

CANADA TARGET 1

Municipal Involvement in Canada's Biodiversity Target on Protected and Conserved Areas



December 22, 2017

Table of Contents

BACKGROUND	4
METHODOLOGY	4
RESULTS	5
Question 1 - What local government do you work for?	5
Question 2 – What province or territory are you in?	7
Question 3 - What is your role with the local government?.....	7
Question 4 - Are you aware of Canada Target 1: “By 2020, at least 17% of terrestrial areas and inland water, and 10% of coastal and marine areas, are conserved through networks of protected areas and other effective area-based conservation measures”?	8
Question 5 - Are you aware of your local government being involved in efforts or activities towards Canada Target 1?	9
Question 6 - What tools or mechanisms is your local government using to deliver area-based biodiversity conservation and conservation of nature?	9
Question 7 - Do you maintain spatial (GIS or CAD) data on natural areas?	11
Question 8- What do you perceive as the main barriers towards biodiversity conservation and conservation of natural areas at the local government level?	11
Question 9 - What do you perceive as your local government’s greatest successes to date with regards to biodiversity conservation and conservation of land?	12
Question 10 - Is your local government part of a biodiversity conservation committee or association? If so, what committee or association	14
Question 11 - How could the provincial or federal governments best engage local governments in collaborative action towards Canada Target 1?	15

Question 12 - Would you be interested in having your local government’s natural areas contribute to Canada’s international biodiversity commitments?..... 16

Question 13 - Are there any additional comments you would like to make regarding biodiversity conservation within your local government, Canada Target 1 or related matters? 16

Question 14 - Thank you for your participation in the survey. If you would like to remain connected and learn about the results of the survey, please provide your name and email:..... 18

EMERGING THEMES & OPPORTUNITIES 19

CASE STUDIES..... 20

Area-Based Conservation – Islands Trust Fund..... 20

Biodiversity Strategy - Biodiversity Conservation Strategy for the South Okanagan Similkameen 21

Policy Development – Richmond, BC, Development Permit Guide..... 21

Plan Development – Peel Region Climate Change Master Plan (Ontario)..... 22

Mapping & Monitoring – City of Edmonton Open Data Portal 22

Partnerships – Association of Saskatchewan Urban Parks and Conservation Areas (ASUPCA) 23

Regulation – City of Surrey Streamside Protection Zoning By-law 23

APPENDIX A - SURVEY 25

Background

Canada has a global reputation for its beautiful wilderness and natural spaces. We have made a commitment to protect these spaces and become a world leader in conservation through Canada Target 1. Canada Target 1 aims to protect and conserve at least 17% of terrestrial areas and inland waters, and 10% of coastal and marine areas, by 2020 to help stem the loss of biodiversity.

At the end of 2015, 10.6% of Canada's terrestrial area was recognized as protected. These protected areas have been established nation-wide and can be found in every province and territory.

Reaching Canada Target 1 will take a pan-Canadian effort, involving many government departments, Indigenous groups, communities and organizations across Canada. Municipalities have a role to play too. Currently municipal parks and protected areas are not included in Canada's report to the international conservation community.

ICLEI Canada¹ explored the potential of municipal involvement in Canada's Target 1 through an online survey. Issues explored included general awareness of Target 1, mechanisms for municipalities to deliver area-based and biodiversity conservation and the barriers municipal practitioners face. This report highlights and summarizes the results of the survey.

Methodology

The survey questions were developed by ICLEI Canada in consultation with the Ontario Ministry of Natural Resources and Forestry (MNRF) and the Pathway to Canada Target 1 Local Government Engagement Task Team (LGETT). The survey aims to address three themes:

- a) Awareness: Gauge general awareness of local governments of biodiversity conservation targets and the Pathway to Canada Target 1;
- b) Involvement: Gauge current level of local government involvement in biodiversity conservation and conservation of lands initiatives, including tools and mechanisms of delivery; and
- c) Future opportunities: Explore opportunities for further local government engagement, including best bets, barriers or gaps and opportunities to communicate with the public.

The full set of survey questions are provided in Appendix A.

¹ ICLEI originally stood for the "International Council for Local Environmental Initiatives," but in 2003 the organization dropped the full phrase and became "ICLEI-Local Governments for Sustainability" to reflect a broader focus on sustainability, not just environmental initiatives. ICLEI Canada refers to ICLEI's national office in Toronto, Canada.

The survey was hosted online using ICLEI Canada’s Survey Monkey account, providing for streamlined distribution and collection of responses.

The target audience was local government representatives such as planners and elected officials from across the country. The audience was reached primarily through ICLEI Canada’s internal distribution list, which includes about 1,000 sustainability practitioners, approximately 650 of which are local governments. In addition to the internal distribution list, the survey was also sent directly to:

- Greater Golden Horseshoe environmental managers/coordinators (6)
- Local government members of the Canadian Parks & Recreation Association (CPRA) “Parks Task Group” (142)
- British Columbia (BC) local governments in the Species and Ecosystems at Risk Local Government Working Group (SEAR LGWG) (127)

In total, this amounts to 925 local government representatives, some of which may have been duplicates. Each of the provincial municipal associations and the provincial and national planning associations were also asked to help spread the word about the survey.

The survey was launched on September 14, 2017 and originally planned to close on October 10, 2017. The closing date was extended to October 27, 2017 to allow more time for participation.

Results

The results section of this report provides a detailed summary of the results of each survey question. Emerging trends are explored in a later section of the report.

In total, the survey was completed by 97 participants. The average amount of time spent completing the survey was 8 minutes.

QUESTION 1 - WHAT LOCAL GOVERNMENT DO YOU WORK FOR?

The survey was directed at staff and elected officials from Canadian local governments. All the local governments represented are listed in the table below. A wide variety of local government types participated, including cities, regions, districts and townships. There were also three First Nation communities that responded. Twelve (12) participants did not identify the community they were associated with.

Local Governments that Responded to the Survey		
Capital Regional District, Victoria	City of Richmond	Region of York
City of Abbotsford	City of Salmon Arm	Regional District North Okanagan
City of Brampton	City of Saskatoon	Regional District of Central Okanagan

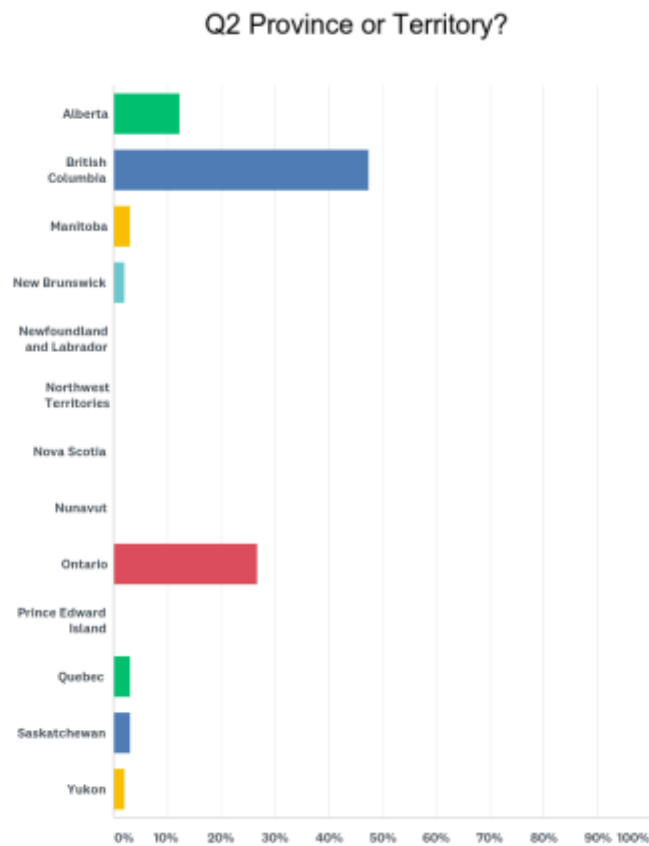
City of Burlington	City of Saskatoon	Regional District of Central Okanagan
City of Calgary	City of Surrey	Regional District of Central Okanagan
City of Calgary	City of Toronto	Regional District of East Kootenay
City of Campbell River	City of Toronto	Regional District of North Okanagan
City of Chilliwack	City of Vancouver	Regional District of Okanagan-Similkameen
City of Colwood	City of Vaughan	Regional District Okanagan Similkameen
City of Coquitlam	City of Vaughan	Regional Municipality of Springfield
City of Coquitlam	City of Victoria	Regional Municipality of York
City of Courtenay	City of Victoria	Resort Municipality of Whistler
City of Edmonton	City of West Kelowna	Town of Ajax
City of Edmonton	City of West Kelowna	Town of Oakville
City of Edmonton	Cowichan Valley Regional District	Town of Olds
City of Fredericton	Cowichan Valley Regional District	Town of Redcliff
City of Grande Prairie	Cowichan Valley Regional District	Town of Richmond Hill
City of Greater Sudbury	District of Lake Country	Township of Esquimalt
City of Guelph	District of Lake Country	unidentified
City of Guelph	District of Peachland	unidentified
City of Kelowna	District of Saanich	unidentified
City of Kelowna	District of Tofino	unidentified
City of Lethbridge	District of Tofino	unidentified
City of London	District of Wheatland County	unidentified
City of Mississauga	Islands Trust	unidentified
City of Montréal	Metro Vancouver Regional District	unidentified
City of Montréal	Municipality of Clarington	unidentified
City of North Battleford	Municipality of Marsh Lake	unidentified
City of North Vancouver	Nanaimo Regional District	unidentified
City of North Vancouver	Region of Halton	unidentified
City of Peterborough	Region of Halton	
City of Red Deer	Region of Peel	

First Nations that Responded to the Survey		
Chippewas of Georgina Island	Mohawk Council of Akwesasne	Mohawk Council

QUESTION 2 – WHAT PROVINCE OR TERRITORY ARE YOU IN?

A large portion of the survey respondents were from British Columbia, at 47%. Ontario represented 27% and Alberta represented 12%. The remaining provinces and territories represented 0 to 3% of respondents.

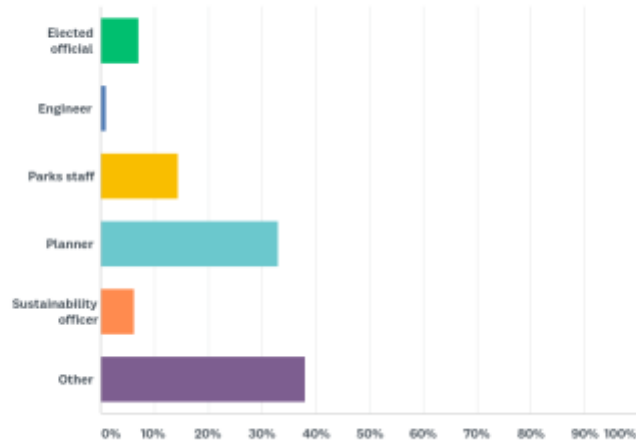
The provincial and territorial representation in survey responses is not representative of the distribution list. The survey was distributed across all provinces and territories; therefore, the disproportional response rate may be attributable to the level of engagement on area-based nature conservation in those provinces or the capacity of municipal representatives to respond to the survey.



QUESTION 3 - WHAT IS YOUR ROLE WITH THE LOCAL GOVERNMENT?

Municipal representatives working on area-based nature conservation work across the many departments and disciplines in a local government. Planners represented 33% of survey respondents, followed by 14% parks staff, 7% elected officials, 6% sustainability officers and 1% engineers. The remaining 38% of respondents identified as other, from a wide range of disciplines and departments.

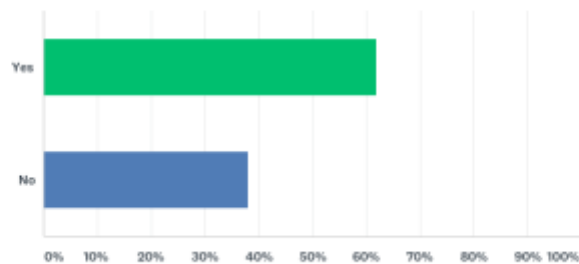
Q3 What is your role with the local government?



QUESTION 4 - ARE YOU AWARE OF CANADA TARGET 1: "BY 2020, AT LEAST 17% OF TERRESTRIAL AREAS AND INLAND WATER, AND 10% OF COASTAL AND MARINE AREAS, ARE CONSERVED THROUGH NETWORKS OF PROTECTED AREAS AND OTHER EFFECTIVE AREA-BASED CONSERVATION MEASURES"?

The awareness level of Canada Target 1 was relatively high among survey participants. Sixty-two percent (62%) of survey respondents indicated they were aware of the target, while 38% were unaware.

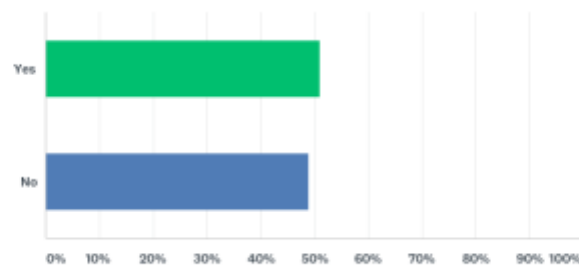
Q4 Are you aware of Canada Target 1: "By 2020, at least 17% of terrestrial areas and inland water, and 10% of coastal and marine areas, are conserved through networks of protected areas and other effective area-based conservation measures"?



QUESTION 5 - ARE YOU AWARE OF YOUR LOCAL GOVERNMENT BEING INVOLVED IN EFFORTS OR ACTIVITIES TOWARDS CANADA TARGET 1?

Fifty-two percent (52%) of survey respondents identified as being aware of their local government being involved in efforts or activities towards Canada Target 1, while 48% of respondents were unaware of any such involvement.

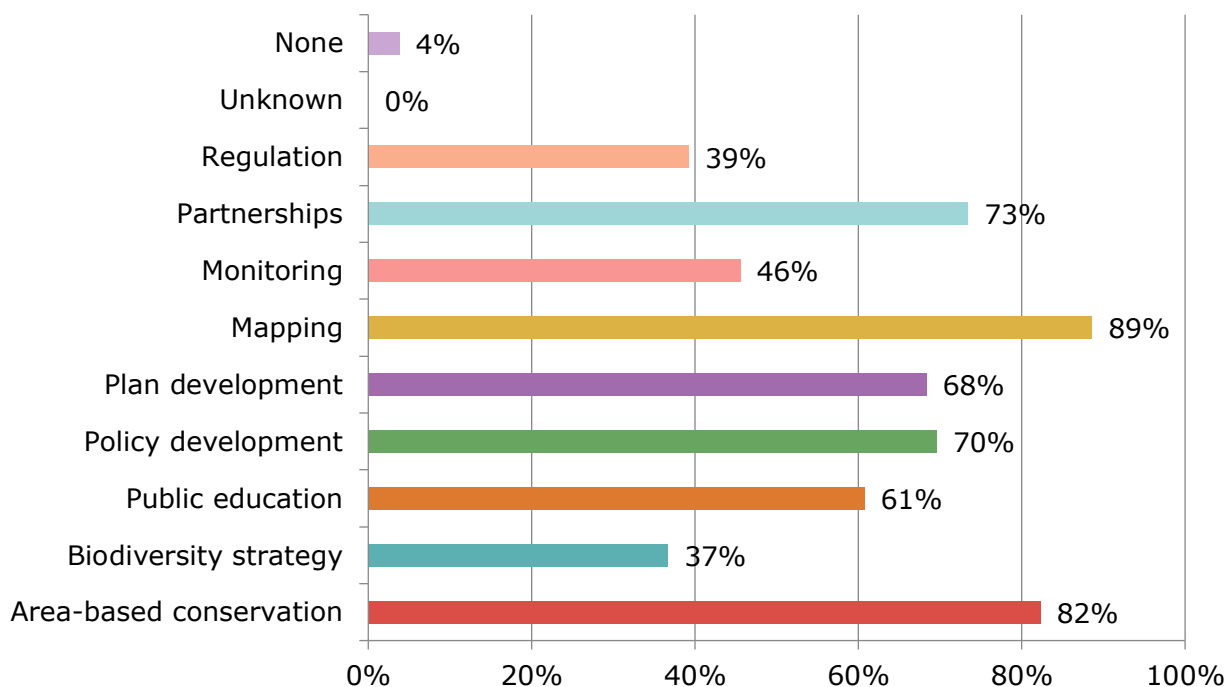
Q5 Are you aware of your local government being involved in efforts or activities towards Canada Target 1?



QUESTION 6 - WHAT TOOLS OR MECHANISMS IS YOUR LOCAL GOVERNMENT USING TO DELIVER AREA-BASED BIODIVERSITY CONSERVATION AND CONSERVATION OF NATURE?

Local governments are using a wide-range of tools and mechanisms to deliver area-based biodiversity conservation and conservation of nature. Eighty-nine percent (89%) of respondents indicated their local government is doing some form of mapping followed by 82% doing a form of area-based conservation. Seventy-three percent (73%) are leveraging partnerships and 70% are actively engaged in policy development activities. The local governments are also engaged in plan development, public education, monitoring programs, regulatory activities and the development of biodiversity strategies. Only 4% of respondents indicated their local government was not engaged in area-based biodiversity conservation, or conservation of nature activities.

Q6 What tools or mechanisms is your local government using to deliver area-based biodiversity conservation and conservation of nature?



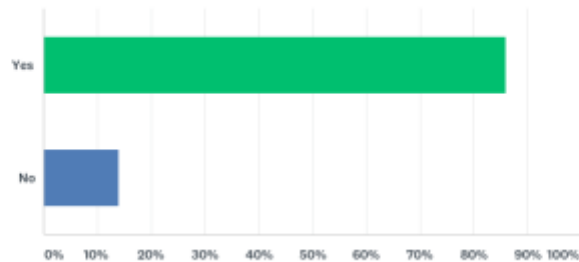
There is a great variety in the tools and mechanisms municipalities can use to deliver area-based biodiversity conservation and conservation of nature. The following are some of the examples provided by the survey respondents in each category.

- *Area-based conservation, e.g. natural area conservation in new development and growth areas, collaboration with other orders of government, purchasing land.*
- *Biodiversity strategy, e.g. Strategies aligning with Convention of Biological Diversity guidelines.*
- *Public education, e.g. literature development, web-based outreach.*
- *Policy development, e.g. constructed wetlands plans, covenants on private land, land-use policies, natural environment development permit areas.*
- *Plan development, e.g. Official plan prioritization, watershed plans, master plans, invasive species plans, natural heritage plans, green infrastructure strategy.*
- *Mapping, e.g. biodiversity and natural features inventories and assessments, streams and wetland mapping.*
- *Monitoring, e.g. indicator monitoring programs, natural heritage monitoring programs.*
- *Partnerships e.g. collaboration with local naturalists and volunteers, partnerships with land trusts, first nations partnerships, community stewardship programs.*
- *Regulation, e.g. bylaws affecting parks planning.*

QUESTION 7 - DO YOU MAINTAIN SPATIAL (GIS OR CAD) DATA ON NATURAL AREAS?

A large portion of the survey respondents are aware of their local government maintaining spatial data on natural areas. Eighty-six percent of participants responded positively, while 14% responded that their local government does not maintain spatial data.

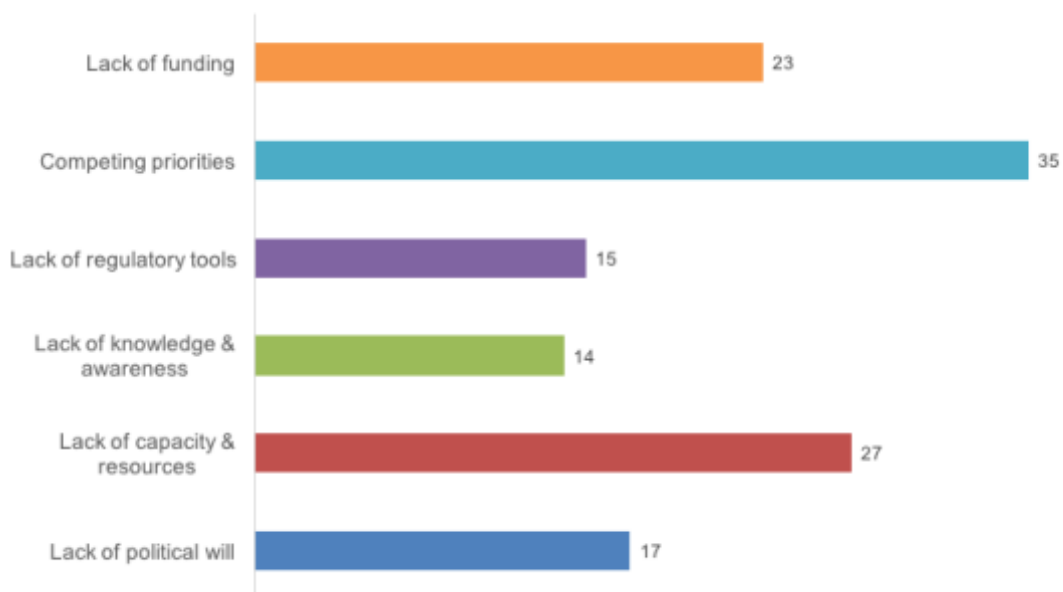
Q7 Do you maintain spatial (GIS or CAD) data on natural areas?



QUESTION 8- WHAT DO YOU PERCEIVE AS THE MAIN BARRIERS TOWARDS BIODIVERSITY CONSERVATION AND CONSERVATION OF NATURAL AREAS AT THE LOCAL GOVERNMENT LEVEL?

Survey participants were asked what they perceive to be the main barriers faced at the local government level towards biodiversity conservation and the conservation of natural areas. This was an open-ended question, with no specific categories or prompts provided as possible answers. Responses fell within six main categories represented in the table below. Competing priorities (35%) was the most common barrier cited, followed by the lack of capacity and resources (27%). Lack of funding (23%) was also a significant barrier, followed by lack of political will (17%), lack of regulatory tools (15%) and lack of knowledge and awareness (14%).

Q8 What do you perceive as the main barriers towards biodiversity conservation and conservation of natural areas at the local government level?

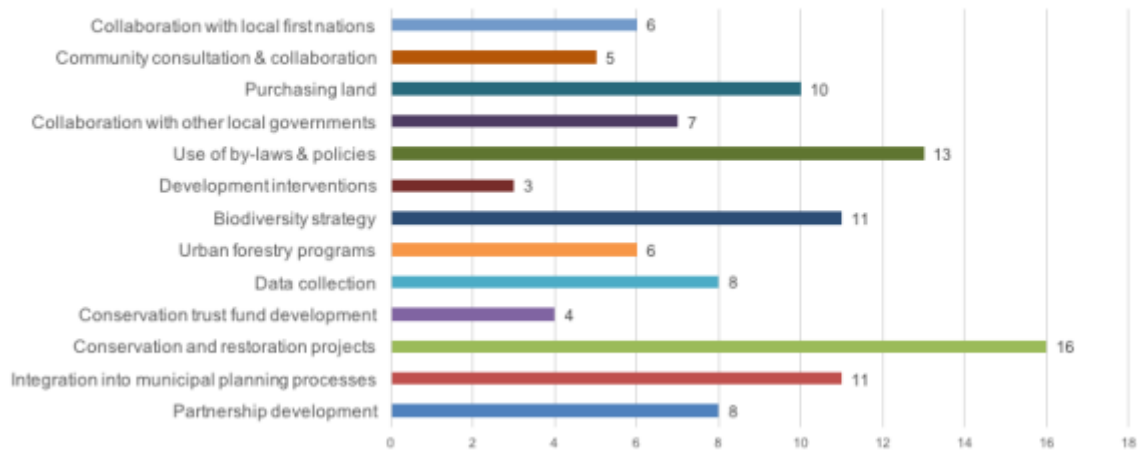


QUESTION 9 - WHAT DO YOU PERCEIVE AS YOUR LOCAL GOVERNMENT'S GREATEST SUCCESSES TO DATE WITH REGARDS TO BIODIVERSITY CONSERVATION AND CONSERVATION OF LAND?

This survey question gauged participants' perceptions of their local government's greatest successes to date, in terms of biodiversity conservation and conservation of land. The answers were provided in open written format, and were summarized and categorized into 13 types, as highlighted in the table below.

The most frequently cited success was local conservation and restoration projects (16), followed by the use of bylaws and policies (13). The integration of conservation into municipal planning processes (11) and the development of specific biodiversity strategies (11) were identified as the third and fourth most commonly cited success.

Q9 What do you perceive as your local government's greatest successes to date with regards to biodiversity conservation and conservation of land?



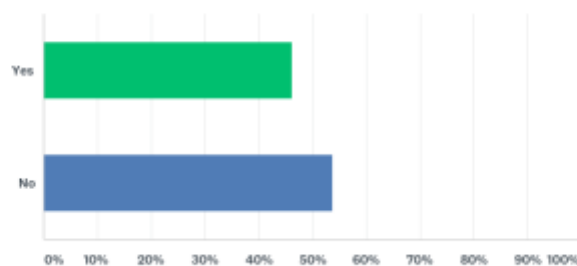
Some survey respondents provided examples of their greatest successes. The examples in each category are summarized below.

- *Partnership development e.g. supporting stewardship groups, collaboration with Conservation Authorities and wildlife groups.*
- *Integration into municipal planning processes e.g. integration of conservation and biodiversity priorities into official plan, master plan and secondary plan development.*
- *Conservation and restoration projects e.g. wetland & estuary restoration, water stewardship program, maintaining ecological networks.*
- *Conservation trust fund development e.g. development of a conservation fund.*
- *Data collection e.g. collecting more environmentally relevant data, tree-health surveys, monitoring programs.*
- *Urban forestry programs e.g. ALHB host tree removal, tree planting programs.*
- *Biodiversity strategy e.g. Comprehensive biodiversity strategy, Natural heritage strategy, naturalization strategy.*
- *Development interventions e.g. guidelines for sensitive ecosystem development, pre-development environmental protection negotiation, watercourse permit development policies.*
- *Use of by-laws & policies e.g. development conservation by-laws, enforcement of existing by-laws, forest buffers on new subdivision planning, urban containment, policies, protection policies for landform, streamside protection by-laws, natural environment development permits, sensitive ecosystem development permit area and guidelines.*
- *Collaboration with other local governments e.g. participation on Species and Ecosystems Local Government Working Group in BC, collaboration on regional parks program, collaboration with Regional government on enforcement.*
- *Purchasing land e.g. purchase of wetlands, purchase of land for conservation, purchase of land with sensitive ecosystem.*
- *Community consultation & collaboration e.g. public engagement & awareness raising.*
- *Collaboration with local First Nations e.g. consultation, environmental programs, staff support.*

QUESTION 10 - IS YOUR LOCAL GOVERNMENT PART OF A BIODIVERSITY CONSERVATION COMMITTEE OR ASSOCIATION? IF SO, WHAT COMMITTEE OR ASSOCIATION?

Forty-six percent (46%) of respondents indicated that their local government is part of a biodiversity conservation committee or association, while 54% indicated they were not.

Q10 Is your local government part of a biodiversity conservation committee or association? If so, what committee or association?

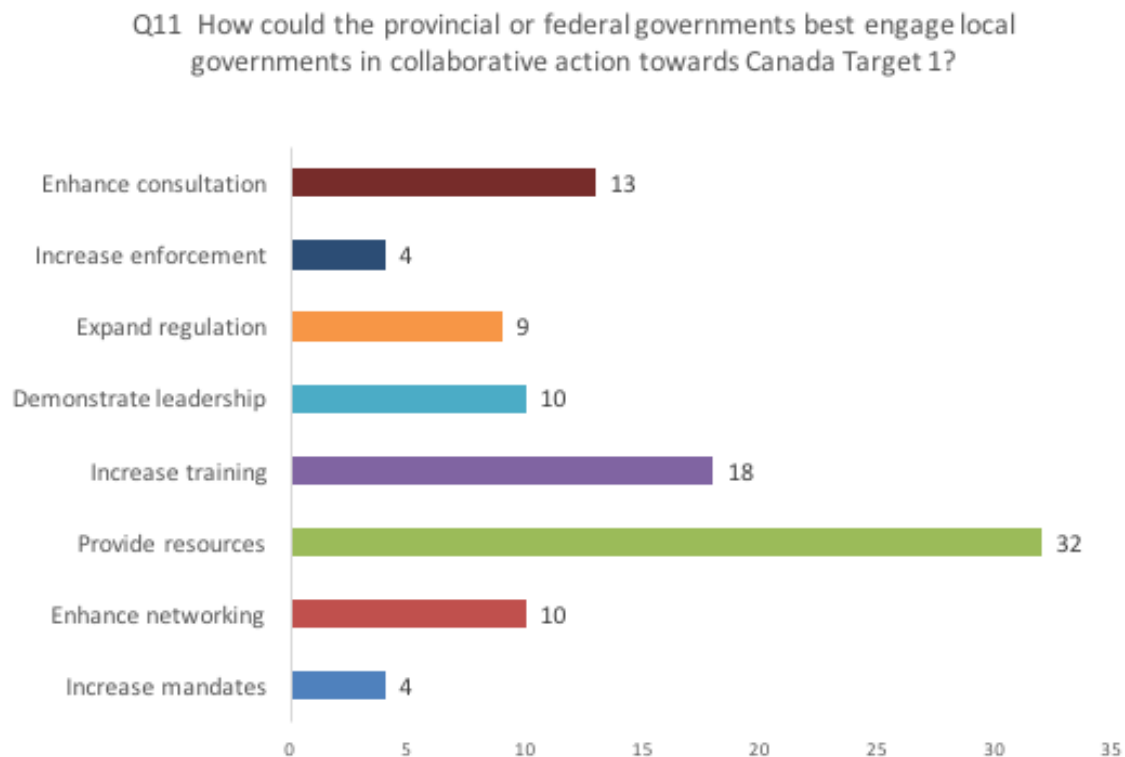


The committees and associations that were identified were:

- *Association of Saskatchewan Urban Parks and Conservation Agencies*
- *BC Local Government Species at Risk Working Group*
- *Biophilic Cities*
- *Calgary Biodiversity Advisory Committee*
- *Capital Region Invasive Species Partnership (CRISP)*
- *Carolinian Canada*
- *Coastal Douglas Fir Conservation Partnership*
- *Conservation Authorities*
- *Durban Accord*
- *East Kootenay Invasive Species Council*
- *Gary Oak Ecosystem Recovery Team*
- *George Waterway Initiative*
- *ICLEI*
- *Kawartha Naturally Connected*
- *Kootenay Conservation Program*
- *Target 1 – Local Government Advisory Committee (LGAG)*
- *Metro Vancouver RPAC Regional Invasive Species Task Force*
- *Mission Creek Restoration Initiative*
- *Okanagan Collaborative Conservation Partnership*
- *Ontario Climate Change Projections*
- *Peel Community Climate Change Committee*
- *South Nation Conservation*
- *South Okanagan Similkameen Conservation Program*

QUESTION 11 - HOW COULD THE PROVINCIAL OR FEDERAL GOVERNMENTS BEST ENGAGE LOCAL GOVERNMENTS IN COLLABORATIVE ACTION TOWARDS CANADA TARGET 1?

Survey respondents were asked to share their views on how the provincial or federal governments could best engage local governments in collaborative action towards Canada Target 1. A wide variety of responses were received. The three most common recommendations, in order of popularity, were; provide resources (32), increase training (18), and enhance consultation (13).



Some survey respondents provided specific recommendations on suggested engagement methods. These included:

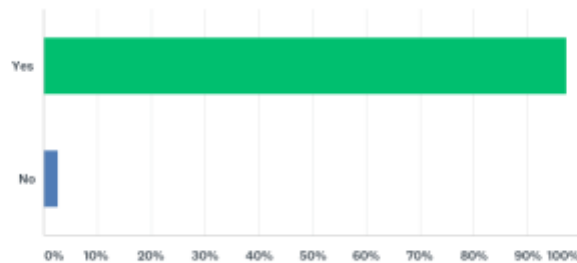
- Increase mandates, e.g. provide mandates to facilitate stronger enforcement, create provincial policy statement that requires official plans take action on Target 1.
- Enhance networking, e.g. build engagement networks for parks managers, enhance partnerships, highlight best practices through webinars, engage professional and municipal associations.

- Provide resources, e.g. funding to local governments and non-profit sector, common tools, reduce funding to activities that encourage sprawl, mapping, monitoring and managing resources, best practices.
- Increase training, e.g. workshops targeted at local government elected officials and staff.
- Demonstrate leadership, e.g. support federal, provincial and local level to lead by example, provide consistent direction, recognize the value of natural areas within municipalities, provide strategic goal oriented direction, improve communications amongst orders of government, encourage adoption of Target 1 across levels of government.
- Expand regulation, e.g. more robust regulatory frameworks, increase parkland requirements for developers, increase environmental protection at time of zoning, conduct private land protection activities at the provincial level.
- Increase enforcement, e.g. discourage violations.
- Enhance consultation, e.g. consult with local governments on Target 1 goals, establish committees with local governments, engagement from federal and provincial government that enables local government to tailor to local conditions.

QUESTION 12 - WOULD YOU BE INTERESTED IN HAVING YOUR LOCAL GOVERNMENT’S NATURAL AREAS CONTRIBUTE TO CANADA’S INTERNATIONAL BIODIVERSITY COMMITMENTS?

The vast majority of survey respondents responded affirmatively to this question. Ninety-seven percent (97%) of participants would be interested in having their local governments contribute to Canada’s international biodiversity commitments.

Q12 Would you be interested in having your local government’s natural areas contribute to Canada’s international biodiversity commitments?



QUESTION 13 - ARE THERE ANY ADDITIONAL COMMENTS YOU WOULD LIKE TO MAKE REGARDING BIODIVERSITY CONSERVATION WITHIN YOUR LOCAL GOVERNMENT, CANADA TARGET 1 OR RELATED MATTERS?

Some survey respondents took the opportunity to share additional comments regarding biodiversity conservation within their local government, Canada Target 1 or related matters. The unedited comments are shared below:

- *It is time to make this a national priority.*
- *Sounds like a great program. The challenge we have seen with these programs, is it seems conservation and recreation are incompatible. This has led to resistance at the community and board level.*
- *Non-government agencies such as conservation programs and land trusts take on the largest responsibility for conservation and protection of natural areas for biodiversity. This is problematic.*
- *We believe that we have and will continue to make a difference towards the conservation of natural area park lands and protection of biodiversity, while educating and providing our community with respectful passive recreational opportunities and relationship building with the local indigenous community.*
- *The work that we have completed as a community will serve our current and future generations well and regardless of whether these park lands are counted within the commitments to Target 1 or not, will continue to be protected in perpetuity and make our region, province and country a better place to live.*
- *We should all be dedicated to preserving our biodiversity.*
- *As a local government, most of the acquisition of parkland is paid for through local taxation so is dependent on the economics of the community whether more or less land can be acquired. Grants through the Province or Federally can help local governments protect more of these local lands for biodiversity and conservation parkland otherwise we depend a lot on land dedication through subdivision or re-zonings which in turn promotes urbanization of our rural areas.*
- *We have two academic institutions in our community. The success story I mentioned was in partnership with researchers. This can also be supportive perhaps. We're highly urban - make what we have important to your goal. Metrics are difficult for municipalities. What metrics do you suggest I include for our organization as part of our forthcoming sustainability strategy. What metrics should municipalities have on their radar that speak to the goals/objectives you are trying to make happen?*
- *We need engage local Councils in these initiatives, as they are making decisions on development applications and City programs.*
- *In Alberta, Municipalities acquire their conservation tools from the Province through the Municipal Government Act. Unfortunately, the MGA does not provide any conservation tools that protect upland areas that are not instability. More tools are needed that speak very specifically to protecting biodiversity rather than just "areas prone to flooding" or "swamps" etc.*
- *Feds and Prov. need to get with the program and talk to those on the ground to develop municipal funding for climate resilient green infrastructure (trees).*
- *The importance of adjacent lands to already protected lands is probably an important place to start in terms of overall large protected land area increases to be achieved.*
- *We need to ensure that Canada Target 1 initiatives are in alignment with current corporate strategies and Local Council initiatives in order to be successful at the local level.*
- *Looking forward to the conversations on reaching the biodiversity conservation target and how municipal and regional parks could help to meet the targets.*

- *There seems to have been very little 'buzz' regarding this project; without a Federal or Provincial 'champion', a rationale for doing this, and most importantly money for land acquisition, I do not see municipal governments moving very far towards this project - you need to show how this will help RM's/will fit in with drainage/flood mitigation/solving municipal problems in order to get much buy-in - but it can be done!*
- *Please promote communication with local government.*

QUESTION 14 - THANK YOU FOR YOUR PARTICIPATION IN THE SURVEY. IF YOU WOULD LIKE TO REMAIN CONNECTED AND LEARN ABOUT THE RESULTS OF THE SURVEY, PLEASE PROVIDE YOUR NAME AND EMAIL:

Sixty-six (66) people indicated they would like to remain informed and learn about the results of this survey. Their names and email will be provided to the Ontario MNRF outside of this written report in a matter that respects the MNRF's communications policies.

Emerging Themes & Opportunities

Several trends were observed within the survey results. These trends may present opportunities to have local governments become more involved in Canada Target 1 activities and/or activities that complement federal and provincial nature conservation efforts. To help summarize the results of the survey, four key themes and opportunities are presented.

- **Collaboration** - *Local governments in British Columbia appear to be most active in nature conservation activities, followed by local governments in Ontario. Outside of these two provinces local government engagement appears to be minimal. This presents an opportunity for networking, collaboration and peer-learning among local governments from across the country, where leaders in the field can help build the capacity of their peers in local governments where there is little expertise. Peers can share strategies to tackle common obstacles and strategies to build on their success.*
- **Data** - *Quite a large portion of the survey respondents were aware of their local government maintaining spatial data on natural areas. Eighty-six percent (86%) of participants responded positively. Ninety-seven percent (97%) of survey participants also demonstrated interest in having their local government contribute to Canada's international biodiversity commitments. By virtue of the availability of data and the willingness of participants, this presents a viable opportunity to engage local governments on Canada Target 1 reporting.*
- **Engagement** - *Many of the survey respondents reported on successes they have achieved in regards to their nature conservation efforts. Many also indicated they were part of local or regional biodiversity committees. This indicates there is interest, willingness and expertise developed at the local and regional level. What is lacking are activities or committees that span beyond local, regional or provincial borders. Local governments did not report being part of any national or interprovincial conservation activities beyond the Canada Target 1 Local Government Advisory Group. There is an opportunity to engage and empower local governments across Canada under a common goal.*
- **Empowerment** - *Survey participants were asked what they perceive to be the main barriers municipalities face in biodiversity conservation and the conservation of natural areas. Competing priorities was the most common barrier cited, followed by the lack of capacity and resources. Survey respondents were asked to share their views on how the provincial or federal governments could best engage local governments in collaborative action towards Canada Target 1. The three most common recommendations were provide resources, increase training, and enhance consultation. Clear prioritization of objectives, enhanced consultation and capacity building through resource development and training will help to empower local governments to help achieve Canada Target 1 goals.*

Case Studies

A wide-range of tools and mechanisms used by local governments were reported in the survey to deliver area-based biodiversity conservation and conservation of nature. ICLEI further researched these examples and developed short case studies. The case studies provided below demonstrate how seven different tools and mechanisms have been applied by local governments or in collaboration with local governments. Following each case study is a recommendation on how these types of initiatives could support Canada Target 1 objectives.

AREA-BASED CONSERVATION – ISLANDS TRUST FUND

The Islands Trust Fund is a conservation land trust for the islands in the Salish Sea, which is the network of coastal waterways that includes the southwestern portion of British Columbia and the northwestern portion of the state of Washington.

The Islands Trust Fund protects natural landscapes as nature reserves and empowers property owners to protect private land through innovative programs. The Trust has a close working relationships with policy makers at both the local and regional level, including:

- *Islands Trust and Local Trust Committees*
- *Bowen Island Municipality*
- *Capital Regional District*
- *Comox Valley Regional District*
- *Cowichan Valley Regional District*
- *Metro Vancouver*
- *Regional District of Nanaimo*
- *Powell River Regional District*
- *Sunshine Coast Regional District*
- *BC Parks*

Most of the land in the Salish Sea is privately owned. Through the efforts of the Trust, 18% of the islands in the Salish Sea are protected through parks, nature reserves, ecological reserves, watershed lands, heritage forests lands and conservation covenants.

For more information about the protected areas in the Salish Sea, or to learn more about the efforts of the Island Trust Fund, visit: <http://www.islandstrustfund.bc.ca/>

Enabling area-based conservation could support Canada Target 1 objectives. This could be achieved through the allocation of resources, training, and/or support that leads to the development of conservation trust funds.

BIODIVERSITY STRATEGY - BIODIVERSITY CONSERVATION STRATEGY FOR THE SOUTH OKANAGAN SIMILKAMEEN

The biodiversity strategy for the South Okanagan Similkameen, Keeping Nature in our Future, is a multi-regional effort that goes beyond jurisdictional boundaries to include entire ecosystems, watersheds and all land tenures. It was developed through a collaborative and consultative process in southern British Columbia, guided by a steering committee that included fourteen local governments, federal and provincial government ministries, First Nation observers and participants, and non-profit organizations.

The biodiversity strategy highlights the importance of conservation and restoring natural areas, identifies areas for protection and restoration, who can contribute, how and when conservation and enhancement of these natural areas can be achieved.

In addition, Keeping Nature in our Future includes 16 strategic directions and accompanying opportunities for action to support biodiversity conservation efforts of local and senior governments. While specific to South Okanagan Similkameen, these strategic directions would be useful to other multi-governmental efforts in biodiversity strategy development. For direct reference to the strategic directions and additional information about Keeping Nature in our Future, visit: <https://soscp.org/biodiversity/>

Facilitating collaboration on biodiversity across federal, provincial and local governments, as well as First Nations, and non-profit organizations could support Canada Target 1 objectives. This could be achieved through supporting the development of cross-boundary biodiversity planning activities, networks, collaborating with professional and municipal associations, and/or highlighting best practices through webinars.

POLICY DEVELOPMENT – RICHMOND, BC, DEVELOPMENT PERMIT GUIDE

In British Columbia, under the Local Government Act, a municipality may designate Development Permit Areas in its Official Community Plan for several of cited reasons, including the protection of the natural environment. Development Permit Areas have become important tools for municipalities across BC to conserve nature and protect biodiversity, and Richmond, BC is no exception. The City of Richmond has identified and mapped Environmentally Sensitive Areas (ESA) within their boundaries which are subject to development permits. These areas have special environmental attributes worthy of retention or special care and are critical to the maintenance of productive and diverse plant and wildlife populations. The City's ESAs are designated within the City's OCP, and can be viewed here:

https://www.richmond.ca/_shared/assets/2041_OCP_esa34185.pdf

Any development proposed for an area designation as an ESA is subject to the Development Permit process. Planning and Development staff will work with applicants to determine the feasibility, process, timelines, variances and any requirements that may be involved. Applications are subject to review by an Advisory Design Panel, a Development Permit Panel as well as review and approval by Council.

For more information about the City of Richmond, BC Development Permit Guide, visit:
<https://www.richmond.ca/plandev/devzoning/permit.htm>

Building the capacity of local governments to develop policies that protect biodiversity could support Canada Target 1 objectives. This could be achieved through the development of guides, tools, case studies, as well as through training and networking.

PLAN DEVELOPMENT – PEEL REGION CLIMATE CHANGE MASTER PLAN (ONTARIO)

The Regional Municipality of Peel recently launched the development process for the Peel Region Climate Change Master Plan. The 10-year plan will guide the agency's efforts to adapt and mitigate climate change. One element of this plan is a Climate Change Heat Resiliency Strategy being developed in collaboration with Brampton, Caledon, Mississauga, Toronto and Region Conservation and Credit Valley Conservation aimed at enhancing the urban environment to reduce heat vulnerability in key areas.

This work builds on a long history of collaboration, including the Peel Region Urban Forest Strategy, developed in 2011. The Strategy presents the vision, goals and actions required to guide and engage individuals and organizations in urban forest management, and to ultimately contribute to a healthier, more sustainable Peel Region.

Urban forests are valuable assets in managing the impacts of climate change at the local government level while also enhancing residents' quality of life. For example, large-canopy trees in parking lots provide shade in hot summer months, reduce air pollution from off-gassing vehicles, absorb rainwater, and lengthen the lifespan of surrounding asphalt.

For more information about the Peel Region Climate Change Master Plan, visit:
<https://www.peelregion.ca/planning/>

Enabling local governments to integrate biodiversity into their formalized planning processes could support Canada Target 1 objectives. This could be achieved through the development of pilot projects, training seminars, as well as written resources and case studies.

MAPPING & MONITORING – CITY OF EDMONTON OPEN DATA PORTAL

Open Data is freely available, easy to access, and simple to reuse. Data from across all the City's departments and branches is available in the Open Data Portal. Open data allows for direct visibility into how decisions are made, empowers citizens and enhances the relationship between citizens and public organizations.

Edmonton's Open Data Portal contains a wide variety of information related to nature conservation and biodiversity protection. For instance, the constructed wetlands datasets are an integral component of Edmonton's storm water management strategy, while also providing

habitat and urban biodiversity. Increasing the connections between natural areas and constructed wetlands improves ecological integrity while providing important ecological services. The Portal also has maps of edible fruit trees across the city, tree species maps, mosquito traps, naturalized areas, and parks, and many more data sets related to the City's conservation efforts.

The City of Edmonton is an award-winning leader in Open Data. It was the fourth local government and the third major Canadian city to host an online Open Data Catalogue when the City launched its platform in January 2010.

For more information about the City of Edmonton Open Data Portal, visit:

<https://data.edmonton.ca>

Supporting local government mapping and monitoring efforts could be a mechanism to support Canada Target 1 reporting. This could involve consultation with local governments, the establishment of criteria for inclusion, and the development of a reporting mechanism.

PARTNERSHIPS – ASSOCIATION OF SASKATCHEWAN URBAN PARKS AND CONSERVATION AREAS (ASUPCA)

The ASUPCA is a non-profit organization dedicated to sustaining the betterment of Saskatchewan's seven conservation and development agencies. ASUPCA includes Chinook Parkway in Swift Current, Meewasin Valley in Saskatoon, Wakamow Valley in Moose Jaw, Wascana Centre in Regina, Tatagwa Parkway in Weyburn, Battlefords River Valley in North Battleford, and Pêhonân Parkway in Prince Albert. ASUPCA and its member organizations represent approximately 60% of the population of the Province of Saskatchewan.

Together, the seven communities engage in public programs, workshops and demonstrations, marketing and fundraising. Together they have produced over a dozen publications to support their conservation efforts, such as A Guide to Community Forestry in Saskatchewan, Managing Insects and Other Pets in Urban Landscapes, and Are You Living with A Junkie (The Homeowner's Guide to Getting the Yard Off Drugs).

For more information about ASUPCA, visit: <http://www.asupca.sk.ca/>

Facilitating collaboration and partnerships among local governments could support Canada Target 1 objectives. This could be achieved by supporting the existing biodiversity networks, or helping to establish new biodiversity networks that span different geographic areas.

REGULATION – CITY OF SURREY STREAMSIDE PROTECTION ZONING BY-LAW

In September 2016, the City of Surrey adopted a new set of ecosystem protection measures called Sensitive Ecosystem Development Permit Areas and a Zoning By-law on Streamside Protection Setbacks. The new By-law changes the way projects can be developed within 50 metres of a regulated watercourse or ditch. Prior to September 2016, the City applied the Provincial Riparian Areas Regulation (RAR) Assessment that addressed fish habitat concerns.

The new By-law considers additional issues along stream corridors and natural feature areas to manage liability and private/public interests. Any development proposal within 50 metres of a regulated watercourse or ditch are required to go through Development Permit Applications.

The Streamside Protection Zoning By-law is an important tool in helping Surrey conserve nature and protect biodiversity. Good quality streamside habitat is essential for ensuring healthy fish populations.

For more information on the City of Surrey Streamside Protection Zoning By-law, visit:

http://www.surrey.ca/files/SEDPA%20FAQ_Final.pdf

Enabling local governments to utilize regulation to protect biodiversity could support Canada Target 1 objectives. This could be achieved through the development of guides, tools, case studies, as well as through training and networking.

Appendix A - Survey

Municipal Involvement in Canada's Biodiversity Target on Protected and Conserved Areas

Is your local government engaged in area-based nature conservation? ICLEI Canada wants to know your opinion – in 10 minutes!

[Canada Target 1](#) aims to protect and conserve at least 17% of terrestrial areas and inland waters, and 10% of coastal and marine areas, by 2020 to help stem the loss of biodiversity. Reaching this goal will take a pan-Canadian, effort, involving many government departments, Indigenous groups, communities and organizations across Canada. Municipalities have a role to play too. Currently municipal parks and protected areas are not included in Canada's report to the international conservation community, but many could be. Help us bring your voice to the Pathway to Canada Target 1 initiative by sharing your opinion in this ten-minute survey.

1. *What local government do you work for?*

Name:

Select: (province or territory)

2. *What is your role with the local government?*

Select from list: elected official, planner, engineer, sustainability officer, administration, parks staff, none of the above.

If none of the above: insert role

3. *Are you aware of Canada Target 1: "By 2020, at least 17% of terrestrial areas and inland water, and 10% of coastal and marine areas, are conserved through networks of protected areas and other effective area-based conservation measures"?*

Select: Yes/No

4. *Are you aware of your local government being involved in efforts or activities towards Canada Target 1?*

Select: Yes/No

If yes, briefly describe

5. *What tools or mechanisms is your local government using to deliver area-based biodiversity conservation and conservation of nature?*

Select one or more from below:

- *Area-based conservation, i.e. park establishment and management*
- *Biodiversity strategy*
- *Public education, e.g., biodiversity and/or species and ecosystems at risk related programming*
- *Policy development, e.g., green infrastructure bylaws*
- *Plan development, i.e. guide land use in secondary plans*
- *Mapping, e.g., prioritization of specific natural areas, environmentally sensitive areas, natural heritage areas, riparian areas*
- *Monitoring, i.e. tracking biodiversity indicators*

- *Partnerships, i.e. with nature conservation organizations*
- *Regulation, e.g., species and ecosystems at risk regulation*
- *unknown*
- *none*
- *Other: insert written answer*
- *More information: please share more information on the tools and mechanisms selected above, i.e. links or brief written statements*

6. *Do you maintain spatial (GIS or CAD) data on important natural areas?*

Yes / No

7. *What do you perceive as the main barriers towards biodiversity conservation and conservation of natural areas at the local government level?*

Space for written answer:

8. *What do you perceive as your local government's greatest successes to date with regards to biodiversity conservation and conservation of land?*

Space for written answer:

9. *Is your local government part of a biodiversity conservation committee or association? If so, what committee or association?*

Space for written answer:

10. *How could the provincial or federal governments best engage local governments in collaborative action towards Canada Target 1?*

Space for written answer:

11. *Would you be interested in having your local government's natural areas contribute to Canada's international biodiversity commitments?*

Space for written answer:

12. *Are there any other comments you'd like to make regarding biodiversity conservation within your local government, Canada Target 1 or anything else related?*

Space for written answer:

Thank you for your participation in the survey. If you would like to remain connected and learn about the results of the survey, please provide your name and email:

Name:

Email: