

**FINAL REPORT:**  
A Feasibility Study for an  
Ecosystem Management Industry Clearinghouse

Submitted to:

**Organization for Economic Initiatives, Inc.**

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**August 2000**

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# Executive Summary

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## Background and Purpose

Experience with the Federal Jobs in the Woods program and with Oregon salmon restoration efforts has shown that experienced and trained workers are having a hard time finding stable employment. Recognition of this problem led to a discussion in April 1999 among representatives from the Oregon Watershed Enhancement Board, Oregon Economic Development Department, and the Ecosystem Workforce Program. The group concluded that the absence of communication and coordination between public and private land managers, contractors and members of the workforce in the ecosystem management industry is a contributing factor to the lack of employment opportunities for contractors and workers in the industry.

In March 2000, EWP contracted the University of Oregon's Community Planning Workshop (CPW) to conduct a feasibility study of an ecosystem management industry clearinghouse. The purpose of the study is to assess the need for a clearinghouse that provides information to connect various components of the ecosystem management industry (e.g., contracting agencies, contractors, and workforce) and determine the best technical system to operate the clearinghouse. Organization for Economic Initiatives, Inc. funded this study. The Ecosystem Workforce Program (EWP) at the University of Oregon provided direction, organizational support and information on the ecosystem management industry.

## Methodology and Evaluation of the Alternatives

EWP chose four system alternatives to evaluate during the feasibility study: voicemail, fax-back, email, and an Internet Web site. The study used three evaluation criteria to assess the most practical technical system. These criteria include cost, effectiveness of the system to provide necessary information, and access the target groups have to the system. The study used focus groups and telephone interviews with public and private land managers, contractors, and members of the workforce to assess the need for the clearinghouse and target group accessibility to the different system alternatives.

## Findings

Although the focus groups and interviews determined that participants see value in an ecosystem management industry clearinghouse, there are many issues that would determine the clearinghouse's effectiveness. The current state of the ecosystem management industry and the lack of federal and private funding for restoration activities and environmental projects affects the number of contracts awarded each year, and therefore, the number of jobs available to the workforce.

When asked to rank the system alternatives, the majority of focus group and interview participants chose an Internet web site as their number one choice for a clearinghouse system. The web site alternative received the highest rating in the evaluation as the most cost efficient, effective and accessible alternative.

## Recommendations

Based on the findings of this study, we do not recommend immediate implementation of an ecosystem management industry clearinghouse. Before an ecosystem management industry clearinghouse is developed, we recommend that (1) partnerships be established with key agencies to ensure consolidated information on solicitations, and (2) issues that would affect the clearinghouse, such as the number of contracts awarded each year, agency commitment to the project, and criteria for qualified contractors and workers, as stated by focus group and interview participants are addressed. *All general recommendations are represented by G-# (G=General Recommendations).*

## Partnerships

Partnerships and coordination between key agencies and organizations in the state of Oregon are essential to the success of the clearinghouse. If EWP or another organization develops an ecosystem management clearinghouse, they should appoint a clearinghouse administrator to commence by creating partnerships with public and private land managers, including the state agencies involved with procurement activities. To consolidate all of the solicitations and notifications, partnerships and coordination between key agencies and land managers is essential. Following are recommendations to establish partnerships before a clearinghouse is developed and maintain them once it has been implemented:

- G-1 To consolidate solicitations, the clearinghouse should **form partnerships and conduct outreach** with: Federal agencies dealing with procurement including BLM, USFS, and the Bureau of Reclamation; private timber companies; landowners; non-profit organizations and watershed councils.
- G-2 **Develop a marketing plan** to ensure that contractors are aware of the clearinghouse services. Include an outreach component to private contractors and watershed councils contracting for ecosystem management work.
- G-3 **Establish partnerships with watershed councils, community-based organizations, and local governments** throughout the state to provide outreach to the workers. Ask partners to post information on bulletin boards or in newsletters. Ask partners to inform local workers where information is located, and where they can find public computers to access the clearinghouse (i.e. City Hall or a local library).
- G-4 Continue discussion on **establishing criteria that recognizes skilled contractors and workers** in the ecosystem management industry when contracts and jobs are being awarded.
- G-5 When training opportunities are available, **provide greater equity in training opportunities** for members of the workforce, including migrant and Hispanic workers. Consider establishing training opportunities in Spanish, and including Spanish language to make the clearinghouse accessible to a larger population.

## Issues for consideration

Twenty-four of twenty-five focus group and interview participants thought that the clearinghouse was a good idea, and could be very beneficial. The issues they placed on its

effectiveness, however, must be taken into consideration. Table S-1 (Summary – 1) describes recommendations to address the issues people felt would determine the effectiveness of the clearinghouse.

<b>Table S-1 Issues and Recommended Actions</b>	
<b>Issue</b>	<b>Recommendation</b>
1. Instability of the ecosystem management industry and a changing political climate. If not enough contracts are awarded annually, additional solicitations won't be posted and contractors won't need to find more workers.	<i>G-6 Conduct an economic evaluation (a ten-year industry trend analysis), including annual number of contracts and amount of money awarded, and the number of contractors and workers supported by these contracts.</i>
2. Are enough contracts for watershed restoration and reforestation being awarded to warrant a clearinghouse?	<i>G-7 Based on the analysis, determine a minimum number/amount awarded of contracts to justify a clearinghouse.</i>
3. Is there agency acceptance of the clearinghouse?	<i>G-8 Develop partnerships with BLM, US Forest Service, private timber companies, private landowners to be able to effectively consolidate all solicitations in one place.</i>
4. Does the clearinghouse promote the use of skilled contractors and laborers?	<i>G-9 Land managers, contractors and workers should agree on minimum qualifications, and develop new criteria for awarding contracts and verifying qualifications.</i>
5. Is the clearinghouse funded separately from ecosystem management projects?	<i>G-10 Find funding sources for the clearinghouse or consider charging a usage fee for the clearinghouse. (This suggestion was made by three contractors in the focus groups.)</i>
6. Are the contractors using the clearinghouse to find skilled workers?	<i>G-11 Determine the number of contracts that need to be awarded (that exceed current contracts) to justify contractors hiring and locating additional workers.</i>
7. Will the clearinghouse information be timely and accurate?	<i>G-12 Ensure that the clearinghouse administrator has time and training to maintain timely solicitations from public and private land managers.</i>
8. Is the system navigable/easy to use?	<i>G-13 Develop a web site for the clearinghouse.</i>
9. Can everyone access the system?	<i>G-14 Include a voicemail component to the clearinghouse. Coordinate with organizations to post clearinghouse information.</i>
10. Will the clearinghouse respond to concerns raised by agencies, contractors and workers during the focus groups?	<i>G-15 Submit drafts of proposed clearinghouse to public and private land managers, contractors and workers for critique and input on the system design.</i>
11. Were the participants in the worker focus groups representative of Oregon Workers?	<i>G-16 Collect data from a larger sample of the Oregon workers to ascertain their skills and access to different technical systems.</i>

## Clearinghouse Design and Implementation

There are many issues that could make an ecosystem management industry clearinghouse ineffective. If these issues are addressed and a group or organization finds that the time is right to develop a clearinghouse, following are recommendations for implementation. These recommendations are based on the clearinghouse alternative assessment, and feedback given by participants of the resource manager, contractor and worker focus groups/interviews. These recommendations incorporate cost, effectiveness and accessibility of each system alternative.

- G-17 **Develop a primary Internet web site** for the clearinghouse to provide the most comprehensive information available. The web site should have a database that can be used by the clearinghouse administrator to print information and fax or mail it to those people unable to access the Internet.
- G-18 **Install a supplementary voicemail system** that allows users to leave messages and request specific information. Appropriate information could then be faxed or mailed to the user.
- G-19 **The clearinghouse administration will require a full-time employee** to find solicitations, process worker and contractor qualifications, maintain the web site, answer voicemail and send faxes to interested people and local partners.
- G-20 Average annual costs over two years of the recommended system, the recommended combination of a website and voicemail are about \$43,600, and average \$42,000 over 5 years. **Local, state or federal agencies, public universities and non-profit organizations could administer this system at a comparable cost.**
- G-21 **Specific categories should be included on the Internet web site.** Users could also use the voicemail system to call and request specific information.

## Conclusion

If there are not enough contracts or funds being awarded in ecosystem management, contractors don't need additional workers, agencies do not need to find additional contractors, and workers will not find employment opportunities or contractors interested in their qualifications. This study, therefore, does not recommend immediate implementation of an ecosystem management industry clearinghouse. A thorough analysis of the ecosystem management industry should be conducted before allocating resources to developing a clearinghouse, including an analysis of the longevity and future of the industry, number and amount of contracts awarded and a needs assessment that includes a more representative sample of resource managers, contractors and workers in the Oregon ecosystem management industry.

If an ecosystem management industry clearinghouse is developed in the future, this study recommends developing an Internet web site as the primary host for the clearinghouse, and using a supplementary voicemail system to ensure that anyone wishing to access the clearinghouse information is able to do so.

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# Chapter 1: Background

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Over one-third of the United States is federal land, managed by several different agencies. With the expansion of our population, America's open spaces, once valued primarily for their commodities, such as minerals, timber, and livestock forage, are becoming more attractive for recreational uses and ecological diversity. A renewed interest in the nation's public lands has focused attention on the importance of maintaining its long-term health and productivity. Accommodating public and private interests in land development while sustaining the lands' health has become a primary issue in managing public land. <sup>1</sup>

Ecosystem management is a strategy that developed as resource managers began recognizing the need for an approach that promotes long-term care of the earth's resources through collaborative problem solving. Ecosystem management looks beyond federal agency boundaries, and works closely with public and private land managers. It addresses the long-term consequences of today's decisions, and considers various resources as interrelating parts of systems rather than as individual components to be managed separately. <sup>2</sup>

The Northwest Forest Plan and the accompanying Northwest Economic Adjustment Initiative (NEAI) engendered many experiments in ecosystem management in the rural communities of the Pacific Northwest. Some of these experiments were designed to benefit the community residents and to achieve the ecological objectives of ecosystem management. Many of these experiments resulted in projects designed to provide quality jobs for local residents, provide training for workers, and explore new relationships and procurement arrangements with federal land management agencies.

The Ecosystem Workforce Program (EWP) was created in 1994 by the Labor Education and Research Center at the University of Oregon to assist communities with training curriculum and technical assistance. In September of 1998 the EWP moved to the University of Oregon's Institute for a Sustainable Environment to begin a new three-year program supported by the US Forest Service, the Oregon Economic and Community Development Department, and the Ford Foundation. <sup>3</sup>

During its first four years the EWP demonstrated that forest workers can be trained for the technical, multi-faceted work of ecosystem management, and that providing stable, quality jobs offers clear advantages for the community, workers, land management agencies, and the landscape. EWP is now focusing on the "demand side" of the labor market, providing technical assistance to resource managers and watershed councils as they look for approaches that help create stable businesses and a stable, high-skilled local workers. <sup>4</sup>

## Development of an Ecosystem Management Industry Clearinghouse

Experience with the federal Jobs in the Woods program and Oregon salmon restoration efforts has shown that experienced and trained workers are having a hard time finding stable employment. Recognition of this problem led to a discussion in April 1999 among representatives from the Oregon Watershed Enhancement Board, Oregon Economic and Community Development Department, and the Ecosystem Workforce Program. The group concluded that the absence of communication and coordination between public and private land managers, contractors and workers in the ecosystem management industry is a contributing



factor to the lack of employment opportunities for contractors and workers in the industry. This led to the idea of an ecosystem management industry clearinghouse. The discussion acknowledged the Geographic Information System (GIS) based worker and contractor database developed by the Rogue Institute for Ecology and Economy.<sup>5</sup>

In September of 1999, The EWP advisory council met to discuss the development of a clearinghouse for workers, contractors and resource managers in the Ecosystem Management Industry. The proposed ecosystem management industry clearinghouse is intended to provide opportunity for public and private land managers to post solicitations and notifications of future contract opportunities, contractors to post future contract job openings, and workers opportunity to post their qualifications. The clearinghouse would offer people access to consolidated information on the solicitations, employment opportunities, and contractor and worker qualifications.

## Purpose

EWP contracted with Community Planning Workshop (CPW) at the University of Oregon to: (1) conduct a feasibility study of the ecosystem management industry clearinghouse; (2) assess the need for an ecosystem management industry clearinghouse; and (3) determine the best technical system for the clearinghouse. CPW engaged a steering committee comprised of individuals from the Organization for Economic Initiatives, Inc. (OEI), RIEE, a private industry contractor, and the coordinator and workers from the Coquille Watershed Association to provide guidance to the feasibility study.

Discussions about the clearinghouse raised questions of standards for accessing the information:

- How can a resource be created that is accessible to workers, contractors and land managers committed to the high skilled, high wage approach to ecosystem management?
- How can this resource be developed and used without influence or imposition by members of the industry not committed to the same values?

An informal survey of contractors, private industry foresters, and watershed council administrators was conducted by EWP in the fall of 1999 to determine needs, problems and market gaps in the ecosystem management industry. Overall, contractors and workers showed an enthusiastic response to the idea of a statewide resource listing of ecosystem work opportunities. Resource managers and Forest Services representatives were not as supportive of the clearinghouse idea, potentially because of their reliance on a regional or national system of service providers. Specifically, individual groups targeted problems they face in the ecosystem management industry:

- Watershed councils reported difficulty in timely matching of workers or contractors when procurement needs were beyond the scope of their own volunteers, workers or other capacity.
- Private industry historically operated by word-of-mouth, low bid and informal contractor lists. New types of technical work are requiring them to move beyond their traditional contractor base and find qualified service providers.

- Contractors reported difficulty in accessing opportunities from groups such as watershed councils because of a lack of knowledge concerning how to contact such groups.
- Workers face severe problems in procuring year-round work and matching their skills with employer needs in both ecosystem management work and general forest contracting.

This information led to the decision that a feasibility study on the clearinghouse would be undertaken to identify the most appropriate system for the clearinghouse to help facilitate linking procurement and employment opportunities between public and private land managers, contractors and workers.

## Scope of Information

The scope of information for the clearinghouse concept is broad and includes traditional tree planting and thinning work, as well as watershed assessment, habitat, treatment, and more. Clearinghouse information should represent all contracted land management work on public or private land other than engineering or higher-level scientific work.

A shift to more sustainable resource management, including forest ecosystem management and watershed restoration and management will make defining this new paradigm of work an adaptive process. For example, in the arena of monitoring and surveying for sensitive species, public agency land managers may discover monitoring and assessment work that can be done by skilled workers, as opposed to work done by those holding bachelor or higher degrees. Similar discoveries may be made about landscape management work and what that entails when it comes to treatments to enhance or protect habitat. Equipment operators, used in the past to maintain forest access roads for industrial management, are now used for culvert upgrading, and landscape management to reduce non-point source sedimentation in streams. Much of the workforce and business capacity needed for timber management and silviculture in the past will still be needed, as timber output at reduced levels will be a part of sustainable landscape management.<sup>6</sup>

## Clearinghouse Stakeholders

This feasibility study considers the perspectives of the stakeholders in the ecosystem management industry. Stakeholders include public and private land managers, private contractors, and workers. Within each of these groups is a broad array of resources, skills, and capacity to meet the needs of economic growth and environmental protection.

## Organization

The remainder of this report is organized as follows:

- **Chapter 2: Focus Group and Interviews** presents the results of research CPW conducted to evaluate need for the clearinghouse.
- **Chapter 3: Evaluation of Clearinghouse Alternatives** describes differences between the four alternatives based on a common set of evaluation criteria.

- **Chapter 4: Findings** summarizes the key results and conclusions of this study.
- **Chapter 5: Recommendations** provides a set of recommendations based on the research findings. The recommendations are designed to provide guidance for next steps in the process.

This report also includes four appendices:

- **Appendix A: Rating System and Costs of the Alternatives** describes the evaluation criteria, the rating system, and the methods and results of the cost analysis.
- **Appendix B: Focus Group and Interview Results** presents results of the focus group meetings and key person interviews.
- **Appendix C: Point System for Ranking Focus Group Access** describes the system used to rank access to alternatives by focus group participants.
- **Appendix D: Internet Procurement Databases** describes several procurement databases CPW reviewed as comparable systems.

## Chapter 2: Focus Group and Interviews

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CPW conducted focus groups and telephone interviews to assess the need for an information clearinghouse for the ecosystem management industry and determine the best technical system to operate the clearinghouse. Participants in separate focus groups and interviews included resource managers, private contractors, and workers. Focus groups were held in Coquille, Oregon on July 11<sup>th</sup>, 2000 and in Ashland, Oregon on July 13<sup>th</sup>, 2000. Additional phone interviews were conducted the week of July 17<sup>th</sup> with resource managers, contractors and a worker in various locations throughout the state.

Collecting information from people throughout the state provides the study with a cross-section of clearinghouse stakeholders. EWP, having developed relationships with agencies, contractors, and workers throughout the state, organized the focus groups, participants and interview list. CPW designed, conducted and analyzed outcomes for the focus groups and interviews.

At the focus groups, CPW presented the background of the clearinghouse idea, information on each of the potential alternatives and asked a series of questions to ascertain need and access to the different system alternatives. Results from the focus groups informed the access rating for the evaluation of alternatives. Participant responses are summarized in this chapter, and findings are listed in Chapter 4. Actual responses from the focus groups and phone interviews can be found in Appendix B.

### Participant Descriptions

#### Resource Managers – 7 participants

Four people took part in the Coquille resource manager focus group, one in the Ashland resource manager group and two took part in phone interviews. Participants represented federal agencies and watershed councils. The resource manager focus groups and interviews did not include representatives from private timber companies or private landowners who are also important stakeholders in the ecosystem management industry.

#### Contractors – 8 participants

Two private contractors and one representative from the Coos Bay Economic Development Department took part in the Coquille contractor focus group. Three people took part in the Ashland contractor focus group. One person had formerly been a private contractor and trainer for the Rogue Institute for Ecology and Economy. One person was a private contractor and worked with large-scale timber projects in the state and nation. The third person was a community development worker in a local community. Phone interviews were conducted with a private Eugene contractor and a Mollala contractor who works primarily with Latino workers. Contractor respondents provided a broad range of experience and seemed representative of other contractors.

#### Workers – 10 Participants

Three Coquille Watershed Association trained workers took part in the Coquille worker focus group. They were representative of a slightly older population (all appeared to be over the age of 60). Six people participated in the Ashland focus group. Three were employed

with the Rogue Institute almost year round. One woman had been with Rogue Institute ecosystem workforce training program (EWTP) for one year but was currently looking for work. One man had completed the EWTP training but had not found employment, and a spouse of a worker knowledgeable about the realities of finding jobs in the industry. One phone interview was conducted with a man who had been trained in the Ecosystem Workforce Program but was no longer participating in the program. He was also a contractor and worked primarily alone.

These ten workers did not seem representative of Oregon workers. They were representative of trained workers, but also maintain strong collaboration with their training programs and are able to maintain employment through those connections. This may not be representative of Oregon workers. A contractor stated that 95% of the workers doing planting and thinning are Latino. One participant was Latino, but he spoke English and had undergone the Rogue EWTP training, and was not necessarily representative of the Latino population.

## **Summary of Participant Responses<sup>7</sup>**

### **What are the current means and obstacles to posting solicitations?**

#### ***Resource Manager Responses***

Agency representatives and land managers use contractor mailing lists to send notification of their solicitations. The BLM and USFS procurement databases were also mentioned as a source for information resources. Watershed coordinators stated that they don't use a formal solicitation process, and instead contract with whom they know, act as contractors and/or directly hire their own workers. All resource manager participants agreed that having a "family" of contractors to solicit from was important because of the familiarity with qualifications, and because it can be troublesome working with new contractors.

### **What are the current means and obstacles to receiving notice of solicitations?**

#### ***Contractor Responses***

Most contractors stated that they receive notifications through the mail, the Consumer Business Daily listings, National Forest Service listings, and by word of mouth. Regionalism is an important factor in successful bid processes, but often workers are from outside the local area. Finding federal solicitations is easy because of the requirements of the procurement process, but it's difficult outside of federal contracts. Local, state, and watershed projects are hard to access.

Some felt that mail was adequate to hear about solicitations and that the real problem was the lack of solicitations being awarded in the ecosystem management industry. Another problem stated was that since there are no specific criteria regarding ecosystem management training, agencies are not required to award solicitations to the most qualified bidder. This frustrated four of eight contractors because they felt it inhibited their ability to maintain adequate work for the year.

The procurement process is common for projects under a particular amount. Most contractors and agencies are not using the Request for Proposal process, but like the best

value concept having more weight than awarding contracts to low bidders associated with Sealed bids. One participant stated that having RFPs on web site with enough lead-time would be beneficial to Forest Service and contractors.

Private work is partially sustaining contractors. Several participants agreed that current notification limited the number of contractors made aware of solicitations. The real problem, however, seems not to be in receiving notice of solicitations, but in being competitive and being awarded the actual bids. Current downsizing locally in contracting is the effect of downsizing of work and money for Forest Service projects. The lack of funding and awarded contracts severely affects the ability of some contractors to sustain year-round employment.

## **What are the current means and obstacles to receiving notice of job opportunities?**

### ***Worker Responses***

All ten of the workers that participated in the focus groups had undergone training through an ecosystem workforce training program. The Coquille Watershed Association employs the three Coquille participants almost year-round and the six participants in Ashland relied primarily on the Rogue Institute to help them locate jobs. This sampling of the workers was not representative of the larger Oregon workforce as every participant had formal training and more regulated employment.

Locally, establishing relationships with contractors is the best way to secure job opportunities. Research, and word-of-mouth were mentioned as means to obtaining employment. One participant mentioned the development of a National Watershed Council, which may increase jobs in watershed planning and management. Experience, developing contacts locally and regionally, knowing contractors, and researching future opportunities was said to increase a worker's chance in finding employment. "Who you know" was said to be an important factor in job placement. Marketing skill level is a beneficial way to let contractors know skill levels and increase job competitiveness.

The primary obstacle reported in obtaining jobs is limited funding, political decisions and the lack of contracts awarded by the federal government. Other limiting factors in gaining employment include not knowing contractors, not being able to make contacts until you've been in the field for some time period, and the fact that contractors don't often file notice of specific jobs. Another disadvantage is that contractors may not be familiar with the worker skill pool, and current contacts and the relationships that have been established with past workers may influence them.

## **Are you able to find contractors to meet the needs of your solicitations?**

### ***Resource Manager Responses***

All of the resource manager respondents stated that they worked hard to maintain solicitations locally, thus employing contractors and workers in the locality. One respondent stated that being familiar with local contractors, they were inclined to maintain relationships with them. Resource manager respondents were much more concerned with accessing the qualifications of the contractors than they were the workers. They stated they would like to access an information source that organized the contractors by skill type. Two

watershed coordinators stated that this would help them aim their solicitations to jobs that could be completed using local skills.

A major obstacle for Agencies in posting solicitations is the fee permitting process. Other obstacles include ESA regulations, seasonal restrictions, and unfamiliarity with contractor qualifications.

## **Are you currently able to find skilled workers to meet the needs of your contracts?**

### ***Contractor Responses***

Three contractors agreed that they would never bid a job without a crew first. This explained the lack of interest in posting employment opportunities for workers. All contractors agreed that because there were a limited number of awarded contracts, there was no need to increase the base of workers that they have come to know. In addition, seasonal work makes it hard to maintain trained workers, so contractors stated they would rather use people they know and trust, even if it meant providing the training for them. Word of mouth is the primary source of information dissemination as contractors seek workers. Other venues for references on workers included BLM, Private Industry, Timber agencies, Landowners, ODOT, local colleges and the employment office. Several contractors at the Coquille meeting stated they used the employment office as a source, while the Ashland contractor respondents directly stated they did not use the employment office because it did not direct them to qualified people.

All of the contractors agreed that it was important to build and maintain a loyal, qualified workforce. This is difficult since seasonal employment doesn't provide health insurance, year round work, and is difficult to retain workers if they find work elsewhere. One contractor stated that often contractors would take break-even jobs just to keep their favored workers busy so that they would have them for more important jobs.

## **What benefits will an ecosystem industry clearinghouse provide you?**

### ***Resource Manager Responses***

Resource manager representatives felt that the potential for an electronic bidding process would increase the number of contractors able to access solicitations and submit bids in a timely and efficient manner. Four of the resource manager respondents wanted to access a site that provided them information on contractor qualifications.

Finding qualified people in the timeliest manner would be the biggest benefit from the resource manager perspective.

Two of the six resource manager respondents felt that the clearinghouse would be more beneficial for the contractors and would be useful to link skilled workers with the contractors. One specifically felt that agencies wouldn't give their time to posting additional solicitations, and that the work would fall on the clearinghouse administrator.

Agencies are beginning to use electronic processes more frequently and the four resource manager respondents from the Coquille region felt that the clearinghouse could facilitate that process. Other benefits of the clearinghouse could include collaboration between

agencies in the industry, the ability to find specific skills, access to qualifications to ease the skilled worker search, facilitating rural development, and increasing opportunities for people to find year-round employment.

All resource manager respondents agreed that the clearinghouse isn't a solution to the problem of ecosystem management industry, and that if funding is available and projects are being awarded in the industry, then there may be need for the clearinghouse. They all agreed that the clearinghouse would be useful in broadening employment opportunities if the information was kept timely.

Specifically, the four Coquille resource manager respondents wanted to see the clearinghouse encourage and maintain local job opportunities, which could in turn, strengthen the credibility of the system. Credibility was referenced to providing local opportunities to the most qualified people.

### ***Contractor Responses***

Overall contractors liked the idea of accessing more contracting opportunities and that the consolidation of information would be extremely beneficial. The main information they need is related to the solicitation notifications, and they also stated interest in posting their qualifications.

Of the seven contractor respondents, none felt a need to access or review worker qualifications. They felt with the limited number of jobs available, they already had an adequate work force to choose from. The hardest part is maintaining relationships with qualified workers because there is a lack of year-round employment. What contractors need are more job opportunities, and then they would need more workers and be inclined to use a database for skilled workers.

Contractors felt strongly that the current bidding process lacked important criteria that would ensure that the most qualified bidders were being awarded contracts, as opposed to the low bidders. Because of this, contractors were interested in the opportunity to post their qualifications, and have specific criteria and or references developed to help establish qualifications.

Four of the seven contractor respondents spoke of the research they put into finding solicitations. They felt that a clearinghouse that consolidated all of the available information (i.e. federal agency sites like USFS, USF&W, CBD, BLM, Bureau of Reclamation, etc.) would be extremely beneficial. However, if the information was not consistently updated, or encompassed all of the existing information, it would not necessarily be beneficial. The contractors stated that they would continue to put their time and energy into researching solicitations if they did not feel the clearinghouse was encompassing all of the information. One contractor stated that he thought it would be a huge job to access and post all of the available procurement information and keep it updated.

Several contractors stated that they thought getting other contractors to use the clearinghouse would be difficult because of their access or interest in using an additional system. Contractors wanted to know who would pay for the system – if it would be the user, grant money or other funding sources. Three contractors felt a consolidated system would be



very worthwhile and that they would be willing to pay for the ability to access solicitation information and post their qualifications.

### ***Worker Responses***

All ten of the worker respondents thought that the clearinghouse would be beneficial, primarily in the provisions of notices of job opportunities. They felt that if contractors posted employment opportunities, they would have a better chance of finding jobs.

The ten workers agreed that the clearinghouse should post employment opportunities, provide workers the opportunities to post their qualifications, and list training opportunities in the state. They felt if the clearinghouse was combined with incentives for contractors to use trained workers, that contractors would be more likely to access the worker qualifications.

Specific information that workers felt would be beneficial in the clearinghouse included postings of all contractors and their contact information, and state job opportunities. Job opportunity postings should include start and end dates, pay rate, travel requirements, type of work, per diem and equipment provided, and qualifications needed. Worker respondents wanted worker qualification postings to include skills, travel and mobility, dates of availability, and references. Workers felt strongly that part of the criteria for contractors evaluating worker qualifications should include mandatory reference checks.

Several workers recommended dovetailing with employment offices or other state agencies to provide contractors with more opportunities to access trained workers.

### **What would prevent an ecosystem industry clearinghouse from working?**

#### ***Resource Manager Responses***

Overall, resource manager respondents felt that limited federal funding for ecosystem management projects could prohibit the clearinghouse from being effective. They felt that operational maintenance of the clearinghouse would be high in order to keep the information updated and consolidate all of the information in the industry. Part of this concern was regarding the time it would take to coordinate with agencies such as BLM, USFS, EPA, NMFS, private timber companies, watershed councils, and landowners to organize and post all available solicitations.

Four of the seven resource managers stated concern that the clearinghouse would actually infringe on local job opportunities. The fear was that opening up information statewide could cause local contractors to lose out to low bidders in other regions of the state. One resource manager respondent stated a concern that good contractors would go elsewhere and the agencies wouldn't be able to maintain their relationship with them.

Agencies were concerned with losing credibility by not maintaining a local focus, working with local partners, and following guidelines set by federal procurement processes.

## ***Contractor Responses***

All eight of the contractors interviewed stated that they were interested in consolidated information, but if it wasn't timely or easy to navigate through, it wouldn't be worth their time. The other major obstacle to an effective clearinghouse is funding for work in the ecosystem management industry. Without funding for projects, contractors don't have solicitations to bid on and don't need additional workers for those projects. In addition, posting contractor qualifications won't have significance unless there are specific criteria for agencies that they must award contracts to the most qualified bidder as opposed to the low bid. Discussion was held on the "job equation" and four contractors were concerned that a clearinghouse would be developed but only people from big cities would benefit. The suggestion to mitigate this situation was to establish criteria that locality be taken into consideration when reviewing qualifications and bid proposals.

Additional barriers to an effective clearinghouse include contractor malaise (those who just don't take the time to use systems), not describing or organizing the clearinghouse by region, and the seasonal restrictions on ecosystem work. Perceptions of liberal, environmental restrictions would sink the clearinghouse unless it was a partnership between agencies, private timber companies, landowners and contractors – people wouldn't want to take advantage of the clearinghouse if there were unwarranted restrictions. One contractor stated that the mishandling of the development of the clearinghouse tainted her perception and interest in the clearinghouse. The contractor was not interested in using a system that was not developed in a collaborative manner.

## ***Worker Responses***

All worker respondents agreed that if contractors do not use the clearinghouse to post employment opportunities or review worker qualifications, there would be little benefit to them. If contractors do not hire workers based on qualifications (and base hiring off of low wages) posting worker qualifications will have little significance.

Four of the ten workers interviewed stated that if the system were Internet based they would not be likely to use the clearinghouse. A Latino contractor said that the majority of Latino workers would not access a computer-based program, and that clearinghouse would have to offer Spanish-based options.

Other factors that would prohibit the clearinghouse from being effective include not having timely information, a lack of quality control for information being posted, and difficulty in navigating through the clearinghouse.

## **What recommendations would you make for the development of the clearinghouse?**

### ***Resource Manager Responses***

Partnerships between federal agencies (USFS, BLM, ODF, NRCS, etc.), watershed councils, private timber companies and private landowners are essential to make this a true clearinghouse. The clearinghouse administrator would need to organize the consolidation of all this information. Multiplicity of efforts sometimes becomes a problem if information is just scattered on not consolidated.

Developing a clearinghouse is dependent on contract funding and employment opportunities in the ecosystem industry. One watershed coordinator asked if shifting to a web site from mail solicitations would exempt legal requirements for the procurement process.

The idea of setting up criteria for the clearinghouse was important. Criteria for consideration included having to be licensed contractor, having different points of entry into the clearinghouse for licensed or non-licensed contractors. Are there registration requirements, standards for environmental restoration or wages, and are there specifications for geographic locations. The latter criteria was a point reiterated by several resource manager respondents as they felt that keeping jobs local was very important. Broadening employment opportunities and increasing opportunities for year round employment was a positive aspect of the clearinghouse, through there was some concern that a clearinghouse would displace benefits. Several agencies wanted to see contractor qualifications and potentially a matrix to organize contractors by training and expertise.

### ***Contractor Responses***

Industry advocacy linked with the clearinghouse would be beneficial (between contractors/agencies). Lobbyists know what congressional districts they operate in so they can pursue problems with their congressmen. Funding for projects in the industry is imperative to success of the clearinghouse. If contracts are available, contractors will bid, need to find qualified workers, and workers will want jobs. Contractors would like to see notification of local opportunities to keep their work local. All contractor respondents were interested in posting their qualifications to help agencies access the most qualified contractors to meet their contracting needs.

Four of eight contractors agreed that at this point the federal government seems to be arbitrary and inconsistent in sending out notification of solicitations and awarding those bids. The average number of bidders is twenty-four on a given project. Because of “low bids” outside contractors are given local jobs.

Four of eight contractors mentioned their desire to see watershed councils post their contracting opportunities. One contractor stated that since councils are run under federal grant money, they should be required to send out solicitations.

### ***Worker Responses***

All of the workers felt that a clearinghouse would be extremely beneficial if it could help them access employment opportunities. They felt it was important to have the opportunity to see contractor qualifications and it would help them in the networking process. They also wanted the opportunity to post their qualifications provided that contractors were going to access them. Five of the worker respondents have practically year-round employment because of their affiliation with the local watershed council or connections they had made in the ecosystem workforce training programs. Four of the unemployed workers stated their trepidation in securing year-round employment.

**Table 2-1  
Resource Manager Perspectives**

<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
Voicemail 7 of 7 - access	Everyone has access to a phone and voicemail would be the most widely accessible and cheapest alternative. It would work well for posting solicitation notifications.	Voicemail is not convenient to get information. Many don't like using automated services and prefer real people. Too complicated to be efficient - try to access contractor qualifications and solicitation notices. Impatient people frustrated by the menu options.
Fax-back 7 of 7 access	A fax/phone combination could be very easy to use. Faxes are somewhat accessible.	Faxes not always readable. Many don't have personal access to fax machines. Readability and reliability are concerns. Fax better for receiving - not posting it. High administrative burden.
Email 7 of 7 – access	Speed/time efficiency Documentation of solicitation notices being sent out would be very helpful. People like information that is spoon-fed, easy, and comes without too much personal effort.	No email, no access. Specifications and drawings are hard to send via email. Credibility is an important issue – if the list serve is not monitored people may receive inappropriate information.
Internet 7 of 7 access	The internet is most beneficial because of the different data sets available. It is very accessible (once you have access to a computer) and data can be compatible with other programs. This is the most palatable, time efficient system. It would not alienate or inundate users with information as they could access it at their leisure.	It would be difficult to have on-line solicitations, and agencies didn't like the idea of on-line signatures. Questions arose regarding how the system will be paid for and maintained. The system would be accessible to people outside the target audience which might stimulate competition which may or may not be a limitation
<b>Do you think the clearinghouse is a good idea? Yes – 7 of 7</b>		

**Table 2-2  
Contractor Perspectives**

<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
<b>Voicemail</b> 8 of 8 access	Everyone can access voicemail. It is a Universal system, quick and there doesn't need to be a person present to leave a message.	Slow, not visual, number of solicitations would complicate the system. High administrative burden to return calls. Language could be a limitation for Latino callers.
<b>Fax-back</b> 8 of 8-access	Notification of solicitations could be faxed. Data on resumes, qualifications, maps, etc is visual.	High administrative burden and too much information to send via fax. People who don't have access to faxes.
<b>Email</b> 8 of 8 – access	Email notifies users of new information on the web. Flexible hours of use – not dependent on office hours. Can be accessed at a location that has a computer like city hall, or a library in small towns	Cost to the user. People who don't have email. Attachments could be difficult if maps or additional information has to be spent. Expensive to maintain a list serve administrator.
<b>Internet</b> 8 of 8 access	Immediate, downloadable information. Can see pictures, maps, interactive. Able to modify criteria depending on whether you're a worker, contractor, etc. Workers could link to contractors after reviewing their skills and how they may fit in the project. Review bid notices to see if it's relevant.	Cost to user. Training Not everyone is on-line or has access to a computer
<b>Do you think the clearinghouse is a good idea? Yes – 6 of 7</b>		

**Table 2-3  
Worker Perspectives**

<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
<b>Voicemail</b>	Voicemail would be the easiest method for workers – they all have a phone. Simplest but maybe not the best. An answering service for contractors would be beneficial. Easy access to notices or to contact contractors.	Will all the necessary information be there? Time consuming for user and the administrator. Information will have to be written down (nothing visual.)
<b>Fax-back</b>	Calling in and requesting a fax would make information visual. Drugstores/mini-marts can send receive a fax	Faxes are not timely or easy. Many people don't have faxes.
<b>Email</b>	Many workers have access to email and know how to use it. (This is not the case with the Latino population.)	Outdated information would not be useful. Limited access to email
<b>Internet</b>	Cheap, easy and fast. Easiest to post information, cover more ground with less time. Convenient and no postage costs. Available to those who don't have a computer through city hall or libraries. Trend towards using Internet in the future.	Limited access and potential for outdated information.
<b>Do you think the clearinghouse is a good idea? Yes – 10 of 10</b>		

# Chapter 3: Evaluation of Clearinghouse Alternatives<sup>1</sup>

This chapter explores system design for an ecosystem industry clearinghouse using three evaluation criteria: cost, effectiveness and access, to evaluate four alternatives: voicemail, fax-back, email and an Internet web site. Each alternative includes a definition of the system design and a critique of the system feasibility. A table describes the cost, including start-up, maintenance and operations, effectiveness and clarity of the information presented, and accessibility target groups have to the alternative.

In evaluating the overall system design, we looked at existing models of procurement databases used in similar contracting industries to compare potential system designs. Appendix D describes these databases.

## Methodology

The feasibility study for the information clearinghouse includes an exploration of four system alternatives. To accurately evaluate the alternatives, CPW designed a rating system with three evaluation criteria: (1) cost; (2) effectiveness; and (3) access. In the final system analysis, each alternative receives a rating based on an evaluation that is documented in text before receiving a numerical score<sup>2</sup>.

Criteria	Ratings			
	4	3	2	1
<b>Cost</b> Average cost over 2 and 5 years (including start-up and operations)	\$37,000 - \$38,999	\$39,000- \$40,999	\$41,000- \$42,999	\$43,000+
<b>Effectiveness</b> 4 Variables 1. Encompasses data for target groups 2. Incorporates 5 Regions 3. Easy to Understand 4. Easy to Navigate options	4 variables met	3 points met	2 points met	0-1 point met
<b>Access</b> Accessibility to the target groups (Rating is based on votes from focus group respondents on which alternative they would prefer to access <sup>8</sup> .)	3.51 – 4.00 points	2.51-3.50 points	1.51-2.50 points	0.00 – 1.51 points

## Cost

The cost criteria are based on the total financial expense incurred by the clearinghouse during start-up and annual operations. The cost rating is based on the average cost over two and five-

<sup>1</sup> **Disclaimer:** The evaluation for the clearinghouse was conducted using EWP as the clearinghouse administrator to provide a foundation for system implementation and cost analysis.

<sup>2</sup> Appendix A describes the methodology for the criteria rating, and specific ratings on each alternative.

year intervals. Implementation of all systems alternatives will require outreach to target groups to make them aware of the clearinghouse, garner interest, and monitor use of the clearinghouse system. Costs of outreach to promote awareness of the clearinghouse systems are not included in the rating system, as each alternative will require outreach.

### ***Cost Considerations***

- Costs are based on price estimates attained through the applicable server provider during April 2000. These costs are subject to change. Costs for each system include materials, salary and implementation costs.
- Changes in labor costs over 5 years are not reflected in this study. The study assumes that while time spent seeking solicitations may be more intense during the initial two years, the amount of information would probably increase in years 3 through 5, and will balance the labor costs of seeking solicitations.
- The cost of implementing a marketing plan and outreach to promote the clearinghouse to target groups will be incurred by all alternatives. This cost was not included in the evaluation criteria.
- The average costs represented over two and five-year periods are in current dollars and do not take into account inflation.
- The following additional items were not accounted for in the cost evaluation:
  - Training for administration of the clearinghouse system
  - Cost of hiring administrators for the clearinghouse system
- Administrative burden is the number of hours required to support the system alternative. There are approximately 3,000 solicitations<sup>9</sup> posted by Federal and State agencies, private industry, landowners, watershed councils, municipalities and counties each year. In order to attract these solicitations and process contractor employment opportunities and worker qualification sets, the clearinghouse will require a full-time employee to seek solicitations from agencies, review inputs to the system, and monitor usage.<sup>10</sup> Because of the amount of work required researching solicitations and administering the clearinghouse, this study calculates administrative burden at 40 hours per week at a cost of \$20 per hour for the labor.

### **Effectiveness**

Effectiveness is determined by the usability of the system alternative, and the amount of information included in the system design. Alternatives were evaluated by the extent to which a user can access information by target groups, regions and skill type. Ease of navigating the system and clarity of information provided were also considered in the evaluation.

### **Access**

Access to the clearinghouse system is central to the usefulness. This criterion evaluates which of the target groups can access each alternative system and to what degree. Focus groups and

interview results include information on access that the target groups have to the different system alternatives. A point system in Appendix C describes the calculation for the access rating.

## Potential Alternatives for the Clearinghouse

### Alternative 1: Voicemail System Design

#### *Definition*

The voicemail system allows agencies, contractors, and workers the chance to post and hear information provided by the clearinghouse. The design of a basic voicemail system for the clearinghouse includes 6 options:

1. Agencies post solicitations
2. Contractors/Workers access solicitations
3. Contractors post employment opportunities
4. Workers/Agencies access employment opportunities
5. Workers post skills
6. Contractors/Agencies access worker skills

The design used to evaluate the voicemail system is simple and does not allow for options to post and hear information by geographical region or skill type. Allowing users to access information with the voicemail system by region would cause the price to increase.

#### *Critique*

- The voicemail system is the most accessible alternative for the information clearinghouse. The 1-800 number provides equal access to agencies, contractors and workers to use the service.
- The cost for installation, maintenance and operations of phone lines and mailboxes is over \$41,000 annually for basic options. If the clearinghouse includes information by geographical region or skill type, this cost will increase. There is also a high administrative burden in using voicemail. The voicemail system allows callers to leave messages rather than posting them for public access. Messages must be received and re-posted in another mailbox. Installation of telephone services will be simple, regardless of on-site or off-site providers.
- Making target groups aware of the voice-mail service will require a marketing campaign through the mail, yellow pages or other forms of advertisement.
- The number of mail box options available, depending on the service provider will cause the price to increase or prohibit users the option to make queries by geographical region.
- A voicemail system may seem cumbersome to the users as they sift through options to find their region or desired information.
- It may be difficult to monitor the users of a voicemail system. Implementing criteria and standards for workers, contractors and agencies that are allowed to use the system may be difficult on a voicemail system.



<b>Table 3-2 Voice-Mail System Rating - Telecom – University of Oregon</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Why?</b>
<b>Cost Rating</b>	2	Average annual cost over two years is <b>\$42,000/Over 5 years is \$42,000</b>
<b>Effectiveness Rating</b>	1	Telecom's limit of 9 options makes it impossible to incorporate information by region, target groups and skill category. Navigation of a phone line could be more difficult and require multiple uses before information is attained and clearly understood.
<b>Access Rating</b>	2	See Focus Group Results for more information.

Note: 4 is the highest rating, 1 is the lowest.

<b>Table 3-3 Voice-Mail System Rating – US West</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Why?</b>
<b>Cost Rating</b>	1	Average annual cost over two years is <b>\$43,750/ 5 years-\$43,700</b>
<b>Effectiveness Rating</b>	2	Navigation of a phone line could be cumbersome and require multiple uses before information is attained and clearly understood. More effective than Telecom because there are more mailbox options.
<b>Access Rating</b>	2	See Focus Group Results for more information.

Note: 4 is the highest rating, 1 is the lowest.

## **Alternative 2: Fax-back System Design**

### ***Definition***

Upon calling a fax-back system users will hear a summary of information available by fax. The user would need to leave a message requesting specific information. The user would also have the option to fax in a solicitation, contract or qualification posting. The clearinghouse administrator could provide a corresponding worksheet listing the specific work categories.

### ***Critique***

- Using the fax-back system would provide an opportunity to use a database system for all information, with a simple voicemail message that allows users to request the information he or she needs.
- The 1-800 number would provide equal opportunity to agencies, contractors and laborers to use the service.
- Annual costs are over \$41,000, including installation, maintenance of the phone line and additional cost for the fax feature.
- Administrative burden would be high, as the clearinghouse administrator would be responsible for inputting faxed information into the database and faxing out information requests.

- Implementation of the system would be simple with University or off-site telephone service providers. The clearinghouse administrator could choose to pay for the telephone line and compartmentalize the mailboxes on a computer database.

<b>Table 3-4 Fax-back System Rating - Telecom – University of Oregon</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Why?</b>
<b>Cost Rating</b>	2	Average annual cost over 2 years is <b>\$41,600/ 5 years \$41,600</b>
<b>Effectiveness Rating</b>	3	Faxing information from a database will provide comprehensive information. User will need to leave accurate information on the message.
<b>Access Rating</b>	1	See Focus Group Results for more information.

Note: 4 is the highest rating, 1 is the lowest.

<b>Table 3-5 Fax-back System Rating – US West</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Why?</b>
<b>Cost Rating</b>	2	Average annual cost over 2 years is <b>\$42,900/ 5 years \$ 42,900</b>
<b>Effectiveness Rating</b>	3	Faxing information from a database will provide comprehensive information. User will need to leave accurate information on the message.
<b>Access Rating</b>	1	See Focus Group Results for more information.

Note: 4 is the highest rating, 1 is the lowest.

### **Alternative 3: Email Distribution**

#### ***Definition***

An email list serve creates an on-going dialogue between target groups. Email lists can take two formats: (1) a discussion group (called a list serve), and (2) a distribution list.

The list serve would facilitate the dialogue and transfer of information between agencies, contractors and workers. The distribution list would be solely for distribution of project information. The list manager would post and monitor activities on the list serve, and, receive all relevant information. In order to optimize effectiveness of the list serve, the manager would need to organize monthly postings by region and work category. The clearinghouse administrator would be responsible for sending out postings of information on a monthly basis. The clearinghouse administrator would send out three messages: one with agency solicitations, one with contractor opportunities, and one detailing worker qualifications. Users would be responsible for sending their information to the list serve manager in a certain timeframe, so that the list manager would have enough to time to re-post the information on the three messages.

#### ***Critique***

- Annual costs are over \$38,000 for a University-based server. The cost of implementing a University-based list serve would be minimal, and implementation and maintenance of the operation would be relatively simple and can be done on-line.
- The email list serve would consolidate all solicitations, contracts, and worker qualifications on monthly messages to the distribution list.

- The list manager would be responsible for organizing each posting by region and type. This increases the administrative burden on the list manager. There is no option for navigation or input of queries for the email list serve.
- Users would be responsible for submitting solicitations, contracts and worker qualifications in a timely manner so as to provide up-to-date information for the monthly postings.
- Marketing the email list serve, particularly with workers who may not have email access, could be more difficult.
- The site manager would spend time assisting new members log onto the site and helping existing members change user names or log off the site. An open group would allow users to email the group directly without going through any screening process. This reduces the administrative burden. The more regulated the group process, the higher amount of work for the system administrator.
- People familiar with list serve programs and email distribution lists will be more inclined to use this service. People without personal computer access may be less inclined to use an email distribution service because they have no way to continually monitor the list. It would potentially be simpler to access a web site at their leisure than to maintain a relationship with an email distribution list.

<b>Table 3-6</b>		
<b>Email List serve System Rating – University of Oregon - Majordomo</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Why?</b>
<b>Cost</b>	4	Average annual cost over two years is <b>\$38,400/</b> 5 years is <b>\$38,400</b>
<b>Effectiveness</b>	1	The email list serve will allow Agencies, Contractors, and Workers to post items of interest to the list manager. Since a list serve does not have database options, it would be difficult to navigate or organize the materials on the list serve. The potential inundation of information that may not be pertinent to an individual list serve member may aggravate the users.
<b>Access</b>	2	See Focus Group Results for more information.

Note: 4 is the highest rating, 1 is the lowest.

<b>Table 3-7</b>		
<b>Email List Serve System Rating – LSOFT!</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Why?</b>
<b>Cost</b>	4	Average annual cost over 2 years is <b>\$38,800/</b> 5 years is <b>\$38,900</b> because lists must be repurchased every two years.
<b>Effectiveness</b>	1	The email list serve will allow Agencies, Contractors, and Workers to post items of interest to the list manager. Since a list serve does not have database options, it would be difficult to navigate or organize the materials on the list serve. The potential inundation of information that may not be pertinent to an individual list serve member may aggravate the users.
<b>Access</b>	2	See Focus Group Results for more information.

Note: 4 is the highest rating, 1 is the lowest.

## Alternative 4: Web-site

### *Definition*

A web site allows users to navigate through different options to post or attain desired information. Options for the clearinghouse would be visually available, allowing users to be directed by region, information or work category. Web site databases allow for a substantial amount of information to be organized and available from a central location. The web site would require a Webmaster to provide access to users through passwords, and monitor the database of information on the web site.

### *Critique*

- Average annual cost for a five-year period is over \$39,000 for University services and over \$43,000 for off-site services.
- The web site offers the most options for providing to users comprehensive information that is easy to find and understand.
- Agencies and contractors have access to the Internet and will be able to make easy use of the web site.
- Easy to link and network the information through the Internet. Designing the web site, and marketing the web site through external links on federal, state and local Internet resources would be fairly easy.

<b>Table 3-8 Web site System Rating – UO New Media Services</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Why?</b>
<b>Cost</b>	2/3	Average annual cost over 2 years is <b>\$41,400/</b> Average Cost over 5 years <b>\$39,900</b>
<b>Effectiveness</b>	4	Constituents, Regions and solicitation information would be clearly defined in databases. Web sites make navigation relatively simple.
<b>Access</b>	4	See Focus Group Results for more information.

Note: 4 is the highest rating, 1 is the lowest.

<b>Table 3-9 Web site System Rating – Cyber Internet Services</b>		
<b>Criteria</b>	<b>Rating</b>	<b>Why?</b>
<b>Cost</b>	1/2	Average annual cost over 2 years is <b>\$40,300/ \$39,600</b> over 5 years
<b>Effectiveness</b>	4	Target groups, regions and solicitation information would be clearly defined in databases. Web sites make navigation relatively simple.
<b>Access</b>	4	See Focus Group Results for more information.

Note: 4 is the highest rating, 1 is the lowest.

## **Additional Alternative: Mailing System**

CPW did not investigate the mailing system alternative. EWP asked CPW to provide a summary of the mailing system design and preliminary critique.

### ***Mailing System Summary***

A mailing system provides target groups with mailed information that they specifically request. (An initial postcard would be sent with a checklist of information that could be provided by the clearinghouse.) This could potentially be a very expensive, labor-intensive process. There would be a lot of paper-waste, in addition to a time-delay that may occur through the postal system. Costs would be comprised of paper production and postage, multiplied by the number of mailings sent out per month and number of people receiving the mailings. Written information provided by the clearinghouse will be easy to understand, and reach all members of the target groups with mailing addresses. The time delay in the mailing process could result in lost opportunities. It would be labor intensive to request submissions, conduct mailings, and maintain correspondence with different target groups. People may also be less inclined to send in contracts or qualifications by mail.

## Chapter 4: Findings

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CPW conducted this feasibility study to assess the need for an ecosystem management industry clearinghouse, and assess which system alternative would be most appropriate for operating the clearinghouse. This chapter will describe the findings for both topics.

### Needs Assessment

Twenty-four of twenty-five participants in the focus groups said they thought a clearinghouse was a good idea, and something that they would take advantage of. One participant remained undecided. However, participants stated specific issues they thought could make the clearinghouse ineffective.

#### Issues:

1. Are contracts being awarded in Ecosystem Management?
2. Is there agency buy-in to the clearinghouse?
3. Does the clearinghouse promote the use of skilled contractors and laborers?
4. Is the clearinghouse funded separately from ecosystem management projects? (money is not taken from potential contract opportunities)
5. Are the contractors using the clearinghouse to find skilled workers?
6. Will the clearinghouse information be timely and accurate?
7. Is the system navigable and easy to use?
8. Can everyone access the system?
9. Does the clearinghouse respond to concerns raised by agencies, contractors and workers during the clearinghouse focus groups?
10. Were the participants in the worker focus groups representative of Oregon workers?

### Resource Manager Findings

Agencies were less enthusiastic about the idea of using the clearinghouse for solicitations, as it sounds like more work. They are already required to abide by the federal requirements and send out solicitation notices. Five of seven resource manager representatives thought it would be beneficial as a link between workers and contractors. Overall, resource manager participants portrayed the feeling that they were not interested in spending time or energy in seeing that the clearinghouse administrator obtained all of the solicitations, but thought it would be beneficial for contractors and workers.

### Contractor Findings

Overall, contractors were enthusiastic (though equally as skeptical) about the idea of having a one-stop shopping center and consolidated information on solicitations. They were also enthusiastic about the idea of posting their qualifications in the clearinghouse so that public and private land managers could review their skills. While contractors thought posting worker qualifications was a good idea, the eight contractor participants all said they would not take advantage of it at this time, as there just aren't enough contract opportunities being awarded to warrant hiring new people or posting employment opportunities in the clearinghouse. In addition, they felt it was sometimes easier to just hire people they knew and train them on the job. All contractors agreed that if they had more contract opportunities and needed to hire skilled workers, they would use the clearinghouse if that information were made available.

## Worker Findings

All worker participants were very enthusiastic about the idea of posting their qualifications, having them looked at by contractors, and having the ability to access employment opportunities. Their main concern was finding year-round employment and they felt strongly that a clearinghouse would open up those opportunities to them.

Several of the workers stated that the only system they would use is voicemail. In addition, (and as mentioned in the focus group summary) the worker focus group participants were not representative of the majority of the workers. All participants had undergone ecosystem workforce training and only one Hispanic worker (who was fluent in English) participated among the 10 worker focus group participants.

## Developing Criteria

Several participants from each of the different groups stated that they thought a clearinghouse would only be effective if criteria were established. (The issue of criteria is also noted in the contingencies of an effective clearinghouse.)

- Criteria that public/private land managers acknowledge skills held by contractors
- Criteria for bids to be awarded to the qualified candidate as opposed to the low bid.
- Criteria stating that contractors should recognize training and skills held by workers as opposed to hiring who they know.
- Criteria making contracts “worker-friendly” and easier for workers to understand.
- Criteria for verifying worker and contractor qualifications.

## Ranking the Alternatives

The system alternatives evaluated for this study include voicemail, fax-back, email and an Internet web site. Table 4-1 shows the ranking of alternatives. The highest ranking describes the alternative that is most cost efficient, effective, and is preferred by the majority of focus group and interview participants.

<b>Rank</b>	<b>Alternative</b>	<b>Overall Rating</b>
# 1.	University of Oregon – Web site	3.25
# 2.	Lsoft - Email	2.75
# 2.	University of Oregon - Email	2.75
# 2.	Cyber Internet Services – Web site	2.75
# 3.	US West – Fax-Back	2
# 3.	University of Oregon – Fax- Back	2
# 4.	University of Oregon-Voicemail	1.75
# 5.	US West – Voicemail	1.5

Eighteen of twenty-five participants chose the Internet or a combination of Internet/Email or Internet/ Voicemail as their top choice. Nine participants chose email as their second choice. Two chose the fax option, and two chose voicemail as their second choice. Six people chose

voicemail as their third choice and seven of the nineteen participants stated the fax was their last choice, with three people leaving fax off all together.

While voicemail was chosen by relatively few participants, several stated that they felt many workers and some contractors they knew would only use the voicemail system, given that it was not too complicated to use. All twenty-five participants ranked the alternatives in terms of which they felt would be most effective. Some participants voted for a combination of two alternatives. In that case, both alternatives received an equal rating.<sup>11</sup>

Table 4-2 describes the points each alternative earned for resource managers, contractors and worker participants and the focus group rating for system accessibility. The total points divided by 25 (the number of participants) equals the final rating.

<b>Target Group</b>	<b>Internet Points</b>	<b>Email Points</b>	<b>Voicemail Points</b>	<b>Fax Points</b>
Resource Manager	27	18	9	12
Contractor	30	16	11	7
Worker	28	18	31	11
<b>Total Points</b>	<b>85</b>	<b>52</b>	<b>51</b>	<b>30</b>
<b>Score</b>	<b>3.4</b>	<b>2.08</b>	<b>2.04</b>	<b>1.2</b>
<b>Ranking</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>1</b>

Table 4-3 is the matrix comparing the evaluation criteria for each system alternative and incorporates the focus group/interview rating within the evaluation criteria.

<b>Alternative</b>	<b>Cost</b>		<b>Effective ness</b>	<b>Access</b>	<b>Total</b>	<b>Score <i>Total / 4</i></b>
	<b>2 years</b>	<b>5 years</b>				
<b>1. Voice Mail System</b>						
UO Telecom Services	2	2	1	2	7	<b>1.75</b>
US West	1	1	2	2	6	<b>1.5</b>
<b>2. Fax-Back System</b>						
UO Telecom Services	2	2	3	1	8	<b>2</b>
US West	2	2	3	1	8	<b>2</b>
<b>3. Email List serve</b>						
University of Oregon	4	4	1	2	11	<b>2.75</b>
Lsoft! Peachease	4	4	1	2	11	<b>2.75</b>
<b>4. Web site</b>						
UO New Media Services	2	3	4	4	13	<b>3.25</b>
Cyber Internet Services	1	2	4	4	11	<b>2.75</b>

## Summary of Findings

Although the focus groups and interviews determined participants see value in an ecosystem management industry clearinghouse, there are many variables that would determine the clearinghouse's effectiveness. The current state of the ecosystem management industry and the



lack of federal and private funding for restoration activities and environmental projects affects the number of contracts awarded each year, and simultaneously, the number of jobs offered to workers.

## Needs Assessment

- **Overall**, participants agreed that currently there are not an adequate number of contracts, or not enough money being awarded being awarded to sustain year-round employment or require contractors to find additional workers (above and beyond their current network.)
- **Resource managers** see value clearinghouse to link contractors with skilled workers and to access contractor qualifications, but don't see value for their own use and were not interested in taking time to submit solicitations to a new source;
- **Contractors** see value in posting their qualifications and access consolidated information on solicitations. They do not currently see a need to post employment opportunities or access worker qualifications; and
- **Workers** see value in finding information on current employment opportunities, a place to post their qualifications and access information on contractors.

## Ranking the Alternatives

- The majority of focus group and interview participants chose an **Internet web site** as their number one choice for a clearinghouse system;
- **Voicemail** received only the third highest rating of the systems target groups wanted to access, but 4 workers stated that voicemail is the only system they would access. In addition, 25 of 25 participants agreed that everyone would be able to access voicemail; and
- The **web site alternative** received the highest rating in the evaluation as the most cost efficient, effective and accessible alternative.

## Chapter 5: Recommendations

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Based on the findings of this study, we do not recommend immediate implementation of an ecosystem management industry clearinghouse. Before an ecosystem management industry clearinghouse is developed, we recommend that (1) partnerships be established with key agencies to ensure consolidated information on solicitations, and (2) issues that would affect the clearinghouse, such as the number of contracts awarded each year, agency commitment to the project, and criteria for qualified contractors and workers, as stated by focus group and interview participants are addressed. *All general recommendations are represented by G-# (G=General Recommendations).*

### Partnerships

Partnerships and coordination between key agencies and organizations in the state of Oregon are essential to the success of the clearinghouse. If EWP or another organization develops an ecosystem management clearinghouse, they should appoint a clearinghouse administrator to commence by creating partnerships with public and private land managers, including the state agencies involved with procurement activities. To consolidate all of the solicitations and notifications, partnerships and coordination between key agencies and land managers is essential. *“Without consolidated information on solicitations, a clearinghouse would be useless to contractors.”*<sup>12</sup> This feeling was articulated by six of eight contractors that participated in the focus groups and interviews. In addition, several members of the workforce agreed that if contractors did not use the clearinghouse, it would have no benefit for the workforce. Following are recommendations to establish partnerships before a clearinghouse is developed and maintain them once it has been implemented:

- G-1 To consolidate the information for the solicitations, the clearinghouse should **form partnerships and conduct outreach** with: Federal agencies dealing with procurement including BLM, USFS, and the Bureau of Reclamation; private timber companies; landowners; non-profit organizations and watershed councils.
- G-2 **Develop a marketing plan** to ensure that contractors are aware of the clearinghouse services. Include an outreach component to private contractors and watershed councils contracting for ecosystem management work.
- G-3 **Establish partnerships with watershed councils, community-based organizations, and local governments** throughout the state to provide outreach to the workers. Ask partners to post information on bulletin boards or in newsletters. Ask partners to inform local workers where information is located, and where they can find public computers to access the clearinghouse (i.e. City Hall or a local library).
- G-4 Continue discussion on **establishing criteria that recognizes skilled contractors and workers** in the ecosystem management industry when contracts and jobs are being awarded.
- G-5 When training opportunities are available, **provide greater equity in training opportunities** for members of the workforce, including migrant and Hispanic workers. Consider establishing training opportunities in Spanish, and including Spanish language to make the clearinghouse accessible to a larger population.

## Issues for consideration

Twenty-four of twenty-five focus group and interview participants thought that the clearinghouse was a good idea, and could be very beneficial. The issues they placed on its effectiveness, however, must be taken into consideration. Table 5-1 describes recommendations to address the issues people felt would determine the effectiveness of the clearinghouse.

<b>Issue</b>	<b>Recommendation</b>
12. Instability of the ecosystem management industry and a changing political climate. If not enough contracts are awarded annually, additional solicitations won't be posted and contractors won't need to find more workers.	<i>G-6 Conduct an economic evaluation (a ten-year industry trend analysis), including annual number of contracts and amount of money awarded, and the number of contractors and workers supported by these contracts.</i>
13. Are enough contracts for watershed restoration and reforestation being awarded to warrant a clearinghouse?	<i>G-7 Based on the analysis, determine an minimum number/amount awarded of contracts to justify a clearinghouse.</i>
14. Is there agency acceptance of the clearinghouse?	<i>G-8 Develop partnerships with BLM, US Forest Service, private timber companies, private landowners to be able to effectively consolidate all solicitations in one place.</i>
15. Does the clearinghouse promote the use of skilled contractors and laborers?	<i>G-9 Land managers, contractors and workers should agree on minimum qualifications, and develop new criteria for awarding contracts and verifying qualifications.</i>
16. Is the clearinghouse funded separately from ecosystem management projects?	<i>G-10 Find funding sources for the clearinghouse or consider charging a usage fee for the clearinghouse. (This suggestion was made by three contractors in the focus groups.)</i>
17. Are the contractors using the clearinghouse to find skilled workers?	<i>G-11 Determine the number of contracts that need to be awarded (that exceed current contracts) to justify contractors hiring and locating additional workers.</i>
18. Will the clearinghouse information be timely and accurate?	<i>G-12 Ensure that the clearinghouse administrator has time and training to maintain timely solicitations from public and private land managers.</i>
19. Is the system navigable/easy to use?	<i>G-13 Develop a web site for the clearinghouse.</i>
20. Can everyone access the system?	<i>G-14 Include a voicemail component to the clearinghouse. Coordinate with organizations to post clearinghouse information.</i>
21. Will the clearinghouse respond to concerns raised by agencies, contractors and workers during the focus groups?	<i>G-15 Submit drafts of proposed clearinghouse to public and private land managers, contractors and workers for critique and input on the system design.</i>
22. Were the participants in the worker focus groups representative of Oregon Workers?	<i>G-16 Collect data from a larger sample of the Oregon workers to ascertain their skills and access to different technical systems.</i>

## Clearinghouse Design and Implementation

There are many issues that could make an ecosystem management industry clearinghouse ineffective. If these issues are addressed and a group or organization finds that the time is right to develop a clearinghouse, following are recommendations for implementation. These recommendations are based on the ranking of the alternatives, and feedback given by participants of the resource manager, contractor and worker focus groups/interviews. These recommendations incorporate cost, effectiveness and accessibility of each system alternative.

- G-17 **Develop a primary Internet web site** for the clearinghouse to provide the most comprehensive information available. The web site should have a database that can be used by the clearinghouse administrator to print information and fax or mail it to those people unable to access the Internet.
- G-18 **Install a supplementary voicemail system** that allows users to leave messages and request specific information. Appropriate information could then be faxed or mailed to the user. Costs of a voicemail system will be reduced from the system evaluated during the feasibility study by the following factors:
- As a supplement to the web site, one line option should be adequate. This provides users basic clearinghouse information, including how to access the web site and ability to leave messages.
  - Administrative burden is relatively low involving monitoring of phone messages and distributing messages as needed via phone, fax or mail. The information would be readily available on the computerized database.
  - The system would require a computer, phone and fax system, with a 1-800 number for the phone line. Faxes would only be used to send out information to those people without computer access. Faxes or notices should be sent to partner organizations such as watershed councils, community development corporations, unemployment offices and community-based organizations.
- G-19 **The clearinghouse administration will require a full-time employee** to find solicitations, process worker and contractor qualifications, maintain the web site, answer voicemail and send faxes to interested people and local partners.
- G-20 Average annual costs over two years of the recommended system, the recommended combination of a website and voicemail are \$43,600, and \$42,000 over 5 years using costs provided by the University of Oregon. **Local, state or federal agencies, public universities and non-profit organizations could administer this system at a comparable cost.**
- G-21 **Specific categories should be included on the Internet web site.** Users could also use the voicemail system to call and request specific information. This information could be accessed from the web site database, and sent to the user via facsimile or mail if the user does not have access to a computer. Table 5-2 describes the recommended categories for an ecosystem management industry clearinghouse web site. These categories would be linked to a database that would organize and process solicitations,

job opportunities and qualifications of contractors and workers. Figure 1-1 depicts the design of the clearinghouse.

<b>Table 5-2 Web site Configuration</b>		
<b>Resource manager Category</b>	<b>Contractor Category</b>	<b>Workforce Category</b>
<ul style="list-style-type: none"> <li>• Submit notification of solicitations (posted by agencies/land managers)               <ul style="list-style-type: none"> <li>- Downloadable files for the solicitations</li> </ul> </li> <li>• Access solicitation information (accessed by contractors and the workforce)</li> </ul>	<ul style="list-style-type: none"> <li>• Submit job opportunities including wage, start and end day of contract, location, equipment and per diem (workforce access)</li> <li>• Submit Contractor qualifications (posted by contractors)</li> <li>• Access Employment opportunities (accessed by workers)</li> <li>• Access Contractor qualifications (accessed by agencies/land managers and workforce)</li> </ul>	<ul style="list-style-type: none"> <li>• Submit Worker Qualifications</li> <li>• Access Worker Qualifications (accessed by contractors and agencies/land managers)</li> <li>• Access Training Opportunities (posted by the clearinghouse administrator)</li> </ul>
Other potential categories in include information by skill type and by geographic region		

Figure 1-1 shows the type of information that the clearinghouse proposes to encompass.

**Figure 1-1  
Ecosystem Management Industry Clearinghouse**

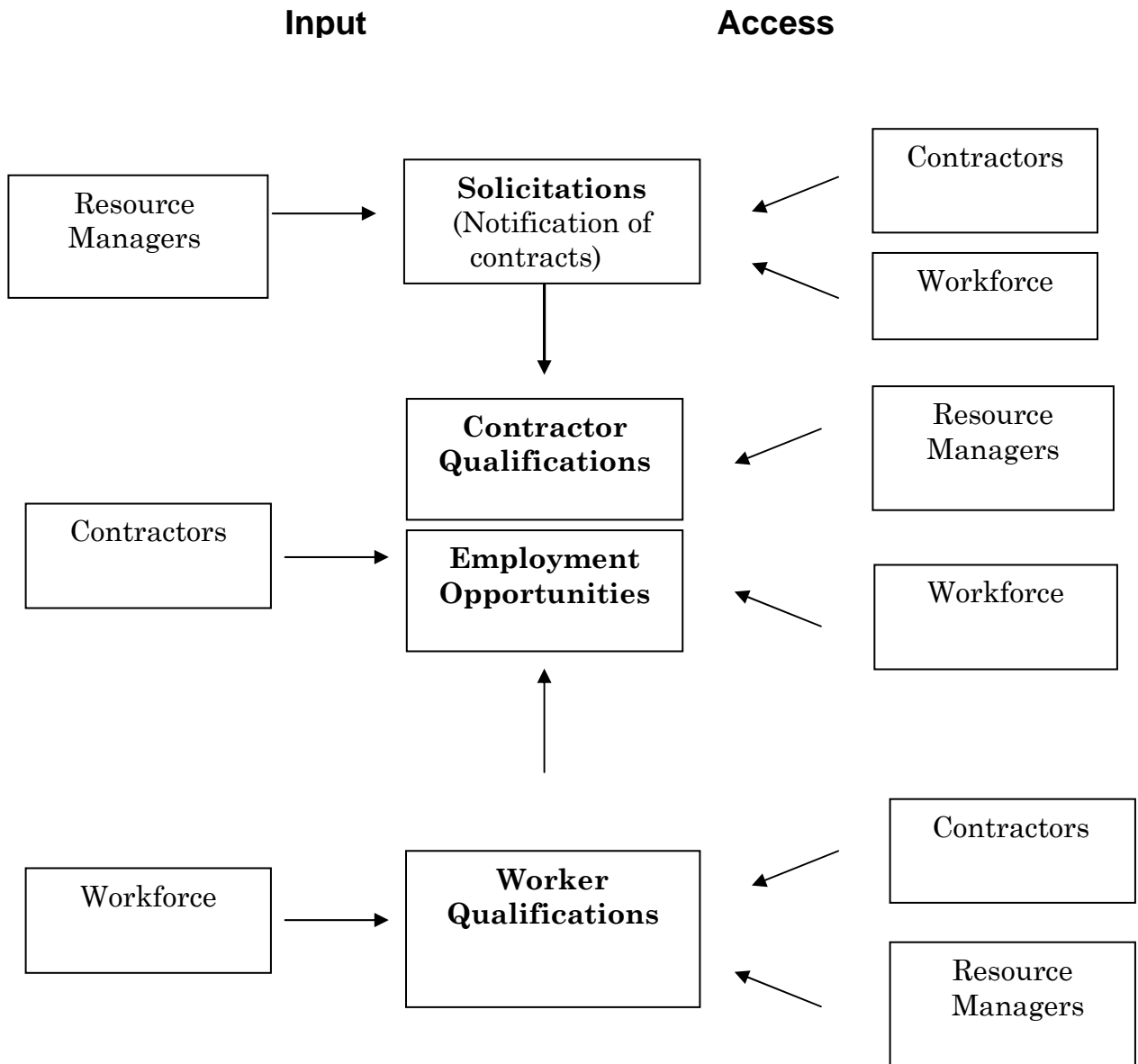


Table 5-3 describes estimated costs for the recommended system for an Ecosystem Management Clearinghouse, which includes a web site, phone and fax system.

<b>Table 5-3</b>		
<b>Cost Estimate for Recommended Clearinghouse<sup>13</sup></b>		
Start-up	Item	Cost
	Domain Host Name (Required every two years)	\$70
	Design – Web site and Database Interface (UO provider)	\$5000
	Fax/Phone Installation (UO Provider)	\$75
	<b>Total Start-up</b>	<b>\$5145</b>
Monthly fees	Monthly Service Charge for Affinity Service Provisions <sup>14</sup>	\$41.67
	1 line option @ \$5.50	\$5.50
	1-800 # Service Fee	\$20.00
	1-800 # user /fax fee (\$7.50/hourly rate - 5hr/week)	\$150.00
	Labor Costs (\$20/hour – 40hr/wk)	\$3200
	<b>Monthly Cost</b>	<b>\$ 3417.17</b>
	<b>Total Cost of Operations/Start-up over 1 year</b>	<b>\$ 46,151.04</b>
	Year 1	\$ 46,151.04
	Year 2 & 4	41,006.04
	Year 3 & 5	\$ 41,076.04
	<b>Average Cost over 2 years</b>	<b>43,578.54</b>
	<b>Average Cost over 5 years</b>	<b>42,063.04</b>

## Conclusion

If there are not enough contracts or funds being awarded in ecosystem management, contractors don't need additional workers, agencies do not need to find additional contractors, and workers will not find employment opportunities or contractors interested in their qualifications. This study, therefore, does not recommend immediate implementation of an ecosystem management industry clearinghouse. A thorough analysis of the ecosystem management industry should be conducted before allocating resources to developing a clearinghouse, including an analysis of the longevity and future of the industry, number and amount of contracts awarded and a needs assessment that includes a more representative sample of resource managers, contractors and workers in the Oregon ecosystem management industry.

If an ecosystem management industry clearinghouse is developed in the future, this study recommends developing an Internet web site as the primary host for the clearinghouse, and using a supplementary voicemail system to ensure that anyone wishing to access the clearinghouse information is able to do so.

## Appendix A: Rating System and Costs of the Alternatives

### VoiceMail System Providers

Voice-Mail System Rating - Telecom – University of Oregon Cost <sup>15</sup>		
Start-up	Installation	\$25.00
	1-800# Installation	\$50.00
	<b>Total Start-up</b>	<b>\$75.00</b>
Monthly fees	7 line options x \$5.50	\$38.50
	1-800 # Service Fee	\$20.00
	1-800 # user fee (\$7.50/hourly rate - 8hr/wk)	\$240.00
	Labor Costs (\$20/hour – 40hr/wk)	\$3200.00
	<b>Total Monthly Cost</b>	<b>\$3498.50</b>
	<b>Total Cost of Operations over 1 year</b>	<b>\$42057</b>
	Year 2 Costs	\$41982
	<b>Average cost over 2 years</b>	<b>\$ 42,019.50</b>
	<b>Average Cost over 5 years</b>	<b>\$ 41,997</b>

Voice-Mail System Rating – US West Cost – US West Service <sup>16</sup>		
Start-up	Item	Cost
Start-up	Installation	\$180.00
	<b>Total Start-up</b>	<b>\$180.00</b>
Monthly fees	Monthly Line Charges	\$42.52
	7 Mailbox lines @12.50/each	\$87.50
	7 Mailbox Routing Charges @ \$3/each	\$21
	Labor Costs (\$20/hour – 40hr/wk)	\$3200.00
	1-800 # (So. OR \$.20/min - 4hr/wk)(OR/US \$0.10-4hr/wk) = \$72/wk	\$288
	<b>Total Monthly Cost</b>	<b>\$3639.02</b>
	<b>Total Cost of Operations over 1 year</b>	<b>43848.24</b>
	Year 2-5 Costs	43668.24
	<b>Average cost over 2 years</b>	<b>\$ 43758.24</b>
	<b>Average cost over 5 years</b>	<b>\$ 43704.24</b>

### Fax-back System Providers

Fax-back System Rating - Telecom – University of Oregon Cost <sup>17</sup>		
Start-up	Installation	\$25.00
	1-800# Installation	\$50.00
	<b>Total Start-up</b>	<b>\$75.00</b>
Monthly fees	1 line options x \$5.50	\$5.50
	1-800 # Service Fee	\$20
	1-800 # user fee (\$7.50/hourly rate - 4hr/week)	\$120
	Labor Costs (\$20/hour – 40hr/wk)	\$3200
	Faxing to users (\$7.50/hr – 4hr/wk) = \$30/wk	\$120
	<b>Monthly Cost</b>	<b>\$3465.50</b>
	<b>Total Cost of Operations over 1 year</b>	<b>\$ 41661.00</b>
	Year 2-5 Costs	\$ 41586.00
	<b>Average cost over 2 years</b>	<b>\$ 41,623.50</b>
	<b>Average cost over 5 years</b>	<b>\$ 41,601.00</b>



Fax-back System Rating – US West Cost – US West /Fax Line <sup>18</sup>		
Start-up	Item	Cost
	Installation	\$180
	<b>Total Start-up</b>	<b>\$180</b>
Monthly fees	Monthly Line Charges	\$42.52
	1 Mailbox lines @12.50/each	\$12.50
	1 Mailbox Routing Charges @ \$3/each	\$3
	Labor Costs (\$20/hour – 40hr/wk)	\$3200
	800#/fax (So.OR \$.20/min - 4h/wkOR/US \$.10-4h/wk)= \$72/wk	\$288
	Fax Line	\$24
	<b>Monthly Cost</b>	<b>\$3570.02</b>
	<b>Total Cost of Operations over 1 year</b>	<b>\$ 43020.24</b>
	Year 2-5 Costs	42840.24
	<b>Average cost over 2 years</b>	<b>42930.24</b>
	<b>Average cost over 5 years</b>	<b>42876.24</b>

### Email list serve System Providers

Email List serve System Rating – University of Oregon – Majordomo Cost <sup>19</sup>		
Start-up	Item	Cost
	2 Labor Hours – \$10/hr	\$ 20
	<b>Total Start-up</b>	<b>\$20</b>
	Labor Costs –\$20/hour – 40hr/wk	\$3200
	<b>Monthly Cost</b>	<b>\$3200</b>
	<b>Total Cost of Operations over 1 year</b>	<b>\$ 38,420</b>
	Year 2-5	\$38,400
	<b>Average Cost over 2 years</b>	<b>\$ 38,410</b>
	<b>Average cost over 5 years</b>	<b>\$38,404</b>

Email List Serve System Rating – LSOFT! Cost <sup>20</sup>		
Start-up	Item	Cost
	2 Labor Hours– \$10/hr	\$ 20
	<b>1 List serve w/500 member access @ \$780/each</b>	<b>\$780</b>
	<b>Total Start-up (\$780 every two years)</b>	<b>\$800</b>
Monthly fees	Labor Costs Manage Information \$20/hour – 40hr/wk	<b>3200</b>
	<b>Monthly Cost</b>	<b>\$3200</b>
	<b>Total Cost of Operations over 1 year</b>	<b>\$39200</b>
	Year 2 & 4 Costs	38400
	Year 3 & 5Costs	39180
	<b>Average cost over 2 years</b>	<b>\$38,800</b>
	<b>Average cost over 5 years</b>	<b>\$38,872</b>

*Lsoft! International – LISTSERV95-L@PEACH.EASE.LSOFT.COM*

The LSOFT site can be purchased for a fee of \$780 per year and is limited to 500 users. An upgrade to a business class service is calculated by the amount of use, and not on the number of users. The cost per year could be as low as \$900 or as high as \$1138. The low cost is based on the minimum charge per year and the high cost is a forecast of based extrapolating existing use. The business class has no limitations on the number of users.

**Web-site System Providers**

<b>Web site System Rating – UO New Media Services Cost<sup>21</sup></b>		
<b>Start-up</b>	<b>Item</b>	<b>Cost</b>
	Domain Host Name (Required every two years)	\$70
	Design – Web site and Database Interface	\$5000
<b>Monthly fees</b>	<b>Total Start-up</b>	<b>\$5070</b>
	Monthly Service Charge for Affinity Service Provisions <sup>22</sup>	\$41.67
	Labor Costs (\$20/hour – 40hr/wk)	\$3200
	<b>Monthly Cost</b>	<b>\$ 3241.67</b>
	<b>Total Cost of Operations over 1 year</b>	<b>\$ 43,970.04</b>
	Year 2 & 4	\$38,900.04
	Year 3 & 5	\$ 38,970.04
	<b>Average Cost over 2 years</b>	<b>\$ 41,435.04</b>
	<b>Average Cost over 5 years</b>	<b>\$ 39,942.04</b>

**Note:** To contract with New Media Center, contact Scott Mongrain at 346-1458. They need a few months advance notice for project development, but are potentially available to begin system development in the fall.

<b>Web site System Rating – Cyber Internet Services Cost<sup>23</sup></b>		
<b>Start-up</b>	<b>Item</b>	<b>Cost</b>
	Domain Host Name & Registration	\$145
	Design – Web site (No SQL or Database Interface) 80 hours to design the site at \$35/hour	\$2800
<b>Monthly fees</b>	<b>Total Start-up</b>	<b>\$2945</b>
	Monthly Service Charge for Service Provisions	\$50
	Labor Costs (\$20/hour – 45hr/wk) – No SQL/Database interface could require more hours than UO services	\$3200
	<b>Monthly Cost</b>	<b>\$3250</b>
	<b>Total Cost of Operations over 1 year</b>	<b>\$ 41945</b>
	Year 2-5	\$39,000
	<b>Average Cost over 2 years</b>	<b>\$ 40472.5</b>
	<b>Average Cost over 5 years</b>	<b>\$ 39589</b>

## Appendix B: Focus Group and Interview Results

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### Coquille Focus Groups

#### Resource Manager Respondents

##### *What are the current means and obstacles to posting solicitations and receiving bids on solicitations?*

- Has EWP looked at the BLM/USFS system? Seems similar. Perceived as necessary and appropriate. Watersheds are like land managers in this case; act as a clearinghouse for contracts. By and large don't have a final solicitation process.
- EWP clearinghouse isn't whole answer due to seasonal work but it is very useful in broadening employment opportunities.
- Local employment – credibility – don't want to step out of geographic region
- Issues of year-round employment – coordinator for year-round employment
- Watershed councils – no formal solicitation process – use who we know

##### *Are you currently able to find contractors and skilled workers to meet the needs of your solicitations?*

- Sue- usually do find skilled workers.
- Tries to maintain solicitations locally; would be hard, difficult to look outside the local geographic area. Would be nice having contractors organized by skill type (i.e. culvert replacement) so that watershed can aim their solicitations to what jobs needs to be done.
- Fee permitting process is an obstacle – ESA Seasonal restrictions – in-stream work

##### *How do you currently receive bids on your solicitations? How do you get the word out?*

- List of local contractors – mail to all of them. They may bid but do not also send qualifications. Having a “family” of contractors to solicit from is necessary because too troublesome with working with new folks.

##### *What are the obstacles you face in receiving an adequate number of appropriate bids?*

- Fee permitting process and moving goal posts of ESA – people want the work but find ESA very strict Seasonal restrictions – July 1- September 15 is the in-stream window.
- No references to qualifications
- Family of contractors (new contractors) Broadening employment/types of work
- NRCS - State agencies
- Clearinghouse should encompass it all – including private timber companies and land owners

##### *What kind of information about workers or contractors would you find useful?*

- Multiplicity of efforts is part of problem
- Idea of environmental standards associated with how jobs are awarded
- Standardize wages

- NRCS, ODF, private timber all should be involved to make this a true clearinghouse. A coordinator would tie 4 and 5 together.
- Steady employment needs to be guaranteed and possibly a coordinator at the clearinghouse to ensure steady employment. Contractor expertise/organize by skill type and ask what would you be willing to learn Partnerships between agencies
- What else would contractors be willing to learn? There might be something they didn't list but can do or learn. Training/skills needed for different projects matrix - need one.

***Given the conceptual design of the ecosystem industry clearinghouse, will clearinghouse be useful?***

- Interesting dynamic – if you have a good contractor do you want them working for other people? And given the in-stream window, you want them available for you and not working for your competitors.

***What benefits will an ecosystem industry clearinghouse provide you?***

- Credibility - a local competing in the big time market would/may boost credibility by winning out. Could be a double-edge sword. More different types of projects. If watershed associations could find qualified contractors with diverse skills/experience (i.e. specific equipment)
- Finding qualified folks in a timely manner - Time efficiency Getting bids out (potentially an electronic bidding process)

***What would prevent an ecosystem industry clearinghouse from working?***

- Big city contracts may impede locals getting/holding jobs - Maintain local jobs/local integrity
- Potential to lose credibility.
- Funding and Operational Maintenance
- Tapping into more regions/local focus. What is the job equation? Where does the focus go?

***Notes***

- Outside management thrust; outside ideas, etc.
- Does shifting to a web site instead of mail exempt any legal requirements about notification on the part of the agency? (Keith's question)
- DO you have to be a licensed contractor? Different levels of entry for licensed or not? Are there any registration procedures? Like where you're from?
- Agency needs aren't the same as whatever a contractor or worker needs
- Year round employment is crucial
- Keeping jobs local, will the clearinghouse displace the benefits? Not in favor if so.

<b>Resource Manager Benefits and Limitations</b>		
<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
Voicemail (4 of 4 yes)	Everyone has access to a phone! Would work well for posting solicitation notifications.	Coquille watershed – answering machine, not voicemail. Not convenient for receiving information. Automations is not locally acceptable – for a lot of people, there needs to be a live person at the end. Too complicated to be efficient. Want to also receive contractor qualifications.
Fax-back (4 of 4 yes)	Fax/Phone combo would be very useable. Coquille – submits bids through mail via a list – high cost because they can't target contractors based on skills and takes time.	Unusable not many have faxes – not accessible not always clear and some concern about whether it arrives? Readability and reliability are concerns – not good! Better for receiving but not for posting bids.
Email (4 of 4 most)	Speed/time efficiency Written record (documentation; more social than legal but the one is able to say : "I sent you that," etc.	Without email one is screwed Can't send specs and drawings – can be a benefit too
Internet (4 of 4 yes)	Seems that this is most beneficial Lots of different data available Very accessible (once you have access to a computer Compatibility of data bases (i.e. scale) clearinghouse can function to standardize data land/water interface GIS will become hugely important (i.e. site identification) travel time, more \$-Speed easy	Bid solicitation would be of concern (notification would be okay ) Signatures online are also a concern. Contractor qualifications are important to agencies/land managers How will this system be paid for? Maintained? Local perspective of "we've been doing this and we don't see a reflection of our views in this anywhere" What is the job equation? "0 here – somewhere else quite a few."
<p><b>Do you think a THE CLEARINGHOUSE Is a good idea? Yes – 4 of 4</b></p> <ul style="list-style-type: none"> <li>• Given a responsiveness to the concerns raised by the focus group</li> <li>• Good idea for getting information shared and contractors accessed</li> <li>• If funded separately from projects</li> <li>• Depending on its purpose.</li> </ul> <p><b>If one is developed – How?</b></p> <ol style="list-style-type: none"> <li>1. Internet, 2. Fax 3. Email 4. Phone</li> <li>2. Internet 2. Email 3. Fax 4. Phone</li> <li>3. Email 2. Internet 3. Phone 4. Fax</li> <li>4. Combine Web and list serve or list serve with fax-back or voicemail with fax-back.</li> </ol>		

## **Contractors**

### ***What are the current means and obstacles to accessing solicitations, posting employment opportunities and reviewing worker qualifications?***

- Regionalism is key; can access solicitations now, but the workforce is from outside the local area and that is not good. Finding federal opportunities is good (easy) otherwise it's tough. Local, state, watershed agency projects are very hard to hear about. List opportunities – tell us who/what is out there. Word of mouth is only way right now.
- There isn't one specific Internet site to access; have to hunt around for jobs in some cases the feds say "no we have enough contractors." So they won't get put on a mailing list. Getting contractors to use a clearinghouse may be a problem. Links between jobs on state/federal/local projects are helpful. (ODOT)

### ***Are you currently able to find skilled workers to meet the needs of your contracts? How do you currently locate workers and their qualifications?***

- Would never bid a job without the crew first. Word of mouth seems sufficient to staff crews at this point. (Both contractors)
- Have used the employment office, leave name, potential workers call all the time.
- Work is so seasonal and iffy that a contractor usually trains from scratch – doesn't count on a pool of skilled workers.
- Have used temp agencies
- Gives college students a chance for summer work
- She calls ODOT etc to find out where the workers are

### ***Given the conceptual design of the ecosystem industry clearinghouse, do you think the clearinghouse will be useful?***

- Consolidating information and getting it quickly would be a benefit.
- Labor trading idea (labor exchange)
- Contractors want the work (jobs) from the clearinghouse; they don't need more workers
- Submittals are more and more proposals, which rely on qualifications. Can help an established contractor. The contractors are interested in posting their qualifications too. Certification is also important and establishes qualifications. References are also important to contractors and agencies.

### ***What benefits will an ecosystem industry clearinghouse provide you?***

- Hearing about jobs they can successfully bid on. Would love a site where jobs are posted; she would continue to research to make sure she didn't miss anything
- If workers are still being re-trained, are they finding employment in this field?

### ***What would prevent an ecosystem industry clearinghouse from working?***

- Difficult if not from area; work is seasonal; people don't want to move for seasonal work. People don't reflect their qualifications accurately on resumes
- Lots of federal agencies making it harder for local contractors.
- FUNDING ISN'T THERE! If there was a steadier flow of jobs, workers could be more permanent. The highly skilled are not sitting here in Coquille waiting for jobs.
- "I don't need workers, I need work." There are no guarantees for keeping jobs beyond 3 months.

<b>Contractor Benefits and Limitations</b>		
<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
Voicemail – yes 4 of 4 YES		Too slow, not visual, too many solicitations
Fax-back – yes	Getting a fax of notice is okay, the actual solicitation may be too long	High admin burden, too much paper
Email – most	Using email to link to solicitations posted on web, GCAP filters through categories.	Cost to user
Internet - yes	Downloadable information, Immediate	Cost to user The cost of having a contractor for the web site – would they maintain it?
<p><b>Do you think a THE CLEARINGHOUSE Is a good idea? Yes – 3 of 3</b></p> <ul style="list-style-type: none"> <li>• Organization is a key – format daily updates</li> <li>• Consolidation of information</li> <li>• How to discuss someone’s real skills on paper.</li> </ul> <p><b><i>If one is developed – How?</i></b>            Combo email/internet,            email, internet, fax, phone;            internet, email, fax, phone.</p>		

**Notes**

- Industry advocacy linked with the clearinghouse would be beneficial (between contractors/agencies) Big time lobbyists know what congressional districts they operate in so they can pursue problems with their congressmen.
- Contractor list was sparse; could have contacted many more? Maybe there are other reasons why so many weren’t on the list.
- Funding is a big deal! Not steady and going down.
- The feds appear to be arbitrary in notifying solicitations and awarding bids. Big barrier is “contingent on funding” clause.
- 24 average # of bidders on a given project; now seeing outside contractors on local jobs.
- Contractors are looking elsewhere for jobs but would prefer to be local.
- The clearinghouse exists so Debbie wants to see the \$ put into awarding jobs.
- Contractors can also create their own web pages and link to state agency job sites.
- Coos county does have more private timberland than other areas of the state. More closed than public processes on public land. “pilot crews” from watershed agencies.
- Unless earmarked for country, then must be opened up for competitive bidding.
- Are agency people having trouble in any area finding contractors? The agency folks want to know qualifications.

**Workers**

***What are the current means and obstacles to finding employment in the ecosystem industry that match your skills and wage requirements?***

- CWA employs people almost year-round But it’s year by year and grant funded
- We’re all self-employed fisherman (current CWA employees) walking the docks always provided a job up until 5 years ago.

- A highly funded National Watershed Council may increase job opportunities through watersheds.
- Not enough funding and political decisions limits funding.

***Given the conceptual design of the ecosystem industry clearinghouse, do you think the Clearinghouse will be useful?***

- Use incentives to get contractors to utilize EWP trained workers – more regional opportunities
- Credibility standards.
- Where are the jobs in the state?
- Where are training opportunities located ? Tell me so I can plan for it.
- How long might the job last? Allows for workers to plan/accommodate steady employment.
- Pay rate?
- If it's a family wage job workers may be willing to move.
- If contractors do not employ the workers using the clearinghouse
- If too few contractors utilize it.

<b>Worker Benefits and Limitations</b>		
<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
Voicemail	Phone would be easiest method for workers – they all have a phone Flyers would work Simplest but maybe not the best	Will all the necessary info be there? Job description, etc
Fax-back	Perhaps call in and request a fax Drugstore/mini-mart can send receive a fax	But it's not timely or easy. Can send but not receive?
Email	workers present liked it and use it	outdated information is dangerous
Internet		Very limited access – outdated information
<p><b>Do you think a THE CLEARINGHOUSE Is a good idea? (Yes, 3 of 3)</b></p> <p><b>If one is developed – How?</b>            Voicemail, email, internet, fax            Voicemail, email, internet            Voicemail, Fax, email, Internet (Nice to access them all)</p>		

**Notes**

- For workers in the EWP training, the clearinghouse would be good. The CWA employs several steady
- Contractor qualifications are key! Workers want to see them, agencies want to see them, and contractors want to give them.
- Curiosity, Networking
- If unemployed, the workers would definitely want the opportunity to post their qualifications.
- Will be a great idea – depending on the interest. It could grow into something big. Information submitted by agencies/contractors would make it useful to workers.



## Ashland Focus Groups

### Resource manager Respondents

#### ***What are the current means and obstacles to posting solicitations and receiving bids on solicitations? How do you get the word out?***

- Contractors are on a mailing list by interest; get a mailing based on what their work/interest are.
- There is a national Forest Service, list of jobs to peruse; often unwieldy.
- Word-of-mouth (not formal but shouldn't be overlooked)
- Sealed bids is Forest Service norm. The procurement process is common for projects under a particular amount.
- Have not used RFPs (best value concepts instead of lowest bidder) having RFPs on web site with enough lead time would be beneficial to Forest Service (and contractors from Paul Galloway's point of view.
- Lots of private work and is somewhat sustaining contractors

#### ***What are the obstacles you face in receiving an adequate number of appropriate bids?***

- Building projects was difficult for some contractors because they did not want year-round work (culture thing)
- Not reaching all the potential contractors out there.
- Seeing downsizing (locally anyway\_ in contracting (possible because Forest Service is downsizing work and money for projects, etc.)

#### ***What kind of information about workers or contractors would you find useful?***

1. Not sure – people on ground in Forest Service aren't ones awarding bids. He wasn't the contract officer.

#### ***Given the conceptual design of the ecosystem industry clearinghouse, do you think the clearinghouse will be useful?***

- Yes, mostly for linking skilled workers with contractors (came back to this 4 times)
- Having more bids out there would increase number of jobs for all
- Getting the information out and making it more readily available.

#### ***What benefits will an ecosystem industry clearinghouse provide you?***

- All kinds of benefit if the information is timely, it must be maintained to keep the information timely.
- Can point to the clearinghouse and say, yes, there is work and here is where you can look.

#### ***What would prevent an ecosystem industry clearinghouse from working?***

- Must have interagency agreement to ensure that the commitments are keep it timely and up and running.
- Look beyond BLM, USFS< to the regulatory agencies (EPA, NMFS) because they also have a lot of work
- Look to state/local/ agencies and private industry and watershed councils to come together and pool skilled workers and notify each other of contract opportunities.

- On-going debate in Forest Service about “ what is local” k falls is local to Forest Service but not to workers in Butte Falls. He feels clearinghouse should be regionally focused (not state)
- Set up clearinghouse on watersheds; larger than county but smaller than state focus.
- MULTI-AGENCY PRIVATE INDUSTRY –Investments

<b>Resource Manager Benefits and Limitations</b>		
<b>Alternatives (# of participants who have access to the alternative)</b>	<b>Benefits</b>	<b>Limitations</b>
Voicemail (1 of 1)	Would be most widely accessed Cheapest alternative	Menu options would be irritating Not patient
Fax-back (1 of 1)	Widely accessible	Administrative burden (timeliness)
Email (1 of 1)	Spoon-fed material – easy, comes to you without too much effort on your part	Any screening activity has to be sensitive so as not to alienate or inundate anyone. Credibility- pertinence of information
Internet (1 of 1)	Easiest “palatable: Having some entity manage the system would be beneficial to contractors *from agency point of view. No filtering; all who access it> have to do it themselves so no entity alienates or inundates. Competition – user access	Accessible to people outside your target audience (perhaps stimulate competition) may or may not be a limitation
<p><b>Do you think a THE CLEARINGHOUSE Is a good idea?</b>            *Yes, good idea  <b>If one is developed – How?</b>            1. Internet 2. Voicemail 3. Email 4. fax *Contractors would probably have access to 3to 4 of these</p>		

**Notes:**

- Sean Edwards’ work – Paul Galloway’s perspective takes in Sean’s work. Agencies were all over the board regarding bundled contracts.
- Contractors specifically asked for these jobs to be posted on Internet. Wanted easy access. In the Forest Service (Internet, PC based) is so new it’s not in the vocabulary yet; often overlooked as a means of getting word out.
- Posting contractors qualification is more for workers/contractors and not as crucial for agencies because at first sign of incompetence they’re yanked from the job.
- While contacting agencies be sure to contact Monty Bell – Willamette National Forest – Contracting Officer John Owen – Rogue River
- Yes , need for clearinghouse is very real. Contractors can see what’s out there and gear up ahead of time. Bundling with Forest Service and BLM would provide 10-11 with jobs (increase agency collaboration)
- Putting all the work in one place (clearinghouse) would seem only to be beneficial for contractors, workers, and agencies.

**Contractors**

***What are the current means and obstacles to accessing solicitations, posting employment opportunities and reviewing worker qualifications?***

- Bjorn – contracting for 20 years/taught at RIEE helps other contractors get their bids valid and out. Helps non-English speakers facilitate the contract process.
- Contractor can post needs but security is not seen as an issue in this regard.
- Which is the most economical – who pays for system? User? Grant \$? Worker usage fees?
- Yes, would pay to post contractor qualifications.
- Need equity to be awarded, finding skilled workers, bonding, certified payroll – obstacle for contractors

***Are you currently able to find skilled workers to meet the needs of your contracts? How do you currently locate workers and their qualifications?***

- No difficulty (if you're on a bidding list)
- Not a plethora of restoration contracts
- Contracts do not seem to go to “skilled workers” does not seem to be a requirement for agencies that workers be skilled. As long as these agencies don't have that requirement the clearinghouse idea won't work.
- Restoration contracts not there/ not awarded to EWTP customer base that requests contractor services (primarily workers, private rural homeowners.)
- Customer Base – BLM, Private Industry, Timber agencies, Landowners, slow in the spring
- Contractors use Jake EWTP
- Mail is adequate for hearing about notices of solicitations
- CBD is not so useful for small contractors
- Word of mouth is still most common
- Used same workers (build a loyal workforce)
- Can be political – personalities, health insurance, year round work, in retaining workers – hourly wages.
- Many contractors use word of mouth or calling their friends in the industry
- Contractors will take break-even jobs to keep workers for when the “really big jobs” come.
- Keep your own busy, workers stay with you - accept them, then train, tough to hire part-time
- Avoid the unemployment office
- Industry Contracting Officers
- Barretts

***How do you receive notice of solicitations?***

- Mail, CBD (It's overkill unless it's a big contact), word of mouth looking at track records – make the contract for low bidder.

***Given the conceptual design of the ecosystem industry clearinghouse, do you think the clearinghouse will be useful?***

- Being able to locate trained and skilled workers
- Encourage collaboration among agencies
- Find very specific skills (surveys, slug studies, etc.)
- To see contract qualifications/worker resumes - Locate skilled workers
- EWTP requires electronic resumes to send at moment notice
- Facilitate rural community development (maintaining local job opportunities)

***What benefits will an ecosystem industry clearinghouse provide you?***

- Look at contractor qualifications \*references, resumes, detailed qualifications - EWTP resumes on disk)
- Facilitate rural community development
- Maintaining local jobs and creating opportunities

***What would prevent an ecosystem industry clearinghouse from working?***

- Contractor Malaise - Contractor concept is that they don't need it
- Perception of liberal, environmental restrictions would sink the clearinghouse unless it was a partnership.
- May be other benefits not readily apparent
- Agencies must employ local, qualified people for the clearinghouse to work
- The lowest bidder isn't always the most qualified or skilled (i.e. veteran's preference points)
- Contract officers are personally legally liable, therefore they stick to business as usual and don't always hire local or qualified people.
- Standards for employing local qualified people, criteria – mandates – use a point system
- Roads, reforestation, restoration, timber
- Support for Ecosystem Management
- Clearinghouse would be useful if it actually supported the ecosystem industry

<b>Contractor Benefits and Limitations</b>		
<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
Voicemail (3 of 3)	Commonality (universal) Quick; don't have to be present to leave a message	Requires a return call language limitations (Hispanic) admin staff burden/ impersonal/impatient
Fax-back (3 of 3)	Get a lot of data on the 1 <sup>st</sup> try (resume, qualifications, maps, etc.)	People not having access to faxes Too much information to send via fax
Email (3 of 3)	Get a lot of data on the 1 <sup>st</sup> try (qualifications, maps, etc.)  Common no office time required (time schedule is flexible) can do it at 11pm Central location for a computer – city hall, library in small towns	No access to email, funding of list serve coordinator (who pays for it) Scanning information (admin burden) Inexpensive
Internet (3 of 3)	Can see pictures, maps, most interactive, modify criteria depending on whether you're a worker, contractor, etc. Workers would link to contractors after seeing what their skills were and how they may fit into the project. Look over bids notices to see if it's even relevant. Explanation would be beneficial and a central location.	Training Not everyone on line Is there a central location explanation?
<p><b>Do you think a THE CLEARINGHOUSE is a good idea?</b></p> <ul style="list-style-type: none"> <li>• 1 of 3 say yes - Ease of use is a critical factor in the feasibility of this idea</li> <li>• 1 of 3 says yes/no – agency buy-in mandating at all levels for this to work. No- business as usual will kill this rapidly</li> <li>• 1-no opinion</li> </ul> <p><b>If one is developed – How?</b></p> <ul style="list-style-type: none"> <li>• 1.email 2.internet.3.voice 4.fax</li> <li>• 1.internet 2.voice 3.fax 4.email</li> </ul>		

## **Workers**

### ***What are the current means and obstacles to finding employment in the ecosystem industry that match your skills and wage requirements?***

- Federal Employment
- Contractors / EWTP
- Word of mouth; once you work for a contractor (and are good) the work comes your way. Federal work is also word of mouth
- EWTP - They get contracts and find the workers
- Footwork, research

### ***What increases opportunities for employment?***

- Experience, building contacts
- Who you know

- Knowing contractor and worker skill levels would be beneficial
- Many have not tried to find jobs in last year so feel trepidation's about starting now.
- Footwork, research
- Experience
- Regional contracts
- Who you know
- Knowing where opportunities stand

***What limits your opportunities for employment?***

- Until you're in it for awhile; contacts are difficult to make
- Specific jobs – contractors don't file notice
- Very localize (regional limitations)
- If you're new; hard to know where to begin
- Not knowing contractors
- Contractors may not know worker skills (the skill pool)
- Contractors may be influenced based on current contacts

***Given the conceptual design of the ecosystem industry clearinghouse, do you think the clearinghouse will be useful?***

- Regional state/contacts (for those willing to travel)  
Link to other state clearinghouses (for those willing to travel)
- Regional focus provides more opportunities but have to be willing to travel
- Training opportunities (preference for particular training programs)
- Dovetail with employment office or other state agencies
- What are contractor/worker qualifications? Benefit to getting them out there
- Posting upcoming jobs (allows planning ahead in regard to seasonal work)
- Knowing who contractors are
- Knowing potential jobs in particular seasons
- Being able to get in contact with contractors
- Would definitely want to post references and qualifications – quality control
- Criteria – black balling
- Start/end date; wages; location ; type of work; per diem with equipment provided; exactly what qualification are necessary; references
- Putting qualifications out
- Regional contacts
- Posting qualifications/accessing information from other states
- Know what's coming – what skills are needed and in what season
- Know who the contractors are – what work/season and how to contact them
- Criteria – integrity – check references, willing to travel

***What would prevent the clearinghouse from being effective?***

- Access
- Understand
- Not timely/No quality control
- Difficulty/ease of access and understanding
- Timeliness (outdated information)
- Hard to travel to regional/outside –state-jobs

<b>Worker Benefits and Limitations</b>		
<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
Voicemail – yes	Keep it simple Perhaps an answering service for contractors Easy access to notices or talk directly with contractors	Time consuming for user/admin Too complicated – low use Not there to receive messages Have to write information instead of printing it.
Fax-back – no personal access but can find one	Typed material as opposed to writing it	Time consuming No office space, hard to get a hold of contractors
Email – all		Access to email
Internet – yes	Easiest to post (access, \$, time, target your information , cover more ground with less time, \$ on your part, Convenient; no postage costs. Also available to those who don't have a computer Cheapest, easiest, fastest # 1 step. Ubiquitous, evolution is towards everyone having internet anyway, makes sense (Thought to be a representative population.)	
<p><b>Do you think a THE CLEARINGHOUSE Is a good idea?</b></p> <ul style="list-style-type: none"> <li>• Yes – 6 of 6 <ul style="list-style-type: none"> <li>• Very much so!</li> <li>• Put it on the internet</li> </ul> </li> </ul> <p><b>If one is developed – How?</b></p> <ul style="list-style-type: none"> <li>• 3 said – web.email.phone.fax</li> <li>• 1 said – web.email.fax.phone</li> <li>• 2 said web and voice</li> </ul>		

**Worker notes:**

- What you wanted in the clearinghouse: What, Where, How , How Much, Qualifications, When, Who
- 1 person vs 1000
- Need to know contractors
- Competition
- Will balance out
- Division of skills
- Evolution of computers.
- Extremely useful for workers to see what's out there
- Don't fear non-locals because local contractors seem only to hire local. Highly specific skills may come from outside.
- Division of skills occurs/manual labor vs. highly-skilled
- There is a balancing effect here; travel being the equalizer; locals can go elsewhere to take jobs as well as outsiders coming in to take local jobs
- There is a local person who can build web pages, but who will pay and support the system?

## Resource Manager Telephone Interviews

### *What are the current means to posting solicitations and receiving bids on solicitations?*

- Us Forest Service Contractors Office
- Forest – 4 weeks ago
- Charles Spencer – Willamette – Solicitations on the web physically in the office – telephonically Foster with small businesses and contractors.
- Receive adequate number ? Marginally not good bad I'd like to see more and better qualifications
- Watershed Lu: work to date hire directly who they want to. Don't legally need to put jobs out for bid. Easier not to do – hire as locally as we can. Familiar – hire flat
- Postcards plan holders. No Internet. Yes. Qualified. Good sense of their contractor labor pool. Community of contractors. Adequate? For new interest. Moving to web – put it on the Internet.
- Useful purpose to make interested parties aware of what's available. Communication between partners. See contractor qualifications. Different agencies are seeing their contracts. Possibilities on collaborating and potentially work more closely and maximize opportunities and efficiency.

### *What are the obstacles you face in receiving an adequate number of appropriate bids?*

- Consistency within the advertisement process
- Funding for projects – Not enough – not an even flow. Don't have as many projects.
- Able to find skilled workers – EWTP quite a lot of skilled workers – GIS
- Contract with council – year –round – do everything, grant writing, fiscal management. Don't have enough worker. Full time coordinator – landowner outreach. Aren't entailing that kind of stuff. A few coming up with permits. Hire outside sources. Volunteers. Tree planting, fencing. Anticipate hiring environmentalists. Clean up – stream restoration, possibility of working with people with good reputation in the area. Closely connected – 7 watershed. Know who not to hire and who to hire. Autonomy in watershed.. lots doing stuff. Applegate, hire lots of people. USFS, BLM.

### *Are you currently able to find capable contractors and skilled workers to meet the needs of your solicitations?*

- Select from is marginal? Yes, - indirect rep in the field for contact. Contractor would need to look at worker .
- GCAP – where do contractors need to have Willamette, Siuslaw – everyone does their own thing. Contractors need to know how to access.

### *Given the conceptual design of the ecosystem industry clearinghouse, do you think the clearinghouse will be useful?*

- It could be – is it widely accepted by contractors – some are astute some are good old boys don't use computers.
- Best possible format for contractors to access this information – complete contact information. Tremendous amount of work, lot
- Useful tool – BLM, USFS, and workers would use it to pick up work from that.
- Useful for contractors for those who want to do EMW to partner and pool to bid on bundled.



- Would tap in to it If it would exist –standard protocol
- Construction arena has a network but not a clearinghouse
- Kind of same light as bundled contracts.

***What would prevent an ecosystem industry clearinghouse from working?***

- Based on funding. If we are funded to do this work.
- Started the concept, hard feelings. EWTP hard feelings – didn't think it was handled well – Jake Crabtree set up whole system, do it for the whole state, and EWP took it over. Basically a good idea, but a parent of something may have ownership – had there been conversation it would have been a good idea. 97 watershed councils.
- Not necessarily – ad in CBD – primary requirement for over \$25,000. Pro-net. 5 bidders, SB, minority, women, disadvantage. Already an elaborate protocol and have to follow those requirements already.

**Notes:**

- Ask the contractors. They are the users, what is the most attractive process.
- Watch the Willamette web site – faithful about posting things. Administrator goes to the web site. One-stop shopping.
- Federal Agency won't want to work more. Three different types.
- Partnerships between organizations.
- Internet would be useful for background on a small firm sharing among interested parties
- Most everyone has email
- Faxes are a quick way of communicating

**Contractor Telephone Interviews**

***What are the current means to accessing solicitations, posting employment opportunities and reviewing worker qualifications?***

- Word of mouth. Needs to hire, pool of people. Work before, know them, and scatter shot. Yes and no. Core of good workers.

***How do you receive notice of solicitations?***

- Not seeing everything. Try to access as many – daily magazines, daily journal of commerce, access on line government CBD, read newspapers, solicitations through the mail. Follow up – scatter. Bidding lists, email access resources, agencies that have web site Bureau of Reclamation, Wildlife, BLM, Forest Service, Lots of stuff missing, lot doesn't surface. Lot goes up on proposal format. Doesn't reach a lot of people. Restoration and planting seeding. Yes, but there's room for more work.
- List for ranger districts, mailing list, send solicitations. Small business directory. Computerized system out of Florida. Contact National Forest get on their list. Not enough information. Doesn't guarantee you'll get the solicitations. BLM doesn't send... are they not upgrading lists – if you fail to send in requested information they take you off the list. Upgrading mailing lists is a big obstacle. They think you don't want to see the solicitations. Have to be upgrading.

***What are the obstacles to accessing solicitations, posting employment opportunities and reviewing worker qualifications?***

- Methods that get them out there. Notice is vague in explanation. Access the copy, call the agency. Can't tell. Found work in jobs that didn't seem to be work. Get more of breakdown the projects.
- Government takes low bidder.
- Beneficial to share contractor qualifications. How much experience and how to do that. What kind of crews do you have available

***Are you currently able to find skilled workers to meet the needs of your contracts? How do you currently locate workers and their qualifications?***

- People shift around to different contractors. 15 they keep busy throughout the year.
- Tree planting – have those qualifications. Technical work we don't have or manpower. Can't do that work. Technical people associate with technical people. They know each other and hire each other. Latino community – tree planting, implementation, thinning, that's where the skills are. There is not a trained Latino workforce. Need to have a trained workforce to get the contracts.

***Given the conceptual design of the ecosystem industry clearinghouse, do you think the clearinghouse will be useful?***

- Single source for info on solicitations – a dream save time. Builders Exchange – business that acquires the different bid documents. Make copies – tap into that resource. Interesting if it kept up with things – listing projects, who has the plan holders list, who has the contract, enable you to access general contracts and you can sub quote. Accessing it through web page.
- Good to have contractor and qualifications for personal workers
- Have to have contractors and workers!
- If there was a clearinghouse for all the federal private contracts – very beneficial because you would be able to look at the list, request packet to get details and then bid. In relation to the workers you could contact workers with certain skills. If we need a foreman – find fire foreman's and call him.
- Important to have (95% Latinos in forest tree planting and thinning) Latino contractors should be able to read the information.)
- Publications of training's going on would be very beneficial (i.e. watershed restoration.)
- Contracts that are coming out of the watershed councils at the local level. Those solicitations are government monies and that should not exclude others on bidding practices.

***What would prevent an ecosystem industry clearinghouse from working?***

- Thoroughness, pull in a lot of different information. Finding things that you're not finding. Is it just a reiteration? Driven a niche in a market. Don't know if the industry can support it.
- Major partnership with Community Based Organizations to facilitate the transfer of information.
- How are workers going to access this? Publication would be beneficial
- These contracts – if they know ahead of time those contracts could be written up. Visual information. USE JUAN MENDOSA. Radio spots. Designated organizations use the information. Partnerships so they can communicate with the community. Mallowa – East of Woodburn.

- Majority of workers – hasn't been the training to get to the point that they can do technical work. Still doing the same things. Need more technical training. Compete like everyone else. Comparative analysis of who has gone through training. If they are good workers the contractors will chase them. Need contacts and skills. Posting of training's – Spanish and English.
- 95 % in reforestation. Technical aspect is going to 5%.
- It's needed now because work is out there – contractors are missing workers and vice versa – bulletin board of skills needed. Definitely need to hook up workers and contractors. If it works out there's going to be more work and more communications for contractors to feel confident. If they get a contract and they don't have personnel they will default.
- Clearinghouse would be a back up for solicitations. Receiving from BLM and now not anymore. If it has all solicitations from all the forests it's beneficial. Committed person to do this. Good idea. Solicitations, training.

<b>Contractor Benefits and Limitations</b>		
<b>Alternatives</b>	<b>Benefits</b>	<b>Limitations</b>
Voicemail	Yes!	Spanish and English
Fax-back		Not too many workers have fax machines
Email	Is the easiest	Not all workers have computers. Creates a situation is that a level playing field
Internet	Live in front of computer monitor. Govt' is going to online solicitation. Easy to gather Access it outside your workstation. Mostly accessible to everyone – putting at a disadvantage.	Need Bulletin Boards to see the type of work available (CBOs have this and could be used- if you are interested in checking this out come look.) -Newspaper is a good way.

## **Worker Telephone Interview**

### ***What are the current means and obstacles to finding employment in the ecosystem industry that match your skills and wage requirements?***

- Not involved with EWP – contracting yes. Don't get much government work. Doesn't seem like there's much. Contractors. Mailing list for forest service, BLM, various projects. Lack of funding and not more work because there is no more logging.
- Sole proprietor work myself – sometimes hire one or two people. People you know. Bid on the work that I can do. Could have used tree planters.
- Might be – private landowners send solicitations for contracts. More work available to the masses. . Main concern is finding out about work. Private sector could advertise their needs that would help. Fair amount of work, word of mouth and knowing people.
- Voicemail or email – not a computer person. Do use telephone so that's better.

## Appendix C: Point System for Ranking Focus Group Access

### *Rating System*

- 1<sup>st</sup> Choice – Total votes x 4
- 2<sup>nd</sup> Choice – Total votes x 3
- 3<sup>rd</sup> Choice – Total votes x 2
- 4<sup>th</sup> Choice – Total votes x 1

Points are totaled for each target group, added together and divided by 25 (the number of participants) to get the access rating for the evaluation criteria.

### *Agencies*

1		2		3		4	
Internet		Voicemail		Email		fax	
Internet		Fax		Email		Voicemail	
Internet		Email		Fax		Voicemail	
Email		Internet		Voicemail		Fax	
Internet and Email		Email w/Fax		Voicemail w/fax			
Internet							
Internet							
Internet = 6x4=24 Email = 2x4=8		Email/Fax= 2x3=6 Internet/Vmail = 1x3=3		Email/Fax= 2x2=4 Voicemail = 2x2=4		Voicemail = 2x1=2 Fax = 2x1=2	
<b>Total Points</b>	Internet – 24+3 = 27	Email–8+6+4 = 18		Fax– 6+4+2=12		Voicemail–3+4+2 =9	

### *Contractors*

1		2		3		4	
Email		Internet		Voicemail		Fax	
Internet		Voicemail		Fax		Email	
Email/Internet							
Email		Internet		Fax		Voicemail	
Internet		Email		Fax		Voicemail	
Internet							
Internet/Voicemail							
Internet							
Internet – 6x4=24 Email = 12/ Vmail = 4		Internet – 2x3=6 Vmail/Email – 1x3=3		Fax 3x2=6 Voicemail 1x2=2		Voicemail – 2x1=2 Fax/Email 1x1=1	
<b>Total Points</b>	Internet – 24+6 = 30	Email–12+3+1 =11		Vmail =11		Fax = 6+1=7	

**Workers**

1	2	3	4
Internet	Email	Voicemail	Fax
Internet	Email	Voicemail	Fax
Internet	Email	Voicemail	Fax
Internet	Email	Fax	Voicemail
Internet and Voicemail			
Internet and Voicemail			
Voicemail	Email	Internet	Fax
Voicemail	Email	Internet	
Voicemail	Fax	Email	Internet
Voicemail			
Internet – 6 x 4 = 24 Voicemail – 6 x 4 = 24	Email – 6x3=18 Fax – 1x3 = 3	Voicemail – 3x2=6 Fax 1x2=2 Internet 2x2=4	Fax 4x1=4 Voicemail 1x1=1 Internet 1x1=1
<b>Total Points</b>	Internet–24 +4 = 28	Vmail 24+6+1=31	Email = 18 Fax – 3+2+4=11

**Rating the Alternatives**

Target Group	Internet Points	Email Points	Voicemail Points	Fax Points
Resource Manager	27	18	9	12
Contractor	30	16	11	7
Worker	28	18	31	11
Total Points	85	52	51	30
<b>Score</b>	<b>3.4</b>	<b>2.08</b>	<b>2.04</b>	<b>1.2</b>
<b>Ranking</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>1</b>

## Appendix D: Internet Procurement Databases

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### Sierra Cascade Province

<http://www.clarint.com/scp/>

The Sierra Cascade Province Contracting consists of the Lassen, Plumas, and Modoc National Forests. Contracts with the Sierra Cascade Province fill a variety of needs for the Forest Service as well as providing economic opportunities for many types of businesses.

**Benefits:** This web site provides easy access to current and available contracts, determined by geographic location. In addition, there is a simple bidding application form for agency use. There are five databases, one for each of the California national forest provinces) sites. The Webmaster was approached 3-4 years ago to create a site for a single national forest (Tahoe National Forest). The purpose was to publicize contracting opportunities and the publicly required information on successful bidders on these contracts, and allowing interested persons to sign up for particular mailing lists announcing contract opportunities. In addition, potential bidders may request the contract information packet for a particular contract opportunity via a form on the web site.

The Tahoe National Forest site was later expanded to cover the other three forests in the IBET Province (Inyo, Lake Tahoe Basin Management Unit, El Dorado, and Tahoe). This became the prototype for the other 4 provinces in California:

IBET - [www.clarint.com/tnf](http://www.clarint.com/tnf)  
Sierra Cascade - [www.clarint.com/scp/](http://www.clarint.com/scp/)  
Southern Sierra - [www.clarint.com/ssp/](http://www.clarint.com/ssp/)  
Northern Province - [www.clarint.com/noprov/](http://www.clarint.com/noprov/)  
Southern Province - [www.clarint.com/soprov/](http://www.clarint.com/soprov/)

The original intent was very straightforward. The complexity occurs in maintaining the sites to be current on a daily basis. There is a set of forms, which forest service personnel use to submit information for inclusion on the site. These are batch processed on a daily basis so the sites will contain accurate, timely information.

### Drawbacks:

There has always been intent to interface the web sites with contacting databases in the various provinces to eliminate the manual step of updating the sites. Information on the web sites would be pulled from the database on-the-fly and thus reflect precisely what is in the database at all times. So far this is just in planning stages.

### Pro-Net - Procurement Marketing and Access Network

<http://pro-net.sba.gov/index2.html>

Pro-Net is an electronic gateway of procurement information -- for and about small businesses. It is a search engine for contracting officers, a marketing tool for small firms and a "link" to procurement opportunities and important information. It is designed to be a "virtual" one-stop-procurement-shop.

### Benefits

- Pro-net is free to federal and state government agencies as well as prime and other contractors seeking small business contractors, subcontractors and/or partnership opportunities. Pro-Net is open to all small firms seeking federal, state and private contracts.
- Businesses profiled on the Pro-Net system can be searched by SIC codes; key words; location; quality certifications; business type; ownership race and gender; EDI capability, etc.

### **Drawbacks**

- It is very cumbersome to use. Workers seeking appropriate job opportunities may have difficulty identifying the correct SIC or relevant labor codes.
- Last Modified: 8-14-99

## **Bureau of Land Management Acquisitions**

<http://www.blm.gov/natacq/>

It is the mission of the Bureau of Land Management to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations.

- Procurement Initiatives?
- Agreements on acquisitions?

## **Federal Procurement Data System**

<http://fpds.gsa.gov/fpds/fpds.htm>

The FPDS contains statistical data about U.S. Government Executive Branch procurement contract transactions awarded since October 1, 1978. Every year, the Federal Executive Branch spends approximately \$200 billion to buy goods and services. The FPDS summarizes who bought what, from whom, and where. The FPDS does not contain information about current procurement opportunities. See our list of links for help in finding current opportunities.

## **Commerce Business Daily**

<http://cbdnet.gpo.gov/>

CBDNet is the Government's official FREE electronic version of the Commerce Business Daily (CBD). The Commerce Business Daily (CBD) lists notices of proposed government procurement actions, contract awards, sales of government property, and other procurement information. A new edition of the CBD is issued every business day. Each edition contains approximately 500-1,000 notices. Each notice appears in the CBD only once. The CBD databases online via GPO Access contain notices from December 2, 1996 forward. All Federal procurement offices are required to announce proposed procurement actions over \$25,000 and contract awards over \$25,000, that are likely to result in the award of any subcontracts, in the CBD.

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<sup>1</sup> Bureau of Land Management. Environmental Education. [www.blm.gov/education/ecosystem/intro.html](http://www.blm.gov/education/ecosystem/intro.html) (July 2000)

<sup>2</sup> *ibid.*

<sup>3</sup> Labor Education and Research Center. The High-Skill Approach to Ecosystem Management: Combining Economic, Ecological, and Social Objectives. (May 1998) University of Oregon

<sup>4</sup> *ibid.*

<sup>5</sup> Spencer, Charles. Personal Interview. July 2000

<sup>6</sup> Charles Spencer. Ecosystem Workforce Program. July 2000

<sup>7</sup> See Appendix B for Actual Participant Responses

<sup>8</sup> See Appendix C for the Point Rating System

<sup>9</sup> Estimated numbers of annual solicitations determined by EWP staff in 4/2000.

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<sup>10</sup> Estimated number of labor hours to operate the clearinghouse estimated at 5 hours by EWP staff in 4/ 2000 and re-evaluated by CPW to be at least 15.

<sup>11</sup> See Appendix C for Point System for Rating Focus Group Access

<sup>12</sup> Contractor focus group participant. Coquille Focus Group. July 2000

<sup>13</sup> Appendix A describes all cost breakdowns for individual system alternatives

<sup>14</sup> Cost estimates have been provided for University of Oregon based services and non-university service providers. All costs are based on prices quoted in April of 2000. The costs are subject to change. Costs provided by [www.affinity.com](http://www.affinity.com), April 2000 – See Appendix A

<sup>15</sup> Costs provided by Telecom Services at the University of Oregon – April 2000

<sup>16</sup> Costs provided by US West Phone Services – April 2000

<sup>17</sup> Costs provided by Telecom Services at the University of Oregon – April 2000

<sup>18</sup> Costs provided by US West telephone Services – April 2000

<sup>19</sup> Costs provided by Andre LeDuc, Community Planning Workshop, University of Oregon – April 2000

<sup>20</sup> Costs provided by LSOF! Peachease Web site – April 2000

<sup>21</sup> Cost provided by Scott Mongrain, New Media Center, April 2000

<sup>22</sup> Costs provided by [www.affinity.com](http://www.affinity.com), April 2000 – See Appendix A

<sup>23</sup> Costs provided by Cyber Internet Services, <http://www.eugene.cyberis.net/>, April 2000