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Background

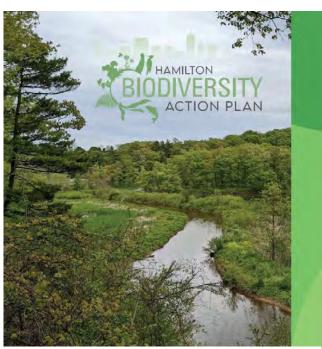
Hamilton's Biodiversity Action Plan is a collaborative initiative between local conservation community partners and the City of Hamilton. Community partner organizations involved in developing the Biodiversity Action Plan include, but are not limited to the Hamilton Naturalists' Club, Hamilton Conservation Authority, Cootes to Escarpment Eco Park System, Bay Area Restoration Council, and Niagara Peninsula Conservation Authority. These organizations are referred to in this document as the "Working Group" as they have undertaken the majority of the work to develop the Biodiversity Action Plan.

The Working Group partner organizations have committed to working towards the vision of "A Hamilton that is resilient to climate change, celebrates nature and provides a healthy environment for all life". The intention of the Biodiversity Action Plan is to coordinate actions across the partner organizations over the next 5 years to protect, restore, connect and explore local biodiversity. The plan will be reviewed and updated after the first 5 year term.

A draft version of Hamilton's Biodiversity Action Plan was presented to City of Hamilton Planning Committee on May 2, 2023. Staff from the Planning and Economic Development Department as well as the Public Works Department were directed to consult on the draft plan with the public, interested community organizations, and Indigenous communities. Consultation also included consideration for how the 23 Global Biodiversity Framework (GBF) targets adopted at the 15th Conference of Parties to the UN Convention on Biological Diversity could be integrated as local targets.

The consultation work was initiated in May 2023, and this report provides a summary of the consultation activities and what was heard.





1 Cover of the draft Biodiversity Action Plan for Consultation

Consultation Plan

The consultation plan for the Biodiversity Action Plan was developed by the partner organizations with assistance from Public Engagement and Communications staff at the City of Hamilton.

The target audience for the public consultation was City-wide, including residents from urban and rural areas. Community partner organizations targeted for engagement were those who participate in the space of conservation and ecology as part of their daily work programs. Indigenous consultation was directed to those communities which are recognized in the City's Land Acknowledgement as having traditional territory in Hamilton.

Level of Engagement

The level of engagement that was determined to be appropriate was "**Consult**", in accordance with the IAP2 Public Participation Spectrum¹. This level of engagement was chosen because the intent of the Biodiversity Action Plan consultation was to obtain feedback on the project, inform the public about the plan and the decisions being made, and provide a summary of how the input was used to inform changes to the final document.

Goals

- Share information about the importance of biodiversity and the threats that are having an impact locally;
- Gather feedback about the structure and content of the draft Biodiversity Action Plan including the Vision, Key Priorities and Actions;
- Understand what programming and stewardship opportunities members of the public and other local organizations would be interested in participating in in the future;
- Gather feedback on the potential application of the Global Biodiversity Framework 2030 targets locally;
- Provide a chance for people to meet the Biodiversity Action Plan partner representatives and learn about their on-going programming.

Methods

Interactive public engagement opportunities for the public included one virtual public information session, two in-person Open House events, and activation at Open Streets 2023. An Engage Hamilton webpage was created and included a survey tool, document mark-up tool for the draft Biodiversity Action Plan and the Global Biodiversity

¹ Source: https://iap2canada.ca/resources/Documents/IAP2%20Canada-Foundations-Spectrum revised june orange.pdf

Framework targets, and an opportunity for individuals to share their stories about why biodiversity was important to them.

For consultation with external ecological and conservation organizations consultation methods included an in-person workshop, questionnaire, and one-on-one virtual meetings with the Working Group partners.

Consultation with Indigenous communities included virtual meetings with the Working Group partners on multiple occasions, and comment submission on the draft Biodiversity Action Plan.

Communications and Outreach

- Social media posts through City and Working Group partner channels;
- Local newspaper advertisements;
- Signage on City digital billboards;
- Biodiversity Action Plan webpage;
- Posters with engagement dates and QR code to Engage Hamilton webpage at all Municipal Service Centres, recreation centres and libraries, and at Hamilton Conservation Authority main office (see Appendix A – Biodiversity Action Plan Poster);
- Communication Update to the Mayor and Members of Council on June 5, 2023 to advise of the public engagement opportunities; and,
- Public library locations across the City were provided paper copies of the public survey to distribute to patrons.



Summary of Public Engagement Activities

Engage Hamilton

An Engage Hamilton webpage for the Biodiversity Action Plan (https://engage.hamilton.ca/biodiversityplan) was published on May 18, 2023 with engagement tools available through to July 23, 2023. The Engage Hamilton webpage received 1.960 visits during the engagement period. Visitors to the webpage were encouraged to provide their feedback about the Biodiversity Action Plan through the Konvieo document mark-up tool, complete a brief survey about biodiversity preferences and programs in Hamilton, and to comment on the 23 Kunming-Montreal Global Biodiversity Framework targets adopted at the 15th Conference of Parties to the UN Convention on Biological Diversity. Paper copies of the Biodiversity Action Plan survey that was available on Engage Hamilton were also made available through Hamilton Public Library locations. and results for the online survey and paper surveys are combined in the results.



Biodiversity Action Plan Survey

For a full summary of all statistics and responses associated with Biodiversity Action Plan Survey, see Appendix B – Biodiversity Action Plan Survey – Results Summary. The key details and findings from the survey are as follows:

- A total 154 completed surveys were received.
- Response were received from across the City, with Wards 1, 2, 3, 4, and 13 having the greatest numbers of responses.
- Results indicate that most respondents had a general knowledge about biodiversity, and that they felt that protection of biodiversity was very important.
- Most responses indicated that protection of habitats for local species, climate change mitigation and adaptation, and improved air and water quality were the most important reasons to protect biodiversity in Hamilton. Additional comments made noted that there is an intrinsic responsibility to preserve the environment for long term quality of life, protection of greenspace, and for future generations.
- Commentors indicated that, in addition to the threats outlined in the draft Biodiversity Action Plan, urban sprawl because of political decision making and changes to urban boundaries were seen as a threat.
- Of the seven Key Priorities listed in the draft Biodiversity Action Plan, most respondents felt that protection of natural areas and their functions within Hamilton over the long-term was the most important to address the threats to biodiversity locally. Consideration of biodiversity in local decision making and

- enhancement of local aquatic habitats were also highly ranked as a top priorities. Many respondents indicated that it was difficult to rank the Key Priorities because they all seemed to be of equal importance.
- Many respondents noted which activities that they are doing or plan to undertake
 to have a positive impact on biodiversity. Planting native species, not releasing
 aquatic plants or animals into waterbodies, and identifying and removing invasive
 species at home were the top activities that individuals identified that they were
 already undertaking.
- Additional actions suggested for consideration in the Biodiversity Action Plan included a focus on more native species plantings across the city, and more education and action taken on invasive species. Respondents also indicated that native species and invasive species education are topics that they want to learn more about through involvement in programming with local environmental organizations.

Konveio Comments – Draft Biodiversity Action Plan

A total of 160 comments were made on the draft Biodiversity Action Plan through the Konveio markup tool. The following section includes highlights from the comments including general feedback, threats to biodiversity, and the key priorities and actions:

• General Comments:

- Concern about balancing priorities of developing plans like this with infrastructure repair costs.
- More education needed for residents about what they can do to help, especially with planting native species.
- o Integration of more natural spaces in parks, and making natural spaces accessible to residents to explore and learn and connect with nature.
- Concern about lack of Indigenous lens in the draft plan, and consideration of traditional ecological knowledge.
- o Greater emphasis on the impact of climate emergency is needed.
- o Protection of biodiversity is in the greater public interest and the plan should mention humans are part of nature.
- Compensation for loss of biodiversity through monetization should not be accepted since it allows for loss of biodiversity as a principle. Biodiversity should not be lost for private gain.
- Updates are needed to the City's Natural Heritage System mapping to integrate more recent inventories and policies should be clearly explained.

Comments about Threats to Biodiversity:

o Invasive Species: Need to remove invasive species broadly, and not allow them to be sold for landscaping. Regulation about introduction of invasive species needs to be developed and enforced locally. Education campaign is needed to increase awareness of impacts of invasive species and to stop people from buying them, or moving them to sensitive areas accidentally.

- Habitat Loss and Fragmentation: encourage connections through conversion of private lawns to native plantings. Concern about development of natural lands by way of urban expansion – Greenbelt protections should remain.
- Climate Change: Manage stormwater by reducing impervious surfaces and provide incentives. Ensure trees are protected through enforcement of a tree by-law that does not allow removal for development. Biodiversity loss also aggravates climate change impacts.
- Pollution: Need to hold industries accountable for environmental contamination. Vehicle use broadly is contributing to pollution as well and more needs to be done to encourage sustainable mobility in Hamilton.

• Comments on Key Priorities and Actions:

- Key Priority 1 Policy change needed to end destruction of biodiversity for profit, and need to centre the public good.
- Key Priority 2 focus on promoting iNaturalist and educate about proper use so that data is high quality. Need to understand more about how the data will be used by the organizations, and how it can be accessed. Consider how Indigenous knowledge can be incorporated into developing a framework for collecting data.
- Key Priority 3 Invasive plants are limiting biodiversity and need incentives for people to change behaviours on plantings. Create opportunities for naturalization on a wide range of scales – from small lots to big institutional properties. Consider an analysis of where land needs to be protected and acquisition approaches.
- Key Priority 4 Incentives should be provided for landowners to plant more native species and create ecologically sustainable landscapes.
 School lands could be improved for more biodiversity and opportunities for ecological education.
- Key Priority 5 Need stronger and enforceable invasive species legislation and requirement for action locally. A public change on reducing invasive plantings for invasives, needs to be led by municipal, provincial and federal bodies.
- Key Priority 6 Encourage management of water run-off on private properties through raingardens etc. and provision of financial incentives. Explore rainwater/watershed education on all school properties with examples like bioswales and other landscape based low impact development techniques.
- Key Priority 7 Make sure all the policies are in place to take action and avoid guidelines since they may not be seen as requirements. Maintain a firm urban boundary and greenbelt. Ensure policies are stringent and do not permit degradation of natural areas at all.

Konveio Comments – Kunming-Montreal Global Biodiversity Framework 2030 Targets

Visitors to the Biodiversity Action Plan Engage Hamilton webpage were asked to consider how the Kunming-Montreal Global Biodiversity Framework 2030 Targets could be considered in a local context and provide comments. The target descriptions that were posted (see Appendix C – Global Biodiversity Framework 2030 Targets for Engage Hamilton) were adapted from the original framework on the United Nations Convention on Biological Diversity webpage². A total of 23 comments were made on the Kunming-Montreal Biodiversity Framework Targets through the Konveio markup tool. Comments are summarized below:

Targets:

- Target 1: Biodiversity inclusive spatial planning Establish infrastructure for implementation with a Coordinator and designated teams to guide decisions, secure funding, and monitor progress.
- Target 2: Restoration of degraded terrestrial and aquatic ecosystems Prioritize restoration efforts in the 5 or 6 worst degraded areas, focusing on terrestrial and inland water habitats in Hamilton. Obtain buy-in from all partners, arrange funding, and develop restoration plans for each targeted area.
- Target 3: Conservation and management of terrestrial and aquatic ecosystems –
 Required buffers to aquatic habitats that improve their biodiversity and protect
 them from impacts. Direct development away from sensitive waterbodies. Define
 the standards that are going to be used to determine if something is being
 effectively conserved.
- Target 4: Recovery of species at risk Address the impact of roaming cats on native wildlife through education, humane removal, and responsible pet ownership. Protect 'at risk' and endangered species with measures like wildlife corridors and habitat restoration. Address threats to biodiversity, such as habitat fragmentation from roadways and urban development.
- Target 5: Sustainable harvesting and trade of wild species Focus on education and sharing information about biodiversity in the school curriculums. Respect the native species that are in the area.
- Target 6: Managing invasive species publicize lists of invasive species in the area and do not allow sales of these species. Organize volunteers to remove invasives and provide education.
- Target 7: Pollution reduction Use of plastics by public entities like utilities companies and schools. Incorporate reusable, long-lasting alternatives wherever possible. Engage golf courses in pesticide reduction and water conservation efforts.

² https://www.cbd.int/doc/decisions/cop-15/cop-15-dec-04-en.pdf

- Target 8: Minimize climate change impacts no comments.
- Target 9: Sustainable management of wild species Indigenous consultants with expertise in wild species management should be included in discussions about planning/permitting that could threaten wild species.
- Target 10: Sustainable management of agriculture, aquaculture, fisheries protect farmland from development to ensure local food production.
- Target 11: Enhance nature-based contributions no comments.
- Target 12: Improve access to natural spaces in urban areas educate municipal staff about benefits of native plants and respect efforts by citizens to plant these as part of their landscaping.
- Target 13: Sharing benefits from genetic resources no comments.
- Target 14: Integration in policy and planning processes Advocate for more federal government involvement in biodiversity conservation and climate action. Prioritize actions that align with climate change goals and that reduce greenhouse gas emissions.
- Target 15: Monitoring impacts from industry Promote transparent labeling and supply chain information for consumer goods to enable informed choices.
- Target 16: Reduce global footprint of consumption Implement EU-inspired recommendations for waste reduction, sustainable product design, and green industries. Industrial polluters must pay for cleanups. Educate about waste derived from over-consumption, namely online ordering. Push big retailers to reduce waste and build to green standards.
- Target 17: Ensure biosafety measures Learn about new technologies to measure biodiversity in natural areas.
- Target 18: Reforming incentives harmful to biodiversity no comments.
- Target 19: Fund and implement national biodiversity strategies no comments.
- Target 20: Sharing science and technology related to biodiversity no comments.
- Target 21: Access to data and knowledge for decision makers Decision makers need to be aware of false information. Utilize peer-reviewed research and local knowledge from community organizations like the Hamilton Naturalists' Club and RBG.

- Target 22: Inclusive representation in decision-making no comments.
- Target 23: Gender responsive implementation no comments.

General comments:

- Consider local specific targets that are in "How Much Habitat is Enough" for Great Lakes-specific targets, as well as Ontario Biodiversity Strategy.
- Ensure Indigenous representation and consultation in planning processes, respecting traditional knowledge and land stewardship.

Story Submissions

Visitors to the Engage Hamilton webpage were given the option to share a story about Hamilton's Biodiversity, how it has impacted them, and what their hopes are for the future. Two submissions were received, each highlighting the work that local homeowners are doing to encourage biodiversity on their properties, and how impactful they have found their efforts even in a short time. The stories submitted are provided below:

Story 1:

"It all started because I didn't want to have to cut or water a lawn, that would dry into hard pan Red Hill clay in the summer anyways. So my husband and I decided to naturalize our yard. We started with putting some manure and rehabbing the soil with mulch and clover. We got two free beeches from the City. We planted as much native plants as possible. We created a rain garden and rerouted drainage to keep the water on our yard. We created a small path for wildlife to be able to cross in between the houses.

The results in a very short time has been nothing short of astounding. We now have a ton and a huge variety of insects. That brings a ton of a variety of birds, including rare warblers in the spring on the spruce during the hatch. We have a skunk, a possum, a groundhog, and have had a coyote drink from our birdbath. Raccoons and squirrels and rabbits, which brings the raptors.

The aphids and caterpillars are now kept in check by ladybugs, blue mud wasps and ants instead of pesticide. Everyone loves coming by our yard and experiencing the naturalized yard - but there is a different expectation of what a yard and/or garden is. We don't trim the plants over the winter, we leave plant material on the ground, and while we try to keep it relatively tidy for the neighbours, it is a different way of thinking of a yard. It's not for everyone. But I will say, our yard is way less work than having a lawn. We just sort of let it do it's thing. And it's thing is amazing."

Story 2:

""Lose the grass mom." I heard this over and over from my then 14 year old. "It's a desert that does nothing for biodiversity. And your geraniums are useless too." I resisted and persisted with weedy grass full of dandelions for a couple more years until one spring my sister gifted me a native bee house from a local hardware store. "Cute" I thought as I propped it up against my deck railing and forgot about it. I knew nothing about native bees and thought they were the same as honeybees back then. Next spring rolled around and to my surprise I found a few of those bee tubes plugged with clay. "What's that?" I asked my now 17 year old who had blossomed into a walking environmental encyclopaedia. That's when I learned about mason bees, leafcutter bees, sweat bees and the over 800 species of native solitary bees in Canada! I learned how they are such efficient pollinators and about their life cycle of laying eggs, leaving a pollen loaf for the larvae, plugging the cell with clay or leaf pieces and repeating till the tube was full. Amazed I watched new bees emerge, mate and immediately begin to nest in neighbouring tubes.

It dawned on me pretty quickly at that point that my daughter was right. I needed to lose the grass and turn my lawns into native gardens to help support these little guys. Over the last four years we've done just that, and my front yard is now full of Ontario native plants, bees, butterflies, hummingbirds, caterpillars, birds, fungi, milkweed and all sorts of mammals. We saw a weasel last week! Thank you Summer, for finally convincing me to get rid of our 'lawn desert' and replace it with native pollinators so that little bee would have a buffet to enjoy in this urban space."

Virtual Information Meeting

On June 8, 2023 a Virtual Public Information Meeting was held at 5:30pm through the City of Hamilton's WebEx Webinar platform. A total of 39 registrations were received in advance, and 31 individuals attended. An overview of the draft Biodiversity Action Plan was presented by City of Hamilton staff as well as staff from the Hamilton Naturalists' Club. A Questions & Answers tool was available to attendees to ask questions during the meeting to the presenters and the other Biodiversity Action Plan partner organization representatives.

The comments and questions made at the Virtual Information Meeting touched on the following themes:

- A multifaceted approach to biodiversity conservation in Hamilton is needed.
- Consideration of collaboration with Indigenous Nations.
- Desire for more community engagement and learning opportunities.
- Concern about regulatory measures and effective implementation of actions long-term.
- Concerns about government decision making impacting sustainable management practices.

The recording of the Virtual Public Information Meeting was made available on the Biodiversity Action Plan Engage Hamilton webpage following the meeting.

In-Person Open House Events

Two in-person Open House events were held in June 2023. Open House 1 was held at Gage Park Tropical Greenhouse, Hamilton, on June 15, 2023 from 6pm-9pm and was attended by 9 people. Open House 2 was held at Dundas Town Hall, Dundas, on June 26, 2023 from 4pm-8pm and was attended by 21 people. Presentation panels outlining the content of the draft Biodiversity Action Plan were provided, and representatives from the Working Group partner organizations attended both events. To review the Open House presentation panels, see Appendix D.



3 Open House 2 event at Dundas Town Hall

The following sections provide a summary of comments provided on some of the presentation panels at each Open House event:

- Draft Vision Statement:
 - Need to be more ways to address invasives by citizens.
 - Hopeful.
 - A good starting point to work from.
- First Impressions of the draft Biodiversity Action Plan:
 - Wording may be too complex for the average reader.

- Desire for more details about potential citizen-led actions.
- Very thoughtful.
- o Ambitious and inspiring.
- Desire for measurable outcomes/reporting.
- Need for connection with other community groups.
- Global Biodiversity Framework Targets for this panel, visitors were asked to add a sticky dot to the targets they think could potentially be adapted for Hamilton. The original target descriptions were shortened for the engagement panels. The responses are summarized in the following table:

Target	Count
Biodiversity inclusive spatial planning	1
 Restoration of degraded terrestrial and aquatic ecosystems (30% x 2030) 	12
 Conservation and management of terrestrial and aquatic ecosystems (30% x 2030) 	10
4. Recovery of species at risk	8
5. Sustainable harvesting and trade of wild species	2
6. Managing invasive alien species	9
7. Pollution reduction	6
8. Minimize climate change impacts	3
Sustainable management of wild species	2
 Sustainable management of agriculture, aquaculture, fisheries and forestry 	5
11. Enhance nature-based contributions	1
12. Improve access to natural spaces in urban areas	5
13. Sharing benefits from genetic resources	0
14. Integration in policy and planning processes	3
15. Monitoring impacts from industry	10
16. Reduce global footprint of consumption	7
17. Ensure biosafety measures	0
18. Reforming incentives harmful to biodiversity	5
19. Fund and implement national biodiversity strategies	8
20. Sharing science and technology related to biodiversity	1
21. Access to data and knowledge for decision makers	8
22. Inclusive representation in decision-making	2
23. Gender responsive implementation	0

The results illustrate there was a strong preference by attendees for consideration of integration of targets 2, 3, and 10 as part of local targets or actions in the Biodiversity Action Plan. Other notable targets to consider were targets 4, 6, 19, and 21.

Open Streets 2023



4 Biodiversity Action Plan partners at Open Streets 2023

Biodiversity Action Plan Working Group partners attended Open Streets and created an event activation at Bernie Morelli Recreation Centre, 876 Cannon Street East, Hamilton. This event occurred on June 18, 2023, 10am-2pm.

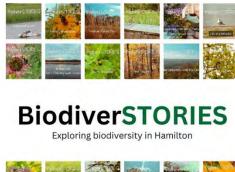
- Event attendance included select presentation panels that were prepared for the Open House events, co-location with Office of Climate Change Initiatives staff, and interactive activities for parents and children focused on aquatic habitats and biodiversity presented by the Bay Area Restoration Council.
- Over 120 interactions with event participants were recorded at the Biodiversity Action Plan activation.
- General observations:
 - Not many people knew about the draft plan before coming to the event, but happy to hear that it is happening.
 - Engage Hamilton handout was an effective means to remind people to do the survey later.
 - Event was a great opportunity to go where people were, instead of asking them to come to a specific location for a project specific event.
- Conversation notes:
 - Questions/concerns about how strong the Biodiversity Action Plan can be in the current political landscape that prioritizes development.

 Questions about getting involved with local volunteering opportunities, and "how can we help?".

Other Public Engagement Activities

The Biodiversity Action Plan Working Group partners collaborated on many events to reach a broad public audience, but some partners also engaged with membership from their organizations directly through independent events. The following highlights some of the outreach activities that were undertaken by the Hamilton Naturalists' Club specifically:

- Social media shared information from Engage Hamilton and provided weekly posts. to highlight local biodiversity or the action plan.
- BiodiverSTORIES video series (31 videos) were shared through HNC social media.
- Presentation to six Grade 6 classes.
- Biodiversity in Action walk series (5 events).
- BAP presentation at Action 13 event (2 events).
- City of Hamilton staff also presented to a Grade 6 class, presenting concepts about biodiversity as well as activities related to managing stormwater through various landscape based low impact development techniques.







5 Ward 1 walk with Hamilton Naturalists' Club

External Agency Consultation Activities

Local Ecological Partners Workshop

The Hamilton Naturalists' Club organized a workshop for local agency representatives who work in the ecology or environmental stewardship field. The event took place inperson on May 23, 2023 at the Dundas Town Hall Auditorium. Representatives from the following organizations were present:

- Environment Hamilton;
- Green Venture:
- Niagara Escarpment Commission;
- · Bay Area Restoration Council;
- Grand River Conservation Authority;
- Cootes to Escarpment EcoPark System;
- Hamilton Conservation Authority;
- Royal Botanical Gardens;
- Niagara Peninsula Conservation Authority;
- Conservation Halton;
- City of Hamilton; and,
- Hamilton Naturalists' Club.

Sheelah Dunn Dooley, a trained facilitator and active participant in the Hamilton Naturalists' Club, volunteered to facilitate the workshop event and guide the group. Participants gathered in small groups and circulated throughout the room over the course of the afternoon to discuss the draft Biodiversity Action Plan elements, including Threats, Key Priorities, and Actions. Groups were asked to provide their thoughts on poster paper so that could be reviewed by others who were participating in the space. The following is a summary of the comments received through the workshop:

Threats:

- Political processes threaten biodiversity protection. Need stability to allow improvements to take place.
- Policies should be firm and clear.
- Overharvesting and other human influences should be considered.

Key Priorities and Actions:

- Key Priority 1: Develop an administrative framework to manage the on-going implementation of the Biodiversity Action Plan's Actions.
 - o Use existing local report cards as template for action reporting.
 - o Be sure that roles of each agency is defined.
 - Consider targets for each key priority as part of reporting.
 - Need resources for governance framework grants?
- Key Priority 2: Understand the current baseline state of Hamilton's biodiversity to inform future monitoring and priorities.

- Narrowed scope for Natural Areas Inventory to report on indicator species.
- o Integrate academic institutions into research.
- Identify a strategy to assess private lands.
- Make sure there is no duplication of efforts between organizations.
- Key Priority 3: Protect natural areas and their functions within Hamilton over the long-term to support diversity and connectivity.
 - o Focus first on protecting forests and Environmentally Significant Areas.
 - o Provide financial incentives to landowners for naturalization.
 - Look at Core Areas that are fragmented by roads and prioritize connection.
 - Make sure organizations know about all the funding opportunities for land acquisition for natural space protection.
 - Policy should be directive and not subjective words matter "shall" vs "should".
- Key Priority 4: Enhance public awareness of the importance of biodiversity and explore opportunities to enhance biodiversity through stewardship.
 - Coordinator role may be over-stretched trying to also take on stewardship actions.
 - Need to involve representatives from horticultural industry and education system to be sure there is consideration for biodiversity not just aesthetics.
 - Community data collection and tracking should be monitored carefully for accuracy.
 - There is a need to provide education and awareness about the threats.
- Key Priority 5: Protect Hamilton's biodiversity by implementing coordinated, citywide efforts to control, remove, and manage invasive species.
 - Need a proactive approach to reducing introduction of invasive species involving industries that move between ecologies (ie. Shipping).
 - o Strengthen local by-laws for yard maintenance and proactive enforcement.
 - o Provincial corridors need to be considered as vectors for invasives too.
 - Focus on data sharing across organizations and jurisdictions invasives don't recognize political boundaries.
- Key Priority 6: Enhance local aquatic habitats through sustainable stormwater management practices and restoration of degraded watercourses, waterbodies and wetlands.
 - Stormwater fee communication to residents to clarify intent.
 - Concern about conservation authorities having to scale back on environmental protections planning in watersheds due to regulations.
 - Provide financial incentives for property owners to install low impact development techniques, and for those near watercourses to steward them with naturalized buffers.

- Key Priority 7: Ensure impacts on, or improvements to local biodiversity are clearly considered in all municipal decision making related to the development or use of urban and rural lands.
 - More policies may lead to more confusion, better to make existing stronger and clear.
 - o Look at landscape-wide protections, more than just single properties.
 - o Climate lens should also be applied to all decision making.
 - o Fund positions at the City to make sure commitments are acted upon.
 - o Determine how to fund other land acquisition strategies.
 - Continuous outreach and education so residents know why certain decision are being made to protect biodiversity.

Wrap Up:

A wider group discussion was held at the end to go over what people thought were insightful takeaways from the event. Overall, the participants were excited that there was so much collaboration underway to get the project going and recognized that it is difficult to make plans that affect many different organizations. Participants felt the City seemed to be understaffed for Natural Heritage, and need more staff to implement the actions. There was also an acknowledgement that, as the plan progresses, there needs to be a commitment to working more with Indigenous knowledge keepers to be sure there is opportunity to collaborate using a two-eyed-seeing framework.

Local Ecological Partners Survey

Following the local ecological partners workshop, a questionnaire was sent out to the organizations that were invited to attend, asking a series of follow up questions about the draft Biodiversity Action Plan, potential for future collaborations, and resource sharing. Responses to the questionnaire were received from most organizations that attended. Comments received ranged from: suggestions for grammatical and typographical updates to the draft document; to general comments about why they felt the action plan should be developed in the first place; to and specific responses to the survey questions. The key themes of the general comments and responses to the questionnaire are summarized below:

General Comments:

- Creation of the plan is generally well received and welcome by those who commented.
- A landscape-based approach is needed to protect and enhance biodiversity in priority areas.
- Environmentally Significant Areas identified in the Natural Areas Inventory update need to be protected through acquisitions and strong policies.
- Target of protecting at least 30% of natural areas by 2030 in Hamilton is recommended.
- Coordinator position needs to be funded and consideration for City to take this
 on.

- Regular public reporting and engagement events are needed alongside education on using the iNaturalist app.
- Commitment is needed from the City to steward natural areas, manage invasive species, restore open spaces, and promote native plantings and sustainable stormwater management practices.
- Migratory birds are threatened by light pollution and outdoor cats and more needs to be done to reduce these threats.
- Engagement and outreach with youth could be fostered through collaborations with other local agencies that do work in schools and community youth groups.
- Agencies are interested to get involved in actions as they are implemented as there are shared goals.

Threats:

- Most agreed that the threats were identified correctly.
- Habitat loss and fragmentation were noted as being significant because of competing land use priorities; habitat alteration should be added to this threat.
- Political decisions and regulatory changes could also be seen as a threat.
- Lack of knowledge about biodiversity by the public seen as a threat.

Key Priorities and Actions:

- Consider targets to measure the effectiveness of each Key Priority.
- Ensure coordination with Federal and Provincial plans.
- Involve Indigenous knowledge keepers in actions where they have an interest in participating.
- Funding for all actions should be in place, and additional funding source for strategic land acquisitions is needed.
- Make reporting on the actions easy for the public to understand.
- Wildlife corridors protections are needed broadly, and education about the value of corridors to local wildlife needs to be provided.
- The Key Priorities rely on each other in many cases, and need to ensure strategic delivery of actions so that others aren't held up.
- Accurate GIS data is crucial to understanding changes in biodiversity and need to ensure partnerships between agencies.

Actions alignment with other agencies:

- Organizations have strong ties to community and can help to share resources, promote opportunities for learning, and co-deliver programming with partners.
- Data collected about other agencies work can be considered in reporting on community-wide efforts for biodiversity in annual report.
- Rehabilitation of certain natural areas can be supported by more involvement from partner organizations and broader network of conservation organizations.

Resource contributions towards actions:

• Data contributions in the form of statistics of programming and GIS data could be shared with partners to implement certain actions.

• Community outreach and education programs could include reference to actions being undertaken, including promotion of ways to get involved.

Current barriers to projects related to biodiversity:

- Connectivity related projects require coordination between agencies, landowners etc. and this can be a challenge to timely implementation.
- Accuracy of data and mapping can cause challenges with identifying/prioritizing sites for restoration or rehabilitation.

Desired impact of the Biodiversity Action Plan to work:

- Provides common ground for agencies to prioritize work and will help focus conversations when issues arise and decisions need to be made.
- Can be used to inform comments through development review processes and can be made stronger through implementation into policy.
- Provides a sound rationale for more robust data collection and management across local organizations.

The comments from the conservation agencies were reviewed by the working group and edits to the final Biodiversity Action Plan were made through a collaborative and iterative editing process. Since many of the comments addressed similar themes, changes were integrated to address core themes in various areas of the document. Suggestions for actions were considered and where appropriate, added in or revised into existing actions. Follow up conversations with the agencies that provided comments took place and included a review of how their comments were incorporated, where possible.

Development Industry Liaison Group

City staff presented the draft Biodiversity Action Plan at the Development Industry Liaison Group on September 11, 2023. Attendees were provided a digital copy of the draft Biodiversity Action Plan with the meeting minutes and were asked to provide any comments by October 6, 2023. No comments were received from the Development Industry Liaison Group by the October 6, 2023 deadline.

Agricultural Sector

Hamilton Conservation Authority staff sought comments on the draft Biodiversity Action Plan from local agricultural sector representatives including from the Ontario Federation of Agriculture, Christian Farmers Federation of Ontario, and the Ecological Farms Association of Ontario. Representatives were provided a copy of the open-ended questionnaire that was provided to the ecological organization representatives. No comments from these organizations were received.

Indigenous Consultation

With assistance from the City's Indigenous Relations staff, Sustainable Communities staff from the Planning and Economic Development Department contacted representatives from the following Indigenous communities:

- Six Nations of the Grand River Elected Council Lands and Resources Department;
- Mississauga's of the Credit First Nation;
- Hamilton Regional Indian Centre;
- Haudenosaunee Development Institute;
- Metis Nation of Ontario; and,
- Huron-Wendat Nation.

Correspondence was sent through email to the appropriate representatives in late April, mid-May and early June advising of the draft Biodiversity Action Plan and asking for a meeting if they were interested in providing feedback.

In response to the communications sent, staff from the Wildlife and Stewardship Office at Six Nations of the Grand River Elected Council requested a meeting, which took place virtually on July 10, 2023. The discussion at the meeting included an overview of the draft Biodiversity Action Plan elements, the work programs of the different partner agencies, and general discussion about trends all are observing in their work related to managing wildlife and natural lands in the area. Wildlife and Stewardship Office staff provided comments on the draft Biodiversity Action Plan, and a follow up meeting was held on December 6, 2023 to go over all the comments received.

The following are highlights of the comments provided by Six Nations of the Grand River Elected Council staff in the Wildlife and Stewardship Office:

- The City of Hamilton's land acknowledgement is used in the draft Biodiversity Action Plan and partner organizations should be aware that there is a desire to see this reviewed in the future by the City's Indigenous Relations staff.
- Biodiversity can include good and bad players in terms of ecology invasive species are damaging, and distinction needs to be clearer that not all green is good.
- Putting nature as a primary focus should not be viewed only as an indigenous worldview, but a values-based worldview that respects nature and recognizes the interconnectedness between all life.
- Best management practices and long-term monitoring should be discussed, and action taken if not already planned.
- Request for Six Nations of the Grand River Elected Council staff to be circulated on development applications.

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A short, virtual meeting was held with representatives from the Joint Stewardship Board of the Haudenosaunee Development Institute on July 26, 2023. A brief overview of the draft Biodiversity Action Plan was provided, and Haudenosaunee Development Institute representatives indicated the meeting would not be considered consultation. A formal application and review fee are required. The City responded that currently the City's policy is not to remit a review fee.

Additional opportunities to learn about the importance of indigenous engagement and incorporation of Traditional Ecological Knowledge in conservation practice have been made available to staff from the various Biodiversity Action Plan partner organizations. These include a Cootes to Escarpment EcoPark System and Nature at McMaster University co-created event in August 2023, a Best Practices of Indigenous Engagement and Collaboration by McMaster University in February 2024, and a Traditional Ecological Knowledge summit in March of 2024.

City of Hamilton staff who have attended these events have created an internal working group to discuss how Traditional Ecological Knowledge can be incorporated into future plans and initiatives, and how City staff can engage meaningfully in two-eyed seeing through all projects by building greater relationships with the Indigenous communities. Indigenous Relations staff from the City are attending these meetings as well as staff from the Planning Division and the Office of Climate Change Initiatives, and Environmental Services in the Public Works Department.

Summary of Key Findings

Throughout the various consultation activities for the draft Biodiversity Action Plan, there were several key messages that were heard consistently and were considered carefully by the Biodiversity Action Plan working group partners as the document was being edited. The key messages and responses are outlined below:

Key message/theme	Response
Actions need funding and funding is needed for a governance model.	 Each agency involved in the Biodiversity Action Plan has outlined actions that they are committed to undertaking, with appropriate funding over the next five years. A role at the City of Hamilton will carry-on the work of developing the governance model and finalizing the funding model. Agreements between agencies take time to develop and more work is needed to determine a funding model that is reasonable for all partner agencies.
Habitats are threatened by being neglected or significantly altered through human activities, and further threatened by political pressure for development.	 Habitat alteration was added to the threat of habitat loss and fragmentation to acknowledge that successive changes to natural areas by way of invasive species, climate change, and human activities may alter the natural areas that local species need. While political pressures for development cannot be dissuaded by the creation of the plan, the coordinated effort on the Biodiversity Action Plan creates a strong voice for local concerns and can be used as a reference to collaborative efforts and common priorities when advocating for protection.
Targets for measuring the success of the plan, including alignment with the Global Biodiversity Framework 2030 targets, should be considered and reported on regularly.	Consideration was for integration of the Global Biodiversity Framework 2030 targets into the local context. Partner agencies agreed that a natural areas protection target should be informed by understanding the current baseline state of biodiversity. Many of the groups involved in developing the Biodiversity Action Plan are also involved in the Natural Areas Inventory update, and have agreed that the target for natural areas protection should be determined based on the outcomes of the study. A future report on the findings of the Natural Areas Inventory will provide guidance on what an appropriate target would be.

Key message/theme	Response
Environmental knowledge from local Indigenous communities needs to be integrated into the Biodiversity Action Plan and how actions are implemented.	 The partner organizations involved in the Biodiversity Action Plan have each approached their relationship building with Indigenous communities separately and in consideration of the work that they are looking to do. All partners have recognized that there is an opportunity to come together to begin to establish more collective relationships with Indigenous communities and approach the understanding of biodiversity with a two-eyed-seeing framework. Opportunities for City of Hamilton staff to strengthen relationships with Indigenous communities, notably with respect to integration of Traditional Ecological Knowledge will be facilitated through collaboration with the Indigenous Relations Office.
Urgency is needed to address threats to biodiversity and take action.	 The Biodiversity Action Plan actions are broken down into timeframe categories – immediate (0-1 year), mid-term (1-3 years), and long-term (3-5 years). The timeframes specify when the actions are anticipated to be initiated and provides transparency to the reader to know what is planned and when. The Biodiversity Action Plan is a five-year plan and will be reviewed for new actions when a new plan is being developed.
Opportunities for community-level engagement are needed to help spread awareness of biodiversity and understanding of threats.	 Through the public engagement events, participants noted regularly that they wanted to have more opportunities to get involved to protect biodiversity. Agencies who were consulted on the draft Biodiversity Action Plan provided excellent examples of the community outreach efforts that are already underway. It was recognized that there was a need to support the work that is already being done by these organizations (ie. Green Venture, Environment Hamilton, Nature at McMaster) by working more collaboratively, and involving them in the future governance model of the plan.

Conclusion

The Biodiversity Action Plan Working Group sincerely appreciates all the individuals and organizational representatives who took the time to participate in the consultation activities related to the draft Biodiversity Action Plan. There is a clear enthusiasm for the project from those that took the time to give feedback, and all the working group partners look forward to collaboration with the community, conservation agencies, and Indigenous communities through the implementation of the actions over the next five years.

Implementation of the Biodiversity Action Plan is designed to ensure that there will be opportunities for education and outreach by all project partners. More opportunities for engagement and consultation will be available as progress is made on the work plans for various actions.

For regular updates about the Biodiversity Action Plan, please visit the Biodiversity Action Plan webpage on the City of Hamilton's website https://www.hamilton.ca/city-council/plans-strategies/strategies/biodiversity-action-plan, or visit the webpages of the following project partners for additional resources and opportunities to get involved locally:

Hamilton Naturalists' Club: https://hamiltonnature.org/

Hamilton Conservation Authority: https://conservationhamilton.ca/

Bay Area Restoration Council: https://bayarearestoration.ca/

Cootes to Escarpment EcoPark System: https://cootestoescarpmentpark.ca/

Niagara Peninsula Conservation Authority: https://npca.ca/

Appendix A – Biodiversity Action Plan Poster



Hamilton is creating a Biodiversity Action Plan!

Local community environmental organizations and the City of Hamilton have partnered to develop a draft Biodiversity Action Plan. The goal is to create a guiding framework of actions across organizations so that we are all working together to protect Hamilton's biodiversity against threats.

WE WANT TO HEAR FROM YOU!

WAYS TO ENGAGE:

- Engage Hamilton Visit the Engage Hamilton webpage: engage.hamilton.ca/biodiversityplan to review the Biodiversity Action Plan, complete a survey and provide comments (commenting closes July 16, 2023)
- Attend an information session online or in-person:
 - Virtual Information Meeting:
 June 8, 2023 6pm-8pm
 (Webex registration is required. Register through Engage Hamilton: engage.hamilton.ca/biodiversityplan)
 - Open House #1: Gage Park Tropical Greenhouse, 1000 Main Street East, Hamilton June 15, 2023 – 6pm-8pm
 - Open House #2: Dundas Town Hall, 60 Main Street, Dundas, June 26, 2023 – 4pm-8pm
 - Open Streets Pop-up!
 Bernie Morelli Recreation Centre, 876 Cannon Street East, Hamilton
 June 18, 2023, 10am-2pm
- * Note: The survey will be available at Hamilton Public Library locations until July 16, 2023. If you wish to complete the survey over the phone, please contact project staff.

QUESTIONS? Would you like to be added to the project mailing list? Contact us at biodiversityactionplan@hamilton.ca

Do you have any accessibility requirements in order to be able to review the material and provide comments? Please contact Lauren Vraets via email at Lauren.Vraets@hamilton.ca or by phone at 905-546-2424 Ext. 2634.

Information will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.



Partner organizations:













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Appendix B - Biodiversity Action Plan Survey — Results Summary

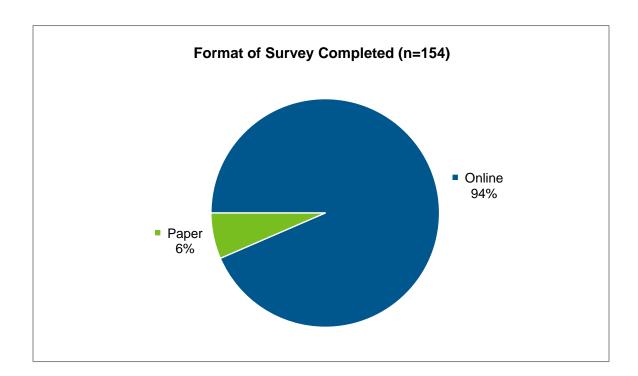
Biodiversity Action Plan Survey ~ Results Summary

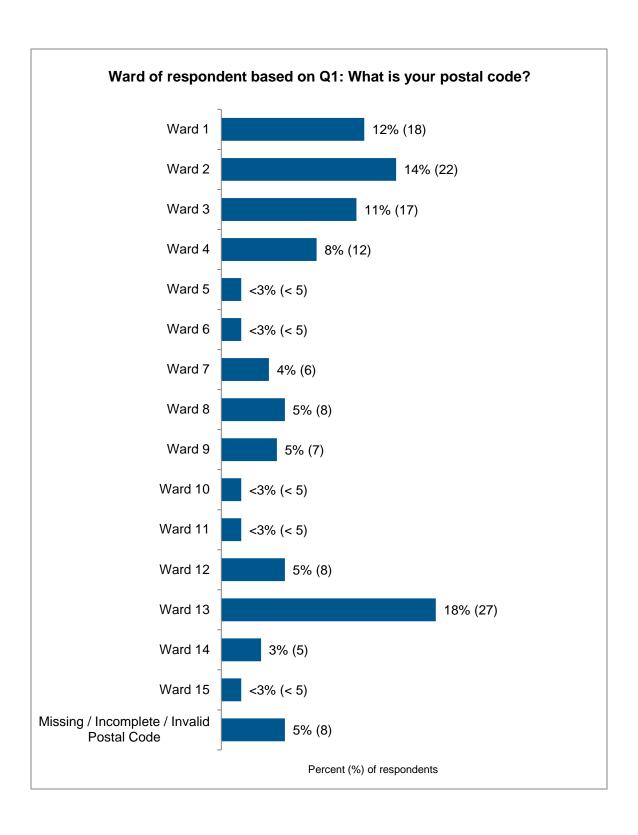
Survey Summary

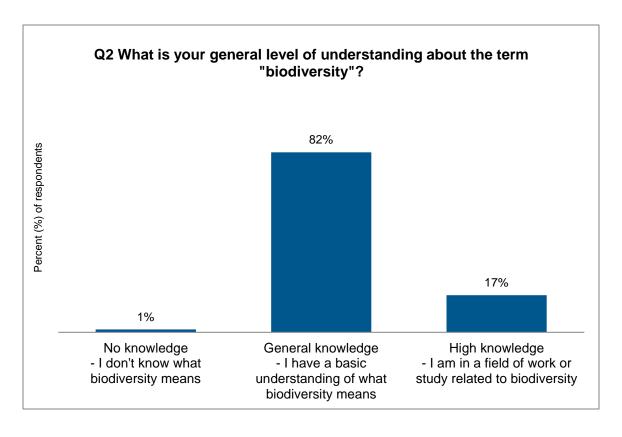
This document provides a summary of the responses collected for the Biodiversity Action Plan Survey. The survey was hosted on Engage Hamilton from May 18, 2023 to July 18, 2023. Hard copies were made available through Hamilton Public Libraries and related in-person engagement events. The survey tool is provided in Appendix A.

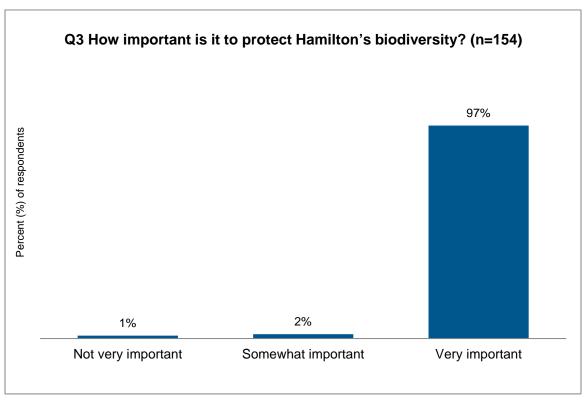
Notes:

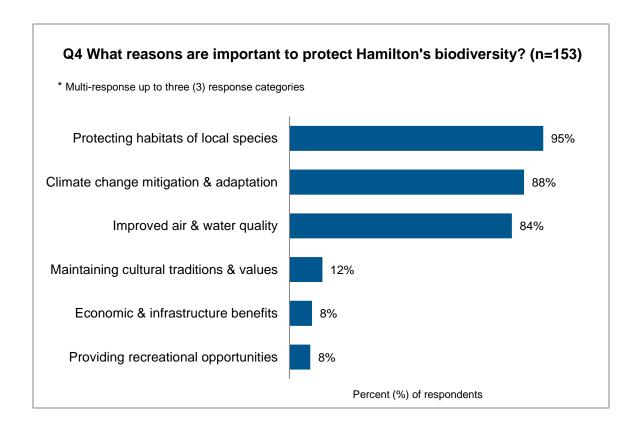
- Respondents did not always provide a response to every question. The universe of respondents (n) is provided for each question.
- Data shown may not add up to 100% due to rounding. For some questions, respondents were allowed to select multiple responses in which case totals would exceed 100%.
- Text responses to open-ended questions were coded into themes or categories. The more common themes or categories are provided in this document and do not represent all expressed ideas. A complete set of verbatim responses to open text questions is provided in Appendix B.







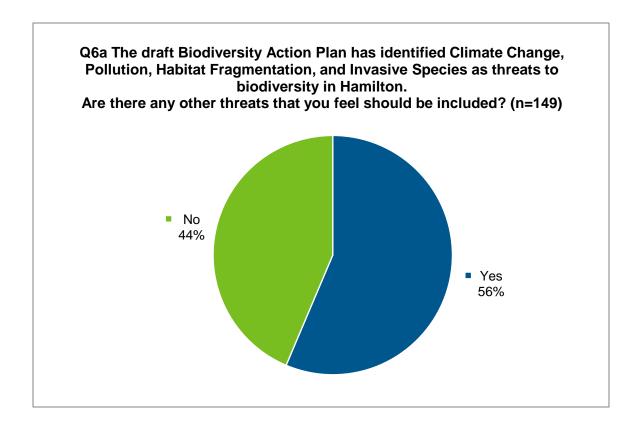




Q5 Are there other reasons why protecting Hamilton's biodiversity is important to you?

Based on 101 text responses, the following are the most common additional reasons specified by respondents about why protecting Hamilton's biodiversity is important, listed with the more common reasons first.

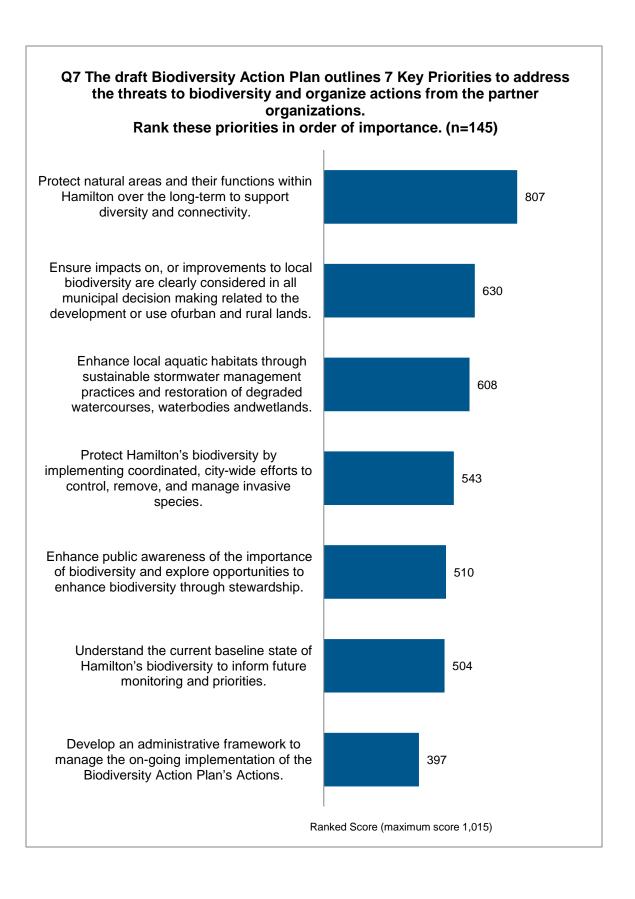
- protecting and/or preserving the ecosystem/nature/species is essential/important/fundamental
- quality of life, healthy community, physical and/or mental health and wellbeing
- protect climate, air and/or water
- protect green space, prevent urban sprawl
- sense of responsibility/morals, right thing to do
- for future / future generations



Q6b Are there any other threats that you feel should be included? Please specify other threats.

The following are the most common additional threats identified from the 84 text responses to this question, listed with the more common ones first.

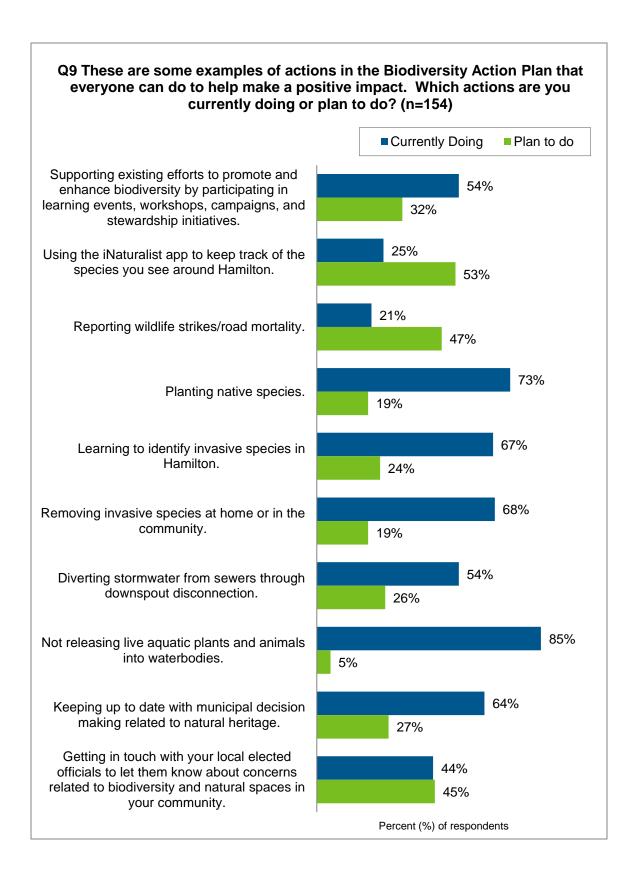
- urban sprawl and development, developers and government decisions/policies related to urban boundaries/expansion
- destruction of green space and/or protected green space, natural lands etc.
- habitat loss

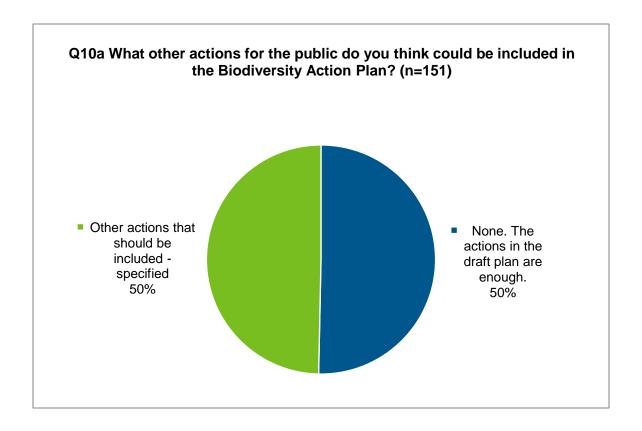


Q8 Do you have any additional comments on the 7 Key Priorities identified in the Biodiversity Action Plan?

The following are the most common themes from the 62 text responses to this question, listed with the more common ones first.

- all key priorities are equally important, difficult to rank
- need education and awareness for public, corporations etc.
- protecting native species, removing invasive species, planting of native species on City maintained/owned property
- advocate/protect green space/greenbelt, prevent urban sprawl

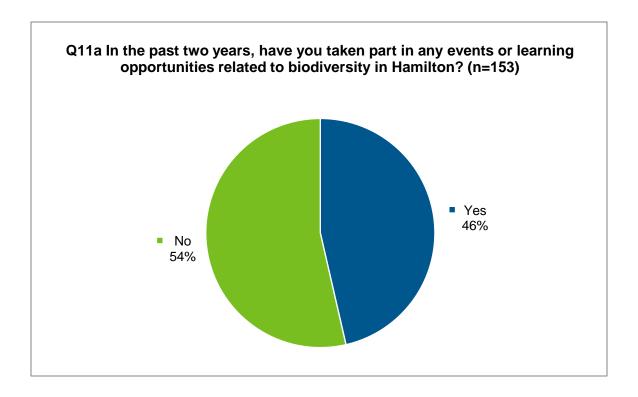




Q10b Tell us what other actions that should be included.

Based on 75 text responses, the following are the most common additional actions for the public that could be included in the Biodiversity Action Plan identified by respondents, listed with the more common ones first.

- education and awareness
- native species encourage City and public to plant, encourage nurseries to sell
- having policies, bylaws and/or enforced bylaws for invasive species, removing trees or green space
- invasive species removal, education, ensuring not being sold



Q11b Please briefly describe the event and hosting organization.

The following are the most common events and hosting organizations from the 71 text responses to this question, listed with the more common ones first.

Hosting Organizations:

- Royal Botanical Gardens
- Hamilton Naturalists' Club
- Green Venture
- Butterflyway Hamilton
- Action 13
- Environment Hamilton

Events and activities

- tree and/or native species planting, gardening, pollinator gardens
- garbage/litter clean-up
- invasive species workshops or removal

Q12 If more opportunities were made available in the future to learn about Hamilton's biodiversity, what topics would you want to cover?

The following are the most common learning topics from the 84 text responses to this question, listed with the more common ones first.

- invasive species
- native species
- ways to help/support biodiversity
- gardening and tree planting

Appendix A: Survey Tool

WE WANT TO HEAR FROM YOU!



Draft Biodiversity Action Plan Survey

(Note: This is a paper version of the survey that is available on engage.hamilton.ca/biodiversityplan)

Everyone has a role to play to protect, restore, enhance, and explore Hamilton's biodiversity. Before completing this survey, please review the draft Biodiversity Action Plan at engage.hamilton.ca/biodiversityplan, or consult a reference copy, where available at library locations.

Your response to the survey will help the partner organizations understand what is important to the public in terms of Hamilton's biodiversity, determine if we are on the right track with the draft document, and identify changes that may need to be made for the final BAP. It will also help us understand how you want to be involved in biodiversity related actions and community activities in the future.

vledge (I am in a ork or study biodiversity)
ortant
top 3 reasons.
g cultural & values
& infrastructure
rk bio nta to

engage.hamilton.ca





The draft Biodiversity Action Plan has identified Climate Change, Pollution, Habitat Fragmentation, and Invasive Species as threats to biodiversity in Hamilton. Are there any other threats that you feel should be included?
□ No □ If Yes, please specify other threats:
The draft Biodiversity Action Plan outlines 7 Key Priorities to address the threats to biodiversity and organize actions from the partner organizations. Rank these priorities in order of importance (where 1 is most important, 7 is least important)
Develop an administrative framework to manage the on-going implementation of the Biodiversity Action Plan's Actions
Understand the current baseline state of Hamilton's biodiversity to inform future monitoring and priorities
Protect natural areas and their functions within Hamilton over the long-term to support diversity and connectivity
Enhance public awareness of the importance of biodiversity and explore opportunities to enhance biodiversity through stewardship
Protect Hamilton's biodiversity by implementing coordinated, city-wide efforts to control remove, and manage invasive species
Enhance local aquatic habitats through sustainable stormwater management practices and restoration of degraded watercourses, waterbodies and wetlands
Ensure impacts on, or improvements to local biodiversity are clearly considered in all municipal decision making related to the development or use of urban and rural lands.
Do you have any additional comments on the 7 Key Priorities identified in the Biodiversity Action Plan?

engage.hamilton.ca





	make a positive impact. Which actions are you currently doing or pla apply:	an to do? Che	eck all tha
		Currently Doing	Plan to
	Supporting existing efforts to promote and enhance biodiversity by participating in learning events, workshops, campaigns, and stewardship initiatives		
	Using the iNaturalist app to keep track of the species you see around Hamilton		
	Reporting wildlife strikes / road mortality		
	Planting native species		
	Learning to identify invasive species in Hamilton		
	Removing invasive species at home or in the community		
	Diverting stormwater from sewers through downspout disconnection		
	Not releasing live aquatic plants and animals into waterbodies		
	Keeping up to date with municipal decision making related to natural heritage		
	Getting in touch with your local elected officials to let them know about concerns related to biodiversity and natural spaces in your community		
0	.What other actions for the public do you think could be included in t	he Biodivers	ity Actio
	□ None. The actions in the draft □ Tell us what other actions should plan are enough.	be included:	
11	In the past two years, have you taken part in any events or learning obiodiversity in Hamilton? □ No □ If Yes, please briefly describe the event and hosting organization:	opportunities	related





	e's keep in touch! Provide your email address if you would like to be added to the City of milton's mailing list to receive updates about the progress of the Biodiversity Action Plan:
Bio Na	ould you like to receive additional emails from the partner organizations involved in the odiversity Action Plan for future learning or volunteering opportunities? (eg. Hamilton turalists' Club, Hamilton Conservation Authority, Environment Hamilton, Bay Area Restoration uncil, Cootes to Escarpment EcoPark System, City of Hamilton)
	Yes, please share my email with all the Biodiversity Action Plan partner organizations
	No, please don't share my email address
D	Only share my email address with these organizations: Hamilton Naturalists' Club Cootes to Escarpment EcoPark System Bay Area Restoration Council Hamilton Conservation Authority City of Hamilton

- . Deliver to the City Hall dropbox (back of City Hall) it in a sealed envelope addressed to "Planning Division"; or
- . Send it by Mail to: "Planning Division, 71 Main Street W, 4th floor, Hamilton ON, L8P 4Y5



Please call City of Hamilton staff if you have questions or need assistance completing the survey: 905-546-2424 ext. 2634

engage.hamilton.ca





Appendix B: Verbatim Responses

Q5 Are there other reasons why protecting Hamilton's biodiversity is important to you?

(Note: text responses have not been modified in any way for grammar, spelling and/or content with the exception of references to names/personal identifiers that have been redacted.

- A focus on building condos and inflating police budgets to protect corporate investments is going to affect the health of the people, animals, and ecosystems of the Hamilton area specifically, the core. Lastly by not maintaining a balance in the ratio of natural spaces to urban development elements the land itself will change and can lead to structural unpredictably and unbearable conditions for civilians in Hamilton. Specifically the low income and empoverished Hamiltonians that are often neglected intentionally through policy.
- A functioning ecosystem should not be optional.
- A future for children to enjoy
- A healthy city is a good place to live.
- A precipitous mass extinction has begun. Attempting to preserve what remains is morally the least we can do. I hope that future generations will discern that some of us tried.
- A sense of responsibility towards the planet and all of its creatures. Biodiversity is fundamentally important. Each species has a value and a right to exist. We should embrace all living creatures and the whole of nature in its beauty.
- After the three reasons I chose above which are directly related to improving life on earth for our own species, of course maintaining healthy ecosystems for all of our wildlife is just as important because it also supports human survival. Everything else can fall into place if we work on these four reasons with the highest priority on solving the climate emergency. If we fail at that then nothing else will matter much because we'll all just be struggling to survive. It was 48C in Texas today, that's scary!
- All life forms must be protected to insure balanced interaction within ecospheres. We need to dialogue with indigenous groups to tap into their ancient knowledge
- All the others listed above
- As a bird advocate, I understand the significance of a thriving bird population and it's relationship to biodiversity and a healthy climate.

- All of the other options from question 4 that I was unable to select; also, mental health, physical heath of of humans (we're not separate from our environment), and I also strongly believe that protecting biodiversity is connected to working toward and upholding Truth and Reconciliation.
- All of the above are important reasons. I also think biodiversity, and more nature, period, is crucial for Hamilton's population in terms of physical and mental health as well as its economy and identity. Hamilton can be a 21st century city that its residents admire, enjoy, and take pride in calling home, if we bring nature back into and around the city and value it accordingly. As a lakefront city, enhancing biodiversity to make the shorefront safe to enjoy and play near should be a priority.
- As all created species from mineral vegetable animal humankind are all interrelated what injures one injures all.
- As caretakers of this land it is our duty to protect the biodiversity.
- Beatify city, quality of air and water
- Because as a 56 year old I can see, hear and smell the decline of biodiversity even in my own lifetime. Levels are falling and people are not even aware because they don't know what we had.
- Because once we lose it, it's gone forever.
- because we'll create a hellscape for our children in the future if we don't protect it.
- Behind my home in Ancaster there is nice naturals habitat and water creek which I would like to protect
- Biodiversity contributes to the health and wellbeing of our world and ourselves. The
 ecosystem provides our air, water and food. Nevermind the potential for medicines that
 can developed from each and every organism.
- Biodiversity gives all residents the opportunity for a fuller, richer lifestyle.
- Biodiversity in general is required for food security, clean water and clean air. These are global goals which are enabled by local action.
- Changing minds / habits of citizens is key to success of this project. One thing the city must do is replace all slip lanes with rainwater gardens, not rely on citizens to do it themselves. Look at cities all across the United States that have replaced general traffic lanes with rainwater gardens / basins. Why is Canada, and Hamilton, so behind?

- Climate change, medication, and adaptation is also another important reason, and in addition, increasing education and awareness of the general public of what native species are, and what they provide an hour, local imperator environment
- Commercial interests have managed to destroy our natural places. It is time to reclaim
 what belongs to all of us. We need to oppose [redacted] who has passed laws to
 destroy our ecosystems and farmland to allow developers to make billions.
- Community health.
- Cultural and recreational benefits.
- Economic benefits
- Economic impact
- Educate the public on invasive species and the importance to not purchase such species (Lily of the Valley, Periwinkle, Ivy, Creeping Jenny) Many nurseries continue to sell invasive species! Also correct strategies for remediation of invasive species.
- Everything depends on maintaining biodiversity and a healthy ecosystem
- For future generations to be able to experience seeing wildlife in a near urban setting, to walk for hours in a conservation area within their city, to experience the joy of being outdoors surrounded by nothing but nature!!
- For the species themselves. The Strategy is strongly biased to human-focused benefits. We are just one species, indeed at the root of the 6th Mass Extinction, so we need to more focused on benefits for the species themselves (inherent right to exist and pursue their evolutionary potential).
- Future generation's access to nature
- Hamilton is poised to avoid the destruction of agricultural lands and the greenbelt in the name of urban sprawl in a way that many cities are either too far gone or uninterested to do so. Acting against the provinces wishes is tough but by building a reputation as a 'green city', a place of nature, etc it encourages wider public support of protecting biodiversity, making actions against the greenbelt too distasteful for those seeking \$\$\$
- Honestly, it can be cheaper. Let natural wild plants take over the grass portion of hwys
 it looks pretty and we won't have to pay maintenance. We can do the same for most
 public land we pay to maintain grass.
- Human activities should not necessarily mean loss of biodiversity. We can learn to do better.

- Humans are also part of the ecosystem and need somewhere to live.
- I enjoy watching pollinators do their bees-ness. It's relaxing.
- I live in a condo community with many ponds. The decision makers who are maintaining these ponds do not consider things like biodiversity. Just like our [redacted] who is also uneducated and making bad decisions. It is unfortunate that these people cannot ask for help without risking being forced to act with timelines that they feel are too expensive. Their information is coming from those providing services instead of the scientists who might have a better plan of action.
- I moved to Hamilton because if it's biodiversity and easy access to green spaces.
 Would like to see it as a a leader in protecting it and improving it. Other municipalities along golden horseshoe are not doing a good job of doing so.
- I provide my family meat in a traditional manner by hunting for most of it.
- I think we are increasingly seeing the impact of "creep" into our natural spaces, not only on other species such as pollinators and wildlife but also human beings in terms of our physical and mental health. Well planned environmental polices must promote green spaces that leverage native plants and natural landscapes, it is good for us, for the world around us and our pocketbooks (e.g., more shade less air conditioners)! i will say I think Hamilton is doing an amazing job in terms if trails across the city, and I love the tree planting program (only native trees please) let's build on and boost that success with not only more green spaces but better green spaces (with less lawn)!
- I think we owe it to future generations to leave this city and planet in better shape than we found it.
- I want the younger generations to be able to observe nature in all its biodiversity or at least as it is now before humans destroy more and more of the land, trees, habitat around us. The level of extinction is alarming. Can we work harder to mitigate this problem?
- I want to live and work in a healthy community.
- I'd like to avoid having to move in 20-40 years because the area's become inhospitable, and focusing on the actions that improve, maintain, and protect biodiversity are key to this.
- Improve air and water quality
- Improve the physical and mental health of the people.

- Improved air & water quality Providing recreational opportunities Economic & infrastructure benefits
- Improved health of people and the ecosystem
- Improvement of peoples physical and mental health
- intrinsic value other species deserve to exist!
- It is essential to the overall health of our community.
- It is integral part of our ecosystem.
- It is vital to human survival
- It leads to well-thought development that needs to be followed by monitoring and mitigation measures.
- It would help create a healthier environment for not only animals but also people.
- It's important for future generations to have a livable planet.
- [redacted] not reports spills.
- Losing species at an alarming rate
- Many of my currant bushes have not fruited due to lack of pollinators. I need more
 native plants that will flower earlier in the spring to attract more pollinators.. it's a sad
 loss over what should be a bumper crop.
- My young grandchildren live in Hamilton and I want them to grow up here in a healthy and functional environment, understanding the importance of stewardship of the land, water, and air.
- No
- No
- None at the moment but protect the species n water
- Not all community spaces needs to paved in concrete and asphalt
- Overall benefit to human health. When ticks and mosquitos dont have predators, they spread more disease.
- part of being a decent human
- Preserving native species
- Protecting our native species in natural areas

- Policies and programs that increase or protect biodiversity also improve the aesthetic of a region. This is not only important in parklands but in the urban core. More diverse and abundant natural space will improve Hamilton's pedestrian traffic, draw people into the city for local shopping and dining, and reduce car traffic. The benefits of this are obvious.
- Preventing extinction of keystone species, saving local pollinators to protect the food chain for humans and animals, preventing monocultures of invasive species from taking over
- Promoting biodiversity is part of a larger and even more essential need: protecting our natural lands and farmlands from development.
- Providing recreational and educational value. Restore sense of community and mitigate ecological impacts.
- Providing recreational opportunities
- Quality of life for all people and all living things.
- Recreation in nature for physical and mental health.
- Red Valley Flying Squirrels went extinct I think
- The amount of urban sprawl I've witness is devastating.
- The benefits of a healthy, balanced ecosystem affect every local citizen. Our physical & mental health, safety, property, access to food & water all rely on the complex ecosystem that has evolved over millions of years.
- The Dundas Valley, Cootes Paradise, Niagara Escarpment, west Flamborough watersheds, Halton watershed, and Lake Ontario shoreline are my home, and home to an incredible diversity of plants and wildlife.
- The economic (including recreational) and infrastructure benefits should be strongly emphasized especially to developers; I feel that most folks are unaware of such things. Indigenous cultural traditions and values have had the most profound respect for their environment. The history of their attitudes toward our natural heritage are lessons that need to be studied and learned, especially now.
- The other three above.
- The reduction of biodiversity is the result of settler lifestyles and industry, and protecting and increasing biodiversity is a step toward reconciliation with the Indigenous people on Turtle Island.

- The right thing to do.
- To create connection with the land we live on and change our behaviour and mindset towards responsible stewardship
- To educate children and have a worthwhile, caring, healthy city for future generations to live in.
- To educate young students about nature.
- To enjoy hiking and discovering nature
- to promote and ensure the sustainability of future generations of natural wildlife and human beings in partnership/stewardship
- Urban biodiversity has a special place in my heart. Most people live in cities; therefore, most people connect with nature in an urban context. If we don't value urban biodiversity, we remove our relationship with the natural world.
- We have a responsibility to be good stewards of the ecosystems in our region for the intrinsic value they have and also our reliance on them for clean air and water.
- We have a responsibility, given how bio-diverse this area is. Also, given the
 interconnectedness of all living things, we don't know when the loss of one species will
 cause a negative cascade.
- We have removed so much of natural habitat and that has had serious effects. With impending climate change we must have a coordinated approach to help/ preserve what is left
- We have taken away too much of natural habitat and engaged in too much sprawl. We need to stop the destruction before it's too late
- We share this earth with all creatures and plants so we must protect all living things.
 We are all interconnected and a loss of one affects the whole ecosystem.
- Without a healthy ecosystem we have nothing. We rely on this.
- Yes it seems money is more important. Lower city should not have skyscrapers, no move view of bay from mountain way too many people for space provided driving will not help environment because cars are stalled due to everyday traffic no more city flow lol what a joke
- yes, leading with Indigenous stewardship and knowledge of the land and species
- Yes. Ecosystem health creates health and wellness for plants, animals and human beings. Without a healthy ecosystem we as a human species will perish.

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- Action by the provincial government promoting urban sprawl and discouraging activities by conservation authorities must be addressed.
- Agricultural land around Hamilton should be preserved. We're building strip malls and condos on some of the best farmland on the planet. It's moronic and short sighted
- Air pollution is bad here. A hydrolic explosion polluted my land where children play.
 Unsafe vehicles spewing rotten eggs smells. Immense amount of truck traffic.
- All other human disturbances, and there are many that cause habitat degradation.
 Improper uses of toxic chemicals on private property, illegal encroachment into publicowned conservation lands by residents living adjacent to them, people removing native plants from the wild to add to their gardens or sell at businesses, people hunting and fishing over the legal limits, etc., etc...
- All these threats should state how our overall quality of life is impacted by these threats at every level - physical, mental, even spiritual.
- Apologies if it's already included under habitat fragmentation: we need to focus on reducing urban sprawl.
- Birds are threatened by many things but window collisions and outdoor cats have not been effectively addressed in Hamilton. Hamilton lags years behind Toronto, New York and Chicago and many other cities and jurisdictions regarding bird-friendly measures in construction. The solutions have been available for well over a decade. Hamilton should also join almost 50 other North American cities and implement a meaningful Lights Out program to protect migrating birds.
- Building and rezoning protected areas, such as green belts etc. is one of the biggest threats we face today.
- Building over all of our natural spaces, allowing use of herbicides and pesticides
- capitalism and corporations, government corruption
- capitalism.
- Cars, speeding
- Consider identifying overconsumption as a root cause of climate change, pollution and habitat fragmentation.
- Conventional Agriculture.

- Continued human encroachment & development through policies and vaguely worded. non-binding legislations that don't put ecology at the forefront of a decision regarding future developments, for example. Systemic issues and pressures from captains of industry a world away whose wealth is accumulating from practices that continue to plunder the planet and further exasperate the the crisis on a scale not even a whole city compares. The industry captains' resistance to change and power to maintain the status quo of a world reliant on fossil fuel extraction and the economic myth of everexpanding growth on a finite planet is a threat. The threat of leaders with no initiative or tenacity to take bold steps and actually do something to stop all further expansion into undeveloped spaces, or impose real programs like free city buses to get people out of the habit of using cars, or switching from the use of monoculture lawns to native pollinator gardens on city properties. Because really the greatest threat is all of us being idle; subject to the bystander effect while a grim version of the butterfly effect sweeps over the rest of our days. Except there will be no butterflies. Because they will have gone extinct.
- Corporate development and infringing on the greenbelt which was promised to be protected
- Cutting grass too short! Cutting down too many trees for housing, which increases heat in cities etc
- Cutting up the green belt
- Decisions to build/develop without attention to ancestors' knowledge and species' living patterns.
- Destruction if wetlands and other natural habitat.
- Detrimental quality of life
- Developer, urban and suburban expansion, resource mining, industrial development
- developers, landlords, [redacted], car-centric infrastructure
- Development of existing protected green space.
- Development on protected lands.
- Development on protected or existing natural land (for housing, commercial use, etc.)
- Development. Sprawl
- Direct human interaction.
- Direct human interference, loss of maintenance, lack of knowledge are some of the ones I can think of.

- [redacted] and associated provincial legislation that threatens protection of natural areas, eg. Greenbelt, endangered species, conservation authorities, urban boundary expansion.
- Driver Culture. The City needs to replace all slip lanes with Rainwater Gardens ASAP, while increasing the cycling network and bike share program up the escarpment and into the suburbs. Ward 1 alone has fifteen slip lanes! Why is the city putting motorist comfort above its biodiversity goals?
- Expansion of urban boundaries
- Food, structrual ex water damage, water quality
- General anthropocebtric bias among Hamilton residents; not acknowledging human role in biodiversity.
- Greed
- Greed, ignorance and power
- Green grass requirements get rid of them.
- Habitat destruction, roadkil, bylaws regarding type & size of plants allowed in yards
- Habitat loss not just fragmentation, loss of tree canopy, noise and light pollution, chemicals/insecticides etc that are still allowed....human choice (and I would say here it is because people aren't aware of what they are choosing (eg non native plants), better info for people is key to better choices (this likely takes advocating to feds and province)
- Habitat Loss should be included if it's not already covered by Habitat Fragmentation
- Habitat loss through sprawl. Infrastructure threats like light pollution, road hazards and reflective glass that injure wildlife.
- Habitat loss within the city due to lack of urban ecological corridors and natural spaces within the built up area. New subdivisions should include green corridors and natural spaces for wildlife and not just built for humans.
- Habitat loss, 'fragmentation' implies that there is still space for habitats, just that they are separated.
- Habitat loss, specifically for the species-at-risk Barn Swallow.
- Hamilton has no private property restrictions on the destruction of old, indigenous trees.
 Oakville for example, restricts indiscriminate cutting on private property.
- Hamilton roads and road parking.
- Housing and commercial:warehouse construction on the wetlands, greenbelt and farmland!!

- I strongly feel a lack of awareness about our local environments is a great threat.
 People won't protect something they don't know anything about.
- I would like more info.
- Intentional removal of important native flora and fauna by humans.
- Invasive species preventing people from buying, planting and/or releasing them into the wild
- Lack of education and understanding of the health and economic benefits of true diversity.
- Lack of greenspace with biodiversity
- Lawns and the protection of traditional lawn aesthetics. Currently, the by-law allows one person who doesn't like a biodiversity-protecting garden to call in a complaint, triggering a visit from a by-law enforcement office who does not have complete training in distinguishing noxious weeds from native plants. Having received a complaint, and discovering I had three days to comply (and it wasn't clear whether that was three business days or calendar days), it felt safer to cut down my garden than to get into a debate with by-law enforcement. It sounds as though the Halton Master Gardeners are potentially willing to offer free training to by-law officers, to help them distinguish between weeds and native plants. I realize that this is a tricky topic, as people like knowing that there's a complaint process, so I'm not necessarily suggesting getting rid of the by-law, but rather updating it, since one person's visual preferences don't outweigh the importance of protecting biodiversity.
- Light pollution and reflective glass, which impact bird populations (as well as bats)
- Loss of habitat or lack of buffer space Impacts to water bodies or groundwater vulnerable areas (I.e loss of recharge or base flow due to overexploitation or increase in the impervious areas)
- MZO. Ministerial zoning orders where the Ontario government overrules the local planning and ignore the environment. Our provincial government who is pressuring the city to expand into the greenbelt instead of intensifying and using vacant land within the city.
- Off leash dogs. Homeless encampments on escarpment.
- Over population of a one way out area not enough roads for cars and not enough parking
- Over population of certain species such as deer, geese etc. When the carrying capacity is exceeded the ecosystem struggles
- Overdevelopment

- Overuse of natural areas for recreation. Lack of safe wildlife crossings of roads. Poor infrastructure choices such as windows that do not reduce bird strikes.
- Poor/poorly informed public policy having a detrimental effect of biodiversity (ie.. weak by law/by law enforcement, lack of incentive to install native gardens etc)
- Preserving rare or endangered native species
- Rampant Development
- Removing the powers of conservation authorities to oversee applications for development that impact surrounding waterways, ensure no building on flood plains, etc.
- Sewage leakage damaging water.
- Suburban development; biological simplification and standardization in agriculture (see the work of [redacted])
- Suburban sprawl
- Suburban sprawl, automobiles, toxic chemicals found in products, plastics, deforestation, waste, coal/gas, carnivore diet
- Sustainable farmland (ie a plot of farmland does not exist in a vacuum)
- The [redacted] government is a major threat. We must take legal action to stop his
 destruction. We need to target developers who are using their financial power to
 destroy what belongs to all of us. This requires taking the government to court and
 overturning his decisions.
- The outdoor cat population; there are far too many cats let out that pose a risk to biodiversity. University of Guelph is doing a study on cats and their impact.
- Tourism is having a major (negative) impact on local natural areas
- Tree removal.
- Under utilization of current green space.
- Urban Boundary Changes which are forced by higher levels of Government and insult the local democratic process.
- Urban development
- urban sprawl
- Urban sprawl
- Urban Sprawl
- Urban Sprawl

- Urban sprawl, illegal garbage dumping
- We should stop too Much urban development happening in city

Q8 Do you have any additional comments on the 7 Key Priorities identified in the Biodiversity Action Plan?

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- Add private property restrictions to the destruction of trees and habitat. This I believe is critical to reduce habitat fragmentation and screen for indiscriminate "clear-cutting".
- Adding more administration and rule is not helpful, get rid of green grass requirements
- Adequate funding must br committed. Indigenous knowledge and communities should be included in all planning.
- Again, learn from indigenous wisdom sources
- All are equally important.
- All of the above are equally important.
- All of them are important and neccessary. Planting on Clty property should prioritize
 native trees and a variety of pollinator-friendly species. Property owners residential,
 commercial, religious and industrial could be actively encouraged to do the same.
- All the sudden massive growth and new businesses being astablished with public consultation on a farm in the green belt. My area is going industrial. Why Stoney Creek Airport is no longer for planes but illegal garages and trucking companies
- An ounce of prevention is worth a pound of cure.
- Biodiversity cannot thrive in a city infamous for sewage leaks. Hamilton's infrastructure
 must be reviewed and improved to avoid further incidents that have left Cootes
 Paradise what should be our biodiversity and recreational hotspot severely
 degraded.
- City Council has to oppose any change in boundaries and prevent any development on the greenbelt. Take [redacted] to court and get any injunctions needed. [redacted] is using his power to benefit developers and this is a conflict of interest.

- Consult with local conservation groups for current actions and concerns and local Native plant nurseries for barriers and suggestions. For example, Butterflyway, Hamilton Naturalists Group, Network of Nature, Kayanese . I'd like to see native plants used through out the city plantings in boulevards and parks, bird/bee/bat houses set up.
- Create a free, publicly accessible database of species native to this area and encourage the public to plant native species. Come up with guides for residents for creating native gardens that help protect our local biodiversity to make it easier for residents to participate. Encourage local greenhouses and nurseries to carry more native species, and do more events like the free tree giveaway to make native species more easily accessible to residents who may not know where to start. Offer free programs about starting native gardens and promoting biodiversity at the public library.
- Create an educational 'kit' for elementary and high school students, whereby they can gain an understanding of the importance of biodiversity and get involved in protecting their future; perhaps provide some grants for teachers/schools to implement this.
- CREATE new habitat, acquire new land, purchase and set aside new areas which already are/can be green space. Preserve the Urban Boundary.
- Do not allow [redacted] Government to build any type of buildings on these lands and to respect the Greenbelt, waterways and farmland!!
- Encouraging/educating citizens to support/create healthy biodiversity on their own private properties is important to the city as a whole. Pollinator gardents on public properties should include signs with information about the plants and the insects and other wildlife that rely on them.
- Focus on litter enforcement that is suffocating the ecosystem and causing animals to become ill.
- I am a strong advocate of educating the public, but the public *knows* and most don't or won't care. We have to just start implementing protections.
- I hesitated doing a ranking as all of the priorities are important as each one is required for the plan to succeed. My ranking is based in part on emphasizing actions that the City can/should lead as opposed to the other agencies and groups. For example, understanding the current baseline state is very important to evaluate the success of the action plan; however, I have ranked it #6 since the initiative is better led by the Conservation Authorities then the City. The initiative however should be supported by municipal funding.

- I really like these priorities; however, I would love to see some energy and attention directed towards the socio-cultural aspects of biodiversity conservation to address equity concerns. For example, it is well documented that pollution and environmental degradation disproportionately affects lower income and BIPOC communities (e.g., environmental racism). How will this biodiversity plan address these realities in Hamilton? I also really appreciated that aquatic habitats are specifically targeted. Freshwater conservation and protection should be strongly emphasized given that Hamilton is deeply connected to the Lake Ontario waterfront and is known as the city of waterfalls. Freshwater ecosystems are among the most threatened on the planet (as a result of multiple stressors, isolated habitats, and high human pressures) and Hamilton has a real opportunity to become a leader in freshwater biodiversity conservation. Smaller comments: - Page 6: Definition of nature: "...processes that exist independently of people." I would argue that people are a part of nature and that it serves us well to consider humans to be a part of nature. Perhaps a more inclusive definition could be included here instead. There was a recent Nature article on the subject here: https://www.nature.com/articles/s41599-020-0390-y - In Target 7: Incorporate native tree planting into cycling infrastructure planning and other developments.
- I was surprised not to see anything about prioritizing diversity and native species in the land management activities the city has responsibility for (e.g., parks, road edges, street trees, city building properties, etc.) Some institutions have taken really impressive steps in this regard see, for example, the University of Toronto's extensive native plantings, which have almost all been planted in the last three years. The city should do better on its own turf (literally). It would also be helpful for the city to provide native plants specific to this ecoregion (and grown locally) to local residents for free or at cost.
- I would like to see education on these priorities with local landscaping companies and garden centers. Help for people to remove invasives on personal property especially when it borders natural protected areas.
- Identify areas that the City can continue to enhance biodiversity by making minor short-term adjustments to existing initiatives. For example, center medians on roads should be planted with perennial pollinator gardens rather than annual plants. Possibly eliminate mowing of grasses in areas where there are known habitats (ex. turtles) and either replace with other native grasses or just not mow. Plant more trees alongside highways and roads. These minor adjustments could also save the City money in maintenance costs over the long term.

- Increase the urban tree canopy and make it mandatory that every property has as many trees as can be accommodated.
- Invasive species are a major threat to our woodlands and demand a concerted effort by our municipalities.
- It would be nice to include a framework for individuals to increase biodiversity in their communities.
- It's really hard to actually prioritize from 1 7. My choices are all tied for #1. All I know is that all actions must be inclusive and that any and all government actions must be crystal-clear in transparency.
- Just wanted to add the public education might be best accomplished by asking local schools to add a teaching unit in about this topic, hopefully with a take home task, then kids can spread it to their parents.
- Knowledge transition Act on what you learn
- KP1: need to conduct a formal review of City staff's capacity to implement the Plan (i.e., natural heritage planning staff capacity woefully inadequate, including vs other municipalities, need to hire one or more ecologists given provincial rules on conservation authorities...). KP2: need to develop a "State of Biodiversity Report to serve as a baseline by which to measure actions. KP3: Need to review natural heritage policies against best practices from other municipalities noting that Ontario Nature has done this and can assist. KP6: mention that Hamilton has XX Seabins, noting that there are new, more effective versions of this technology now available from Poralu (also note the other term is "Litta Traps" vs litter). KP7: need to establish measurable targets using more local examples vs U.N. targets.
- Less spending on auditing, administration and planning and more spending on legitimately things that will help.
- Money talks in this city. Growth is not a inner city gift it's a curse, if you can't move in the city car, bus, nobody will come here, but house around and keep the view from mountain then people will want to enjoy our lower city it's no longer unique lol what a joke born and raise in the north end family of 5 ran with the Canada game torch over 50 years ago when Vic Copps was mayor like I said before think before way too many buildings in the lower city, what a joke nobody cares money will ruin us more homeless because pushing poor out for Ritch lol tell me you can't see it turn your blind eye until the next problem you create
- Need to have (measurable) achievable targets

- No political consequences to Chedoke pollution years past
- No. Well described, all are important. I did not like having to prioritize.
- Pass legislation to prevent sale of invasive species Maintain the Green belt!!!!!!!
- Plant more native trees & water them so they survive. Plant native plants, bushes etc. on city properties. Give talks so people can become more knowledgeable about the importance of native species.
- Please don't waste too much time on elaborate protocols only city staff will read.
- prepare for jurisdictional issues and advocacy amongst different levels of government
- Provide economic benefit information of biodiversity as public education and guiding principle in decision making regarding land/water use.
- public awareness is important but ranking them, it came out last because I felt that conducting the other priorities would create public awareness. idk
- Public awareness wil come as a result of having already taken action and improving policy..there doesn't need to be a separate time consuming and expensive campaign..Intakena 'Build it and they will come 'approach to protecting biodiversity
- Push back against provincial actions that encourage sprawl and discourage action by conservation authorities.
- Question number 7 is extremely difficult to answer as all of the points are important.
- Sad to see building and development is priority#7 in the current plan
- Spending more money on admin is a waste of resource. The city needs to work with the assets at hand. Fiscal responsibility and proper allocation of funds is not antithetical Bio Action Plan. More emphasis on volunteer ship.
- start with action, then focus on education. People care more about actions than abstract ideas. Get going with something, than monitor and talk about it.
- The city budget to enhance and protect biodiversity needs to be sacrosanct.
- The city should stop growing exotic/introduced species in public garden beds and should start planting native plants instead.
- The Key Priorities below are ALL a priority. It's impossible to rank them.
- The priorities are a mix of goals and actions. I don't know enough about the current state to comment on what is a priority

- The priorities will have to be implemented in a coordinating effort rather than in isolation or at different times.
- The sale of invasive species needs to stop. More education on why these species should not be planted or shared is needed. Also needed is education on the benefits of planting native plants. I have seen many non native trees and plants installed on city porperties where natives could have been used instead.
- There is a overwhelming amount of huge rats on the East Mountain so doing something about this would be fantastic..our neighborhood has reported this for the last 3 years
- There is too much talk and not enough action on the ground in almost every administration in Canada these days. The city needs staff to ensure that the BAP is followed by all departments of our local government but that should be done quickly by hiring more local knowledgeable people like [redacted]. Look to organizations like the Hamilton Naturalists' Club that have been studying local biodiversity in Hamilton for decades and many of its members know our natural areas better than almost anyone else. Get the staff in order quickly to organize action on the ground asap. Enough talking.
- There needs to be actual consequences for folks who do environmental damage.
- These priorities are part and parcel... I'm not sure what the point of rating them is all about. All are necessary.
- They are all important actions.
- This isn't a check list, as these all need to be done in cohesive and tangible, transformative ways.
- Tough to rank and while I would like to put establishing a baseline first, I also think that baseline establishment, intervention, and public awareness raising could function in cycles, as a baseline can be outdated by the time it's firmly established. It sounds like the City has working with [redacted] on adopting Lean Six Sigma practices. How about establishing a baseline per initiative, and simultaneously rolling out an intervention and public engagement/distributed stewardship plan? Repeat the process per initiative, with likely impact on biodiversity (based on extant evidence from other cities) considered in municipal decision making before GHA baselines are established replaced with more firmly evidence-based approaches as the City's own evidence becomes available.

 Use all of the management tools available. Remove the sunday gun hunting ban like so many other community's have so that this tool can be better deployed to manage species and provide residents a health and secure source of food

Q10b What other actions for the public do you think could be included in the Biodiversity Action Plan?

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- 'Working from the list above (can't recall the specific public actions in the document): Not throwing yard waste into natural areas (this is a problem in the EcoPark, for sure) Having less lawn Working towards earning a "Monarch Award" for your garden turn off lights and close blinds at night; install "dark sky compliant" outdoor light fixtures removing invasive species from your property planting native species INSTEAD OF non-natives (this is a bit of a stronger request) planting the "keystone plants" that are crucial to the food web and ecosystem because they support many other plants, animals and insects throughout their life cycles remove lawn from under trees and let the leaf litter accumulate
- Under Priority #7 Update City's Yard Maintenance By-law to allow for naturalization of urban lots legally, including initiatives like No Mow May. 2) Under Priority #7 Strengthen Official Plan policies and Zoning By-laws to conserve and even improve biodiversity. 3) Under Priority #7 Consider refining or adding actions for City departments to reduce their footprint of consumption. 4) Consider including specific actions to strengthen learning from and collaboration with local Indigenous groups
- A much more comprehensive and detailed approach to the protection of birds. The
 adoption of all bird-friendly measures that are mandated in the Toronto Green
 Standard. The implementation of a meaningful Lights Out program for all municipal
 properties. The BAP should consult with the Fatal Light Awareness Program (FLAP)
 Canada, the experienced and knowledgeable global leaders in this area.
- Actions that must be included are working with H.S.B. and community gardens to include all schools and with residents who require adequate funding to insure their food needs are met.
- Adjust the Trillium Awards to recognize those gardens which conform to the BAP and ensure awards are not given to those with invasive plants!

- Air quality monitors at junk yards.
- An element of the plan that was not emphasised enough was the greening of economically depressed areas of the city, areas where homelessness, unemployment are common.
- As noted above, Identify areas that the City can continue to enhance biodiversity by making minor short-term adjustments to existing initiatives. For example, center medians on roads should be planted with perennial pollinator gardens rather than annual plants. Possibly eliminate mowing of grasses in areas where there are known habitats (ex. turtles) and either replace with other native grasses or just not mow. Plant more trees alongside highways and roads. These minor adjustments could also save the City money in maintenance costs over the long term.
- Ask nurseries and garden centers to stop selling invasive plants and start selling more native plants.
- Boulevard plantings of native trees and native wildflowers instead of lawns.
 Encouragement to replace lawns with wildfowers or vegetable gardens
- City Council must provide funds fo a massive publicity campaign. It is a soery fact that most people in Hamilton do not understand how important our eco systems are to all people. Uae bill boards, go on tv and radio shows to educate the people, conbect with school boards to engage the students, put use signs in all our natural places indicating its a protected area, publisize the results of COP15 held in Montreal in 2022 which mandated the protection of biosystems and reclaming damaged areas.
- Community gardening events, free native plant giveaways, information packets, etc.
- Demonstrate biodiversity in action by planting native 'meadows' in city-owned greenspaces: for example, in the boulevard gardens along York Rd., etc.
- Develop policies to increase green infrastructure such as green roof areas. Commit to include Traditional Environmental Knowledge amd First Nations in all decisions.
- Discourage local garden centers from selling invasive species Plant native perennials instead of exotic annuals on city medians, etc Narrow streets to allow for the planting of street trees
- Driving Less, using active and/or transportation more often.
- Education on our native and invasive species. For example- when feeding birds to try and prevent feeding or attracting invasives. Not encouraging nesting of invasives.
 Protecting our native species through education

- Encourage garden centres to carry more native plants. & people to understand their importance in ecosystem. Have people talk about this important topic in schools, to educate the young. Offer workshops at garden clubs etc.
- End over expansion of lower city
- Ensure a city wide ban of all sale of invasive species from nurseries. Ban all use of synthetic lawn fertilizer. Ban dragnet and other "mosquito" fumigation that is a treat to all vertebrae. Create a directory for the public to search when in need of landscapers that support biodiversity in design and maintenance. Mandatory rain catchment on all households or extra tax. Implementation of biodiversity tax. Rate is based on how well individual dwelling supports biodiversity-measured in native plants cover, storm water catchment, tree cover etc.
- Establish new green spaces with urban areas and community gardens forbid all further encouraging on any natural space or wetlands.
- Hamilton Councillors and staff to educate the public and adhere to the current building codes!!
- Have a strong communication plan. How are you sharing info with hamilton residents?
 Need strong awareness and presence. Outreach to schools, recreation centres,
 libraries involve/engage the next generation.
- Having a wildlife rescue center with an educational exhibit for the area.
- I don't have any other ideas but I'm not going to say the draft plan is enough. However, it's enough for now, and this is a great initiative.
- I don't have a good answer, but I don't think the action plan is good enough.
- I think one of the most powerful actions that an individual can do is get involved with local, community initiatives. If there were ways for this action plan group to help people connect with each other and with their local natural spaces, that would be great (I know some suggestions are already included but I just wanted to emphasize the importance here). Perhaps opportunities for kids to get engaged through school activities? Nature Canada had a great report called "Race and Nature in the City" based on engaging youth of colour in Toronto's ravines: https://naturecanada.ca/race-and-nature-in-the-city/
- I think the City should enforce developers to maintain healthy trees instead of allowing widescale cutting of old growth trees.
- I think there should be a citizen committee

- I would add some actions for businesses and also add something about removing dead zones like concrete patios or even lawns and roofs (vs green roof) beyond just planting native species
- I'm sure that there's always more that can be included, but perhaps we shouldn't 'bite more than we can chew' for now.
- I'm sure there are several ideas than "enough"
- If there was a suggested list of plants to add to their garden it would eliminate the extra research step for them. Would be even better if there was a native seed/seedling give away by the city.
- Just noting that there a number of existing I Naturalist projects should note those in the Strategy and how to access them.
- Listen to groups that know the area and its history. Learn about older ways to manage the land (e.g., controlled burning)
- Make a more explicit codified commitment to protecting ecological spaces from "development", especially with the threat posed by the [redacted] government.
- Make Hamilton car free
- Maybe this goes with planting native species or learning events but "learning to identify native species" and "learning how to spread native plant seeds", "replacing monoculture grass lawns with native plant pollinators and kale and stuff:)"
- Might have missed this, but school reach out/ educational visits.
- Monitoring and/or reporting bird-building glass collision fatalities. Turning off or dimming essential lighting during spring and fall bird migration. Keeping cat(s) indoors.
- More about reducing car traffic and improving roads with planting more trees and creating more bike lanes
- More publicity!
- Natural yards with native plants, replacing grass where possible with clover, wild flowers and other natural plants, utilize rain water and purification, focus on green energy on micro scales, incorporate it into every project(need new street lights? Add solar power tops maybe), plant more trees and focus less on carbon and more on what we can put back into the environment
- Plant based/vegan/vegetarian diets, walk/cycle/transit, compost/reduce/reuse/recycle
- Please see document with links sent to [redacted] and [redacted].

- Ongoing education and reminders of when/how to take action in bite-sized pieces.
 Report seems overwhelming making it hard to know where to start. Joining clubs or buying conservation authority and Royal Botanical Gardens memberships are other actions that could be taken.
- Obviously, I'd like a by-law change to prioritize biodiversity above lawns. Even small tax rebates may encourage people to adopt positive practices, like including more diversity in gardens, getting rid of invasive species but that's tricky and creates a savings option for land owners only). If the document is intended as a guide, how about making a public-facing executive summary? The action plan doesn't appear until the second half of the 50+ page report, and action steps for individuals are in the appendix, at the bottom of each page, in text that isn't highlighted. Could there be rotating calls to action one at a time that link back to the longer plan, but are in really easy-to-digest form? Maybe Green Venture and/or other sustainability-focused local organizations could partner with the City on that, to reach more people? Partnerships kind of help to restore trust in institutions, too, since it implies that the City's initiatives have earned the approval of partner organizations.
- Please put something more concrete in the plan! Some actual measures to attain. And shorten it! The plan should be the plan not an educational document.
- Prevent planting of invasive plants and encourage/mandate removal.
- Protect the greenbelt
- Provide a directory for home gardeners of nurseries that focus on native plant species.
- Public education forums as well as leaflets attached to taxpayer property tax bills.
 Highlighted in yellow to draw attention to this. Same thing could apply to recycling education.
- Regular review of actions to determine effectiveness and implement changes as necessary.
- Regular updates, or Newsletter via as many mediums as possible to keep these initiatives in front and centre of everyone.
- Removal of trees on private property should be limited.
- Restrictions on reductions to the biodiversity within private properties. (I have seen too
 many large old trees destroyed in Dundas on private property) *birds need the insects
 on Indigenous trees "National Audubon society:
- See above

- See above.
- Set much more strict limits on the area of a property than can be made impermeable. I was shocked to find out that when my neighbour, who operates a business, expanded their paved driveway to almost double the area, that was perfectly acceptable to the City of Hamilton because they had a big enough side yard. Increasing the area of impermeable surfaces in our city greatly increases the chance that our homes will flood -- especially with climate change bringing much more intense precipitation events to our area. Adding any new impermeable surfaces in Hamilton should be illegal unless approved by the BAP. The same goes for areas of lawn where native plants could be used instead.
- Setting targets
- Stiffer fines if people are doing things that threaten or remove biodiversity
- Stop cutting down hundreds of trees! Plant more trees in the city and on islands in the cities itself. My area is horrible and has a lack of trees all over.
- Stop garden centres from selling invasive species and educate the general public on the dangers of same - i.e., lily of the valley, periwinkle and barberry - see lots of people offering to give these away on facebook.
- Strict measures for policy violations. Hold people accountable for violations. Not okay
 to do harmful actions and just get a slap on the wrist after the fact. That isn't a
 deterrent.
- Stronger bylaw enforcement to protect our natural spaces.
- Sunday gun hunting
- Taxing poor environmental choices, rewarding good ones. Strengthening by laws and implementing for example a mandatory tree planting program
- Terminating sales of invasive and harmful plants in greenhouses and nurseries
- The City has done an atrocious job of maintaining important stopover habitat for migratory songbirds on the Lake Ontario shoreline. Paletta Park (private), Confederation Park (city) have both undergone significant changes resulting in destruction or modification of habitat. The city also failed to preserve land along the waterfront trail, instead opening it for aggressive development.
- The distribution of physical materials that can better inform the public about Hamilton's biodiversity

- The importance of increasing biodiversity on private property and reducing invasive species grown in home gardens
- The public needs to be educated but not sure how to do that.
- Think before you kill.
- Update city bylaws such that it isn't read and up to interpretation for things like planting naturalized gardens.
- Work with garden centres to ensure invasive plants are not sold. Encourage citizens to plant native, pollinator-friendly plants & trees on their properties.

Q11b In the past two years, have you taken part in any events or learning opportunities related to biodiversity in Hamilton?

(Note: text responses have not been modified in any way for grammar, spelling and/or content with the exception of references to names/personal identifiers that have been redacted.

- Action 13 native species, pollinators, food security Environment Hamilton webinars
 Applied to city for funding to support initiatives related to biodiversity
- Action 13 and Green Block Dundas... Several events. naturalist club and butterfly way.
- Action 13 Buttetfly way Conservation authority and Bruce Trail magazine and info
- At Royal botanical gardens
- CFUW had a speaker from the Hamilton Naturalist club speak about the Pollinator Paradise project
- Community Permaculture Lab workshops; volunteered with master gardener Bev
 Wagar and Jean Jacobs.; attendedGreen Blick Growing lessons on native plants; U. Of
 Guelph Org. Growers Conference., RBG talks
- Cootes paradise clean up
- Created three native pollinator gardens in the community and provided information to the public. Seed started many native plants and have shared them with community members
- Educational walks, invasive species removal, planting native species, collecting seed and growing native plants, volunteering with HNC.

Q11b In the past two years, have you taken part in any events or learning opportunities related to biodiversity in Hamilton? (cont'd)

- E-workshops hosted by Environment Hamilton, Acton 13.
- Environment Hamilton air quality
- Events/information from Environment Hamilton, Royal Botanical Gardens, Hamilton
 Naturalists club and conservation Hamilton
- Flamborough Horticultural Society meetings
- Gage Park tour with Environment Hamilton and Hamilton Naturalists Society.
- Grassroots invasive species workshop
- Green venture events
- Green Venture Organization open house.
- Green Venture, Action 13, Hamilton Butterflyway
- Green Venture rain garden installation. Hamilton Butterfly Rangers installing pollinator gardens. Action 13 learning events. Paul OHara Forrest walks. Environment Hamilton storm water watch. Hamilton Water Walk.
- Halton not hamilton conservation halton
- Hamilton Naturalists Club Cootes to Escarpment Eco-Park
- Hamilton Naturalists Club events
- Hamilton Naturalists Club, plant tour
- Helping to organize pollinator gardens. Picking up trash at the Bayfront
- I am a member of Halton Master Gardeners (which includes Hamilton) and in addition to our regular education sessions for our members we provide consultations to homeowners and institutions such as schools and public libraries focused on supporting biodiversity. This summer we are organizing an open garden event focused on gardens that support biodiversity. https://haltonmastergardeners.com/garden-journeys-opendays/
- I don't count covid but part of David Suzuki Foundation for butterfly way
- I followed COP15 in Montreal and presented results to achools and school board. I am a supporter of Conservation Authorities.
- I have done research and been in touch with the organizers of the Hamilton Pollinator Project
- I turned a large portion of my lawn into a garden.

Q11b In the past two years, have you taken part in any events or learning opportunities related to biodiversity in Hamilton? (cont'd)

- I am a member of the Hamilton Naturalists' Club, the Royal Botanical Gardens, I'm on the executive of the new Hamilton Bird Friendly City group, and I'm a member of Hamilton350.org as well. I also support many other action oriented public groups to address the climate emergency and keep [redacted] in check as much as possible. I take part in the community improving events that all these groups provide. I have done research to help organizations like Environmental Defense and Ecojustice organize to save precious local habitats here like the Beverly Swamp, from our province's terrible planning ideas. I am a member of and financially support any organizations and political bodies that do good work to tackle the climate emergency. For example: my children and I planted trees with Blue Dot in the Dundas Valley to widen the natural buffer zone habitat between an urban park and the shore of Cootes Paradise; we planted trees in the Fletcher Creek watershed in Hamilton's east end with our local Green Party candidate; I participate in the Longwatch migratory bird monitoring project on RBG lands with many friends; I was one of the first women to become a Hawk Watch Official Counter at Beamer CA; my husband and I often take part in Hamilton Naturalists' Club community events including being the rock climbers who placed hacked Peregrine Falcon chicks from Alberta into an active wild Peregrine nest on the Sheraton Hotel in downtown Hamilton (1980s), bird counts throughout the year, invasive species removal events in the forest behind Westview Public School, and Falcon Watch; I am also a Principal Atlasser in the Mount Hope area for the "Ontario Breeding Bird Atlas" project. The latter is a 5-year project done 20 years apart, and this is the third and most significant and important OBBA to date. I'm hoping that all these efforts will help to combat the climate emergency.
- I have volunteered for the 'Dundas Turtle Watch' to cover turtle nests, increase turtle nesting sites and mitigation fencing in Dundas.
- I volunteer regulary at RBG
- I volunteer with FalconWatch.
- I was the founding co-chair for the Bird Friendly Hamilton Burlington team, a Nature Canada project, for about sixteen months. I'm now founding co-chair for Birdsong Hamilton, an independent bird advocacy team.
- I've organized tree planting projects for my department on the grounds of McMaster University.
- Increasing my knowledge by joining groups on Facebook and Instagram and learning from others. FB's Ontario Native Plant Gardening is an excellent grass roots group.
 Butterflyway Hamilton is also a great local non profit organization.
- Invasive removal at RBG Natural Lands

Q11b In the past two years, have you taken part in any events or learning opportunities related to biodiversity in Hamilton? (cont'd)

- Listen to City Council meetings on this topic
- McMaster
- Meeting about urban boundaries and invasive plant identification
- Mini-forest planting, virtual talks by different speakers on biodiversity, proposed park garden pilot to City.
- Monarch awards Butterflyway Environment Hamilton Green venture Online events and in person events
- Mostly webinars and sessions from Green Venture or RBG.
- Native planting and depaving. Green venture, Env. Hamilton, HNC.
- Native species info session/sales community gardens and clean up projects
- Native tree plantings around Waterdown.
- On-line information sessions of Environmental Defense.
- Ongoing activities educating school children and the general public about the benefits of biodiversity through education programs at Conservation Halton, which encompass parts of Hamilton and through the Hamilton Naturalists' Club.
- Plantings, litter clean up events, workshops
- Pollinator friendly garden participant Recycle with knowledge of end reults
- RBG expo or talks, activities at the children's garden in gage park
- RBG Natural Lands volunteer, Westdale Butterflyway volunteer, native plant gardener
- RBG Readings-Audubon/Bird conservacy etc.
- RBG/EcoPark activites; Halton CA watershed stewardship
- Royal Botaical Gardents Invasive Species Removal / Biodiversity Guardians volunteer
 @ Churchill Park area
- Royal Botanical Gardens, presentation about reptiles
- Seed exchanges Pollinator workshops
- Species count..tree canopy through Green Venture
- Talks at the RBG, involvement with the HCA re. Storm water, active participation in Falconwatch. HNC talks and walks. Bruce Trail activities.
- The Biodiversity Action Plan booth at Open Streets 2023

Q11b In the past two years, have you taken part in any events or learning opportunities related to biodiversity in Hamilton? (cont'd)

- Through Green Venture. Also Crown Point Garden Club
- Through RBG and Cootes to Escaprment
- Tree event
- Tree planting Garbage clean up
- Unitarian church.
- Various events around gage park and through the Bruce trail network
- Volunteering with stewards of cootes regularly
- We have planted several native trees and shrubs from the free giveaway sponsored by Trees for Life (I think?)
- Weekly meetings
- Within Hamilton seniors building many seniors work together to encourage sharing food, clothing and furniture items which assists many who may not have available funds to meet their basic daily needs. I would
- World Migratory Bird Day with Bird Friendly Hamilton Burlington

Q12 If more opportunities were made available in the future to learn about Hamilton's biodiversity, what topics would you want to cover?

(Note: text responses have not been modified in any way for grammar, spelling and/or content with the exception of references to names/personal identifiers that have been redacted.

- 1. Enhancing and maintaining our urban tree canopy. 2. The possibility of utilizing highway boulevards (Cootes Drive, the Linc) for planting trees and plants. 3. The priority use of trees and shrubs as architectural 'soft' elements (windbreaks, visual screening, traffic direction) as an alternative to 'hard' elements (brick, concrete, steel, etc.) in urban developments.
- Freshwater fishes Migrations (birds, butterflies, fishes) Where our water goes and how it is treated (runoff, storms, sewage, drinking water) - Urban forage plants - How renters can engage with biodiversity conservation (we often don't have yards for planting native species, or control over property choices like downspouts)

- Actions the public can take and actions they can demand the different levels of government to take
- Air and ground water responsibilities for end of life businesses. Who don't report disaster's
- Air and water pollution
- All
- Backyard pond maintenance and plantings
- Beginners guides on how to help protect our biodiversity, including info on native species and invasive species, how to most effectively incorporate native species into our gardens to do the most good, etc.
- Biodiversity and natural assets
- Birding, invasive species identification (land and aquatic), pollinator gardening promotion, effective alternatives to using pesticides, bug promotion (how to make bug hotels)
- Birds, Reptiles, Amphibians, Insects
- clean pure water
- Clean air and clean water
- Dealing with invasive tree species (E.g. tree of heaven, Siberian elm, Norway maple).
 What can homeowners do?
- Easy access to info about reporting, invasive species, where to find native plants etc.
- Education of the public.
- Endangered animals and species etc
- Garden plants that should not be planted
- Gardening plants, land management
- Green and sustainable housing developments!!
- How I can help
- How to effectively intervene in municipal land use planning processes.
- How to engage neighbours who are ignorant and dismissive

- How to get rid of invasive species in the garden, what to do if you spot invasive species on Hamilton trails, benefits of a greener garden (i.e. helping make it more socially acceptable to have a lush garden).
- How to improve water quality
- I think focusing on making more locally-tailored information on biodiversity and how to help contribute to it easily accesible would be more effective. Creating short and long form video content (Tik Tok and YouTube), assembling a wiki, and promoting such resources.
- I think it should cover the values of stewardship and provide resources for young people on how to respect nature
- I was not aware of opportunities so I say make opportunities more widely known.
- I would gladly share knowledge & ideas with residents in my building to enhance their quality of life as residents of Hamilton.
- I would like to know what I can do as an individual to help with increasing biodiversity.
- I would personally like to educate the city of hamilton landscape workers on how to identify a turtle nest so they do not drive over them or level the baseball diamonds if a turtle has just nested. I would like them to be able to identify an invasive species so they know which plants to cut and which ones to leave. I would like people to learn why it is not a good idea to feed wildlife. I would like to see our garbages secured so wildlife does not access them.
- I would sit in on the board, bio mass wastewater treatment
- Indigenous relationships with the land, water, and environment; the relationship between environmental degradation and for-profit/corporatized development; sustainable food systems
- Insects
- invasive species and planting native species
- Invasive species management and updates of new risks and mitigation (tree pests, Asian jumping worm).
- invasive species removal
- Invasive species, wildlife identification and native & invasive plant species identification.
- Invasive species.

- Know how to better support existing initiatives; What's being done about invasive species and if there are reporting tools available to the public; Significance of native species re: climate change
- Landscape restoration, especially for Hamiltons most polluted areas
- Learn more about Hamilton's endangered species and how we can support them.
- Learn stewardship initiatives from older generations
- Lol we will have no more bio down here will all be dead keep expanding
- Maybe
- More about gardens and landscaping that is environmentally sustainable and help maintain and grow the ecosystem.
- More about native species and biodiversity generally, talks by Indigenous Peoples about their historical relationship with this land and things we can do to make a difference - a general newsletter here and there about some of the items noted above would likely be helpful as many wouldn't have heard about it - it would also be nice to have a council and city update on actions they are taking and how biodiversity has been considered in policy/programs (in a short publicly accessible format people will read!)
- More awareness of the many threats to bird populations and the available solutions.
- Most offending non-native plants we are buying from garden centres? Are some terrible and others just not ideal? Also: Hi [redacted]! We used to pump gas together at Harbour West 20ish years ago:)
- N/A
- Native planting and planting gardens for insects and birds
- Native Plants, Invasive Species, Fungi:)
- Native species flora/faura Water saving tips Gardening the ecofriendly way
- Native species and the benefits they provide, top five invasive, terrestrial and aquatic species, and what residents can do about them, tours of revitalization or stewardship projects, workshops, and tours of important natural areas in Hamilton, opportunities to participate in invasive, specie, removals, or other hands-on projects to support biodiversity in Hamilton
- No
- No. I'd like some action though.

- Not sure
- Our protected natural habitats
- Planting native front yards; replacing monoculture lawns; creating wildlife corridors with our home gardens
- Planting native species, ecological corridors, climate change.
- Pollinator garden workshops
- Re-wilding of waste spaces and street boulevards Water conservation Green roofs Hair mats and booms for soaking up spills and protecting storm sewers
- Role of TEK in urban areas Urban landscapes as wildlife corridors Coexisting with wildlife
- Species diversity and ID.
- Species identification, indigenous teachings and sharing knowledge of local regions (paying the indigenous teachers), edible plant species (with a focus on what invasives plants are edible when removing them)
- species native to Hamilton and how we can further enhance what the City plants, or handles biodiversity.
- Storm water pond management
- Studying all the cities and towns across the United States who have installed rainwater gardens across their municipalities over the past few years. Why is Canada, a 'world leader' on climate change initiatives, so behind the U.S.?
- Supporting local wildlife birds, insects, reptiles etc, beautifying your property with gardens that support local biodiversity, alternatives to turf grasses
- Sustainable urban and suburban development
- There is plenty going on already. Keep encouraging groups like the HNC and RBG.
- Tips about how an average citizen can help out.
- Tree planting, invasive species, remediation.
- Trees, gardens, wildlife corridors, pollinator corridors, effects of lawns, water health
- Value of trees in sustaining life of songbirds. Keeping cats indoors and hte science behind this. The unique biodiversity within Hamilton in general. American Bird Conservancy research - 2.4 billion birds/year killed by cats.

- We need to have monthly open houses well publisized to feature information on all aspects of biodiversity.
- What an individual could do within their own property. Having individual contact available to assist with answering questions specific to one's own environment.
- What are the areas of concern in Hamilton and plan for protect
- What can you do in your home to improve biodiversity and what resources may be available to support you, how to identify which/when businesses are making permit requests to go above environmental set limits that can have a direct impact on the biodiversity and what is the process to prevent it from happening
- What ways to address issue with children through curriculum or child-friendly events.
- Whatever will help to solve the climate emergency.
- Where to source native plants.
- Which Native plants that will blossom to have some blossoms continuous qthroughout the season
- Why we need more trees and native plants and animals

Appendix C – Global Biodiversity Framework 2030 Targets for Engage Hamilton

This information has been adapted from the Convention on Biological Diversity website regarding the <u>2030</u> <u>Global targets</u> contained in the <u>Kunming-Montreal Global Biodiversity Framework</u>.

Kunming-Montreal Global Biodiversity Framework - 2030 Targets

Section H. Global targets for 2030

13. The Kunming-Montreal Global Biodiversity Framework has 23 action-oriented global targets for urgent action over the decade to 2030. The actions set out in each target need to be initiated immediately and completed by 2030. Together, the results will enable achievement towards the outcome-oriented goals for 2050. Actions to reach these targets should be implemented consistently and in harmony with the Convention on Biological Diversity and its Protocols, and other relevant international obligations, taking into account national circumstances, priorities and socioeconomic conditions.

1. Reducing threats to biodiversity

TARGET 1 - biodiversity inclusive spatial planning

Ensure that all areas are under participatory, integrated and biodiversity inclusive spatial planning and/or effective management processes addressing land- and sea-use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.

TARGET 2 - restoration of degraded terrestrial and aquatic ecosystems

Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

TARGET 3 – conservation and management of terrestrial and aquatic ecosystems

Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.

TARGET 4 – recovery of species at risk

Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.

TARGET 5 – sustainable harvesting and trade of wild species

Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spillover, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.

TARGET 6 – managing invasive alien species

Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands.

TARGET 7 – pollution reduction

Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.

TARGET 8 - minimize climate change impacts

Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.

2. Meeting people's needs through sustainable use and benefit-sharing

TARGET 9 – sustainable management of wild species

Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.

TARGET 10 - sustainable management of agriculture, aguaculture, fisheries

Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems, and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.

TARGET 11 – enhance nature-based contributions

Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as the regulation of air, water and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.

TARGET 12 – improve access to natural spaces in urban areas

Significantly increase the area and quality, and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature, and contributing to inclusive and sustainable urbanization and to the provision of ecosystem functions and services.

TARGET 13 – sharing benefits from genetic resources

Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030, facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.

3. Tools and solutions for implementation and mainstreaming

TARGET 14 – integration in policy and planning processes

Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, and fiscal and financial flows with the goals and targets of this framework.

TARGET 15 – monitoring impacts from industry

Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions:

- (a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains, and portfolios;
- (b) Provide information needed to consumers to promote sustainable consumption patterns;
- (c) Report on compliance with access and benefit-sharing regulations and measures, as applicable;

in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.

TARGET 16 – reduce global footprint of consumption

Ensure that people are encouraged and enabled to make sustainable consumption choices, including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.

TARGET 17 – ensure biosafety measures

Establish, strengthen capacity for, and implement in all countries, biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.

TARGET 18 – reforming incentives harmful to biodiversity

Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least \$500 billion per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.

TARGET 19 – fund and implement national biodiversity strategies

Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, mobilizing at least \$200 billion per year by 2030, including by:

- (a) Increasing total biodiversity related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, to at least \$20 billion per year by 2025, and to at least \$30 billion per year by 2030;
- (b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances;
- (c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments;
- (d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards;
- (e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises;
- (f) Enhancing the role of collective actions, including by indigenous peoples and local communities, Mother Earth centric actions [1] and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity;
- (g) Enhancing the effectiveness, efficiency and transparency of resource provision and use;

TARGET 20 - sharing science and technology related to biodiversity

Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South-South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the Framework.

TARGET 21 – access to data and knowledge for decision makers

Ensure that the best available data, information and knowledge are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent,[2] in accordance with national legislation.

TARGET 22 - inclusive representation in decision-making

Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.

TARGET 23 – gender responsive implementation

Ensure gender equality in the implementation of the Framework through a gender-responsive approach, where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.

[1] Mother Earth Centric Actions: Ecocentric and rights-based approach enabling the implementation of actions towards harmonic and complementary relationships between peoples and nature, promoting the continuity of all living beings and their communities and ensuring the non-commodification of environmental functions of Mother Earth.

[2] Free, prior and informed consent refers to the tripartite terminology of "prior and informed consent" or "free, prior and informed consent" or "approval and involvement.

Appendix D – Open House Display Panels



WELCOME









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What is Hamilton's Biodiversity Action Plan?

The Biodiversity Action Plan (BAP) is a city-wide, multistakeholder strategy that will protect Hamilton's future generations by enhancing and protecting the natural environment around us. The BAP will guide the protection and restoration of biodiversity through a set of proposed actions, focused on addressing the key threats to biodiversity.

The BAP contains actions related to policy, regulatory and on-the-ground programs across multiple organizations. The Biodiversity Action Plan will also expand on activities already taking place and fill gaps in areas where action is needed.

Why is biodiversity important?

Biodiversity is important because the interactions that occur between species create the functioning ecosystems that keep us and our planet healthy. Ecosystems that have a high level of biodiversity are more resistant to long and short-term threats and are generally more resilient to change over time. A biodiverse, healthy landscape provides critical benefits to Hamiltonians such as managing flooding by storing water, reducing air pollution by filtering out harmful air particulates, and sequestering carbon.

BAP Partners



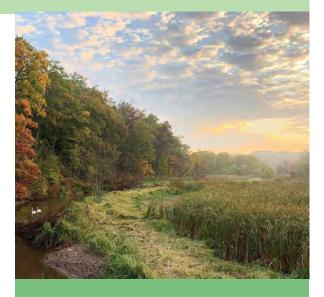












What is "Biodiversity"?

"Biodiversity" is the combination of the words "biological" and "diversity." Biodiversity means the variety of life on earth. It refers to the diversity of all species within an ecosystem and the ways they interact with each other and their environment. It includes everything from plants, fish, insects, bacteria, wildlife, and humans – because we are part of nature as well. Biodiversity is about the connection between all species, and how they depend on each other to survive.

3 Categories of Biodiversity:

SPECIES DIVERSITY:

the different types of species that are present in a region or habitat.

GENETIC DIVERSITY:

the amount of variety, genetically, within the same species.

ECOSYSTEM DIVERSITY:

the variety of habitats in a certain area.



Hamilton's Biodiversity Context

Hamilton has a diversity of habitats across the rural and urban areas, including Dundas Valley, Cootes Paradise, Lake Ontario shoreline, Beverly Swamp, the Niagara Escarpment, Eramosa Karst, Copetown Bog, and Ancaster Prairie. Hamilton's unique geography contributes to the City being a regionally significant area with respect to biodiversity.

Natural Heritage System

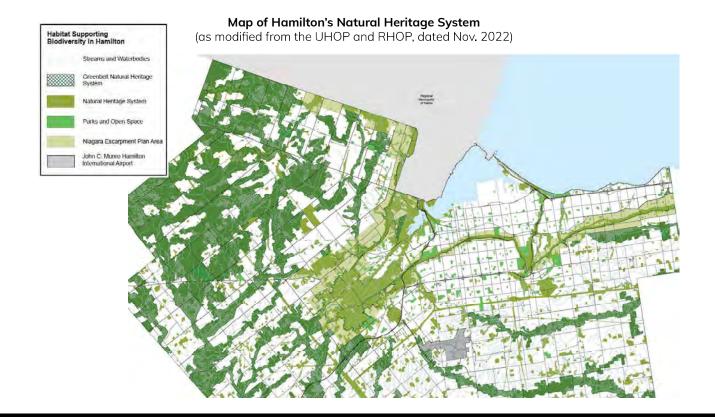
Through the development of a Natural Heritage System within the City's Official Plans, Hamilton has established a strong policy framework for the identification and protection of natural heritage.

The Urban Hamilton Official Plan (UHOP) and Rural Hamilton Official Plan (RHOP) contain policies and definitions which address the City's Natural Heritage System (NHS). The NHS is comprised of the Greenbelt Natural Heritage System, the Niagara Escarpment, Core Areas, and Linkages.

Core Areas are natural features that are considered critical for sustaining local species and providing essential ecological functions. Approximately 36,750 hectares of land is identified as Core Area across the urban and rural areas combined.



Linkages are corridors which allow movement of plan and animal species between larger natural areas. Examples of linkages are meadows, hedgerows, and streams.





Vision Statement

"A Hamilton that is resilient to climate change, celebrates nature, and provides a healthy environment for all life"

The draft vision statement acknowledges that the state of Hamilton's biodiversity will continually adapt over time, including in the presence of the known implications of climate change. However, if Hamilton's biodiversity is prioritized, healthy ecosystems can play a role in mitigating the effects of climate change. Celebrating nature is key to prioritizing biodiversity – by building public knowledge of, and appreciation for the unique environment of Hamilton. Finally, a healthy natural environment is essential for all life, not just human life.

What are your thoughts on the draft Vision for the Biodiversity Action Plan?

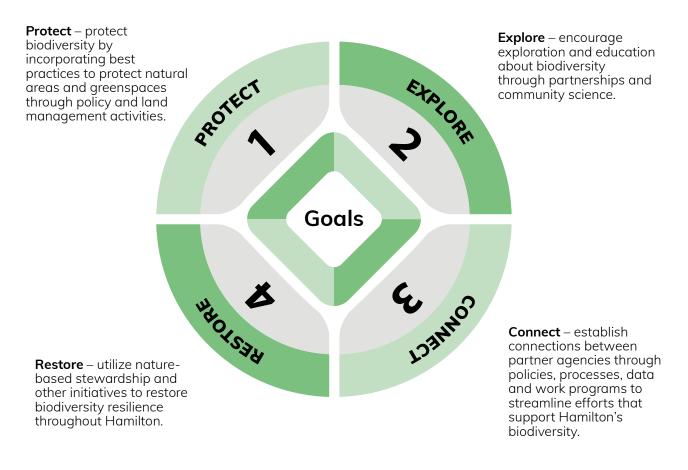
Feel free to add your thoughts with a sticky note below:

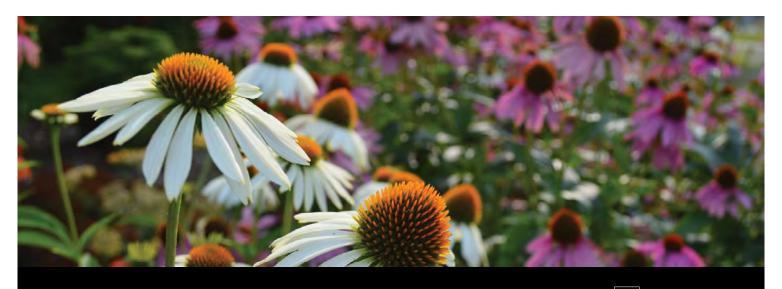




Goals

The draft Biodiversity Action Plan has 4 main goals:





Threats to Biodiversity

Human activities are threatening biodiversity and putting the complex ecosystems of Earth at risk of collapse at a rate unseen in human history. Hamilton is no exception to the global biodiversity crisis. The threats to biodiversity currently occurring within Hamilton include **invasive species, habitat loss and fragmentation, climate change, and pollution.**



Invasive Species

An invasive species is an organism or plant that is not native to a particular area and whose introduction has a negative impact on the natural environment, society, or human health.

Invasive species can outcompete native species for habitat and forage, spread disease, and cause significant damage to isolated areas and broader geographies.

Invasive species in Hamilton include garlic mustard, common buckthorn, Japanese knotweed, phragmites, spongy moth, emerald ash borer, carp, beech bark scale, dog strangling vine, periwinkle, goutweed among many others. Invasive species can be found in forests, grasslands, ravines, and very commonly in gardens.



Habitat Loss and Fragmentation

Habitat loss is a predominant threat to species diversity, and is happening here in Hamilton. Habitat loss occurs when natural habitats are converted to agriculture or urban uses. Habitat loss also occurs because of invasive species making areas less suitable for wildlife.

Fragmentation occurs when habitats are cut into smaller pieces of land or water because of roads and development, as an example. Fragmentation interrupts essential wildlife corridors and eliminates habitats for species that require large natural areas of a specific habitat type.



Did you know?

The Cootes to Escarpment EcoPark System was created by a collaborative that was formed, in part, to help "fight the fragmentation" of the natural lands in the Dundas and Aldershot area and ensure a green corridor exists between Cootes Paradise and the Niagara Escarpment. EcoPark System partners have permanently protected over 200 acres of natural lands to help connect the 9,600 acres that are already protected. The Partners continue to acquire natural lands as they become available.





Threats to Biodiversity (cont'd)



Climate Change

Climate change and biodiversity are interconnected. Even small changes in average temperature and precipitation have a significant effect on ecosystems and the wildlife that rely on them.

Species are sensitive to changes in average temperatures and their ranges may change to adapt to climate changes, new species may migrate further north, extreme precipitation events can cause damage to terrestrial habitats through erosion while also overwhelming water treatments systems resulting in impact to aquatic environments.

A strong healthy ecosystem can help to mitigate the impacts of climate change. The Biodiversity Action Plan focuses on maintaining and enhancing biodiversity, as well as ecosystem health, to increase resiliency to climate change.



Pollution

All forms of pollution threaten biodiversity. Pollutants in terrestrial and aquatic ecosystems from human activities lead to unsuitable conditions for plant, animal and insect species to thrive, and contributes to species decline where environments are toxic.

For example, acid rain can lead to excess levels of acid in waterways and can damage soil, affecting aquatic life and causing unsuitable growing conditions. Pollutants, including fertilizer, road salt and heavy metals are absorbed into the ground and transported into natural systems via stormwater runoff where they damage aquatic ecosystems.

Locally, particulate pollution and other air contaminants emitted from our industrial sector and trucks and cars negatively impact Hamilton's terrestrial life and human health. Air deposition of contaminants into waterways is a problem for aquatic ecosystem health.



Did you know?

The construction of the Randle Reef containment facility is the single most significant step forward in containing toxic sediment in the Harbour. It is not, however, the only step. Importantly, according to the 2017 Bay Area Restoration Council Report Card, the contamination of fish and wildlife is slowly declining overall (Bay Area Restoration Council, 2017). The clean-up will lead to further reductions in exposure to and the effects of toxic deposits.





Key Priorities

The Biodiversity Action Plan's draft Vision, Goals and identification of Threats, provide a strong foundation for categorizing the planned actions of partner organizations over the next five years.

The following Key Priorities have been identified as strategic areas of focus to enhance biodiversity conservation in Hamilton. The Key Priorities provide a high-level description of the areas of focus that are required to ensure the long-term protection, enhancement, and restoration of biodiversity in Hamilton.

- **1** Develop an administrative framework to manage the on-going implementation of the Biodiversity Action Plan's Actions.
- 2 Understand the current baseline state of Hamilton's biodiversity to inform future monitoring and priorities.
- **3** Protect natural areas and their functions within Hamilton over the long term to support diversity and connectivity.
- 4 Enhance public awareness of the importance of biodiversity and explore opportunities to enhance biodiversity through stewardship.
- **5** Protect Hamilton's biodiversity by implementing coordinated, city-wide efforts to control, remove, and manage invasive species.
- **6** Enhance local aquatic habitats through sustainable stormwater management practices and restoration of degraded watercourses, waterbodies and wetlands.
- 7 Ensure impacts on, or improvements to local biodiversity are clearly considered in all municipal decision making related to the development or use of urban and rural lands.

Each Key Priority is listed with a summary of the guiding actions that are to be undertaken by the BAP partners. To review a detailed list of the actions to be undertaken, their anticipated timeframes, and the lead organizations, please refer to Appendix A of the draft BAP.

An Action Plan for Everyone

Everyone has a role to play in protecting and enhancing biodiversity. Each Key Priority includes ideas for action that any person or organization can take to improve Hamilton's local biodiversity.







Develop an administrative framework to manage the on-going implementation of the Biodiversity Action Plan's Actions.

To maintain momentum of the Biodiversity Action Plan and ensure implementation of the Actions is successful, an on-going administrative framework is needed. This will help ensure that Actions committed to by participants are executed in a coordinated way and that their implementation is communicated to the public effectively.

Guiding Actions

- Form a Biodiversity steering committee, which includes representatives from contributing partners and the community-at-large, that is responsible for monitoring progress and tracking the implementation of BAP Actions and identifying gaps.
- Secure funding for an administrative coordinator position for central management of the BAP for all contributing partners.
- Develop and implement a communications plan to help raise awareness about biodiversity in Hamilton and the role everyone can play in protecting and celebrating it

- Share information from the BAP with friends, family, co-workers, and community groups.
- Follow the BAP project partners on social media to stay informed about opportunities to get involved in volunteer opportunities or local events.
- Support existing efforts to promote and enhance biodiversity by participating in learning events, workshops, campaigns, and stewardship initiatives.







Understand the current baseline state of Hamilton's biodiversity to inform future monitoring and priorities.

This Key Priority and its Actions will assist in identifying the gaps in the collection and sharing of data about biodiversity between partners involved in collection of biodiversity data in Hamilton. It also sets the baseline information about the state of biodiversity across Hamilton so that future monitoring reports can measure the effectiveness of the Actions.

Guiding Actions

- Develop a biodiversity report and monitoring framework to depict the baseline state of Hamilton's biodiversity health, and determine the methods for how it will be assessed in the future.
- Improve coordination of biodiversity data collection and monitoring efforts across local partnering organizations.
- Collect additional information about Hamilton's biodiversity through community science programs, including the free iNaturalist app.
- Plan opportunities to bring together experts in ecology and biology to discuss local biodiversity issues and successes with the community.
- Report regularly on the progress of BAP action implementation.

- Review and share the BAP report.
- Download iNaturalist and start recording the species you see around Hamilton.







Protect natural areas and their functions within Hamilton over the long term to support diversity and connectivity.

There are spaces around Hamilton that are important for the overall health and long-term stability of local biodiversity, but which may not have protections from development for the long-term. This Key Priority and its Actions focus on investigating public, institutional, or private lands that could be permanently protected to enhance opportunities for biodiversity and provide safe passage for wildlife movement.

Guiding Actions

- Assess local wildlife corridors to understand current patterns of movement of local species.
- Investigate options for protected wildlife corridors to promote habitat connectivity.
- Identify terrestrial and aquatic habitats that require further protection.

What can you do?

• Help identify wildlife corridors by sharing where you see wildlife at road crossings as well as road mortality sightings by contributing to iNaturalist.







Enhance public awareness of the importance of biodiversity and explore opportunities to enhance biodiversity through stewardship.

This Key Priority and its Actions focus on the role that everyone must play in protecting and enhancing Hamilton's biodiversity, including opportunities for urban and rural biodiversity enhancement projects at the watershed and neighbourhood scale.

Guiding Actions

- Increase outreach opportunities to educate the public on the importance of biodiversity in Hamilton.
- Provide increased opportunities for planting native species to connect fragmented landscapes, and create new, biodiverse natural areas.
- Celebrate local biodiversity excellence through award and certification programs.

- Provide habitat for nature by planting native trees, shrubs, and wildflowers to enhance biodiversity and on your property.
- In rural areas, use agricultural best management practices to improve water quality and wildlife habitats.
- Participate in native species planting events.









Protect Hamilton's biodiversity by implementing coordinated, city-wide efforts to control, remove, and manage invasive species.

This Key Priority and its Actions build on existing initiatives to pool resources and expertise to manage invasive species collaboratively. Invasive species are prevalent in Hamilton and are one of the key threats to biodiversity. A focused effort is needed to manage invasive species and is critical for the protection and enhancement of local biodiversity.

Guiding Actions

• Share data and expertise and collaborate on management initiatives and maximize resources where possible with organizations involved with managing invasive species.

- Learn to identify Hamilton's invasive species and how to curb their spread. Learn how to manage and dispose of invasive species at home through resources such as the Ontario Invasive Plant Council and their "Grow Me Instead" quide (2020).
- Participate in invasive species management activities such as garlic mustard pulls and buckthorn removal. Visit partners' websites and social media channels for upcoming opportunities.







Enhance local aquatic habitats through sustainable stormwater management practices and restoration of degraded watercourses, waterbodies and wetlands.

This Key Priority and its Actions investigate opportunities to improve the health of aquatic habitats and source water protection through the adoption of innovative stormwater low impact development practices, noted agricultural Best Management Practices and mitigating the effects of stormwater run-off into the local ecosystem.

Guiding Actions

- Investigate opportunities for enhancing on-site stormwater management practices through redevelopment.
- Deliver education programs to the public about sustainable stormwater management practices.
- Install sea bins and litter traps in catch basins surrounding the Harbour to collect litter entering the Harbour.

- Learn about and implement techniques to manage stormwater at home, for example creating a rain garden or installing a rain barrel to slow down or eliminate the flow of storm water to the municipal sewer system.
- Disconnect your downspout from the sewer system and, instead, direct flow to a permeable area of your yard.
- Do not release live aquatic plants and animals, including live bait, into rivers, streams, and lakes









Ensure impacts on, or improvements to local biodiversity are clearly considered in all municipal decision making related to the development or use of urban and rural lands.

This Key Priority and its Actions focus on prioritizing biodiversity in all planning, development, and decision making. It will help to ensure that developments consider and minimize their impact on biodiversity by reducing habitat fragmentation, managing stormwater innovatively, and providing opportunities for enhancements to the local ecosystem.

Guiding Actions

- Create development standards and site plan design guidelines that protect biodiversity and improve local habitats.
- Protect biodiversity and consider enhancement during all project planning by ensuring the BAP's Key Priorities and Actions are upheld in this context.
- Investigate potential for wildlife sweeps and plant salvages ahead of development when impact on natural areas cannot be avoided.

- Participate in municipal planning approvals processes to understand how natural areas are being protected in decision making.
- Get in touch with your local Councillor to let them know what your concerns are about biodiversity and natural spaces in your community.
- Contribute your thoughts on the Biodiversity Action Plan, and other important City initiatives, on the Engage Hamilton website. Your ideas and feedback will ensure Hamilton is an even better place to live, work, and play



Global Biodiversity Framework Targets to 2030

The United Nations Convention on Biological Diversity (CBD) is an international legal instrument to conserve biodiversity worldwide that was initiated at the Earth Summit in Rio de Janeiro in 1992. The CBD has been ratified by 196 nations, including Canada.

The City of Montreal hosted the fifteenth Conference of the Parties (COP-15) of the CBD in December of 2022. At this meeting, the **Kunming-Montreal Global Biodiversity Framework (GBF)** was agreed upon as the strategic plan for the implementation of 23 targets for the 2022-2030 time period.

On May 2, City Council added an additional recommendation to Report PED21065(c) to include the 23 GBF targets in the public consultation for the Biodiversity Action Plan.

On the following panels, we want to hear what you think about including the GBF targets through the BAP.

GBF 2030 Objectives

- Reducing threats to biodiversity (Targets 1-8)
- Meeting people's needs through sustainable use and benefit sharing (Targets 9-13)
- Tools and solutions for implementing and mainstreaming (Targets 14-23)

Scan the QR code below to read the targets online:







Place up to **5 dot stickers** on the targets you want to prioritize being reviewed for potential inclusion in the Biodiversity Action Plan.

TARGET 1 – biodiversity inclusive spatial planning Ensure that all areas are under participatory, integrated and biodiversity inclusive spatial planning and/ or effective management processes addressing land- and sea use change, to bring the loss of areas of high biodiversity importance, including ecosystems of high ecological integrity, close to zero by 2030, while respecting the rights of indigenous peoples and local communities.	
TARGET 2 – restoration of degraded terrestrial and aquatic ecosystems Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and marine and coastal ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.	
TARGET 3 – conservation and management of terrestrial and aquatic ecosystems Ensure and enable that by 2030 at least 30 per cent of terrestrial and inland water areas, and of marine and coastal areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas and other effective area-based conservation measures, recognizing indigenous and traditional territories, where applicable, and integrated into wider landscapes, seascapes and the ocean, while ensuring that any sustainable use, where appropriate in such areas, is fully consistent with conservation outcomes, recognizing and respecting the rights of indigenous peoples and local communities, including over their traditional territories.	
TARGET 4 – recovery of species at risk Ensure urgent management actions to halt human induced extinction of known threatened species and for the recovery and conservation of species, in particular threatened species, to significantly reduce extinction risk, as well as to maintain and restore the genetic diversity within and between populations of native, wild and domesticated species to maintain their adaptive potential, including through in situ and ex situ conservation and sustainable management practices, and effectively manage human-wildlife interactions to minimize human-wildlife conflict for coexistence.	
TARGET 5 – sustainable harvesting and trade of wild species Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spillover, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.	
TARGET 6 – managing invasive alien species Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50 per cent by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands.	
TARGET 7 – pollution reduction Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.	
TARGET 8 – minimize climate change impacts Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.	
TARGET 9 – sustainable management of wild species Ensure that the management and use of wild species are sustainable, thereby providing social, economic and environmental benefits for people, especially those in vulnerable situations and those most dependent on biodiversity, including through sustainable biodiversity-based activities, products and services that enhance biodiversity, and protecting and encouraging customary sustainable use by indigenous peoples and local communities.	



Place up to **5 dot stickers** on the targets you want to prioritize being reviewed for potential inclusion in the Biodiversity Action Plan.

TARGET 10 – sustainable management of agriculture, aquaculture, fisheries Ensure that areas under agriculture, aquaculture, fisheries and forestry are managed sustainably, in particular through the sustainable use of biodiversity, including through a substantial increase of the application of biodiversity friendly practices, such as sustainable intensification, agroecological and other innovative approaches, contributing to the resilience and long-term efficiency and productivity of these production systems, and to food security, conserving and restoring biodiversity and maintaining nature's contributions to people, including ecosystem functions and services.	
TARGET 11 – enhance nature-based contributions Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as the regulation of air, water and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and/or ecosystem-based approaches for the benefit of all people and nature.	
TARGET 12 – improve access to natural spaces in urban areas Significantly increase the area and quality, and connectivity of, access to, and benefits from green and blue spaces in urban and densely populated areas sustainably, by mainstreaming the conservation and sustainable use of biodiversity, and ensure biodiversity-inclusive urban planning, enhancing native biodiversity, ecological connectivity and integrity, and improving human health and well-being and connection to nature, and contributing to inclusive and sustainable urbanization and to the provision of ecosystem functions and services.	
TARGET 13 – sharing benefits from genetic resources Take effective legal, policy, administrative and capacity-building measures at all levels, as appropriate, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources and from digital sequence information on genetic resources, as well as traditional knowledge associated with genetic resources, and facilitating appropriate access to genetic resources, and by 2030, facilitating a significant increase of the benefits shared, in accordance with applicable international access and benefit-sharing instruments.	
TARGET 14 – integration in policy and planning processes Ensure the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes, poverty eradication strategies, strategic environmental assessments, environmental impact assessments and, as appropriate, national accounting, within and across all levels of government and across all sectors, in particular those with significant impacts on biodiversity, progressively aligning all relevant public and private activities, and fiscal and financial flows with the goals and targets of this framework.	
TARGET 15 – monitoring impacts from industry Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions:	
(a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains, and portfolios;	
(b) Provide information needed to consumers to promote sustainable consumption patterns;	
(c) Report on compliance with access and benefit-sharing regulations and measures, as applicable;	
in order to progressively reduce negative impacts on biodiversity, increase positive impacts, reduce biodiversity-related risks to business and financial institutions, and promote actions to ensure sustainable patterns of production.	
TARGET 16 – reduce global footprint of consumption Ensure that people are encouraged and enabled to make sustainable consumption choices, including by establishing supportive policy, legislative or regulatory frameworks, improving education and access to relevant and accurate information and alternatives, and by 2030, reduce the global footprint of consumption in an equitable manner, including through halving global food waste, significantly reducing overconsumption and substantially reducing waste generation, in order for all people to live well in harmony with Mother Earth.	
TARGET 17 – ensure biosafety measures Establish, strengthen capacityfor, and implement in all countries, biosafety measures as set out in Article 8(g) of the Convention on Biological Diversity and measures for the handling of biotechnology and distribution of its benefits as set out in Article 19 of the Convention.	



Place up to **5 dot stickers** on the targets you want to prioritize being reviewed for potential inclusion in the Biodiversity Action Plan.

TARGET 18 – reforming incentives harmful to biodiversity Identify by 2025, and eliminate, phase out or reform incentives, including subsidies, harmful for biodiversity, in a proportionate, just, fair, effective and equitable way, while substantially and progressively reducing them by at least \$500 billion per year by 2030, starting with the most harmful incentives, and scale up positive incentives for the conservation and sustainable use of biodiversity.	
TARGET 19 – fund and implement national biodiversity strategies Substantially and progressively increase the level of financial resources from all sources, in an effective, timely and easily accessible manner, including domestic, international, public and private resources, in accordance with Article 20 of the Convention, to implement national biodiversity strategies and action plans, mobilizing at least \$200 billion per year by 2030, including by: a) Increasing total biodiversity related international financial resources from developed countries, including official development assistance, and from countries that voluntarily assume obligations of developed country Parties, to developing countries with economies in transition, to at least \$20 billion per year by 2025, and to at least \$30 billion per year by 2030 b) Significantly increasing domestic resource mobilization, facilitated by the preparation and implementation of national biodiversity finance plans or similar instruments according to national needs, priorities and circumstances c) Leveraging private finance, promoting blended finance, implementing strategies for raising new and additional resources, and encouraging the private sector to invest in biodiversity, including through impact funds and other instruments d) Stimulating innovative schemes such as payment for ecosystem services, green bonds, biodiversity offsets and credits, and benefit-sharing mechanisms, with environmental and social safeguards e) Optimizing co-benefits and synergies of finance targeting the biodiversity and climate crises, f) Enhancing the role of collective actions, including by indigenous peoples and local communities, Mother Earth centric actions13 and non-market-based approaches including community based natural resource management and civil society cooperation and solidarity aimed at the conservation of biodiversity; g) Enhancing the effectiveness, efficiency and transparency of resource provision and use.	
TARGET 20 – sharing science and technology related to biodiversity Strengthen capacity-building and development, access to and transfer of technology, and promote development of and access to innovation and technical and scientific cooperation, including through South South, North-South and triangular cooperation, to meet the needs for effective implementation, particularly in developing countries, fostering joint technology development and joint scientific research programmes for the conservation and sustainable use of biodiversity and strengthening scientific research and monitoring capacities, commensurate with the ambition of the goals and targets of the Framework.	
TARGET 21 – access to data and knowledge for decision makers Ensure that the best available data, information and knowledge are accessible to decision makers, practitioners and the public to guide effective and equitable governance, integrated and participatory management of biodiversity, and to strengthen communication, awareness-raising, education, monitoring, research and knowledge management and, also in this context, traditional knowledge, innovations, practices and technologies of indigenous peoples and local communities should only be accessed with their free, prior and informed consent,[2] in accordance with national legislation.	
TARGET 22 – inclusive representation in decision-making Ensure the full, equitable, inclusive, effective and gender-responsive representation and participation in decision-making, and access to justice and information related to biodiversity by indigenous peoples and local communities, respecting their cultures and their rights over lands, territories, resources, and traditional knowledge, as well as by women and girls, children and youth, and persons with disabilities and ensure the full protection of environmental human rights defenders.	
TARGET 23 – gender responsive implementation Ensure gender equality in the implementation of the Framework through a gender-responsive approach, where all women and girls have equal opportunity and capacity to contribute to the three objectives of the Convention, including by recognizing their equal rights and access to land and natural resources and their full, equitable, meaningful and informed participation and leadership at all levels of action, engagement, policy and decision-making related to biodiversity.	





Final Comments



What are your first impressions of Hamilton's draft Biodiversity Action Plan?

Leave a comment on a sticky note and let us know what you think!



THANK YOU FOR COMING!

Have your say!



Visit **Engage Hamilton** to complete a survey, share your story about Hamilton's Biodiversity, and to comment directly on the draft Biodiversity Action Plan and the 23 Global Biodiversity Framework targets.

Questions?

Reach out to project staff at:

biodiversityactionplan@hamilton.ca



