



HANDBOOK

A Toolkit for Local Electeds Climate Action

PROTECT AND RESTORE NATURAL AREAS

A part of the [Nature Based Solutions Councillor Handbook](#)



Stay tuned for the up-to-date
version of this resource!

This document is undergoing fact checks and updates...
you will be able to access the new version in September 2025.

Table of Contents

1. [Introduction](#)
2. [Protect Nature Initiatives](#)
 - a. [Amend OCPs using Development Permit Area \(DPAs\) to designate protected natural areas](#)
 - b. [Commit municipal lands to parks and green space provision](#)
 - c. [Comprehensive Preservation Plan](#)
 - d. [Streamside Protection and Enhancement Area \(SPEA\)](#)
 - e. [Implement an Invasive Species Strategy](#)
 - f. [Natural coastal protection](#)

- g. [Become a Bird Friendly City](#)
 - h. [Support Habitat Gardens](#)
 - i. [Improve wildfire protection by providing free waste disposal for property owners, reducing fuel hazards](#)
 - j. [Partner with Local Environmental Groups and Stakeholders for Conservation and Park Management](#)
 - k. [Support Municipal Land Trusts](#)
 - l. [Make a Conservation Commitment or Support Canada's National 30x30 Conservation Target](#)
- 3. [Restore Nature Initiatives](#)
 - a. [Create an Ecosystem Restoration Plan](#)
 - b. [Restore a wetland](#)
 - c. [Daylight Rivers, Streams, & Creeks](#)
 - 4. [Additional Resources](#)
 - 5. [Existing tools](#)

Introduction

Natural areas are important spaces that must be protected and restored. Natural areas like the wetlands, meadows, and forests all provide services that perform significant ecological functions while supporting human prosperity and well-being. Natural areas can promote mental wellness and strengthen a sense of community by providing a space to gather and interact.

Protect Nature Initiatives

*Resource expertise level:  Green = beginner  Blue = intermediate

◆ Black = advanced

◆◆ Double black = expert

****Climate Caucus has ranked the following initiatives from beginner to expert, based on Complexity to implement, Staff time & expertise and Political capital. Please note, these rankings are our own best judgements.*

Amend OCPs using Development Permit Area (DPAs) to designate protected natural areas



The basics:

- Amend OCP using DPAs to designate protected natural areas
- Key priorities should include preserving large and diverse core habitat areas and ensuring connectivity between habitat areas, and ensuring ecological connectivity within urban spaces, particularly with native species.

Examples:

- [Kelowna Natural Environment DP Guidelines](#), BC
- Climate Emergency Action Plan – [Big Move 6: Natural Climate Solutions](#), Vancouver, BC

Commit municipal lands to parks and green space provision



The basics:

- Accessible public green space supports mental and physical wellness, and increases resilience to climate change, such as extreme heat and flooding
 - For example, communities with nearby parks are significantly cooler, with [one study](#) finding that areas that are within a 10 minute walk from a park are nearly 6 (°F) degrees cooler than surrounding areas
- Park dedication is a positive use of municipal-owned lands

Examples:

- [Edgeley Pond and Park, Vaughan, ON](#)
- [Huron Natural Area, Kitchener, ON](#)

Case study: West Vancouver, BC

In 2024, the District of West Vancouver voted to formally dedicate 1,932 acres of district-owned land as park. The area is mostly made up of undeveloped forest land and hiking trails. This new park is almost twice the size of Stanley Park and one of the largest protected areas near an urban centre. The park dedication more than doubled the amount of park land in West Vancouver. The park now represents 11% of all district-controlled land. See the [Council Report Here](#).

Comprehensive Preservation Plan



The basics:

- Develop a comprehensive management plan to ensure that the natural spaces and built green spaces are conserved, restored, connected and enhanced to support the health and diversity of the natural and built environments
- Apply the detailed local biodiversity solutions from OurSafetyNet.org including:
 - Integrating biodiversity protection into the Official Community Plan, the Sustainability Plan and the Disaster Management Plan
 - Establish natural and semi-natural wildlife corridors and linkages
 - Grow native plants, wildflowers, trees or shrubs on road verges
 - Create green parking lots and green spaces in underused lots
 - Develop bird-friendly building design guidelines and bylaws to prevent window collisions
 - Create cat roaming bylaws to protect native bird diversity
 - Amend bylaws that restrict plants and lawn height and so [restrict growth of native plants and edible gardens](#)

Examples:

- [Calgary's Natural Area Management Plan](#), AB

- [Brampton Natural Heritage and Environmental Management Strategy](#), ON
- [Surrey's Biodiversity Conservation Strategy](#), BC
- [Toronto's Biodiversity Strategy](#), ON
- [Toronto's Ravine Strategy and Implementation Report](#), ON
- [York Region's 20-Year Forest Management Plan](#), ON
- [Bowen Island](#), BC
- [Edmonton's regional biodiversity protection strategy](#) to protect, manage, and restore local natural areas and biodiversity while engaging the community.
 - See [Natural Connections: Biodiversity Action Plan for details](#).
 - City of Edmonton, '[Ribbon of Green](#)' - North Saskatchewan River Valley and Ravine System Strategic Plan, AB
- [Hamilton, Biodiversity Action Plan](#), ON

Resources:

- [UNDP Elements of a Biodiversity Action Plan](#)

Streamside Protection and Enhancement Area (SPEA)



The basics:

- Adapt the OCP to establish streamside protection and enhancement policies, as well as requirements and procedures applicable to the following development applications and activities:
 - Community & Neighbourhood Plan Amendments
 - Rezoning
 - Subdivision
 - Development Permits
 - Development Variance Permits
 - Building Permits
 - Soil Extraction and Soil Deposit Permits
 - Soil and vegetation disturbance

Examples:

- [Township of Langley Streamside Protection Information](#), BC
- [City of Burnaby Streamside Protection and Enhancement Areas Bylaw](#)
 - [Guide for Developing near Streams](#)
- [District of Saanich Streamside Development Permit Area](#), BC
- [District of North Vancouver Streamside Development Permit Area](#), BC

Implement an Invasive Species Strategy



The basics:

- Create an invasive species policy which includes:
 - identification of species found locally
 - education about invasive plants,
 - and makes use citizen volunteers to remove these plants

Examples:

- The [City of Toronto's Natural Environment Community Stewardship Program](#), ON, engages over 5,000 volunteers each year for ecosystem restoration work
- [City of London, ON Invasive Plant Management Strategy](#)
- Helpful resource: [Invasive Species Centre](#) - includes a Best Management Practices Database
- Edmonton's [Spot it, Report it, Remove it](#) Campaign

Natural coastal protection



The basics:

- Propose development of a natural coastal protection plan that includes:
 - Coastal vegetation to mitigate storm surges with permeable surfaces, rain gardens and naturalized landscapes (DePave Paradise)
 - Enhanced salt marshes to replace dikes as sea level rise
 - Establishing "Living Shorelines" guidance and requirements.

Examples:

- [Ecology Action Centre's Living Shorelines Program](#)
- [The Natural Edge program for restoring a natural shoreline](#)
- [Quinte Conservation's Natural Edge program](#)
- [City of Orillia's Shoreline Development Agreement ON](#)
- [Green Shores Protection program BC](#) and their [local government manual](#) with OCPs, DPAs, zoning and sample g/l's
- [MNAI](#) is piloting a Coastal Asset framework with Gibsons, BC & Pointe-du-Chene, NB

Become a Bird Friendly City



The basics:

- A [Bird Friendly City](#) is a community where:
 - Key threats to birds are effectively mitigated;
 - Nature is restored so native bird populations can thrive;
 - Residents are actively engaged in admiring and monitoring local bird populations;
 - Organizations are creating events to protect birds;
 - Progressive municipal policies are created to protect urban bird populations; and
 - A Bird Team has been created to oversee and lead these initiatives.
- See [details of certification](#)

Examples:

- As of 2021 Vancouver, Calgary, Toronto and Vancouver had started working on certification

Support Habitat Gardens



The basics:

- Habitat gardens are cultivated with plants that attract and support a diversity of wildlife including birds, bees and butterflies.
- Conventional mowed lawns (turfgrass) that dominate our communities offer minimal ecological value and come with steep environmental costs, including excessive water use, greenhouse gas emissions from mowing, and chemical reliance. These lawns can also increase vulnerability to local flooding.
- Municipal property standards, practices and bylaws can limit the potential of these personal and community initiatives.
- Municipalities need to **revise existing property standard bylaws** that discourage or prohibit habitat gardens. For example:
 - Prohibiting “weeds”,
 - Disallowing habitat features such as nurse logs or leaving fallen leaves,

- Vegetation height restrictions and
- Presentation of the manicured mowed lawn as the approved standard
- **Bylaw enforcement officers need to be trained** on native and prohibited plant identification, essential and permitted habitat features, community relations and the legal rights of gardeners to express their environmental ethics.
- Municipalities can **lead by example by insisting on ecological gardening** practices in public gardens, green infrastructure, natural areas and other lands.
- **Facilitate community outreach and education** on sustainable gardening practices through partnership with organizations to deliver habitat garden resources and events.

Examples:

- [City of Toronto](#), ON - encourages the growth of pollinator friendly gardens
- [City of Sudbury](#), ON - Amended Clearing of Yards bylaw to support pollinators
- [CSLA Precedents in Bylaw Reform in Canadian Municipalities re: Naturalized Yards and Gardens](#)
 - Provides 6 examples from City of Toronto, Prince Edward County, City of Fredericton, City of London, Town of Lunenburg and City of Thunder Bay

Resources:

- [David Suzuki Foundation: An Open Letter to Canadian Municipalities in support of Habitat Gardens](#)
- [Ecological Design Lab - Bylaws for Biodiversity](#)
 - [Barriers and Opportunities for Naturalized Gardens on Private Property](#)

Improve wildfire protection by providing free waste disposal for property owners, reducing fuel hazards



The basics:

- Introduce a motion to forgo waste disposal fees for yard waste in fire season to reduce available fuel

Examples:

- [West Kootenay Fuel Management](#), BC
- [BC First Nations Fuel Management](#)
- [Fire Smart Canada](#)

Partner with Local Environmental Groups and Stakeholders for Conservation and Park Management



The basics:

- Local nature/environmental groups have **localized biodiversity knowledge** that local governments can leverage to support conservation.
 - Consider the creation of a working group to support your community's conservation goals.
- Local governments have limited capacity to provide land-based education **interpretive services** within municipal parks. Local environmental groups could fill this gap.
- ENGOs could also support **park management activities**, such as tree planting, trail maintenance, and/or invasive species removal.

Examples:

- **Mount Royal Park, Montreal, QC**
 - The park is managed by the City of Montreal and supported by groups such as [Les Amis de la Montagne](#) which supports environmental education and native tree planting activities
- **Stokes Bay, Gosport Borough, ON**
 - [Friends of Stokes Bay](#) is a group of local residents and regular users of the Park supported by Gosport Borough Council formed to promote respectful and thoughtful use of the park.
- **Stanley Park, Vancouver, BC**
 - Stanley Park Ecological Society is a registered charity with the aim of education conservation and outreach programs in Stanley Park. In June 1997, SPES and the Vancouver Park Board entered into a Joint

Operating Agreement that documents the nature of our reciprocal relationship.

Case study - Saskatoon Northeast Swale, SK

The Northeast Swale is located in the northeastern area of Saskatoon. The City of Saskatoon and the Meewasin Valley Authority have partnered to conserve the Swale located in both the City's boundary and Meewasin's Conservation Zone. The Meewasin Valley Authority is a non-profit organization that exists to ensure a healthy and vibrant river valley, with a balance between human use and conservation, for the benefit of present and future generations, in Saskatoon & surrounding area.

This partnership has existed since 1992 when the Swale was first identified as an important natural prairie remnant. The City has approved [Northeast Swale Development Guidelines](#) (2012), and developed a Northeast Swale Working Group (NSWG). The NSWG is an ad-hoc group with a short-term focus on current issues and policy outcomes. Representatives are to report back to their respective groups to ensure they are up to date on the activities of the NSWG. The group provides opportunities for dialog about the Swale, issues arising from adjacent development, and on-going management. The group is composed of representatives from the Meewasin Valley Authority, The University of Saskatchewan, City Council, the Northeast Swale Watchers, and City of Saskatoon Administration. This is a great example of how municipalities can facilitate dialogue between the various conservation players within a community.

Support Municipal Land Trusts

The Basics:

- A land trust is a nonprofit or charitable organization, which have as one of their core activities the acquisition of land or interest in land (i.e. conservation easements) for the purpose of conservation
- Municipal green space plans need to include all conservation efforts within their municipal boundaries, including land trusts, to ensure a holistic approach.
 - In the best case scenario the municipality acts as a facilitator of conservation authority coalitions to ensure collaboration.
- Municipalities can also support land trusts through the provision of municipal land or resources.

Examples:

- [Bruce Trail Conservancy](#) is a land trust which has a trail system that touches 26 municipalities.

Resources:

- Alliance of Canadian Land Trusts, [Conservation Options for Municipalities](#)
 - [Infographic on Land Trusts](#)
- [Nature Canada, Municipal Protected Areas](#)

Make a Conservation Commitment or Support Canada's National 30x30 Conservation Target



The Basics:

- Municipalities can **sign onto the Montreal Pledge** by submitting an official letter of interest on the [Montreal Pledge](#) website
 - The pledge includes 15 tangible actions towards pursuing and accelerating efforts to preserve ecosystems
- Canada has a **national target to protect 30% of our land, water, and oceans by 2030** as a part of the Global Biodiversity Framework signed in Montreal at COP15. To be successful this goal requires municipal support.
 - Municipalities can contribute their natural areas to help Canada reach their 30% by 2030 goal
 - For areas to be eligible they must meet the following criteria:
 - Have clearly defined geographic boundaries
 - Achieve in-situ conservation of biodiversity
 - Prohibit actions incompatible with conservation
 - Are intended to be protected in perpetuity

Examples:

- [Hamilton Montreal Pledge](#), ON
- [Mississauga Montreal Pledge](#), ON
- [Ottawa, Montreal Pledge Motion Report](#) ON,
- [Halifax Montreal Pledge](#), NS
- [Sudbury, Mayor's Taskforce on 30x30](#) ON

Resources:

- Local governments can track their biodiversity progress using [CitiesWithNature](#), an international sharing-platform that harmonizes Montreal Pledge targets

Restore Nature Initiatives

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Create an Ecosystem Restoration Plan



The basics:

- Create an integrated approach, considering many components of the natural system before prioritizing where and what to restore.
- As a first step, assess and select sites for restoration based on site-specific conditions, the type of opportunity and the severity of the threat/impairment to natural system function.

Examples:

- [Toronto's Biodiversity Strategy](#), ON
- [Councillor Motion for Ecosystem Restoration Plan to 2030 \(Vancouver\)](#), BC
- [Toronto and Region Conservation Authority's Integrated Restoration](#)
Prioritization: A multiple benefit approach to restoration planning; examples of restoration projects can be found [here](#)
- [City of Woodstock ON wetlands restoration](#)

Restore a wetland



The Basics:

- Wetlands are critical habitat and have been quickly disappearing
- [Benefits of wetland restoration include:](#)
 - Increased biodiversity
 - Increased wildlife habitat
 - Improved habitat connectivity
 - Flood attenuation
 - Improved water quality
 - Improved hydrologic function
 - Improved base flow for watercourses
 - Recreational opportunities (such as bird watching and fishing)
 - Improved air quality
 - Urban Heat Island mitigation
 - Carbon sequestration

Example:

- [Ajax ON Kerrison Wetland Restoration](#)

Daylight Rivers, Streams, & Creeks



The basics:

- Daylighting is the process of uncovering all or part of a waterway that has been buried in pipes, drainage systems, culverts, or other impervious materials
- The goal is to re-establish the stream system above ground, ideally in the original channel
 - if a development impedes it, an new one can be created
- Ways to daylight:
 - Natural restoration
 - Architectural restoration (a constructed channel)
 - Cultural restoration - use of public art or markers to inform the public of the historic stream path
- Benefits:
 - Improve urban stormwater systems

- Revitalize watercourses that can increase property values and benefit local businesses
- Challenges:
 - Short-term cost feasibility
 - Potential community and political opposition

Examples:

- [City of Vancouver Restoring Streams](#), BC
- [District of West Vancouver Appendix B Guidance Document](#), BC

Additional Resources

Existing tools

1. Cities and Biodiversity Case Study Series: [Canadian Best Practices in Local Biodiversity Management](#)
2. [Town of Ajax, ON Natural Capital and Climate Vulnerability Assessment - presentation slides](#)
3. [Natural Systems Vulnerability Assessment in Peel Region](#)

Did you know Climate Caucus offers an “Ask Us Anything” service for elected officials in the network?

You could ask questions like “can you help me find this resource?” “Do you know of funding for X?” “Do you have examples of X policy language?” or “can you connect me with an expert in X?”

Send us your questions here!

Climate Caucus Resources:

[Climate Caucus Municipal Grants List](#) - detailed list of relevant municipal grants

[Policies and Resources Library](#) - list of motions, bylaws, council reports and briefing notes