumstances. You might also begin with measures for which data is already collected. After you and your partners have discovered what existing data can offer, you can develop with partners systems to gather additional data to fill any gaps.

Measures using existing data

1.A. Amount and type of work procured

<u>Why monitor</u>	Determine the quantity and type of work offered in recent years.
<u>What you need</u>	Contracts issued during the past year(s) Dollar value of each contract Type of work involved in each contract Categorization of types of work
<u>Where to get it</u>	Acquire agency contract registers and SF-279 forms. Convert project titles into work types such as reforestation, thinning, surveys, road and other heavy equipment work, range work, in-stream work, surveys, and other.
<u>How to calculate</u>	Sort contracts by work type. Sum up dollar value and number of contracts for each work type.

1.B. Number of firms receiving federal contracts and total dollar amount captured by firm

<u>Why monitor</u>	Determine who is capturing contracts and how diffuse or concentrated the contracting sector is.
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<u>What you need</u>	Contracts issued during the past year(s) Dollar value of each contract Names contractors awarded contracts
<u>Where to get it</u>	Contract registers and SF-279 forms.
<u>How to calculate</u>	Sum the total dollars captured by each contractor. Create a list of contractors who captured contracts and sort by amount awarded. Count the number of contractors; add up the total dollar value.

1.C. Percent of dollar value and contracts captured by small businesses

<u>Why monitor</u>	Determine if small businesses are capturing work. (The Forest Service is required to set aside all contracts for small businesses, as defined by the Small Business Administration, when a small businesses could provide the good or service.)
<u>What you need</u>	List of contracts with dollar value The names of contractor firms that won contracts Information about whether these contracting firms are small businesses
<u>Where to get it</u>	Acquire list of contracts with dollar value and contractors from the contracting office. The contracting staff can also identify small businesses. This information is sometimes also recorded on the SF-279 form, and it can be easily recorded on the contract register.
<u>How to calculate</u>	Count contracts won by small businesses, divide by the total number of contracts, multiply by 100. Sum contract value won by small businesses, divide by the total contract value, multiply by 100.

1. D. Percent of dollar value and contracts captured by local contracting firms

<u>Why monitor</u>	Determine if local firms are capturing work. This is one measure of local benefit.
<u>What you need</u>	List of contracts with dollar value and contractors Zip codes or addresses of contractors A definition of local Towns, counties, or zip codes considered local
<u>Where to get it</u>	Acquire agency contract registers and SF-279 forms. Contracting officers can also provide addresses for contractors that captured contracts. You and your partners will have to define local for your purposes. See Appendix 1 for some suggestions.
<u>How to calculate</u>	Count contracts won by small businesses, divide by the total number of contracts, multiply by 100. Sum contract value won by small businesses, divide by the total contract value, multiply by 100.

1. E. Number of forest-related local firms registered in Pro-Net and for the HUB zone program.

<u>Why monitor</u>	Determine how many local business are taking advantage of the Pro-Net. If you are located in a HUB zone, to determine if local firms can take advantage of the HUB zone program.
<u>What you need</u>	Names of local, forest related businesses registered for Pro-Net Name of local, forest related businesses that are certified HUB zone firms.
<u>Where to get it</u>	Search the Pro-Net data base by county or zip code and then eliminate contractors not involved in forest related work by looking at the detailed information. Note: Do not just look at the name of the company to make this determination, as names can be misleading. You can search for small businesses and HUB zone certified firms on the Pro-Net site at: http://pro-net.sba.gov/ .
<u>How to calculate</u>	List the businesses registered in Pro-Net or certified HUB zone; count them.

1.F. Percent of contracts and contract value that considered local benefit as part of the evaluation criteria (National Fire Plan funds)

<u>Why monitor</u>	Determine if the special National Fire Plan (NFP) authorities are being used to provide local economic benefit
<u>What you need</u>	List of national fire plan contracts with dollar amounts Whether local benefit was used as an evaluation criterion
<u>Where to get it</u>	The SF-279 database identifies all National Fire Plan contracts. The contract solicitations indicate whether local benefit will be considered; you can look contract by contract or develop a system with the contracting office in which they record that information on their contract register.
<u>How to calculate</u>	Count the number of contracts using local benefit criteria, divide by the total number of NFP contracts issued, multiply by 100. Sum the total contract value; divide by the total NFP contracted dollars, multiply by 100. You might also find it useful to keep list of the contracts, and what the dollar value was.

1.G. Percent of contract value and number of contracts over \$100,000 set aside for HUB zone firms

<u>Why monitor</u>	Determine if the agency is directing work to firms in economically distressed areas. (The set aside requirement applies only to contracts over \$100,000.)
<u>What you need</u>	List of contracts valued over \$100,000

Whether they were set aside for HUB zone firms

Where to get it Contact the staff at the local contracting office. Alternatively, but more cumbersome, try the Federal Business Opportunities (<http://www.fedbizopps.gov>) web page, where the government advertises contracts. Look regularly, as this page does not archive contract advertisements. It also does not provide information about price, but does indicate whether a contract is set aside.

How to calculate Sum the contract value of all set aside contracts. Sum the value of all contracts over \$100,000. Divide value of set aside contracts by total contract value. Count the number of set aside contracts. Count number of contracts over \$100,000.

1.H. Total contract value and number of contracts awarded to HUB zone firms

Why monitor Determine if firms located in economically distressed areas are winning contracts

What you need List of contracts with dollar value
Names of firms awarded contracts
Whether the winning firm was a certified HUB Zone firm

Where to get it Acquire contract register from staff at the local contracting office. Go to <http://pro-net.sba.gov/> to identify HUB Zone certified firms in your area.

How to calculate Sum the value of contracts won by HUB Zone certified firms and divide by total contract value.

1.I. Percent contracts advertised for and awarded to small disadvantaged 8(a) business

Why monitor To determine if agency is awarding work to firms owned by people from economically disadvantaged groups

What you need List of contracts with dollar value
Names of the firms winning contracts
Whether or not the winning firm was a certified disadvantaged small business, e.g. 8(a)

Where to get it Acquire federal contract register or SF-279 form from local contracting office. Go to <http://pro-net.sba.gov/> to identify 8(a) firms.

How to calculate Sum value of all the contracts won by certified disadvantaged firms and divide by total contract value.

Measures involving data not typically collected

4.N. Percent of contracts in which at least 50% of workers came from nearby communities.

<u>Why monitor</u>	Determine if local residents are capturing local work opportunities.
<u>What you need</u>	A definition of local (See Appendix 1) Residence of each worker (local, non-local) for each contract. Note: The 50% threshold is arbitrary and should be changed to fit local circumstances.
<u>Where to get it</u>	The agencies do not generally collect this information but could require that contractors report this information as part of contract close out. It might best protect contracting firms privacy to have them report the percent of local workers rather than describing each worker separately. Alternatively, you could ask the contracting businesses that you interview where their workers live. If you take this approach, be sure to interview both local and non-local firms that do forest work in your area.
<u>How to calculate</u>	To calculate the average, sum up the number of contracts that had more than 50% local workers, divide by the number of contracts and multiply by 100. Although this is simple to calculate, a more helpful approach may be to plot percent local workers along a line, to get a sense of distribution and look for patterns by contract type.

4.O. Average and distribution of number of days worked per contract

<u>Why monitor</u>	Determine if contracts are providing durable work opportunities.
<u>What you need</u>	Number of days worked by each worker on each contract.
<u>Where to get it</u>	The agencies do not generally collect this information but could require that contractors report it as part of contract close out. Alternatively, contract duration could be used as an approximation.
<u>How to calculate</u>	To calculate the average, sum up the number of workdays and divide by the number of contracts. Although the average is simple to calculate, it may not very useful as there may be large variation in contract length that the average hides. You might consider plotting the contract lengths along a line, to get a sense of distribution or look for patterns by contract type.

4.P. Percent of contracts with average hourly wage at or above the county average

<u>Why monitor</u>	Determine if forest work is increasing or decreasing the county average.
<u>What you need</u>	Average hourly wage paid to workers on each contract

Where to get it The agencies do not generally collect average wage information but the agency could require that contractors report this information as part of contract close out. The county average hourly wage can be obtained with from the wages and hours division of your state's employment department.

How to calculate Compare the average hourly wage on each contract to the county average hourly wage. Sum up the number of contracts with average wage above the county average. Divide the number of contracts above the county average by the total number of contracts and multiply by 100.

MONITORING USING INFORMATION FROM CONTRACTORS

Although federal land management agencies gather information to measure the supply of contracts and the distribution of contracting dollars among firms, much information about the health of contracting firms and the effects of federal contracts can only come from the contractors themselves.

Worksheet 2 suggests some questions that you can adapt for interviews with contractors. Add or subtract questions based on your particular local interests. Whenever possible, ask about a specific time period rather than what happens "in general" or "typically." For some reason, "typical" rarely describes what happens.

In this section, we omit the detailed descriptions of how to calculate each measure, as the method for collecting the information and calculating the results is similar for each measure.

Interviewing contractors

We recommend that you develop relationships with contracting businesses and talk with them regularly about their needs and your program. In addition, repeat your interviews every year or two to update information and keep abreast of changing conditions.

Most forest contractors are not accustomed to being surveyed or interviewed. In addition, they often work long hours during the field season. Thus, some contractors may be unwilling at first to be interviewed. You may be able to put them more at ease in a number of ways. First of all, it may make sense to have at least one contractor on your monitoring team. This contractor could be useful in building relationships with others, and he or she may even be the lead interviewer. Second, be sure to explain the purpose of your efforts. They may be willing to talk with you once they know that your monitoring efforts could help them. Finally, tell them when your results will be available and follow through by sending them your results and inviting them to meetings where reports will be presented.

Start by developing a comprehensive list of the contractors in your area. You can use:

- Bidders lists (not all national forests or BLM districts keep these. Check locally.)

- Contract register or form SF-279
- Pro-Net (<http://pro-net.sba.gov>)
- Telephone book
- State contractor licensing board (In Oregon, the list of licensed Oregon Farm/Forest Labor Contractors is available from the Bureau of Labor and Industry at <http://www.boli.state.or.us/wage/whfarm.html>)
- Contractor associations
- Contracting officers
- Other contractors

When identifying firms, consider heavy equipment, logging, forestry services, engineering, surveying, and biological firms and sole proprietors such as independent botanists, ecologists, or technical writers.

A word of caution: It may be difficult to identify all contracting firms or determine if the ones you talk to are representative of the firms in your area. Consequently, you should use percents and averages with caution, avoiding them whenever possible. Calculating percents will be simple and attractive but quite misleading in these circumstances. Instead, talk about the number of firms that you identified, how many you interviewed and how accurate this sample seems to be. Then describe what you discovered.

A word about confidentiality: You may collect sensitive information about individuals and businesses. When developing questions, think carefully about what information you really need. In addition, develop a system of collecting this information that will maintain contractor confidentiality. Data should be reported in such a way that it does not reveal information about particular contractors or workers and raw data should be kept in a secure place. Also, keep in mind that, as an interviewer, you are not protected by any confidentiality laws such as those that protect lawyers and doctors. In the very unlikely event of some legal tangle (even over something unrelated to your monitoring), the information you collect could be revealed in court.

A note about the survey form: The numbers and letters to the left of some of the questions relate to the measures listed in the indicators tables above. They are not in the same order as they appear in the matrices because the logical organization of the tables and the survey are not the same.

Worksheet 2: Sample Contractor Survey

Prior to conducting the interview, explain:

- Who you are
- Whom you represent
- Why you are asking these questions and
- What you plan to do with the answers
- How you will protect their confidentiality
- Ask them if they have any questions before you start

General Business Information

What kind of work does your business do?

How long have you been in business?

Q 1) What percentage of your work comes from public lands?

Q 2) What percentage of your work comes from private lands?

Business Focus

Q 3) What kinds of work did you do last year?

Q 4) Do you think you will do different kinds of work next year? Please explain.

Q 5) Did the dollar value of contracts on federal land you received increase or decrease from last year?

Q 6) Did the dollar value of contracts you received on private lands increase or decrease from last year?

Q 7) How many employees did you employ during the height of the field season last year?

Q 8) How many employees did you have at the slowest part of the year?

Business Outlook

Q 9) How was business compared to last year—better, the same, or worse? Please explain.

Q 10) Compared to this year, do you think business next year will be better, the same, or worse? Please explain.

Q 11) Last year, were you able to employ your crew as long as you wanted? Please explain.

Access to Resources

Q 12) Can you find enough people with the skills and training to fill your vacant positions? Please explain.

Q 13) If not, do you have access to trainable workers to fill your vacant positions? Please explain your answer.

Q 14) What equipment do you currently have?

Q 15) During the past year, did you lease or buy any new equipment?

Q 16) What equipment did you buy? What did you lease?

Q 17) Did you sell any major pieces of equipment? If so, what?

Q 18) What equipment do you need?

Q 19) Do you have access to enough capital to buy the equipment you need? Please explain.

Q 20) Do you have a line of credit? If so, it is sufficient?

Q 21) Do you provide your employees with health insurance?

Q 22) Last year, did any employee have a work-related accident or injury that caused that employee to miss work?

Suggestions and Assistance

Q 23) Do you have any suggestions how we, or other local organizations, might better serve your business?

Q 24) Are there ways that the federal government could improve its contracting to make the work more appealing to your business?

Q 25) How could federal contracting be changed to improve your business's chances of capturing federal contracts?

Q 26) Do you have any additional comments or questions?

MONITORING USING INFORMATION FROM WORKERS

In most communities, the contracting sector is a mixture of sole proprietors and firms with employees. The work experiences of business owners or managers may be quite different from the workers. Consequently, it is important to talk with workers as well as owners or managers.

Likely Data Sources

The approach to talking with workers is similar as contractors, and the same words of caution apply. To refresh your memory, read the introductory material from the above section.

One difference is in identifying workers. There are no central lists of people who work in the woods. One important source of workers to interview may be the contractors that you interview. In addition, ask contracting officers and community residents with large social networks to identify people who work in the woods. Whenever you interview a worker, ask them who else you should talk to. As with contractors, you may want to consider having a forest worker on your monitoring team. This person could help with contacting other forest workers and with conducting the interviews.

A word of caution: In many areas, a significant portion of forest workers may not be comfortable being interviewed in English. If this is the case in your community, find someone who can help you conduct interviews in the workers' native language. If you ignore non-native English speakers, you may not have a complete picture of work in the woods.

Worksheet 3: Sample Worker Survey

Prior to conducting the interview explain:

- Who you are
- Whom you represent
- Why you are asking these questions and
- What you plan to do with the answers
- How you will protect their confidentiality
- Ask them if they have any questions before you start

Durability and employment outlook

- Q 1)** How many months did you work last year in forestry or natural resource work?
- Q 2)** How many different forest or natural resource companies did you work for last year?
- Q 3)** What kind of forestry or natural resource work did you do last year?
- Q 4)** How many months did you work last year in any kind of work?
- Q 5)** What did you do when you were not working in forestry or natural resources?
- Q 6)** Did you file for unemployment last year?
- Q 7)** Did you work as much as you wanted to last year?
- Q 8)** Do you expect to have enough work next year?

Work Conditions

- Q 9)** How many days last year did you spend “on the road” working (i.e. you spent the night away from home)?
- Q 10)** Did you miss any work last year because of a work related illness or injury? If so, for how long?

Wages and Benefits

Q 11) Did you earn more or less than [fill in your county's average wage here]?

Q 12) Did you receive health benefits last year from your employer?

Q 13) Do you and your family members have health insurance?

Advancement and training opportunities

Q 14) Did you receive work-related training led by an instructor last year?

Q 15) Did you receive unstructured, on-the-job training last year?

Q 16) Are there opportunities for advancement for you in forestry or natural resource work?

Suggestions and assistance

Q 17) Can you think of ways that the federal government could improve its contracting to work better for you as a worker? If so, what are they?

Q 18) What changes do you think could and/or should be made to improve working conditions?

Q 19) Can you suggest other ways to improve your work conditions or chances for employment?

Q 20) Do you have any other comments or questions?

MODULE 2: EMPLOYMENT RESULTS—GOVERNMENT EMPLOYMENT

Purpose

Researchers and monitoring teams often do not track the impact of government employment in natural resources. Many government jobs provide steady work, benefits, and opportunities for skill training, skill development and promotion. Others are lower wage and more temporary. Communities and agency partners considering ecosystem management contracting as an economic development strategy might track government employment to determine if the characteristics of those jobs and their impact on the local economy are changing over time. For example, you may want to know if high paying, durable government jobs are being replaced with less durable, lower wage jobs.

General Approach

When thinking about what to measure, you will want to consider whether the government is creating a quality job, how many jobs are being created, and who is getting those jobs.

You may be interested in focusing on a subset of government employees such as those hired for a particular program, such as the National Fire Plan or you may want to focus on one agency such as the Forest Service or BLM.

Suggested Measures

Outcome #1: Quality employment opportunities

No.	Measure	Purpose
1.A	Number of people hired by agency, compared to total government employment and total employment	Determine the importance of the jobs to the local economy
1.B	Percent of people hired who are paid at or above the county average wage	Determine if the jobs provide better economic opportunities than already exists in the community
1.C	Percent of hires who are seasonal, temporary, and/or permanent workers	Determine the durability of the jobs
1.D	Percent of people hired locally	Determine how many people are hired from local community
1.E	Percent of people hired from HUB Zones	Determine how many people coming from economically distressed communities
1.F	Percent of women hired	Determine if hiring traditionally under represented people
1.G	Percent of minorities hired compared to percent of minorities in local population	Determine if hiring traditionally under represented people

Likely Data Sources

Most of the data required to monitor hiring by government agencies will likely come from the internal human resources or personnel department. In most cases, the human resources

department will have the information you need, but it may not be collected in any systematic way at the Forest or BLM district level. Consequently, you will have to work with your agency counterparts to develop a tracking system. This may be difficult at first because human-resource departments have not been frequently involved in many collaborative efforts and they manage sensitive personal information. As with all monitoring, the team should develop the monitoring program collaboratively and work to build relationships with agency staff. *A hint:* make clear from the outset that you are not interested in any personal information—no names, no social security numbers.

Depending on the exact approach, for each person hired, your database might include:

- Grade of hire (also known as General Services (GS) level)
- Zip code of employee at time of hire
- Whether they were hired permanently, seasonally, part-time
- Gender (female, male)
- Racial or ethnic background

Specifically ask them **not** to give you the names of the employees.

Monitoring Details

Note: When a data source is not specified, ask the agency’s human-resources department for the information.

1.A. Number of new people hired by the agency, compared to total government employment and total employment

<u>Why monitor</u>	Determine the importance of these hires relative to overall government and local-area employment.
<u>What you need</u>	<p>Definition of local (see Appendix 1)</p> <p>Number of new people hired by government agencies to work in the local area</p> <p>Number of total government employees in local area</p> <p>Number of total employed people in local area</p>
<u>Where to get it</u>	Covered Payroll and Employment contains data on government employment and total county employment at the county and state level. For Oregon, go to http://olmis.emp.state.or.us/olmisj/CEP . Information on new hires could be obtained from the agency.
<u>How to calculate</u>	Sum up the number of people hired and compare to federal and total employment

1.B. Percent of people hired who are paid at or above the county average wage

<u>Why monitor</u>	To determine if, on average, the jobs provide better economic opportunities than already exist in the community.
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<u>What you need</u>	Grade of each hire County average wage Wage rate for each GS level for your area
<u>Where to get it</u>	Average county wage can be found in the Covered Employment and Payroll data available from your state employment department. In Oregon, this data can be found on the OLMIS site at http://olmis.emp.state.or.us/olmisj/CEP . To convert GS grades into annual wages, examine the wage table at the U.S. Office of Personnel Management http://www.opm.gov/oca/02tables/indexGS.htm where the wage tables are located.
<u>How to calculate</u>	Convert GS to dollars for each hire. Compare each wage rate to county average. Count number of hires with above average county wage, divide by total hires, multiply by 100.

1.C. Percent of hires who are seasonal, temporary, or permanent workers

<u>Why monitor</u>	To determine the durability of jobs
<u>What you need</u>	Hiring status for each employee
<u>Where to get it</u>	Human resources office of your local land management agency
<u>How to calculate</u>	Sum the number of temporary hires, divide by total number of hires, multiply by 100. Repeat for part-time and full-time workers.

1.D. Percent of people hired locally

<u>Why monitor</u>	To determine how many people were hired from local community vs. people who relocated for the job
<u>What you need</u>	A definition of local (see Appendix 1) Zip code of employee at time of hiring. To match zip codes and locations, you can use the Postal Service town-zip code site at http://www.usps.com/ncsc/lookups/lookup_ctystzip.html
<u>How to calculate</u>	Determine which zip codes are in your local area. Compare to zip codes of hires. Divide total number of hires with local zip codes by total hires, multiply by 100.

1.E. Percent of people hired from HUB zones

<u>Why monitor</u>	Determine how many hires come from economically distressed communities
<u>What you need</u>	Zip code of each employee at the time of hiring. HUB zone locator map
<u>Where to get it</u>	http://www.usps.com/ncsc/lookups/lookup_ctystzip.html

<http://map.sba.gov/hubzone/init.asp#address>

How to calculate Conduct a zip code search on the HUB zone web page to determine if addresses are located in a HUB zone. Divide the number of people located in HUB zones by the total number of hired, multiply by 100.

1.F. Percent of women hired

Why monitor To determine if the agencies are hiring traditionally under-represented people

What you need Gender of people hired

Where to get it Agency's human resource department

How to calculate Divide number of women hired by the total number hired.

1.G. Percent of minorities hired compared to percent of minorities in local population

Why monitor Determine if the agency is hiring traditionally under-represented people

What you need Race and/or ethnicity of people hired
Percent of each race or ethnicity in the local population.
Note: the ethnic groups you focus on will depend which are the key groups in your area

Where to get it Percent of minorities in the population (at the county level) can be obtained from the Census Bureau Quick Facts page:
<http://quickfacts.census.gov/qfd/>

How to calculate Divide number of each group hired by the total number hired.
Compare to percent of each ethnic group in local population.

MODULE 3: UTILIZATION OF BY-PRODUCTS OF ECOSYSTEM MANAGEMENT

Purpose

Small-diameter trees and other woody biomass are sometimes removed or treated in place as part of ecosystem restoration, especially fire hazard reduction. Some rural communities and their agency partners are seeking to use these materials to develop economic opportunity. They have sought to add value to this material by turning small-diameter material into firewood, chips, lumber, or finished products such as flooring and furniture.

This module offers suggestions for monitoring the use of the by-products of ecosystem restoration and the health of the businesses that use this material. It suggests ways to track how much material was removed, whether value was added, and where it was used or processed.

Many communities have found it difficult to develop businesses that make small-diameter material into medium and high value-added products. There are many reasons for these difficulties, and the interview questions may touch on some of them. If one of your goals is to increase value-added processing, it will be important to identify barriers to small-diameter development. Contractors and timber-sale purchasers will likely have some insight into this question; so may economic-development specialists or county-extension agents.

General Approach

When developing a utilization monitoring program, consider your goals for creating and sustaining healthy value-added businesses. To that end, questions you may want to answer include:

- What by-products are available locally?
- How are they being used?
- How much value is added locally?
- How healthy are the local value-added businesses and what needs to be done to meet their needs?

In general, this module suggests that you track material from the landowner to the raw material purchaser and then to the value adding business (whether inside or outside your community). In addition, we suggest that you monitor the health of value-added manufacturing businesses in your local community. This will involve gathering information from landowners (public or private), the people or businesses that harvest the material, and the businesses that use the material.

Suggested Measures

Outcome #1: By-products are used for economic or environmental benefits

No.	Measure	Purpose
1.A	Amount of materials harvested/removed in the local area	Determine potential material available for value-added use
1.B	Amount of materials piled and burned (but not as part of a prescribed burn)	Determine amount that isn't used for value-added purposes
1.C	Amount of materials left for wildlife habitat	Determine amount of material used for wildlife

Outcome #2: Provide raw materials to local firms and add value to local economy

No.	Measure	Purpose
2.A	Percent of removed material that local businesses processed	Local use measure
2.B	Percent of removed material that small businesses processed	Determine the extent to which small businesses are using removed material
2.C	Percent of by-products used to make low, medium-low, medium high, and high value value-added products locally	Determine how much material is being used to add value locally
2.D	Value created by making low, medium-low, medium high, and high value added locally	Determine how much value is being added locally.

Outcome #3: Businesses making value-added products are able to use material and workers from the local area.

No.	Measure	Purpose
3.A	Number of businesses who obtain raw materials from outside the local area	Determine the extent to which local businesses use locally material
3.B	Percent of material harvested that was purchased locally	Measure of the sustainability of small-diameter removal and utilization

Outcome #4: Business making value-added products are strong and growing.

No.	Measure	Purpose
4.A	Number of business reporting that they are processing more material than last year	Determine if material needs are growing
4.B	Number of business reporting that they expect to use more material next year	Determine future demand and desire for expansion outlook
4.C	Number of businesses that reported plant expansion or new products launched	Determine business growth
4.D	Number of businesses that raised (or lowered) wages last year	Determine business growth
4.E	Number of businesses that expanded (or contracted) their staffing	Determine if cash flow a problem
4.F	Number of businesses that report	Determine strength of business
4.G	Number of businesses reporting that they have access to enough money to buy or lease new equipment	Determine business strength
4.H	Number of businesses reporting that they believe that business will be good or excellent in the next year	Gauge business outlook
4.I	Number of businesses reporting that they had adequate access to trained employees	Determine training needs
4.J	Number of businesses reporting that they were able to find trainable workers	Determine workforce needs

Likely Data Sources

Small diameter material and other by-products of restoration can come from public and private lands. Consequently, this module suggests methods for acquiring information about both material from public and private lands and the businesses that use the material. You may decide to track only what happens to material removed from one or the other. Most value-added business will likely use material from both sources.

Tracking Material Removed from Private Lands

Tracking what happens to materials removed from private lands may be difficult. You might want to start by asking local wood-products businesses where they get their material. In addition, you may want to speak with some of the forest landowners in your community to determine what they are doing with this material. Finally, if your state requires harvesting permits, it might keep records that identify local private-land harvests.

Tracking Material Removed from Public Lands

For federal lands, you can make use of data tracking systems to gather information about material removed. The vast majority of material removed from public lands is done so through some sort of timber sale or removal permit. In addition, the occasional service contract involves removal of material. Most of these contracts have an associated bill of sale that indicates volume and price of the sale. Consequently, this information should be entered into the timber sale tracking databases. As a result, you should be able to work

primarily with the timber staff from local federal land management agencies to gather information about removed material.

A word of caution: Be sure to include agency staff such as district rangers, timber-sale administrators, and small-sale administrators early in your monitoring process so that they can help you shape your monitoring to match the available data and make it easier for them to provide you with needed information.

One of your first tasks in gathering information about material removed from public lands will be to decide what types of timber sales you want to consider. Of course, the more you consider, the more complete your analysis could be, but also the more time and energy it could take. Keep in mind that in isolated rural communities, local residents will likely capture the smaller timber sales and non-competitive sales as well as permits for firewood and other uses. Do not neglect these categories just because they seem small. They could be important to your local economy.

The Forest Service sells timber in a number of different ways. If the timber is valued at more than \$10,000, the Forest Service will sell it through a competitive bid process. Less valuable material can be sold without a competitive bidding process. The Forest Service can also issue permits for the removal of firewood or Christmas trees. For each type of sale, the Forest Service must fill out a different type of form. The names of selected forms and their purpose are listed in Fig. 3. Examples of these forms can be found at <http://www.fs.fed.us/r6/nr/fp/FPWebPage/ForestProducts/ForestProducts.htm>. Choose the link for “project forms.” The forms typically include information about the volume being sold, the name and contact information of the purchaser, the purchase price, and the number of bidders (if applicable).

Timber sale size is measured using a number of different units depending on the type of material sold. The size could be measured in board feet, cords, cubic feet, and tons. Volume and weight measures do not readily convert, so you may have to separate totals for different units.

FIGURE 3
Selected Forest Service Timber Sale Forms

FS-2400-3P	Forest products contract for special forest products sales
FS-2400-3T	Timber sale contract for tree measurement sales (non-bid sales, inc. service contract with product removal)
FS-2400-4	Forest products sale contract
FS-2400-6	Timber sale contract (bid sales; scaled after felling)
FS-2400-6t	Timber sale contract (bid sales; scaled before felling)
FS-2400-8	Forest Products Free Use Permit (personal use only)
FS-2400-17	Report of the Timber Sale (has summary of bids and some other useful information. A good first place to start looking)

Using these forms directly will provide you with the most information about the sales. However, if you have more limited time, you should work with agency staff to access databases where the information is compiled.

Tracking Added Value

After you have identified timber-sale purchasers, and volume purchased, you will need to ask the purchasers what they did with the material. Worksheet 5 suggests questions to ask when interviewing timber sale purchasers.

Some timber sale purchasers will add value to the material themselves. Mills often bid on a timber sale and process the material in their own facilities. Similarly, some people harvest small diameter material and make it into posts and poles or firewood themselves. In other instances, purchasers harvest the material and then resell it to other users who process it.

Not all uses of material have the same impact on the local economy. As a general rule, the more the material has been processed, the more value has been added. The table below offers a general guide as to how much value has been added to common wood products.

FIGURE 4 Examples of Value Added Wood Products

Low: chips, bark chips, sawdust, mulch, firewood, posts, poles

Medium: cut stock, dimensional lumber, energy, flooring

Medium-high: veneer, ply-wood, engineered wood products, mass-produced furniture, cabinets, gifts, and accessories, doors, windows, trusses,

High: handmade and made-to-order furniture, musical instruments, fixtures, cabinets, gifts, accessories

Tracking Utilization Businesses

After tracking material and purchasers, you will want to turn your attention to local value-added businesses. Some of these may purchase raw materials directly from the landowner. Others will buy those materials from harvesters, typically loggers who bought the material from the landowner. In addition to determining if they are adding value to local by-products, you may want to monitor the economic health of these businesses and determine what challenges they face in order to make use of the by-products of ecosystem management. Worksheets 4 and 5 offers sample interview questions that correspond to the measure that we suggest below.

To identify businesses to interview, ask the raw material purchasers to whom they sell material. Also, ask them if there are other businesses they know about. Check the phone book, ask around, and ask those you interview. Your goal is to build a list of people and businesses that process wood products from firewood sellers to furniture makers. Make

sure to talk with business that do not purchase material locally to understand why they do not—or cannot—make use of local material.

As you interview people, ask them to explain their answers so that you can identify patterns in your analysis. For most measures, you might use raw numbers rather than percents because you will probably be talking to a small number of businesses.

Tracking Unused Material

If you want to understand how much material is being treated but not removed, work with the people who develop thinning and slash treatment projects that are implemented through service contracts or with in-house crews. These jobs are typically measured by the acres not volume of material. Moreover, they may not systematically report this sort of information so you will have to work with agency staff to develop a tracking system. Fire staff may know how much material they burned in piles or mulched during a year.

Monitoring Details

Outcome #1: By-products are used for economic or environmental benefits

1.A. Amount of materials harvested or removed in the local area

<u>Why monitor</u>	Track volume of material potentially available for local valued-added use.
<u>What you need</u>	Definition of local (see Appendix 1) Volume harvested from public lands Volume harvested from private lands
<u>Where to get it</u>	National Forest total cut and sold volumes are available on the web at http://www.fs.fed.us/r6/nr/fp/FPWebPage/ForestProducts/ForestProducts.htm . Choose link to “cut and sold reports.” For Region 5 (California), go to http://www.r5.fs.fed.us/sales/ and choose the forest in which you are interested. State forestry departments often track private lands harvests.

1.B. Amount of material piled and burned (not as part of a prescribed burn)

<u>Why monitor</u>	Determine the amount that is not used for value-added purposes.
<u>What you need</u>	Estimate of the tons of materials piled and burned
<u>Where to get it</u>	Agency fire staff oversee pile burning and may be able to estimate burnt volumes

1.C. Amount of materials left for wildlife habitat

<u>Why monitor</u>	Determine amount of material used for wildlife.
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<u>What you need</u>	Project by project estimate of the materials left to improve wildlife habitat
<u>Where to get it</u>	Work with wildlife staff to develop estimates of how much material was left behind for wildlife. Consider snags, downed trees, and other types of habitat as wildlife staff suggest.

Outcome #2: Provide raw materials to local firms, add value to local economy

2.A. Percent of removed material that local businesses processed

<u>Why monitor</u>	Track local use of local material
<u>What you need</u>	A definition of local (see Appendix 1) A list of timber sales, volume sold, and purchasers Volume of material sold for processing Location of the businesses processing material
<u>Where to get it</u>	Timber sale information available on the Forest Service the forms as listed in Fig. 3 Interview purchasers to determine where material was sold
<u>How to calculate</u>	Sum volume used locally. Sum total volume sent out of the area. Divide total local volume by the sum of local and non-local. Multiply by 100.

2.B. Percent of removed material that small businesses processed

<u>Why monitor</u>	Determine the extent to which small businesses are using removed material
<u>What you need</u>	A definition of a small business Volume sold to each business using by-products Size of the businesses processing materials
<u>Where to get it</u>	The Small Business Administration defines small manufacturing businesses to have fewer than 500 employees. Another definition may be more appropriate to your needs. Timber sale information is available from the Forest Service the forms as listed in Fig. 3. Interview purchasers to determine which companies processed materials. Interview processing businesses to determine business size.
<u>How to calculate</u>	Sum volume processed by small businesses. Divide that by the sum of the volume sold to small and big businesses. Multiply by 100.

2.C. Percent of by-products used to make low, medium-low, medium-high, and high value-added products locally

<u>Why monitor</u>	Determine how material is used to add value locally.
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<u>What you need</u>	A definition of local (see Appendix 1) Definitions of low/medium-low/medium-high/high valued added products (see Fig. 4) List of volume sold and purchasers Volume processed locally by use (e.g. chips, molding, flooring, etc)
<u>Where to get it</u>	Interview raw material purchasers and processing businesses to determine use of material using Worksheets 4 and 5.
<u>How to calculate</u>	Sum the volume in each category. Divide that amount by the total volume.

2.D. Total value created by making low, medium-low, medium-high, and high value-added products locally

<u>Why monitor</u>	Determine how much value is added locally.
<u>What you need</u>	A definition of local (see Appendix 1) Definitions of low/medium-low/medium-high/high valued added products (see Fig. 4) Names of local value added businesses Gross sales of each producer in each value-added category (making low, medium-low, medium-high, and high value-added)
<u>Where to get it</u>	Interview raw material purchasers and processing businesses to determine use of material using Worksheets 5.
<u>How to calculate</u>	Sum the volume in each category. Divide that amount by the total volume.

Outcome #3: Businesses making value-added products are able to use materials and workers from the local area.

Outcome #4: Businesses making value-added products are strong.

Note: The measures related to outcomes #3 and #4 draw directly upon survey questions listed in Worksheet 5. Calculation involves summing responses across interviews. Consequently, we do not provide a measure-by-measure description of how to proceed.

Worksheet 4: Sample Survey of Raw Material Purchasers

The purpose of this interview is to get information about where material harvested locally is processed and how much value is added. If the person you are interviewing also processes material, also ask them the questions on Worksheet 5.

Prior to conducting the interview explain:

- Who you are
- Whom you represent
- Why you are asking these questions and
- What you plan to do with the answers
- How you will protect their confidentiality
- Ask them if they have any questions before you start

Ask these questions about each timber sale that the person you are interviewing purchased. Begin by describing the specific timber sale that you are interested in.

Timber Sale and Value Added Information

- Q 1)** Please note timber sale name or number.
- Q 2)** How much material was removed in the timber sale? Which species? What diameter classes?
- Q 3)** Did you sell any of the raw materials that you purchased?
- Q 4)** If yes, to whom?
- Q 5)** Where was the buyer/s located?
- Q 6)** How much and what type of material went to each buyer?
- Q 7)** What products were going to be made with the material you sold them?
(Note: you will need to verify this with the actual processor).

Q 8) Did you process any of the material yourself? (Note: if they answer yes here, you will also have to ask them many of the questions from Worksheet 5)

Q 9) If yes, how much?

Q 10) Where did you process the material?

Q 11) What kinds of products did you make?

Q 12) Where were these products sold?

Q 13) Do you have any additional comments, questions, or suggestions?

Worksheet 5: Survey of Wood Products Businesses

The purpose of this interview is to understand the health of value added forest products businesses and the opportunities and challenges they face.

Prior to conducting the interview explain:

- Who you are
- Whom you represent
- Why you are asking these questions and
- What you plan to do with the answers
- How you will protect their confidentiality
- Ask them if they have any questions before you start

Business Information

Q 1) How many years has this business been in operation?

Q 2) How many year-round employees did you have last year?

Q 3) What were most and least number of employees you had over the past year?

Business Focus

Q 4) What products does your business make?

Q 5) If multiple products, about what percentage of your total production does each product make up? (To clarify, you could ask, "For example, what percent of your business is flooring?")

Q 6) What were your gross sales last year?

Q 7) What percentage of your sales were in the following value added categories?
(Interviewer: give examples of each category)

low value added

medium value added

high value added

Use of Local Natural and Human Resources

Q 8) What type of wood/materials do you use in your business?

Q 9) Where does your supply come from?

If supply comes from outside the community, move to Q10. If not proceed to Q12.

Q 10) What factors contribute to this decision? For example, lack of availability, lack of consistent supply, price, and/or quality.

Q 11) How much material did you purchase last year?

Q 12) How much material did you purchase from the local area last year?

Workforce and Training Issues

Q 13) Over the last year, did the number of employees at the business increase, decrease, or remain the same? Please explain any changes.

Q 14) If you had openings, did you get qualified applicants for the positions?

Q 15) If not, do you have access to training programs or resources to train new employees?

Q 16) Do you have a need to training for existing employees?

Q 17) If yes, how does that training need get met?

Business Growth and Expansion

- Q 18)** Over the last year, has the amount of material processed at your facility increased, decreased, or remained the same?
- Q 19)** Please explain any changes in the amount of material processed.
- Q 20)** Over the next year, do you expect to process more, less, or about the same amount of material?
- Q 21)** Please explain any expected changes in the amount of material to be processed next year.
- Q 22)** Did your production increase, decrease or stay the same over the last year? (While similar to the previous question, it is slightly different. Increased efficiency could lead to improved production.)
- Q 23)** Please explain any changes in your production over the last year.
- Q 24)** During the past year, did you lease or buy any new equipment?
- Q 25)** What equipment did you lease?
- Q 26)** What equipment did you buy?

Q 27) Did you sell any major equipment over the past year?

Q 28) If yes, what?

Q 29) Does your business have a line of credit or other access to short-term capital?
If so, is this sufficient for your current needs?

Q 30) Do you sufficient access to capital to expand or diversify?

Q 31) What are the prospects for your business in the next year?

Q 32) Do you have any additional comments, questions, or suggestions?

MODULE 4: GRANTS AND OTHER INVESTMENTS RURAL COMMUNITY ASSISTANCE GRANTS AND COOPERATIVE AGREEMENTS

Purpose

Grants and agreements allow communities, federal agencies, and other funders to work together to improve rural areas and ecosystems. Community-forestry and rural development organizations seek grants and agreements for a number of reasons, including:

- training workers
- assisting business owners
- restoring ecosystems
- using the by-products of restoration
- completing fire-safe or economic development plans

This section describes a monitoring program that measures some of the impacts of grants and agreements on local communities and ecosystems.

General Approach

There are numerous types of investments that governments, companies, and donors can make. This module uses Forest Service grants and agreements as an example to suggest approaches to monitoring investments in areas such as workforce development, job training, ecosystem restoration, and economic diversification. You should adapt these measures to your particular goals and the particular funding sources used in your area.

The monitoring program described below is designed to help you find out what kinds of projects received funding, if the projects were completed, what impact they had on the ecosystem, and if local jobs were created, enhanced, or retained.

Suggested Measures

Outcome #1: Investment in ecosystem restoration and economic development

No.	Measure	Purpose
1.A	Number and type of projects funded by grants or agreements	Determine what types of projects are being funded; identify gaps
1.B	Total value awarded to grants or agreements by type	Determine level of investment
1.C	Number of jobs created, maintained, or stimulated locally by the grant or agreement	Measure local benefit
1.D	Average duration of created and stimulated jobs	Measure job durability
1.E	Percent of people hired that live in distressed areas (HUB zones)	Measure of benefit to areas with struggling economies
1.F	Percent of jobs created, maintained, or stimulated that provide health insurance	Measure job quality

Outcome #2: Increased capacity of local businesses through training, business development, and mentoring in the ecosystem-management and utilization sectors.

No.	Measure	Purpose
2.A	Number and total value grants or agreements that involved job training related to forest and value-added-woods-products work	Track investments in training programs
2.B	Number of people trained for ecosystem management and use of by-products	Determine how many people trained for ecosystem management and value added production
2.C	Number and total value of grants and agreements that included business-skill development for ecosystem management or use of by-products	Determine if grants and agreements are helping improve business skills

Outcome #3: Improved health, safety, and economic well-being of local communities and ecosystems

No.	Measure	Purpose
3.A	Percent and dollar value of grants or agreements that included fuels-reduction, road maintenance or decommissioning, habitat restoration, other treatments	Track investments in ecological restoration
3.B	Percent and dollar value of grants that contracted work to local businesses and organizations	Determine the economic benefits of grants and agreements
3.C	Amount of by-products that were used to make value-added products	Determine amount of by-products being used
3.D	Amount of by-products that were used locally	Determine amount of by-products used locally

Outcome #4: Completed and implemented plans to ecological health and economic opportunity

No.	Measure	Purpose
4.A	Number of planning grants or feasibility studies awarded	Track investments in planning projects and feasibility studies
4.B	Percent of planning grants that produced a completed plan	Track results of planning grants and feasibility studies
4.C	Percent of plans completed that have been or are being implemented	Determine if completed plans are being implemented

Likely Data Sources

In this module, you will be looking for information about investments, particularly in the form of grants or agreements. In general, information will come from the granting source and the funding recipient. Here we outline where you might get information for tracking Forest Service grants and cooperative agreements.

According to the Forest Service Handbook, grants and cooperative agreements are both “instruments used for the transfer of money, property, services, or anything of value” from the Forest Service to some “recipient.” While similar, grants and agreements have several distinct features. First, the Forest Service has a small role in the projects funded through grants, but has a large role in the work done using cooperative agreements. The role may be anything from oversight to providing staff. Second, projects completed using a cooperative agreement can be on federal or private lands, but both parties must benefit from the project. Grants typically cover work done on state or private lands, usually with the major benefit going to the local community. Third, the source of money is different. Funds for cooperative agreements typically come out of the National Forest System budget while money for grants more frequently come from the State and Private Forestry and Cooperative Programs budgets.

Money available for both grants and agreements may change from year-to-year, depending on national and state budgets. Congress often creates special rules related to particular programs. For example, the economic action grants funded by the National Fire Plan must have a direct link to the utilization of by-products of hazardous-fuels reduction for some economic benefit.

You can find some information needed for monitoring Forest Service grants and agreements by looking at the State and Private Forestry or Cooperative Forestry links on your Forest Service regional office web site. In Region 5 (California), the information is at http://www.r5.fs.fed.us/fpm/coop_ea.htm and, in Region 6 (Oregon and Washington), the information is at <http://www.fs.fed.us/r6/coop/>. If you cannot find your region’s link, start with <http://www.fs.fed.us/spf/coop/eap.htm>. These sites list grant recipients and award amounts but do not typically include agreements.

Once you have this list, contact your local rural-community-assistance coordinator and the agreements coordinator by phoning your local National Forest or BLM district office. In some places these coordinators are the same person. These coordinators can help you complete your lists and provide additional details. Once you have complete lists of recent grants and agreements, you will want to begin to get more detailed information. Grants typically require proposals and final reports. The agency may let you read the proposals and reports to get the needed information. In addition, you will have to speak directly to the grant recipients and agreement partners. If the organization subcontracted work, you may have to call the subcontractor, too.

Because grants and agreements programs vary, it may be worthwhile dividing the investments based on objectives (see Fig. 5). For example, you may want to only track job creation for certain types of grants. Typically, planning grants do not create jobs beyond the staff who are paid to develop the plan. By contrast, training programs seek to create long-term job opportunities for participants. It makes sense for your team to ask specific questions about subsets of those grants based on the goals and objectives of those grants. You might consider the overall mixture of grants and agreement funds received by community organizations and determine if that mixture is meeting local needs.

FIGURE 5

Possible Grant and Agreement Categorization

Economic capacity building (e.g. job training, mentoring, business skills)
Restoration grants (fuels reduction, habitat restoration, other restoration)
By-product utilization development (e.g. biomass, small-diameter materials)
Planning (fire, economic development, other planning)

Monitoring Specifics

We have divided this module into four sections. The first section suggests some general questions you may want to ask about grants and cooperative agreements. This includes identifying the general categories of projects being funded by grants and agreements. The other three sections address specific types of projects that may be funded using grants and agreements. For each section, we start with the overall “desired outcome” and then suggest some things that could be measures to determine if that outcome has been reached.

Because all of the information from this section will come from the granting agencies and interviews of funding recipients, the “where to get it” section is omitted from most of these measures.

Outcome #1: Increased investment in ecosystem restoration and economic development.

1.A. Number and type of projects funded by grants or agreements

Why monitor Identify types of funded projects and if there are gaps that future projects can fill.

What you need A list of grants and agreements including purpose of grant
A list of grant types (see Fig. 5)

How to calculate Add up the number of grants or agreements into each category

1.B. Total value of grants or agreements awarded

Why monitor Determine the level of investments in your area.

What you need Grants and agreements with award amounts
Grant types (see Fig. 5)

How to calculate Sum award amounts in each category

1.C. Number of jobs created, maintained, or stimulated locally by grants and agreements

Why monitor Measures benefit to the local economy.

What you need Definition of local (see Appendix 1)

Number of jobs each grant/agreement directly created or maintained
Number of employees by zip code
Estimate of the durability jobs (if any) the grant stimulated

How to calculate Sum number of people hired locally. Sum the estimated number of stimulated jobs

1.D. Average duration of jobs created or stimulated with grants and agreements

Why monitor Measure job durability

What you need Time per worker that each grant or agreement funded
Estimate of the durability of jobs each grant or agreement stimulated

How to calculate Convert time per worker into full time equivalent (FTE) (see Glossary for assistance with calculations). Calculate FTE for stimulated jobs. Sum all FTE across all grants; divide the number of FTEs by the total number of jobs created. Multiply by 100.

1.E. Percent of people hired that live in distressed communities (HUB zones)

Why monitor Measure of benefit to areas with struggling economies

What you need Zip codes of employees from each grant

Where to get it If you have town names, match them to zip codes using:
http://www.usps.com/ncsc/lookups/lookup_ctystzip.html
Match zip codes to HUB zones using the HUB Zone look-up program at
<http://map.sba.gov/hubzone/init.asp#address>

How to calculate Sum the number of people hired from HUB zones. Divide the total number of people hired. Multiply by 100.

1.F. Percent of jobs created, stimulated, or maintained that provided health insurance

Why monitor Measures job quality

What you need The total number of jobs
The number of employees that received health insurance

How to calculate Divide the number of jobs with health benefits by the total number of jobs. Multiply by 100.

Outcome #2: Build the capacity of local businesses through training, business development, and mentoring in the ecosystem-management and utilization sectors.

Note: If the number of grants or agreements is fewer than 20 it may make more sense to use raw numbers instead of percents.

2.A. Number and total value grants or agreements that involved job training related to forest and value added wood products work

<u>Why monitor</u>	Track investments in job training related to ecosystem restoration
<u>What you need</u>	List of objectives of grants Dollar value of grants
<u>How to calculate</u>	Count the number of grants or agreements with a job-training component. Sum dollar amounts of each grant that included job training; compare to total grants funds expended.

2.B. Number of people trained for ecosystem management work or the use of by-products

<u>Why monitor</u>	Determine how many people trained are being trained for this work
<u>What you need</u>	The number of people in each grant or agreement that attended training sessions or who were trained “on-the-job” to perform ecosystem-management work. [You might distinguish between short term (e.g. one day) training sessions and long term (full season) training programs]
<u>How to calculate</u>	Sum numbers across grants

2.C. Number and total value of grants and agreements that included business-skill development for ecosystem management or use of the by-products

<u>Why monitor</u>	Determine if grants and agreements are helping improve business skills.
<u>What you need</u>	A list of grants Project objectives for each grant
<u>How to calculate</u>	Count the number of grants with business-skill development for ecosystem management or use of its by-products. Sum the grant funds of these grants. Compare these totals to total grants and grant funds.

Outcome #3: Improved health, safety, and economic well-being of local communities and ecosystems.

3.A. Percent of dollar value of grants or agreements that included fuels-reduction projects, road maintenance or decommissioning projects, habitat restoration projects, or other relevant ecological treatments.

Note: Some grants and agreements will fall into more than one category.

<u>Why monitor</u>	Track investments in ecological restoration
<u>What you need</u>	A list of grants, grant recipients, project objectives Amount of each grant spent on each restoration objective
<u>How to calculate</u>	Divide the number of grants or agreements to the total number of grants or agreements. Multiply by 100. Sum the dollar amount spend on each objective and compare to total dollar investments.

3.B. Percent and dollar value of grants that subcontracted work to local businesses and organizations

<u>Why monitor</u>	Determine local economic benefit
<u>What you need</u>	A definition of local (see Appendix 1) Whether recipients or cooperators contracted work out City or zip code in which the contractor is headquartered Funds spent on subcontracting in each grant
<u>How to calculate</u>	Count grants involving local contractors, divide by total contracts involving contracting. Divide by 100. Sum the funds contracted to local businesses.

3.C. Amount of by-products that were used to make a value-added product

<u>Why monitor</u>	Determine amount of by-products being used
<u>What you need</u>	List of grants List of amount materials removed and sold as part of each grant
<u>How to calculate</u>	You may want to compare this to the overall amount that was removed.

3.D. Amount of by-products that were used locally

<u>Why monitor</u>	Determine amount of by-products being used locally
<u>What you need</u>	Definition of local (see Appendix 1) List of grants and grant recipients Location of the companies that bought the by-products Estimate of amount bought by each company
<u>How to calculate</u>	Sum the amount bought by local companies.

Outcome #4: Completed and implemented plans for ecological health and economic opportunity.

4.A. Number of planning grants or feasibility studies awarded

<u>Why monitor</u>	Track investments in planning
<u>What you need</u>	List of grants, grant recipients, project objectives.
<u>How to calculate</u>	Count those that had planning components.

4.B. Percent of planning grants that produced a completed plan

<u>Why monitor</u>	Track planning grant success
<u>What you need</u>	List of grants, grant recipients, project objectives Number of planning grants that produced a completed plan

How to calculate Divide the number completed by the total number of planning grants.
Multiply by 100

4.C. Percent of completed plans that are implemented

Why monitor Determine if completed plans are being implemented

What you need Number of plans completed last year that have been implemented
The number of plans completed last year

How to calculate Divide the number of implemented plans by the total number of plans completed. Multiply by 100.

Worksheet 6: Sample Survey of Grant and Agreements Recipients

The purpose of this interview is to gather information to understand the investments that are being made in economic development and restoration. You will probably find it most effective to interview grant recipients annually, shortly after the end of their grant period is complete. You will need to ask these questions for each grant, even if an agency received multiple grants. Substitute “agreement” for “grant” in the questions below when asking about agreements.

Prior to asking questions, explain:

- Who you are
- Whom you represent
- Why you are asking these questions and
- What you plan to do with the answers
- How you will protect their confidentiality
- Ask them if they have any questions before you start

General Grant Information

Q 1) Grant Name

Q 2) Grant Number

Q 3) Amount awarded

Q 4) Date of award

Q 5) Duration of grant

Q 6) Awarding agency or organization

Q 7) What was the location of grant activities?

Q 8) What were the objectives of the grant?
Prompt for specific answers, if necessary.

Grant Results—Employment

Q 9) How many people were employed directly with funds from this grant?

Q 10) How many person-hours did each employee work on the grant?

Q 11) Where is the residence of each employee who worked on this grant?

Q 12) Were the employees who worked on this grant provided health insurance?

Q 13) How many jobs were created by this grant?

Q 14) How many jobs were enhanced?

Q 15) How many jobs were maintained?

Grant Results—Training and Business Assistance

Q 16) How many people received job training to these grant funds?

Q 17) How long did this training last?

Q 18) How many of those trained found employment in their or related field after completing the training?

Q 19) How many businesses received assistance using funds from this grant?

Grant Results—Ecological Restoration

Q 20) How much of your grant funds were spent on:

- Fire hazard or fuel reduction?
- Road decommissioning, obliteration, reconstruction, and/or maintenance?
- Habitat restoration?
- Other restoration activities?

Q 21) Who completed the work activities (staff, contractors, volunteers, others)?

If the work was not completed in-house:

Q 22) What was the financial value of the contract to complete the restoration activities?

Q 23) Where are the contractor(s) headquarters who received the contract?

Q 24) Did your project involve the removal of material?

Q 25) If yes, how much?

Q 26) How much of this material was sold to make value-added products?

Q 27) If so, where was the material sold to make value-added products?

Grant Results—Planning

Q 28) What was the objective(s) of the planning process?

Q 29) Was this objective achieved?

Q 30) Have you begun implementation of the plan?

Q 31) What is the time line for plan implementation?

Q 32) Do you have any other comments, questions, or suggestions?

MODULE 5: ECOLOGICAL IMPACTS

Purpose

This module describes measures for ecological restoration and rehabilitation efforts. The module is primarily focused on fire hazard reduction and its ecological effects. Because ecological goals and concerns vary considerably from place to place, these measures should be modified to address local conditions.

We offer program-level indicators to determine if restoration projects are meeting ecological goals and not causing harm. We recommend that communities interested in pursuing project-level data collection and field monitoring consult, *Community Monitoring for Restoration Projects* published by the Forest Trust (see Appendix 4). It provides detailed information about collecting field data. It was written with ponderosa pine forests in mind but many of the methods and indicators apply to other fire-prone landscapes. Several aquatic monitoring guides are also listed in Appendix 4.

General Approach

When developing your ecological monitoring program, consider your both resource restoration and resource protection (See <http://www.fireplan.gov>). In addition, consider focusing on those components of your efforts that are experimental or controversial. And, of course, consider the unique conditions of your landscape that should be monitored (e.g. soil type, slope, species, etc.).

Many of the measures below are the same as those suggested as part of the National Fire Plan's 10-year comprehensive plan. In some cases, federal land management agencies may be collecting this information. However, you may want to create more specific measures that address local ecological issues, such as soil conditions or noxious weed invasion.

Suggested Measures

Outcome #1: Reduced fire hazard and restored fire-adapted ecosystems.

No.	Measure	Purpose
1.A	Percent of acres in fire-adapted ecosystems in condition class 2 and 3 compared to class 1	Determine the amount of land in the moderate-to-high risk category for fire danger
1.B	Percent of acres treated that were identified in a strategic plan (such as fire safe plan)	Determine the extent to which priority acres are being treated
1.C	Percent of acres treated that were identified as priorities by the Ten-Year Comprehensive Strategy	Determine the extent to which priority acres are being treated
1.D	Percent of acres treated that shifted from condition class 3 to condition class 1	Determine if treatments are reducing fire hazard
1.E	Ratio of the costs of suppression, preparedness, and rehabilitation to fire-hazard reduction and planning	Determine if fire-hazard reduction treatments are cost effective compared to suppression

Outcome #2: Maintained or improved ecosystem health

No.	Measure	Purpose
2.A	Percent of projects implemented that included wildlife prescriptions	Determine extent to which projects are addressing wildlife habitat
2.B	Number of projects implemented that were designed to improve/protect endangered-species habitat	Determine if projects designed to improve or protect endangered-species habitat
2.C	Percent of acres treated with prescription to leave vegetation appropriate seral stage	Determine whether treatments are improving stand structure
2.D	Percent of acres with fire-adapted ecosystems that are functioning within the historical range of fire occurrences (fire regime I and II, condition class I)	Determine the extent to which fire-adapted ecosystems are being restored
2.E	Percent of acres previous burnt by wildfire that have been treated for post-fire rehabilitation	Determine the extent of post-fire rehabilitation

Objective #3: Treatments met government ecological standards and monitored their ecological impacts

No.	Indicator	Purpose
3.A	Percent of acres treated to reduce fire hazard that met water-quality guidelines	Determine the extent to which treatments follow ecological standards and guidelines
3.B	Percent of acres treated to reduce fire hazard that met soil guidelines	Determine the extent to which treatments follow ecological standards and guidelines
3.C	Percent of projects with ecological-monitoring plans	Determine the extent to which project-level ecological monitoring is occurring.

Likely data sources

Numerous agencies and organizations keep ecological data. For those related to fire-hazard-reduction Forest Service, Bureau of Land Management, and rural fire departments may be particularly helpful. The technical staff and people who work with geographic information systems may be particularly useful. Finally, members of the monitoring team and the people planning and implementing the fuels-reduction work may need to collect some data.

Similar to the need to define local in the other modules, you and your partners will have to decide the extent of the land base you want to examine. You might consider watershed, subwatersheds, national forests, county or other ecologically and socially logical boundary. As you make this decision, consider the interests of your group, how you defined “local” in earlier monitoring, how existing data is collected, and the time you have available for analysis. Some areas may be too small to have enough examples to show trends; other areas will be so larger that you are overwhelmed by information. In addition to considering your scale, you have to decide which types of land ownerships you want to

consider—public, private, or some combination. Again, you will have to balance the group’s interest with the availability of data.

Monitoring Details

Outcome #1: Reduced fire hazard and restored fire-adapted ecosystems.

1.A. Percent of acres in fire-adapted ecosystems in condition class 2 and 3 compared to condition class 1

Why monitor Determine the amount of land in the moderate-to-high risk category for fire danger

What you need Number of acres in fire-adapted ecosystems in condition class 2 and 3
Number of acres in fire-adapted ecosystems in condition class 1
Total number of acres in fire-adapted ecosystems

How to calculate Compare acres in condition class 2 and 3 to condition class 1

1. B. Percent of acres treated that were identified in a strategic plan (such as a fire safe plan)

Why monitor Determine if plans are being implemented effectively.

What you need Number of acres treated that were identified in strategic plans during your time frame
Total number of acres treated

How to calculate Sum the number of acres treated that were identified in strategic plans, divide by the total number of strategic plans, and multiply by 100.

1.C. Percent of acres treated that were identified as priorities under the 10-year comprehensive strategy (wildland-urban interface, municipal watershed, threatened and endangered species, etc.)

Why monitor To determine if treatment programs are focusing on priority areas, as specified by the 10-year comprehensive strategy

What you need Number of acres treated
Number of those acres that address each of the comprehensive strategy priorities. (See http://www.fireplan.gov/report_page.cfm)

How to calculate Sum the priority acres treated, divide by total acres treated, and multiply by 100

1.D. Percent of acres originally in condition class 3 in which treatment has reduced the risk to condition class 1

Why monitor Determine if treatment projects are effective

What you need Number of acres treated that were originally condition class 3
Number of acres treated formerly in class 3 that are now in class 1

How to calculate Divide the number of acres originally in class 3 that were reduced to class 1 by the total number of acres originally in class 3 that were treated.

1.E Ratio of the costs of suppression, preparedness, and rehabilitation to fire-hazard reduction and planning

Why monitor Determine if fire hazard-reduction treatments are cost effective compared to suppression.

What you need Information on the costs of suppression, preparedness, and rehabilitation
Information on the costs of fire-hazard reduction and planning
Consumer price index

How to calculate Compare historic records of costs of suppression, etc., and compare to costs of reduction and planning. Adjust for inflation.

Outcome #2: Maintained or improved ecological health

2.A. Percent of projects implemented that include wildlife prescriptions

Why monitor Determine extent to which projects are addressing wildlife habitat.

What you need List of all projects
List of those including wildlife prescription

How to calculate Divide those including wildlife prescription by all projects. Multiply by 100.

2.B. Number of projects implemented that were designed to improve endangered-species habitat

Why monitor Determine if projects designed to improve endangered-species habitat

What you need List of all projects
List of those including prescriptions for endangered species

How to calculate Divide those including endangered-species prescriptions by all projects. Multiply by 100.

2.C Percent of acres treated with prescriptions to leave vegetation in the appropriate seral stage

Why monitor Determine whether treatments are improving stand structure

What you need List of all projects in monitoring area
List of those including prescriptions appropriate to seral stage

How to calculate Divide those including prescriptions appropriate to seral stage by all projects. Multiply by 100.

2.D. Percent of acres with fire-adapted ecosystems that are functioning within the historical range of fire occurrences (fire regime I and II, condition class I)

Why monitor Determine the extent to which fire-adapted ecosystems are being restored

What you need Acres in which current fire-regime class matches historic range
Historic fire-regime class for all acres (you will have to decide on a baseline time period)

How to calculate Divide the number of acres adapted to historic conditions by total number of acres measured. Multiply by 100.

2.E. Percent of acres previously burnt by wildfire that have been treated by post-fire rehabilitation

Why monitor Determine the extent of post-fire rehabilitation

What you need Total number of acres burnt by wildfire
Total number of acres burnt that have been rehabilitated

How to calculate Divide acres rehabilitated by all acres burned. Multiply by 100.

Outcome #3 Projects met government ecological standards and included project-level ecological monitoring

3.A. Percent of acres treated to reduce fire hazard that were in compliance with water-quality guidelines.

Why monitor Determine the extent to which treatments follow ecological standards and guidelines

What you need Total acres treated
Acres in compliance with water-quality guidelines

How to calculate Divide the acres in compliance by total acres treated. Multiply by 100.

3.B. Percent of acres treated to reduce fire hazard that were in compliance with soils guidelines.

Why monitor Determine the extent to which treatments follow ecological standards and guidelines

What you need Total acres treated
Acres in compliance with soil guidelines

How to calculate Divide the acres in compliance by total acres treated. Multiply by 100.

3.C. Percent of projects with ecological monitoring plans

Why monitor Determine the extent to which project-level ecological monitoring is occurring.

What you need Total number of projects
Total number of projects with monitoring plans

How to calculate Divide number of projects with monitoring plans by total number of projects. Multiply by 100.

ABBREVIATIONS

BLM	Bureau of Land Management
FTE	full time equivalent
GS	General Services
HUB zone	Historically underutilized business zone
NFP	National Fire Plan

GLOSSARY

Appraised value—calculated dollar value of timber or other goods. The federal government has specific processes for calculating the appraised value of timber.

Base rates—the lowest amount that the Forest Service may sell timber regardless of its appraised value.

By-products—material removed as part of restoration, usually small diameter trees or other woody material.

Cut volume—the amount of timber cut and removed from federal land (see also sold volume).

Dimensional lumber—lumber cut for the commodity market, such as 2”X4”X8’ boards.

Full-time equivalent—the equivalent of one person working 40 hours per week for one year. Typically, one FTE includes 40 hours per week for 50 weeks, or 2000 hours (assuming two weeks vacation). Job involving 25 weeks of 8-hour days would be 0.5FTE.

HUB zone—low income or high unemployment areas as designated by the Small Business Administration. Federal procurement contracts are sometimes set aside for businesses located in HUB zones.

Monitor—to keep track of something. For the purposes of this guidebook, monitoring involves keeping track of the social, economic, and ecological impacts of a project, program, or policy.

Multiparty monitoring—monitoring involving the active participation of stakeholders in program development and implementation.

Procurement—purchase of goods and services

Service contract—a contract for the purchase of services

Sold volume—the amount of timber sold , though may not yet be removed (see also cut volume).

Snag—a dead, standing tree

Stimulated job—a job created indirectly. For example, a grant program that trains people may lead to employment for participants. Or, a job in the local mill may supports additional jobs in grocery stores, banks, schools, etc.

Timber sale contract—an agreement between a landowner and a purchaser to sell timber.

Utilization—the processing materials of ecosystem management for activities such as habitat restoration, firewood, dimensional lumber, furniture, energy generation.

Value-added manufacturing—processes that increase the sale price of material though human or machine labor. For example, harvested raw logs have had value added to them through harvest and trucking. Dimensional lumber has more value added than raw logs; but furniture has more added value than lumber.

APPENDIX 1: DEFINING LOCAL

Throughout these modules, you are asked to define local. It is tempting to want a universal definition of “local” or “nearby.” But the meaning of local varies considerably from place to place and from purpose to purpose. It implies geographical, social, and economic connection. Local implies that the people who live there have a shared sense of place. In some instances, county is an acceptable proxy for local. In other instances, people think about their places as only a small watershed or neighborhood. Local can also be considered to include multiple counties or portions of several counties. Your definition of local will have to balance people’s vision of “local” with practical considerations about how data is collected and how much is available. Because people will have different perspectives and data considerations will intervene, your definition will be imperfect. Give it some thought but don’t get bogged down.

Boundary approach

One common way to define “local” is to draw an area on a map with boundaries. Everything inside the map is local; everything outside is not. As you and your partners think through your definition of local, you might begin by considering what nearby means for your group. Which neighborhoods, communities, and land ownerships you want to include? After you have begun to narrow in on your ideal monitoring area, you should think about where your data is likely to come from and how it is compiled. Will you be getting county or forest level data? Can you get subwatershed, district, or community data? Next, consider how much data you are likely to get if you chose your particular area. Are you going to be overwhelmed with information? Will you have too little information to reveal patterns? Finally, test your definition of local by looking on both sides of the boundaries. Has an important community or land base been left out? Are some areas unnecessarily included?

Relative approach

A second approach to defining local uses Map Quest or other simple on-line mapping tool to measure the distance between project sites and business locations or worker residences. This approach can be particularly useful if your project locations are near the edges of counties or other logical boundaries or are spread across large areas where the sense of local changes from place to place.

To determine if something is local, use web-based directions services such as Map Quest or Yahoo to calculate the travel distance between to points. In this approach, you might define local as the distance that people drive to and from work each day and still return home to sleep each night. This distance will vary considerably depending on driving conditions and local practice. The example below shows how you might determine how many local workers worked on particular project using commute distances.

A word of warning: Map Quest and other on-line mapping services will be inaccurate when your project sites are deep in national forests far from communities, as they will measure from the closest community.

Example: Measuring between work site and worker residence

What you need A web-based mapping site like <http://www.mapquest.com> or <http://maps.yahoo.com>
Zip code or name of the closest town to where the work took place
List of the zip codes in which workers live

How to calculate Using the “driving directions” option on Map Quest or similar web site, enter the zip code or name of the town nearest to where the work was performed. Then enter the zip code in which one or more workers lived. If you are given the choice between the shortest time or the shortest distance, use the shortest distance. It is usually more accurate. Count as “local” all zip codes within a given distance of the project site.

APPENDIX 2: ADDITIONAL RESOURCES FOR PROCUREMENT CONTRACT MONITORING

- A. Examples of contract registers
- B. Information found on the SF 279 form
- C. Examples of Service Contract Act Wage Determinations

Fremont National Forest Contract Register, FY01									
Date Received	Project Name	R F Q	Solicitation Number	District	Unit	Award Amount	Contractor	281 279	Contract Number and Award Date
12/01/00	EAP Services	X	02-01-0024	Forest	2 yrs	\$5,875.00	Wellness 2000, Inc.	279	53-04P5-1-0024 Jan 1, 2001
12/13/00	BGR Application	X	02-01-0025	Paisley	1 - 658 ac 2 - 385 ac	\$17,731.00	M&N Reforestation	279	53-04P5-1-0025 April 10, 2001
12/20/00	Slam Dunk IDIQ	X	02-01-0026	Paisley	1000 ac	\$25,430.66	J. Raymond Farm & Reforestation	279	52-04u3-1-0007RD 8(a)
01/11/01	Lakeview Hoedad Planting FY01	X	02-01-0027	Lakeview	332 ac	\$64,466.56	Birrieta Reforestation	279	52-04P5-1-RD501 8(a)
01/19/01	Seed Orchard Water Quality	X	02-01-0028	Paisley	1 job		CANCELED		-04P5-1-0028
01/24/01	South TSI & Fuels	X	02-01-0029	Paisley	180 ac	\$21,033.00	GH Ranch	279	53-04P5-1-0029 May 29, 2001
01/24/01	Gopher Baiting	X	02-01-0030	Paisley	813 ac	\$15,398.22	Quicksilver	279	53-04P5-1-0030 July 18, 2001
01/25/01	Windmill Pretreatment 2001	X	02-01-0031	Silver Lake	520 ac	\$25,220.00	Jose Perz Reforestation	279	52-04P5-1RD505
02/20/01	Site Prep Jades - Watts	X	02-01-0032	Bly	116 ac	\$7,540.00	John Richmond	279	53-04P5-1-0032 July 01,2001
03/07/01	Bly Stocking Survey	X	02-01-0033	Bly	2 yrs.	\$3,672.84	Hobart Means	279	53-04P5-1-0033 June 01,2001
03/08/01	01 Tube Maintenance & Removal	X	02-01-0034	Silver Lake	1364 ac	\$19,896.00	Jeffrey Mentzer	279	53-04P5-1-0034 June 15,2001
03/09/01	Fire School Catering 01	X	02-01-0035	Bly	1 Job	\$10,505.00	yummy's Cowboy Cuisine	279	53-04P5-1-0035 June 01,2001
04/10/01	Grass Seed Collection	X	02-01-0036	Bly	1 Job	\$23,015.00	Hobart Means	279	53-04P5-1-0036 June 08,2001

Contract Register, Deschutes National Forest

FY 2001

DATE RECV	CO	Sol # IFB/CONTRACT	PROJECT NAME	CONTRACTOR	AWD DATE	AWD AMT	SM B MIN	TOTAL UNITS
9-16-01 9-27-00	DP	R6-01-1-001 R6-01-1-001	Deschutes River Restoration D13 Tree Planting 8A/Tabing	Henderson Land Svcs Coria Contracting	8-17-01	52,500.00	S ^b B	
11-27-00	DP	R6-01-1-002	Crescent Grapple Piling	Lee Jay Brushing	2-28-01	41,112.15	S ^b B	8A
12-7-00	DP	R6-01-1-003	band Auger Planting/Tubing	Chickenshire Contracting	2-28-01	31,518.00	S ^b B	309ac @ 102.0
12-8-00	DP	R6-01-1-004	Sisters Trees Planting Kelly Holling	Forest For The Future	2-20-01	80,697.00	S/B	
1-9-00	DP	R6-01-1-005	Herbicide Application	Summitt Forests	3-1-01	108,803.01	S ^b B	8A
1-11-01	DP	R6-01-1-006	Gopher baiting	Summitt Forests	3-15-01	50,522.75	S/B	1129 Ac @ 44.
1-19-01	MG	R6-01-1-007	CVS Inventory	Chickenshire	3-19-01	11,140.00	S ^b B	1000 ac @ 11.
1-22-01	DP	R6-01-1-008	Subsoiling - 82	Keywood Blm	3-14-01	81,515.00	S ^b B	181500 @ 420. 181500 @ 420. 361400 @ 3000. 119600 @ 3000. 361400 @ 42.25
2-6-01	DP	R6-01-1-009	Sisters/Veg mats	Korvish Forest	3-23-01	51,368.20	S ^b B	
2-13-01	EH	RFA-01-2006	Staples D5					
2-13-01	EH	RFA-01-2007	Staples D5					
2-16-01	MG	R6-01-1-010	Crescent Tree Planting	3B Forestry	4-9-01	8500.20	S ^b B	165ac @ 51.88
2-16-01	EH	RFA-01-2008	D13 Gopher Trapping					
3-5-01	DP	R6-01-1-011	D2 PCT 1	Chickenshire	4-25-01	44,393.15	S ^b B	37870 @ 61.6 36140 @ 58.
3-26-01	DP	R6-01-1-012	Grapple Pile	Blake-Lawrence	5-4-01	25,818.00	S/B	331Ac @ 578.00
3-01	EH	RFA-01-2009	Signs					
3-28	DP	R6-01-1-013	Tumalo Budget	Pop Wan	7-27-01	630,154.33	S ^b B	5BA
4-2-01	MG	R6-01-1-014	D2 Paint Tree Cooler	Chapman Painters				SbA-8.
4-6-01	DP	R6-01-1-015	R6-FIA Plot Design	Keywood Blm	6-18-01	146,400.00		
4-6-01	MG	R6-01-1-016	Sisters Gopher Baiting	Ponderosa Ref.	6-20-01		S ^b B	Probert 14.00 Spoon 19.00 @ 2
4-9-01	MG	R6-01-1-017	Equipment/Stream Restora	LKE Corp	8-28-01	57,390.00	S ^b B	

**FEDERAL PROCUREMENT DATA SYSTEM (FPDS)
INDIVIDUAL CONTRACT ACTION REPORT (ICAR) (SF 279)**

- NOTE: 1. For this form, column 1 defines the item name and description if appropriate.
 2. For this form, column 2 depicts the item number for the item name (column 1).
 3. For this form, enter the appropriate response in column 3.
 4. For this form, blank item # means subheading information only.

ITEM NAME	ITEM #	RESPONSE
REPORTING AGENCY (FIPS 95)	1.	
CONTRACT NUMBER	2.	
MODIFICATION NUMBER	3.	
CONTRACTING OFFICE ORDER NUMBER	4.	
CONTRACTING OFFICE CODE	5.	
ACTION DATE (YYYYMM)	6.	
TYPE OF DATA ENTRY A. = Original, B. = Deleting, C. = Correcting	7.	
REPORT PERIOD (YYYYQ)	8.	
KIND OF CONTRACT ACTION A = Initial Letter Contract, B = Definitive Contract Superseding Letter, C = New Definitive Contract, D = Purchase Orders/BPA Calls Using Simplified Acquisition Procedures, E = Order Under Single Award Indefinite Delivery Contract, F = Order Under BOA, G = Order/ Modifications Under Federal Schedule Contract, H = Modification, J = Termination for Default, K = Termination for Convenience, L = Order Under Multiple Award Contract, Z = Initial Load of Federal Schedule Contract	9.	
DOLLARS OBLIGATED OR DEOBLIGATED THIS ACTION (in 000)	10.	
TYPE OF OBLIGATION A = Obligated, B = Deobligated	11.	
PRINCIPAL PRODUCT OR SERVICE CODE	12.	
PRINCIPAL NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM	13.	
COMMERCIAL ITEM ACQUISITION PROCEDURES Y = Yes, N = No	14.	
CONTRACTOR NAME	15.	
CONTRACTOR IDENTIFICATION NUMBER (DUNS)	16.	
PRINCIPAL PLACE OF PERFORMANCE (FIPS 55) State City	17A.	
FOREIGN COUNTRY (FIPS 10)	17B.	
CONTRACT FOR FOREIGN GOVT. OR INTERNATIONAL ORGANIZATION Y = Yes, N = No	18.	
USE OF EPA DESIGNATED PRODUCTS A = EPA-designated products or products were purchased and all contained the required minimum recovered material content, B = EPA-designated product or products were purchased without the required minimum recovered material content and a justification was completed based on inability to acquire the products(s) competitively within a reasonable time, C = EPA-designated product or products were purchased without the required minimum recovered material content and a justification was completed based on inability to acquire product(s) at a reasonable price, D = EPA-designated product or products were purchased without the required minimum recovered material content and a justification was completed based on inability to acquire the product(s) to reasonable performance standards in the specifications, E = No EPA-designated product(s) were required.	19A.	
USE OF RECOVERED MATERIAL AND WASTE REDUCTION CLAUSES A = Recovered Material and Waste Reduction Clauses, B = No Clauses Included	19B.	
PERFORMANCE-BASED SERVICE CONTRACTING (PBSC) Y = Yes, N = No	20.	
BUNDLING OF CONTRACT REQUIREMENTS Y = Yes, N = No	21.	
COUNTRY OF MANUFACTURE (FIPS 10)	22.	

**FEDERAL PROCUREMENT DATA SYSTEM (FPDS)
INDIVIDUAL CONTRACT ACTION REPORT (ICAR) (SF 279) (Cont'd)**

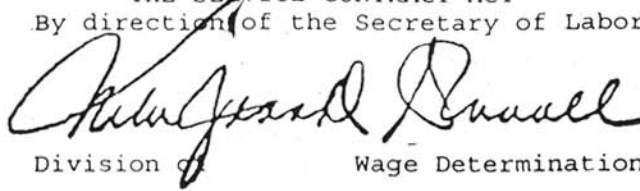
ITEM NAME	ITEM #	RESPONSE
SYNOPSIS OF THIS PROCUREMENT PRIOR TO AWARD A = Synopsized Prior to Award, B = Not Synopsized Due to Urgency, C = Not Synopsized for Other Reasons, D = Not Synopsized Under the SBA/OFPP Waiver Pilot	23.	
TYPE OF CONTRACT OR MODIFICATION A = Fixed Price Redetermination, J = Fixed Price, K = Fixed Price with Economic Price Adjustment, L = Fixed Price Incentive, R = Cost Plus Award Fee, S = Cost - No Fee, T = Cost Sharing, U = Cost Plus Fixed Fee, V = Cost Plus Incentive, Y = Time and Materials, Z = Labor Hours	24.	
CICA APPLICABILITY A = CICA Applicable, B = Purchase Orders/BPA Calls Using Simplified Acquisition Procedures, C = Subject to Statute Other Than CICA, D = Pre-CICA, E = Commercial Item Acquisition Procedures Under Test Program	25.	
SOLICITATION PROCEDURES (Complete only if Item 25 = A) A = Full and Open Competition - Sealed Bid, B = Full and Open Competition - Competitive Proposal, C = Full and Open Competition - Combination, D = Architect - Engineer Procedures, E = Basic Research, F = Multiple Award Schedule, G = Alternative Sources, H = Reserved, J = Reserved, K = Set-Aside, L = Other Than Full and Open Competition	26.	
AUTHORITY FOR OTHER THAN FULL AND OPEN COMPETITION (Complete only if Item 26 = L) A = Unique Source, B = Follow-on Contract, C = Unsolicited Research Proposal, D = Patent/ Data Rights, E = Utilities, F = Standardization, G = Only One Source - Other, H = Urgency, J = Mobilization, Essential R&D Capability or Expert Services, K = Reserved, L = International Agreement, M = Authorized by Statute, N = Authorized for Resale, P = National Security, Q = Public Interest	27.	
NUMBER OF OFFERS RECEIVED (Complete Only if Item 25 = A or E) A = 1, B = 2-5, C = 6-10, D = 11-15, E = 16-20, F = 21-50, G = Over 50	28.	
EXTENT COMPETED A = Competed Action, B = Not Available for Competition, C = Follow-on to Contract Action, D = Not Competed	29.	
TYPE OF CONTRACTOR A = Small Disadvantaged Business, B = Other Small Business, C = Large Business, D = JWOD Nonprofit Agency, E = Educational Institution, F = Hospital, G = Nonprofit Organization, H = Reserved, J = Reserved, K = State/Local Government, L = Foreign Contractor, M = Domestic Contractor Performing Outside US, U = Historically Black College/University or Minority Institution (HBCU/MI)	30.	
WOMEN-OWNED BUSINESS Y = Yes, N = No	31.	
HUBZONE SMALL BUSINESS CONCERN Y = Yes, N = No	32.	
HUBZONE PROGRAM A = HUBZone Sole Source, B = HUBZone Set-Aside, C = HUBZone Price Evaluation Preference, D = Combined HUBZone Preference/Small Disadvantaged Business Price Adjustment, E = Not Applicable	33A.	
SMALL DISADVANTAGED BUSINESS PROGRAM A = 8(a) Contract Award, B = 8(a) with HUBZone Priority, C = SDB Set-Aside, D = SDB Price Evaluation Adjustment, E = SDB Participating Program, F = Not Applicable	33B.	
OTHER PREFERENCE PROGRAMS A = Directed to JWOD Nonprofit Agency, B = Small Business Set-Aside, C = Buy Indian, D = No Preference/Not Listed, E = Very Small Business Set-Aside	33C.	
HUBZONE PRICE EVALUATION PREFERENCE PERCENT DIFFERENCE	33D.	
SDB PRICE EVALUATION ADJUSTMENT PERCENT DIFFERENCE	33E.	
SUBCONTRACTING PLAN (Small, Small Disadvantaged, and Women-Owned Small Business) A = Required, B = Not Required	34.	

**FEDERAL PROCUREMENT DATA SYSTEM (FPDS)
INDIVIDUAL CONTRACT ACTION REPORT (ICAR) (SF 279) (Cont'd)**

ITEM NAME		ITEM #	RESPONSE
SUBJECT TO LABOR STATUTES A = Walsh-Healey Act, B = Reserved, C = Service Contract Act, D = Davis-Bacon Act, E = Not Subject to Walsh-Healey, Service Contract, or Davis-Bacon Acts		35.	
ESTIMATED CONTRACT COMPLETION DATE (YYYYMM)		36.	
CONTRACTOR'S TIN		37.	
COMMON PARENT'S NAME		38.	
COMMON PARENT'S TIN		39.	
VETERAN-OWNED SMALL BUSINESS (VOSB) A = Service Disabled Veteran Owned Small Business, B = Other Veteran Owned Small Business, C = Not Veteran Owned Small Business		40.	
MULTIPLE AWARD CONTRACT FAIR OPPORTUNITY A = Fair Opportunity Process, B = Urgency, C = One/Unique Source, D = Follow on Contract, E = Minimum Guarantee		41.	
SMALL BUSINESS COMPETITIVENESS DEMONSTRATION PROGRAM (Applicable to AGR, DOD, DOE, DOI, DOT, EPA, GSA, HHS, NASA, and VA)			
DEMONSTRATION PROGRAM Y = Yes, N = No		42.	
EMERGING SMALL BUSINESS Y = Yes, N = No		43.	
EMERGING SMALL BUSINESS RESERVE AWARD Y = Yes, N = No		44.	
SIZE OF SMALL BUSINESS Number of Employees A = 50 or less, B = 51 - 100, C = 101 - 250, D = 251 - 500, E = 501 - 750, F = 751 - 1,000, G = Over 1,000 OR Average Annual Gross Revenue M = \$1,000,000 or less, N = \$1,000,001 - \$2,000,000, P = \$2,000,001 - \$3,500,000, R = \$3,500,001 - \$5,000,000, S = \$5,000,001 - \$20,000,000, T = \$10,000,001 - \$17,000,000, Z = Over \$17,000,000		45.	
FUNDING AGENCY		46A.	
FUNDING AGENCY - DODAAC		46B.	
FUNDING AGENCY - COMMERCIAL ITEM CATEGORY A = Commercially Available Off-The-Shelf Item, B = Other Commercial Item, C = Nondevelopmental Item, D = Noncommercial Item, E = Commercial Service, F = Noncommercial Service.		46C.	
FUNDING AGENCY - REASON FOR PURCHASE A = Convenience and Economy, B = Expertise, C = Specifically Authorized, D = Authorized by Executive Order, E = Modification or Extension, F = Other		46D.	
FUNDING AGENCY - CLINGER-COHEN ACT Y = Yes, N = No		46E.	
OPTIONAL REPORTED DATA ELEMENTS		47.	
48. FOR AGENCY INTERNAL USE			
49. CONTRACTING OFFICER OR REPRESENTATIVE			
a. TYPED NAME	b. SIGNATURE	TELEPHONE	DATE SUBMITTED
		c .AREA CODE NUMBER	

REGISTER OF WAGE DETERMINATION UNDER.....
 THE SERVICE CONTRACT ACT
 By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
 EMPLOYMENT STANDARDS ADMINISTRATION
 WAGE AND HOUR DIVISION
 Washington, D.C. 20210



Division of Wage Determinations

Wage Determination No.: 77-0079
 Revision No.: 21
 Date of Last Revision: 06/01/1998

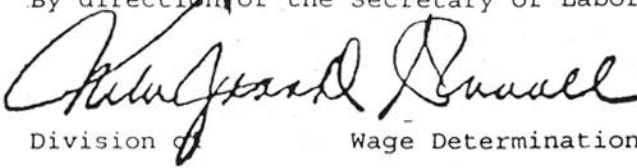
State(s): Oregon
Areas: Oregon ALL COUNTIES

**** Fringe Benefits Required For All Occupations Included In
 This Wage Determination Follow The Occupational Listing ****

OCCUPATION CODE AND TITLE	MINIMUM HOURLY WAGE
Employed on contracts for Forestry and Logging Services in the above locality:	
Forestry Technician	\$13.68
Forestry Heavy Equipment Operator	\$13.00
Forestry Truckdriver (all types of trucks)	\$10.48
Precommercial Thinner	\$12.00
Road Maintenance	\$10.72
Campground Maintenance	\$10.72
Tree Shading	\$10.72
Stream Clean out, Hand	\$ 7.72
Lookouts	\$ 8.11
Wildlife tree limbing and Topping	\$ 7.72
Nightwatchman	\$ 7.72
Vehicle Maintenance	\$10.48
Slash Piler/Burner	\$ 7.72
Tree Planter	\$10.72
Choker Setter	\$11.50
Faller/Bucker	\$19.76
Gopher Baiting	\$ 7.72
Cone Collection	\$ 7.72
Tree Netting	\$10.72
Trail Maintenance	\$10.72
Sign Installation and Maintenance	\$10.72
Fire Hose Maintenance	\$10.72
Tree Nursery Worker	\$10.72
General Forestry Laborer	\$ 8.00
Scalper	\$ 9.86

**** Fringe Benefits Required For All Occupations Included In
 This Wage Determination ****

REGISTER OF WAGE DETERMINATION UNDER.....
 THE SERVICE CONTRACT ACT
 By direction of the Secretary of Labor



Division of Wage Determinations

U.S. DEPARTMENT OF LABOR
 EMPLOYMENT STANDARDS ADMINISTRATION
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Wage Determination No.: 77-0079
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Vehicle Maintenance	\$10.48
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Tree Planter	\$10.72
Choker Setter	\$11.50
Faller/Bucker	\$19.76
Gopher Baiting	\$ 7.72
Cone Collection	\$ 7.72
Tree Netting	\$10.72
Trail Maintenance	\$10.72
Sign Installation and Maintenance	\$10.72
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Scalper	\$ 9.86

** Fringe Benefits Required For All Occupations Included In
 This Wage Determination **

REGISTER OF WAGE DETERMINATIONS UNDER
THE SERVICE CONTRACT ACT
By direction of the Secretary of Labor

U.S. DEPARTMENT OF LABOR
EMPLOYMENT STANDARDS ADMINISTRATION
WAGE AND HOUR DIVISION
WASHINGTON, D.C. 20210

William W. Gross
Director

Division of
Wage Determinations

Wage Determination No.: 1977-0209
Revision No.: 25
Date of Last Revision: 07/12/2001

State: Washington
Area: Washington Statewide

**** Fringe Benefits Required Follow the Occupational Listing ****
Forestry Industry

OCCUPATION TITLE	MINIMUM WAGE RATE
Forestry and Logging Occupations	
Brush/Precommercial Thinner	11.32
Choker Setter	13.52
Faller/Bucker	20.56
Fire Lookout.....	8.63
Forestry Technician.....	15.31
Forestry Truckdriver.....	15.31
Forestry/Logging Heavy Equipment Operator.....	15.31
General Forestry Laborer	11.31
Nursery Specialist	14.02
Slash Piler / Burner.....	8.63
Tree Climber	12.67
Tree Planter.....	11.31
Tree Planter, Mechanical	11.31

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$2.02 an hour or \$80.80 a week or \$350.13 a month.

VACATION: 1 week paid vacation after 1 year of service with a contractor or successor, 2 weeks after 2 years; and 3 weeks after 5 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

* UNIFORM ALLOWANCE *

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

** NOTES APPLYING TO THIS WAGE DETERMINATION

Source of Occupational Title and Descriptions:

The duties of employees under job Wes listed are those described in the "Service Contract Act Directory of Occupations," Fourth Edition, January 1993, as amended by the Third Supplement, dated March 1997 unless otherwise indicated. This publication may be obtained from the Superintendent of Documents, at 202783-3238, or by writing to the Superintendent of Documents, U.S. Government Printing Office, Washington D.C. 20402. Copies of specific job descriptions may also be obtained from the appropriate contracting officer.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE (Standard Form 1444 (SF 1444))

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification We(s) a Federal grade equivalency (FOE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authored representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4.

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

APPENDIX 3: ADDITIONAL RESOURCES FOR UTILIZATION MONITORING

- A. Example of Forest Service form 2400-17 (Report of Timber Sale)
- B. Example of Appraisal Form 2400-17 (Appraisal Summary)

USDA-FOREST SERVICE
(REF. FSM 2490)

REPORT OF TIMBER SALE
CONVERTIBLE AND NONCONVERTIBLE PRODUCTS

REGION:	FOREST:	DISTRICT (OR AREA):	SALE NUMBER:	QTR.-FY:
STATE:	COUNTY:	SALE NAME:		
ACRES IN SALE:	SIZE CLASS:	LEGAL DESCRIPTION:		COMPARTME

BID DATE: / /	STATUS:	SBA SET-ASIDE:	APP. BASE PERIOD:	ZONE:
SALVAGE:	PRICING METHOD:	PLAN SAB COL\$	TERM. DATE: / /	CONTRACT
CONT. NO:	CONTRACT FORM 2400:	CONTRACTING OFFICER:	METHOD OF SALE:	REG. 36CF

SPECIES	SPEC CODE	PRD-UNIT	VOLUME	ADVRTSD RATES \$	STAT. HGH BID \$	HIGH BIDDER \$	1 HIGH BIDDER \$	2 HIGH BIDDER \$	3 HIGH BIDDER \$	4 HIGH BIDDER \$	5 HIGH BIDDER \$	6 HIGH BIDDER \$	7 HIGH BIDDER \$
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TOTAL/AVERAGE:													
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SUMMARY OF BIDDERS

RANK	NAME	SBA SZ/CL	ID NUMBER	VALUE OF BID
HIGH1				\$
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

I CERTIFY THAT I HAVE PERSONALLY EXAMINED THE FOR THIS SALE AND THAT THIS IS AN ACCURATE REC

SIGNATURE _____ DATE _____
TITLE _____
REMARKS _____

DISTRIBUTION: Original Forest/District; cc to RO and SBA

USDA - FOREST SERVICE

REPORT OF TIMBER SALE
APPRAISAL SUMMARY CCF

R6-FS-2400-17 (04/02)
Version 0242 (TEA 11-02)

Region: 06	Sale Name: TARZAN	Appraisal Date: 12/18/02
Forest: 06 Mt Hood	Sale Number: 59955	Base Period Ending: 09/30/02
District: 05 Clackamas River	Appraise to: Mollala, Or	Competition Factor: 10%
Salvage: N	Appraiser: Polzin	Required KV Cost: 235,540

SELLING PRICES	1	2	3	4	5	6	7	Average	Total
1. Species	D Fir	W Hem	Nonsaw						
2. Species Code	205	263	2						
3. Product/Unit	01-03	01-03	08-03						
4. Volume	3,767	4,361	1,163						9,291
5. Base Period Price	85.51	61.05	33.75*					67.55	
6. Base Period Index	172.83	135.97	78.00					143.66	
7. Current Index	169.97	132.03	78.00					140.65	
8. Rapid Market Adj									
9. Market Adj BP Price	82.65	57.11	33.75					64.54	
10. Unusual Adjustment	-2.08	-10.08	-2.08					-5.84	
11. Nonsawtimber Adj			-129.00					-16.15	
12. Product Quality Adj	24.53	-15.70						2.58	
13. Adj Base Period Price	105.10	31.33	-97.33					45.13	419,347.04

COSTS	Zone Avg Cost/UM	Est Sale Cost/UM	Adj to BP Cost	ROADS	Km/Mi	Cost	
14. Stump to Truck	81.26	66.23	15.03	Specified Road Con Km			
15. Haul/Scale	25.17	27.02	-1.85	Specified Road Rec Km	7.40	117,789	
16. Road Maintenance	3.87	17.58	-13.71	Purchaser Credit Limit			
17. Contract	16.79	15.29	1.50	Ineffective Purch Cred			
18. Development & Other	1.91	3.10	-1.19	Temporary Road Con Km	1.00	28,830	
19. Road Const & Recon		12.68	-12.68	Haul Miles	67		
20. Total (lines 14-19)	129.00	141.90	-12.90				
				DEPOSITS:	Br Disp/UM 12.71	Rd Mtc/UM 15.66	C(T)5.213# 9,550.00

ADVERTISED RATES	1	2	3	4	5	6	7	Average	Total
21. Predicted Bid Rate	92.20	18.43	-110.23					32.23	299,493.14
22. Competition Adjustment	9.22	1.84	-11.02					3.22	29,939.72
23. Property Value									
24. Indicated Adv Rate	82.98	16.59	-99.21					29.01	269,553.42
25. Base Rate	31.34	27.34	.50					25.60	237,869.02
26. Adjustment	-43.23	10.75	99.71						-3.93
27. Advertised Rate	39.75	27.34	.50					29.01	269,549.49

CCF to MBF Rate Factors:	1.6078	1.7932	1.8849			1.7231
CCF to MBF Volume Factors:	.6220	.5577	.5305			.5803
MBF to CCF Index Factors:	.5200	.5200	.5200			
Base Index for A(T)5a:	204.29E	145.99D				
MBF Volume (estimated):	2,343	2,432	617			5,392
Wtd Avg Deliv Log Price:	364.51	224.59				

APPENDIX 4: COMMUNITY-BASED MONITORING RESOURCES

Web Resources

Consultative Group on Sustainable Development Indicators

Although not a web page written for communities, this international group provides some helpful tools for thinking about sustainability indicators.

<http://iisd1.iisd.ca/cgsdi/default.htm>

Dodge County, Wisconsin Extension

Includes a long list of links to citizen and community ecological monitoring resources.

<http://www.uwex.edu/ces/cty/dodge/crd/CRDWEB2-1184.htm>

Forest Stewardship Council

Provides principles and criteria for forest stewardship.

<http://www.fscus.org>

The Montreal Process

Provides the Montreal Process Criteria and Indicators, which the USDA Forest Service and the Oregon Department of Forestry are using to create sustainable forestry measures.

<http://www.mpci.org>

Nature Watch

A Canadian web site that provides citizen-monitoring techniques for frogs, worms and soils, plants, and ice.

<http://www.naturewatch.ca/english>

Oregon Progress Board

Describes the Oregon benchmarks, and provides data for statewide and county-by-county progress. Some of these measures could be used in a community-based monitoring effort.

<http://www.econ.state.or.us/opb/>

Oregon Watershed Enhancement Board

Offers several monitoring guides including a community-based monitoring guide for water quality.

<http://www.oweb.state.or.us>

Pacific Northwest Region, Monitoring and Evaluation Report, 2000

This document summarizes some of the ecological monitoring activities conducted in Northern California, Oregon, and Washington. The document is most useful for finding out what kinds of issues are being monitored and for getting an overall idea of the state of the forests, watersheds, and local communities.

<http://www.fs.fed.us/r6/plan/monitor2000.htm>

Sustainable Measures

Resources for communities interested in broad sustainable community indicators

<http://www.sustainablemeasures.com/>

Watch Over Washington

Offers teaching and monitoring resources, especially for water quality and watersheds.

<http://apps.ecy.wa.gov/wow/>

Volunteer Wetlands Monitoring

This Environmental Protection Agency site offers a guidebook for monitoring wetlands.

<http://www.epa.gov/owow/wetlands/monitor/volmonitor.html>

Xerces Society

Resources for aquatic invertebrate monitoring guide for community groups.

<http://www.xerces.org>

Guidebooks

Community Monitoring for Restoration Projects

Melissa Savage, 2002

This guide provides protocols for communities-based forest monitoring, using southwestern ponderosa pine forests an example.

Available from the Southwest Community Forestry Research Center, Forest Trust, PO Box 519, Sante Fe, NM 87504. (800) 803-0025.

Labor Market Profiling

Peggy Clark and Amy J. Kays

Offers approaches to gathering information on industries, employers, occupations, and participants.

Available from Economic Opportunities Program, Aspen Institute, 1333 New Hampshire Ave., NW, Suite 1070, Washington, DC 20036, (202) 736-5800

Guide to Rural Data, revised edition

Priscilla Salant and Anita J. Walker, 1995

Provides an introduction to the data available to describe rural communities.

This book was published by Island Press and is out of print. To find used copies, try an on-line used bookstore or university library

Guide to Sustainable Community Indicators

Maureen Hart, 1999.

Describes traditional indicators and how they could be replaced with sustainable indicators.

Available from Sustainable Measures, PO Box 361, North Andover, MA 01845.

E-mail: mhart@tiac.net, Web: <http://www.sustainablemeasures.com/> \$19.95 + shipping

Indicators and Information Systems for Sustainable Development

Donella Meadows, 1998.

Although somewhat theoretical, this guidebook helps make linkages across scales and between means and ends.

Available from The Sustainability Institute, PO Box 174, Hartland Four Corners, VT 05049.
(603) 646-1233. \$10

Measuring Community Capacity Building

Aspen Institute, 1996

Provides thorough guidebook for tracking community capacity.

Available from the Community Strategies Group of the Aspen Institute. Web:

http://www.aspeninstitute.org/csg/csg_publications.html

Measuring Community Success and Sustainability: An Interactive Workbook

Cornelia Butler Flora and others, 1999.

Provides an easy-to-understand approach to community sustainability monitoring with examples of simple measures and where to get needed information.

Available from North Central Regional Center for Rural Development, Iowa State University, 108 Curtiss Hall, Ames, IA 50011-1050. (515) 294-8321.

Email: jstewart@iastate.edu, Web: <http://www.ncrcrd.iastate.edu>

Measuring Change in Rural Communities: A workbook for Determining Demographic, Economic and Fiscal Trends

Ray Rasker and others, 1994.

Although this was written prior to the massive move of data to the Web, this book provides descriptions of how to use Census Bureau and other data to track county-level economic and demographic trends.

Available from the Wilderness Society. Web:

<http://www.wilderness.org/newsroom/publications.htm#economics> \$10

Measures of Success: Designing, Managing, and Monitoring Conservation and Development Projects

Richard Margoluis and Nick Salafsky, 1998.

Written for conservation and development practitioners and focused somewhat on Third World contexts, this book provides low-tech approaches to planning, implementing, and monitoring.

Available from Island Press or a bookstore. Web: <http://islandpress.org> \$35

Examples

Achieving the Oregon Shines Vision: the 2001 Benchmark Performance Report

Provides statewide progress on towards Oregon's performance benchmarks.

Available from Oregon Progress Board \$15 (1 copy free for each Oregon resident)

Web: <http://www.econ.state.or.us/opb/>

An Analysis of Forest Service and BLM Contracting in Lake County, Oregon
Marcus Kauffman, 2001.

An example of ways to assess and monitor federal contracting and local contractor capacity
Available at <http://ewp.uoregon.edu/>

Community-based Socioeconomic Assessment and Monitoring of Activities Related to National Forest Management

Cecilia Danks, Lisa J. Wilson, and Lynn Jungwirth, 2002.

An example of a community economic assessment and monitoring of local forest-related industry over time.

Available from the Watershed Research and Training Center, <http://thewatershedcenter.org>

A Review of the Lakeview Federal Sustained Yield Unit, 1992-2000

Cassandra Moseley and Marcus Kauffman, 2002.

Measures economic conditions, federal timber harvest, and timber industry over time.

Available at <http://ewp.uoregon.edu>

The State of Working America

Lawrence Mishel, Jared Bernstein, John Schmitt, 2001.

Describes overall working conditions in America with plenty of charts and graphs; could be used for comparison to local conditions.

Available from Cornell University Press (Web: <http://www.cornellpress.cornell.edu>), bookstore, or university library.

APPENDIX 5: PROPOSED WILDLAND FIRE MEASURES



United States Department of the Interior
USDA Forest Service



JAN 31 2002

MEMORANDUM

To: Chief, USDA Forest Service
Director, Bureau of Indian Affairs
Director, Bureau of Land Management
Director, Fish and Wildlife Service
Director, National Park Service

From: Bob Leaverton, National Fire Plan Coordinator
USDA Forest Service
Tim Hartzell, Director
Office of Wildland Fire Coordination, DOI

Subject: Proposed Wildland Fire Performance Measures

Bob Leaverton
Tim Hartzell

Enclosed are Proposed Wildland Fire Program Performance Measures for use by the Department of the Interior (DOI) and the USDA Forest Service (FS). This common set of measures will provide nationally consistent direction from which to measure the performance of the wildland fire management program and outcomes from implementation of the Federal Wildland Fire Policy, National Fire Plan, Cohesive Fuels Strategy and the Implementation Plan for the 10-Year Comprehensive Strategy. The measures will also be incorporated into the overall DOI and FS Strategic Plans.

In November 2001, the DOI and the FS contracted with the Performance Management Institute to assist with the development of a consistent set of wildland fire management performance measures. Meetings to gather information from both internal agency specialists and external stakeholders were held in November and December 2001, and January 2002. A draft report, *Designing Results-Oriented Performance Measures for the National Wildland Fire Management Program*, was completed in early January 2002. This draft report, in conjunction with additional input and analysis from DOI and FS resource and wildland fire management specialists, strategic planning staff, and external stakeholders, has resulted in the enclosed measures.

The four goals in the August 2001, 10-Year Comprehensive Strategy (A Collaborative Approach to Reducing Wildland Fire Risk to Communities and the Environment), became the framework for this exercise. A stated outcome, performance measures, and associated workload/activity measures were developed for each goal. The combined suite of performance and workload measures are the strategic indicators that the Departments will use to communicate progress toward meeting the stated outcomes for the wildland fire management program. While we may not currently collect data exactly in the way some of these measures are crafted, we believe that the data for the proposed measures is available or readily obtainable through our existing systems and those of key partners.

Actions needed to make these performance measures operational include:

- DOI and FS approval of the Proposed measures.
- Consultation with OMB and Congress.
- Definition of key terms and concepts to facilitate consistent understanding and data collection.
- Identification of data sources, and establishing or augmenting data collection and database systems to effectively and consistently gather and report outcomes.
- Establishing a baseline for each performance measure.
- Establishing a target for each performance measure based on projected future appropriations.
- Incorporating outcomes and measures into the Implementation Plan for the 10-Year Comprehensive Strategy.
- Incorporating outcomes and measures into the Departments' Strategic Plans, annual performance plans, National Fire Plan reporting tool, and appropriate internal work plans.
- Aligning necessary resources (financial, human, infrastructure, and information systems) to ensure focus, meet targets, and begin tracking.

Because of the desire of the Congress and the Office of Management and Budget for consistency between the Departments and the importance of these performance measures to budget and strategic planning processes, approval of the proposed measures is crucial for the success and continued support of the National Fire Plan.

We ask that you review these measures and provide comments to us by February 8, 2002. Based upon the nature of the comments we may recommend that appropriate officials from both Departments meet to resolve concerns and bring closure to this effort.

Enclosure

cc: FS Deputy Chief, State and Private Forestry
FS Deputy Chief, National Forest System
FS Deputy Chief, Business Operations
FS Deputy Chief, Office of Finance
FS Deputy Chief, Programs and Legislation
FS Deputy Chief, Research and Development
FS Director of Fire and Aviation Management
DOI Assistant Secretary, Policy Management and Budget
DOI Office of Planning and Performance Management
DOI Office of Budget
DOI Fire Directors (BIA, BLM, FWS, NPS)

United States Department of the Interior and Agriculture
Proposed Wildland Fire Management Performance Measures

Goal 1. Improve Prevention and Suppression:

Outcome: Severe wildland fire occurrences with associated loss of life and damage to communities and the environment are reduced.

Performance Measures:

- Percent of unplanned and unwanted wildland fires controlled during initial attack.
- Amount of time lost from fire fighter injury in proportion to number of days worked.
- Percent of planned facilities, positions, and operational equipment available.
- Percent of acres covered under fire management plans.
- Percent of communities-at-risk with "Firewise" or similar prevention programs in place.
- Annual cost of wildland fire suppression activities and post-fire rehabilitation treatments.
- Percent of needed support resources available for deployment in support of large fire incidents (percent of available resources by category).

Workload/Activity Measures:

- Number of fire management plans completed.
- Number of fire facilities under construction, reconstruction or upgraded.
- Number of fire preparedness personnel on board.
- Number of funded and operational fire management equipment (engines, aircraft, heavy equipment).
- Number of acres burned by unwanted wildland fire.

Goal 2. Reduce Hazardous Fuels:

Outcome: Hazardous fuels are treated to reduce the threat of severe wildland fire to communities-at-risk and the environment.

Performance Measures:

- Percent of acres in fire-adapted ecosystems in condition classes 2 and 3 (moderate to high risk) compared to condition class 1 (low risk).
- Percent of wildland urban interface (WUI) areas associated with communities-at-risk treated as prescribed in a fire management plan.
- Number of communities-at-risk from wildland fire removed from high-risk category.

Workload/Activity Measures:

- Acres with fuels reduction treatments (prescribed fire, mechanical, and other) completed (by condition class 1-3, WUI and non-WUI).
- Number of fuels reduction projects monitored as prescribed in treatment plan.

Goal 3. Restore Fire Adapted Ecosystems:

Outcome: Fire adapted ecosystems are restored and maintained to provide improved resilience and sustainability that will promote environmental, social and economic benefits to communities.

Performance Measures:

- Percent of high priority acreage within fire adapted ecosystems functioning within the historical range of fire occurrences (fire regime I and II, condition class 1).
- Percent of high priority areas damaged by wildland fire with post fire rehabilitation treatments completed.
- Annual cost of post-fire rehabilitation activities.
- Percent of total acres burned that is managed with wildland fire use or prescribed fire.

Workload/Activity Measures:

- Number of project acres on which post-fire rehabilitation treatments were completed.
- Number of project acres (by condition class 1-3) on which restoration treatments (prescribed fire, wildland fire use, and mechanical) were completed.
- Number of rehabilitation and restoration projects monitored as prescribed in treatment plan.
- Number of research products associated with wildland fire management delivered to local field units.

Goal 4. Promote Community Assistance:

Outcome: Communities at risk have increased capacity to prevent losses from severe wildland fire, and have enhanced opportunities and benefits as a result of fuel reduction and fire adapted ecosystem rehabilitation and restoration activities.

Performance Measures:

- Percent of communities-at-risk with completed fire management plans.
- Number of homes and structures lost as a result of wildland fire.

Workload/Activity Measures:

- Number of contracts awarded locally and the dollar amount of the contracts in support of wildland fire management activities.
- Dollar value of biomass products generated and utilized associated with hazardous fuels reduction and restoration activities.
- Number and value of community cost-share projects for wildland fire management.
- Number of fire departments receiving assistance.
- Dollar value of training, equipment, prevention activities, and federal property transferred.
- Number and value of community grants awarded.
- Number of cooperative agreements developed with communities.
- Number of "Firewise" or similar workshops conducted.