

PASSED

IN THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

ORDER NO.
08-6-18-1

(IN THE MATTER OF AMENDING THE LANE
(COUNTY INTEGRATED ROADSIDE VEGETATION
(MANAGEMENT PROGRAM ANNUAL REPORT FOR
(2007 FOR THE JANUARY 02, 2008 THRU
(DECEMBER 31, 2008 REPORTING PERIOD

WHEREAS, The Board of Health approved a revised Annual Report for the 2007 reporting period with items deleted or postponed regarding proposed herbicide applications and equipment purchases until conclusion of a 60 day public comment period and subsequent report back by Public Works staff.

WHEREAS, The 60 day public comment period concluded on March 10th, 2008 and all public testimony has been recorded and provided to the Board of Health and the public on the Lane County Vegetation website which can be viewed at the link listed below.
www.lanecounty.org/Roads/Vegetation/Vegetation_Management.htm

WHEREAS, on this date the Board of Health has deliberated, considered and balanced various factors including; 1) safety concerns for pedestrians, bicycle and automobile users; 2) various environmental concerns for humans and wildlife; 3) costs of differing maintenance methodologies; 4) available County resources; and 5) impacts on nearby properties; and finds that mechanical/manual methods of roadside vegetation control will eliminate the use of herbicides for an indefinite period of time while providing for generally safe, effective, and economical maintenance of County roads, And

WHEREAS, The Board of Health has directed Public Works to continue indefinitely, the moratorium on the use of herbicides for roadside vegetation management within road rights-of-way, And

WHEREAS, The Board of Health finds that the Department of Public Works should fill two additional full time FTE Road Maintenance positions to assist in mechanical/manual maintenance of problematic roadside vegetation within Lane County road rights-of-way **NOW THEREFORE, IT IS HEREBY**

ORDERED That the Department of Public Works maintain the existing moratorium on the use of herbicides for roadside vegetation management within Lane County rights-of-way for an indefinite time period, and hire two additional full time FTE Road Maintenance positions to assist with mechanical/manual control of problematic roadside vegetation, and provide direction to the Board of Health on how to fund these positions.

DATED this 18th day of June, 2008



Chair
Lane County Board of Commissioners

APPROVED AS TO FORM

Date 6-18-08 lane county



OFFICE OF LEGAL COUNSEL

Attachment 1

**ANNUAL REPORT
ROADSIDE VEGETATION MANAGEMENT AND LAST RESORT HERBICIDE USE
POLICY**

**Lane County Integrated Roadside Vegetation Management Program
(2007)**

VMAC Vote December 12, 2007 was 6 in favor and 2 opposed.

Prepared for:

LANE COUNTY BOARD OF HEALTH

Prepared by:

**Lane County Department of Public Works
Engineering Division, Road Maintenance Department**

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Contact: Orin C. Schumacher, Vegetation Management Coordinator

January 2, 2008

TABLE OF CONTENTS

| | |
|---|-----|
| I. HERBICIDE USE..... | 2 |
| II. PROPOSED NON-LISTED HERBICIDE USE..... | 2 |
| III. PROPOSED HERBICIDES USES..... | 3-4 |
| IV. COST OF HERBICIDE APPLICATION..... | 4 |
| V. SUCCESSFUL NON-HERBICIDE CONTROL METHODS..... | 5-6 |
| VI. UNSUCCESSFUL NON-HERBICIDE CONTROL METHODS..... | 6-7 |
| VII. PLANNED NON-HERBICIDE CONTROL METHODS..... | 8 |
| VIII. HERBICIDE USE REDUCTION..... | 9 |
| IX. REPORT AVAILABILITY..... | 10 |

LIST OF TABLES

| | |
|--|-----|
| Table 1: Concentrations and amounts of herbicides applied from January 31, 2006 to December 05, 2007..... | 2 |
| Table 2: Current Herbicide Inventory..... | 4 |
| Table 3: Routine Maintenance Activities – Non-Herbicide..... | 4 |
| Table 4: Successful Non-Herbicide Control Methods..... | 5-6 |
| Table 5: Unsuccessful Non-Herbicide Control Methods..... | 6-7 |
| Table 6: Project in Review..... | 6 |
| Table 7: Annual Roadside Miles Treated With Herbicide From September 2000 thru August 2003..... | 9 |

Lane County Department of Public Works has prepared this annual report to comply with the requirements of Lane Code 15.530

I. Herbicide Use.

Table 1, shows the quantities and concentrations of each herbicide product applied for roadside vegetation maintenance during the time period from January 31, 2006 to December 05, 2007. The Board of Health adopted by resolution a permitted products list for use by the Department of Public Works on April 26, 2006, permitting the use of approved herbicides for control of roadside vegetation in accordance with the Last Resort Policy.

With adoption of the Permitted Products List and completion of the "Rights-of-Way" Management Prescription Plan and Action Thresholds, the Department of Public Works analyzed the current herbicide program and looked into necessary adjustments needed to satisfy requirements of the Last Resort Policy and to make the program as safe as possible prior to initiating any herbicide applications. For this reporting period Public Works has finalized our approach to work in accordance with Last Resort Policy and have begun planning herbicide applications in accordance with the policy for the current annual reporting period.

Table 1: Concentrations and amounts of herbicide product applied from January 31, 2006 to December 05, 2007 for roadside vegetation management.

| <u>Product Name</u> | <u>Concentration</u> | <u>Amount Applied</u> |
|---------------------|----------------------|-----------------------|
| Aquamaster | N/A | 0 quantity |
| Garlon 3A | N/A | 0 quantity |
| Habitat | N/A | 0 quantity |
| Milestone | N/A | 0 quantity |
| Oust Extra | N/A | 0 quantity |

II. Proposed Non-Listed Herbicide Use.

No herbicides, other than those listed on the Permitted Products List (Table 1), are proposed for use from December 5, 2007 thru December 31, 2008. During this reporting period, use of herbicide products not on the Permitted Products List could only occur by specific authorization of the Board of Health in accordance with Lane Code 15.510(3)(d).

SECTION DELETED FROM APPROVED ANNUAL REPORT

III. Proposed Herbicide Uses.

Herbicide use will occur if needed, and as a last resort in accordance with the Last Resort Policy, Ordinance 12-03, along with following guidelines detailed in the “Rights-of-Way” Management Prescription Plan. Staff anticipates limited herbicide applications during the next 12-month reporting period. We have detailed our plan for the use of herbicides during this reporting period to manage roadside vegetation where we have faced limitations with other methods of control and also to manage the growing challenge and spread of noxious and invasive plant species that occur along our County roadways.

Planned herbicide use for roadside vegetation control for the reporting period December 5, 2007 thru December 31, 2008:

- **Noxious and Invasive plant control:**
Plan to use herbicides from the Permitted Products list to manage County listed noxious and invasive plant species in targeted areas to maintain public safety, preserve native plant habitats and reduce the spread of these plants along County roadways and into adjacent lands. Refer to Management Prescription plan document for guidelines and prescriptions. All herbicides will be used in the most effective method and targeted towards specific weed species during optimal control periods: *VMAC Meeting, 12-12-2007. Vote 6-2 in favor.*
- **Guardrail Maintenance:**
Plan to use herbicides from the Permitted Products List to manage roadside vegetation adjacent to guardrail safety features. This action is based upon the loss of the Sherriff's inmate work force and the restrictions in staffing to complete this work. We also do not have mechanical equipment in our current fleet that is adequate to maintain vegetation around guardrails to maintain proper sight distance, visibility and road encroachment concerns for the safety of the traveling public, bicyclists and pedestrians. If Sherriff's inmate work force or additional staff can be brought back sufficient to manage County guardrail systems manually, herbicide use will be halted for guardrail vegetation control. *VMAC Meeting 12-12-2007. Vote 6-2 in favor.*
- **Partnerships:**
Use limited herbicides from the Permitted Products List to work in partnership efforts with other agencies, private sector groups and other cooperatives to preserve native habitats, work in restoration partnerships and to share financial resources in vegetation control efforts within Lane County and encourage other agencies to use an integrated vegetation management approach in their efforts. *VMAC Meeting 12-12-2007. Vote 6-2 in favor.*

- **Road Repair Projects:** Use limited herbicides from the Permitted Products List as a Last Resort to manage specific road repairs. This proposed herbicide use refers specifically to Lane County's crack seal program when needed for removing vegetation that grows within the road surface prior to repairing the road surface. *VMAC Meeting 12-12-2007. Vote 6-2 in favor.*

IV. Cost of Herbicide Application.

Lane County has incurred very small costs associated with proposed herbicide applications for this reporting period. Lane County Public Works transferred the previous, non-approved herbicide inventory that existed prior to adoption of the Last Resort Policy in July, 2007. Lane County distributed a portion of our herbicide inventory to our previous supplier to offset costs associated with the purchase of herbicides included on our current Permitted Products List. The included table details the cost of purchasing herbicides listed on the Permitted Products List and rebates we received from the distribution of the old herbicide inventory.

Table 2: Current Herbicide Inventory – Associated Costs.

| Product Name | Quantity | Cost |
|--------------|--------------|------------|
| Aquamaster | 25 gallons | \$968.75 |
| Garlon 3A | 17.5 gallons | \$914.70 |
| Habitat | 10 gallons | \$2,450.00 |
| Milestone | 10 quarts | \$800.00 |
| Oust Extra | 128 ounces | \$896.00 |
| Credits | 120 gallons | \$5,145.00 |

Total Cost: \$884.45

Proposed Changes to “No Spray Area” program to reduce costs associated with the program.

Lane County Department of Public Works has maintained a “No Spray Area” (NSA's) program available to public individuals that desire to have no herbicide applications on county roads that border their property. Lane County Department of Public Works has maintained an average of 878 “No Spray Areas” since the inception of the program in 1990. The current NSA program is a field based system, in that NSA applicants are mailed ribbons to mark the boundary of their desired no spray buffer, and then County staff members go out and measure those marked areas and place metal posts at the start and end of each designated “No Spray Area”. We have continued this marking system since the inception of the program, and have maintained signs and records for each buffer area at a high cost to the County, as sign placement and maintenance costs are expensive, the metal signs impede roadside maintenance activities, and there is also a high rate of vandalism of the signs.

Lane County is looking to modify our current marking system from that of field based marking to integrating it into our Geographical Information Systems database. By converting it to GIS we will eliminate the need to perform sign installation and maintenance, reduce conflicts with road maintenance activities and improve the mapping and accuracy of our No Spray Program. This is one of the improvements we are making to strengthen the protections for the public and sensitive habitat areas as we move forward in implementing the Last Resort Policy and our proposed herbicide applications.

V. Successful Non-Herbicide Control Methods.

Roadside vegetation management accomplishments that occurred during the reporting period January 31, 2006 to December 05, 2007 included routine maintenance activities and testing of non-herbicide equipment and management techniques.

Table 3: Routine Maintenance Activities – Non-herbicide

| Activity Name | Accomplishments (roadside miles) |
|-----------------------------------|---|
| • Mechanical Brushing activities: | 218 RSM |
| • Safety Strip Mowing activities: | 2,302 RSM |
| • Full width Mowing activities: | 1,812 RSM |
| • Top-Trimming Activities: | 102 RSM |

Numerous non-herbicide projects and strategies were implemented during this reporting period outside the scope of routine vegetation management activities that were considered successful or showed positive results.

Table 4: Successful Non-Herbicide Control Methods

| Control Method | Project(s) Attempted | Results | Number of Projects |
|-----------------------------|---|--|---------------------------|
| Seeding Projects | Native seeding projects occurred on West Boundary road, Sweet Creek road, Seavey Loop road, Cantrell road, 30 th Avenue. | This method proved to be successful by promoting lower-maintenance vegetation, reducing future management costs and reducing the need to manage those areas with herbicides in the future. | 5 |
| Restoration Projects | Native shrub planting and restoration work on Bernhardt Heights, Jasper road, Jasper road Retention Area, Cantrell road, Canary road and other small project areas. | This method proved to be successful by promoting lower-maintenance vegetation, reducing future management costs and limiting maintenance needs | 8 |
| Outreach/Education Projects | These projects involved working with other agencies, watershed groups and | This method proved to be successful by sharing | 12 |

| | | | |
|--|--|--|----|
| | the public to educate and cooperate on projects to jointly manage vegetation management concerns. | expenses, working in multiple jurisdictions to resolve management issues, and reducing future herbicide applications | |
| Public Safety Projects | These projects included working with the public to resolve safety concerns related to vegetation on County roadways through non-herbicide methods. | This method proved to be successful in reducing herbicide use by working with property owners to resolve vegetation issues on County roadways. | 24 |
| Manual Control / Vegetation Removal | Purple Loosestrife removal on Chambers road | This method showed positive results in reducing establishment and spread of Loosestrife on Chambers road, small site control | 1 |
| Vehicle Washing Stations - Containment | This method was employed to reduce the spread of un-desirable vegetation from one project site to another, by cleaning vehicles of potential seed and vegetative matter. | This method showed positive results as a low cost, minimal effort approach to limit the spread of non-desirable, costly to manage vegetation. | 1 |

VI. Unsuccessful Non-Herbicide Control Methods.

The following non-herbicide vegetation control methods were found to be ineffective during the August 31, 2005 to December 31, 2006 reporting period.

Table 5: Unsuccessful Non- Herbicide Control Methods

| Control Method | Project(s) attempted | Results | Number of Projects |
|---|---|---|--------------------|
| Manual Control Efforts | Manual removal of Knotweed on River Road and other County owned lands. | This method proved to be unsuccessful by only managing above ground vegetation with no impacts to seed bank, and also had a low rate of production. | 5 |
| Manual Control Efforts | Manual removal of Meadow Knapweed on Seavey Loop Road, Goodpasture Road, Clear Lake Road. | This method proved to be unsuccessful by only managing above ground vegetation with no impacts to seed bank, and also had a low rate of production. | 3 |
| Mechanical Guardrail vegetation control | Fox Hollow road was a test site along with delta highway. We also employ this method county wide during routine | Mechanical operations limited by current fleet equipment, cannot mow | 50+ |

| | | | |
|-------------------|---|--|---|
| | maintenance. | vegetation near guardrails for good control | |
| Rotary Mower Demo | Delta Highway and the delta bowls along Delta Highway | Attempted to use rotary mower to achieve more efficient vegetation control, proved to be in-efficient and a safety risk. | 5 |

Table 6: Projects in Review – Monitoring for success of failure of method / Technique.

| Control Method | Project(s) attempted | Results | Number of Projects |
|---|--|--|---------------------------|
| Bio-Swale Development and Establishment | Bio-Swales being installed on Jasper Road, Airport road, Cantrell Road. | Very recent projects, with plants in the early development stage. Showing positive results but will need continued monitoring. | 3 |
| Biological Vegetation Control | 13 release sites of Scotch Broom Seed Weevil on County roadways | Un-Known, will take years of monitoring to see if Bio-release has affect on limiting population growth. | 13 |
| Myco-Tech Paste | Method was never employed but investigated as an alternative to herbicide applications to control stump sprouting vegetation. | This biological control agent has been used in Canada with good success, but has not been licensed in the U.S. | 0 |
| Adopt-A-Vegetation Area | Developing concept in working with VMAC to develop a program to involve interested public in non-herbicide vegetation control projects | We are working to develop this potential program | 0 |
| Vegetation Control Fabric | Control un-wanted vegetation by applying shad fabric over areas on Shoreview Road. | In Review, project sites were established in November 2007. | 2 |

VII. Planned Non-Herbicide Control Methods.

For the next reporting period Lane County Department of Public Works will continue to utilize mechanical tools as the primary method to manage roadside vegetation concerns. We will continue to investigate new tools that become available over the next 12 month period, and continue with testing and evaluation other non-herbicide control methods. Until we have an established budget for this next reporting period, these planned projects are tentative, and prioritization of management needs will determine what projects occur over the next 12 month reporting period.

Planned Routine Non-Herbicide Control Methods:

- **Mechanical Control:** This includes using brush mowers, grass mowers and the aerial lift truck to manage roadside vegetation.
- **Manual Control:** This includes using County forces to manage roadside vegetation using manual tools and methods.
- **Tiger brush / grass mower combo equipment:** This is a new piece of equipment ordered for the 2008 fleet to assist with mowing both woody vegetation and groundcover vegetation in a more efficient manner. This would allow for the use of our equipment year round, when previously we only used this equipment for half of the year.

Non-Routine, Non-Herbicide Control Methods:

- **Biological Control:** This method would employ biological control agents to manage weed populations that have established in areas within Lane County rights-of-way. This would be a partnership between Lane County and the Oregon Department of Agriculture.
- **Adopt-a-Weed:** This is a concept that is developing in conjunction with the Vegetation Management Advisory Committee, based upon the concept that private individuals and companies can adopt a section of road, in which they take the responsibility to manage the vegetation for that adopted section without the use of herbicides.
- **Myco-Remediation:** This is a project that was planned for last year but was not completed. It would involve mulching disturbed areas with wood chips inoculated

with fungi to promote good soil conditions and make the area suitable for the establishment of native, preferred vegetation.

VIII. Herbicide Use Reduction:

Lane Code 15.510(3)(e) states;

Within one year after the effective date of this chapter, and for each consecutive year, Lane County will aspire to reduce its herbicide use along county roadsides by at least 5%. Herbicide use reduction will be measured by the percent of roadside miles treated with herbicides as compared to the previous three-year average.

Because the County Engineer imposed a moratorium on the use of herbicides in August 2003, no herbicides have been applied for roadside vegetation control since that time. As a result, the three-year average baseline for the next reporting period is September 1, 2000 thru August 31, 2003 as these were the last full years of herbicide use.

Table 7. Annual roadside miles treated with herbicides from Sept. 2000 thru August 2007.

| <u>Year</u> | <u>Roadside Miles Treated</u> | <u>Total Roadside Miles</u> | <u>% Miles Treated</u> |
|---------------|-------------------------------|-----------------------------|------------------------|
| 2000 – 2001 | 597 | 2,870 | 20.8 % |
| 2001 – 2002 | 300 | 2,870 | 10.4 % |
| 2002 – 2003 | 385 | 2,870 | 13.4 % |
| Ave. per year | 427 | 2,870 | 14.9 % |
| <u>Year</u> | <u>Roadside Miles Treated</u> | <u>Total Roadside Miles</u> | <u>% Miles Treated</u> |
| 2003-2004 | 0 | 2,870 | 0.0% |
| 2004-2005 | 0 | 2,870 | 0.0% |
| 2005-2006 | 0 | 2,870 | 0.0% |
| 2006-2007 | 0 | 2,870 | 0.0% |

The aspired 5% reduction during the December 5, 2007 thru December 31, 2008 reporting period will result in herbicides being applied to no more than 9.9 % of County roadside miles (284).

Public Works staff believes tracking herbicide use reduction by the amount of product(s) used as compared to the previous three-year average would more accurately reflect the amount of herbicides being applied to County roadsides. For any given roadside mile, the type, amount and concentration of herbicide could be very different depending on the application type and method used. By tracking the amount of product by fluid or solid weight prior to mixing with surfactants or other inert additives, a more accurate accounting and comparison from year to year can be made.

SECTION POSTPONED UNTIL FURTHER ORDERED

Herbicide Spray Truck:

During the January 3rd, 2007 Board meeting there was discussion between Commissioners and County Vegetation staff regarding sale of the County herbicide spray truck. Public Works vegetation staff agrees with the concept of selling our current spray truck, as it is no longer compatible with proposed herbicide applications for roadside vegetation management in Lane County. We are proposing that we replace the current spray truck with a smaller spray system that has been developed for guardrail and invasive plant species applications through the use of wand systems, injection applicators and one boom applicator for targeted guardrail applications. This new system would fit into a 1 ton truck and would be removable to allow for cost savings and multiple uses of our fleet, in replacement of a dedicated spray truck.

- Spray Truck Purchase 1990. Total Cost \$61,313.00
- Current Sale Value 2007. Estimated Value by fleet department \$15,000 - \$20,000
- New Spray Equipment Cost 2007. Estimated cost of complete new system, with GPS mapping system, on-board monitoring computer and all spray equipment \$18,000 – \$25,000

IX. Report Availability:

Copies of this report are available at the Lane County Department of Public Works offices at 3040 N. Delta Highway, Eugene, Oregon, 97408-1696. The report is also available for viewing, download, and printing from the Lane County website: <http://www.lanecounty.org/RoadMaint/LastResort.htm>

Attachment 2

Cost Report

Additional costs associated with mechanical and manual control of roadside vegetation at guardrail locations within Lane County rights-of-way. This cost estimate also includes costs associated with managing Noxious and Invasive plant species within County rights-of-way without the use of herbicides.

Staffing requirements:

- Estimated that it would require two full-time road Maintenance employees, at the Road Maintenance 2 classification level to safely maintain vegetation for Lane County's estimated 80 roadside miles of guardrail.

Estimated Staffing Costs per Fiscal Year:

- To employ two additional Road Maintenance 2 classified employees with Salary and Benefits included.
- **Total Staffing Cost Estimate \$113,000 per fiscal year.**

Equipment needs:

- Lane County currently has one new mower during the months of November through March to assist in managing vegetation at guardrail locations. It is not anticipated that we will require any additional large tractor mowers to manage vegetation issues around guardrails. Public Works would need to purchase smaller push type mowers and hand equipment to manage guardrail vegetation. The need for one additional passenger truck and trailer is likely to haul equipment to project areas and maintain adequate fire support during maintenance activities.
- Landscaped Equipment: Estimated Cost \$10,000
(Includes utility trailer, weed eaters, blades, safety gear, hedgers and other small misc. equipment.)
- **Total Equipment Cost Estimate \$10,000**