

Best Value Contracting for Wood Based Watershed Improvement Materials White Paper – Summer 2004

Forest Concepts, LLC is a federal contractor that is developing value-added uses for small diameter timber. Our objective is to create new jobs in rural communities through the manufacture and/or use of forest biomass that is a co-product of forest health and fuel reduction thinning programs.



Figure 1. Forest managers, communities and environmental specialists are co-dependent on the forest resources. Completing the watershed cycle uses wood from the forest and labor from the community to create functional fencing, habitat and other products for use back on the landscape, thus completing the triangle.

It only makes sense that public landowner agencies and their community partners cooperate to complete the watershed cycle, or forest products triangle. If we determine efficient ways to capture the smallwood from the thinning operations, process it into value-added products in the local communities, and purchase those materials for use on projects associated with the public lands, then everyone will win. The “system costs” should be reduced. The societal costs associated with unemployment and low economic activity should be positively impacted and the environmental values increased, with total benefits exceeding total costs. The win-win-win potential is readily apparent to citizens, agency staff and political leaders at all levels. The value is equally compelling in the case of forested communities that are preventing wildfires and those that are recovering from the ecological and economic consequences of wildfire.

Communities near to or surrounded by public land traditionally achieve economic vitality from extraction of public timber that could be converted to commodity wood products which are subsequently shipped to distant markets. Today, both the timber supply and the markets have shifted to the disadvantage of rural communities. Large industrial employers have moved out of many towns, replaced by an entrepreneurial movement that is trying to bootstrap new business. Small entrepreneurial firms, most with fewer than ten employees, depend on local customers for their base income. Over a decade or more the growth of the small firms will shift to more distant markets as business reputation and capacity increase.

Rural public landowners and agencies recognize the potential positive impact if they purchased more wood products made from local timber and containing more local labor content. Agency buyers and contract approvers are seeking guidance on two questions:

1. What is an appropriate premium to place on bids from suppliers who can certify that their products are manufactured from forest thinnings and that the predominant labor content is from local communities?
2. What policies are available to enable procurement preference to justify purchase of products that are manufactured from forest thinnings predominantly using labor from local communities?

Best Value Contracting (aka contracting by negotiation)

The Federal Acquisition Regulations include a number of authorities that enable or encourage procurement of products and services that are environmentally friendly or help achieve other public policy objectives. Some of the most common FARs include:

- Part 15 – Contracting by negotiation
- Subpart 19.5 – Set-asides for small business
- Subpart 23.2 – Preference for products that conserve energy
 - Reduced delivery fuel use due to local manufacture, roundwood vs. dimension lumber, minimally processed wood products.
- Subpart 23.4 – Use of recovered materials
 - Coproducts of forest management, forest and mill residuals, underutilized species
- Subpart 23.7 – Contracting for environmentally preferable products and services
 - Ecologically compatible forest biomass materials vs. agricultural residue based materials
- Clause 52-225-5 Buy American preference for construction materials
- FAR 8.404(b)(2)
 - When selecting the **supply** or service representing the best value, the ordering office may consider-
 - (i) **Special features of the supply or service required for effective program performance**
 - (ii) Trade-in considerations;
 - (iii) Probable life of the item selected as compared with that of a comparable item;
 - (iv) Warranty considerations;
 - (v) Maintenance availability;
 - (vi) Past performance; and
 - (vii) **Environmental and energy efficiency considerations.**

Section 1109 of the Healthy Forests Restoration Act specifically encourages use of best-value contracting, and adds local community benefits to the list of factors to consider. In the context of completing the watershed cycle, the authorization may be a useful tool for giving preference to post-fire rehabilitation materials that contain wood from forest thinning programs and are manufactured in local communities with local labor.

SEC. 1109. BEST-VALUE CONTRACTING.

To conduct a project under this Act, the Secretaries may use best value contracting criteria in awarding contracts and agreements. Best-value contracting criteria includes--

- (1) the ability of the contractor to meet the ecological goals of the projects;*
- (2) the use of equipment that will minimize or eliminate impacts on soils; and*
- (3) benefits to local communities such as ensuring that the byproducts are processed locally.*

Wood-based Supplies that are amenable to Best-Value procurement

- Hydraulic mulch – hydromulch, bonded fiber matrix, etc.
- Rolled erosion control blankets - ECBs
- Log erosion barriers
- Wattles – wood-strand, excelsior, wood shaving wattles
- Manufactured log erosion barriers – FlowCheck™, etc.
- Fencing – replacement and/or reconstruction of boundary, sensitive area, riparian, allotment, etc.
- Landscape structures - Information boards, signage, kiosks, shelters, etc.
- Benches and tables

In order to fairly evaluate alternative suppliers and materials under best-value procurement, we need to define appropriate criteria. The following list has been suggested as the primary vendor-independent factors to consider when evaluating best-value proposals. One effective method is to first score the relative importance of each item to establish a weighting factor for subsequent calculations. The evaluation team would mark each factor with an importance score of 1 to 5 with 1 being unimportant and 5 being highly important.

- ___ Price
- ___ Wood Content: Percentage of the product that is composed of wood
- ___ HFI/NFP Source: Percentage of the product that is source-identified as wood from Fire Plan and Healthy Forests thinning units
- ___ Ecological Consequences: The relative ecological impact of materials during use and at end of life
- ___ Life-cycle Costs: The costs of use including risk of weeds, cost of removal and disposal, etc.
- ___ Recycled Content: Percentage of the product that is recycled content
- ___ Bio-based Material Certification: Whether the product is listed on the USDA 2002 Farm Bill bio-based materials program
- ___ Local Source: Whether the product is manufactured or service provided by a business located within the geographic region where it is to be used
- ___ Small Business: Whether the proposing firm is a small business entity
- ___ Other Preference Program: Whether the proposing firm is registered under other disadvantaged preference programs including 8A, hub zone, minority owned, woman owned, etc.
- ___ Other: _____

The next step is to compare pairs of proposals (or materials) with a rating table like the one below. Given what you know about the materials, manufacturers, local suppliers, etc. you would compare the by allocating 10 points between the items for each factor (column) with more points to the preferable product. An example is provided.

		Price	Wood Content	HFI/NFP Source	Ecological Consequence	Life-cycle costs	Recycled Content	Bio-based Material Cert.	Local Source	Small Business		
Sa	Park Benches – Galvanized Steel	6	0	0	3	7	7	0	5	2		
Sb	Park Benches – Rustic Furniture	4	10	10	7	3	3	10	5	8		
1a	Buck & Rail Wood Fence											
1b	Wire Fence & Steel Posts											
2a	Wheat/Rice Straw Mulch											
2b	Wood-strand mulch											
3a	Straw Wattles											
3b	Wood shavings & Excelsior Wattles											
4a	Log Erosion Barriers											
4b	Straw Wattles											

The final step is to apply the weighting to the comparison scores to arrive at a mathematical score for each proposed material/supply. This is most easily done in a spreadsheet. We offer an MS Excel workbook that automates the calculation of best-value scores. Contact us at jdooley@forestconcepts.com.