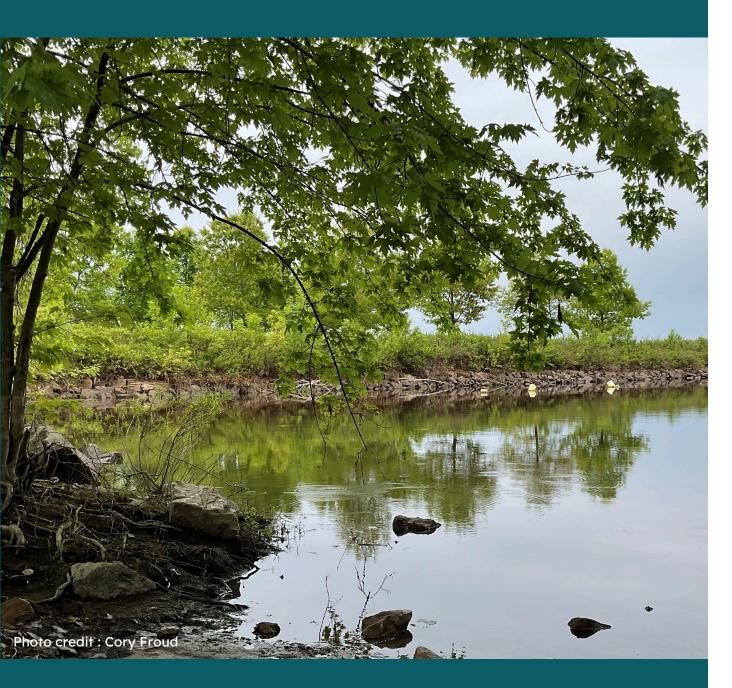
Natural Areas Conservation Plan

Prepared by:







Benefits associated with the conservation of natural areas:



Increased resilience of natural areas improves overall resilience of the area to climate change.



Protect and improve
ecosystems services
provided by natural areas
such as carbon
sequestration, cooling
effect and sediment
retention.



Protection of aquifer recharge areas and improve water quality within the territory.



Better public access to nature.

Full document:

WHAT IS A NATURAL AREAS CONSERVATION PLAN?

Natural areas conservation plans combine the latest scientific advances in ecology and in landscape connectivity to characterize the current state of the study area and develop land management and conservation strategies. The plan relies on a set of scientifically proven indicators to support biodiversity and identify priority natural areas. These indicators are commonly understood and accepted by the Town and the public.

OBJECTIVES

<u>50</u>

PR

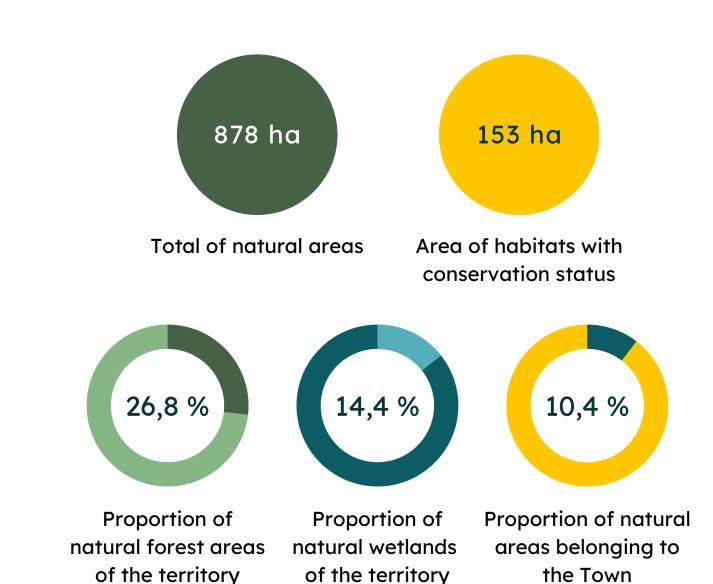
Provide a snapshot of the current state of natural areas within the Town of Hudson.

Identify available conservation tools and mechanisms.

Develop land management and conservation strategies for priority areas.

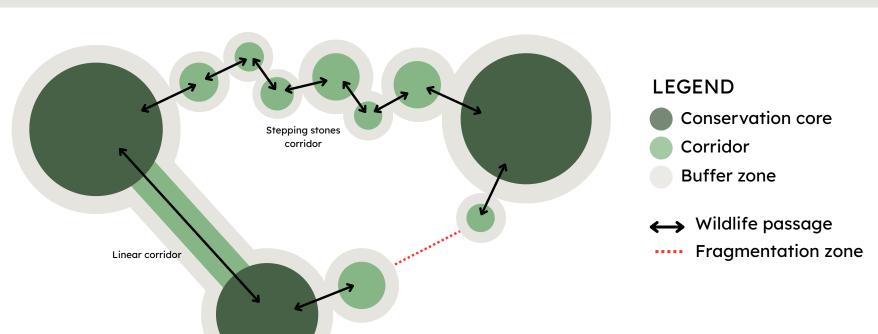
Propose an action plan to progresively implement conservation measures over a 5-year period.

SOME STATISTICS



WHAT IS ECOLOGICAL CONNECTIVITY?

- Ecological connectivity is the ability of wildlife species to move within their range.
- High connectivity indicates that natural habitats are close to each other in the landscape, allowing species to move according to their needs.
- Human-altered habitats, such as urban and agricultural areas, fragment species ranges and are the main barriers to species movement.





STATUS OF BIODIVERSITY







Number of species inventoried in Hudson:



230

165

22

248

Mammals

Birds

Insects

Reptiles & Amphibians

Plants

Updated analyses provide an assessment of the area's fauna and flora health:

- An important bird hotspot is located in the Choisy plain / Alstonvale embankment area, and there is a high concentration of herpetofauna sightings in the eastern part of the municipality.
- The presence of invasive alien species is a challenge for the health of natural areas and native biodiversity.
- There are 31 species protected by legal status, federal and/or provincial.

SUMMARY BY TYPE OF ENVIRONMENT



Wetlands

- Highly connected, but sensitive to urban development.
- Include different types of wetlands: watercourses, swamps, marshes, peat bogs.



Agricultural Areas

- Agricultural areas are located both in the west (Choisy plain) and in the east of the Como plain.
- Como plain area is prone to landslides.



Forest Environments

- Mixed forests are the most connected forests and the most sensitive to drought.
- Fallows and shrublands are characterized by low connectivity, moderate sensitivity to drought and wind, and sensitivity to biotic threats.



PRIORITY AREAS FOR CONSERVATION

The analyses carried out highlight three ecological corridors of interest, all recognized for their structuring role in regional connectivity.

Conservation constraints:



Urban development:

pressures from

residential

development to

occupy ecologically

important forests

and agricultural land.



Environment:
Invasive alien species,
habitat fragmentation,
climate change,
damaging insects and
diseases.



Funding:
External funding such
as grants and
provincial funds is
unpredicatable,
municipal funds should
be allocated to the
purchase of strategic
natural areas.



Governance:
Need for
collaboration and
coordination among
the various
stakeholders.

Ecological corridors components

Watercourse
Buffer zone

Forest environment

ACTION PLAN

The Action Plan aims to achieve a defined vision for Hudson by 2030, when it will be fully implemented. This vision represents what the municipality wants to achieve in terms of natural area conservation, climate change adaptation, and quality of life for its residents.

VISION 2030

Hudson's natural areas are healthy and contribute to the conservation of biodiversity corridors. They are resilient to climate change while providing an exceptional quality of life to current and future generations.

The Action Plan stems directly from the Natural Areas Conservation Plan, defining measures to conserve Hudson's natural areas. It is organised in two complementary parts that outline both general guidelines and targeted actions.

Action plan- Section 1 General guidelines for the entire town

Action plan - Section 2
Strategic planning by priority sector

This first section proposes general measures applicable to the entire Hudson area to achieve the overall conservation goals. It defines long-term objectives and provides an overview of municipal conservation priorities while aligning them with regional priorities.

Four strategic orientations aligning with the objectives of the Town's planning documents and regional priorities have been developed to guide this first phase of the action plan.

They were defined by Habitat and the Town of Hudson following public consultation through surveys and focus group discussions.



- 1. Identify ecological corridors and protect natural areas
- Create a conservation policy
- Implement a voluntary conservation program
- Apply for "Humanized Landscape" status for the Viviry River corridor, recognizing human intervention in the environment while preserving its ecological value.



- 2. Through active management, enhance and restore ecosystems to increase environmental benefits
- Encourage sustainable practices on golf courses and on agricultural land
- Develop a local strategic plan to improve the resilience of natural areas
- Conduct a comprehensive forest inventory on public land



- 3. Mobilizing the community for active participation in conservation
- Establish a participatory environmental budget whereby citizens can vote on future projects
- Provide support to private landowners to implement pro-biodiversity landscaping solutions
- Create a volunteer group of residents to help restore sensitive habitats



- 4. Facilitate a fair access to nature in ways respectful of the environment
- Install educational materials in partnership with local organizations
- Create an ecological code of conduct for trail users
- Reduce the impact of recreational activities on waterways, particularly through boat clean-up

Photo credit : Cory Froud

What is voluntary conservation?

Voluntary conservation is when private landowners take responsibility for conserving natural heritage on their property. There are various options available. For each option, the status lasts for a period ranging from 25 years to perpetuity.

- Designation of a humanized landscape
- Conservation easement
- Donation/sale/transfer to a conservation organization
- Designation of a floral habitat
- Nature reserve

Common misconceptions about voluntary conservation:

"They want to stop me from using my land!"

Actually, voluntary conservation is a personal choice; there is no obligation.

"I'll lose all the value of my land if I protect it!"

Options such as conservation easements allow you to retain ownership while enjoying tax benefits.

"Only large plots of land can be protected."

Even a small wooded area, a riverbank, or a meadow can be preserved and contribute to biodiversity.

Action Plan - Section 2 Strategic planning by priority sector

This section targets priority conservation areas where specific actions are needed to protect and restore entire ecosystems. Three areas have been identified as essential: the Viviry corridor, the Black Creek corridor and the Western forest. These corridors were selected based on several strategic criteria, including their biological richness, their role in connecting natural areas, and their level of disturbance and sensitivity to surrounding pressures.

Viviry Corridor



Examples of proposed conservation actions

- A Stabilize river banks by replanting native species.
- B Improve connectivity by updating conservation zoning and obtaining humanized landscape status for the Viviry corridor.
- C Control invasive species in Pine Lake.
- Improve park trails with clear signage and learning panels. Restrict access to sensitive habitat.

Black Creek Corridor

Examples of proposed conservation actions

- Create buffer zones in sensitive areas near wetlands and watercourses.
- Negotiate voluntary agreements with private landowners to secure sensitive forest cores between Davidson Park and Como.
- C Control invasive species in Davidson Park.
- Improve Davidson Park trails in collaboration with Como Golf Course to promote responsible practices.



Western Forest Corridor



Examples of proposed conservation actions

- A Secure critical habitats for herpetofauna.
- B Maintain and expand wooded corridors by planting native tree species.
- C Control invasive Species and redraw the Gary Cirko Trail.
- Restore areas vulnerable to drought by planting drought-resistant tree species and promoting forest regenerations.