

GROW WILD
DECEMBER 2022

POLICY ANALYSIS:

INCREASING ECOLOGICAL HEALTH OF PRIVATE YARDS IN KAMLOOPS

PREPARED BY:



Kamloops
Naturalist
Club



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The Grow Wild Project was initiated by Kamloops Naturalist Club with the intent of identifying barriers, facilitators and next steps for fostering culture and policy change to increase the ecological health of private land in the city. This policy analysis document examines the various policies that are in place, as well as gaps in adoption and implementation in Kamloops.

The scope of the project is focused on understanding **municipal** policies that could help or hinder the enhancement of ecological health on **private** land (backyards, new developments, multifamily landscaping etc.). In particular, we examined which City of Kamloops policies are currently adopted, implemented, evaluated or actualized related to ecological health of private urban land.

1. Method

The policy analysis was conducted in a multiple stage process that included:

1. **Policy review:** Conducting a review of City adopted plans, bylaws and educational materials to assess what policies exist that would either advance or hinder ecological value.
2. **Case study:** Common questions and/or misconceptions about policies related to ecological health were examined based on the policy implementation continuum. In this step, we looked at whether policies were adopted that would help/hinder ecological health related to the question, whether the policies were operationalized, evaluated and actualized.
3. **Analysis of barriers to policy implementation:** The results of the case study and gaps in the policy implementation continuum were examined along with interviews have been conducted with City staff to discuss the barriers to policy implementation.
4. **Next Steps:** Based on the case study, several areas of policy implementation next steps were identified.

2. Analysis Framework

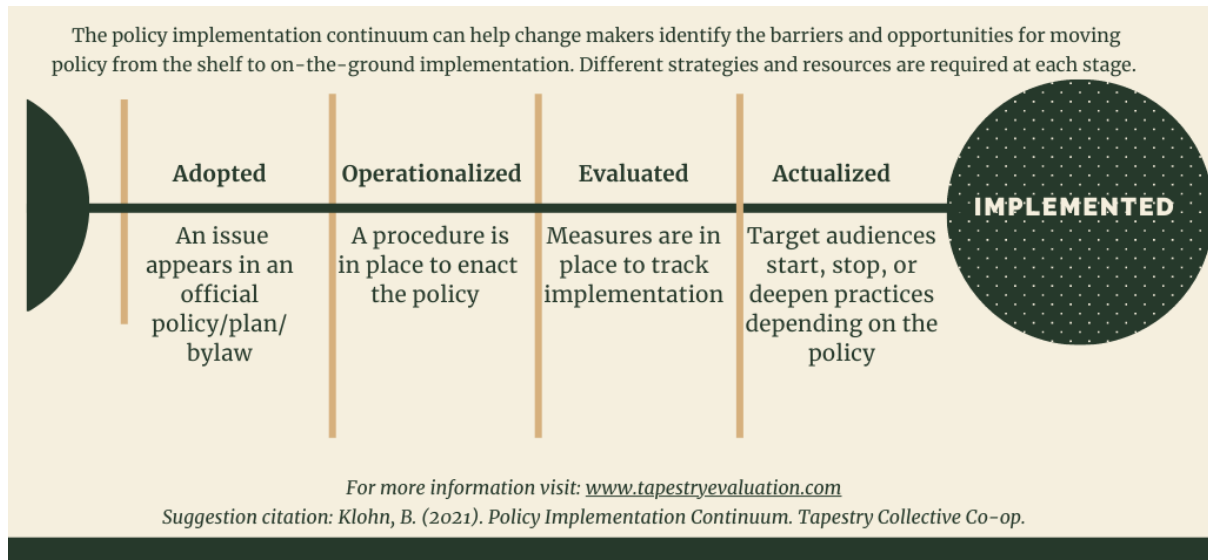
Often policy is considered primarily in terms of advocacy, and the work that interest groups do to encourage decision makers to adopt a particular law, goals, or action item. However, especially in a municipal context, policies are often adopted that speak to community and environmental imperatives and the barriers to change lie in the implementation¹.

Without strong implementation and evaluation plans that have sufficient resources, plans that are aimed to move municipalities towards sustainability or ecology outcomes can often

¹ Clarke, A. (2012). Passing go: Moving beyond the plan. Federation of Canadian Municipalities. Retrieved from https://fcm.ca/Documents/tools/GMF/SS_PassingGo_EN.pdf.

be tokenistic². The following graph was developed to help municipalities and their partners identify the strengths and gaps in the implementation of a desired policy in the community.

Figure 1. Policy Implementation Continuum



The first stage in the policy implementation continuum is that the policy is adopted. This can mean that it appears in a plan or bylaw of the municipality, is ratified by decision makers and publicly accessible. Sometimes policies that enhance ecological health are adopted as a part of a broader planning process or plan update. However, at times policy adoption only occurs after intensive education and advocacy on the part of civil society. In either case, the focus of the policy implementation continuum is to ensure that all the work that went into ratifying adopted policy does not go to waste and that the policies have the impact that they are intended to.

The second stage is policy operationalization. Often policies require a shift in processes and actions internal to the government or organisation that adopted the policy. For example, if a policy is adopted to create more gardens in the city, it can be operationalized through landscape design guidelines, or incentives for developers to incorporate green space, or through a service agreement with a group managing community gardens.

The third stage is evaluation, which involves both the act of creating an evaluation plan as well as carrying out the plan to measure the impact of the policy or group of policies. Deciding how the decision makers and the public will know that the policy is working is a key part of implementation that is frequently overlooked³. Creating an evaluation plan and carrying it out is an important tool for course-corrections or troubleshooting if the desired impact is not being reached. Evaluation can be quantitative, based on statistics, or qualitative, involving reflective processes on the impact of the policy. Evaluation can occur by engaging with those closely monitoring the desired impact area of the policies as well as the target audience of the policy (if there is one).

² Stevens, M. & A. Mody. (2013). Sustainability Plans in British Columbia: Instruments of Change or Token Gestures? *Canadian Journal of Urban Research* 22 (1): supplement pages 46-71.

³ Ibid.

Finally, once the policy has changed the behaviours of the target audiences, to the desired level, it is considered to be actualized, and fully implemented. This means that the impact of the policy is felt on the ground. That there is some tangible social or environmental change that has occurred as a result of the work that went into policy advocacy, adoption and implementation.

The policy implementation continuum is an important tool for the Grow Wild initiative because there are many policies embedded in City of Kamloops plans and strategies that relate to environment preservation, and ecological values, however, how and when they get implemented can make a significant difference in the outcomes.

3. Policy Case Study

One of the major themes explored in the Grow Wild literature review is the prevalence and limitations of turf grass in terms of ecological value. There are a number of news articles and some indication that there is a public belief that there may be policies restricting homeowners or renters from growing vegetables gardens or other types of gardens/meadows in their front yards. One of the intents of this project is to help people within urban settings understand how to (and the importance of) transitioning the land they care for from turf grass to something with more ecological value. We are using this topic of replacing turf grass with other options such as meadows with blooming flowers or vegetable gardens as the subject of the policy analysis.

Adopted

A review of City of Kamloops plans shows that there are policies that are already adopted in two different plans that would support citizens transitioning their turf grass lawns to an option with higher ecological value. These policies are:

- In the 2021 Community Climate Action Plan (CCAP) Big Move # 8:
 - Urban Ecosystems for Climate Resilience: Provide public education to encourage landscaping and gardening using native species, plants that attract pollinators, integrated pest management, and Firesmart landscaping practices in wildland/urban interface areas.
 - Green Infrastructure: Update the City's Landscape Guidelines to ensure that landscaping developed on City rights-of-way (e.g. boulevards) use green infrastructure technologies, support the City's tree canopy goals and use sufficient soil volumes and native vegetation where appropriate.
- In the 2015 Food and Urban Agriculture Plan (FUAP):
 - Policy # 1.1.4 Continue to support horticultural practises that promote healthy and diverse ecological systems and enhance natural habitat for pollinators and beneficial insects when cultivating edible landscapes and community gardens. (public property and urban areas)
 - Policy # 1.2.1 Review and update the City's Multiple-family Development Permit Area Guidelines and zoning regulations for landscaping, screening, and fencing, and update the City's landscape guidelines to support the use of community gardens and edible landscaping as amenity space in multiple-family residential developments.

Summary: Are policies adopted?

- **Four related policies in two plans have been adopted**



Operationalized

The CCAP includes an implementation section which identifies Development and Engineering Services and Civic Operations as lead implementers for Big move # 8. However, this plan does not contain detailed information about how to operationalize public education initiatives and the update of the landscape design guidelines. Similarly, the FUAP identifies parks as the lead for action item 1.1.4 and Development, Engineering and Sustainability as the lead implementers for action item 1.2.1.

There are several programs that the City currently operates that relate to the biodiversity, ecosystem and pollinator habitat impact that private citizens can have on land use decisions. These include the Communities in Bloom program and the Healthy Landscapes education/communications initiatives.

Communities in Bloom includes natural and cultural heritage preservation as an evaluation criteria, something which the City could apply to protecting our natural biodiversity. Communities in Bloom assessments also include environmental action and tree management, both areas that the City could emphasise to help operationalize this CCAP goal.

The Healthy Landscapes initiative that is described on the City website contains three primary areas: lawns, xeriscaping and pests. The lawn component includes information about grass alternatives like clover, as well as other water-saving tips such as mowing high, dethatch, aerate, top dress, overseed, watering deeply, and fertilising. This would be an excellent place to incorporate information about Kamloops' natural biodiversity and the potential for private lawns to be a place that safeguards native biodiversity. The xeriscaping component offers useful tips for reducing water use associated with gardens and lawns, however, it does not mention selecting local native plants nor the potential for biodiversity to be incorporated into low-water gardening plans. Conversations with City of Kamloops staff have indicated that with water metering in place as the most effective tool for incentivizing water use reduction, there will likely be a shift towards messaging that is more specific to climate change resilience, reduction of GHGs and stormwater management and green infrastructure.

Finally, the FUAP policy 1.2.1 "*Review and update the City's Multiple-family Development Permit Area Guidelines and zoning regulations for landscaping, screening, and fencing, and update the City's landscape guidelines to support the use of community gardens and edible landscaping as amenity space in multiple-family residential developments*" have been operationalized. The multi-family Development Permit Area Guidelines now read:

Residential units should have access to daylight and private amenity space (e.g. garden, balcony, courtyard, rooftop patio). Use of edible landscaping in the form of fruit trees, nut trees, and edible ground cover is encouraged, provided such plantings are properly maintained to reduce attractants for wildlife predators and pests. Examples of outdoor amenity areas include irrigated edible gardens, landscaped and trellised seating areas, playgrounds, clubhouses, and outdoor cooking areas.

This operationalization of the policy around the use of edible landscaping in multi-family units means that these considerations will be part of the development process for new buildings.

Summary: Are policies operationalized?

- **Lead implementation departments have been identified for all policies**
- **City-run programs have been adapted to advance policies related to biodiversity, native habitat and ecological value**
- **Multi-Family Development Permit Area Guidelines have been updated to encourage edible landscaping**

Evaluated

CCAP contains an implementation plan for all of the big moves and an annual report to council is recommended in the plan in terms of evaluating the progress on the action plans. One of the primary evaluation metrics for the CCAP is the reduction of GHG emissions, which are modelled and evaluated as part of the plan. Big move #8, which contains the policies and actions that are related to ecological values, are not monitored in the same way that other GHG reduction actions are. The implementation plan action completion is a way of evaluating progress.

Communities in Bloom does offer an opportunity for evaluation of the landscape in Kamloops each year, and more communication and advocacy from the municipality may help the criteria to shift in a more holistic way towards ecological health, as opposed to aesthetic value.

There is no public evaluation of the Healthy Landscapes initiatives and education. These initiatives are created to reduce water consumption, which is, of course, measured by the City. However, because these programs also have a significant relationship to the change that is intended within other adopted policies related to biodiversity, ecosystem conservation, pollinator habitat and edible landscapes, a broader measurement of the impact of the educational initiatives would help the City understand how we are (or are not) moving towards increasing the ecological health of our urban and semi-urban landscapes. A partner we met with indicated that it may be more realistic to do this work at the neighbourhood

level. For example, through a comprehensive pilot project where before and after surveys and/or GIS mapping analysis could identify changes in yard uses.

The City has created a Food Asset Map, which is a helpful evaluation tool, where it may be possible to assess pollinator friendly areas, and gardens that are richer in biodiversity, however it only includes City land and not private land. Policy 1.1.4 specifically states that it is intended for both public and private spaces. The policy reads: *“Continue to support horticultural practices that promote healthy and diverse ecological systems and enhance natural habitat for pollinators and beneficial insects when cultivating edible landscapes and community gardens. (public property and urban areas)”* so in this instance there are no evaluation tools for the private property component.

Finally, while all Multi-Family Development Permit Area records are kept by the City, there is no assessment of how much edible landscaping is being taken up by the development community in these plans.

Summary: Are policies evaluated?

- **CCAP Big Move # 8 implementation action items are evaluated annual to review progress towards ecological services as an important factor in mitigating climate change**
- **CCAP Big Move # 8 does not include modelling for reduction of GHG emissions, though it is the primary evaluation metrics for other parts of the CCAP**
- **Communities in Bloom offers is being used as an evaluation tool adapted to meet the needs the City’s ecological policies**
- **There is a mechanism to measure gardens, pollinator corridors, and edible landscaping on private property (potentially within the existing Food Assets Map)**
- **Edible landscaping in Multi-Family Development Permit Areas is assessed on an annual basis so that changes can be evaluated**

Actualized

Without many key mechanisms in place for evaluation, it is difficult to determine if these policies that are intended to enhance ecological health (and would support transitions away from turf grass on private land) are being actualized.

From the perspective of the Kamloops Naturalist Club, as citizens that live, work and play in Kamloops, it seems like mowed turf grass is extremely dominant in our urban landscape and variations from this model are rare.

There are a few more perceived and real barriers to people transitioning their lawns to something with more ecological value, and therefore preventing the actualization of several City adopted policies. In relation to the potential of growing out a blooming lawn alternative that offers forage for bees and other pollinators, it has been noted that there is a belief that the Good Neighbour Bylaw prohibits lengthy foliage in a lawn-like area. However, it is only noxious weeds (as defined by the Invasive Species Council of BC) that are identified in this bylaw as being enforceable for removal.

The general landscape design guidelines for single family homes and other types of development are not in alignment with the ecological policies that the City has adopted. The current guidelines specify that landscape designs should be based on practicality, aesthetics and ease of maintenance, as well as suggested chemical soil additives for seeding lawn. There is a new Landscape Planning Technician hired within the City, who will be reviewing these and also working on updating the landscaping guidelines to align with CCAP and other policies.

Finally, in terms of *how* private citizens may maintain their land, lawns, and gardens, the City has adopted a bylaw prohibiting the use of cosmetic pesticides, which are however, still widely available to purchase in gardening stores in Kamloops. There is no active enforcement of this bylaw, and this impacts pollinators and many of the ecological goals that are established in City policy, and related to the issues of providing a habitat for native plants, and pollinators in the urban environment.

Summary: Are policies actualized?

- **Ecological policy evaluation has been developed and tracked over time, so there is a solid understanding of the impact**
 - **Clear communication about perceived barriers (such as potential complaints about “long lawns” or vegetable gardens in front yards) has helped to reduce the perception that mowed lawns are the only permitted approach to private land use**
 - **Landscape design guidelines for new development encourage ecological planning and are reviewed by the implementation leads of related policies**
 - **Pesticide bylaws are being actively enforced**
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4. Analysis of Barriers

The analysis of the policy implementation continuum is not intended to criticise the progress of City policy implementation, but rather to identify the key areas of opportunity for moving forward. Civic society actors like the Kamloops Naturalist Club are well positioned to move forward with projects like Grow Wild that attempt to bridge some of the implementation gaps. However, understanding why these gaps appear helps to move policies along the implementation continuum.

Interviews were conducted with six City of Kamloops staff members that have portfolios that overlap in some way with the implementation of policies that promote ecological values. The purpose of the interviews were to identify the success factors and barriers to policy implementation. Some of the barriers to policy implementation that were identified through these interview include:

Resources

- Lack of resources for implementation (or lack of leveraging resources such as private citizen peer to peer etc) both human resources and capital budgets⁴
- Lack of plan on HOW to achieve goals

Education

- The importance of face to face conversations in education and the time-intensive nature of it
- siloed workplace departments

Political Will and Public Will

- culture of change resistance within municipal government
- culture of change resistance among public- people don't want to change, fine line of forcing people to do something vs encouraging or inviting them- limited mechanisms for moving things forward
- People in leadership pushing priorities

Overwhelm

- Disconnect between suggested changes and severity of problems faced- climate change, pollinator collapse etc.
- Unachievable targets or too many priority areas

An overarching reflection on these barriers to implementation is that the City cannot implement all the actions, goals and policies that are adopted internally or with only the use of City staff members. Implementation requires multiple stakeholders at each level of the implementation continuum to assist with operationalizing, evaluating and actualizing the policies on the ground. Kusakabe (2013) echos the sentiment that implementation capacity comes from a strong network of champions to share the work and to influence a culture of change:

⁴ Clarke, A., & Crane, A. (2018). Cross-Sector Partnerships for Systemic Change: Systematized Literature Review and Agenda for Further Research. *Journal of Business Ethics*, 150(2), 303-313.

“Important factors influencing local plan implementation performance include the level of institutional capacity of cities and municipalities; resources arising from network connections, and the presence of committed individuals and champions who mobilise others and promote processes that enhance local policy and sustainability programs (Kusakabe, 2013)”⁵

The next section recommends next steps for moving the case study along the implementation continuum.

5. Policy Implementation Next Steps

We can summarise the analysis on the policy case study by looking holistically at each step of the implementation continuum. Are policies that support transitioning turf grass to an alternative with higher ecological health implemented?

Adopted	Many policies that support the transition of lawns to an alternative with higher ecological health have been adopted	<input checked="" type="checkbox"/>
Operationalized	There is some level of operationalizing these policies in terms of identifying lead departments and updating related procedures	<input checked="" type="checkbox"/>
Evaluated	There are few formal evaluation metrics and processes in place	<input type="checkbox"/>
Actualized	The policies around ecological health are not widely actualized and impacting change on the ground	<input type="checkbox"/>

The implementation continuum loses momentum in the case study at the evaluation and the actualization stage. As a result, one of the key possible next steps for implementing policies is to engage supportive partners in evaluating the ecological impacts of the adopted policies. Some key partners in evaluation may include:

- The Kamloops Naturalist Club, particularly using the Grow Wild evaluation rubric as a key tool that can be considered alongside City programs and initiatives
- The Thompson Nicola Conservation Initiative (TNCI)
- A TRU Researcher in residence
- A working group of citizens and partners for implementation

⁵ Kusakabe, E. (2013). Advancing sustainable development at the local level: The case of machizukuri in Japanese cities. *Progress in Planning*, 80, 1-65.

Actualizing ecological policies can involve education, peer to peer mentorship, and communications that aim to shift the mindsets of the current culture of monoculture lawns and a perception of “normal” or “good”. Some of the action next steps to consider are listed below. These will be incorporated into the recommendations for the overall needs assessment undertaken as part of Grow Wild.

- Policy and culture change roundtable for increasing ecological health of land in Kamloops
- A social media campaign (or other online education campaign) that helps homeowners/renters envision the look of a transitioned lawn
- Encouraging the mainstream availability of turf grass alternatives that are appropriate for the Kamloops climate: including partnering with seed companies to create a Kamloops-appropriate bee turf or lawn alternative
- Working with neighbourhood associations or other engaged citizens on pilot projects, or train the trainer approaches
- Internal City of Kamloops Bylaws education on ecological land use and the intersections with the good neighbour bylaw to eliminate the possibility that people who are practising ecological land use may receive a warning
- More ecological land use demonstrations on City property
- Updating landscape design guidelines to include ecological practises for rain retention (swales and natural drainage, rain gardens), biodiversity, pollinator habitat, and other ecological factors
- Advocating for a barrier on urban growth to support the natural landscapes that support the urban ecosystems
- Offering signage to home owners that explains and identifies a “naturalised” garden that helps to communicate what someone is doing and help create norms around lawn alternatives.