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Mobilizing Human Resources for Watershed Restoration

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In Oregon, community-based organizations, including watershed councils and soil and water conservation districts (SWCDs), have become major actors in the development and implementation of watershed restoration. SWCDs have a history dating back to the 1930s, when state governments authorized their creation as special government districts to foster soil and water conservation on farm and rangelands. SWCDs have taxing authority and an elected board. Watershed councils emerged more recently in the wake of the spotted owl crisis and impending listing of a number of salmon species as threatened or endangered under the Endangered Species Act. In the mid-1990s, the State of Oregon began to promote watershed councils as a strategy to find local-level approaches to improving watershed health. Following the lead of grass-roots collaboratives that had emerged to develop agreement around federal forest management, the Oregon legislature created the Watershed Health Program and authorized the funding of pilot watershed councils in two regions of the state. Over time, this pilot evolved into a statewide program of ninety watershed councils. Unlike SWCDs, which are state-authorized special government districts, watershed councils are nongovernmental organizations.

Community-based organizations such as watershed councils and SWCDs differ considerably from the standard approaches to watershed management in America. More common strategies include federal and state landownership and government regulation of private landowner management practices. Local watershed organizations rarely own land and do not have regulatory authority over landowners. These watershed organizations also differ somewhat from state extension efforts such as those provided by university extension and some natural resource agencies. These extension efforts have historically supported the conservation efforts of individual landowners. Local watershed organizations also provide technical and financial assistance to landowners, but have typically sought to do so in a watershed context in which they work across landownerships in key drainages in order to improve overall watershed health.

Each of these approaches to fostering land, water, and wildlife conservation functions through different institutional arrangements. Typically, government employees manage lands, regulate private landowner behavior, or



support private land management with technical assistance and funding. Government entities also use contractors to implement projects and sometimes use in-kind assistance from citizen volunteers, nongovernmental organizations, and other government entities.

Watershed councils were initially conceived as voluntary collaboratives of diverse local stakeholders that would develop agreement on management priorities in their watershed. As they have developed those agreements, many watershed councils have increasingly developed the organizational capacity to implement their agreements. Watershed councils have had to manage themselves, assess watershed conditions, and develop, fund, and implement restoration activities. As with government agencies, they can do so by hiring staff members, using contractors, or making use of the human resources of other entities including government agencies, other

nongovernmental organizations, and landowners. However, unlike government agencies whose capacity and structure is guided by legislative authorities, watershed councils have had to decide on their own what their institutional arrangements should be.

This working paper explores the ways in which watershed councils have built the organizational capacity and human resources necessary to manage themselves and implement watershed restoration projects.

We found that watershed council boards determine strategies for mobilizing human resources to manage the council and implement restoration projects. The experiences of board members influence their orientation. For example, members with knowledge and experience in public contracting are likely to mobilize resources differently than members without that experience.

Running watershed councils involves council management and the implementation of restoration projects. Council management can include the development of funding opportunities; maintenance of positive working relationships with natural resource agencies, community groups, stakeholders, agencies, and interested citizens; clerical work; preparing newsletters and reports; outreach; and education. Implementation of restoration projects may require activities such as watershed condition assessment, surveying and engineering, riparian planting, culvert replacement, fish habitat creation, and irrigation improvements.

To organize their operations and accomplish restoration projects, watershed councils mobilize three significant types of human resources: contracting, in-kind assistance, and in-house staffing. Contracting involves an agreement for delivery of specified services in exchange for payment. Watershed councils can choose to have contractors perform work on a project-by-project basis rather than hiring a permanent staff. In-kind resources are provided to watershed councils without payment. Local, state, and federal agencies, landowners, for-profit and nonprofit organizations, and volunteers all provide in-kind assistance to watershed councils. We found that most councils use a mix of in-house staff members, contractors, and in-kind contributions for both council management and restoration.

Methods

To understand how councils mobilize resources to organize itself and implement projects, we conducted in-depth, open-ended interviews with the coordinators of watershed councils that completed Oregon Watershed Enhancement Board (OWEB) support grant applications for the 2009–11 biennium. We asked sixty-four council coordinators to participate in interviews and were able to interview fifty-two of them (81 percent) during summer 2009. We asked council coordinators to discuss their choices whether to use staff members, contractors, and in-kind human resources to manage the council, and to develop and implement restoration projects. Our interview guide can be found in the appendix.

Findings

ORGANIZATIONAL STRUCTURE

In order to manage watershed councils, boards have organized the councils in two different ways. The first approach to organization involved the use of a single-employee—a coordinator. These councils typically also used a range of contracting and in-kind resources to manage their operations. The second was multistaff councils, which had in-house staffing capacity but also mobilized contracting and in-kind assistance for specific purposes.

Single-employee councils

Fewer than half of the councils in our study were small, single-employee councils that only employed a council coordinator. These types of councils relied on this person for all of the organizational management of the council, supporting the board in setting priorities, and guiding the implementation of restoration projects. Councils could be organized in this model because they were new, worked at a small scale, or had access to other resources through partnerships with their local soil and water conservation districts (SWCDs) or other in-kind arrangements that allowed them to meet their needs without expanding the in-house staff. Councils that partnered with an SWCD used the SWCD as their fiscal agent. This arrangement shaped the council's choice of human resources and meant that it used defined government rules for any contracting. Councils without governmental

fiscal agents have greater range of flexibility in contracting procedures. We discuss the differences in contracting procedures shortly.

Some councils that were not partnered with SWCDs or using government fiscal agents engaged their council coordinator via personal services contract. A contract offered the advantages of low overhead costs (e.g., payroll taxes, insurance premiums, workers compensation insurance, and unemployment) and a prearranged agreement that defined the terms of the position. Interviews revealed a preference for contracting coordinators.

The council only uses personal service contracts, and the decision was made by the council's board of directors because the council is small and not set up to deal with employees and all of the things that go with employees (I-011).

The council's board does not feel as though they have the capacity to supervise an employee. They prefer a contractor because they can agree on the terms and duties of the position (I-002).

The coordinator of a single-employee watershed council in turn facilitated additional organizational activities, such as education and outreach, monitoring, administrative assistance and fiscal administration, depending on the size and maturity of the council. Coordinators typically mobilized a mix of in-kind assistance (volunteers,

landowners, and professionals from government agencies and nongovernmental organizations) and contractors to achieve these objectives.

As far as staff for organizing and running the board and managing the nonprofit, because there are such limited funds available from council support grants and other grants for administration to run this type of nonprofit, there is only one person employed by the council and that is the coordinator. For anything else we need help with, we hire contractors or use volunteers including board members (I-001).

Agencies with a formal and active role in natural resource management such as the Bureau of Land Management or Oregon Department of Fish and Wildlife provided in-kind assistance in engagement with landowners or community groups.

In other instances, councils used temporary volunteer internships and AmeriCorps placements.

The council has been able to use interns and work-study students to help with specific tasks that council needed (media-public relations, developing a workbook for the council) because we had limited funds to hire anyone to do this work (I-060).

The board of a watershed council could also provide volunteers.

Table 1. Sources and types of in-kind contributions to watershed councils

<i>Sources of in-kind</i>	<i>Number of councils</i>	<i>Percentage of councils</i>
<i>Federal agencies</i>	46	88%
<i>State agencies</i>	47	90%
<i>Local government</i>	36	69%
<i>Volunteer</i>	46	88%
<i>Landowners</i>	44	85%
<i>Contractors</i>	17	33%
<i>Private corporations</i>	18	35%
<i>NGOs</i>	3	6%
<i>Types of in-kind</i>		
<i>Technical assistance</i>	41	79%
<i>Operational assistance</i>	14	37%
<i>Materials</i>	28	54%

Our board is a working board, which is very unique in the watershed council world. In other councils, many people join the board thinking it is a decision-making board, and, while that is part of what the board does for this council, they also help the coordinator with doing other aspects of the watershed councils mission, including doing education and outreach work for the council (I-001).

Many of the single-employee councils in our study reported that they would be building partnerships, hiring additional staff members, and seeking contractors in the upcoming biennium to add organizational capacity in-house. Only one council suggested that it could be transitioning from a full-time to a part-time contracted position as a result of funding constraints. This suggests that, while a single-coordinator model is effective for flexibility and cost-efficacy, watershed councils require additional capacity as they grow, and seek that capacity through a range of human resources.

A second model of single-employee watershed council also relied on one employee, but had access to in-kind resources through partnership with their local soil and water conservation district (SWCD). Councils in this group did not typically need to utilize contractors for organizational capacity. These partnerships were often created at the founding of the council. The partnership between these two groups was based on their shared objectives (facilitation of conservation practices on private lands). In those cases, the council coordinator was an employee of the SWCD. Some SWCDs also donated or used grant funding from council projects to cover the time of additional SWCD employees for council-specific work. SWCDs provided this capacity through memoranda of understanding for in-kind assistance. Councils in turn provided grant funding and council support grants to cover the SWCDs' council coordinator costs.

Technically, on paper I am an employee of the SWCD, but my position is paid for by OWEB and other grants, but because the SWCD is our fiscal agent and I work in their office I am actually employed by them and not the council (I-068).

This arrangement was effective for both watershed councils and SWCDs as it enabled them to share human

resources on mutually complementary work. However, this meant that watershed councils were reliant on the capacity and priorities of their SWCD, which varied. About half of the councils surveyed reported that their SWCD was hiring staff members that would directly complement the work of the council, and in other cases the SWCD was not hiring at all.

There really hasn't been enough work or money in the budget to support bringing on another employee. If the SWCD were going to hire another staff person they would assign them to other district projects instead of specifically to the council (I-066).

The SWCD might be adding a new position that would complement the work of the watershed councils (I-034)

Watershed councils that worked in partnership with SWCDs had a ready source of in-kind assistance for their organizational and administrative needs, but the SWCD had significant power over their decision-making, staffing, and fiscal capacity. Single-employee watershed councils not affiliated with an SWCD had greater flexibility in mobilizing a range of human resources. Some of these councils purposefully sought to avoid the limitations and requirements of employing a staff, but many indicated the need to expand the staffing roll to accomplish all the work.

Staffed watershed councils

The majority of the councils in this study employed staff members in addition to a coordinator. These councils employed both full and part-time employees for programmatic needs such as education, fiscal administration, landowner outreach, project management, and general administrative assistance. Interviewees suggested that, to meet their goals and longer-term needs, it was necessary to expand their in-house staffing:

The council recognized that it was impossible to get meaningful work done at any meaningful scale with just one person [i.e., coordinator] because of the amount of work that needs to be done and the nature of watershed work, requiring a bunch of different types of skill sets—project management people,

fiscal people, technical, communication people, big picture people. You can't get all of these skill sets in one person and expect them to be excellent in all of these categories (I-062).

The work has to demand a long-term perspective versus "we just need help right now" because the council always feels like we need extra help (I-023).

Councils chose to increase staff member numbers through in-house hiring or by contracting. They tended to see hiring as a strategy for increasing long-term capacity.

The council wants to build a high-capacity organization with value-added employees who have technical skills, and to the degree possible the council focuses on building internal capacity and only relies on contractors when necessary (I-008).

A larger staff was crucial to the capacity of many watershed councils. However, staff supervision could also detract from a coordinator's many other tasks. Contracted staff members were a way to avoid this issue. Councils tended to weigh their internal capacity, their long-term needs, the duration of positions, and the availability of funding when they considered bringing on contracted staff members.

There are types of services that are not done as well in a contractor position as they are in a staff position. Councils are interested in having a person who is invested, has the spirit of the organization in them. You don't get this from a contractor who responded to an RFP [request for proposal]. Councils need to consider whether they are looking for someone to be part of the team, or someone to just get a task done. The staff is typically managers, leaders, and people who are part of the team, but when it comes to a technical task, the council will just contract that out (I-062).

Interviewees told us that contractors were best suited to activities that were defined tasks—specific, specialized, and limited in duration.

If a position fit a recurring need, it makes sense for

us to hire an in-house staff person, but if it is just a special need or specialized skill with limited application, then we would probably just contract with someone (I-019)

If it is a staff position that fulfills our council's mission and we have an ongoing need, we will likely employ an in-house staff person, provided there is funding available to support the position. Otherwise, we contract for technical work like engineering, basin assessments, and specialized work like our bookkeeping and web development (I-005).

Contracting for organizational capacity often took place on an individual contract basis, but a small number of councils contracted their entire staff through a human resources firm. This firm provided the staff with all of the benefits typically provided by employers. Councils using this arrangement found it to be advantageous because it protected them from liability and staff overhead costs, but still ensured high-quality working conditions for employees. This arrangement also freed coordinators from administrative and human resources duties.

Additional staff members enabled watershed councils to increase their organizational capacity and develop educational and outreach programs. Increases in a staff were an indication that a watershed council was expanding its capacity and scope of activities. However, taking on additional staff members required councils to develop funding sources to support these positions in the long term. Approximately half of the councils with multiple staff members that we interviewed indicated that they would be hiring additional employees or contractors in the coming biennium. A very small group of councils expected to eliminate positions in the coming biennium.

MOBILIZING HUMAN RESOURCES TO IMPLEMENT RESTORATION PROJECTS

In addition to council management, education, and outreach, watershed councils develop and implement watershed restoration projects. Restoration projects tend to involve components that are (1) technically intensive, such as project design, management, engineering, or surveying; (2) equipment-intensive (using large pieces of heavy equipment), such as culvert replacement and

changing stream channels; or (3) labor-intensive, such as fencing, tree planting, or invasive-species management. Although these are three distinct types of work, many projects may require multiple types of work. For instance, a large woody debris placement for in-stream habitat likely has a technical component in developing the design for the placement and an equipment-intensive component for log placement. As with watershed council management, councils mobilized human resources in three primary ways by hiring contractors, employing a staff, and acquiring in-kind assistance. Contracting was the most common way to implement restoration projects. Most watershed councils conducted projects that exceeded the abilities of their internal staff and volunteer capacity. Only a few councils had any in-house resources for equipment-intensive projects.

Labor-intensive activities

Councils were often engaged in labor-intensive restoration work such as invasive-species removal or riparian tree planting. In these situations, councils utilized community volunteers, hired contracted labor crews, arranged for low-cost crews (youth corps and prisoners), or hired their own laborers to implement restoration projects. Many councils implemented straightforward riparian restoration projects with volunteers as a means of engaging the community in local watershed restoration. Councils utilized their internal staffs to develop, organize and implement volunteer planting and invasive-species removal events in the community.

Councils were primarily considering the scale of the work involved when determining whether to use volunteers, hire staff members, or hire contractors. Often, they employed a combination of human resource strategies to accomplish different elements of a project.

Our council primarily uses volunteers to do planting and invasive-species removal as part of riparian restoration projects, but we will use contractors depending on the topography and site conditions of where we are doing the planting (I-060).

The use of volunteers to implement riparian planting projects can be part of larger projects of which planting is only a small component.

The coordinator managed a riparian project that included fencing, noxious-weed removal, and replanting. We hired a contractor to install the fence and remove vegetation and then used volunteers to plant vegetation (I-022).

We found that a small group of councils employed their own seasonal labor crews for restoration projects like riparian planting and invasive-species management. These councils were consistently doing more labor-intensive restoration work than would have been feasible with volunteer crews. Interviewees also saw management benefits to having an in-house crew.

If the council needed a work crew, we would hire them as employees of the council. We would rather have them as employees because we would have more supervision over their work (I-031).

A small number of watershed councils had a history of employing crews under the Jobs in the Woods and Hire the Fisher programs, which were created in the 1990s to hire and train displaced forest workers and fishers. For these councils, part of the purpose of employing crews directly was to create long-term, high-quality jobs. Other councils have been concerned that employing a crew would lead them to chase work.

We don't want to be in a situation with low-skill employees like work crews, where the tail (low-skill work crews) wags the dog (council). Our council isn't interested in having its activities driven by the need to constantly search for work; we want to use labor crews as efficiently as possible (I-008).

One interviewee suggested that hiring staff members for labor-intensive work created financial risk for the council. Councils estimate project costs during the project development stage. When a council is doing this work itself, it is at risk of exceeding its budget when unforeseen situations occur (e.g., a council needs to wait until a flooded area dries before beginning work). Councils are then forced to find funding from other sources to cover the extra expenses incurred as a result of the delay.

The way that the OWEB and all federal agencies work is on a cost reimbursement process. So if our

council can do a project faster, we just save time, but the council faces the risk of underbidding the project. Therefore, if a project takes more time or money than initially asked for, the council has to come up with the difference, versus being able to hold a contractor to their bid. Because of this, our council has found that it is more expensive to hire our own labor crews—for this reason and the other associated expenses of hiring seasonal workers like workers compensation [insurance] and unemployment, not to mention the administrative time that is required to interview, hire, and manage employees (I-020).

Many councils opted for contracting labor-intensive work to avoid these risks and obligations. Watershed councils weighed their own capacity, project scope, benefits to local communities, and job quality when making the decision between staffing or contracting for labor-intensive activities.

Equipment-intensive activities

In addition to labor requirements, watershed councils often used heavy equipment to achieve restoration objectives. Heavy equipment was used for excavation associated with installing bridges, replacing culverts, and creating in-stream habitat by placing rocks and large woody debris in streams. We found that watershed councils almost exclusively used contractors to implement equipment-intensive work.

If it is in-stream or requires equipment or anything that is technical, the council contracts it out (I-038)

Councils did not do this work in house, primarily because it required expensive equipment that required significant capital investment. However, we did find that a few councils had some capacity to do such work. A few others worked with landowners or partners who could implement equipment-intensive restoration work. Even for those councils that did have some internal capacity to perform equipment-intensive tasks, when projects were complex, they used contractors.

We council members are able to do most in-stream excavation work ourselves, but when the scope of work exceeds our ability, we hire contractors. For

instance, we wanted to replace a bridge on a major roadway, but because of the scale of work involved, primarily the personnel required to handle traffic and the amount of equipment involved, we chose to contract it out (I-009).

On larger projects that may require heavy equipment or lots of time to complete, the council will hire contractors to do the work (I-041)

The majority of councils did not focus on building their internal capacity to do equipment-intensive restoration work. The high costs, capitalization, and maintenance of heavy and specialized machinery made it a difficult investment, and most councils opted to mobilize the resources of contractors.

Technical activities

Many restoration projects required specialized knowledge and skills, especially for their design. Watershed councils had technical needs specific to individual projects (e.g., engineering and design work for a culvert replacement), but also needed technical skills to plan for future projects (e.g., conducting basin assessments to help prioritize and identify key locations for restoration). Councils utilized a variety of technical skills including hydrology, spatial analysis, engineering and survey work, and project design and management. Technical skills were typically needed for a specific aspect of a project. The majority of councils hired contractors for technical tasks and relied on in-kind assistance through partnerships with government agencies or large nonprofit organizations to meet their technical needs. Some councils contracted project design and management because they did have employees or partners to develop or oversee projects.

Our council hires contractors to do design and engineering work, primarily for diversion dams and fish passage projects. We also use contractors for specific tasks like data collection, watershed assessments, or LIDAR [light detection and ranging] flights (I-043).

Councils also partnered with SWCDs or other agencies to received in-kind technical assistance on a project-by-project basis. Without in-kind assistance from local,

state, and federal institutions, few councils would have had technical resources for sophisticated restoration work.

There were only a few councils that had hired technical specialists for their staffs. Watershed councils sought to maximize employee resources when they could, but typically, the scale of restoration work exceeded staff capacities.

When it comes to restoration projects, the council has already grabbed the low-hanging fruit, and now focuses on projects that are too big and complex for the council to do internally (I-031).

The council does as much restoration work possible with the resources that are at its disposal and invests in its employees to build the capacity of the council. That said, when it requires specialist assistance, the council goes and gets it. We use engineers for design and evaluation of certain aspects of restoration projects as required (I-008).

Councils used in-kind assistance primarily in the form of technical assistance to develop riparian planting projects or designs for culvert installations and bridge replacements. The use of contractors was typically for very specific needs such as LIDAR flights. Contracting was a primary strategy for councils that did not partner with a SWCD.

SUMMARY OF HUMAN RESOURCE MOBILIZATION IN WATERSHED COUNCILS

Watershed councils were using varied strategies to mobilize human resources for council organization and restoration project implementation. These included in-house staffing, partnerships and in-kind assistance, and contracting. Although there were a number of factors that determined which resources they would mobilize, councils were strategically seeking to minimize costs and risks while maximizing benefits in their restoration work. In-kind assistance was a significant resource for organizational capacity in councils partnered with SWCDs. SWCDs often had a crucial role in the structure of watershed council partners and helped accelerate the scope and scale of their activities. We found that contracting

was an important component of organizational capacity for single-employee councils. Contracting was also a primary strategy for acquiring the labor, machinery, and technical skills necessary for project implementation.

CONTRACTING PROCESSES

Watershed councils contracted with the private sector for a wide variety of services when the scope, scale, technical nature, or level of complexity of a project or task exceeded their internal resources and those of their partners. In our study, contracting was a common strategy for watershed councils that were undertaking specialized organizational work, such as bookkeeping, as well as for all types of restoration activities. Because contracting was such an important strategy for watershed councils to mobilize human resources, we asked council coordinators about their contracting processes. In particular, we asked them about the formality of procedures they used, how they sought bids, and the criteria they used for selecting contractors.

There were three methods that watershed councils used for contracting restoration projects. First, some councils passed funds to landowners, who then identified and oversaw a contractor's work for restoration on their lands. Second, some watershed councils partnered with an SWCD and were required to use the codified state rules of contracting. Third, those that were not affiliated with an SWCD developed their own contracting practices, which were more flexible than the SWCD requirements. When landowners hired contractors, they tended to obtain referrals from neighbors or hire locally from a familiar source. Councils also differed in their approach to selecting bids and their selection criteria. Again, councils affiliated with an SWCD followed formal government contracting policies, and we saw a greater range of contracting methods among non-SWCD councils.

Contracting procedures

We found that half of the councils had formal procurement policies in place and another 8 percent were in the process of developing them. Formal procurement policies were typically a reflection of a fiscal partnership with a soil and water conservation district (SWCD) or other government agency. In addition, a number of

councils had adopted rules for contracting with private businesses. Councils that had government fiscal agents such as SWCDs, cities, or counties had to select contractors in accordance with public contracting requirements under state statutes. Under these statutes, watershed councils had to use the State of Oregon Attorney General Model Rules, or the modifications that their local fiscal agent had adopted under the guidelines.

Forty-two percent of the councils interviewed were not using formalized policies. Informal policies allow councils to make individual decisions about what cost thresholds or other criteria necessitate different types of procurement procedures. One council had this to say about adopting a formal procurement policy at the council:

No, we don't have a formal procurement policy. This would be a real problem—the process can't be local and community-driven and then have all of the agency processes. The council feels that a community process can be just as good as an agency process; the community process is very thorough and you get very high-quality work from it. But it is different from an agency procurement policy (I-023).

In other cases, watershed councils provided funding to landowners who were then responsible for contracting a restoration project on their land.

Our council does not hire contractors directly, rather we work with individual landowners on developing projects and then allow the landowners to go out and find contractors to do the work that they need done to implement the project. The council then has a project committee that looks at proposals from landowners and decides if the project sounds worthwhile, then makes the decision on whether to fund the project or not (I-028).

Another council that was primarily implementing projects on land owned by a private company allowed the company to contract with their preferred businesses. The private company owned the majority of the watershed in question and had extensive experience with contractors, so the local watershed council allowed this company to procure contractor services.

Soliciting Bids

The process of soliciting bids was similar for both councils with and without government fiscal agents. All councils that conducted their contracting used a range of approaches: requests for proposal (RFPs), requests for quotes, sole sourcing, and prequalification to select contractors. RFPs were commonly used for projects that required extensive design prior to implementation, or contained technical aspects that required specialized expertise such as engineering requirements for a bridge installation. In some cases, contractors would also seek subcontractors to implement the designs. Some councils required the primary contractor to use local subcontractors. For the request for quotes, councils typically had designs in hand that they provided to potential contractors to solicit bids. The major difference was that rules for government contracting determined when SWCD-partnered councils needed to seek three bids, or go through the procedures of their policy regardless of the types of solicitations. Codified procurement policy provided explicit guidelines on the bidding process (e.g., three bids, sole source, competitive bidding) that institutions use depending on the value of the contract, and included details about how the contract would be evaluated.

Many councils maintained lists of contractors from their local areas that they had worked with, that had experience with restoration, or that had expressed interest in doing restoration. Councils also added contractors to the list through consultation and referrals from other agencies and councils. There was a small group of councils that also advertised contract opportunities in local newspapers, in business journals, and on their websites. The lists of contractors that councils maintained allowed them to prescreen contractors and ensure that only qualified contractors received offers to submit RFPs and bids on projects.

Some councils devised strategies making their procurement process more efficient. For example, three councils together developed a strategy to prequalify contractors. These councils entered into a contractor review process to select qualified contractors for surveying, hydrology modeling, engineering and assessment, and construction oversight. This process “makes it quick and easy for our council to line up a contractor for a project because we

know the firms do good work” (I-004). The councils had standing contracts with preselected firms. The councils issued work orders to initiate work through the standing contract.

Some councils created sole source contracts when there were limited numbers of firms that were capable of doing a particular type of work. In one situation, a council noted that the limited number of contractors working in their area made it easy for the council to partner with a single experienced contractor. The contractor was helping develop the technical aspects of projects and in some cases subcontracted if the required expertise exceeded their internal capacity.

Generally, the council is not putting projects out to bid because there is such a small group of local contractors and the council is doing small projects. The council just evaluates each project and selects the contractor that would be most fitting. Then, the council and the contractor write the grant together (I-002).

When councils were not working directly with contractors to develop and implement projects, there were other types of specialized work where sole sourcing was commonly used. One of the most commonly cited examples of sole sourcing was for large woody debris placements with helicopters, as there was only one firm in the state doing this work.

Bid evaluation criteria

Watershed councils used a number of different criteria to

evaluate potential contractors. Councils that had SWCDs as their fiscal agents consistently followed their government-mandated procedures when evaluating bids. However, most councils developed their evaluation criteria on a project-by-project basis. As one interviewee said, “We want as much flexibility as possible, while maintaining accountability and transparency” (I-064). Experience was the most commonly cited evaluation criteria that councils were using to assess contractors, followed by contractor locality, work quality, and cost (Table 2). Watershed councils commonly required contractors to participate in a site visit in order for bid to be considered.

While cost is typically a major consideration for councils when hiring contractors, the majority of councils prioritized competent contractors with previous experience. As one council coordinator expressed:

We look at the best value, recognizing that if someone way underbid a project they may be cutting corners on the project (I-063).

Many councils mentioned additional criteria for evaluating contractors who made the bid, including past work experience and relationship with the council, references, reputation in the community, equipment type, and availability to carry out a project within a preferred time frame. But specific criteria and evaluation processes varied from one council to another.

We are using good judgment when hiring contractors to maximize the council’s ability to spend our limited funding as efficiently and effectively as possible when working on restoration projects (I-009).

Table 2. Bid evaluation criteria

<i>Criteria</i>	<i>Number of councils</i>	<i>Percentage of councils</i>
<i>Experience</i>	43	83%
<i>Local</i>	39	75%
<i>Work quality</i>	35	67%
<i>Cost</i>	34	65%
<i>Past experience with council</i>	23	44%
<i>References</i>	13	25%
<i>Reputation</i>	8	15%
<i>Equipment</i>	8	15%
<i>Availability</i>	7	15%

Most councils were interested in hiring local contractors because of their limited travel and overhead costs and the potential for close working relationships.

Local isn't one of the major decision criteria, but only because we don't have to formally acknowledge it, nonlocal contractors' bids are just not as competitive as a local contractors" (I-007).

Councils were able to develop relationships with local contractors that advanced both the contractor's and the council's experience with restoration projects. One coordinator described the process for contracting locally:

The council does not have a formally adopted definition [of local] outlined in any of its procedures or policies. The council would probably consider Oregon local; however, the council does give preference to contractors within the watershed first and second to those within the county and lastly to contractors within the state (I-004).

Many of the councils described having to expand their definition of local when seeking more specialized types of work. Councils in rural areas could not always access local contractors for specialized and technical work like engineering, hydrology, and project design. These councils considered firms in their region and the entire state when looking for contractors to do more complex work.

Conclusions

In the last decade, Oregon's watershed councils have emerged as local agents for watershed restoration. Watershed councils have brought together communities, landowners, and state and federal agencies to reach agreement and then develop and implement restoration activities across the state. In many instances, they have pioneered new strategies to integrate restoration activities across landownerships. In other instances, they have undertaken activities completely new to their watershed.

To undertake restoration, watershed councils adopted a variety of approaches for mobilizing human resources. Most councils have built staffs that can manage councils and undertake parts of restoration projects. We also

found a rich array of in-kind arrangements and contracting strategies across the watershed councils.

In-kind assistance for council management often came from SWCDs, which worked closely with many watershed councils to provide staff members and administrative capacity. Councils were able to use these in-kind resources to accomplish council management that would otherwise be difficult with a single staff person. In-kind support from citizen volunteers and federal employees also provided human resources for labor-intensive, equipment-intensive, and technical activities associated with project implementation.

Contracting was a third strategy for mobilizing human resources. By using contractors, watershed councils gain access to specialized skills and equipment and avoid the costs and risks of a permanent staff. Across the state, watershed councils prioritized hiring local contractors. There were a few examples of contracted staff members providing an administrative base for councils. Contracting was more common in project implementation. Councils contracted all kinds of restoration tasks, but some councils also used volunteer crews for less complex labor-intensive projects and received in-kind assistance for technical aspects of project design and management, especially from government agencies. However, the scale and complexity of much of the watershed restoration has increased beyond the capacity of local volunteers. Some councils sought to develop technically skilled staffs, but many found that contracting was the most efficient method for shorter-term projects, or for the technical components of projects alone.

A council's fiscal agents determined its contracting policies. Those councils with SWCDs or other government entities as fiscal agents followed the state procurement processes. Councils acting as their own fiscal agents or with nongovernmental fiscal agents developed their own procurement processes, which were less formal and more flexible than government procedures. Councils evaluated contractors on a wide variety of criteria (e.g., experience, work quality, cost, past experience with the council, references, availability, and location). When feasible, councils used local contractors, but some projects were too specialized for local contractors and required an expanded search for a nonlocal firm with appropriate skills and resources.

Although most of the funding for watershed restoration has come from state and federal sources, nongovernmental watershed councils and other community-based organizations have been designing and implementing most restoration projects, especially on private lands. Engaging nongovernmental energy, enthusiasm, and support was a deliberate strategy of policymakers who created the Oregon Watershed Health Program and the Oregon Plan for Salmon and Watersheds. They believed that this collaborative approach would build social agreement to make restoration possible. But it has also

strengthened local organizational capacity to mobilize human resources for watershed management. Rather than the uniformity typically seen across government agencies, watershed councils have mobilized human resources in ways that reflect their local circumstances. Some councils have chosen to adopt the employment and contracting regulations of their local government partners, whereas others have created their own flexible and fluid system for hiring staff members, partnering for in-kind assistance, and selecting and managing contractors.



