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AGENDA COVER MEMO

DATE: April 9, 2003

TO: Lane County Board of Commissioners

DEPT.: Public Works/Parks

PRESENTED BY: Rich Fay, Parks Manager

AGENDA ITEM TITLE: Work Session/Directing the Parks Division to Use Manual and Mechanical Means or Herbicides as Part of a Forestry Management Plan to Comply with the Forestry Practices Act at Blue Mountain Park Timber Areas.

I. MOTION

None- Work Session Only.

II. ISSUE OR PROBLEM

Shall Lane County use manual and mechanical means or herbicides on Blue Mountain Park timber area forests to control unwanted vegetation associated with reforestation efforts?

III. DISCUSSION

A. Background

Since 1986, Lane County has been harvesting timber from Blue Mountain Park. The proceeds from the harvests have been used to assist the Parks Division with capital improvements throughout the parks system. The Blue Mountain Park Timber Management Plan calls for a series of staged harvests over 20 years.

In 1994, Area 1 was planted with Douglas-fir seedlings. The Youth Services Work Crew was responsible for the planting. Approximately 6000 trees were planted on 12.5 acres. The tree planting site has been inspected by Dan Green of Woodland Management, the County's timber management consulting firm. Mr. Green has indicated that survival rate of the seedlings was very low (less than 25%) because of an abundance of competing vegetation. The vegetation (primarily salal, blackberries, vine maple, & sword fern) provides too much shade and absorbs too much water for seedling growth and survival. Lane County Parks discussed this

issue with the Board on March 10, 1999. The Board directed Parks to return to the Board with alternatives for their review.

On February 4, 2002, the Oregon Department of Forestry's Forestry Practices Forester Tom Berglund wrote to Lane County Parks Division referring to his inspection of Lane County land near Blue Mountain Park. Mr. Berglund's letter states, "without management of the grass and blackberries on the site, replanting may be necessary and achievement of the Forest Practices requirements will be in jeopardy." In response to Mr. Berglund's findings, our forestry consultant, Woodland Management, recommended that the County use limited herbicides in the planting area to minimize competition between the seedlings and the surrounding vegetation.

On August 28, 2002, I presented an agenda item to you entitled "Order/In the Matter of Authorizing the Parks Division to Use Herbicides as Part of the Reforestation Efforts on Forestlands Managed by the Division." This item included both Mr. Berglund's letter and Woodland Management's recommendations for minimizing competition between seedlings and the competing vegetation. The Board directed staff to research the feasibility of options including the use of manual and mechanical means or herbicides to control unwanted vegetation and bring the information back to the Board.

B. Analysis

The Parks Division has used herbicides on an occasion in parks to control poison oak and other noxious weeds. These occasions are rare and only considered if manual removal is impractical or too expensive. The Engineering Division selectively uses herbicides to control vegetation along the county road right of ways. The proposed use of herbicides at Blue Mountain Park is consistent with standard forest practices and with the Division's general policy of minimizing exposure to surrounding properties and park visitors.

Woodland Management is recommending that the County spray the area needed using ground-based equipment. The proposed herbicides, Oust, Accord, and Garlon, are low toxicity chemicals and are similar to those used on road rights-of-way by the Engineering Division. Hood River and Coos Counties use similar herbicides on their forests. Contract crews under general supervision of Woodland Management would apply the herbicides. A no spray buffer area around any streams, residences or school areas would be maintained as recommended by Woodland Management and determined by the Board.

In Attachment A - Options Comparisons, the costs of the various methods are displayed. The ninety- five acres of Blue Mountain Park timber areas are divided into four areas of similar characteristics. The estimated cost of spraying is $100

per acre per application using ground-based equipment. This option will require two entries, one in the first year and one in the third year. Included in the estimate of $100 per acre is mechanical and manual clearing costs for buffer zone areas. The cost is approximately $9,500 per application. Two entries will cost $19,000 to allow trees to achieve "free to grow" status and meet the requirements of the Forestry Practices Act.

Manual removal of vegetation would cost approximately $800 per acre. This figure is derived from using the Sheriff's forest work crew in a test area to determine the amount cleared in one day. The crew of 10 workers and a supervisor cleared approximately one acre in one day using hand-held power equipment and non-power trimmers. The cost of the Sheriff's forest work crew is the supervisor at $81 per hour times 10 hours per day for a total of $810 per day. There are some significant risks associated with the manual removal of this plant material. The frequency of injury for strains slips and falls and injury from the cutting tools is relatively high particularly in steep areas. These steep areas are the areas manual removal is needed.

Mechanical removal of the vegetation is based on using a front-mounted articulating brush cutter mounted on a track-driven Bobcat-like tractor. This type of rig and operator costs approximately $200 per acre. This estimate was obtained from a local contractor who has done similar work. The tractor is somewhat limited in it's ability to mow the steep areas. Therefore, we have estimated a percentage of each area that can be mowed mechanically and the remainder would need to be done manually.

There are four areas of the Blue Mountain timberlands to be managed. As stated, each area varies in the percentage that can be done by mechanical or manual means. The extent of each area is indicated on Attachment A. The number of entries required for manual or mechanical means is once per year for 4 or 5 years. Five entries using a combination of mechanical and manual means will result in approximately a total cost of $197,000.

C. Alternatives/Options

1. Direct staff to use herbicides and a combination of manual and mechanical means to remove unwanted vegetation.

2. Direct staff to use a combination of manual and mechanical to remove unwanted vegetation

3. Direct staff to explore the possibility of selling or trading the 95 acres of timberland to relieve the County of the obligation of maintaining the lands.

D. Recommendation

Staff recommends the alternative that calls for herbicide use. We believe that alternative to likely be more effective in allowing seedlings to become fully established. Also, since the Parks Division has only limited financial means, the substantially lower cost of that alternative is most attractive.

E. Timing

Depends on Board direction.

IV. IMPLEMENTATION/FOLLOW-UP

Survival of the seedlings will be reported back to the Board within 3 years with or without the use of herbicides as a vegetation management tool.

V. ATTACHMENT

Attachment A - Blue Mountain Brush Removal Options Comparisons

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Area	Mechanical- Manual $200/acre - $800 acre	Herbicide $100/acre
Area A- 35 acres- 50% Mechanical-50% Manual	$17,500	$3,500
Area B- 26 acres- 80% Mechanical-20% Manual	$8,320	$2,600
Area C-15 acres- 50% Mechanical-50% Manual	$7,500	$ 1,500
Area D-19 acres- 80% Mechanical-20% Manual	$6,080	$1,900
One entry total	$39,400	$9,500
Total entries: 5 -Mech- Man; 2 Herbicide	4 entries-$157,600 5 entries-$197,000	$19,000