

Staff Report

Origin

On April 27, 2009 Council adopted the Enhanced Pesticide Management Program (EPMP) with the following resolutions:

1. *That the staff report dated April 16, 2009 from the Director of Parks and Public Works Operations, entitled Pesticide Use Management in Richmond be received for information;*
2. *That Option 4 (as outlined in the staff report dated April 16, 2009 from the Director of Parks and Public Works Operations, entitled Pesticide Use Management in Richmond), be enacted and related policies and procedures be reviewed in one year to measure its effectiveness and improve it; and*
3. *That the timing of budgetary implications be reviewed.*

The related Pesticide Use Control Bylaw No. 8514 was subsequently adopted on October 13, 2009 with Municipal Ticketing Information provisions.

On October 15th, 2013, Council, moved and seconded *That the Enhanced portion of the Enhanced Pesticide Management Program be extended until the end of 2014.*

This report provides an update to Council on provincial action to reduce exposure to pesticides used for cosmetic purposes, provides an update on the EPMP since adoption in 2009 and presents options for moving forward.

Analysis

EPMP Program Overview

At the time of the EPMP adoption, there was significant community interest for a municipal bylaw to ban the use of pesticides for cosmetic purposes. On April 27, 2009 Council adopted Option 4, of the “Pesticide Use Management in Richmond”.

The EPMP was modeled upon reporting by the Canadian Centre for Pollution Prevention (C2P2)¹ that placed emphasis upon regulatory cosmetic pesticide bylaws that are coupled with strong education and community outreach programs. The five delivery elements of the EPMP include:

1. Education and Community Partnership;
2. Corporate Reduction;
3. Senior Government Regulation;

¹ *The Impact of By-Laws and Public Education Programs on Reducing the Cosmetic / Non-Essential, Residential Use of Pesticides: A Best Practices Review*, (2004), Canadian Centre for Pollution Prevention and Cullbridge Marketing and Communications: <http://www.c2p2online.com/documents/PesticidesBestPracticeReview-FINAL040324.pdf>

4. Pesticide Use Control Bylaw; and
5. Cost/Resource Implications.

Since 2010, the EPMP has been funded annually through the Sanitation and Recycling utility budget. The EPMP continues to be well received by the community, successfully reducing costs and risks related to this new era of pesticide and vegetation management.

Annually, a report to Council has been brought forward to provide an overview of each fiscal year of the EPMP and provide updates on the status of provincial action towards a regulation to ban the use of pesticides for cosmetic purposes. 2014 marks the fifth year of the EPMP.

Highlights of the 2014 EPMP

Attachment 1 highlights the EPMP elements since adoption in 2009. Below are the 2014 Program highlights:

- Delivered 30 Natural Lawn Care and Organic Gardening workshops as part of the Environmental Sustainability workshop series;
- Coordinated year-round programming for Natural Lawn Care and Organic Gardening with a “seed to plate” focus, increasing the local knowledge base for gardening through all four seasons;
- Developed and presented two new information sessions for newcomer invasive insects to Richmond: the European chafer beetle (community workshop) and the European fire ant (staff workshop);
- Delivered a new natural lawn care workshop entitled Fall Lawn Care;
- Delivered presentations to Professional Pest Managers of B.C. – *Challenges of Managing Invasive Species for Local Governments*, and Master Gardeners of B.C. – *European Fire Ants*, Burnaby, B.C.;
- Completed a GIS inventory and mapping for the distribution of invasive knotweeds around the Lulu Island dike perimeter (2014);
- Conducted and monitored Parrot feather control trials to determine viable containment and control options;
- Identified a new aquatic invasive plant in Richmond (Brazilian elodea) and established a provincial partnership for an early detection rapid response program;
- Community Bylaws recorded four Pesticide Use Control Bylaw related complaints. No ticketed fines have been issued; and
- Established an outreach partnership with Community Bylaws for a combined door to door Dog License canvassing and Pesticide Use Control Bylaw education program. Two staff members visited approximately 8000 homes between June 1st and August 31, 2014. The Pesticide Use Control Bylaw was discussed with approximately 25% of home owners. Approximately 1000 Pesticide pamphlets, 400 in English and 600 in Chinese, and 770 Environmental Sustainability Workshops pamphlets were distributed.

Provincial Action on Cosmetic Pesticides

The Minister of Environment is currently reviewing draft revisions to the Integrated Pest Management Act which do not result in action towards a provincial ban on the use of pesticides for cosmetic purposes. This emphasizes the value for the continuance of the EPMP in the absence of provincial action towards a cosmetic pesticide regulation.

EPMP Options for 2015

Option 1 - Continue EPMP on Temporary Basis (Recommended)

This option would maintain the annually dedicated staff resource (i.e. Temporary Full Time (TFT) Environmental Coordinator) and continue to position the City with an EPMP that takes a long term risk and cost reduction approach towards pesticide and vegetation management.

Option 1:

- Maintains the current level of service (i.e. workshops, technical support to staff & community members, best practices development & implementation, monitoring & research, liaison with industry & provincial agencies, retailer outreach, etc.).
- Continues the delivery of resources dedicated to supporting Richmond’s community such as the popular and well attended natural lawn care and organic gardening workshops.
- Deals with ongoing and burgeoning pest issues as they arise (e.g. Brazilian elodea, Japanese Knotweed, Common reed, Parrot feather, European chafer beetle and European fire ants).
- Provides flexibility to support other sustainability objectives related to outreach, public engagement and education. This includes the City’s Sustainability Framework and other Council priorities (e.g. Terra Nova, Railway Corridor, Garden City Lands, Bath Slough, etc.).

Budget impacts for Option 1 are identified below:

TFT Environmental Coordinator	\$ 94,470
Education	\$ 15,000
TFT Bylaw Enforcement Officer	\$ 43,052
TOTAL Option 1 Budget	\$ 152,522

Option 1 provides the community with a robust tool kit for responding to this new era of lawn and garden care in the absence of provincial legislation. The EPMP enables training, research, outreach and education for new approaches to landscape management and new generation pesticide practices for landscape industry practitioners and City Operations staff. Continuation of the EPMP enables a sustainable approach to pesticide management and positions the City to respond to the ecological shifts related to climate change and the associated proliferation of invasive species. Option 1 is recommended for its risk and cost reduction approach to cosmetic pesticide use and vegetation management.

Option 2 - Continue EPMP on Permanent Basis

Option 2 would require the conversion of the TFT Environmental Coordinator into a Regular Full Time position, requiring the creation of a new Position Control Compliment number. This option requires no additional costs to the current EPMP funding, as reported in Option 1 Budget Impacts. Since 2010, the EPMP has been included annually in the Sanitation and Recycling utility budget.

Option 2 allows the same provisions as cited in Option 1 on a permanent basis. In addition, this option allows greater flexibility to support other sustainability objectives that are related to outreach, public engagement and education, included within the City's Sustainability Framework and Council priorities on a permanent basis.

Option 2 is not recommended as it prolongs the temporary scope of the program that was intended for the EPMP. The EPMP was originally adopted as a temporary measure pending provincial action towards a ban on the use of pesticides for cosmetic purposes.

Option 3 - Discontinue EPMP, retain funding for Pesticide Use Control Bylaw

Option 3 will result in an overall reduction in the level of service for the EPMP while retaining the Bylaw. Option 3 includes:

- The loss of the enhanced components of the EPMP, detailed in Attachment 2, that include:
 - i) community outreach and education workshops;
 - ii) invasive species management support;
 - iii) best practices development & implementation, monitoring & research, liaison with industry & provincial agencies and retailer outreach; and
 - iv) technical support for staff and community for training and inquiries regarding weeds, pests, invasive species and pesticides.
- The retention of the Pesticide Use Control Bylaw No. 8514 as well as the technical funding of \$65,802 required to support the Bylaw as outlined in the Option 3 Budget Impacts table below.

- The reduction of budgeting in the Sanitation and Recycling utility budget from the current 2015 budget of \$152,522 to \$65,802, also identified in the table below. Option 3 Budget Impact

Option 3 Budget Impacts

Discontinued TFT Environmental Coordinator	\$ -
Discontinued Education and Community Partnerships	\$ -
TFT Bylaw Enforcement Officer	\$ 43,052
Technical Support Consultancy Services	\$ 22,750
TOTAL Option 3 Budget	\$ 65,802
TOTAL EPMP Budget Reduction	\$-86,720

In order to support ongoing compliance of the Pesticide Use Control Bylaw No. 8514, retention of the Bylaw components of the EPMP is recommended.

Option 3 does not maintain an ongoing approach towards pesticide risk reduction or vegetation management in the City. In the absence of provincial action towards a ban on the use of pesticides for cosmetic purposes, this option is not recommended. Cost and risk reductions associated with ongoing community education, research, monitoring, pesticide trials, implementation of best practices and the early detection and rapid response related to the identification of aggressive invasive species (e.g. common reed, Brazilian elodea, European chafer beetle, fire ants and giant hogweed) would not be possible through Option 3.

Option 4 - Discontinue EPMP

Option 4 would result in the discontinuance of the EPMP in its entirety. All five original delivery elements of the EPMP would be revoked (i.e. Education and Community Partnership, Corporate Reduction, Senior Government Regulation, Pesticide Use Control Bylaw, and Cost/Resource Implications).

This option would include the loss of the provisions identified in Option 3 as well as all technical and budget support for the enforcement of the Pesticide Use Control Bylaw No. 8514.

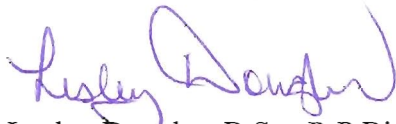
Option 4 would result in a reduction of \$152,522 from the Sanitation and Recycling utility budget. In the absence of provincial action towards a ban on the use of pesticides for cosmetic purposes, this option is not recommended. Option 4 would not enable Bylaw compliance nor address burgeoning issues related to this new era of non-traditional use of cosmetic pesticides. Discontinuance of the EPMP would result in an abrupt change of direction to the previous five successful years of running a comprehensive, risk and cost avoidant program, well received by the community.

Financial Impact

The EPMP is currently funded annually in the Sanitation and Recycling utility budget which will be brought forward for Council's consideration with the 2015 Utility Budget. The EPMP budget includes the TFT staff salary, bylaw enforcement and community outreach.

Conclusion

The City's EPMP continues to garner recognition in the region and the province due to the comprehensive and responsive nature of the program adopted by Council. The EPMP was modelled upon successful cosmetic pesticide programs and strategies that combine education and outreach programming to support the Pesticide Use Control Bylaw compliance. Ongoing program success, in the absence of provincial legislation, is contingent upon continuation of the level of service for the EPMP components which include: *Corporate Reduction; Education and Community Partnership; Senior Government Regulation; and Municipal Regulation*. Staff will continue to build upon the innovation, best practices, outreach and regulatory opportunities to maintain the ongoing effectiveness and leadership of the Program. Updates on provincial announcements for amendments to the Integrated Pest Management Act will be provided to Council accordingly.



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Att. 1: Overview of Richmond's EPMP Highlights - REDMS 4368768

Att. 2: EPMP Program Service Delivery Allocation - REDMS 4368840

Overview of Richmond's Enhanced Pesticide Management Program (EPMP) Highlights

	Policy, Enhanced Management Program and Restrictive Bylaw
Aim	<i>Targets all types of pesticide use (commercial, agricultural, residential) based on level of risk and benefit</i>
Corporate Reduction	
<i>Cease use of non-exempted pesticides immediately</i>	<ul style="list-style-type: none"> • Developed in-house monitoring program to determine the efficiency of trials for compost tea applications on City sports fields • Increased mechanical, manual and cultural weed control methods • Acquisition and retrofit of equipment allowing non-traditional approach to weed management (e.g. <i>Greensteam</i>[™], <i>Aquacide</i>[™] machine, corn gluten meal and compost tea applicators) • Continuous research and evaluation of new science, products, practices and technologies related to cosmetic pest management • Parks Department ceased and substituted cosmetic use of non-exempted pesticides by exempted (i.e. permitted and low-toxicity) pesticides
Education and Community Partnership	
<i>Expanded education program that includes initiatives to inform on the Pesticide Use Control Bylaw</i>	<ul style="list-style-type: none"> • 116 Natural Gardening, Tree Care & Lawn Care workshops, including Chinese languages were held (38 scheduled for 2013, including four on local and sustainable food choices) with over 1545 residents in overall attendance since 2010. • Advertisements and promotion for the PUC Bylaw (e.g. local newspapers, Leisure Guide, City website, community events, etc.) • PUC Bylaw Information (including in Chinese language) Environmental Sustainability Workshop brochures distributed to City facilities, retailers, and through information booths on <i>Natural Gardening</i> public during events • City website updated with comprehensive resources on the Bylaw, and workshops and technical information on pesticide alternatives • Established EPMP Natural garden phone line • PUC Bylaw Information inserts sent with utility and property tax bills (2010)
<i>Work with Industry on Accreditation</i>	<ul style="list-style-type: none"> • Provide pesticide free weed management-training workshops to licensed landscaping practitioners, in partnership with the British Columbia Landscape and Nursery Association (BCLNA). City staff continues to network with other municipalities and organizations for strategies to reduce city costs and risk exposure for landscape and vegetation management. • Bylaw information brochures, surveys and training opportunity letters were sent to all licensed landscapers operating in Richmond

<p><i>Explore problem prevention measures</i></p>	<ul style="list-style-type: none"> • The Ministry of Forests, Lands and Natural Resource Operations is proposing to add the aquatic invasive plant Parrot Feather to the Provincial Noxious Weed List due to the City's request for to management and control assistance • Collaborate with the Province and other partners in the development of a regional and local response plan for European fire ant infestations. • Developed and published <i>Giant Hogweed Identification and Response</i> webpage on City website and reporting phone line • Assisted residents and responded to Giant Hogweed reports, concerns and removal information on their property. Monitoring known properties and providing advanced notices and information to owners were resulted in a dramatic decrease of GH distribution. The City has a 24 hour response program for reporting of Giant hogweed from the general public. • Continue to collaborate with the provincial invasive plant EDRR program to monitor the treated infestation site of <i>Phragmites</i>, the Common reed, in Richmond • With the advent of many new non-traditional pesticides on the market for residential use, considerable staff time has utilized for research, product efficacy and product awareness. This information is shared with residents, the landscaping community and City staff • Working with invasive plant specialists, integrated pest management practitioners and horticultural specialists, to ensure the City is optimizing problem prevention practices • Established new City standard for the removal of Japanese knotweed roots and stems for all dike upgrade projects • Respond to City staff and community information calls on invasive species (e.g. purple loosestrife, Japanese knotweed, Giant hogweed, English ivy, parrot feather, European fire ants, etc) • Lead community stewardship projects involving noxious weeds and other invasive plant removal in natural areas (e.g. parks, riparian management areas, environmentally sensitive areas)
<p><i>Encourage Metro Vancouver to take strong regional role in community education</i></p>	<ul style="list-style-type: none"> • Metro Vancouver is considering the launch of a coordinated community education program including natural lawn gardening, organic gardening and pest management.
<p><i>Significant consultation for draft Bylaw recommended</i></p>	<ul style="list-style-type: none"> • Completed and reported in staff report dated September 11, 2009, entitled "<i>Pesticide Use Control Bylaw</i>"
<p><i>Ongoing liaison/consulting with community</i></p>	<ul style="list-style-type: none"> • Feedback from the community solicited through a number of items including: voluntary survey indicating 79% awareness of PUC Bylaw; a telephone survey for licensed landscapers (indicating 50% interest in natural lawn care training; booths at public events; e-mails; phone calls, and letters to staff • City staff routinely visited local pesticide retailers. All retailers were receptive and agreed to post information on the Bylaw and Workshops at point of sale • Through staff visits, three retailers have voluntarily removed non-exempted pesticides from their shelves • The Environmental Coordinator fielded and Responded to numerous information and complaints calls, e-mails and front of house requests from public and local landscapers, to support compliance with the Bylaw

Senior Government Regulation	
<i>Actively lobby provincial government to better regulate sales.</i>	<ul style="list-style-type: none"> • Ongoing City Staff communication with Provincial Staff to obtain updates on any action pertaining to a cosmetic pesticide regulation or action on the <i>Special Committee</i> recommendations • Provided the City's Response to the <i>Special Committee on Cosmetic Pesticides Consultation</i> • Letter to Richmond MLA John Yap, appointee to the Special Committee on Cosmetic Pesticides, re-iterating the City's commitment to reducing the use and exposure to pesticides for cosmetic purposes • Letter to the Province sent by Mayor and Council, to advocate and support the introduction of province wide legislation prohibiting the cosmetic use of pesticides. • City Staff provided a response to the Province's <i>Cosmetic Use of Pesticides in British Columbia Consultation</i> paper in support of a provincial cosmetic pesticide regulation
<i>Consideration given to lobbying federal government to better regulate product approvals</i>	<ul style="list-style-type: none"> • The City's response to Health Canada Pest Management Registration Agency's Re-Evaluation program (REV2010-18) Consultation
<i>Explore partnership opportunities</i>	<ul style="list-style-type: none"> • All local pesticides retailers continue to provide City information on the Bylaw and the education program in their stores. • Presented the EPMP at the 50th Western Turf Grass Association Conference and Trade Show in Penticton, BC in March 2013 • The Honourable Gordon Mackintosh, Minister of Conservation and Water Stewardship for the Province of Manitoba, contacted and met with Staff to learn about the EPMP successes and challenges to inform the introduction of legislation restricting the use of cosmetic pesticides in his province; • Parks hosted the <i>Integrated Pest Management Best Practices Field Day</i> in 2012, to learn and share Best Practices with neighboring municipal parks managers and staff • Partnered with the BC Landscape and Nursery Association (BCLNA) to provide training opportunities for practitioners in the City • Collaborated with the Richmond School District (RSD) to apply restrictions on RSD lands • The City's PUC Bylaw continues to be cited as a model bylaw to regulate the cosmetic use of pesticides in the province
Municipal Regulation	
<i>Enforce a Bylaw that restricts the cosmetic use of pesticides on residential and City owned property</i>	<ul style="list-style-type: none"> • The Environmental Coordinator fielded and Responded to numerous information and complaints calls, e-mails and front of house requests from public and local landscapers, to support compliance with the Bylaw • Community Bylaws promoted public awareness and compliance of the PUC Bylaw by conducting community canvassing and inspections during summer months • Assisted Community Bylaws with technical expertise, education and regulatory context regarding pesticide use • Community Bylaw officers visited retailers of cosmetic pesticides to promote awareness of the Bylaw • While no violations were issued, the staff assisted Community Bylaws with complaints and conducted on-site visits with Bylaw staff to educate residents on alternatives to traditional pesticides • Adoption of Pesticide Use Control (PUC) Bylaw No. 8514 (October 2009)

Enhanced Pesticide Management Program Service Delivery Allocations

Service	%	Actions/Items
Corporate Reduction Delivery Level		30
1. Research and evaluate new cosmetic pest management products, practices and technologies	10	<ul style="list-style-type: none"> • Training opportunities for City Staff • Evaluate newly registered products and practices compliant with Bylaw • Networking with local, regional and provincial stakeholders
2. Develop and implement pilot program monitoring	5	<ul style="list-style-type: none"> • Research and develop specific methodologies to collect data for each new program designed to pilot new generation, low toxicity pesticides • Collect and analyze program data and make recommendations
3. Optimize problem prevention practices including invasive species management	15	<ul style="list-style-type: none"> • Provide technical assistance and Training for City Staff • Collaborate with regional and provincial invasive species NGOs and agencies to collaborate on invasive species management priorities, new invaders, control methods and best practices for invasive plant species management in Richmond (e.g. Giant hogweed, Japanese knotweed, Wild chervil, Common reed, Parrot feather, European Fire Ants) • Respond to City's Giant Hogweed Control Program phone line and reports • Leading community invasive plant stewardship projects
Education & Community Partnerships Delivery Level		40
4. Expanded education program including information on Pesticide Use Control Bylaw	20	<ul style="list-style-type: none"> • Work with Industry to adopt compliant practices • Promotion and Advertisements • Natural Gardening, Tree Care & Lawn Care workshops, including Chinese languages • City website updated with comprehensive resources on the Bylaw, and workshops and technical information on pesticide alternatives
5. Community liaison/consulting	20	<ul style="list-style-type: none"> • Natural Gardening and Pest Solutions information at City and Community events • Natural gardening and pesticides phone line • Exploring partnership opportunities with Local retailers, associations and organizations • Community invasive plant removal events (e.g, Earth Day, Bath Slough & Middle Arm, Green Ambassadors events etc.)
Senior Government Regulation Delivery Level		10
6. Actively lobby senior governments to better regulate sales and product approvals	5	<ul style="list-style-type: none"> • Mayor and Council Letters supporting the prohibition of cosmetic pesticides • City response to the Province's Cosmetic Use of Pesticides Consultations • City response to Health Canada Pest Management Registration Agency Consultations
7. Coordinate municipal response with provincial agency regulations and initiatives	5	<ul style="list-style-type: none"> • Elevate provincial support for key invasive species (i.e. Common reed, Parrot feather, European Fire Ant) • Lobby for EDRR programs (e.g. Common reed, Parrot feather) • Collaborate with agencies for technical information and research to support timely and effective responses to pesticide and invasive management scenarios.
Municipal Regulation Delivery Level		10
8. Enforce a Pesticide Use Control Bylaw	10	<ul style="list-style-type: none"> • Assist Community Bylaws with technical expertise, education and regulatory context (e.g. Pesticide use reports, Giant hogweed EDRR) • Annual visit to retailers of cosmetic pesticides to promote awareness of the Bylaw and City education workshops. • Information queries regarding PUC Bylaw
9. Other projects	10	<ul style="list-style-type: none"> • Richmond Earth Day Youth (REaDY) Summit coordination • Climate Change Showdown program coordination • Genetically Engineered Free BC consumer choices support
TOTAL	100	

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