
CITY OF KELOWNA

MEMORANDUM

Date: December 11, 2002
File No.: 6300-01
To: City Manager
From: Planning and Development Services Department
Subject: Vegetation Policies, Bylaws and Programs
Report prepared by Greg Routley, Planner – Long Range

RECOMMENDATION

THAT Council receive the information relating to City of Kelowna vegetation related policies, bylaws and programs as outlined in the Planning and Development Services Department report of December 11, 2002;

AND THAT Council direct staff to improve vegetation related bylaws and programs by implementing the following 'action items', which are outlined in the Planning and Development Services Department report of December 11, 2002:

- continue to work towards amending the Subdivision, Development and Servicing Bylaw in order to establish appropriate standards for boulevard landscaping;
- amend the Tree Protection Bylaw to acknowledge different jurisdictional requirements (Federal, Provincial and Municipal) relating to tree and vegetation management in stream areas where fish habitat is present, to improve the tree replacement standards and to regulate the removal of trees that have been protected by covenants through the Subdivision Approval process;
- continue to provide and expand upon environmental education and communication programs in order to promote the benefits of having a healthy balance of vegetation throughout the City; and
- continue to provide planting programs and undertake studies to inventory vegetation on private and City-owned properties in order to effectively expand upon these programs and to ensure that development regulations are succeeding in the goal of retaining a healthy level of vegetation through the development process.

BACKGROUND

Vegetation in the form of trees, shrubs and green areas makes valuable contributions to the environment and ultimately to the liveability of a community. The City of Kelowna has taken action in several ways to ensure that a healthy balance of vegetation is maintained throughout the City. Among these actions has been the adoption of a bylaw (Bylaw No. 8041) to regulate the removal of trees within environmentally sensitive areas. In response to Council's direction at the time this bylaw was adopted and in response to OCP direction to prepare a strategy to help sustain and minimise the loss of vegetation, City staff have conducted a review of the effectiveness of existing vegetation related policies, bylaws and programs. The intent of this report is to outline the findings of this review and to put forth recommendations on how these bylaws and programs could be improved.

EXISTING VEGETATION POLICIES, BYLAWS AND PROGRAMS

The Kelowna Official Community Plan (OCP) establishes various environmental policies (see Appendix 1) that are intended to encourage a healthy balance of vegetation throughout the City. Specifically, the OCP establishes policies related to providing environmental education programs, to encouraging the retention and replacement of vegetation through the development process, to preventing the loss of vegetation and to encouraging the planting of vegetation.

Zoning Bylaw, Subdivision, Development and Servicing Bylaw and Tree Protection Bylaws

Staff from the Works and Utilities Department, the Parks and Leisure Services Department and the Planning and Development Services Department spend a considerable amount of time working with private property owners and utility companies to ensure that their actions comply with the OCP vegetation related policies. To help guide this process, development guidelines and regulations that promote the retention and replacement of vegetation have been incorporated into the OCP, the Zoning Bylaw, the Subdivision, Development and Servicing Bylaw and the Tree Protection Bylaw. In addition, maintenance agreements and exemption criteria have been established to help streamline this process. Information relating to these development guidelines and regulations is provided in Appendix 1 of this report.

Environment Division and Parks Division Programs

The Environment Division and Parks Division do a considerable amount to promote the health of our environment through various environmental stewardship and public education programs. Kelowna is one of only a few communities in British Columbia to allot staff time and funding specifically for environmental protection and enhancement. Through the Communities and Nations in Bloom competitions, the City has received world wide recognition for these efforts. Information relating to these programs is provided in Appendix 1 of this report.

ACTION ITEMS

City staff has been reviewing options for improving vegetation planting and protection efforts. The review reflects input from several departments, including the Parks and Leisure Services Department, the Works and Utilities Department and the Planning and Development Services Department. As noted above, the City of Kelowna does a considerable amount to promote, protect and plant vegetation. However, staff agree that more could be done and in order to do so, it is recommended that the City take the following actions.

City of Kelowna Zoning Bylaw and Subdivision, Development and Servicing Bylaw

The regulations in the existing Zoning Bylaw and Subdivision, Development and Servicing Bylaw are effective tools that help ensure an appropriate amount of vegetation gets planted when properties are developed. Specifically, the bylaw regulations ensure vegetation gets planted around certain roadway classifications and around certain land use classifications where landscaping is required as a condition of a Development Permit, Building Permit or Subdivision Approval. The City should therefore continue to require that owners of properties comply with the landscaping standards in these bylaws when developing their properties. As some of the regulations in these bylaws are relatively new, the City should monitor, as proposed in the following sections, whether or not they are succeeding in the goal of retaining a healthy level of vegetation through the development process.

To improve the effectiveness of the Subdivision, Development and Servicing Bylaw, it would be helpful to further assess boulevard landscaping standards with the aim of determining appropriate types of vegetation to be planted along roadways and to help ensure that proper planting techniques are used. The adoption of higher boulevard landscaping standards could increase costs. Establishing such standards would therefore have to take that into consideration, particularly when determining who will ultimately pay for the landscaping costs.

Given the potential economic, environmental and aesthetic advantages of having vegetation within boulevard areas, it is important that the City continue to work towards amending the Subdivision, Development and Servicing Bylaw in order to establish appropriate standards for boulevard landscaping.

Development Permit Areas

The existing OCP Development Permit Guidelines are flexible, effective tools that help to ensure a healthy balance of vegetation is maintained through the Development Permit approval process. The City should therefore continue to require that owners of properties located within Multiple Family, Commercial, Industrial and Natural Environment and Hazardous Condition Development Permit areas obtain Development Permits prior to altering land and/or receiving a Building Permit or Subdivision Approval. To ensure the effectiveness of this approval process, the City should monitor, as proposed in the following sections, whether or not it is succeeding in the goal of retaining a healthy level of vegetation through the development process.

Landscaping as a condition of Development Permit, Building Permit or Subdivision Approval

Where landscaping is required as part of the development process, the City should continue to require that property owners provide a security deposit for the required landscaping prior to final approval of any such application. This requirement helps to ensure proper compliance with the City's landscaping regulations and guidelines. At present, staff from various departments are involved with administering this process. Continuing to have various departments administering this process allows the City to take advantage of the knowledge and expertise of the respective departments most closely associated with the development process. The City should monitor this administrative process in order to ensure its effectiveness.

Tree Protection Bylaw and Municipal Properties Tree Bylaw

The Tree Protection Bylaw and the Municipal Properties Tree Bylaw help highlight the importance of having a healthy balance of mature trees within environmentally sensitive areas and on City-owned properties. Furthermore, the Tree Protection Bylaw strikes an appropriate balance between allowing for the continuity of use and enjoyment of property and the protection of the natural character of the City. On balance, it is submitted that most people do appreciate and care for trees on their properties, and that expanding the regulations of these two bylaws is not warranted for those few people who value trees in a lesser way.

In order to acknowledge different jurisdictional requirements (Federal, Provincial and Municipal) relating to tree and vegetation management in stream areas where fish habitat is present, it is recommended that the Tree Protection Bylaw be amended by adding a clause which states that no permit or other approval issued pursuant to the bylaw may exempt a person from compliance with all other local, provincial, federal or other applicable regulations or permit requirements. Adding this clause clarifies that the City is not administering or advocating non-compliance with the regulations of senior governments.

It is recommended that the Tree Protection Bylaw also be amended in order to improve the tree replacement criteria. Currently, the Bylaw requires the replacement of protected trees at a minimum of two replacement trees for each protected tree removed. The replacement trees must be at least 10 feet in height for conifers and 3.2 inches in diameter for deciduous species. In order to plant such trees, heavy equipment is often needed, as such trees are too large and heavy to be planted by hand. The use of such equipment can cause damage to environmentally sensitive areas that should remain in an undisturbed state. Also, trees of these sizes are often not available at local tree nurseries.

To address these concerns, staff recommend that the replacement criteria be changed to allow for a range of replacement options. These changes would not reduce the replacement standards. The range of options would ensure that the smaller the replacement tree, the greater the number required to be planted. Introducing a range of replacement options will help reduce the need for heavy equipment in situations where the use of heavy equipment is not desirable and will help take advantage of local nursery stocks.

Through the subdivision approval process, trees can be protected by a covenant registered on the property title. Unless these trees are located within environmentally sensitive areas, they are not currently subject to the regulations of the Tree Protection Bylaw. In order to provide consistent regulatory measures, it is recommended that the Tree Protection Bylaw be amended so that these trees are regulated by the Tree Protection Bylaw. To help administer this new provision, it is recommended that the City establish a better tracking system that would notify staff and the public of trees that are protected by a covenant.

'Heritage Trees'

There has been some interest in the community in providing more protection to trees identified in the Heritage Tree Inventories, as well as to other trees that may have heritage value, by expanding the Tree Protection Bylaw to cover such trees. This issue was raised at the time Council adopted the Tree Protection Bylaw through a petition signed by approximately 500 people. In response to this petition, Council directed staff to review means by which to protect 'heritage trees' located throughout the City.

In reviewing this option, staff feel that the most effective way to ensure a healthy balance of vegetation, including heritage trees, is to take a proactive approach rather than a more rigid regulatory approach. City staff have been proactive by refining development requirements and by expanding programs that promote the retention and planting of vegetation.

Some in the community have suggested that a Tree Bylaw be put in place to prevent the felling of heritage trees. Protecting these trees would be difficult to administer from an approval and enforcement standpoint. Experience in other communities has shown that in reality, retention is often difficult to achieve without restricting the development potential of properties and without incurring significant costs to repair damaged or diseased trees.

Environmental Education Programs

Environmental education programs are valuable proactive tools that can be used to show people how they can maintain and plant vegetation in order to help sustain a healthy environment. The City should therefore continue to provide and expand upon environmental education and communication programs to local organisations and the public.

The Environment Division and Parks Division each have staff with a wide range of skills and knowledge. These staff members should continue to provide and co-ordinate their environmental education programs in order to maximise effectiveness. Continuing to have both Divisions provide these programs ensures that the City reaches the largest audience possible and takes advantage of the knowledge and expertise of the respective departments.

In general, the Parks and Environment Divisions could continue to improve the way information is provided to the public by expanding the level of information in newspapers and brochures, as well as the City's webpage. In this regard, information promoting the retention, planting and proper care of vegetation could be provided.

Vegetation Planting Programs and Inventories

Providing vegetation planting programs is an effective way for the City and local citizens to take proactive steps towards improving the health of our environment. The City should therefore continue to co-ordinate and expand the scope of existing vegetation planting programs.

To effectively expand upon existing planting programs and to monitor the success of development regulations aimed at retaining existing vegetation, the City should undertake a detailed study to inventory vegetation on private and public properties within the City. By monitoring such inventories, the City can better determine whether or not the implementation of existing development regulations is succeeding in the goal of retaining a healthy level of vegetation through the development process. Based on the outcome of these inventories, the City could also facilitate tree planting in areas where trees are deficient and where pedestrian activity is high or is planned to be high.

With existing resources, the Parks Division is attempting to undertake an inventory of trees on City property including street trees and neighbourhood parks. It is also noted that the Long Range Planning Division has recently hired a Spatial Data Analyst who can, given availability of the right software and aerial photography, generate a computer analysis to allow for on-going monitoring of vegetation levels.

Budget Implications

In response to the outcome of vegetation inventories, the Parks and Environment Divisions will be able to assess existing tree planting budgets and determine if additional funds would be required to encourage tree planting in deficient areas. Requests for additional funding would be forwarded for Council's consideration at future budget deliberations.

SUMMARY

Through the use of vegetation related policies, bylaws and programs, the City of Kelowna helps ensure that a healthy balance of vegetation is maintained throughout the City. Existing vegetation related policies, bylaws and programs have been selected on the basis of the need to maintain, promote and plant vegetation within the

community in order to ensure a healthy balance of vegetation. While it is difficult to assess the success of these programs, it is obvious that opportunities exist to improve their effectiveness. It is therefore recommended that Council endorse the 'action items' outlined in this report as a means to improve existing vegetation related bylaws and programs.

Signe K. Bagh, MCIP
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Approved for inclusion ☐

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 Director of Works and Utilities
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APPENDIX 1 - EXISTING VEGETATION POLICIES, BYLAWS AND PROGRAMS

Current City of Kelowna vegetation related bylaws and programs have been established to address the following Official Community Plan vegetation related policies.

Kelowna Official Community Plan Policies

The Official Community Plan establishes various environmental policies that are intended to encourage the retention and replacement of vegetation within natural and urban environments.

To encourage the retention and planting of vegetation through the development process, the OCP states that the City will:

- encourage a balance of vegetation in proposed development areas;
- minimise the effects of development, such as tree cutting and lot clearing, along local watercourses and hillside areas;
- encourage, through the use of alternative development methods, all development and infrastructure projects to retain and/or plant indigenous, drought resistant vegetation;
- develop landscaping standards for the Subdivision, Development and Servicing Bylaw.

To prevent the loss of vegetation and to promote the planting of vegetation in general, the OCP states that the City will:

- continue comprehensive education programs to schools and local organisations by City staff, and encourage public and private interests directed at natural resource protection.
- encourage the retention of mature trees, including the heritage trees identified in the Heritage Trees of Kelowna – Rutland and Inner City Inventories;
- pursue further co-operative initiatives with the Ministry of Forests regarding management of forested areas within and around the periphery of the City;
- undertake a study to inventory vegetation within the City;
- prepare strategy to help sustain and minimise loss of vegetation, including indigenous vegetation, within the City (this report is intended to address this policy);
- encourage tree planting throughout the City, particularly in areas where trees are deficient;
- discourage complete or indiscriminate lot clearing;
- attach priority to planting street trees within Urban Centre areas where there are currently few trees and where pedestrian activity is high or is planned to be high;
- initiate projects to increase watershed health;
- ensure that City activities minimise impacts on the environment and comply with environmental legislation and regulations.

City of Kelowna Zoning Bylaw and Subdivision, Development and Servicing Bylaw

The Zoning Bylaw and the Subdivision, Development and Servicing Bylaw establish landscaping standards for commercial, industrial, institutional and residential zones. When developing, owners must comply with these standards, which establish a minimum level of vegetation that must be planted along streets adjacent to their property, around the perimeter of their property and around parking areas of their property. The standards have been designed to help ensure that the appropriate type and amount of vegetation gets planted along and around certain roadway and land use classifications where landscaping is a condition of a Development Permit, Building Permit or Subdivision Approval.

Development Permit Areas

Through the Official Community Plan, the City has established multiple family, commercial and industrial development permit areas which require that owners of properties located within these areas obtain development permits prior to receiving a building permit or subdivision approval. The terms and conditions of a development permit ensure that such developments comply with the above noted OCP policies as well as the above noted minimum landscaping standards established in the Zoning Bylaw and Subdivision, Development and Servicing Bylaw.

The City has also established Natural Environment and Hazardous Condition Development Permit Areas which require that owners of properties located within environmentally sensitive areas (streamside, hillside and wildland fire hazard areas) obtain Development Permits prior to altering land and/or receiving a Building Permit or Subdivision Approval. Again, the terms and conditions of such a Development Permit ensure that developments comply with the above noted OCP policies as well as the above noted minimum landscaping standards established in the Zoning Bylaw and Subdivision, Development and Servicing Bylaw.

The OCP Development Guidelines acknowledge the potential conflicts between the goal of maintaining indigenous vegetation and the desire or need to remove trees for view or safety reasons. To address this, those pursuing development of visually prominent slopes may be required to provide information on the anticipated aesthetic impacts of the proposed development. Also, in wildland fire hazard areas, a healthy balance of vegetation, including watered lawns, low shrubs, deciduous trees and spaced coniferous trees is required to be retained or planted in order to ensure the safety of homes in the area.

Landscaping as a condition of Development Permit, Building Permit or Subdivision Approval

Where landscaping is a condition of a Development Permit, the owner must provide a security deposit in the amount of 125% of the estimated cost of landscaping. Upon completion of the landscaping, the City may withhold ten percent of the security deposit for one growing season unless the applicant provides warranties for the same period. Currently, Planning staff, with the assistance of Environment and Parks staff, ensure that landscaping is carried out in accordance with an approved Development Permit.

Where landscaping is required in accordance with the Zoning Bylaw and where the owner is not required to obtain a Development Permit, the owner must provide a security deposit for landscaping at the time of application for a Building Permit. The security deposit must amount to 125% of the estimated cost of landscaping. Upon completion of the landscaping, the City may withhold ten percent of the security deposit for one growing season unless the applicant provides warranties for the same period. Currently, Building Inspections staff is responsible for ensuring that landscaping is carried out in accordance with an approved Building Permit.

Where landscaping is required in accordance with the Subdivision Approval process, the owner must provide a security deposit for landscaping at the time of application for Subdivision Approval. The Subdivision Approving Officer uses the above noted OCP policies and development guidelines and regulations to help ensure that a healthy balance of vegetation is maintained through the subdivision process. The Subdivision Approving Officer can require that a covenant be registered to protect trees that would be impacted by a proposed subdivision. Currently, Planning staff, with the assistance of Environment and Parks staff, ensure that landscaping is carried out in accordance with an approved Subdivision application.

Where boulevard landscaping is required as part of the Development Permit, Building Permit or Subdivision Approval process, the owner must provide a security deposit for the landscaping prior to the approval for any such application. Currently, Works and Utilities staff, with the assistance of Environment and Parks Division staff, ensure that boulevard landscaping is carried out in accordance with an approved Subdivision, Development or Building Permit.

Tree Protection Bylaw

The Tree Protection Bylaw regulates the removal of trees on lands located along Natural Environment and Hazardous Condition Development Permit Areas including local watercourses and hillsides with a slope of 30% or greater. The bylaw outlines the permit application procedures and requires that any tree removed under the provisions of the bylaw be replaced with two trees within one growing season. The bylaw also establishes exemption conditions and fines for violating bylaw regulations.

Municipal Properties Tree Protection Bylaw

The Municipal Tree Bylaw provides regulations for the control and management of trees located on City-owned property. Under the terms of the bylaw, no person can do anything to these trees without written permission of the Parks Division. The bylaw also prohibits persons from planting a tree on City-owned property without written permission of the Parks Division.

Environment Division Programs

The Environment Division does a considerable amount to promote the health of our environment through various environmental stewardship and public education programs.

The Environment Division offers free, one to two hour sessions for School District No.23 classes and community groups. Participants learn local environmental facts and ideas about how they can help the environment. Since 1997, over 12,000 students have been given an environmental presentation by Environment Division staff.

The Environment Division also co-ordinates stream stewardship programs for school and community groups to participate, including programs which replant indigenous vegetation along local watercourses. Since 1997, over 7,500 native trees and shrubs have been planted along creeks in Kelowna by Environment Division staff and volunteers.

Each year the Environment Division co-ordinates the annual Family Environment Day celebrations and the annual Mayor's Environmental Expo which celebrate local environmental initiatives. These events provide an opportunity for citizens to learn how other citizens, local businesses, government and non-profit groups are working to protect and conserve our environment. During the Expo, awards are given to acknowledge persons that have contributed to enhancing the health of our environment.

This year, the Environment Division developed a Living Greener Calendar which is full of environmental information on how people can contribute to improving the environment in their own homes and backyards. The Environment Division has also developed a Handbook for Natural Environment and Hazardous Condition Development Permit Areas. The Handbook was prepared as an implementation and information tool to help local residents, developers, consultants and contractors understand the Official Community Plan regulations related to environmentally sensitive areas. Included in the Handbook is a suggested list of plant and seed species to be used in environmentally sensitive areas and suggested places where the plant and seed species can be purchased.

The Environment Division has also provided local residents, landscapers, arborists and pest control companies with information sessions and on-site inspections to provide advice on the importance of properly managing vegetation next to streams.

Parks Division Programs

The Parks Division promotes the health of our environment through various environmental stewardship and public education programs. Through the Communities and Nations in Bloom competitions, the City has received world wide recognition for these efforts. The Communities and Nations in Bloom programs are competitions that evaluate communities based on a series of environmental, aesthetic and community spirit criteria. Participating in these programs helps the City achieve its goal to educate the general public on the importance of community involvement and a healthy environment.

The Parks Division encourages property owners to plant trees along street boulevards through the Neighbourhood Tree Planting Program. To participate, the majority of owners along a street must agree upon initiating the program. The City provides and plants the boulevard trees at no charge, and it is the responsibility of the property owners to help water the trees.

In addition to the Neighbourhood Tree Planting Program, the Parks Division establishes tree planting partnerships and co-ordinates various tree planting projects throughout the City. The tree planting projects are generally intended to enhance the health and visibility of park and open space areas. Through these programs, an average of 650 trees are planted each year.

Recently, the Parks Division hired an Urban Forestry Supervisor whose responsibility is the management of the City's trees and forests. The Urban Forestry Supervisor will play a vital role in fulfilling the City's education and planting related vegetation policies in the OCP. This year, the Urban Forestry Supervisor organised Kelowna's first Arbour Day celebrations. It is hoped that Kelowna's Arbour Day celebrations will serve as a reminder that everyone can play a part by planting and maintaining trees in order to help improve the health of our environment.

Demonstration Xeriscape Garden

The City of Kelowna has partnered with the Central Okanagan Heritage Society to produce a xeriscape display garden at the Benvoulin Heritage Church site. The xeriscape garden offers local residents an opportunity to learn how to make use of indigenous, drought tolerant plants.

Heritage Trees of Kelowna – 1992 Inner City and Rutland Inventories

Two inventories of heritage trees in Kelowna were undertaken in 1992. The inventories identified 157 individual trees and 13 groves of trees in the 'Inner City' and Rutland areas, representing a variety of tree species having particular merit due to their uniqueness, historic context, physical characteristics or other traits. The list does not represent all trees within the City that may share similar attributes and has never been updated. Property owners are encouraged rather than required to preserve heritage trees located on their property.

Communications Program

The Parks Division and Environment Division provide the general public with information about the above noted vegetation bylaws and programs through local newspapers, various brochures and on the City's webpage. The Parks Division is currently compiling information to be placed on the webpage that would provide useful tips on how to properly plant and maintain trees.

