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Stewardship Contracting for Landscape-Scale Projects

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FRONT COVER AND BACK COVER PHOTOS: **SUSTAINABLE NORTHWEST** INTERIOR PHOTO: **EMILY JANE DAVIS**

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tewardship end-result contracting is a flexible set of contracting tools designed to help federal land management agencies and their partners restore public lands and provide local community benefits. Congress created a pilot stewardship-contracting program for the Forest Service in the late 1990s. In the FY 2003 Appropriation Bill (Section 323 of Public Law 108-7), Congress granted the Forest Service and Bureau of Land Management (BLM) the authority, until September 30, 2013, to enter into stewardship-contracting projects for as much as ten years' duration. Stewardship contracting has become an increasingly important means for the Forest Service and BLM to undertake complex, long-term projects that seek to restore ecosystems, reduce fire hazard, strengthen or develop the infrastructure to utilize restoration byproducts, and create local economic benefits. Stewardship contracting is a relatively new set of tools, however, and specific contracting approaches are rapidly evolving. For that reason, lessons from one area can help other regions of the country identify approaches that best fit their circumstances.

Initially, agencies and their community partners focused on reaching agreement about proposed restoration projects and learning how to use stewardship contracting to achieve their goals. Consequently, many early stewardship-contracting projects were small in size—often only a few dozen acres. With time, the agencies have become more familiar with stewardship approaches, and local collaborative groups have become increasingly interested in treating larger landscapes and creating greater economic benefits. Agencies and their partners are now seeking to develop larger and more complex stewardship contracting strategies.

The purpose of this report is to provide information about various approaches that the Forest Service, BLM, and their partners have used to create large restoration programs using stewardship contracts and agreements. These strategies have allowed for the treatment of large landscapes over long time frames, and have supported local contracting, forest products, and biomass utilization capacity. This report describes and compares four approaches to stewardship contracting:

• Single, large-scale, long-term, indefinite delivery, indefinite quantity contracts



- Multiple-award, indefinite delivery, indefinite quantity contracts
- Consistent programs of work using multiple contracts
- Long-term stewardship agreements with nonprofit organizations

Each of these contracting approaches reflects different innovations as well as different local circumstances. Features of these contracts could be mixed and matched to develop a stewardship contract or agreement that is adapted to other circumstances using a decision-based approach outlined at the end of the report.

In the American West, federal agencies and their community partners frequently pursue stewardship contracting to achieve a number of related goals. These common goals include the following:

- Conducting forest and watershed restoration, including hazardous fuels reduction, habitat improvement (especially in plantations), road and river restoration, and noxious weed abatement
- Increasing the amount of restoration work that is possible by trading goods for services
- Creating opportunities for local contractors to benefit from restoration activities
- Supporting existing wood-processing infrastructure and local jobs
- Developing new biomass utilization capacity to lower treatment costs through utilization of marginally valued material, and to create new local economic opportunities and renewable energy sources
- Increasing administrative efficiency and lowering the costs of federal contracting
- Building trust and implementing projects that address the needs and values of multiple stakeholders

Stewardship Contracting Basics

As the law reads, stewardship contracting is a discrete set of contracting authorities (see text box). However, the effect of stewardship contracting is to bring together federal-service contracting and Forest Service and BLM timber-sale contracting authorities. Stewardship contracting also brings service-contracting and timber-sale authorities into agreement authorities. Many of the greatest challenges of developing actual stewardship contracts and agreements have been bringing these systems together in a way that both meets the goals of stewardship contracting and allows the agency to adhere to its prior legal obligations. This has required the agencies to bring together the separate cultures and staffs of acquisition management and timber management. These are two units that, before stewardship contracting, knew relatively little about the other's authorities and procedures. This section describes some of the separate contracting requirements that have to be addressed when developing stewardship contracts.

Integrated resource contracts

The Forest Service has drawn together service and timber-sale authorities to create two basic sets of contracting templates. One is the Integrated Resource Service Contract (IRSC); the other is the Integrated Resource Timber Contract (IRTC). Not surprisingly, the IRSC looks most like a service contract, while the IRTC looks more like a traditional timber-sale contract. Early on, many national forests used IRTC contracts, which were similar to traditional timber sales contracts but included service work and best-value evaluation. However, timber-sale contracts are more rigid than service contracts and, with time, the IRSC has become an increasingly important tool. This is particularly true for more complex and longer-term contracts, and, in some places, where service activities exceeded timber value. The IRTC has also fallen in use because it does not allow for the use of appropriated money; all service activities must be paid for with revenue from material sales. Moreover, because material removal is a byproduct of restoration, stewardship contracts are, from one perspective, a process for acquiring stewardship services.

Contract types

Within the IRSC type, there are several federal service contracts that can be used to fit particular circumstances. Contracts that agencies in this report have used include firm, fixed-price contracts and indefinite-delivery, indefinite-quantity contracts (IDIQ). Firm, fixed-price contracts allow for the purchase of a fixed amount of service at a fixed price by a certain date, whereas IDIQ contracts allow the agency to order services at a future date via a task order.

Solicitation types

The cases described here also use a variety of contracting mechanisms to solicit bids. These include a request for proposals (RFP), which allows bidders to offer technical proposals and price offers, and commercial-items contracts. Commercial-items contracts allow the Forest Service to use simplified solicitation procedures to purchase goods and services that are available commercially—that is, there is a market for these services outside of the government. An invitation for bid (IFB) cannot be used for stewardship contracts because they cannot be awarded on a best-value basis. Similarly, requests for quotations (RFQ) are designed for projects that are smaller and less formal than most stewardship contracts and are not typically used.

Cancellation ceilings

When the federal government enters into long-term, fixed-price contracts that will require contractors to make

capital investments in order to fulfill the contract, the federal government is required to obligate the funds at the time of award (called a cancellation ceiling). These funds are not paid to the contractor but are set aside in the event the federal government cancels the contract. The obligation is calculated on the proportion of the investment that

STEWARDSHIP CONTRACTING AUTHORITIES¹

Best value—Stewardship authority requires that the agencies use "best value" considerations when awarding contracts for stewardship projects. Best value contracting allows the agency to consider factors other than price and to award contracts to businesses that will perform high-quality work and help the agency meet its objectives. This is a major change from timber-sale requirements that require the agency to award contracts to the highest qualified bidder. It mirrors acquisition regulations that allow awarding contracts on the basis of the best value to the government.

Goods for services—The exchange of goods for services can provide funding for ecosystem restoration by allowing the value of removed products to offset the cost of services in a single contract. These products could include timber, nontimber forest products, and grazing access. By allowing the combination of timber removal and service activities in a single contract, goods for services can reduce the number of entries into an area and, thus, minimize the level of ecological impact. It can also help increase funding for restoration activities. In a stewardship contract, when contractors undertake service activities, instead of being paid cash for the work, they often earn "stewardship credits." These credits are then used as timber payment guarantees and, ultimately, to pay for harvested timber.

Retention of receipts—The Forest Service and BLM typically send the receipts of timber sales to the United States Treasury. Using receipt retention, the agency may retain the proceeds from the sale of commercial products removed through a stewardship contract, but must reinvest them in the same or another stewardship project.

Agreements— The stewardship contracting authority allows the Forest Service and BLM to enter into agreements, not just contracts, with nonprofit organizations and other entities to implement stewardship projects. Agreements are will be used for work under that contract. The obligation is amortized and the obligation is reduced and funds released with each passing year. Since the federal government must obligate cancellation funds at the time of award, along with the funds to execute the contract, contract mechanisms that require cancellation ceilings may

cooperative instruments between the Forest Service or the BLM and some nonprofit or government entity that allows them to undertake activities that have mutual benefits.

Designation by description— Under this existing and expanded service contract authority, federal land managers can describe a desired "end result" in place of actual designation by timber marking. The contractor is responsible for developing and implementing a plan to meet the end result. Failure to achieve the end result would result in penalties against the contractor. Under traditional timber-sale authority, the Forest Service must either designate trees to be removed or retained (usually by marking with paint) or describe what is to be removed or retained so that any two people would choose the same trees.

Long-term contracts—This authority allows contracts and agreements for as much as ten years.

Less than full and open competition—This authority exempts stewardship projects from the requirement that all timber sales valued at more than \$10,000 be advertised and competitively bid. With this authority, preference may be given to, for example, small businesses or bidders in particular locations. Less than full and open competition is permitted (and sometimes required) for service contracts.

Exemption of timber payments to counties—The Forest Service and BLM are typically obligated to pay a percentage of revenue from timber sales (25 to 50 percent) to the counties where the timber is harvested. This authority exempts payments to counties when the timber is harvested using a stewardship contract or agreement.

Multiparty Monitoring—The law requires that the Forest Service and BLM conduct multiparty monitoring to track contracting status, accomplishments, and the role of collaboration in stewardship contracting. Unlike the pilot program, the current authority does not require monitoring at the project level. be cost-prohibitive. Cancellation funds are not required in all types of long-term contracts. For example, IDIQ contracts do not have cancellation ceiling obligations.

Best-value evaluation

Evaluating proposals based on the best value to government is required in stewardship contracting. For each proposal it receives, the agency evaluates factors such as past performance, operational plan, ecological impact, and potential for local benefit. Criteria for the extent of material utilization can also be a priority. The cases discussed in this report have all used different weightings of price and nonprice factors to evaluate proposals. The goal of best value is to identify and select contractors that provide a good price while helping the agency and its partners meet the broader goals of high-quality restoration work and local economic benefit.

Bonding and timber payment guarantees

Acquiring bonding and payment guarantees can be an expensive proposition for contractors. This is particularly true for smaller operators located in rural communities. An early challenge to stewardship contracting was creating contracts with the correct type of bonding, guarantees, and deposits that protected the federal government while not placing too much financial burden on the contractors. Although requirements for bonding and payments can still be confusing for nonexperts, the requirements have become clearer and more consistent.

None of the example contracts in this report required either a service-contract performance bond or a timbersale performance bond, regardless of the type of contract involved. However, they all required a timber payment guarantee. In the context of stewardship contracting, the timber payment guarantee need not be for the entire amount of timber anticipated to be harvested. For instance, in the contract examples in this report, the payment guarantee was required for thirty to sixty days of anticipated harvest, with no guarantee required when no harvest is anticipated in the next sixty days. In addition, the contracts allowed the use of stewardship credits to serve as payment guarantee. In these cases, the contractor performs the service work first to earn credits, but does not receive payment. The contractor then can harvest the timber. In these contracts and agreements, the contractor did have to pay base rates in cash.

Case Examples

This report offers five case examples of large-scale stewardship contracting efforts from across the western United States. Undoubtedly, there are many other examples across the country that could provide additional lessons. For example, the White Mountain Stewardship Contract (WMSC) on the Apache and Sitgreaves National Forests in east-central Arizona was the first ten-year stewardship contract. However, given that there has been considerable evaluation of this contract and since the Forest Service is currently conducting a review, this report focuses attention on other cases. Moreover, these more recent case examples offer a number of innovations that have emerged since the WMSC was awarded.

SUSTAINED YIELD RESTORATION STEWARDSHIP (FREMONT-WINEMA NATIONAL FORESTS)

The Lakeview Federal Sustained Yield Unit (SYU) is located on the Fremont National Forest in arid southcentral Oregon. High-elevation lands support ponderosa pine and mixed conifer forests, while lower elevations contain rangelands and sagebrush. The Forest Service created the SYU shortly after World War II. It requires that timber harvested from the unit be milled in Lakeview or Paisley, Oregon. For much of the postwar period, there were multiple mills operating within the unit. However, by the late 1990s, all but one mill has been closed. With only the Collins Pine Company sawmill in Lakeview still operating, the SYU was at risk of being deauthorized. Local citizens invited Sustainable Northwest, a regional nongovernmental organization from Portland, to assist them in developing a collaborative group that could figure out how to move forward. Ultimately, a group of local citizens and elected officials along with representatives from regional and national environmental organizations built an agreement for land management activities that would both restore the national forest to historic conditions and allow the sawmill to remain open. The collaborative came to believe that these two goals were interconnected. Without the sawmill, restoration would be markedly more expensive. Without restoration, there would not be enough logs for the sawmill, and it would likely close, putting the remaining loggers out of business.

In the mid-2000s, the collaborative in Lakeview decided that a long-term stewardship contract would help them achieve their restoration and economic development goals. However, it took a number of years to develop a ten-year contract. Development and approval of the contract involved not only the Washington office of the Forest Service but political appointees at the U.S. Department of Agriculture. While they were determining how to develop a ten-year contract, they awarded several short-term, smaller stewardship contracts within the Sustained Yield Unit.

The ten-year contract and associated collaboration have allowed the Forest Service to sell green timber for the first time in nearly a decade. The contract and biomass MOU appear to be reducing supply risks for biomass investment. During the first two years of the contract, the national forest awarded seven task orders for a total of just under 5,000 acres of thinning including the removal of several million board feet of timber, along with a number of road improvement and culvert replacement activities. Even with this supply and considerable federal and state biomass development incentives, it remains to be seen whether a biomass-electrical facility will come to fruition, as it is not clear whether there is adequate return on investment for the needed outside capital.

Contract types: Integrated resource service contract (IRSC); indefinite-delivery, indefinite-quantity (IDIQ); awards occur via task order.

Solicitation type: Request for proposal

Resource goals: Hazardous fuels reduction and ecological restoration

Local benefit goals: Keep the sawmill open and retain sawmilling and logging jobs; foster for new investment in biomass utilization; support local in-woods contracting capacity

Duration: Ten years

Size: Minimum order \$100,000, not to exceed \$25,000,000

Initial award year: 2008

Contractor: Collins Pine Company (they subcontract the logging and service work)

Cancellation ceiling obligation: None; not required on IDIQ contracts

Best-value evaluation:

- 1. Compliance with Lakeview Federal Sustained Yield Unit Policy 22.5%
 - a. Log milling required to occur in Lakeview or Paisley, Oregon
 - b. Labor contractors required to be located within Lake County or thirty-five air miles from Lake County Court House
- 2. Past performance 20.0%
 - a. Quality of work
 - b. Customer satisfaction
 - c. Timeliness of performance
 - d. Business relations 20.0%
- 3. Technical approach
 - a. Method
 - b. Equipment
 - Timing с.
- 4. Specialized experience of firm
 - and key personnel 15.0%
 - a. Experience with similar stewardship contracts

12.5%

10.0%

- b. Experience of project manager
- Workplace safety 5.
 - a. Quality control plan
 - b. Traffic control plan
 - c. Pedestrian safety
- 6. Use of local work forces
 - a. Local community economic enhancement

Weighting criteria

1. Price is less important than other factors combined with price of increasing importance when technical proposals are similar.

Retained receipts: This contract allows for the use of appropriated funds to pay for service activities; the use of stewardship credits to pay for timber as well as payments to the government of revenue for timber in excess of service obligations (which could be retained).

Timber payment guarantee: Timber payment guarantee is required for sixty days worth of anticipated logging. The contract holder may use stewardship credits as payment guarantee.

Price escalation or de-escalation: None; contractors

provide new price offers for service work and for timberbiomass with each task order.

COLLABORATIVE RESTORATION STEWARDSHIP CONTRACT (MALHEUR, OCHOCO, UMATILLA, AND WALLOWA-WHITMAN NATIONAL FORESTS)

The mixed conifer and ponderosa pine forests of the Blue Mountains in northeastern Oregon are typically overstocked due to past management and fire suppression practices. There are a number of collaborative groups in the region, and there has been growing consensus that the mid-elevation ponderosa pine needs thinning to restore forest resilience in these fire-adapted ecosystems. Several of the national forests in the area were early adaptors of stewardship contracting and have implemented a number of IRSCs and IRTCs. The contracting staff from this part of Oregon has played a significant role in the national development of contracting innovations and templates, especially for stewardship contracting. Innovative contracting and field staff members have worked together to develop this new type of contract. Their strategic goals were to create an administratively efficient contract and increase biomass utilization to create more revenue for hazardous fuels reduction.

Since the awarding of the contract, the Malheur National Forest alone has issued sixteen task orders to seven contractors at a cost of \$3,392,482 in economic recovery funds that will generate \$2,163,993 in receipts for future fuels reduction and restoration activities.

Contract Type: Commercial items, integrated resource service contract (IRSC); \$50 million, multiple award, indefinite-delivery, indefinite-quantity (IDIQ). Work awarded via task orders, which are issued on a firm, fixed-price basis. Contractors deliver logs to specified location; sale of material occurs separately.

There were several reasons that the national forests in northeastern Oregon chose a multiple award, IDIQ contract. The contract developers felt that this IDIQ contract would

• allow the Forest Service to enter into a long-term contract without the need for a cancellation-ceiling obligation. However, IDIQ does not guarantee future work for contractors or material supply

- allow for quick turnaround in advertising, bidding, and awarding task orders compared to the development of new contracts. This reduces administrative costs and allows for quick funding obligations when unexpected infusions of funds occur
- eliminate price risk for the contractors because with each task order, the contractor creates a new price offer for either service work or timber sales to reflect current markets. Traditional service contracts are firm, fixed-price contracts that create considerable price risk for the contractor, especially when wood chip, lumber, and gasoline-diesel prices are volatile.
- maintain competition through bidding among contractors, which may serve to keep prices competitive for the government
- minimize the risk of relying on a single contractor by spreading the work opportunity among multiple contractors
- allow for a single contracting instrument to cover a larger area, but allow for the participation of contractors who may be only interested in working in part of the project area
- ensure that the Forest Service shares the risk with purchasers as material bids are bought over short time frames (three months or less), thereby reducing the purchaser's risk with volatile markets

The national forests chose to separate the service work and sale activities (i.e., "separate the logger from the log") in an effort to increase utilization and total revenue generated from material sales. Rather than requiring a purchaser to buy all of the material in order to get the material they most want, this contract allows contractors to bid on particular types of material, and for the Forest Service to make multiple awards in order to get the best price. The end goal is to provide a sustainable, level supply of work for local contractors, and improve overall business costs by accomplishing single-entry treatments that allow for surface fire reintroduction the following season. The Forest Service awards task orders to jointly sell timber and biomass and other restoration service activities. The contract calls for the in-woods contractor to cut, remove, haul, and deliver the timber and biomass to the purchaser's doorstep. The purchaser prepays for the material prior to delivery.

For product sales, purchasers bid on standing material by

the load (28 to 30 tons per load) and enter into a contract. This allows the Forest Service to use the contractually obligated income as retained receipts to pay for the on-the-ground treatment and material removal. Entities interested in purchasing material bid for it prior to its harvest, but bid for delivered logs. This system allows the receipts generated from the sale to be used to pay for the service work that harvests and delivers the material to the processing facility.

Solicitation type: Bidders develop technical and price proposals based on sample acres and haul distances. The Forest Service can issue task orders for additional work. Task order requests include instructions, evaluation criteria, and requests for needed information. Approved contractors have five days to prepare and submit quotes. Awardees may choose not to provide a quote.

Resource goal: Hazardous fuels reduction; provide for a single-entry treatment to reduce administrative and overhead costs, and allow for the reintroduction of surface fire in the treated areas the following season.

Local benefit goals: Provide local, in-woods work opportunities for a diversity of contractors across the counties where the five national forests are located; provide timber and biomass for utilization in local existing and developing facilities; create local community economic benefit across the region.

Duration: Five years; the contract developers decided to use a five-year rather than a ten-year contract because this was the first one of these types of contracts, and they wanted to be able to learn from this effort and make improvements in the next contract.

Award date: September 2009

Size: Minimum order \$5,000, not to exceed \$49,999,999. To businesses awarded a contract, Forest Service must provide a minimum amount of work (\$5,000).

Contractors: The Forest Service awarded twenty-nine base contracts—eight to industry and twenty-one to service contractors and loggers, most of which are located in northeastern Oregon. Using the bid proposals, the Forest Service created a pool of contractors who could competitively bid on subsequent task orders. To create the pool, a team of Forest Service employees evaluated the contracts based on the technical proposals and benefit to the local community. The contracting officer then selected proposals according to the technical ratings, price, and benefit to the local community.

Cancellation-ceiling obligation: None; not required on IDIQ contracts

Best-value evaluation:

- 1. Relevant past performance of prime contractors and any subcontractors performing more than 20 percent of the work
 - a. Quality of service
 - b. Customer satisfaction
 - c. Timeliness of performance
 - d. Business relations
 - e. Cost control
- 2. Technical approach
 - a. Use of equipment that provides resource protection; higher rating given to lower ground pressure, cut and lift, and maximum distance between skid trails
 - b. Maximize use of harvested material (both saw timber and nonsaw timber)
 - c. Reduce number entries
- 3. Key personnel
 - a. Highest ratings for experience with designation by prescription treatments
- 4. Use of local workforce
 - a. Highest for workforce from counties where work will be performed
 - b. Secondary rating for workforce from counties where national forests are located
- 5. Local industry (for those purchasing biomass)
 - a. Highest rating for exiting local industry or ability to become local industry and immediately receive task orders for biomass or saw logs in the counties were the national forests are located

Weighting criteria:

- 1. Within each criterion, high, medium, and low rankings were defined
- 2. Nonprice factors, when combined, are of equal important than price, with price being of increasing importance as differences between technical proposals decrease

Timber payment guarantee: Timber payments guarantees are not needed because the timber harvester is not purchasing the timber, but delivering it to the mill gate. The purchaser pays total product value when task order is executed or on a schedule developed by the contracting officer. All timber is paid for prior to delivery.

Retained receipts: Receipts from material sale task orders are used to pay for service work task orders.

Price escalation and de-escalation: None; contractors provide new price offers for service work and for timberbiomass with each task order.

CONSISTENT PROGRAM OF STEWARDSHIP WORK (ELDORADO NATIONAL FOREST)

The Eldorado National Forest is located east of Sacramento, California, in the Sierra Nevada Mountains. Compared to nearby national forests, the Eldorado has had a relatively small appropriated budget. When the stewardship contracting pilot program was approved in the late 1990s, a few staff members saw stewardship contracting as a way to increase the amount of hazardous fuels reduction work. With time, the Eldorado has come to use stewardship contracting for nearly all of its timber removal and hazardous fuels reduction work. Nevertheless, given the limited number of timber purchasers in the region, the focus on hazardous fuels reduction, the lack of local biomass utilization capacity, and the fact the timber shop led the development of stewardship contracting on this forest, the stewardship contracts from the Eldorado more closely resemble timber sales than any other examples in this report.

Rather than seeking to develop a long-term contract, the Eldorado has built a consistent program of work with an annual supply of contract offerings. Although the contracts have evolved somewhat, these contracts have been firm, fixed-price contracts awarded to a single offerer, typically for a term of three years. The contracts have been both IRTCs and IRSCs. Initially, these were almost exclusively IRTCs, and the Forest Service selected units to ensure that timber value exceeded treatment costs. Eventually, they built a small pool of retained receipts, which allowed them to offer contracts with service costs exceeding timber value. This approach became more common after timber prices crashed. The Eldorado has awarded many stewardship contracts during the past five years. For example, the Oski Bear Fuel Reduction Stewardship Project was solicited in fall 2008. This project included small-diameter tree thinning and removal, brush cutting, and machine piling on 357 acres. The project also included some road reconstruction to access the units. This IRTC generated about 10,500 tons of saw timber. More recently, the Alder Fuel Reduction Stewardship Project awarded a 1,525-acre project. In the contract, the Forest Service agreed to pay the contractor slightly more than \$50,000. By addition, there was at least \$333,900 in product value generated for approximately 52,000 tons of saw logs to support the purchase of services across the project. Work activities included tree thinning and removal, brush cutting and piling, mastication, road tillage, and maintenance.

Contract Types: Initially, primarily IRTCs; more recently, they have also begun to use IRSCs that involve solicitation for commercial items. These contracts have been definite-quantity, fixed-price contracts involving trading goods for services.

Solicitation type: For IRSCs, solicitations have typically been commercial items

Resource goals: Hazardous fuels reduction; use goods for service and retained receipts to increase the amount of on-the-ground work performed

Local benefit goals: Support local and small businesses

Duration: Typically three years

Initial award year: 2004

Size: Varies, but similar in size to its timber sales

Contractors: Varies, but has included both a sawmill owner (Sierra Pacific Industries) as well as forestry and logging contractors (e.g., Arens Mechanical Harvesting). With one sawmill owner and no biomass electrical or cogeneration facilities within hauling distance of the Eldorado, there was a need to have a willing purchaser, whether it was the logs of a contractor or the entire contract, for stewardship contracting to succeed. Initially, the staff worked with a number of potential bidders to structure contracts to appeal to its limited number of timber purchasers.

Cancellation ceiling obligation: None

Best-value evaluation examples

Alder Fuels Reduction Stewardship Contract (IRCS– Commercial items)

- 1. Past performance of offerer and key subcontractors
 - a. Past compliance with federal, state, and local laws
 - b. Reports from references reports regarding whether offerer and subcontractors
 - i. were capable, efficient, and effective
 - ii. were within terms and conditions
 - iii. were on time
 - iv. had satisfied customers
- 2. Technical approach
 - a. Coordination of work activities; acceptable methods of accomplishing work; use of equipment capable of performing work and protecting resources; achieving timely end results
- 3. Supervision
 - a. Experience of on-the-ground supervisor and quality-control plan
- 4. Utilization of local workforce and small businesses
 - a. Higher ratings to offerers with permanent place of operation and subcontractors closest to work site and within El Dorado, Amado, Sacramento, and Placer counties. Higher ratings to offerers who are small businesses; use local small businesses, including small business sawmills

Weighting criteria: All nonprice factors are of equal importance. Nonprice factors, when combined, are less important than price with price being of increasing importance as differences between technical proposals decrease.

Oski Bear Fuel Reduction Stewardship Project (2008)– Integrated Resource Timber Contract

- 1. Organizational experience with activities similar to activities in the contract
- 2. Organizational past performance, as described by references

- 3. Local community economic enhancement
 - a. Utilization of local hires and subcontractors (from four counties)
 - b. Use local and small businesses, including sawmills
- 4. Understanding government requirements
 - a. Names and résumé of contracts manager
 - b. Plan of operation, including timeline
 - c. Quality-control plan
 - d. Equipment
 - e. Production capability to complete contract on time

Weighting criteria: Nonprice factors, combined, of equal importance to price.

Retained receipts, goods for services: They have used the IRTC and retained receipts, which have then been used on subsequent stewardship contracts.

Timber payment guarantee: May be paid for with stewardship credits, payment bond, cash payment, deposit, or letter of credit; will be equal to the amount of timber the Forest Service estimates will be cut in thirty to sixty days. Neither contract requires a performance bond.

Price escalation or de-escalation: IRTC contracts can have a variety of escalation arrangements; the firm, fixed-price IRSC contracts typically would not have escalation arrangements.

Additional notes: Although the Eldorado's approach has provided a fairly steady supply of contract offerings, environmental organizations, citing the lack of a cumulative-effects analysis, successfully sued the national forest for its use of categorical exclusions for hazardous fuels reduction projects. The court injunction has slowed contract offering, as a number of projects developed using categorical exclusions have to be redone using environmental assessments. However, this sort of delay is not unique to this type of contract structure. All of the contract structures described in this report would have resulted in similar delays in the event of an injunction, whether they were new contracts, task orders, or supplemental project agreements.

WILD RIVERS MASTER STEWARDSHIP AGREEMENT WITH HOPE MOUNTAIN STEWARDSHIP SUPPLEMENTAL PROJECT AGREEMENT (ROGUE RIVER-SISKIYOU NATIONAL FOREST)

The ecologically diverse region of southwestern Oregon has been the home to considerable conflict about forest management. It is also the birthplace of some of the earliest and most active collaborative groups seeking to develop forest management that restores resilience and recovers endangered species. As part of this movement, the Lomakatsi Restoration Project has been working collaboratively with the Forest Service, BLM, county and city governments, and private citizens and nonprofit organizations for more than a decade. They train workers in ecological restoration principles in addition to offering local employment.

The Wild Rivers Ranger District has seen significant conversion to plantations of even-aged stands. In addition, the area is heavily roaded because of historic mining and logging activities. Due to the age of the roads and steep, unstable topography, many of these roads are subject to mass wasting, contributing significant sedimentation into salmon-bearing streams. The purpose of this project is to restore stand complexity and improve road conditions while creating local economic benefit and workforce training. The project also has had an outreach and monitoring component that plays a critical role in mutual learning and trust building.

The Wild Rivers Stewardship Master Agreement was developed to allow for treatments across 10,000 acres of the Wild Rivers Ranger District of the Rogue River–Siskiyou National Forest. The national forest, Lomakatsi, the Siskiyou Project (a local environmental organization), and other local stakeholders developed the agreement through a collaborative process. Somewhat like an IDIQ contract, the master agreement lays out the structure for future work activities. It describes the mutual benefits shared among the Forest Service and the partner organizations, and describes how subsequent supplemental project agreements will be developed and executed, along with a number of other technical issues.

During the first year after the agreement was signed, the

Rogue River–Siskiyou National Forest and the partners entered into a supplemental project agreement for a twoyear Hope Mountain Stewardship Project. The supplemental project agreement includes a detailed scope of work, operating and financial plans, and a description of how best value was determined.

In 2009, the national forest used money from the American Recovery and Reinvestment Act to fund the Hope Mountain Stewardship Project Supplemental Project Agreement. The project included 1,222 acres of treatment. These treatments were largely plantation thinnings and road restorations to reduce the spread of Port Orford cedar root rot and reduce stream sedimentation. During 2009, project partners treated 1,300 acres, employed ninety-eight people and seven contractors (creating \$951,000 in wages and salary), and trained thirty-two local workers.² Work has continued in 2010.

Agreement Type: Master stewardship agreement with supplemental agreements developed collaboratively between the national forest, Lomakatsi, the Siskiyou Project (a local environmental organization), and other local stakeholders

Resource goals: Hazardous fuels reduction, restoration of even-aged plantations, restoration of former logging and mining roads, and maintenance to reduce sedimentation in salmon-bearing streams and the spread of Port Orford Cedar root rot

Local benefit goals: Workforce training in ecological restoration including outreach and monitoring; increase local economic benefits

Duration: Master agreement, ten years; Hope Mountain supplemental, approximately two years

Size: Master project area, 10,000 acres; Hope Mountain Stewardship supplemental, 1,222 acres. In 2009, the Forest Service obligated \$2.1 million, of which nearly \$1.3 million was for use in the first field season; partners obligated \$238,000 in matching funds.³

Initial award year: 2008

Agreement holders: Lomakatsi Restoration Project and Siskiyou Project, both local nonprofit organizations *Cancellation-ceiling obligation:* None; there is no cancellation ceiling obligation under an agreement, since agreements typically prohibit the purchase of major equipment using funds from these agreements

Best-value evaluation: When entering into this supplemental project agreement, the Forest Service conducts a best-value determination, which is to reflect the purposes of the master agreement. In this agreement, the best value considerations include

- 1. achievement of land-management goals of the forest that meet local and rural community needs
- 2. extent of mutual benefit and interest, including education and interpretation opportunities
- 3. advantages and effectiveness of mutual participation
- 4. joint expertise
- 5. factors relevant to costs, such as volunteer participation, contributions from other partners, and cost sharing
- 6. ability to use local workforce
- 7. ability to complete work in a timely manner
- 8. experience
- 9. ability to conduct work in environmentally sound manner

Weighting criteria: nonprice factors are considered more important than cost

Retained receipts: Permitted, but none anticipated; would modify the agreement to increase activities rather than collect receipts

Timber payment guarantee: Deposits must be made prior to cutting; deposits may be cash, payment bond, earned stewardship credit, or some combination; base rate of timber must be paid for in cash

Price escalation or de-escalation: The supplemental project agreement is to be amended to increase or decrease the amount of product and/or reflect the actual product rate that the partner is paid, which will increase or decrease the amount of service work provided by the partner

WYOMING FRONT ASPEN STEWARDSHIP ASSISTANCE AGREEMENT (HIGH DESERT DISTRICT, BUREAU OF LAND MANAGEMENT)

Hunting and fishing organizations, such as the Rocky Mountain Elk Foundation (RMEF), the Wild Turkey Federation, and others, have long collaborated with the national forests and BLM to improve wildlife habitat. During the past several years, for example, the RMEF has entered into a number of ten-year stewardship agreements with both the Forest Service and the BLM to implement wildlife restoration across the West. The Wyoming Front Aspen Restoration Project is one of these projects. It is located in western Wyoming on the Pinedale field office of the BLM, where aspen stands are suffering from conifer encroachment.

Prior to creating a ten-year agreement, the RMEF and the Wyoming BLM initially signed a memorandum of understanding in 2005. A year later, they created the Wyoming Front Aspen Stewardship Assistance Agreement for work on 9,000 acres on the Pinedale field office lands and adjacent private lands. Each subsequent year, they have amended this agreement to develop an annual operating plan and budget for the coming year. As with the Wild Rivers master stewardship agreement, this agreement revolves around mutual goals. This is different from a stewardship contract, which assumes that the federal government is purchasing services from a contractor. Because of these mutual goals, both parties bring financial resources to the project. In this case, the master agreement anticipates that the RMEF will contribute as much, if not more, funding than the BLM.

This agreement includes the possibility of trading goods for services. As with other contracts in this report, the RMEF earns stewardship credits by conducting service activities and then offsets those services with revenue from material sales. Stewardship credits may be used as a timber payment guarantee. Because the cost of service work far exceeds any product value, the BLM has also made payments for services through the agreement.

The RMEF subcontracts much the service work through a competitive bidding process. The agreement directs the RMEF to make efforts to award contract to small, minority-owned, and women-owned businesses. Unlike the Forest Service agreement discussed above, this agreement does not discuss evaluation of best value in either the selection of the RMEF or how the RMEF should select its contractors.

This project has focused on conifer removal from aspen stands and preparing the stands for prescribed burning. Work has occurred on BLM lands as well as adjacent lands of willing private landowners. During the first three years of the agreement, the RMEF treated 2,000 acres of at-risk aspen stands. The BLM obligated about \$125,000 annually with the RMEF spending between \$150,000 and \$200,000. Timber and biomass value is limited from this project, due, in part, to the lack of markets and the material involved. Total product value during that period was small—less than \$10,000. Products removed have included 3,000 Christmas trees and more than 9,000 tons of biomass in the form of logs, firewood, and wood chips. The RMEF worked aggressively to find markets for these materials, and have found a new market for chip use in oil well mitigation.

The 2010 operating plan anticipates continuing conifer removal, cutting, and slashing in preparation of prescribed fire on 860 acres. This may include treatments on adjacent private lands (authorized under the Wyden Amendment). The plan also includes temporary fence building to exclude cattle and wildlife from regenerating aspen stands; monitoring effects of previous treatments, including the impact of prescribed burning and noxious weeds; and cultural resource surveys. In 2010, the partners anticipate selling Christmas trees and firewood as well as wood chips for oil well mitigation.

Agreement Type: Master stewardship agreement with supplemental agreements that add work items and funds by both parties

Resource goals: Restore habitat for elk and other wildlife, restore aspen stands, and reduce hazardous fuels across federal, state, and private lands

Local benefit goals: Identify markets for products as well as create economic benefit through subcontractin

Duration: Ten years

Project Size: 240,000 acres across federal (174,000 acres),

state (12,000 acres), and private lands (57,300 acres); total treatment area anticipated to be 9,000 acres during the ten-year agreement period

Initial award year: 2006

Agreement holder: Rocky Mountain Elk Foundation, which uses a best-value competitive bidding process to subcontract work activities. The agreement directs the RMEF to make efforts to award contract to small, minority-owned, and women-owned businesses. Unlike the agreement discussed above, this agreement does not discuss evaluation of best value for either the selection of the RMEF or how the RMEF should select its contractors.

Cancellation-ceiling obligation: None

Best-value evaluation: Not described in agreement documents

Retained receipts: None anticipated, since there is very little product value associated with this project—less than \$10,000 during the first three years. The product value has been applied to service activities within the agreement.

Decision Points in a Challenging Environment

Across the West, we have seen a considerable decline in wood products and logging capacity during the past two decades. This is particularly common in parts of the interior West where timber production was marginal even at the height of the western timber industry. Conducting forest restoration and creating local community benefits in areas with little or no contracting, nearby processing capacity, or markets can be particularly difficult.⁴ Stewardship contracting or agreements can provide an answer, as seen in the case studies above, but they must be carefully designed to fit the particulars of a given region.

Stewardship contracting inherently requires nonfederal entities to perform restoration activities—be they nonprofit organizations or for-profit companies. At a minimum, local businesses that can conduct work in the woods are necessary to undertake stewardship contracts. Typically, stewardship contracts also call for the removal and sale of some sort of woody material, so logging and processing capacity is important. However, stewardship contracting can also be used to foster the development of contracting capacity and new markets for biomass. Given this context, the Forest Service, BLM, and their collaborators need to make a series of decisions about contract structure, type of contract, contract duration, and trading goods for services when developing a stewardship-contracting strategy. Some of the major decision points include the following:

- Contract or agreement
- One contract or a series of contracts
- Contract structure (IRCT or IRCS)
- Within IRCS,
 - $\circ~$ whether the contract will be firm, fixed-price or IDIQ
 - whether the contract will be awarded to a single contractor or multiple contractors
- Contract duration
- Whether contractor performing service activities will also own the products or whether product sales will occur through separate transaction (commonly called "separating logger from the log")
- Bid solicitation type
- Best-value evaluation criteria
 - o Components of the technical proposal
 - Past performance
 - Operation plan, ecological impacts
 - Structure of local benefit criteria
 - Whether extent of utilization will be given higher ranking
 - Relative weighting of price and nonprice factors

In addition to these major decisions, there are many other decisions and technical details involved in developing stewardship contracts and agreements. Some of these may have a greater impact than others on the ability of the agency and its partners to achieve its ecological and community benefit goals. In many cases, the ways in which these have been addressed have become standard procedure, such as the process around so-called stewardship credits in the trade of goods for services and the ways in which timber payments can be guaranteed. In other instances, national forests and their partners have used their discretion to make these decisions.

Workforce and Market Assessment

Because stewardship contracting is a flexible and diverse tool, there are many different decisions to make when developing contracts and agreements. However, before making any decisions, it is best to conduct a workforce and market assessment because agencies and their partners need to understand what kinds businesses are available to perform work in the woods and utilize materials. By understanding existing business capacity, national forests and their community partners can structure contracts to create local socio-economic benefits through local forest-based businesses as well as identify types of contracting and utilization capacity that needs to be fostered.

A good workforce and market assessment will determine the interests and capabilities of local businesses engaged in logging, forestry, landscaping, and fire suppression. This is necessary because these are the businesses that are likely to bid on stewardship contracts or act as subcontractors. On the Fremont-Winema and northeastern Oregon national forests, collaborative groups conducted workforce assessments early to understand the contracting capacity and develop strategies to strengthen it. It is also a good idea to identify potential and existing uses for material beyond traditional wood products and biomass electricity because this can help local businesses take advantage of existing and growing markets. Even in places with virtually no forest products industry, there may be demands for biomass for animal bedding, landscaping and composting products, commercial firewood, and heat for industrial and space heat. For example, when faced with extremely limited local biomass markets in Wyoming, the Rocky Mountain Elk Foundation worked to identify an emerging market for wood-chip use in the oil-drilling sector. Moreover, understanding the range of possible options can help broaden the ways in which contracts may be developed to achieve ecological and economic development goals and attract contractors. For example, in places with limited saw log and biomass markets, it may be worth targeting in-woods logging or forestry services businesses as contractors. In places with virtually no local in-woods contractors, it may be worth considering identifying a nonprofit organization to partner with, especially one that can provide business assistance and workforce training.

With a clear understanding of the potential in-woods contracting capacity and the full range of local material utilization options, agencies and their partners can move toward structuring stewardship contracts or agreements for their restoration and local benefit goals. For example, developing contract solicitations that appeal to existing contracting capacity and biomass markets and using best-value process to reward contractors who find new markets can help create incentives to take advantage of existing and growing markets while larger-scale utilization capacity is developed, or in the event that it never becomes financially viable. Understanding this capacity can also help shape the structure of subsequent stewardship contracts, which increases the likelihood of receiving competitive bids and achieving local economic benefits. A guide to conducting workforce assessments with sample contractors surveys and examples of completed workforce assessment can be found at ewp.uoregon.edu/ resources/workforce-qualityjobs.

Stewardship contract or agreement?

As seen in the case studies, contracts offer many benefits and are particularly useful in situations where for-profit, service-oriented entities are found that can perform the needed restoration service and product removal. However, stewardship agreements can also serve an important role because they allow the Forest Service and BLM to work with nonprofit organizations, state and local governments, and other entities to achieve mutual goals. Because agreements are organized around mutual goals and benefits, both parties typically bring financial resources to the project. In the case of the RMEF, for example, they have to date contributed more than half the total funds to the Wyoming Front Aspen Restoration Project. In addition, agreements often include additional activities that might not be readily included in a contract. For example, the Wild Rivers master stewardship agreement involves workforce training for displaced forest workers in the rural communities of the ranger district. Using matching funds, it also included for education and outreach activities. Similarly, the agreement with the RMEF included not only work on BLM lands but also work on adjacent private lands as well as monitoring.

Integrated Resource Timber Contract or Integrated Resource Service Contract?

As stated above, an IRTC operates more like a traditional

timber-sale contract while an IRSC is more like a service contract. Either one is a viable choice, although many national forests that use stewardship contracting are now using the IRSC. This is often due to the fact that an IRTC, like a timber-sale contract, is more rigid than a service contract. In addition, an IRTC does not allow for the use of appropriated money; all service activities must be paid for with revenue from material sales. Nevertheless, some national forests, like the Eldorado in California, have found them useful. The IRSC is becoming increasingly popular, especially for more complex, long-term contracts. It also is used in some places where service activities exceeded timber value or where material removal is seen as a process for acquiring stewardship services.

If an IRSC is the choice, then there is another decision: Will the IRSC be a firm, fixed-price contract or an indefinite-delivery, indefinite-quantity (IDIQ) contract? As stated earlier, firm, fixed-price contracts allow for the purchase of a fixed amount of service at a fixed price by a certain date, whereas IDIQ contracts allow the agency to order services at a future date by means of a task order. The three stewardship contract case studies in this report have used IDIQ contracts because of their flexibility, both for the agency and the contractors. Although IDIQ contracts lack guarantees of work and timber supply, they can increase flexibility in positive ways.

First, multiple-award, IDIQ contracts are typically structured to allow the contractors to provide new price offers with each task order. When contracts are structured this way, contractors can adjust their pricing to reflect changing conditions, such as fluctuating commodity market prices for wood products and energy. In firm contracts, prices are often fixed and the risk of price volatility rests with the contractor, unless some sort of price index was built into the contract from the beginning.

In addition, IDIQ contracts allow the agency to award new work quickly when it finds itself with a sudden infusion of funds, whether those are unspent funds toward the end of the fiscal year, funds made available by an administration initiative, or an influx of appropriations. For example, the Rogue River–Siskiyou National Forest received American Recovery and Reinvestment Act funds to support work through its master stewardship agreements. National forests that have IDIQ contracts and IDIQ-like master agreements in place may be in better position to advocate for additional funds because they have demonstrated efficient spending in the past. Firm, fixed-price contracts do not typically allow for the addition of more funds; instead a new contract needs to be developed, solicited, and awarded.

Finally, IDIQ contracts do not require cancellation-ceiling obligations, which greatly reduce the cost for the government agencies. However, IDIQ contracts do not provide the security of firm, fixed-price contracts in terms of guaranteeing a steady supply of work and biomass.

What size and number of contracts?

The size of contracts as well as the number of different contracting opportunities will determine who benefits from the economic opportunities. It will also affect the ability to foster new contracting and biomass utilization capacity. Strategies will likely need to vary, depending on contractor and processing capacity. For example, in areas with limited contracting capacity, the agency could structure stewardship contracting to help increase local capacity or help provide equal work opportunities in areas with many existing businesses.

There are several approaches that an agency can take to structure contracts to enhance local benefits. One option, to concentrate all the work into a single contract, may allow that contractor and its subcontractors to make new investments in equipment and utilization capacity. Among the examples in this report, only the Fremont-Winema developed a strategy that concentrates the work into a single contractor, but it did so because the stewardship contract is located on a designated sustained yield unit where there is only one sawmill that is permitted to mill timber.

However, putting all of the work into the hands of a single contractor for a long period risks shutting out other contractors or entrepreneurs, which may cause existing businesses to wither and discourage future development. In addition, it exposes the federal government to risk if the sole contractor goes out of business or falls short in meeting contract goals and objectives. The second option, then, is to create multiple contracts of smaller size. This option is especially appropriate in areas where there are a number of contractors and wood processors. For instance, although the Rogue River–Siskiyou National Forest made substantial investments in two ten-year stewardship agreements with Lomakatsi Restoration Project, the nearby communities are home to a high concentration of forestry support businesses, and the Forest Service has pursued other stewardship contracts without Lomakatsi. In northeastern Oregon, the national forests involved in the Collaborative Restoration Stewardship Contract used a multiple contract approach because they deliberately sought to provide work opportunities and materials for utilization to a wide variety of contractors, in part to help sustain and foster local capacity.

Contract duration?

Since stewardship contracting allows for a ten-year contract and much of the conversation has focused on how to stimulate biomass utilization investment, there has been significant focus on how to create ten-year stewardship contracts. However, executing a ten-year contract has proven difficult for a variety of reasons, and there are only a few ten-year contracts nationally. Even in the absence of a ten-year contract, the Eldorado case suggests that developing a consistent program of work can create sustained work opportunities for contractors and a biomass supply for sawmills. There are also risks associated with committing to a ten-year contract in a rapidly changing economic climate. Finally, there may be some advantages to creating shorter-term contracts when the contract is particularly innovative. The developers of the northeast Oregon contract chose a five-year duration so they could learn from their experimentation and build a better ten-year contract in the future.

Separate the logger from the log?

In some instances nationally, stewardship contracts have been used to separate the process of harvesting from the sale of timber. This approach is possible because of the retained-receipts authority of stewardship contracting, which allows the national forest to retain the funds from the sale of the timber to pay for the service activities. In some cases, such as in western Montana, where this strategy was pioneered, the purpose has been to take the financial incentives out of the process of tree selection and to reward contractors for high-quality work in the woods. This sort of approach can be particularly important where there is low trust of loggers or other traditional timber-sale purchasers. Others have been interested in this approach in order to foster utilization and revenue, allowing for a process that divides up the material and sells it separately by type. This has been the approach in the northeastern Oregon IDIQ contract. Although separating the logger from the log can be appealing in some instances, there are technical issues associated with payments that can make this approach a challenge. By selling material on the stump, the northeast Oregon contract developers hope they have addressed these key technical issues.

What are the criteria for best-value evaluation?

Criteria for best value in stewardship contracting will vary with local needs and agency priorities. The case examples describe in some detail the range of specific evaluation criteria used in each case as well as the relative weighting of price and nonprice factors. Best-value criteria can be used to strategically focus the benefits of stewardship contracting in a number of key areas (e.g., toward existing businesses, communities, and the environment).

On the Eldorado, for example, the criteria emphasized price and the performance of the offerer and subcontractors. The forest seeks efficient and technically sound proposals from contractors with proven past experience. The forest also gives higher ratings to proposals from local businesses. All nonprice criteria are of equal importance, but are less important than price. The Eldorado's strategy is likely to support established contractors with local experience rather than create opportunities for any less experienced businesses that may be starting up in the area.

The Wild Rivers agreement, on the other hand, has a set of criteria with a community-oriented focus, and weighs nonprice over price considerations. Like the Eldorado, the Rogue River–Siskiyou gives priority to an experienced, efficient local workforce for restoration. However, their criteria also include education and interpretation opportunities, collaboration, and community needs. Their approach demonstrates how stewardship contracting may produce a broad suite of benefits while ensuring high-quality performance.

In northeastern Oregon, criteria for the Collaborative Restoration Stewardship Contract regard price and nonprice values as equal. In addition to local economic benefit, the five forests seek proposals from contractors in their IDIQ pool who are experienced with the type of prescribed project treatment, will use equipment that minimizes damage, and who plan for the least number of entries. Using these best-value criteria helps the forests prioritize ecological restoration and limit negative environmental impacts.

Flexibility or certainty in terms of work and supply availability?

One promise of stewardship contracting is its potential to provide relatively secure work and material supply flows. These flows can help stabilize local businesses that rely on public lands. Another promise of stewardship contracting is that it may provide an avenue for the expansion of biomass utilization businesses because it could help ensure a stable supply of materials. Many biomass development strategies rely on capital investments to develop new biomass utilization capacity. It can be difficult to find capital for investments when supply of raw materials is uncertain, particularly when the return on investment may be inherently low or rely on government subsidies for profitability.

There are several five- and ten-year contracts and agreements among the case studies described in this report. In reality, there are few instances in which the Forest Service or other federal entities can truly guarantee a supply of material. It is difficult for the agency to make firm commitments beyond the funds available in their current appropriation and beyond their National Environmental Policy Act (NEPA)–ready acres. The agency cannot know what next year's budget will look like or if a lawsuit could enjoin future planning and implementation. Moreover, obligating the cancellation ceiling for a firm, ten-year contract may be cost prohibitive.

In all of the cases described here, the Forest Service and BLM have not entered into firm, ten-year commitments to purchase services or sell material. Instead, they have entered into contracts and agreements that allow them to acquire future stewardship services. In two instances, the Forest Service used IDIQ contracts. In those cases, the Forest Service has some minimum obligations to purchase services, but future task orders depend on available funds and NEPA-ready projects as well as the priorities of the national forest. Similarly, the stewardship agreements create master agreements with potential subsequent amendments for future work as NEPA documentation is completed and funds become available.

In many of these cases, robust collaboratives have helped build social agreement and political support for restoration activities, which, in turn, appears to contribute to a consistent supply of work opportunities. For example, in the case of the Sustained Yield Restoration Stewardship project on the Fremont-Winema, project partners preceded the stewardship contract with a memorandum of understanding (MOU) between the Forest Service and the Collins Company wherein each entity committed in principle to annual targets for how many acres each entity will treat. This may provide supply for biomass investors. While the MOU is nonbinding, it does set goals and provide some accountability for accomplishments as part of the collaborative process. Finally, in the cases of the stewardship agreements, project partners are bringing financial resources to the effort. This reduces costs for the national forest, making it appealing for the national forest to invest in these projects.

Conclusion

Although a number of national forests have made stewardship contracting a centerpiece of their restoration strategies, it remains a new and rapidly evolving set of tools that federal agencies and their partners are still discovering how to use. Because of the flexibility and diversity of stewardship-contracting approaches, there are a large number of detailed decisions to make about contract form and structure in order to develop an implementation program that can help achieve local goals. We have sought to bring forward these decision points and provide some examples and lessons from national forests that have been through the process.

One of the important lessons we have observed in our study of stewardship contracting is the need to view it as means of creating biomass supply availability, albeit often without solid guarantees of wood supply or work opportunities.⁵ People interested in forest restoration should realize that by combining timber-sale and servicecontracting authorities, stewardship contracting allows for the removal of material that cannot otherwise pay its way out of the woods. Moreover, it allows for the treatment of stands that include both commercially valuable and noncommercially valuable materials. This authority creates supply availability in ways that traditional timber sales and service contracts cannot. For many places, the availability of this sort of woody biomass is a significant change. In some cases, such as the Fremont National Forest, stewardship contracting has created significant new supplies of saw and nonsaw logs in a place that only had removal of fire salvage harvested for years. Restoration thinning was largely accomplished through pile and burning.

Yet supply availability is not the same as a firm guarantee. The Fremont's ten-year contract creates no guarantee. Neither do the ten-year agreements discussed in the report. This brings us to our next point. It is extremely important to conduct a workforce and market assessment before deciding which combination of stewardship-contracting tools will work best in a given situation. Such an assessment will dispel assumptions and remove a lot of the guesswork that will otherwise inevitably be part of the stewardship-contracting decision-making process. Moreover, it will help overcome concerns about availability and guarantees. Finally, it is always important to remember that stewardship contracting is a tool and is as good as the people who wield it effectively.

Resources

Becker, D., D. Abbas, K. E. Halvorsen, P. J. Jakes, S. McCaffrey, and C. Moseley. *Conventional Wisdoms of Woody Biomass Utilization*. Available online at www. forestguild.org/biomass/resources/ISE_Biomass.pdf.

Federal Business Opportunities. *Alder Fuel Reduction Stewardship Project*. Available online at https://www.fbo.gov/?s=opportunity&mode=form&id=d544738f8c7e4 90a32eb019c55790ae1&tab=core&_cview=1.

____. Collaborative Restoration Stewardship Contract for Malheur, Umatilla, Wallowa, Whitman, and Ochoco National Forests. Available online at https://www.fbo.gov/index?s=opportunity&mode=for m&tab=core&id=503bdc3590b0264d739e0d9a78f1c0 9c&_cview=0.

____. Sustained Yield Restoration Stewardship Project. Available online at https://www.fbo.gov/index?s=opport unity&mode=form&tab=core&id=6fd5f33a38337c287866 e0ade6b2c32d&_cview=1.

Government Accountability Office. 2008. Federal Land Management: Use of Stewardship Contracting Is Increasing, but Agencies Could Benefit from Better Data and Contracting Strategies. GAO-08-23. Washington, D.C.: Government Accountability Office.

____. 2004. Federal Land Management: Additional Guidance on Community Involvement Could Enhance Effectiveness of Stewardship Contracting. GAO-04-652. Washington, D.C. General Accounting Office.

Lake County Resource Initiative, Inc. Available online at www.lcri.org.

Lomakatsi Restoration Project and the Siskiyou Project. 2009. *Restoring Sustainability: 2009 Annual Report of the Wild Rivers Master Stewardship Agreement*. Available online at www.siskiyou.org/c-far/MSAAR2010.pdf.

Moseley, C. 2010. Strategies for Supporting Front Line Collaboration: Lessons from Stewardship Contracting. IBM Center for the Business of Government. http://www. businessofgovernment.org/report/strategies-supportingfrontline-collaboration-lessons-stewardship-contracting

Pinchot Institute for Conservation. *Stewardship Contracting on Federal Lands*. Available online at www.pinchot. org/current_projects/sustainable/contracting.

Red Lodge Clearing House. *Lakeview Stewardship Group, July 2006*. Available online at original.rlch.org/ stories/lakeview.html.

Sustainable Northwest. *Stewardship Contracting and Collaboration: Best Practices Guidebook*. Available online at www.sustainablenorthwest.org/resources/publications/StewConCollabBPG.pdf.

USDA Forest Service. *Stewardship Contracting*. Available online at www.fs.fed.us/forestmanagement/projects/ stewardship/index.shtml.

USDA Forest Service, Pacific Northwest Region. *Stew-ardship*. Available online at www.fs.fed.us/r6/nr/fp/FP-WebPage/FP70104A/Stewardship.htm.

USDA Forest Service, Fremont-Winema National Forests. *Sustained Yield Unit Stewardship Contracting Proposal.* Available online at www.fs.fed.us/r6/nr/fp/Stewardship/ sp_fre-win_lakeview_syu.doc.

Endnotes

- 1 Adopted from Cassandra Moseley, "Procurement and Timber Sale Definitions," Ecosystem Workforce Program, University of Oregon, 2003, ewp. uoregon.edu/pdfs/resources/contrdefns3.pdf, and Moseley, Cassandra. Strategies for Supporting Front Line Collaboration: Lessons from Stewardship Contracting. IBM Center for the Business of Government, 2010. http://www.businessofgovernment.org/report/strategies-supporting-frontlinecollaboration-lessons-stewardship-contracting
- 2 Lomakatsi Restoration Project and the Siskiyou Project. 2009. Restoring Sustainability: 2009 Annual Report of the Wild Rivers Master Stewardship Agreement. www.siskiyou.org/c-far/MSAAR2010.pdf.
- 3 Dollar figures are from www.usaspending.gov.
- 4 See also, Becker, Dennis, Dalia Abbas, Kathleen E. Halvorsen, Pamela J. Jakes, Sarah McCaffrey, Cassandra Moseley, Conventional Wisdoms of Woody Biomass Utilization www.forestguild.org/biomass/resources/ISE_Biomass.pdf

5 Ibid.

