

Bd. of Health
W. 3.a.

Memorandum Date:
Order Date:

TO: Board of Health

DEPARTMENT: Public Works

PRESENTED BY: Orin Schumacher, Vegetation Management Coordinator

AGENDA ITEM TITLE: ORDER/IN THE MATTER OF APPROVING THE LANE COUNTY INTEGRATED ROADSIDE VEGETATION MANAGEMENT PROGRAM ANNUAL REPORT FOR 2007. FOR THE JANUARY 2, 2008 THRU DECEMBER 31, 2008 REPORTING PERIOD

I. MOTION

Move approval of the 2007 Annual Report for the January 2, 2008 thru December 31, 2008 reporting period.

II. AGENDA ITEM SUMMARY

The Board is being asked to approve the 2008 Annual Report in following with reporting requirements of Lane Code 15.530 Last Resort Policy, Ordinance 12-03.

III. BACKGROUND / IMPLICATIONS OF ACTION

A. Board Action and Other History

The Annual Report for (2007) was presented to the Vegetation Management Advisory Committee on November 14, 2007 as required by the Last Resort Ordinance. The Annual Report was presented to the Board of Health on December 5, 2007 and the Board directed that the Annual Report go back to the Vegetation Management Advisory Committee for further discussion. It was presented to VMAC again on December 12, 2007 and was revised. A second vote was taken and there were 6 members supporting and 2 in opposition.

B. Policy Issues

Lane Code 15.530 states; "On a yearly basis in the fall at a public meeting of the Board of Health and following a presentation to the Vegetation Management Advisory Committee, the Department of Public Works shall present an Annual Report". In accordance with the requirements of the Last Resort Policy an annual report needs to be approved by the Board of Health.

C. Board Goals

The County Strategic Plan, Part IV states in part that "Lane County Government exists to ensure the safety and well being of the people who live, work and visit our communities." The Annual Report provides information regarding planned herbicide and non-herbicide activities for the reporting period by the Department of

Public Works to manage roadside vegetation in accordance with the Last Resort Policy while maintaining a safe and efficient road system for Lane County road users.

D. Financial and/or Resource Considerations

The Road Fund is looking at reduced funding over the coming years with the potential reductions of Secure Rural Schools funding, along with resource reductions that have occurred over the last year. The Road Maintenance Division has faced the loss of the Sheriff's inmate work force that was responsible for maintaining vegetation around guardrails, landscaped areas and other vegetation within Lane County, and we have also seen reductions in county staffing during this same period. We need to look at the changing picture of how we maintain roadside vegetation within Lane County while maintaining a high level of public safety and reduce maintenance costs in regards budget and staffing concerns.

E. Analysis

The Annual Report contains proposed herbicides uses for the reporting period, and details planned non-herbicide vegetation management activities, including potential tests and evaluations of our planned activities in accordance with the Last Resort Policy. Approval of the Annual report provides the Department of Public Works with the ability to continue with the implementation and compliance of the Last Resort Policy for this reporting period.

F. Alternatives/Options

1. Approve the 2007 Annual Report as amended for the January 2, 2008 thru December 31, 2008 reporting period.
2. Make further changes to the provided Annual Report (2007) and approve the 2007 Annual Report as amended.

V. TIMING / IMPLEMENTATION

Approval of a 2007 Annual Report is required for compliance with Last Resort Policy, Lane Code 15.530 Annual Report (Reporting). Once approved Lane County Department of Public Works will continue with implementation of the Last Resort Policy for the reporting period December 5, 2007 thru December 31, 2008.

VI. RECOMMENDATION

Alternative 1

VII. FOLLOW-UP

Once approved the Roadside Vegetation Management Prescriptions and Last Resort Policy will continue to be implemented, monitored, and tracked by the Integrated Vegetation Management Coordinator and Public Works Staff. The Annual Report will be made available in hardcopy at the Public Works Offices, 3040 N. Delta Hwy, Eugene, and will be posted electronically on the Lane County website at www.lanecounty.org/RoadMaint/LastResort.htm

VII. ATTACHMENTS

Attachment 1 – Annual Report, Lane County Integrated Roadside Vegetation Management Program (2007), dated January 2, 2008.

IN THE BOARD OF COUNTY COMMISSIONERS OF LANE COUNTY, OREGON

ORDER NO.

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

WHEREAS, Lane Code 15.530 requires an Annual Report each fall to the Board of Health on roadside vegetation management efforts and compliance with the Last Resort herbicides use policy; and

WHEREAS, the Vegetation Management Advisory Committee (VMAC) considered Attachment "A" on November 14, 2007, and forwarded that to the Board of Health on December 5, 2007. The Board of Health returned the report to VMAC for additional deliberation. On December 12, 2007, VMAC met again and deliberated, considering and balancing a number of 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

WHEREAS, on this date the Board of Commissioners 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 the Roadside Vegetation Management Report will significantly restrict herbicide use while providing for generally safe, effective, and economical maintenance of County roads, and

WHEREAS, the Annual Report (Attachment A) will be made available in hardcopy at the Public Works Offices, 3040 N. Delta Hwy, Eugene, and will be posted on the Lane County website at <http://www.lanecounty.org/RoadMaint/LastResort.htm>, and

WHEREAS, the Board of County Commissioners recognizes that implementation of the report requires discretion of the Public Works Director to administer this plan in accordance with the Roads-of-Way Management Prescription Plan and Action Thresholds as presented to VMAC; **NOW THEREFORE, IT IS HEREBY**

ORDERED that the 2007 Annual Report (Attachment A) is approved for the January 02, 2008 through December 31, 2008 reporting period and that the Director of Public Works is authorized to administer the Roadside Vegetation Program consistent with the report and the implementation proposal presented to VMAC.

DATED this _____ day of _____, 2008

APPROVED AS TO FORM

Date 12-21-07 lane county



OFFICE OF LEGAL COUNSEL

Chair
Lane County Board of Commissioners

Attachment A

**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**

3040 N. Delta Highway
Eugene, OR. 97408-1696

Contact: Orin C. Schumacher, Vegetation Management Coordinator

December 5, 2007

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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.

Product Name	Concentration	Amount Applied
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).

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 Sheriff'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 Sheriff'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. 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
<i>Credits</i>	<i>120 gallons</i>	<i>\$5,145.00</i>

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 or 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.

Year	Roadside Miles Treated	Total Roadside Miles	% Miles Treated
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 %
Year	Roadside Miles Treated	Total Roadside Miles	% Miles Treated
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.

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>