

Investments and Local Capture on the Ochoco National Forest: Restoration and Timber Contracts, 2006–2015

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Executive Summary

Restoration contracts and timber sales on national forests and grasslands can generate economic activity and social benefits in nearby communities. The extent to which local communities realize these benefits depends on the amount of work contracted, the type of work contracted, and the ability of local businesses to bid on and receive the work. The Ochoco Forest Restoration Collaborative was interested in understanding the contracting trends, local awards, and local contractor capacity for restoration contracts and timber sales on the Ochoco National Forest. To address these interests, we performed a workforce assessment on the forest, considering both data trends and local contractor perspectives. We used Forest Service restoration contracting data, timber sales data, and contractor interviews to better understand how the Forest Service contracts with local businesses on the Ochoco National Forest. For the study period of fiscal year (FY) 2006–2015, we found:

- **The Forest Service issued restoration service contracts worth \$10.3 million on the Ochoco National Forest, an average of just over \$1 million per year.** Investments in tree thinning were much greater than any other single activity and accounted for half the total contract spending. Less than three percent went to technical pre-implementation activities, and spending in each activity category and in total varied between years.
- **Just over 40 percent of the total restoration service contract investment was awarded to local contractors.** Deschutes County contractors received the most dollars of any county, while no contracts were awarded to Grant County contractors during the study period. Local capture of tree thinning, the largest investment, was only 27 percent, compared to 84 percent for all other natural resource and conservation services.
- **The Forest Service awarded \$3.8 million in timber sales on the Ochoco National Forest.** Only 12 percent of the value of these sales went to local purchasers, and 88 percent of the value of locally purchased sales went to Crook County purchasers. No sawtimber purchases were made by Jefferson or Wheeler County purchasers.
- **Local contractors offered a wide array of services across a broad area.** Services that local contractors performed included surveying, road and infrastructure maintenance, habitat improvement, and commercial and non-commercial tree removal. Contractors suggested that contract opportunities on the Ochoco National Forest are limited, and that they travel widely to maintain full workloads, but have capacity for more local work if it were available.
- **Subcontracting is common among local contractors.** Many local businesses subcontract with other businesses either to handle overflow work or, more typically, to bring in expertise or equipment that they lack in-house. Subcontracting practices are important to consider because they change the number of businesses that are involved in contracts, and potentially the location(s) of spending.
- **A lack of local mills makes timber and stewardship sales on the Ochoco National Forest expensive and puts the local forest industry at risk.** Tailoring contracts to industry capacity would help support local industry and the agency's timber program. Smaller local businesses reported that they are finding fewer contracting opportunities than in the past and suggested that offering more contracts in the range of a few thousand dollars to \$100,000 would better sustain local restoration and forestry workforces.



Private businesses often play a key role in forest management and restoration efforts on US Forest Service lands. Contracts to private businesses for restoration activities on national forests and timber sales from national forests help the Forest Service accomplish needed work on the forests. This work can positively impact local economies and communities, provided local contractors are able to bid on and receive contracts. In many cases, communities that are surrounded by a large proportion of Forest Service lands, like many of those in eastern Oregon, depend on local contracts for employment and timber products from the national forests to support local businesses and livelihoods.

To achieve positive local outcomes while meeting forest management needs, local communities and businesses need to have the capacity to perform the work that is needed, and the ability to competitively bid on contracts. To assess local capacity and contracting, however, communities, local organizations, and agency partners need to understand the amount and types of work that are contracted on the local forest, and the opportunities and limitations that local service contractors and timber purchasers perceive around contracts on the forest.

The Ochoco Forest Restoration Collaborative (OFRC), a diverse group of stakeholders convened in 2012, was interested in understanding recent restoration contract and timber sale history on the Ochoco National Forest and Crooked River National Grasslands, as well as contractor perspectives around work on the forest. Recently, The Ochoco National Forest produced a report that noted the significant contributions OFRC has made to the success of land management on the Ochoco National Forest.¹ These current and past contributions, along with information presented in this report can serve as a basis for focusing the collaborative's efforts to help the Ochoco National Forest plan and assess restoration activities on the forest in ways that could increase benefits in local communities. This working paper examines the restoration service contract and timber sale history from the Ochoco National Forest from FY 2006–FY 2015, including overall spending trends, the amounts of spending awarded locally, and the types of contracts that are most and least often awarded to local contractors. In addition, this working paper highlights the challenges and opportunities to increased local benefit that local contractors perceive by presenting a synthesis of main themes from interviews with 18 local contractors on the Ochoco National Forest.

Approach

For this assessment we reviewed contextual demographic information for the study area, examined recent contracting history for restoration service and timber sales contracts on the Ochoco National Forest between 2006 and 2015, and interviewed local contractors who have either been awarded restoration service contracts or purchased timber from the Ochoco National Forest. We asked interviewees about their preferences and perspectives regarding federal contracting, trends, challenges, and opportunities.

For this assessment, we defined “local” contractors as those located in one of five counties of local interest near the Ochoco National Forest or the Crooked River National Grasslands: Crook County, Deschutes County, Grant County, Jefferson County, and Wheeler County.

Contextual demographics

We used several state and federal sources, including the Oregon Department of Education, the American Community Survey, and the Oregon Department of Employment to gather basic demographic and socioeconomic information about the study area. Contextual information is reported at the state level and at the county level for each of the five local counties. Sources for the measures reported are listed below tables in which the information is presented.

Contract history and patterns

Restoration projects can be accomplished through a variety of venues, including through Forest Service employees, timber sales and service contracts to private businesses, and agreements with other agencies or non-governmental organizations. For this assessment, we focused on recent timber sales and service contracting with private businesses. Economic impacts from agreements and federal employment by the agency for forest restoration and management work on the forest can have significant effects both locally and non-locally, but were not considered in this assessment. Federal contracting data only track contracts from the agency to private vendors, and cannot track subcontracting that in many cases may have a large impact on local economies. In other words, we can only report on businesses that received successful bids for timber sales or were awarded contracts, and not on any

businesses these entities used for subcontracting. We do however discuss subcontracting practices in the area in the contractor interview findings.

During the 10-year period reviewed, the Ochoco National Forest overall awarded \$10.3 million in restoration service contracts and \$3.8 million in timber sales. We reviewed both this service contract history and the timber sale records for the forest to identify patterns, consistencies, and fluctuations of awards during the study period. We used a ten-year study period to capture both recent contracting patterns and longer-term trends, including annual variability in spending and the number of local contractors receiving contracts.

Restoration contracts

We used data from USASpending.gov to identify all contracts issued by the Ochoco National Forest for restoration work from FY 2006 through FY 2015. We isolated contracts for restoration work from contracts for other services using an established set of USFS-issued Product Service Codes (PSCs) related to forest and watershed restoration, grouped into five general categories of restoration work based on PSCs: special studies/analyses, design and engineering, natural resources and conservation, construction of roads and facilities, and maintenance/repair/alteration of roads and facilities (see Table 1, page 4). A single code, PSC F014, “tree thinning services,” from the natural resources and conservation services category was responsible for 49 percent of all contract dollars awarded during the study period. Because this single activity was so significant in terms of overall spending, we separated it from the other services in the natural resources and conservation category and analyzed it separately throughout the assessment.

We report on the overall amount of services contracted over the 10-year period, the types of restoration work with the greatest and least investments, and the numbers and values of contracts awarded to local contractors on the Ochoco National Forest. We also considered the differences in contracts awarded to businesses in each of the local counties, as well as the location of non-local contracts (e.g. awarded to in-state or regionally located contractors). The study period for this assessment includes

FY 2009 and FY 2010, when there was a dramatic increase in spending because of funds from the American Recovery and Reinvestment Act (ARRA). In reporting the results, we flag ARRA-influenced years to highlight how ARRA influenced spending in ways that may not be typical going forward.

Timber sale contracts

We used data from the US Forest Service's Timber Information Manager (TIM) database to identify all timber sales issued by the Ochoco National Forest from FY 2006 through FY 2015. We summarized timber sale patterns including the number, sale value, and volume awarded in timber sales 1) each year, 2) to local versus nonlocal purchasers, and 3) to each of the local counties. For sale value, we used the winning-bid value that is reported in the timber sale record, noted throughout this report as "bid value." Winning-bid value is the dollar value that the purchaser of a sale in the database paid for the timber included in the sale, and was the most consistently reported sale data available for this analysis. In some cases, zero dollar timber sales were recorded in the database; we did not include these sales in our analysis. Finally, there were several timber sales that were recorded but never com-

pleted, we listed and included the award status of each these sales in a table (Table 10, see page 20), but did include these sales in our analysis.

Contractor interviews

We conducted interviews with 18 local contractors to understand the range of work in which they participate on the Ochoco National Forest and their perspectives on the challenges and opportunities for contracting on the forest. In our review of federal service contract and timber sale databases, we identified 40 contractors that had either a timber sale or a service contract on the Ochoco National Forest between 2006 and 2015. Of these 40 contractors, ten—including about one-third of the timber sale purchasers—were either no longer in business or could not be reached because they did not have publicly available contact information. Of the 30 contractors that we were able to confirm, we interviewed 18 in November 2016. Eleven declined to be interviewed, and one did not return phone calls. We asked contractors about their preferences and perspectives on federal contracting, their capacity for additional work, and their experiences with federal contracts including trends, challenges, and opportunities.

Table 1 Contracting categories, restoration PSCs, and services included in Ochoco National Forest restoration service contract analysis

| Category | PSC Category | Services included in this study (PSCs) |
|------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Special studies and analyses for environmental assessments | B | Environmental assessments (B510) Natural resource (B525) |
| Design and engineering | C | Landscaping, interior layout, and designing (C211) |
| Natural resources and conservation | F | Forest-range fire suppression (F003) Forest-range fire rehabilitation (F004) Forest tree planting services (F005) Land treatment practices (F006) Seed collection/production services (F009) Other forest/range improvements (non-construction) (F018) Other wildlife management services (F019) Fisheries resources management (F020) Site preparation (F021) Natural resources/conservation- other (F099) Environmental systems protection- environmental remediation (F108) Other environmental services (F999) |
| Tree thinning services | F014 | Tree thinning services |
| Construction of roads and facilities | Y | Construct of recreation facilities (non-building) (Y291) Construction of highways, roads, streets, bridges, and railways (Y1LB and Y222) Construction of unimproved real property (land) (Y1PC) |
| Maintenance of roads and facilities | Z | Repair or alteration of highways/ roads/ streets/ bridges/ railways (Z222) Maintenance, repair or alteration of recreation facilities (Z291) |

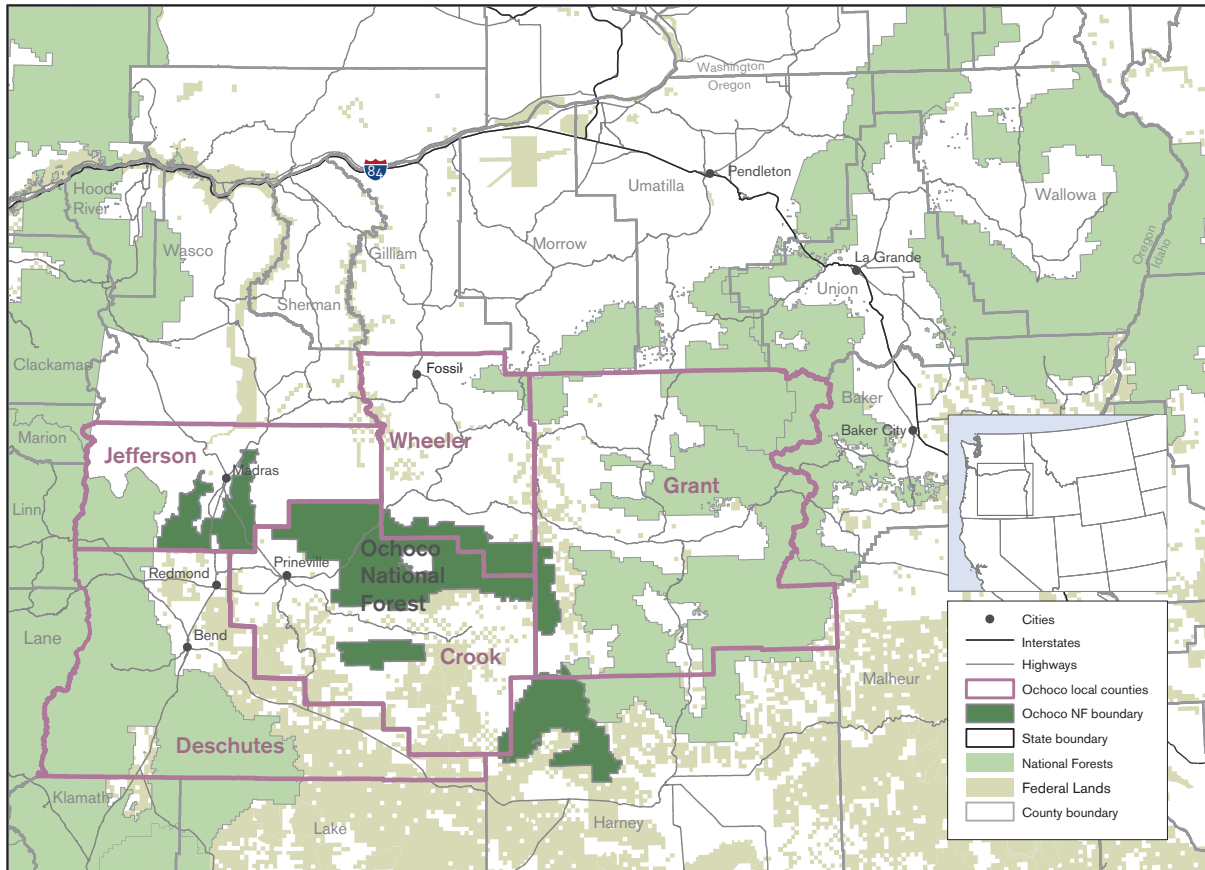
Background: Local social and economic context

Together, the Ochoco National Forest and the Crooked River National Grasslands occupy some portion of five Oregon counties east of the Cascade Crest: Crook County, Deschutes County, Grant County, Jefferson County, and Wheeler County (see Figure 1, below). For this assessment, contractors from any of these five counties were considered local, and contractors with businesses outside of these counties were considered nonlocal. These five counties differ from each other significantly in some ways. We show general metrics for social and economic conditions in each county to illustrate how they at times differ from each other and the state of Oregon as whole.

The population in each local county varies drastically. Of the 36 counties in Oregon, the five in-

cluded in the local study area for this assessment account for 5.5 percent of the state's population; the large majority of that is in Deschutes County, which has 124 times the population as Wheeler County (see Table 2, page 6). Deschutes County has a population of 166,622, the county seat of the City of Bend (pop 81,236), and is the most populated county on the eastside of the Cascades, while Wheeler County, with a population of just 1,348 and the county seat of Fossil (population 473) is the least populated county in the state of Oregon. Like Wheeler County, the other three local counties are significantly less populated than Deschute County. It is important to consider these differences in population when considering the amount and value of contracts that go to each county in the study area.

Figure 1 Ochoco National Forest and local counties study area



Deschutes County also has a greater median household income and less unemployment than the other four counties. Excluding Deschutes County, the other counties have higher median age, higher unemployment, and more poverty than the state as a whole. Jefferson County has a considerably higher unemployment rate, a greater percent of the population living in poverty, and more students eligible for free or reduced lunches than elsewhere in the state, including any of the other study counties.

Crook County, while broadly more comparable to the other counties in the study area besides Deschutes, has social and economic characteristics that differ considerably from those of the state overall. The population in Crook County is older, with a county median age that is nine years older than that of Oregon State. The unemployment rate in Crook

County is considerably higher than the Oregon State unemployment rate, and is the second highest in the study area, behind Jefferson County. In addition, the median household income is considerably lower, the percentage of the population in poverty is higher, and the percentage of students eligible for free and reduced lunch is much, suggesting a county that overall has less wealth and economic opportunity than average across the state. Most notably, school enrollment in the county dropped considerably from the 2013/2014 to the 2014/2015 school years, and dropout rate for the same time period was much higher than that of any other local county or the state.

The economies of the counties also differ from each other and the rest of the state. In Deschutes County, education and health services, and leisure and hos-

Table 2 Comparison of key social and economic characteristics in local counties

| Characteristic | Crook County | Deschutes County | Grant County | Jefferson County | Wheeler County | Oregon |
|----------------------------------------------------------------------------------|---------------------|-------------------------|---------------------|-------------------------|-----------------------|---------------|
| Total Population | 20,956 | 166,622 | 7,276 | 22,061 | 1,348 | 3,939,233 |
| Unemployment rate (2011-2015) | 13.5 | 9.4 | 9 | 14.4 | 8.5 | 9.3 |
| Median household income (2011-2015) | \$37,106 | \$51,223 | \$38,046 | \$46,366 | \$33,487 | \$51,243 |
| Percent of population in poverty (2011-2015) | 12.5 | 10.5 | 11 | 14.7 | 12.3 | 11.2 |
| Median age (2011-2015) | 48.1 | 41.9 | 51.1 | 39.9 | 56.5 | 39.1 |
| School enrollment change from previous year (2013/2014 to 2014/2015) | -10.1% | 1.17% | 2.39% | -1.84% | 95.97% | 0.90% |
| Dropout rate (2013/2014 to 2014/2015) | 17.59 | 3.11 | 1.89 | 7.05 | 2.44 | 4.26 |
| Percent of students eligible for free and reduced lunch (2013/2014 to 2014/2015) | 61.23% | 47.83% | 57.33% | 76.01% | 16.46% | 49.74% |

Source(s): American Community Survey 2015 estimate tables, Oregon Department of Education

pitality are larger players in the local economy than the state as a whole, and these sectors, as well as professional and business services employ considerably more of the population than the other local counties (see Table 3, below). For the other four local counties, all levels of government: local, state, and federal play a larger role in the local economy compared to Deschutes County, and in most cases these sectors employ a higher proportion of people than the state as a whole. In Jefferson County, a significant portion of the economy is also employed in tribal government, nearly 17 percent compared to less than half a percent for the state as a whole. In Crook County, trade, transportation, and utilities is a much greater sector than at the state level or in any of the other counties. In the two counties

where wood product manufacturing is a reported economic sector—Crook and Jefferson—that sector is much larger than at the state level, illustrating the importance that timber resources from nearby forests may have in those counties.

It is important to keep in mind that even among local counties in the study area, these differences in economies and conditions can be significant. Although socioeconomic conditions are not likely to be set or to change significantly as a result of US Forest Service contracting practices, it is important to consider the differences between counties as context when reviewing differences in contracted work history, contract capture, and award sizes, types, and durations in each county.

Table 3 Top employment sectors in local counties, 2016

| Employment sector | Crook County | Deschutes County | Grant County | Jefferson County | Wheeler County | Oregon |
|--------------------------------------|--------------|------------------|--------------|------------------|----------------|--------|
| Mining, logging, and construction* | 6.13% | 7.78% | 6.87% | – | – | 5.03% |
| Manufacturing | 9.28% | 6.62% | 5.15% | 16.77% | – | 10.41% |
| Wood product manufacturing | 7.18% | – | – | 11.13% | – | 1.26% |
| Trade, transportation, and utilities | 24.87% | 19.29% | 14.16% | 13.71% | 17.54% | 18.79% |
| Professional and business services | 4.90% | 12.22% | 5.15% | 2.74% | – | 12.89% |
| Education and health services | 11.56% | 16.62% | 8.15% | 9.52% | – | 14.67% |
| Leisure and hospitality | 11.73% | 14.02% | 7.30% | 9.52% | 5.26% | 10.51% |
| Federal government | 4.73% | 1.16% | 12.45% | 2.10% | 1.75% | 1.51% |
| State government | 4.20% | 1.73% | 6.87% | 6.29% | 1.75% | 4.95% |
| Local government | 12.61% | 9.77% | 27.04% | 32.26% | 49.12% | 10.69% |
| Indian tribal | – | – | – | 16.61% | – | 0.45% |

Source(s): Oregon Department of Employment, 2016

* Some counties do not report employment in all economic sectors. Data reflected above are for counties that reported employment rates in the economic sectors listed. Cells are left empty in places where counties did not report data.

Results

Restoration service contracts on the Ochoco National Forest

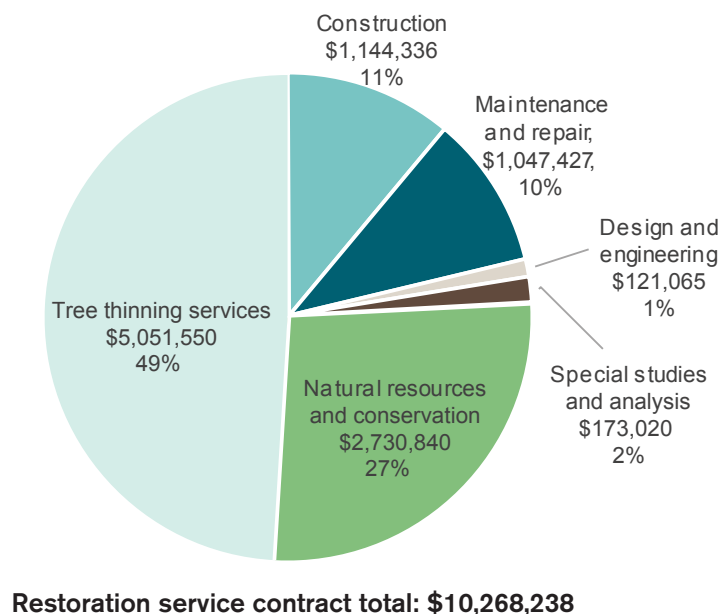
From FY 2006-FY 2015, the Forest Service invested a total of nearly \$10.3 million in service contracts for restoration activities on the Ochoco National Forest, an average annual investment of just over \$1 million per year. Contracts went to 98 different businesses during the study period. The largest proportion of restoration service contract spending was for tree thinning contracts, which were responsible for 49 percent of total restoration service contract dollars invested during the study period (see Figure 2, below), followed by natural resources and conservation services, at 27 percent of the total investment. Spending was nearly equal for both the maintenance and the construction of roads and facilities, with each accounting for 10 and 11 percent, respectively.

The vast majority of the total investment in restoration service contracts was for activities associ-

ated with implementing projects. Activities that are typically associated with pre-implementation technical work for restoration projects, such as stand surveys and biological assessments, are included in the “design and engineering” or “special studies and analyses” categories. These categories together made up about three percent of the total spending on restoration service contracts, suggesting that either there is little of this type of work happening on the forest in general, or if there is a considerable amount of this technical work happening, that there is general agency capacity to complete it, at least relative to spending in other types of service services.

Annual funding fluctuated considerably between FY 2006 and FY 2015, both in terms of total funding and between categories each year (see Figure 3, page 9). As expected, there was an increase in spending in 2009-2010 attributable to ARRA funding. The funding resulted in increased tree thinning contract spending and sizeable investments in

Figure 2 Ochoco National Forest restoration service contract dollars by work type, FY 2006–2015



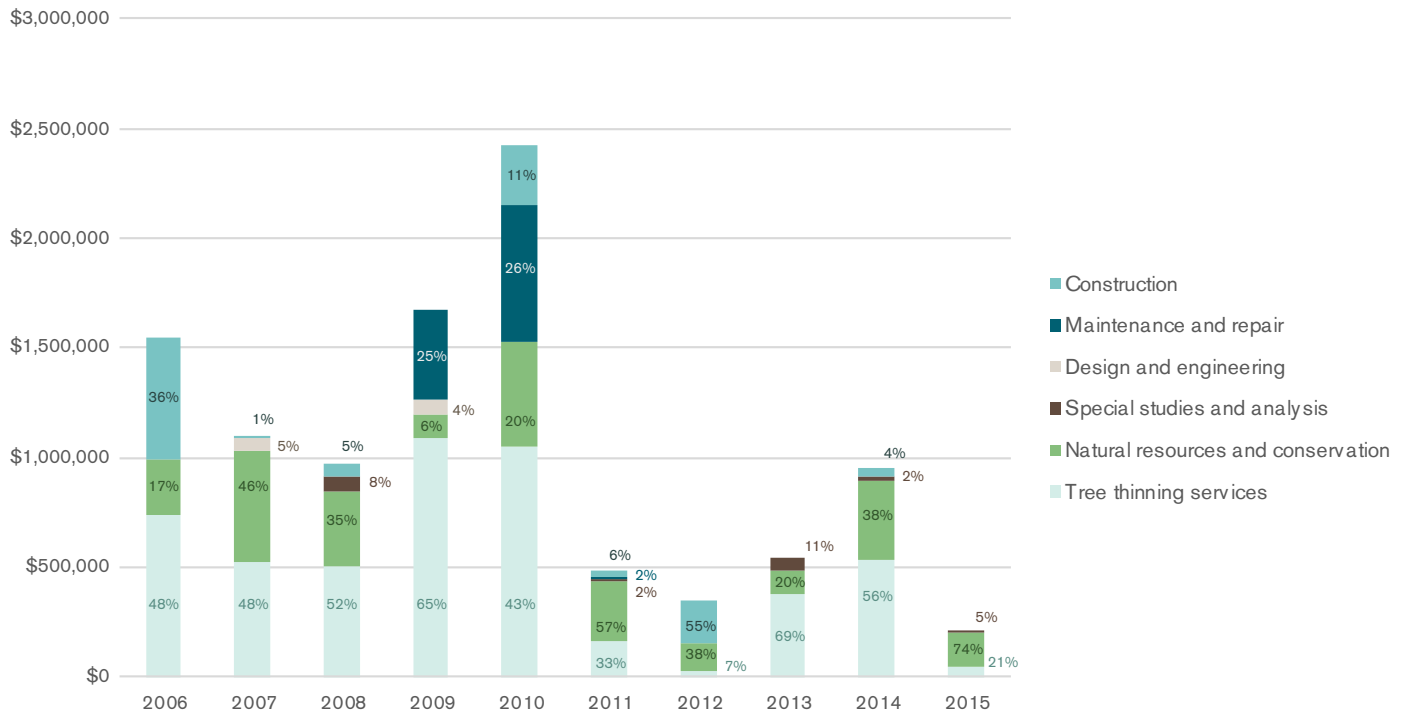
maintenance and repair contracts that did not occur in any of the other years. Forty percent of all restoration dollars in the study period were invested during these two years, and 2010 alone accounted for nearly a quarter of the total restoration contract spending in the study period. Excluding the ARRA years of 2009-2010, the average investment across the other eight years was \$770,000 per year.

During the five fiscal years of the study period that followed FY 2010, restoration contract spending on the forest declined to amounts that were lower than the pre-ARRA years (FY 2008 and earlier). All of the fiscal years prior to ARRA had higher spending than all of the years after it, and most of the post-ARRA years had significantly less spending. Thus, although spending on restoration service contracts was highly variable between years, it appears to

have decreased in recent years compared to the fiscal years at the beginning of the study period. Excluding 2009 and 2010, average annual funding for restoration contracts was \$1.2 million for FY 2006-FY 2008, and \$510,000 (58 percent less) for FY 2011-FY 2015.

Although fluctuations were notable among all restoration service contract categories, investments in tree thinning were especially inconsistent between years, varying from a low of \$26,000 and seven percent of spending in FY 2012 to a high of \$1,091,000 and 65 percent in 2009, with an average spending of \$505,000 per year. Because tree thinning alone was responsible for nearly half of the total investment during the study period, the dramatic fluctuations in contract dollars for thinning had a similar impact on total contract dollars awarded each year.

Figure 3 Ochoco National Forest restoration service contract dollars by year and work type, FY 2006–2015



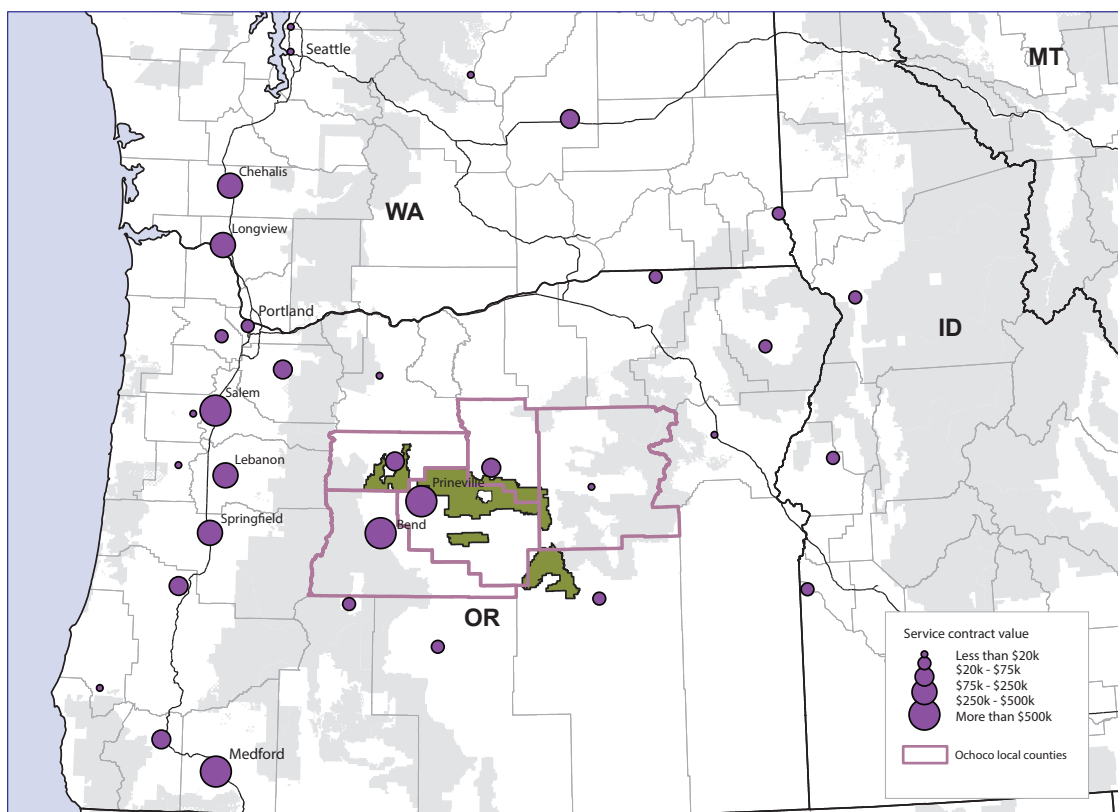
Local capture

Overall, local contractors were awarded \$4,318,000, or 42 percent of the restoration service contract investments on the forest from FY 2006-FY 2015. Of the 98 total businesses that received contracts, 51 were in local counties. An additional \$4,725,000 (46 percent) of the total spending was awarded to contractors located elsewhere in the state of Oregon. Nine percent went to Washington state contractors, and three percent went to states outside of Oregon and Washington. The distribution of service contract dollars is shown in Figure 4, below. It is important to keep in mind that this distribution of awarded dollars does not account for any subcontracting that may occur after a contract is awarded to a business. More or less capture in any area may have happened as a result of subcontracts with other businesses to accomplish contracted work.

The proportion of local capture was very different across years (see Figure 5, page 11). Local contractors captured as much as 82 percent of all service contract dollars (FY 2012), although this was in a year of relatively low total spending. During

years with the greatest total service contract dollars awarded (FY 2006, FY 2007, FY 2009, and FY 2010), local capture tended to be a lower proportion of total spending (between 44-54 percent), even though more contract dollars in total were awarded locally during those years. There are anomalies in this general trend however; both FY 2008 and FY 2013 saw relatively little of the restoration service contract spending on the Forest awarded locally despite sizeable differences in total spending. In FY 2014, more restoration contract dollars were awarded than any other post-ARRA year, but only two percent of these dollars were awarded locally, considerably less than any other year in the entire study period. While it is not clear from the data why local capture was so low during FY 2014, the contracting record shows that just two small restoration service contracts were awarded locally. In contrast, two large tree thinning contracts and one large forest restoration contract were awarded to nonlocal businesses in Jackson County, OR; these three contracts alone were responsible for 80 percent of the awarded dollars during FY 2014.

Figure 4 Ochoco National Forest restoration service contract dollars by contractor location, FY 2006–2015



Local capture also varied greatly between service categories (see Figure 6, below). With just six percent of total contract spending awarded in local counties, special studies and analysis had the lowest proportion of local capture. Local capture was much higher, 55 percent, in design and engineering services. Both special studies and design and engineering contract categories include activities that are primarily technical in nature. Because these two categories together were responsible for rela-

tively low contract spending overall, however, the differences in local capture between them did not result in large differences in locally awarded dollars, relative to other categories with more overall spending. Natural resources and conservation contracts, excluding tree thinning which is discussed in greater detail in the next section, had the highest proportion of local capture (84 percent), followed by construction of roads and facilities (65 percent).

Figure 5 Ochoco National Forest restoration service contract dollars by year and contractor location, FY 2006–2015

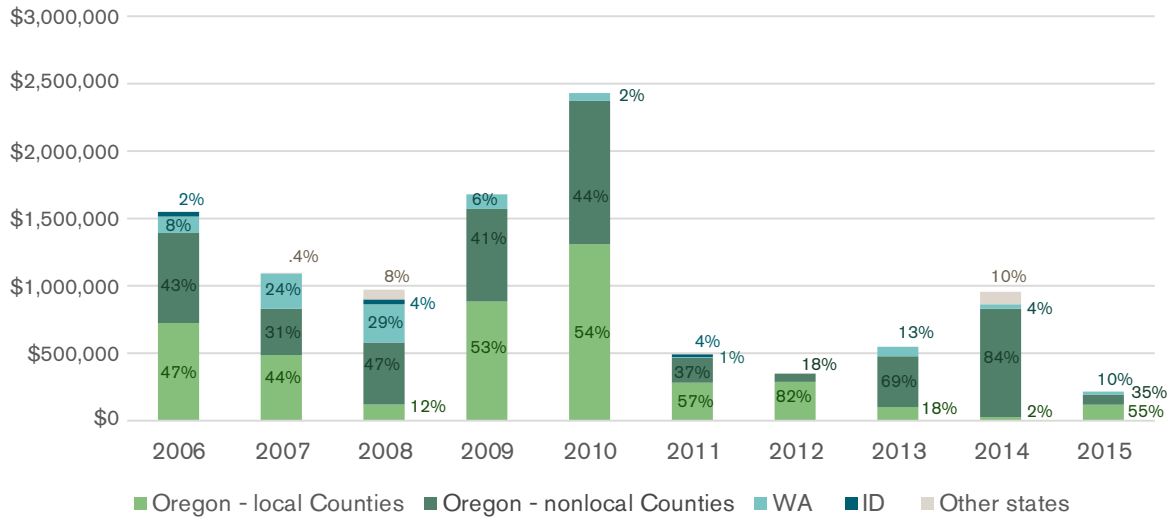
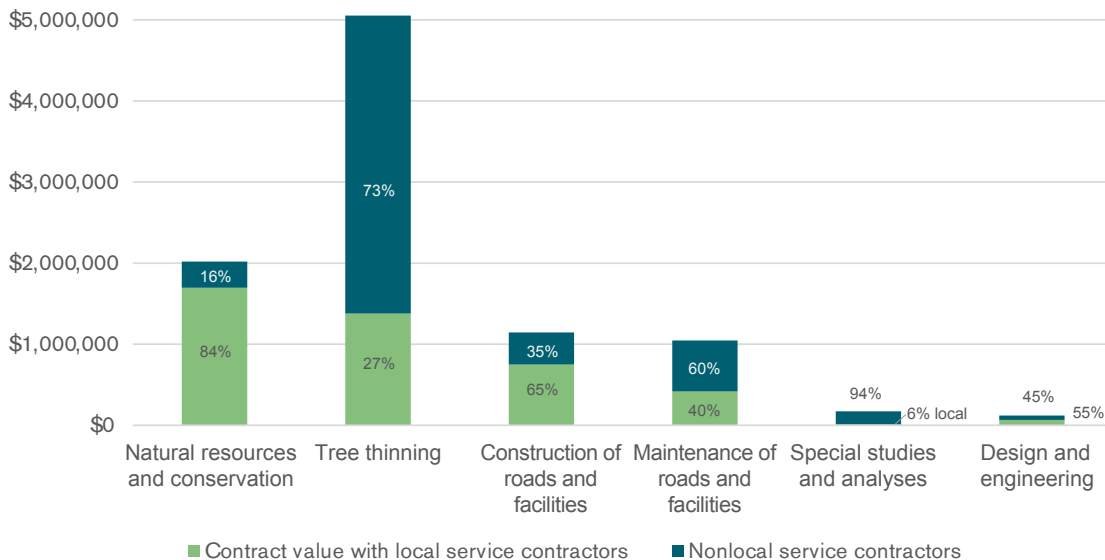


Figure 6 Ochoco National Forest restoration service contract dollars, local capture by work type, FY 2006–2015



Tree thinning contracts

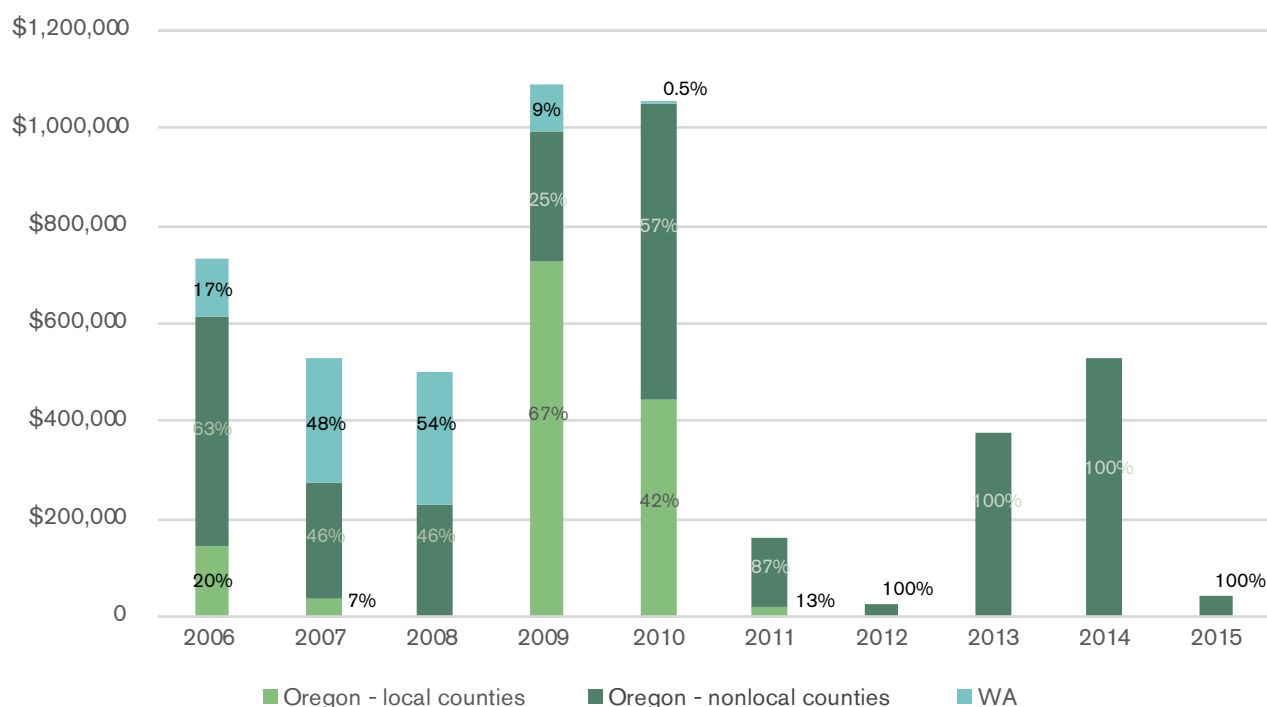
The single largest investment in restoration service contracts during the study period was for tree thinning contracts. While 84 percent of the contract dollars for all other natural resource and conservation services went to local contractors, local businesses were awarded only 27 percent of the tree thinning contract dollars from FY 2006–FY 2015. The majority (58 percent) of tree thinning contract dollars were awarded to in-state but non-local contractors located primarily in Douglas and Marion Counties, and 15 percent went to businesses in Washington State.

Although 17 different contractors were awarded tree thinning contracts on the Ochoco National Forest from FY 2006–FY 2015, the majority of the tree thinning contract dollars were awarded to a much fewer number. Three contractors—one local in Deschutes County, one nonlocal in Marion County, and one nonlocal in Jackson County—together received more than half of the total thinning contract

dollars, with two of these receiving over \$1 million each in tree thinning contracts during the 10-year study period. In total, three local businesses, all located in Deschutes County, were awarded tree thinning contracts during the study period, with one local contractor receiving 80 percent of the local tree thinning contract dollars.

Contract dollars for thinning spiked in the ARRA stimulus years of 2009 and 2010, and local capture of thinning contract dollars was also greatest during these years (see Figure 7, below). During the highest year of 2009, a single contractor located locally in Deschutes County received 67 percent of total tree thinning contract dollars on the forest. However, during five of the ten fiscal years assessed (2008, and 2012–2014), there was zero local capture of tree thinning dollars. In the last four years of the study period, 100 percent of the tree thinning contract dollars on the Ochoco National Forest was awarded to nonlocal but in-state contractors.

Figure 7 Ochoco National Forest tree thinning contract dollars by contractor location, FY 2006–2015



Differences between local counties

Each of the local counties had different levels of local capture. Restoration service contractors located in Deschutes County, with the highest population of the local counties, received more contract dollars than any other county, local or nonlocal, and were responsible for 22 percent of the total service contract dollars awarded anywhere during FY 2006-FY 2015 (see Table 4, below). Crook County contractors had the second highest level of awarded dollars, with 16 percent of the total restoration contract investment. On the other end of the spectrum, Jefferson and Wheeler County contractors received just two percent each of total awarded contract dollars, while no Grant County contractors received any restoration service contract dollars during the

study period. Outside of three local counties, five counties on the westside of Oregon, as well as two counties in Washington State rounded out the top ten counties receiving restoration contract dollars from the Ochoco National Forest during the study period. Contractors in Wheeler County, which was not among the top ten counties, were awarded a total of \$160,000 in restoration service contracts spread between three of the years reviewed (FY 2007, FY 2008, and FY 2011).

As noted earlier, the five local counties differ from each other in both their social conditions and local economies. In the same sense, each of the counties has different levels of capacity for both restoration service contracts as a whole, and also the different

Table 4 Top 10 counties receiving restoration service contract dollars on the Ochoco National Forest, FY 2006–2015*

| County | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Total | Percent of total dollars |
|---------------|--------------------|--------------------|------------------|--------------------|--------------------|------------------|------------------|------------------|------------------|------------------|--------------------|--------------------------|
| Deschutes, OR | \$193,919 | \$141,764 | — | \$757,490 | \$890,572 | \$26,185 | \$190,793 | \$45,335 | — | \$10,570 | \$2,256,628 | 22% |
| Jackson, OR | \$41,794 | — | — | \$34,572 | \$362,407 | \$138,757 | \$25,891 | \$376,477 | \$764,931 | \$38,874 | \$1,783,703 | 17% |
| Crook, OR | \$513,380 | \$310,312 | \$21,659 | \$108,779 | \$399,109 | \$191,803 | \$70,000 | \$37,500 | \$23,492 | — | \$1,676,036 | 16% |
| Marion, OR | \$435,709 | \$270,467 | \$381,768 | \$202,723 | \$(432) | — | — | — | — | — | \$1,290,235 | 13% |
| Linn, OR | \$99,715 | — | — | \$386,656 | — | — | — | — | — | — | \$486,371 | 5% |
| Cowlitz, WA | \$122,123 | — | \$156,956 | \$95,035 | \$4,995 | — | — | \$70,957 | \$21,524 | — | \$471,590 | 5% |
| Lewis, WA | — | \$252,231 | \$116,560 | — | — | — | — | — | — | — | \$368,791 | 4% |
| Lane, OR | — | — | \$33,818 | — | \$229,313 | — | — | — | — | — | \$263,130 | 3% |
| Josephine, OR | — | — | — | — | \$240,269 | — | — | — | — | — | \$240,269 | 2% |
| Jefferson, OR | \$14,954 | \$15,000 | — | \$15,000 | \$17,325 | \$15,725 | \$25,269 | \$16,000 | — | \$106,101 | \$225,374 | 2% |
| Total | \$1,512,657 | \$1,090,329 | \$861,547 | \$1,677,277 | \$2,392,824 | \$462,945 | \$346,894 | \$546,269 | \$861,697 | \$213,210 | \$9,965,649 | 97% |

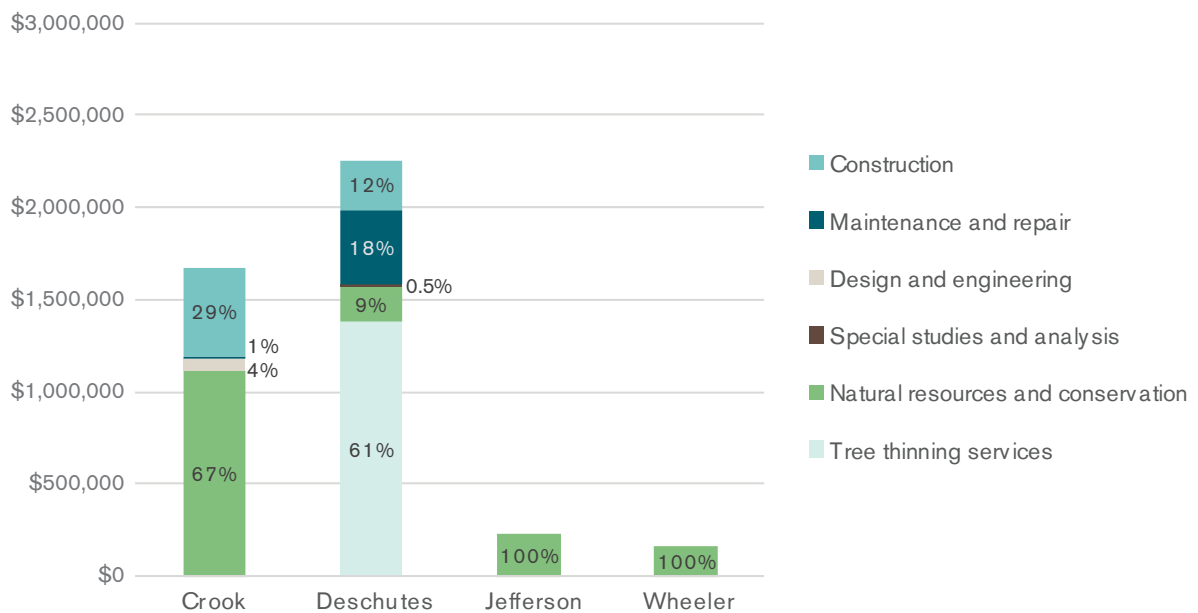
* Counties are listed from high to low. Local counties are highlighted.

types of restoration activities that are contracted on the forest. Relative to their populations, Crook County and Wheeler County were awarded more of the total local restoration service contracts per capita, while Deschutes County and Jefferson County were awarded less. Grant County, as noted, did not receive any restoration service contracts during the study period.

All four local counties that received restoration service contracts during the study period had businesses that conducted work in natural resources and conservation (see Figure 8, below); for the relatively low dollars awarded in Jefferson and Wheeler counties this was the only type of contract awarded to businesses. Contractors in Deschutes, Jefferson

and Wheeler counties all received about the same amount of natural resources and conservation dollars (from \$159,173 in Wheeler County to \$225,374 in Jefferson County). By contrast, Crook County contractors were awarded over \$1.1 million of natural resources and conservation contract work. Crook County contractors were also awarded the most construction contract dollars (\$481,999), and a small amount of design and engineering, and maintenance and repair contracts (\$66,351 and \$9,430, respectively). In Deschutes County, the majority of the restoration service contract dollars awarded was for tree thinning, but Deschutes County contractors were also awarded the most maintenance and repair work (\$408,055).

Figure 8 Ochoco National Forest restoration service contract dollars by county and work type, FY 2006–2015



* No restoration service contracts were awarded to purchasers in Grant County

Timber sales on the Ochoco National Forest

From FY 2006-FY 2015, the Forest Service sold just under \$3.8 million in timber from the Ochoco National Forest to purchasers across the U.S., an average of \$380,000 a year. The value of all timber sold was 37 percent of the value of all restoration service contracts awarded during the study period. In total, 68 timber sales were awarded on the forest, ranging from three to 11 sales per fiscal year (see Table 5, right). These sales resulted in a sold timber volume of 119,736 MBF. The total value of sales sold each year ranged considerably from a low of \$61,000 in 2010 to a high of \$775,000 in 2014.

The large majority of award dollars were for sawtimber. Non-sawtimber products included fuelwood, green biomass converted, non-sawtimber, and cones-dry; all together these non-sawtimber products accounted for just \$30,400, or 0.8 percent of total timber sale bid values (see Table 6, below), and 17 percent of the total volume sold (19,985 MBF of 119,736 total MBF).

Table 5 Ochoco National Forest timber sale numbers, bid values, and volumes by year, FY 2006–2015

| FY | Sales awarded | Bid value of sales | Volume sold (MBF) |
|--------------|---------------|--------------------|-------------------|
| 2006 | 5 | \$ 211,431 | 2,482 |
| 2007 | 7 | \$ 440,888 | 5,093 |
| 2008 | 11 | \$ 422,870 | 19,941 |
| 2009 | 10 | \$ 62,816 | 12,965 |
| 2010 | 9 | \$ 61,078 | 9,536 |
| 2011 | 5 | \$ 632,930 | 15,123 |
| 2012 | 3 | \$ 263,883 | 14,686 |
| 2013 | 5 | \$ 544,407 | 14,990 |
| 2014 | 9 | \$ 774,578 | 14,413 |
| 2015 | 4 | \$ 380,627 | 10,506 |
| Total | 68 | \$3,795,507 | 119,736 |

Table 6 Ochoco National Forest timber sale bid values by year and product description, FY 2006–2015

| FY | Cones-Dry | Fuelwood | Green biomass converted | Non-sawtimber | Sawtimber | Total |
|--------------|-----------------|-----------------|-------------------------|------------------|---------------------|---------------------|
| 2006 | | \$ 230 | | \$ 20,241 | \$ 190,961 | \$ 211,431 |
| 2007 | | \$ 1,729 | | | \$ 439,158 | \$ 440,888 |
| 2008 | | \$ 300 | | \$ 569 | \$ 422,001 | \$ 422,870 |
| 2009 | | \$ 130 | \$ 281 | \$ 76 | \$ 62,329 | \$ 62,816 |
| 2010 | \$ 2,000 | | \$ 329 | | \$ 58,748 | \$ 61,078 |
| 2011 | | | | | \$ 632,930 | \$ 632,930 |
| 2012 | | | | | \$ 263,883 | \$ 263,883 |
| 2013 | | \$ 3,000 | | | \$ 541,406 | \$ 544,407 |
| 2014 | | \$ 826 | | | \$ 773,753 | \$ 774,578 |
| 2015 | | \$ 689 | | | \$ 379,938 | \$ 380,627 |
| Total | \$ 2,000 | \$ 6,904 | \$ 611 | \$ 20,885 | \$ 3,765,107 | \$ 3,795,507 |

Local capture

The geographic distribution of timber sale dollars (see Figure 9, below) takes into account only the location of the sale’s purchaser and the value for each sale, and not who or how these purchasers subcontracted after the sale was awarded. Although USFS sales data does not show how these timber sales may influence businesses and capacity in other places due to subcontracting, we know that subcontracting of sales is common, which is why we interviewed local contractors to further explore contracting/subcontracting distinctions. Interviews suggested that subcontracts are very common, at least among local contractors, which is an important consideration when reviewing the local capture numbers reported below. Additional details and findings from contractor interviews are reported later in this assessment (see page 22).

The large majority of the timber sale value from the forest during the study period was awarded to nonlocal purchasers. Overall, local purchasers were responsible for less than half a million dollars and just 12 percent of the total bid value of timber sales from FY 2006-FY 2015. Based on sale volume, 19 percent of timber sales went to purchasers in local counties. An additional 50 percent of sale volume went to other purchasers within the state of Oregon, and 23 percent of sales by volume went to purchasers in Washington state. The number, value, and volume of timber sales that were awarded to local purchasers varied greatly across the years studied. Local purchasers captured at least one sale during each of the years with a maximum of five sales during each of three years, but the number of sales, the volume and composition of the sales, and the bid values of the sales varied (see Table 7, page 17).

Figure 9 Ochoco National Forest timber sale value awarded by contractor location, FY 2006–2015

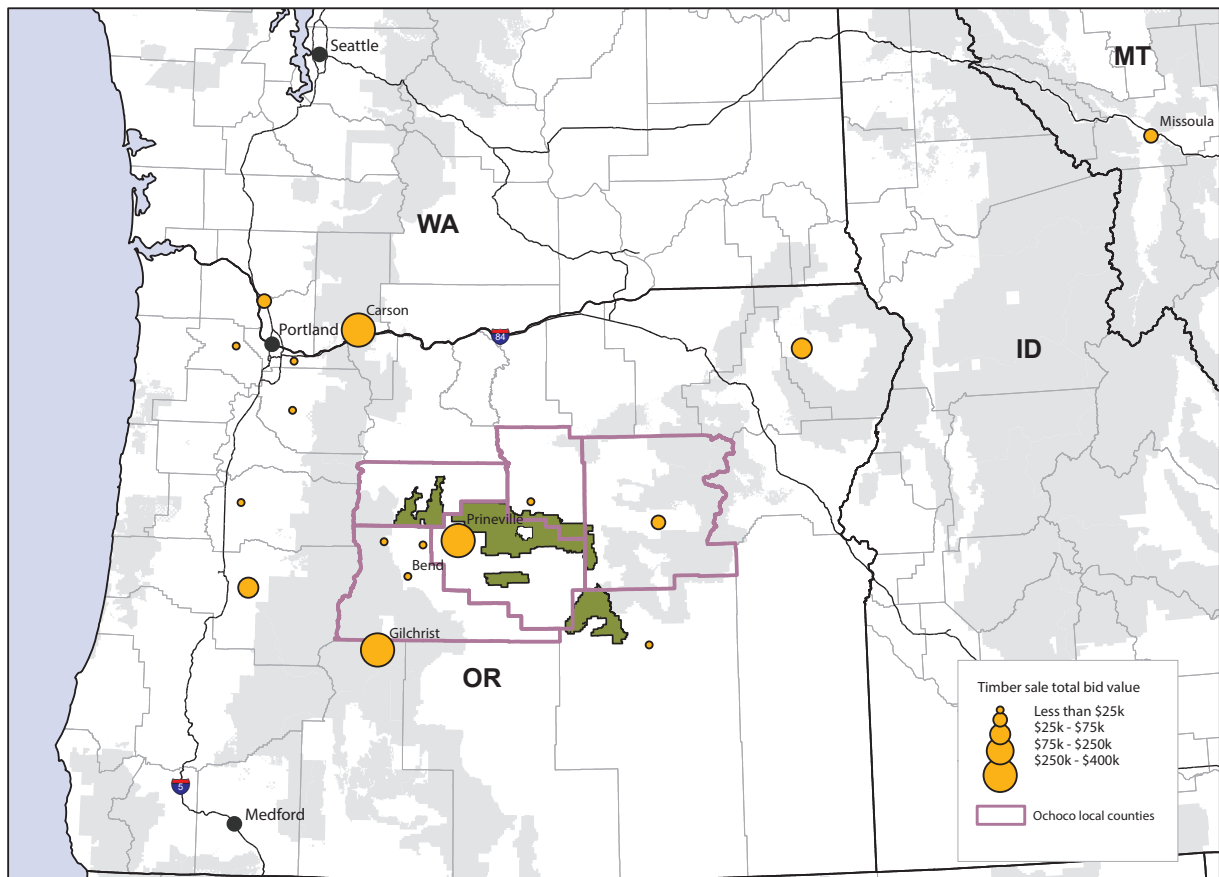


Table 7 Ochoco National Forest timber sale numbers, bid values, and volumes by year, total and awarded locally, FY 2006–2015

| FY | Total sales | Sales awarded locally | Percent of all sales awarded locally | Total bid value of all sales | Bid value of sales awarded locally | Percent of total bid value awarded locally | Total volume of all sales (MBF) | Volume of sales awarded locally (MBF) | Percent of total volume awarded locally (MBF) |
|--------------|-------------|-----------------------|--------------------------------------|------------------------------|------------------------------------|--------------------------------------------|---------------------------------|---------------------------------------|-----------------------------------------------|
| 2006 | 5 | 2 | 40% | \$211,431 | \$20,471 | 10% | 2,482 | 202 | 8% |
| 2007 | 7 | 1 | 14% | \$440,888 | \$1,700 | 0% | 5,093 | 162 | 3% |
| 2008 | 11 | 4 | 36% | \$422,870 | \$81,221 | 19% | 19,941 | 6,107 | 31% |
| 2009 | 10 | 5 | 50% | \$62,816 | \$1,331 | 2% | 12,965 | 560 | 4% |
| 2010 | 9 | 5 | 56% | \$61,078 | \$50,376 | 82% | 9,536 | 4,752 | 50% |
| 2011 | 5 | 2 | 40% | \$632,930 | \$5,038 | 1% | 15,123 | 147 | 1% |
| 2012 | 3 | 2 | 67% | \$263,883 | \$211,179 | 80% | 14,686 | 7,613 | 52% |
| 2013 | 5 | 1 | 20% | \$544,407 | \$3,000 | 1% | 14,990 | 113 | 1% |
| 2014 | 9 | 5 | 56% | \$774,578 | \$91,592 | 12% | 14,413 | 2,926 | 20% |
| 2015 | 4 | 2 | 50% | \$380,627 | \$3,091 | 1% | 10,506 | 120 | 1% |
| Total | 68 | 29 | 43% | \$3,795,507 | \$468,997 | 12% | 119,736 | 22,703 | 19% |

For example, there were five local purchaser sales in both 2009 and 2010, but the bid value purchased locally was two percent and 82 percent for those years, and the volume purchased was four percent and 50 percent, respectively. Likewise, 2011 and 2012 both had two sales to local purchasers, and those sales accounted for just one percent of the total bid value in 2011, but 80 percent of the total bid value in 2012. Overall, even during the six years with the greatest dollars purchased locally, those local purchases accounted for less than 20 percent of the total value of timber sold.

In contrast, 45 percent, the largest share, of the total bid value went to purchasers that were nonlocal but located in the state of Oregon, and 35 percent went to Washington state purchasers (see Figure 10, right). Nonlocal but in-state purchasers were awarded sales during all fiscal years studied, but Washington State purchasers were only awarded sales during four of the ten years. All sales to Washington State purchasers were during the top five bid-value years, showing that Washington State businesses purchased timber sales from the Ochoco National Forest only during the highest value sales years in the study period (see Figure 11, page 18).

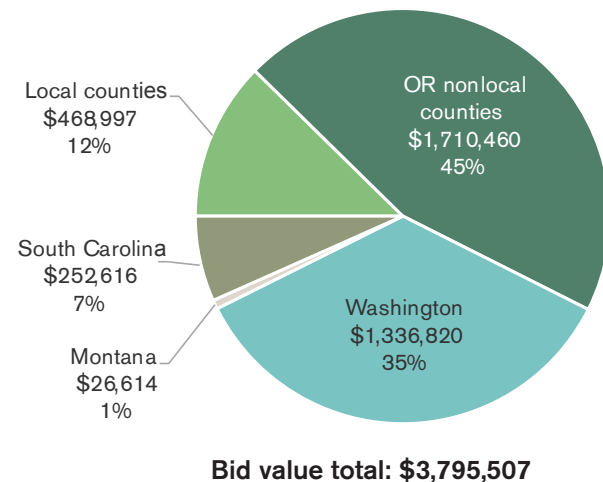
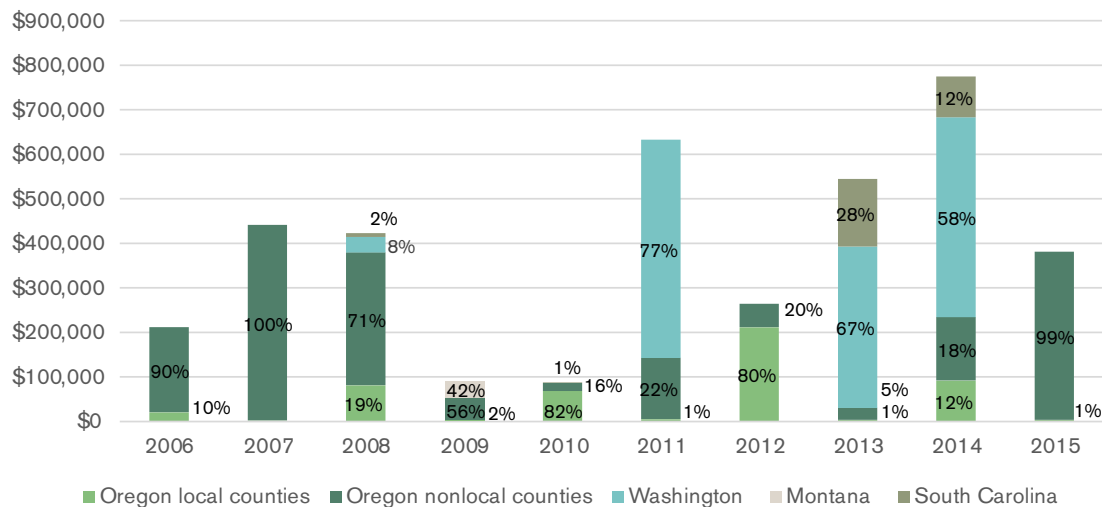
Figure 10 Purchaser location for all timber sale bid values on the Ochoco National Forest, FY 2006-2015

Figure 11 Bid value of awarded timber sales on the Ochoco National Forest by year and purchaser location, FY 2006–2015

Differences between local counties

Among the local counties, there were again significant differences in how much of the total timber value businesses in each county purchased (see Table 8, below). Purchasers in Crook County were responsible for purchasing the large majority—88 percent—of the bid value of the timber sold to local counties; this amounted to over \$400,000 in timber value and was eleven percent of the total bid-value

of all sales during the study period. Grant County purchasers accounted for most of the remainder of the local sale value, with just over \$50,000 in purchases, 11 percent of the local purchase pie. In contrast, no sales were made to Jefferson County purchasers, and only one non-sawtimber sale worth \$506 was sold to a Wheeler County purchaser during the ten fiscal years studied. Deschutes County purchasers, which were awarded sales during six

Table 8 Timber sales awarded on the Ochoco National Forest, to purchasers in local counties* by year and total bid value (all products)

| FY | Crook | Deschutes | Grant | Wheeler | Total |
|-----------------------------------|-------------------|-----------------|------------------|---------------|-------------------|
| 2006 | \$ 20,241 | \$ 230 | – | – | \$ 20,471 |
| 2007 | \$ 1,700 | – | – | – | \$ 1,700 |
| 2008 | \$ 80,921 | \$ 300 | – | – | \$ 81,221 |
| 2009 | \$ 1,049 | \$ 281 | – | – | \$ 1,331 |
| 2010 | \$ 1,198 | \$ 729 | \$ 48,448 | – | \$ 50,376 |
| 2011 | \$ 777 | \$ 4,261 | – | – | \$ 5,038 |
| 2012 | \$ 211,179 | – | – | – | \$ 211,179 |
| 2013 | \$ 3,000 | – | – | – | \$ 3,000 |
| 2014 | \$ 90,838 | \$ 248 | – | \$ 506 | \$ 91,592 |
| 2015 | \$ 689 | – | \$ 2,402 | – | \$ 3,091 |
| Total | \$ 411,592 | \$ 6,049 | \$ 50,850 | \$ 506 | \$ 468,997 |
| Percent of local purchases | 87.7% | 1.3% | 10.8% | 0.1% | |

* No timber sales were awarded to purchasers in Jefferson County.

of the ten fiscal years reviewed, purchased very small timber sales that altogether accounted for just one percent of the total sale value awarded in local counties.

Of the \$411,592 in total timber sale bid value that went to purchasers in Crook County, \$383,702, or 93%, went to one logging company purchaser, located in Prineville. This purchaser had winning bids in four years of the ten-year study period, and was one of eight purchasers from Crook County. In contrast, there were six purchasers from Deschutes County, and only one purchaser each from Grant and Wheeler counties. Purchasers from Crook County purchased more timber sales, and sales with higher average sale bid values on the Ochoco than purchasers of Ochoco timber in other local counties. The 18 timber sales that went to purchasers from Crook County had an average value of \$22,866, whereas the seven timber sales that went

to purchasers from Deschutes County had an average bid value of \$864. The three timber sales that went to purchasers from Grant County had an average value of \$16,950; and the one timber sale that went to a purchaser from Wheeler County had a bid value of \$506.

As noted, non-local but within-Oregon purchasers were responsible for the greatest portion of the timber value sold on the forest from FY 2006-2015, followed by purchasers in Washington State. A look at the top ten counties purchasing timber, which altogether accounted for more than 99 percent of the timber value sold, shows in greater detail where in these two states top purchasers are located (see Table 9, below). Within Oregon, the majority of the nonlocal sale value was purchased in Klamath County, all by one purchaser in Gilchrist that purchased at least one sale per year from FY 2006-2015. Three other nonlocal Oregon counties, two on the

Table 9 Top 10 counties with timber sale purchasers from the Ochoco National Forest, FY 2006–2015, by year and bid value.

| County | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Total | Percent of total sales |
|---------------|------------------|------------------|------------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|--------------------|------------------------|
| Klamath, OR | \$178,078 | \$425,686 | \$139,303 | \$22,607 | \$7,831 | \$137,573 | \$52,705 | \$27,258 | \$142,386 | \$323,978 | \$1,457,404 | 38% |
| Skamania, WA | – | – | – | – | – | \$490,319 | – | \$362,436 | \$449,207 | – | \$1,301,962 | 34% |
| Crook, OR | \$20,241 | \$1,700 | \$80,921 | \$1,049 | \$1,198 | \$777 | \$211,179 | \$3,000 | \$90,838 | \$689 | \$411,592 | 11% |
| Edgefield, SC | – | – | \$8,640 | – | \$871 | – | – | \$151,712 | \$91,394 | – | \$252,616 | 7% |
| Wallowa, OR | – | – | \$157,445 | – | – | – | – | – | – | – | \$157,445 | 4% |
| Lane, OR | \$8,915 | \$11,493 | \$1,404 | \$5,358 | – | – | – | – | – | \$53,558 | \$80,728 | 2% |
| Grant, OR | – | – | – | – | \$48,448 | – | – | – | – | \$2,402 | \$50,850 | 1% |
| Clark, WA | – | – | \$34,858 | – | – | – | – | – | – | – | \$34,858 | 1% |
| Missoula, MT | – | – | – | \$26,614 | – | – | – | – | – | – | \$26,614 | 1% |
| Linn, OR | – | – | – | \$6,907 | – | – | – | – | – | – | \$6,907 | <1% |
| total | \$207,233 | \$438,879 | \$422,570 | \$62,535 | \$58,348 | \$628,669 | \$263,883 | \$544,407 | \$773,824 | \$380,627 | \$3,780,975 | 99% |

* Counties are listed from high to low. Local counties are highlighted.

westside and one on the eastside of the Cascades, were also in the top ten counties, but they all purchased much less of the timber value, and the value sold to Klamath County was greater than the value sold to all other Oregon Counties, including the local ones, summed together. Washington state purchaser value was mainly in Skamania County, the second county in the top ten. Overall, the top two counties purchased 73 percent of the timber value, and the top three counties purchased 84 percent of the timber value sold on the forest during the study period, suggesting that the timber sales market on the forest was primarily focused in a few counties during the years studied. Although there were purchases in 14 other counties, the bid value sold in these counties altogether was less than value purchased in either one of the top two counties.

In addition to the sales described above, we also identified timber sales listed in the timber data for the study period that did not have award dates and bid values (see Table 10, below). This list includes five timber sales that did not receive any bids (“no bids received”), two that were not advertised, and one that did not include any additional information. We included this information in response to inquiries from OFRC members about the number and types of timber sale offers with no bids received that have occurred on the Ochoco over the study period. In some cases, sales listed here have since been reoffered. For example, Lobo was reoffered in 2016 (same sawtimber but without green bio volume), but again did not receive any bids.

Table 10 Unsold timber sales on the Ochoco National Forest, FY 2006–2015

| Sale name | Species description | Product description | Quantity (CCF) | Award status |
|-------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------|--------------------------|
| 2627 Salvage | Ponderosa Pine and Other Coniferous species | Sawtimber | 15 | No bids received |
| Boris | Douglas-fir and Other Conifer Species; Mixed Conifer Species; White Fir | Sawtimber & Non-Saw | 52 (Saw) 6 (non-saw) | No bids received |
| Florida piles | All species | Dry Biomass Converted | 0.01 | No bids received |
| Lobo Stewardship IRTC | Douglas-fir and Larch; Green Biomass Converted; Ponderosa Pine; White Fir & Other Coniferous Species | Sawtimber & Green Biomass Converted | 14,537 (Saw) 1,930 (Green bio) | No bids received |
| Murry Fire Salvage | Ponderosa Pine | Sawtimber & Non-Saw | 771 (Saw) 73 (non-saw) | No bids received |
| Compound Hazard Salvage | Ponderosa Pine and Other Coniferous Species | Sawtimber | 7 | Not advertised |
| Ochillee 17 | Douglas-fir and other Species | Fuelwood | 0 | Not advertised |
| Round Butte II Fuel Reduction and Biomass | Juniper | Sawtimber | 230 | No information available |





Contractor interviews

We interviewed 18 contractors in November 2016. As noted previously, we interviewed contractors to better understand the range of work they participate in on the Ochoco National Forest and their perspectives on the challenges and opportunities for contracting on the forest. We also focused on understanding subcontracting in the area, since this was of interest to OFRC, and also an important consideration for better understanding local capture beyond data reported above. Most of the contractors we interviewed were local to the Ochoco National Forest: 12 had businesses located in Crook County, three were located in Deschutes County, and one was located in Grant County. The two that were nonlocal were from Klamath County and Skamania County, Washington. All but one of the businesses we interviewed had been contracting with the Forest Service or other federal agencies for more than 10 years; the range was six to 79 years and the me-

dian was 25 years of federal contracting experience. Eleven contractors said they hire employees.

Interview themes

Contractors provide a wide range of services.

Of the 18 contractors interviewed, three were mills that purchase timber sales, seven were forestry businesses that purchase commercial timber sales and/or contract for non-commercial tree removal and associated restoration work, three were construction companies, and five provided other services including surveying, engineering inspection, stream restoration, noxious weed removal, seed collection, and plant propagation. Five of the contractors also provided fire suppression services.

In addition to the mills, the forestry contractors included two large timber companies that said they preferred larger contracts of up to three years and three million dollars, and five smaller contractors

that said they preferred contracts of a few months to a few years and a few thousand dollars to \$100,000. The mills and larger forestry companies bid on timber sales that include a wide range of stewardship work, including noncommercial tree removal, fuel reduction, wildlife habitat improvement, road and trail work, and stream restoration. The five smaller forestry contractors were more specialized, with three that provided non-commercial tree removal, fuel reduction work, and other services, and two who only worked on commercial timber sales.

Many contractors travel widely for work, perform very little work on the Ochoco National Forest, and have additional capacity. Ten of the 18 contractors reported that they worked primarily east of the Cascade Mountains in Oregon. However, eight said they traveled outside of the state for contracted work, and two said that they sometimes worked outside of the country. Half of the contractors said they performed less than 50 percent of their work within daily commuting distance from home.

Fourteen of the 18 contractors interviewed said they did less than half of their work on federal land, and that no more than 10 percent of their work was conducted on the Ochoco National Forest. Four contractors, all located in Crook County, conducted one-third to one-half of their work on the Ochoco.

Contractors suggested that they had additional capacity for more work or were able to add capacity to their workforce: All but one of the interviewed contractors said they were capable of taking on more work if it was available.

Hiring and maintaining a workforce is a challenge. Most of the 11 contractors with employees reported challenges in hiring and maintaining their workforce. The most common challenges they reported were a lack of consistent, year-to-year work and an uncertain future for forestry work. Half of the contractors with employees observed that young people were less interested in outdoor work and manual labor than they used to be, and four mentioned a problem with work ethic, especially among younger workers. Two forestry contractors suggested that heavy equip-

ment operators preferred to work construction where the prevailing wage is higher; however, a construction contractor said he had been running an advertisement with the employment office for a year in an attempt to hire employees and had received no responses.

When asked about the preexisting skills and training of new employees, eight contractors said they train new employees in most or all aspects of their work because they do not generally come with the necessary skills. Some contractors noted, however, that some new hires came with preexisting heavy equipment experience. When asked about difficulty finding housing for workers, only two contractors in Crook County and one in Deschutes County said their employees had difficulty finding affordable housing locally.

Subcontracting is common. Fourteen of the 18 contractors interviewed reported that they subcontracted with other contractors at least occasionally, either to handle overflow work or, more typically, to bring in expertise or equipment that they lacked in-house. For instance, one forestry contractor subcontracted out all hand work, while another subcontracted most trucking and feller-buncher work. A construction contractor subcontracted out paving, concrete work, and timber felling. One small forestry contractor said he partnered with other small companies so that none of them had to carry insurance on employees or pay workers' compensation. He explained that: "Workers' compensation is the biggest challenge woodworking companies deal with these days; it takes 40 percent to 50 percent of our gross. So we ... carry personal health and disability insurance and use subcontractors whenever we can to avoid [workers' compensation]."

The three mills that purchase timber sales subcontract all field operations. All of the large and mid-sized forestry and construction companies and most of the small companies, including those with no employees, also use subcontracting. The only contractors that did not subcontract work were a nursery, a surveying company, an independent contractor who does resource surveys and engineering inspection work, and an individual who purchases personal use firewood sales.

Contractors said they find subcontractors through word-of-mouth and tend to have long-standing working relationships with the businesses with which they subcontract. Large timber sale purchasers said they maintain a pool of contractors they consistently work with but sometimes ask the Forest Service to recommend subcontractors for stewardship contracts.

Equipment requirements are a constraint for some contractors. Collectively, the construction and forestry contractors had a wide array of heavy equipment including trucks, excavators, road graders, bulldozers, caterpillars, skidders, log loaders, feller-bunchers, cranes, compactors, backhoes, hydrohammers, and wood processing equipment. Individually, however, some contractors may not have had access to all the equipment they needed. None of the construction contractors had feller-bunchers or log loaders, and only two of the forestry contractors had excavators. One timber sale contractor indicated he'd been getting less work in part because, "[The Forest Service] quit using most of the equipment I have. They started requiring excavators and I don't have an excavator." As noted above, other operators said they subcontracted out portions of contracts for which they don't have the necessary equipment.

Two of the largest timber sale purchasers said they sometimes had trouble finding subcontractors

with the necessary equipment to work on Forest Service contracts. Specifically, they said they had trouble finding subcontractors with trucks the size required for work on the Ochoco National Forest where, they said, there are a lot of old bridges that can't hold newer and heavier log trucks.

Smaller businesses are finding fewer federal contracting opportunities than in the past. The three contractors who purchased large timber or stewardship sales said they were contracting with the Forest Service, if not with the Ochoco National Forest, as much as or more than they used to. However, as noted above, twelve of 40 companies that had contracts on the Ochoco National Forest between 2006 and 2015 said they no longer contract with the Forest Service or did not have working phone numbers. In addition, several of the smaller businesses we interviewed reported fewer contracting opportunities in recent years. Four of the eight non-forestry contractors said they contracted with the Forest Service less than they used to, citing federal government gridlock, budget reductions, and agency project funds getting reallocated to fire suppression instead.

Some of the smaller forestry contractors said that they were experiencing fewer contracting opportunities for a number of reasons, including bonding and equipment requirements that exceed their capacity, a shift toward larger contracts that they



could not afford to bid on, and the agency's use of blanket purchase agreements. Blanket purchase agreements are multi-year contracts for specific categories of work, such as road maintenance or restoration services. Contractors who are part of a blanket purchase agreement receive requests for proposals specific to their identified work areas that are not offered to the public at large. Contractors who were part of a blanket purchase agreement found them preferable to traditional contracts, but those who were not part of a blanket purchase agreement felt they were excluded from some work opportunities. In Central Oregon, the Forest Service has the Central Oregon Restoration Project (CORP) Blanket Purchase Agreement that was set up in 2009, and then renewed again in 2014 for another five years. CORP contains about 10-12 categories of different work types that the Forest Service awards to approximately 20 contractors per activity/work type. In many cases, contractors are awarded to more than one category of work.

Of the smaller forestry contractors, only one, who specialized in stewardship contracts, reported more work with the Forest Service in recent years. He attributed his increased work to a shift in agency focus from timber sales to restoration-focused stewardship contracts and sales.

Many contractors rely on direct communication with the Forest Service to learn of contract opportunities. Although some of the contractors we interviewed indicated that they used federal web sites to identify contract opportunities, many of them emphasized the importance of regular communication with Forest Service staff to keep abreast of contracting opportunities. The larger timber sale purchasers and the construction contractors said that they kept track of federal web sites, including the federal procurement site, FedBizOpps, and individual national forest web sites. Contractors who were part of a blanket purchase agreement like CORP received task order solicitations directly from individual national forests. Several forestry contractors said they were on timber sale and stewardship sale notice lists with individual national forests and heard about contract opportunities that way. However, as

one interviewee noted, contractors had to make special requests to get on each national forest's email list to receive notices of upcoming projects. Six of the 18 contractors interviewed, including both service and timber contractors, said they also get notices of upcoming contracting opportunities from Forest Service staff. As one described it, "Either they call me or I call them and let them know of my availability."

Several contractors said sifting through federal web sites for contract opportunities was time consuming and frustrating and that they preferred getting on individual forests' email notice lists and directly contacting Forest Service staff to find out about upcoming projects. Two contractors said the Ochoco National Forest could better support local forest industry by advertising contracts locally through radio, television, and print media.



One-half of the contractors interviewed said they would be interested in assistance preparing and submitting federal proposals. They were most interested in help with paperwork and technical writing, particularly for best value portions of stewardship and service contracts. Some also wanted more feedback from the Forest Service on their proposals. As one contractor explained, “For timber sales the Forest Service will look at your bid and let you know if it’s responsive; they’ll double-check it before you turn it in. It would be nice if they would do that for service contracts too.” Another said, “With best-value contracting ... we can have an interview but they don’t tell us what the competitors did, just who got the award... With other agencies who use best-value contracts we know the point system up front and know how points are allocated and awarded and we can see what our competitors did.”

One restoration contractor discussed his frustration with not being able to negotiate contract specifications: “Sometimes the person writing up the contract doesn’t know what’s feasible ... so they write things into the contract that aren’t going to work. ... There’s no opportunity to change the contract language once it’s been sent out for competitive bid, so you [have the choice of not bidding or to] bid on it knowing you can’t meet that specification. It would be good if they would ask first ... ask contractors if it’s feasible before they write the contract and put it out to bid.”

The future of the local timber industry is uncertain. Contractors reported that both local timber infrastructure and the local workforce of capable contractors were struggling. Contractors mentioned that work on national forests had been hampered by 1) a trend toward funding fire suppression rather than project work; 2) a dramatic decline in timber sales in recent decades; and 3) the lack of local mills. Although at one time there were five mills in Prineville, during the time of our interviews in late 2016, there were no mills in Prineville, and the three closest mills were each 100 miles or more from the Ochoco National Forest. Timber contractors explained that as a result, they were losing much of the value of merchantable wood to hauling costs and had few options for shipping wood

to different markets. For example, one contractor said, “We’ve worked with the [Ochoco National] Forest on some sales that were rewritten two or three times but we still couldn’t bid them. We just couldn’t make them work.” Another said, “We purchase their sales even though they’re expensive and we get very little return because we want to help them keep operating a timber program and not lose all the local industry... [but] there won’t be jobs in the timber industry in 5 to 10 years if there’s no one to buy the sales.”

Ochoco National Forest timber sales do not match industry capacity. In addition to transportation costs, the material included in timber sales on the Ochoco National Forest was cited as a challenge that needed to be addressed to make timber sales viable. Contractors indicated that the timber included in Ochoco National Forest timber sales was usually small diameter which increased harvest and trucking costs, particularly when there was a weak or nonexistent market for biomass.

Large timber sale purchasers emphasized that the Ochoco National Forest staff have in many cases worked with them to make timber sales affordable. For instance, the Ochoco National Forest made green biofuel removal optional, which removed the cost of hauling some non-merchantable wood. However, other timber contract specifications required by the Ochoco National Forest did not comport with industry capacity. In one example, a timber contractor explained, Ochoco National Forest sales have required “8-foot-long sawlogs with 5-inch tops for every species other than ponderosa pine, but the smallest anyone will buy is a 12-foot piece with a 6-inch top. Getting rid of those small pieces is really difficult.” Similarly, the Ochoco National Forest’s chipping specifications “want you to remove down to two-inch tops, but most debarkers won’t remove below five-inch tops and you can’t sell dirty chips. So really anything below five inches is not marketable on the chip market.” Another purchaser said, “it would help if they made chipwood removal optional. Lately there is no one who will buy it, we can’t even give it away, and even if there is a market we usually remove it at a loss because the value is so low and the haul distances are so long.” Fi-



nally, one large timber sale contractor reported that species mixes included in timber sales made them less viable: “Sometimes they require you to remove white fir in order to get the pine, but the mills that take pine don’t take fir and vice versa. ... It would be better for them if they would make one sale predominantly pine and another predominantly fir – they’d get more bidders and higher bids.”

Longer forestry contracts would attract more bidders and better support local industry. The three mills that purchased timber sales and subcontracted the work tended to purchase and prefer sales that last three years or longer and were valued in the millions of dollars. The other two large timber contractors said they preferred contracts of two to four years and one to three million dollars. Larger and longer contracts were preferred by these larger companies because they provide flexibility in terms of more logging seasons, helping contractors work around seasonal closures and wood product market downturns. They also were more likely to cover the cost of a new piece of equipment and reduce mobilization costs.

Smaller forestry contractors that bid on contracts under \$100,000 also prefer longer-term contracts, for similar reasons. They explained that as smaller operators with few or no employees they need more time to finish a job. One contractor said that often he didn’t bid on timber contracts because, “Even if I can halfway afford it there’s a short termination timeline and I can’t complete it within their timeframe, which is usually one year... With a high minimum bid and only one year to complete the work it’s common to run into a situation where six months into the work the price at the mill drops, but you can’t leave the wood and wait for the market to come back up because then you can’t make the termination date.” Another said that a contract lasting two or three years allowed him to plan ahead and buy equipment if necessary.

Smaller contracts are needed to support small operators. Forestry operators that prefer contracts of a few thousand dollars to \$100,000 said they couldn’t afford to bid on most contracts offered by the Ochoco

National Forest, and smaller contracts would be more competitive than large ones. As one timber sale contractor put it, “The Forest Service usually prices small operators out of their contracts: the minimum bid is too high. There’s no way we can bid on 10 million-board-foot jobs with \$90,000 guarantees. And then there’s bonding on top of that. ... If the Forest Service would break up the jobs into 2- to 4-million board foot pieces all the little guys would be fighting for it and they’d get higher bids.” Another said, “I know it costs more to administer [smaller stewardship projects] and the Forest Service is already spread very thin, but I would like to see more opportunities that are manageable for smaller companies. That would allow the industry to grow instead of stagnating in a few big companies.”

Two timber contractors had a specific recommendation for creating viable timber sales that would support smaller operators: offer more firewood sales. One said, “firewood is paying better than sawlogs that have to be hauled 100 miles. So why are they putting out 15 million board foot sales? There’s no one to buy it... If they made smaller sales there would be more markets – firewood as well as sawlogs and chips.” Another said, “I see a lot of firewood poaching... If they offered more small firewood sales I think they’d get a tremendous response from the public and [it would] benefit the forest.”

Forest Service budgets present an ongoing challenge. Looking to the future, several of the contractors discussed the need for extensive road maintenance and forest health work on the Ochoco National Forest but at the same time expressed doubt that the work would get done without either a change in Congress to separate service and fire suppression dollars or a change on the Ochoco National Forest to support higher volume timber stewardship sales.

Several forestry contractors said the best hope for more funding to support forest restoration and service work was to make the Ochoco National Forest’s timber program viable. As one contractor explained: “They need [to include] trees with enough value to pay for thinning stands, road maintenance,

etc., and they have to put out enough to support a local mill or there will be no one to buy the wood and no way to pay for it.” He added, “I’m also very unhappy with the agency’s no-salvage stance. I understand that there were too many salvage sales in the past and that the environmental community is opposed to any salvage but every spring we have blowdowns on the Ochoco—big, high-value trees that could help pay for service work if they would sell them.” Another contractor said that it’s difficult to make a stewardship sale and get revenue for more restoration work with the 21-inch diameter cap on sales.

Two contractors mentioned a regional shift to a more recreation-based economy and recommended tapping recreationists to help pay for maintenance and restoration work on the Ochoco National Forest. One recommended inviting local residents to

brainstorm ways to raise project funds from recreation, such as asking the Oregon Department of Fish and Wildlife to plan a special hunt with proceeds dedicated to road maintenance or renting out the old Ochoco Ranger Station to recreationists.

A few contractors also mentioned that federal bureaucracy, such as the amount of time agency employees spend on repeat analysis and paperwork, limits the agency’s ability to put out contracts. Non-forestry contractors discussed a preference for task orders and purchase orders that do not require a full contract, because they require less time and paperwork from both the contractor and the agency. One service contractor said that the cap of \$2,500 for non-competitive purchase orders was outdated and should be increased to give the agency more flexibility to undertake small projects without the administrative costs of developing a contract.





Summary and conclusion

In this working paper, we examined the role and capacity of local contractors in implementing national forest restoration through restoration service contracts and timber sales. We gathered data on the use of contractors in federal restoration efforts and the sales of timber on the Ochoco National Forest, characterized the types of work and locations of businesses performing the work, and investigated the perspectives, challenges, and opportunities for restoration service contractors and timber purchasers through interviews with contractors living near and working on the forest.

We found that between FY 2006–FY 2015, the Forest Service spent much more—nearly three times as much—on restoration service contracts than it sold in timber sales on the Ochoco National Forest. In addition, the local capture of restoration service contracts was much greater than local capture of timber sales; local contractors captured about 42 percent of the value of restoration contracts and just 12 percent of the bid value from timber sales on the forest. In total, from FY 2006–2015, local businesses were awarded contracts for Forest Service restoration work worth about \$4.3 million, and local purchasers bought about \$469,000 in timber from the forest.

Local contractors were most commonly awarded restoration service contracts in natural resources and conservation services, with the exception of tree thinning contracts. Tree thinning contracts

were the single greatest activity invested in, but were awarded to local contractors extensively in some years, and not at all in other years. In the last four years of the study period, 100 percent of the tree thinning contract dollars on the Ochoco National Forest was awarded to nonlocal but in-state contractors. The American Reinvestment Recovery Act (ARRA) had a significant impact, as expected, on increased restoration service contract spending during FY 2009 and 2010, but in post-ARRA years investments dropped relative to pre-ARRA years, suggesting a general downward trend in restoration service contract spending across the study period.

The timber sale history on the forest does not show the same trend of increased sales during ARRA years, or a decrease in sale values or volumes after ARRA years. Instead, annual timber sale tallies varied considerably during the study period, from values of \$61,000 in 2010 to \$775,000 in 2014, and from volumes of 2,500 MBF in 2006 to nearly 20,000 MBF in 2008. Likewise, the value of timber purchased locally varied greatly, ranging from winning bid values of less than \$2,000 (2007) to just over \$211,179 (2012). Nonlocal purchasers located within Oregon state, primarily on the westside, purchased the greatest portion (45 percent) of the total timber sale value on the forest, followed by purchasers from Washington State (35 percent), who purchased timber sales on the forest only during years with the greatest total bid values.

Between the five local counties, Deschutes County contractors were awarded the most restoration service contract dollars, mostly for tree thinning services. Crook County was a close second, receiving just under \$1.8 million, 17 percent of the total restoration service contract spending on the forest, in contracts for natural resource and conservation, design and engineering, and road construction. Local timber sales were almost exclusively to Crook County purchasers, who purchased 88 percent of the total bid value that was sold locally, \$412,000 in sales. Relative to population size in each local county, Crook County had high capture for both restoration contracts and timber sales. Grant County received no restoration service contracts during the study period, and neither Jefferson nor Wheeler County had sawtimber purchases during the study period.

We interviewed service and timber sale contractors who have worked on the Ochoco National Forest to identify their interests, capacities, and experiences with national forest contracting. The interviews suggest that there is considerable need for forest restoration and infrastructure maintenance contracting on the Ochoco National Forest, and that there is a local industry with skills, equipment, and interest in doing more work on the Forest. When it comes to forestry work, however, there is a risk that businesses with the skills and equipment to do the work will be lost unless a steadier stream of contracting opportunities can be sustained, which depends in large part on projects from the Ochoco National Forest. Contractors noted budget constraints, and to a lesser extent federal bureaucracy as ongoing challenges, and a lack of viable timber sales as particularly limiting to the local timber industry on the Ochoco National Forest.

The interviews highlighted the importance of personal relationships and direct communication in forestry and restoration work. Contractors used direct communication with national forest personnel to learn about contracting opportunities and address unworkable contract specifications, and

relied on long-standing personal working relationships to subcontract and partner on projects. They were frustrated when agency policy precluded direct communication or contract negotiations, and expressed a clear need for more assistance and communication when dealing with federal contracts.

The Forest Service could help support the local timber and restoration industry and workforce and maximize local economic benefit by offering a wider range of project sizes, including more timber sales and service contracts sized from a few thousand dollars to \$100,000. Working with local contractors to help them understand the contracting process, and particularly best-value contracting, would further support local industry. Continuing to ask contractors for feedback on the feasibility of proposed project specifications could also make contracts more viable.

With recent renewed focus on increasing the pace and scale of restoration in eastside Oregon dry forests,² an important question for many stakeholders, including forest collaboratives like the OFRC is whether there is sufficient local capacity if more work were to become available on the forest, to maximize positive local community and economy benefits. Our interviews with local contractors suggested that they do have additional capacity for increased work from the forest, but that existing challenges with logistics, economics, and bidding procedures may continue to limit contract awards to these local contractors.

Information from this report, coupled with local knowledge and insight can provide useful information to both the OFRC and Ochoco National Forest about recent history of local capture of restoration work, and potential options for increasing future local capture. The OFRC's continued work to inform land management on the Ochoco National Forest,³ not only contributes to restoration efforts but also has potential to generate economic activity and social benefits in nearby communities into the future.

Endnotes

- 1 United States Department of Agriculture (USDA) Forest Service. 2017. Benefits from the Ochoco Forest Restoration Collaborative.
- 2 United States Department of Agriculture (USDA) Forest Service. n.d. Eastside Restoration. Available at: <http://www.fs.usda.gov/detail/r6/landmanagement/resourcemanagement/?cid=stelprdb5423597>
- 3 United States Department of Agriculture (USDA) Forest Service. 2017. Benefits from the Ochoco Forest Restoration Collaborative.



