

March 7, 2013

To: Members,
Public Works Committee

Re: Pesticide Use in Parks and Open Space

RECOMMENDATION

1. That the annual weed density measurements be used as the basis for the annual designation of parks with “herbicide-free” turfgrass.
2. That the three existing “pesticide free” parks be designated “herbicide free”.

CONCLUSION

The key recommendation made by the Environmental Advisory Committee to the Public Works Committee was that, “the City of Regina adopt a policy of avoiding pesticides for cosmetic or non-essential use in the management of lands owned or administered by the City.”

In response, the Public Works Committee directed the Administration to provide further information on the recommendations made by the Environmental Advisory Committee “...in particular, adopting a policy of avoiding herbicides.”

The Administration considers the mosquito, cankerworm, Dutch elm disease, gopher and noxious weed control programs necessary.

Reducing the use of herbicides is a worthwhile objective; however it must be balanced with the prevailing public expectation that weeds on City-owned property be controlled.

Over the past eight years, the overall use of herbicides by the City has decreased, whereas the total area of parks has increased.

Weed density in park turfgrass is measured annually, and weed density thresholds have been established to identify acceptable levels of weeds in turfgrass. If the weed density threshold is exceeded, then herbicide application is considered to be warranted. If the weed density is below the threshold, a park will be considered for “herbicide-free turfgrass” designation.

In order to eliminate confusion between the three existing pesticide-free parks and the proposed herbicide-free parks, it is recommended that the designation of the pesticide-free parks be changed. The former pesticide-free parks would continue to be maintained without the use of herbicides.

BACKGROUND

The Public Works Committee considered the above-noted report and adopted the following resolution:

“That this matter be referred to the Administration for a report to a special Public Works meeting to be scheduled in late November 2012, that provides further information on the

recommendations made by the Environment Advisory Committee, in particular, adopting a policy of avoiding herbicides, including the following:

1. Budgetary implications;
2. Information on the precautionary approach and how it applies here;
3. Information on the former Integrated Pest Management Advisory Committee;
4. That Administration contact open space managers at Wascana Centre Authority, the Public School Board, and the Catholic School Board for information in their present weed regimes;
5. That Administration seeks further information on the partnership between the Saskatchewan Environmental Society and the City of Saskatoon with respect to their use of social marketing for pesticide reduction;
6. That Administration contact Regina Qu'Appelle Health Region, the Provincial Health Officer, the College of Physicians and Surgeons of Saskatchewan, and the Saskatchewan Watershed Authority for their opinion of the use of pesticides;
7. Discussion on how the City's use of pesticides is communicated; and
8. That Administration request information from the Pest Management Regulatory Agency regarding scientific information on pesticides."

DISCUSSION

Definitions

In order to understand the issue of pesticide use, it is important to be clear on the meaning of the terms being used. The Saskatchewan Ministry of Environment document, "A Guide to Reducing the 'Cosmetic Use' of Herbicides in Saskatchewan May 2009 (revised August 2012)", contains a glossary of terms. A condensed list of these definitions, most relevant to this report, is provided in Appendix A. It includes the following:

Pest – Any noxious or troublesome insect, fungus, bacterial organism, virus, weed, rodent or other plant or animal that adversely affects aesthetics, human or ecosystem health.

Pesticide – A chemical/substance that is intended, sold, or represented for use in preventing, destroying, repelling or mitigating any insect, nematode, rodent, predatory animal, parasite, bacteria, fungus, weed or other form of plant or animal life or virus.

Herbicide – A chemical substance or cultured biological organism used to kill or suppress the growth of plants. Also defined as chemical compounds used to kill or inhibit undesirable plant growth.

Cosmetic use – The use of chemical herbicides to control weeds strictly for aesthetic purposes.

Integrated Pest Management (IPM) – An ecological approach to suppressing pest populations (e.g. weeds, insects, diseases, etc) in which all techniques are consolidated in a unified program, so that pests are kept at acceptable levels while minimizing all potential economic, health and environmental risks.

Pesticides are used because they are typically the most efficient, effective, and economical means of controlling pests; however, as the Environmental Advisory Committee has noted, the concern over the health and environmental impacts of their use is increasing. This has led to a national trend for municipalities to move away from the use of pesticides. Many municipalities, and some provinces, have enacted bylaws banning the use of pesticides for “cosmetic use”. The Precautionary Principle is often cited as the rationale for this action:

“The Precautionary Principle states that if an action or policy has a suspected risk of causing harm to the public or the environment, a lack of full scientific certainty shall not be used as a reason for postponing cost effective measures to prevent environmental degradation (United Nations General Assembly, 1992).

There is extensive evidence on the serious negative health and environmental impacts from the use of cosmetic pesticides. Therefore, some dissenting views and a lack of full consensus on scientific evidence should not prevent action against the use of cosmetic pesticides. (“[Recommendation for a Provincial Ban on the Cosmetic Use of Pesticides](#)”. Manitoba Round Table for Sustainable Development. Background Paper. April 2011, page 3.)”

Perspective of Other Agencies

The sale and use of pesticides is regulated by the federal government through Health Canada’s Pest Management Regulatory Agency (PMRA) as described in Appendix B. At the provincial level, the Saskatchewan Ministry of Agriculture is responsible for “The Pest Control Act (Saskatchewan)” and “The Pest Control Product Regulations”. (Appendix C)

The Saskatchewan Ministry of Environment (MOE) also has a role in regulating the use of pesticides. The Ministry’s current policy, with respect to pesticide use, is not to ban the cosmetic use of pesticides, but to reduce their use by increasing public awareness and encouraging alternative methods, while allowing the responsible use of pesticides.

The Saskatchewan Ministry of Health provided a written statement of its position on the cosmetic use of pesticides (Appendix D), which summarizes the role of the PMRA:

“Health Canada’s Pesticide Management Regulatory Agency (PMRA) is responsible for performing a health risk assessment prior to registering a product for use in Canada. Provincial and territorial governments rely on the expertise of the PMRA in assessing the safety of these products.”

The Saskatchewan Ministry of Health statement also states:

“The Ministry of Health has reviewed existing scientific literature regarding cosmetic use of pesticides and cancer. While the ministry supports best management practices to reduce usage of chemicals in the environment, current scientific literature does not cause us to believe that Saskatchewan regulatory interventions are required at this time. Public Health Officials currently focus their efforts on public education to reduce exposure to pesticides and advising municipalities that are considering enacting bylaws restricting the usage.”

The Regina Qu’Appelle Health Region (RQHR) also provided a written statement on the cosmetic use of pesticides (Appendix E). The statement concludes: “The Region is supportive of efforts to reduce pesticide exposure in all forms where practiced and reasonable to do so. Use of

non-pesticide solutions to pest problems is encouraged and supported where this is available and practiced. Further education of the public on the prudent use of products where needed, is supported.”

The College of Physicians and Surgeons of Saskatchewan is responsible for the conduct of physicians and surgeons in the province. They responded that they have no expertise or informed response to this issue and that they have no position on the subject.

The Regina Public School Board has no formal written policy on weed control. In response to a petition, presented to the Board in 2007, traditional chemical herbicides are no longer used. Weeds are managed by providing additional maintenance, including cutting. Ecoclear, an alternative herbicide composed of vinegar and citric acid, is used when needed.

The Regina Separate School Board provided the following description of their weed control practices:

“For more than the past decade our school playgrounds and turf fields have been mowed and trimmed only. We stopped spraying for dandelions and other weeds when hazard information became more widely available and application procedures more restrictive. The school division decided to err on the side of safety given the number of children using the playgrounds daily.

We use trimmers and mowers on the fence and bike rack areas and have researched alternate solutions for weed control on grassed areas (corn gluten fertilizer on front lawns and a soap/vinegar/salt solution).

On occasion we have well-intentioned school councils providing chemical weed control at some locations but through education and explanation have limited the exposure and prevented a continued use.

As you can appreciate we do receive a number of unhappy phone calls in the spring generally concerning dandelions blooming and again later in the season when they start seeding. We keep our crews busy with a program of cutting and trimming but sometimes the weather and Mother Nature win.”

Wascana Centre Authority also has no formal weed policy and uses chemical herbicides including Killex, Round up and Linuron (pre-emergent), as well as others. The decision to spray herbicides is based on visual monitoring of weed populations and complaints. Although Wascana Centre Authority is funded by three agencies (the City of Regina, the Province of Saskatchewan and the University of Regina) the funding parties do not “co-manage” the park. Wascana Centre Authority is governed by a board which includes representation from each of the funding partners. The City of Regina is represented by two City Council members.

In 1994, the City of Saskatoon discontinued their herbicide spraying program and implemented a “Weed and Feed” program in order to improve the health of the turf, while reducing broadleaf weeds. “Weed and Feed” is a dry, pellet type product that was applied by a commercial fertilizer spreader. This practice ended in 2000 as a result of negative feedback from the public and the City of Saskatoon’s Environmental Advisory Committee recommendation to discontinue the program. Since 2000, no herbicides have been applied to turf, however “Round-up” continues to be used to control weeds in shrub beds.

In 2011, after receiving numerous complaints from the public and city officials regarding dense concentrations of dandelions, the City of Saskatoon implemented a dandelion control program at the entrances to the City. It was felt that there would be minimal public impact in these areas and that this would create a more attractive entrance to the city. A Public Service Announcement was issued prior to implementation, however after receiving a large number of negative responses from the public and visitors, the City of Saskatoon abandoned this program before it commenced.

Recently, the City of Saskatoon requested information from the City of Regina regarding the costs associated with an herbicide program. While there is no intention of re-establishing an herbicide program, Saskatoon City Council wanted to know what other municipalities spent on their herbicide programs. The intention is to create a reserve to fund enhanced cultural practices for turfgrass. They have estimated that \$250,000 would be placed in this reserve.

From 2006-2011, the City of Saskatoon partnered with the Saskatchewan Environmental Society (SES) in the Saskatoon Pesticide Reduction Project (SPRP). The project objectives for 2011 were:

- To inform the Saskatoon public about health and environmental risks involved in using cosmetic pesticides.
- To provide information on low-toxicity alternatives to pesticides.
- To achieve a reduction in the use of cosmetic pesticides among Saskatoon residents.

SES uses a definition that is in agreement with the definition set out by the Health Canada's Pest Management Regulatory Agency (PMRA). For the purpose of the program, SES isolated the focus of the program on reducing/eliminating the use of synthetic chemical-type cosmetic pesticides.

Council's Motions Regarding Pesticides (2003)

The issue of pesticide use in Regina came to the forefront in 2002. At the request of the former Parks & Recreation Board, the Administration of the day prepared the "Report on Pesticides – December 2002" which made a number of recommendations. In May 2003, Council passed 13 motions incorporating the Administration's recommendations (Appendix F).

The Former Integrated Pest Management Advisory Committee

One of the 13 recommendations made by Council in 2003, resulted in the establishment of the Integrated Pest Management Advisory Committee in 2004.

The Terms of Reference for the IPM Committee were:

- To provide comments and advice to the City Administration on the quality and effectiveness of the city's pest control programs, products, policies, and procedures.
- To provide comments and advice to the City Administration on public communication initiatives aimed at educating City residents about Integrated Pest Management.
- To provide comments and advice to the City Administration on the practice to be used for the management of various horticultural assets in City parks and open space areas.
- To provide individuals and organizations with a venue to offer comments and advice on the City's Integrated Pest Management programs, products, policies, and procedures.

Committee representation included two citizen representatives, the Regina Qu'Appelle Health Region, the pest control industry, the Regina Board of Education, the Regina Catholic Schools, the Regina Urban Environmental Advisory Council, the University of Regina, Communities of Tomorrow, the Government of Saskatchewan, City Administration and a Council member.

The IPM Advisory Committee was dissolved in 2008 as an outcome of the Committee Structure Review. Since then, pesticide-related issues have been directed to the Environment Advisory Committee.

Current State

The City adopted the integrated pest management (IPM) approach in 1990. The principle underlying integrated pest management is that pest control should be based on an understanding of the life cycle of the pest and should target the stage in the life cycle when it will be most effective. Mechanical, and biological controls are used as a first choice; chemical pesticides are only used as a last resort or when other methods are not effective or economical.

The City delivers a range of pest control programs to meet the prevailing public expectation that certain pests be controlled. These pests include: mosquitoes, cankerworms, elm bark beetles, gophers and weeds (listed in order of annual program expenditure).

The mosquito and cankerworm programs use a biological control (a bacteria), which is considered to be the best practice approach for controlling both these pests. The gopher program uses rodenticides which are placed in the gopher burrows. Beginning in 2010, at Council's request and with increased funding, efforts in both the cankerworm and gopher control program were significantly increased due to increased funding. The Dutch elm disease program currently involves the use of an insecticide which is sprayed onto the base of tree trunks.

Herbicides are used to control weeds in turfgrass, shrub beds, crusher dust and pavement. As a landowner, the City of Regina must be in compliance with the provincial Weed Control Act which requires that invasive weed species (referred to as "noxious weeds") be eradicated. These noxious weeds include scentless chamomile, leafy spurge and purple loosestrife. (In 2012, the City of Regina participated in a project to collect leafy spurge beetles, a natural predator of the plant. Thirty thousand beetles were collected in a rural area and released in a leafy spurge infested area in the city.)

The Administration considers the mosquito, cankerworm, Dutch elm disease, gopher control and noxious weed programs necessary. Mosquitoes are controlled for human comfort and health. The cankerworm and Dutch elm disease programs contribute to the preservation of the urban forest. Gophers and noxious weeds are provincially declared pests that the City of Regina is required to control.

Generally speaking, when reference is made to the cosmetic or non-essential use of pesticides, the criticism is directed towards the use of herbicides to control weeds. In keeping with the direction given by the Public Works Committee and in order to narrow the scope of this report, the focus will be on the avoidance of the use of herbicides to control weeds, and specifically, weeds in park turf. It is worth noting that, while there are many weed species to be found in parks, the single species that generates the majority of the complaints is the dandelion.

Summary of Efforts to Reduce Reliance on Chemical Herbicides

The Administration agrees that avoiding the use of herbicides is a worthwhile objective; however it must be balanced with the public expectation that weeds on City owned property be controlled. Simply abandoning the use of herbicides generally results in a steady decline in the quality of turfgrass. If environmental conditions for turf are not ideal, and they seldom are, weeds will compete with and often overtake turf. Newly developed parks are especially susceptible as the turf tends to be shallow-rooted, due to subsoil that has been heavily compacted during park construction.

Over the past few years, the City of Regina has made a concerted effort to reduce its reliance on herbicides. This commitment to reduce reliance on pesticides, and specifically herbicides, was identified in the 2008-2013 business plan of the former Parks & Open Space Department.

Municipalities committed to reducing or eliminating the use of pesticides, generally adopt what can be referred to as a Plant Health Care (PHC) approach. While IPM is focused on alternative pest management techniques, Plant Health Care is based on the premise that healthy plants are their own best defence against weed and insect infestations.

The City's current premium sports field maintenance program is a PHC program, as is the maintenance program for golf course fairways. These programs include scheduled turf maintenance practices such as irrigation, fertilization, aeration, dethatching, over-seeding and topdressing. The result is a healthy stand of turfgrass which easily out-competes weeds and is able to resist insect infestations.

A PHC program was implemented in Victoria Park in 2011 to address the heavily compacted, thin turf. The "cultural practices" that were increased were aeration, top-dressing and over-seeding, and fertilization. This has improved the overall health and look of the turf in the park significantly. Herbicides have not been used in Victoria Park for a number of years.

Due to cost constraints, the level of maintenance for most park turf does not include sufficient cultural practices to create turf that can out-compete weeds, without occasional herbicide intervention. Having said that, turf maintenance practices throughout the park system have been adjusted to improve turf health.

Mowing heights in parks have been increased from 2" (the previous standard) to 3". Taller turf is more effective in competing with weeds, in coping with drought, and in shading the soil surface to reduce evaporation. Mandatory parks also receive some fertilization and aeration. The regular use of irrigation systems in Class A and B parks contributes significantly to improving the quality of the turf grass.

Specific areas within parks (e.g. steep slopes which are a safety hazard for mower operators), that had been mowed in previous years, have been left to naturalize. Constant mowing results in a poor stand of grass which allows weeds to establish. When the grass is allowed to fully head out and ripen before mowing, the seed drops to the ground and starts filling in the space, resulting in a better stand of grass with less weeds. This does not happen in a single season but improves year by year.

In recent years, the City of Regina has placed more emphasis on the naturalization of existing parks and on introducing low maintenance, natural areas as part of new park design. Naturalization is used to enhance existing natural features (e.g. water courses) or to landscape difficult-to-maintain areas such as steep slopes or naturally wet areas. Naturalized buffer areas

not only add to the diversity and character of the park site, they also reduce maintenance costs, and reduce the need for pesticide and fertilizer applications. Lower maintenance fescue sod areas have also been introduced in some new parks.

The City has participated in the ongoing investigation of new technology and new (alternative) products to determine their effectiveness and economic viability for small or large scale applications and to expand these efforts within the current operating budget. Along with a number of other western Canadian cities, the City partnered for several years with the Prairie Turfgrass Research Centre (Olds, Alberta). Local field trials were done to evaluate the use of agricultural by-products (e.g. corn gluten) as herbicides; however, no consistently effective products resulted from this research.

Alternative products, which may be practical on the residential scale, are typically impractical on a large scale; however, these products may be useful for small scale issues. The City of Regina is considering developing a list of allowable herbicides for this purpose. The allowable herbicide list would contain a list of products that could be used regularly by the City of Regina. The list could also be shared with the public, as part of an education campaign. The allowable herbicide list would contain herbicides that have been approved by the PMRA and are considered to pose a lower risk to humans and the environment based on toxicity, persistence in the environment, and ability to build up, or bioaccumulate, in living organisms.

The City has also been exploring alternate approaches to weed control. As an example, for the last two years herbicide treatment has virtually been eliminated in large-scale hard surface areas such as crusher dust fields and pathways through the use of mechanical cultivation (landscape rakes and box blades). Wood chip mulch has been added to many shrub beds as it inhibits weed growth and conserves moisture.

In 2011, staff implemented the best-practice approach of establishing weed-density thresholds for parks and open space. The principle underlying this approach is that turf does not have to be 100% weed free to be acceptable. The thresholds, which vary for different classes of park space, define what is considered to be an acceptable level of weed infestation, expressed as x weeds/m². If the weed density threshold is exceeded, then herbicide application is considered to be warranted (Appendix H).

The overall result of these efforts to reduce reliance on herbicides has been a steady decline in the amount of herbicide used, in spite of the fact that the area of park land has increased significantly over the same period of time (Appendix I).

Pesticide Free Parks

In 2012, three parks were designated as being pesticide-free. This pilot project was the outcome of a Council motion to establish “biocide-free” park spaces, recognizing that some people have extreme sensitivity to biocides (which were defined in the motion as “pesticides, herbicides, fungicides, etc.”). Given the intent of the motion, a decision was made to not use pesticides of any kind to control any pests in these parks.

Pesticides are not used in the majority of City parks. Pesticide use in parks is typically limited to applying herbicides to control weeds in turfgrass, shrub beds, crusher dust surfaces and along fence lines. Mosquito and gopher control is not required in most parks. This activity typically occurs in unirrigated, rough grass open spaces (e.g. road, rail and utility corridors). Most cankerworm and elm bark beetle spraying is done on City-owned street trees, not on park trees.

Having said this, there are some parks that do receive pesticide treatment for weed, mosquito, cankerworm and gopher control.

In 2010, Gordon Park, Al Pickard Park and Queen Elizabeth Court were selected from a list of parks which had not needed pesticide applications of any kind in the previous few years. The turfgrass was in a healthy state, there were few elm trees, no mosquito breeding sites and no need for gopher control. It was anticipated that there would be no need for any form of pest control at these sites in 2010. The pesticide-free designation was subsequently extended to include 2011 and 2012. During these three years, the turfgrass in these parks was irrigated, fertilized and aerated. These “cultural” practices contributed to a healthy stand of turf that could resist invasion by weeds. Weeds in shrub beds were controlled by rototilling and/or hand hoeing/pulling. It was understood that, in the unlikely event of a pest infestation that could not be controlled using an alternate means, the option existed to use pesticides as a last resort to ensure that health, safety or economic value was not compromised. However, in the past three years, it has not been necessary to apply any pesticides in the Pesticide Free Parks.

Pesticide Communication

The City of Regina communicates its use of pesticides in a variety of ways. Pesticide use is seasonal. Each year, at the start of each major pest control program, a Public Service Announcement (PSA) is released to the media. The major pest control programs are the mosquito, gopher, cankerworm, Dutch elm disease and weed control programs. As well, information on each of these programs is provided on the City of Regina’s website. For some pest control programs (e.g. Dutch elm disease, cankerworms), an online map of the city is updated daily to show where activity will occur by neighbourhood and where it has occurred. A telephone information service, known as the Pesticide Advisory Line provides information about pesticide application in specific parks or street locations and is updated daily. For programs in which tree spraying occurs along the street in front of residences, notices are delivered to each door (DED program) or signs are set up on the ends of each block (cankerworm program).

Areas treated with pesticides in parks and open space are identified by the use of temporary “lawn” signs (e.g. mosquito, gopher and weed control). An exception to this approach is identified in The Weed Policy (2005) which states:

“Passive Open Space areas include areas such as tree wells, shrub beds, light standards, fence posts, center medians, side boulevards, traffic islands and walkways. These areas are exempt from on-site signage and Pesticide Advisory Line notification, provided that the area selectively treated does not exceed 5,000 sq. ft. and treatment is not within 100 feet of Active Open Space Areas.”

Recommended Option:

The Administration recommends that the City of Regina adopt an approach comprised of the following recommendations:

That the annual weed density measurements be used as the basis for the annual designation of parks with “herbicide-free” turfgrass

This recommendation proposes that the park turfgrass weed measurement exercise undertaken annually by staff be used as the basis for identifying parks which have acceptable weed levels. These parks would be designated as having herbicide-free turf in the following year. Based on

the 2012 weed density survey, 80 parks could be designated as having “herbicide-free” turf in 2013.

In 2014, the annual weed survey would again be the basis for determining whether a park would keep its herbicide-free designation, or lose it if weed levels have increased to an unacceptable level. On the other hand, parks that received a herbicide application in the previous year, may have a lower weed density level and now be eligible for designation. The key is that the annual weed measurement will enable good decision-making as to whether or not herbicide treatment is warranted.

It should be noted that the “herbicide-free” designation refers to the parks turfgrass only and not to shrub beds. Weeds in shrub beds are typically controlled by rototilling, string trimming or by hand removal. The latter is labour intensive and, on a parks scale, is not always practical. While herbicides would continue to be part of the “tool list” for managing weed growth in shrub beds, efforts to use alternative products and approaches will continue to be explored.

That the three existing “pesticide free” parks be designated “herbicide free”.

In order to eliminate confusion between the three existing pesticide-free parks and the proposed herbicide-free parks, it is recommended that the designation of the pesticide-free parks be changed. The former pesticide-free parks would continue to be maintained without the use of herbicides.

Alternative Options to Consider

Option 1 (Status Quo)

The Administration considers the status quo to be a viable option. As previously outlined the City has, over the past eight years, implemented a number of practices that has resulted in a steady decline in the overall use of herbicides, while the total area of parkland has increased. If the status quo is adopted, the commitment to reducing the reliance on herbicides would continue and the following efforts would also continue:

- The three Pesticide Free Parks
- Practice of herbicide application in parks being guided by the weed density measurements.
- Current levels of aeration and fertilization.
- Large scale crusher dust areas and pathways maintained via mechanical means.
- Herbicide treatment on small scale hard/aggregate surfaces and in shrub beds (paving stones, crusher dust, red shale, and mulch).
- Ongoing investigation of new technology and new products to determine their effectiveness and economic viability for small or large scale applications and to expand these efforts within the current operating budget.

There is no budget implication to this option.

Option 2 (Plant Health Care)

This option is presented as a means of taking a more aggressive approach to reducing herbicide use. This option includes the Recommendation. In addition, it provides funding for the implementation of the Plant Health Care approach in the parks that would be designated as

having herbicide-free turf. Implementing the PHC approach to the maintenance of the turfgrass in these parks would greatly increase the likelihood that they would not see an increase in weed density and would therefore meet the criteria that would result in a continued, annual designation of having herbicide-free turfgrass.

Implementing a PHC program for the parks with “herbicide-free” turf will require additional resources in the area of staffing, equipment and materials. The estimated annual budget requirement to implement the PHC program in 80 parks is noted below.

- Additional staff would be required to implement the PHC program to undertake activities including turf aeration, verticutting (dethatching), topdressing, additional fertilization.
- While the City has some of the equipment needed to implement the PHC program, additional equipment will be needed. This has both capital and operating costs.
- Implementation of the PHC program would also require an increase in material (e.g. fertilizer and mulch).

	2014
Staffing	\$68,000
Materials	\$60,000
Equipment	\$42,000
Operating Subtotal:	\$170,000
Capital Equipment Total:	\$200,000
Total Funding Required:	\$370,000

The Plant Health Care program is scalable (i.e. 160 parks in total). Expanding the herbicide-free park designation to include 80 more parks would cost an additional \$370,000 to implement, and would require \$170,000 in annual operating costs.

RECOMMENDATION IMPLICATIONS

Financial Implications

None with respect to this report.

Environmental Implications

The implementation of the recommendation will demonstrate the City’s commitment to environmental stewardship.

Policy and/or Strategic Implications

The City’s current strategy, to *Narrow the Gap* between citizens’ service expectations and the City’s capacity to deliver is a consideration in these recommendations. The recommendation will allow the City to increase the number of parks it can designate as herbicide free, based on annual weed density measurement data. Park turfgrass will be managed within existing resources. However, if, weeds exceed the measurement targets, herbicides will be applied in the subsequent year and the park will no longer be considered herbicide free.

Based on the 2012 weed density survey, 80 parks could be designated as having “herbicide-free” turf in 2013. Through annual weed density measurements, continuation of current cultural practices, and targeted herbicide application when weed densities exceed targets, it is expected that in any given year, 80 or more parks can be designated as having “herbicide-free” turf.

There is an increased cost to the City to reduce the use of herbicides on park turfgrass and increase the level of cultural practices as an alternative means of managing weeds. If citizens have an increased expectation that herbicides should not be applied if weeds exceed density targets, it will require increased spending through a reduction in services from some other city delivered service. The only other alternative if citizens do not want herbicides used in parks, and do not want to increase spending is to permit more weeds in parks.

Other Implications

None with respect to this report.

Accessibility Implications

None with respect to this report.

COMMUNICATIONS

The Community Development, Recreation and Parks Department will work with Communications to develop a plan to inform residents of the change. Signs will be posted at each park site indicating that the park is herbicide-free and encouraging users to access the City website for more information.

DELEGATED AUTHORITY

Disposition of public issues relative to land use operations falls within the authority of the Public Works Committee.

Respectfully submitted,



Neil Vandendort, Director
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Respectfully submitted,



W. Dorian Wandzura, Deputy City Manager & COO
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