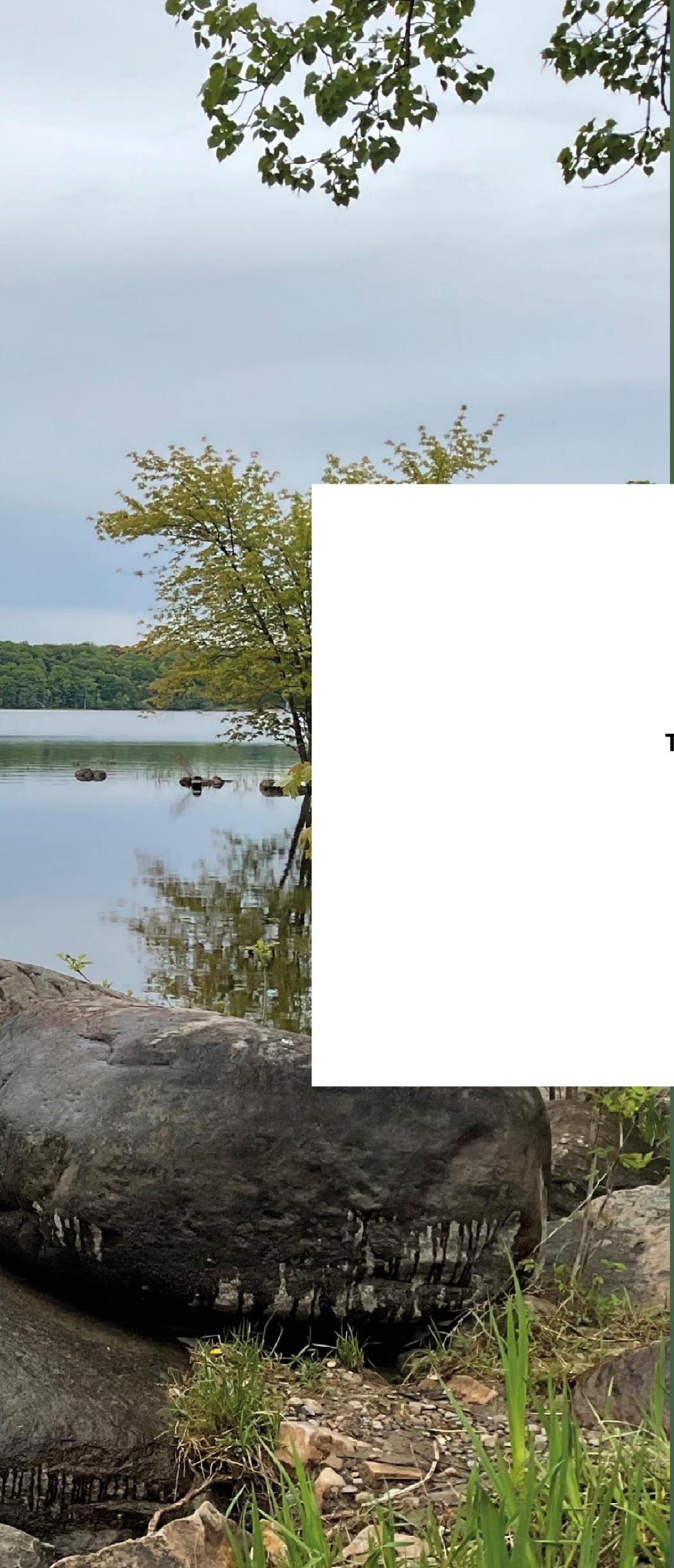


habitat

LA NATURE À L'ŒUVRE

**FINAL REPORT**

# ACTION PLAN FOR THE TOWN OF HUDSON

HUDSON

## HABITAT

Habitat is an environmental solutions company founded in 2017 (initially known as Eco2urb) and based in Montreal.

It offers nature-based solutions to fuel and drive the ecological transition of its clients, particularly in the context of a green recovery. Habitat was born from the pooling of expertise from three leading laboratories in the fields of human and natural sciences. At the head of the company are Professors Dupras, Gonzalez, and Messier, all internationally recognized in their fields.

Over the past five years, Habitat has catalyzed the ecological transition of a diverse clientele. The team collaborates with numerous universities, research centres, and non-governmental organizations to facilitate the implementation of scientific work related to ecology, forestry, and land management. It offers innovative approaches and cutting-edge environmental strategies. Habitat's team of scientific consultants guides you in the sustainable management of ecosystems, biodiversity conservation, and the consideration of services provided by your natural infrastructures, applying the best available science.

Our mission is to accelerate your ecological transition with solutions rooted in nature and science.

## PROJECT TEAM

**Geospatial Analyses:** Médéric Durand, M. Sc.

**Conservation plan development:** Médéric Durand, M.Sc & Julie Faure, Ph.D.

**Action plan development:** Émile Foley & Julie Faure, Ph.D.

**Research and organizational support:** Anaïs Légaré-Morasse

**Project coordination:** Julie Faure, Ph. D.

**Scientific director** : Sylvia Wood, Ph. D.

Cover and summary photo credit: Cory Froud

Suggested citation: Habitat. 2025. Action plan of the Natural Areas Conservation Plan for the Town of Hudson. 48 p.

# EXECUTIVE SUMMARY


The Natural Areas Conservation Plan for the Town of Hudson aims to strengthen the town's ability to protect, restore, and enhance its natural areas while responding to the challenges posed by climate change and biodiversity loss. This document is a milestone and strategic lever, rather than an end in and of itself, to guide concrete conservation actions in the short, medium, and long term.

The Conservation Plan is based primarily on an in-depth territorial analysis that identifies important natural areas, habitats to be preserved, and major ecological threats. Among the key findings of this analysis are:

- High ecological connectivity between the territory's natural areas, particularly along watercourses and wetlands, which is essential for species movement and ecosystem resilience.
- Moderate functional diversity of forest areas, combined with a marked vulnerability to drought and biotic pressures (spongy fungus, Asian longhorn beetle).
- The presence of a significant bird observation hotspot in the Choisy plain/Alstonvale escarpment area, as well as a high concentration of herpetofauna sightings in the eastern part of the municipality.
- Increased sensitivity of forest areas bordering watercourses to climate hazards, particularly drought.
- The identification of three ecological corridors of interest: Viviry River (from downtown to Sandy Beach), Black Creek (Como sector), and the Rivière des Fiefs (Alstonvale escarpment), all recognized for their role in regional connectivity.

The Action Plan, for its part, stems directly from the Conservation Plan, defining specific measures to conserve Hudson's natural areas. It is based on a two-pronged approach that allows for both general guidelines and targeted interventions to be articulated around a vision for Hudson's natural areas for 2030.

***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 for current and future generations.***

**Part 1 – General guidelines and actions at the regional level**

This first part proposes key actions applicable to the entire territory of the Town of Hudson, based on four main guidelines to:

1. Protect natural areas and ecological corridors
2. Restore degraded ecosystems through active management
3. Engage the community in conservation
4. Improve sustainable access to nature

**Part 2 – Strategic planning by priority sector**

The second part targets specific areas of the territory considered to be high priorities for conservation:

- Viviry Corridor
- Black Creek/Como Forest Corridor
- West Forest/Alstonvale Escarpment Corridor

Citizen engagement is at the heart of the Action Plan, as it relies on collaboration among all parties. It is through the collective mobilization of each stage of the Plan (planning, implementation, and monitoring) that the successful conservation of Hudson's natural areas will be ensured with a better guarantee of their benefits for future generations.

## TABLE OF CONTENTS

# 1. INTRODUCTION

## 1.1 Context

The Action Plan flows directly from the Natural Areas Conservation Plan, defining measures to conserve Hudson's natural areas. It is primarily based on a two-pronged approach, combining general guidelines with targeted actions.

Section 1 defines the broad conservation guidelines applicable to the entire territory, establishing strategic objectives and cross-cutting actions to protect biodiversity, ensure ecological connectivity and promote the sustainable management of natural areas. Section 2 focuses on targeted conservation by identifying three priority areas, the town's 3 ecological corridors. It proposes a series of more specific actions to be implemented to ensure the preservation and enhancement of these important portions of territory. Ultimately, by targeting these strategic areas, Hudson will be able to concentrate its efforts where the need is greatest and the ecological gains would be the most significant.

## 1.2 Conservation targets

The Action Plan's conservation targets are based on reference frameworks established at various scales, notably the general targets of the GBF (Kunming-Montreal Global Biodiversity Framework, 2022) and Quebec's 2030 Nature Plan

- No net loss of natural areas through conservation and restoration
    - GBF (Target 1), 2030 Nature Plan (Target 1), revised PMAD (4.3.1)
- Restoration of 30% of degraded natural areas with priority given to the main ecological corridors
    - GBF (Target 2), 2030 Nature Plan (Target 2), revised PMAD (4.3.3)
- Conservation of 30% of natural areas by ensuring connectivity between the territory's major high-value habitat clusters
    - GBF (Target 3), 2030 Nature Plan (Target 3), revised PMAD (4.3.1, 4.3.2)
- Voluntary conservation contributes to efforts to conserve at least 20% of natural areas, with priority given to corridors.
    - 2030 Nature Plan (Target 14), revised PMAD (*Promotion of voluntary conservation tools*)
- Ensure the integrity of 100% of the network of blue-green corridors in the greater region (RCM), in particular through awareness-raising and citizen involvement.
    - GBF (Target 12), revised PMAD (4.3.2)
- Conservation of important habitats for threatened, vulnerable and species likely to be listed as at risk.
    - GBF (Target 4), 2030 Nature Plan nature (Target 4), PMADR (4.3.4)
- Make the region's vulnerable natural areas more resilient to climate change.
    - GBF (Target 8), 2030 Nature Plan Nature (Target 1), revised PMAD (4.3.3)
- Maintain the integrity of natural areas through sustainable practices and biodiversity-friendly recreational activities, with priority given to ecological corridors.
    - GFB (Target 9), 2030 Nature Plan (Target 8), revised PMADR (Sustainable recreation and tourism)

## 1.3 Vision

The Action Plan aims to achieve its defined vision for Hudson in 2030, at the end of its implementation. This vision, put forward by the Town of Hudson, outlines the municipality's goals for preserving natural areas, addressing climate change, and ensuring a high 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 offering an exceptional quality of life for present and future generations.*

## 1.4 Conservation tools and mechanisms

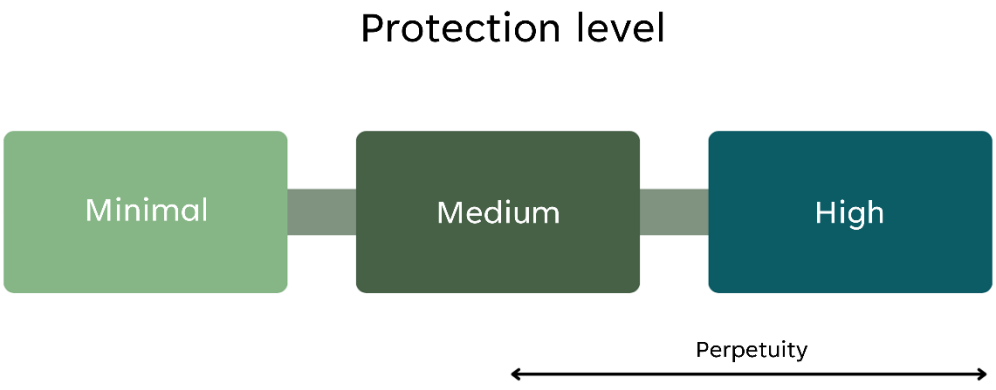
This section presents the various legal tools and mechanisms for conservation, which vary according to the scale of jurisdiction, be it regional, municipal or citizen. Each tool offers a different level of protection to natural areas, depending on the legal obligations it imposes and its long-term effectiveness. **Table 1** below presents a summary of the main mechanisms available, specifying their scope and degree of protection, in order to inform strategic choices for the conservation of natural areas. These tools and mechanisms are detailed in Appendix 1.

### 1.4.1 Protection levels

**Minimal:** Temporarily preserve certain ecological or aesthetic values without compromising future planning or development opportunities. This level does not guarantee long-term conservation and may be lifted or modified according to changing priorities.

**Medium**: Maintain specific ecological functions and critical habitats while allowing sustainable use and certain modifications, if necessary. This may include options for protection options, but these are not guaranteed.

**High:** Ensure the long-term conservation of the ecosystem in its natural state, preventing all forms of destructive development and fully protecting the fauna, flora and ecological processes for future generations.



**Voluntary conservation:**

Voluntary conservation is when landowners take responsibility for conserving the natural heritage on private land.

Various options are available and are presented in section 1.3 (**Table 9)**.

For each of these options, the duration of the status varies from 25 years to perpetuity.

Concerns and misconceptions:

*"They want to prevent me from using my land!"*
FALSE - Voluntary conservation is a personal choice. There is no obligation.

*"I lose all property value by protecting my land!*"
FALSE - Options like conservation easements allow you to retain ownership while enjoying tax benefits.

*"Only large tracts of land can be protected*."
FALSE - Even a small woodland, riverbank or meadow can be conserved and contribute to biodiversity.

To learn more about the steps to follow for each type of voluntary conservation, resources are available:

brochure-conservation-volontaire.pdf

https://rmnat.org/conservation-volontaire/

**Table 1** . List of available conservation tools and mechanisms.

| SCALE OF APPLICATION | CONSERVATION TOOL OR MECHANISM | PROTECTION LEVEL | PERPETUITY |
|---|---|---|---|
| **Vaudreuil-Soulanges RCM** | **Special ecological zoning** mentioned in the SADR | Medium | - |
| | **Areas of ecological interest** | | |
| | **Interim Control Regulations (RCI)** | | |
| | **Identification of areas of interest in the Regional Wetlands and Water Management Plan (PRMHH**) | | |
| | **Strategies for acquiring** natural areas | | |
| | **Conservation easement** | | |
| | **Incentive or compensation programs** | | |
| | **Tree** and woodland **protection policy** | | |
| **Vaudreuil-Soulanges RCM, Town of Hudson and citizen** (Voluntary conservation) | **Designation of a humanized landscape (minimum 25 years)** | High | Yes |
| **Town of Hudson** | **Zoning by-law** | Medium | - |
| | **Site planning and architectural integration program (PIIA)** | | |
| | **Comprehensive development plan (PAE)** | | |
| | **Special urban planning programs (PPU)** | | |
| | **Specific project for the construction, modification or occupancy of a building (PPCMOI)** | | |
| | **Contribution for parks, playgrounds and natural areas** | | |

| SCALE OF APPLICATION | CONSERVATION TOOL OR MECHANISM | PROTECTION LEVEL | PERPETUITY |
|---|---|---|---|
| | **Inter municipal conservation agreements** | | |
| **Citizen and/or Town of Hudson** (Voluntary conservation) | **Moral commitment** | Minimal | - |
| | **Private agreement** | | |
| | **Conservation easement (gift or sale)** | Medium | - |
| | **Donation/sale/transfer to a conservation organization** | High | Yes |
| | **Floristic habitat designation** | High | Yes |

# 2. SECTION 1 - GENERAL GUIDELINES AND ACTIONS AT THE SCALE OF THE TERRITORY

**Objective:** Section 1 of the Action Plan proposes general measures applicable to the entire Hudson territory to achieve overall conservation objectives. It defines long-term objectives and provides an overview of municipal conservation priorities, while harmonizing them with those at the regional scale.

## 2.1. Strategic Orientations

Four (4) strategic orientations in line 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 jointly by Habitat and the Town of Hudson, following consultation of the population through surveys and workshops. They are as follows:

1. Identify ecological corridors and protect natural areas
2. Through active management, enhance and restore ecosystems to increase environmental benefits
3. Mobilize the community for active participation in conservation efforts
4. Facilitate a fair access to nature in ways respectful of the environment

Each of these strategic orientations entails constraints and challenges for implementation, which are presented in a summary table highlighting their potential impacts, as well as possible avenues for mitigation (section 3).

The strategic orientations are broken down into objectives and conservation actions. For each action presented, the actors and partners involved are presented, and the actor responsible for implementing the action is identified. It is this responsible actor who will monitor the progress or completion of the action, using proposed monitoring indicators.

## 2.2. Priority and proposed implementation duration

The table for each strategic orientation is structured along two complementary axes: the priority of actions and the timeframe for their implementation.

Firstly, the actions are presented in ascending order of feasibility, i.e. they are prioritized according to their short-term implementation potential, their ecological and social impact, and the resources currently available. This prioritization reflects a logical sequence in the implementation of the plan, where some actions should ideally precede others to maximize their effectiveness.

Secondly, each action is associated with an estimated duration of implementation, either short, medium or long term. This duration represents the time needed to achieve concrete results, not the point at which the action is initiated. It's important to note that all actions can be initiated at any time, regardless of their duration. It may therefore be that a priority action requires long-term implementation, or that a less strategic action can be carried out quickly.

The table should therefore be read in two ways: firstly, as a sequence of strategic priorities, and secondly, as a time projection for the implementation of actions. This dual reading enables the city to plan the efforts to be deployed, while retaining the flexibility needed to adapt the plan to opportunities, available resources and future collaborations.

- **Short-term (1 to 3 years) - Immediate priority actions**

Measures requiring rapid implementation to prevent the degradation of natural areas, protect the most vulnerable ecosystems, and establish the foundations of the Action Plan.

*E.g.: regulatory actions, urgent ecological restoration interventions, citizen mobilization initiatives to rapidly engage stakeholders.*

- **Medium-term (3 years) - Development and consolidation**

Actions that require more planning, coordination and mobilization of financial and human resources. They aim to structure conservation efforts and develop sustainable initiatives.

*E.g.: trail and infrastructure rehabilitation, implementation of partnerships and collaborations with other municipalities and organizations.*

- **Long-term (5 years) - Structuring and transformational initiatives**

Actions that require sustained commitment over several years, as they involve profound changes in land management, major investments or complex planning processes. The timing of these actions may indicate that they will take more time to complete, or that they will be carried out continuously over the period of the conservation plan's implementation.

*E.g.: creation of new ecological corridors to ensure connectivity, acquisition of strategic lands for conservation in perpetuity, implementation of new regional planning and development regulations.*

### 2.3. Mapping areas of influence

Maps of the “zones of influence” are provided to help spatially translate each of the Action Plan's strategic orientations by identifying the sectors of the territory where the issues are most present and where priority interventions should be concentrated. It should be noted that the dimensions and areas of the shapes used to identify the territory's zones of influence are indicative only. They serve as reference points and identify generally areas with characteristics specific to the issues identified. This visualization method makes it easier to understand the dynamics and interactions within the Town's territory, by simplifying the complexity of the data collected.

### Actions already completed

A number of actions have already been taken by the Town to conserve the natural areas on its territory. These actions are the result of recommendations made in previous conservation plans.

- Actions to improve connectivity and protect natural areas (in line with strategic orientation 1):

2023 - "Bird-friendly city" and "Monarch-friendly city" certifications obtained

2024 - Widening of water and wetland riparian banks protection to 15 m in vacant lots

2024 - Partnership with COBAVER-VS for water chestnut control (cash donation)

2024 - Agreement signed with NAQ to protect the chimney swift

2024 - Signing of the Lake of Two Mountains Charter of Commitment

2025 - Ecological gift of a cattail marsh

- Actions concerning the enhancement and restoration of ecosystems (linked to strategic orientation 2):

2021 - Addition of tree protection measures during construction work

2022 - Adoption of a by-law prohibiting the filling of all wetlands

2025 - Adoption of protection measures for remarkable trees

- Actions to mobilize the community in conservation (linked to strategic orientation 3):

2021 - Grant program to encourage citizen tree planting

2022 - Organization of the Earth Day awareness event

2024 - Publication in La Voix d'Hudson on the ecological value of trees

2024 - Creation of ECO Hudson sheets

2024 - National Forest Week: free lecture by an expert biologist on the importance of trees in the context of climate change.

## 2.4. Conservation objectives, actions and implementation

### Orientation 1 - Identify ecological corridors and protect natural areas

**General description:**

Hudson's territory is characterized by a rich ecological network of mature forests, interconnected wetlands, waterways such as the Viviry River, and open farmlands. However, this network is under increasing pressure: residential sprawl on the periphery of core natural areas, the multiplication of ecological disturbances (roads, fences, woodland enclosures), and the rapid proliferation of IAS such as phragmites and buckthorn. These factors compromise the ability of natural areas to perform their ecological functions in the long term.

In this context, preserving and restoring ecological connectivity becomes an important lever to maintaining biodiversity across the Hudson territory. In particular, this means maintaining functional links between Hudson's large, core natural areas and those of neighbouring municipalities, such as Rigaud and Vaudreuil-Dorion. In this respect, the regional green corridor running through Hudson represents a structural axis, essential for the movement of wildlife, the resilience of ecosystems (particularly in the face of climate change) and the maintenance of regional biodiversity and ecosystem services. To meet national and regional conservation targets, it is proposed to secure at least 30% of the territory, using both regulatory tools (conservation zoning, ecological easements) and targeted acquisition strategies.

This orientation also emphasizes the conservation of wildlife habitats deemed sensitive or priority - particularly for SAR species such as certain amphibians and migratory birds - which depend on the quality and continuity of natural areas. Maintaining viable populations of these species requires the implementation of concrete measures: restricting access to certain areas, ecological restoration of degraded habitats, systematic control of IAS, and restoration using native species adapted to the site.

**Other related plans or studies:**

The actions presented in Orientation 1 respond to the objectives of regional plans, or to the recommendations of studies previously carried out in Hudson. For example, objective 1.3 of the present Action Plan responds directly to objective 3.4 of the PMAD, on the identification and protection of landscapes of metropolitan interest. Action 1.1.4 is linked to action 21 of the PDZA, which recommends collaboration with the farming community and private landowners to connect the territory's ecological corridors.

Other actions respond to the recommendations of the Water Master Plan, the Akifer hydrogeological report (action 1.3.1), the Eco2Urb 2020 report, the Cima+ report and the CWG (*Conservation Working Group*, action 1.1.5).

### Implementation constraints and challenges:

| CONSTRAINT | CHALLENGE |
|---|---|
| **Development pressure and land constraints** | • Growing residential demand, particularly for wooded or agricultural land with high ecological potential.<br>• Lack of public land in several core natural area, limiting the town's ability to intervene directly.<br>• Difficulty in curbing ecological fragmentation caused by the creation of new access roads, fences or housing estates. |
| **Regulatory and administrative constraints** | • Lack of targeted regulatory tools for conservation on private land<br>• Weak municipal capacity to enforce certain standards (e.g., width of riparian buffer strips, prohibition of wetland filling). |
| **Financial constraints and financing requirements** | • Difficulty in allocating a consequential budget to conservation efforts in the context of a small municipality.<br>• Low predictability of external funding sources (grants, provincial funds).<br>• No permanent municipal fund dedicated to the acquisition of strategic natural areas. |
| **Environmental and ecological constraints** | • Widespread presence of IAS in woodlands and wetlands (phragmites, buckthorn, Japanese knotweed).<br>• Many corridors are already fragmented by roads, fenced lots or residential developments.<br>• Sensitive natural areas such as wetlands or old-growth forests are vulnerable to drought or flooding events linked to climate change. |
| **Governance and stakeholder coordination constraints** | • Multiplication of municipal, regional and citizen players involved, with no clear coordination structure.<br>• Weak recognition of the complementary roles of the town, environmental NPOs and the RCM. |

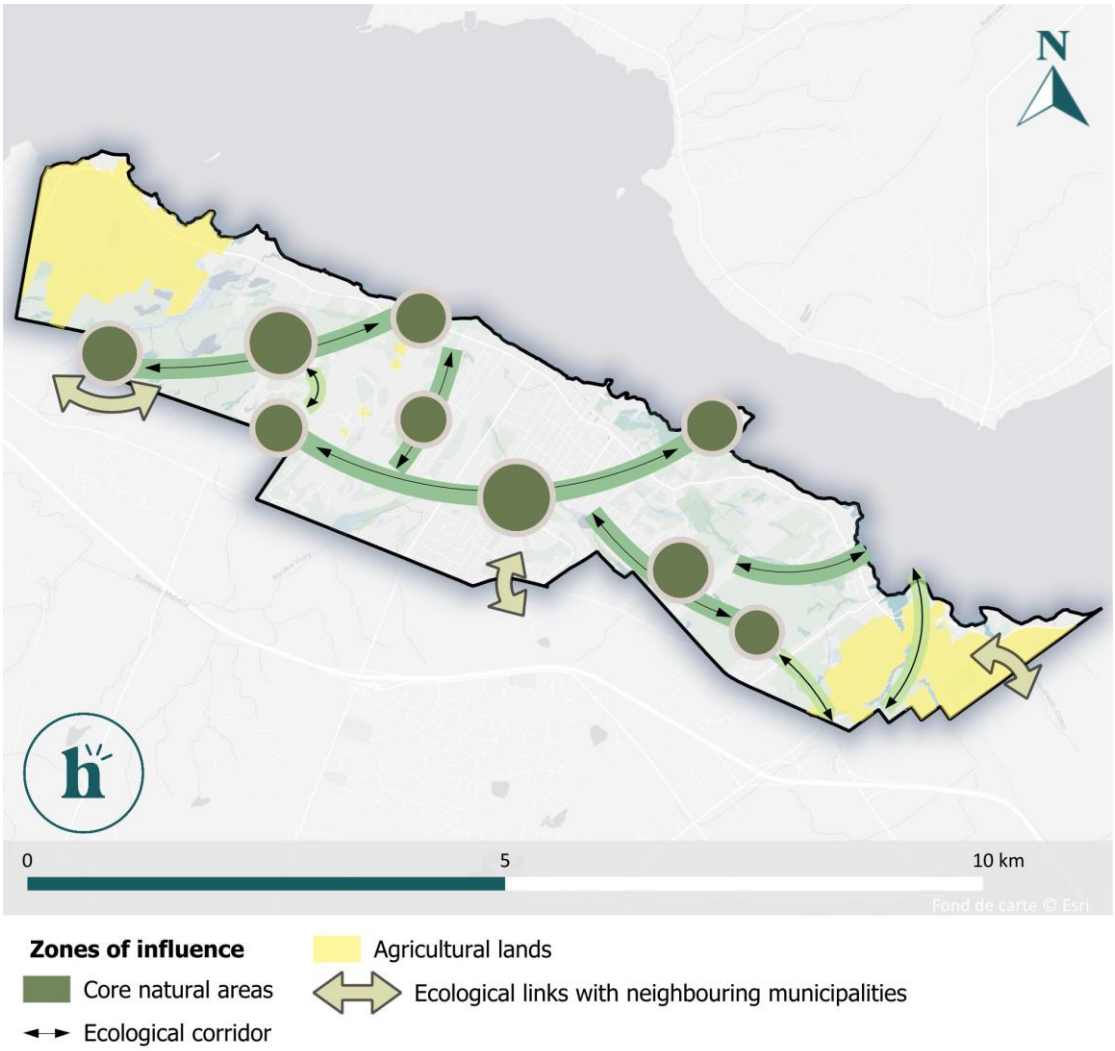
## Strategic Orientation 1 - objectives and actions

| Orientation | Conservation objectives | Actions | Duration | Monitoring indicators | Key stakeholders and partners involved (responsible actor in bold) |
|---|---|---|---|---|---|
| **1. Identify ecological corridors and protect natural areas** | 1.1 Identify biodiversity corridors conducive to conservation and improve of their connectivity | 1.1.1. Establish the spatial boundaries of the three biodiversity corridors. | 3 years | Map of the three corridors | **Town**, conservation NPO, private owners |
| | | 1.1.2. Develop a database of land included in corridors. | 3 years | Active database | **Town** |
| | | 1.1.3. Detailed planning of biodiversity corridors | 5 years | Detailed planning documents | **Town,** conservation NPO, environment committee |
| | | 1.1.4. Through a **Conservation Policy,** focus on shoreline restoration and connectivity by raising awareness and offering financial incentives. | 3 years | Policy in place | **Town,** citizen participation, environment committee |
| | 1.2 Conserving biodiversity | 1.2.1. Create a database identifying public lands requiring an IAS intervention plan. | 3 years | Annually updated database | Town, **conservation NPO,** citizen participation |
| | | 1.2.2. Based on the mapping of public natural areas, include a requirement in a **Conservation Policy** to have for all municipal projects a characterization study of natural areas, which includes documenting the conservation status of species present. | 3 years | Mapping and database of quality habitats within the town's territory | Town, **engineering consulting firm (cartography)** |
| | | 1.2.3. Through a **Conservation Policy**, raise awareness and encourage landowners to set up facilities adapted to the conservation status of species present on the territory, including incentives. | 3 years | Policy in place | **Town**, Le Nichoir, environment committee, citizen participation |
| | | 1.2.4 Evaluate the ecological value of restoring Pine Lake to determine what actions need to be taken to strengthen the ecological corridor. | 5 years | Study completion | Town, **engineering consulting firm** |

| Orientation | Conservation objectives | Actions | Duration | Monitoring indicators | Key stakeholders and partners involved (responsible actor in bold) |
|---|---|---|---|---|---|
| | 1.3 Conserve 30% of natural areas | 1.3.1 Invite local Indigenous communities to take part in discussions on conserving natural areas. | 5 years | Number of invitations sent to various Indigenous communities | **Town,** Indigenous community of Kanesatake and environment committee |
| | | 1.3.2. Implement a voluntary conservation program to support interested private landowners by offering incentives through local partnerships, such as the Creek 53 Trust. | 5 years | Area of conserved land | **Town,** conservation NPO |
| | | 1.3.3. Assess the feasibility of obtaining legal conservation status for lands of high ecological value, including Humanized Landscape status for the Viviry River corridor. | 5 years | Status obtained or in process of being obtained | **Town**, provincial government, RCM |
| | | 1.3.4. Establish a municipal budget dedicated to the conservation and acquisition of natural areas. | 1 year | Budget | **Town** |
| | 1.4. Strengthen policies to protect Hudson's natural areas | 1.4.1. Adopt a **Tree Policy.** | 1 year | Adopted policy | **Town,** environment committee, citizen participation |
| | | 1.4.2. Preserve, by adopting conservation zoning, natural lands of high ecological value acquired by the town. | 5 years | Zoning adopted and modified urban plan | **Town** |
| | | 1.4.3. Diversify and secure sources of funding to ensure the long-term viability of actions to conserve and enhance natural areas | Continuous | Number of financing solutions found | **Town,** conservation NPO |
| | | 1.4.4. Evaluate the value of intermunicipal collaboration with neighboring towns for concerted and consistent management of natural areas on a regional scale, promoting the coordination of protection and restoration efforts. | 5 years | Number of intermunicipal partnerships established | **Town**, RCM, neighboring cities, conservation NPO |

### Mapping the zones of influence of Strategic Orientation 1 - Identify ecological corridors and protect natural areas

To implement the actions proposed in Orientation 1, we need to take into account a number of factors that influence the territory, such as the location of farmland at the extremities of the territory, core natural areas and corridors, and strategic connections with neighbouring municipalities. These components are shown on the map below.



## Strategic Orientation 2 - Through active management, enhance and restore ecosystems to increase environmental benefits

### Objectives :

Strategic Orientation 2 of the Action Plan proposes active management of Hudson's natural areas in order to restore degraded ecosystems and enhance the territory's ecological resources. It seeks to increase the landscape's resilience to climate change and reduce its vulnerability to human pressures.

Priority actions include protecting groundwater recharge zones, essential for preserving drinking water quality, and improving stormwater management by integrating more natural infrastructure. This orientation also puts forward a proactive approach to forest management, by developing a forest cover management plan adapted to local realities, focusing on regeneration, species diversity and reducing the risks associated with diseases and IAS.

Restoring degraded natural areas - whether altered wetlands, eroded riverbanks or fragmented forests - aims to restore key ecological functions, while improving connectivity between habitats. Finally, the re-naturalization of certain urbanized or transitional areas would create more vegetated spaces, enhance the ecosystem services offered to citizens, and promote a more balanced cohabitation between development and conservation.

### Other related plans or studies :

The actions presented in Strategic Orientation 2 respond to the recommendations of the COBAVER-VS and McGill University study on the Viviry River (action 2.2.4), the Akifer report (action 2.2.3.), the Eco2Urb 2020 report, the Cima+ report, and the CWG recommendations (action 2.2.1).

Other actions are directly linked to other land-use plans, such as the PDZA (action 2.5.1), the Town of Hudson's tree policy, the Drinking Water Master Plan, or the Groundwater Recharge zone Protection Plan.

### Implementation constraints and challenges :

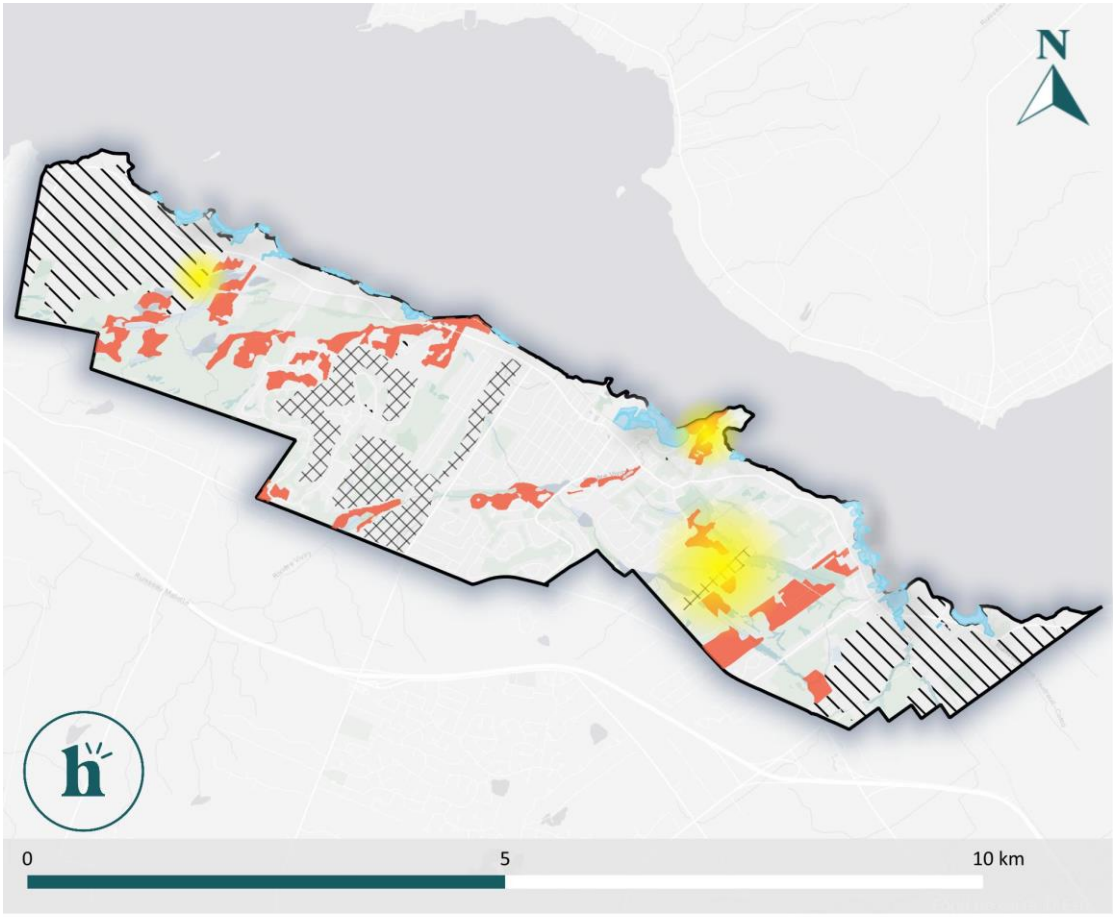
| CONSTRAINT | CHALLENGE |
|---|---|
| **Lack of targeted ecological data** | • Few recent inventories on the quality of wetlands, the state of recharge zones or the composition of forests.<br>• Difficulty in targeting the most urgent or relevant restoration interventions. |
| **High costs and limited resources** | • High cost of restoration work (watercourses, forests, wetlands) and implementation of a forest management plan.<br>• Dependence on external subsidies and lack of a structured conservation fund. |
| **Difficulty of coordination between players** | • Need to coordinate several players (private landowners, organizations, RCM, farmers), which complicates the governance of actions.<br>• Lack of formal mechanisms to steer integrated management of natural areas on a regional scale. |
| **Complex forest management and a complex land mosaic** | • Woodland fragmentation and heterogeneous distribution.<br>• Risk of loss of connectivity if landowners refuse to cooperate. |
| **Growing climate vulnerability** | • Floods, droughts and other extreme events disrupt ecosystems and can cancel out ecological gains.<br>• Difficult adaptation of already fragile ecosystems without significant intervention. |

## Strategic Orientation 2 - objectives and actions

| Orientation | Conservation objectives | Actions | Duration | Monitoring indicators | Key stakeholders and partners involved (responsible actor in bold) |
|---|---|---|---|---|---|
| **2. Through active management, enhance and restore ecosystems to increase environmental benefits** | 2.1. Developing policies to tackle climate change | 2.1.1. Develop a local strategic plan to improve the resilience of natural areas following the adoption of the RCM-VS's Climate Plan. | 5 years | Local plan developed | Town, RCM, **engineering consulting firm** |
| | 2.2. Protecting water recharge zones | 2.2.1. Strengthen stormwater management by promoting green infrastructure on private property through the Urban Plan and on public property through an internal policy. | 5 years | Number of green infrastructures established | **Town**, citizen participation |
| | | 2.2.2. Establish protection areas around wells as recommended by Akifer's hydrogeological report on the construction of new wells. | 5 years | Formalize protection areas around wells in town planning documents | **Town,** RCM |
| | | 2.2.3. Continuously apply the recommendations related to municipal powers from the COBAVER-VS and McGill University study on the Viviry watercourse to maintain water quality. | Continuous | Ongoing monitoring of water quality and number of measures introduced for the Viviry River study | Town, **private landowners**, COBAVER-VS |
| | 2.3 Maintain limited use of pesticides | 2.3.1. Encourage sustainable practices at golf courses by monitoring ACSP certification. | 5 years | Number and proportion of sustainable practices implemented by golf course | Town, **golf course owners, conservation NPOs** |
| | | 2.3.2. Encourage sustainable agricultural practices, such as the renaturalization of riverbanks in agricultural areas. | 5 years | Number of renaturalized riverbanks. | Town**, farmland owners, organic farming organizations** |
| | 2.4. Ensure sustainable and proactive management of forest cover | 2.4.1. Encourage minimal deforestation on private woodlots. | 1 year | Established deforestation limits | Town, **private landowners**, RCM (Tree and Woodland Policy) |
| | | 2.4.2. Set up a program to encourage reforestation with external funding, applying the principles of functional diversity after the felling of more than 50 ash trees on a woodland (or other species decimated by a pathogen). | 3 years | Program established | **Town**, private landowners**,** RCM |
| | | 2.4.3. Implement sustainable management practices for public forests. | 3 years | Number of practices implemented | **Town**, environment committee |
| | | 2.4.4. Initiate a complete forest inventory (health, age, biodiversity, resilience, adaptability) of the public forest. | 5 years | Percentage of public forest inventoried | **Town**, engineering consulting firm |

## Mapping the areas of influence of Strategic Orientation 2 - Through active management, enhance and restore ecosystems to increase environmental benefits

The actions proposed under the Strategic Orientation 2 focus in particular on adaptation to climate change, and sustainable use practices in agricultural areas and golf courses. The map below shows the areas in which these actions are to be implemented.




**Zones of influence**

- Golf courses
- Agricultural lands
- High vulnerability to drought
- Wildlife hotspots
- Eroded banks

## Strategic Orientation 3 - Mobilizing the community for active participation in conservation efforts

### Objectives :

In Hudson, the proximity of the citizenry to their natural environment is a great asset. This local cultural attachment to nature creates fertile ground for innovative forms of citizen participation in conservation, going beyond traditional awareness-raising models. In a context where the majority of natural areas are located on private land, the direct involvement of the population becomes an essential lever for achieving conservation objectives.

Rather than limiting itself to one-off activities, Hudson can create a lasting commitment through concrete engagement mechanisms. A natural areas sponsorship program could be launched, enabling residents, school groups or businesses to become actively involved in monitoring and maintaining specific natural sites. This type of initiative not only fosters a sense of ownership and responsibility for the territory, but also a culture of collective care.

In terms of governance, the introduction of a participatory environmental budget would give the population the opportunity to propose and select conservation projects to be financed locally. In addition, voluntary conservation of private land should be supported by an enhanced support program: personalized advice, technical support, public visibility in the form of ecological recognition, and integration into a local network of "Japanese stepping stones" contributing to the city's ecological corridors.

### Other related plans or studies :

Some of the actions presented in the Strategic Orientation 3 respond to recommendations made in the 2020 Eco2Urb report. They also respond to a need identified by the Hudson citizenry and conservation organizations during consultation activities carried out as part of the Natural Areas Conservation Plan.

### Implementation constraints and challenges :

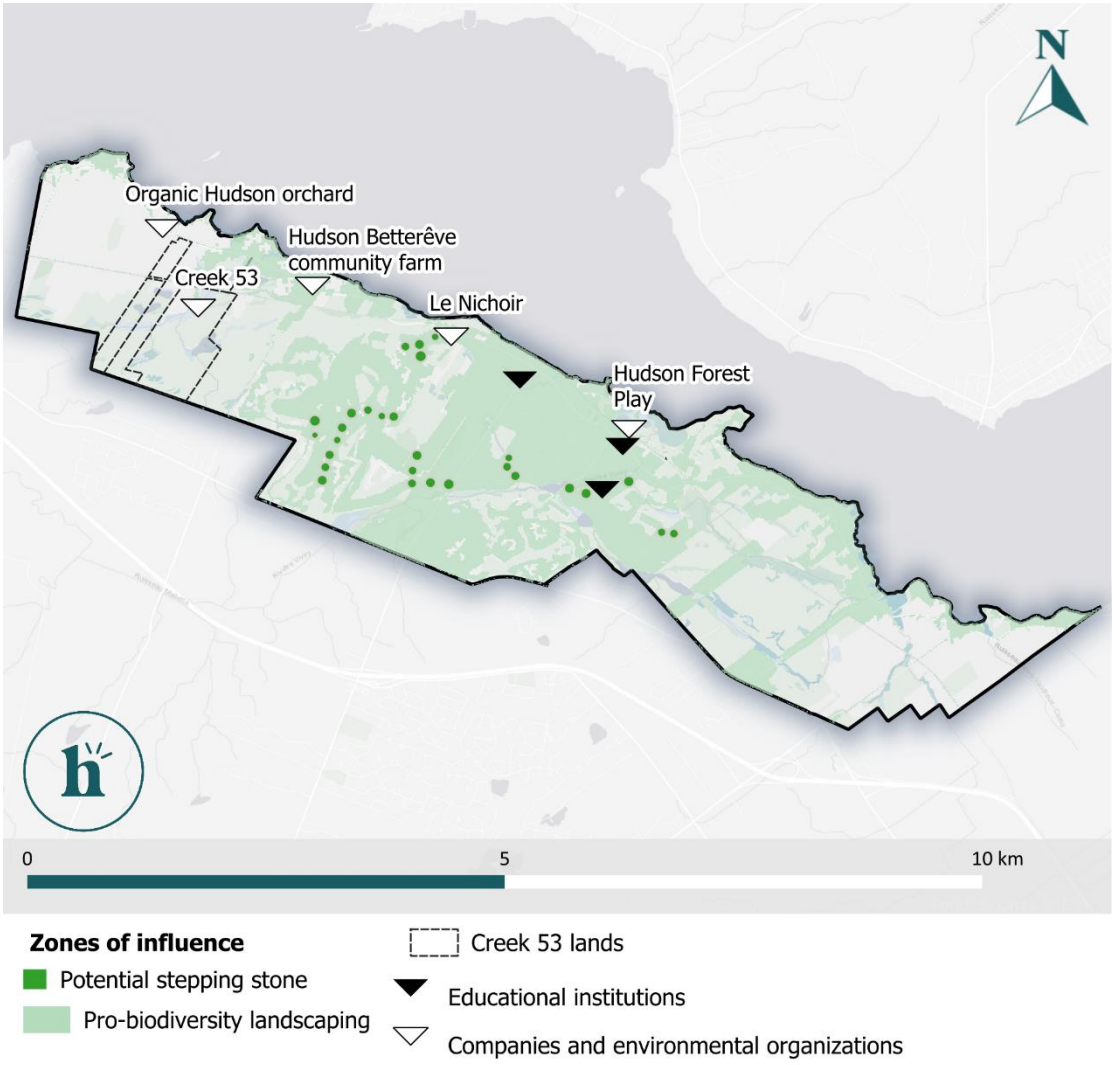
| CONSTRAINT | CHALLENGE |
|---|---|
| **Uneven citizen mobilization** | • Limited participation by certain groups (youth, new residents, seniors).<br>• Difficulty maintaining long-term commitment beyond one-off actions. |
| **Lack of awareness of voluntary conservation tools** | • Poor understanding of programs such as conservation easements or private nature reserves.<br>• Limited informational resources on voluntary conservation tools for the general public. |
| **Perception of intrusion or complexity** | • Reluctance on the part of some land owners to take part in procedures perceived as restrictive or bureaucratic.<br>• Fear of losing control over the use of their land. |
| **Lack of concrete incentives** | • Lack of recognition mechanisms (certificates, visibility, etc.).<br>• Few financial or symbolic benefits associated with civic involvement. |
| **Complex coordination between stakeholders** | • Lack of a formal structure to facilitate consultation between the city, NPOs and citizens.<br>• Risk of redundancy or isolated initiatives. |
| **Unequal access to information** | • Certain people excluded from awareness campaigns (technological barrier, language, age, etc.).<br>• Overlytechnical or poorly adapted informational content to different audiences. |
| **Cultural and social resistance** | • Conservative view of the role of private property or skepticism about municipal projects.<br>• Opposition to certain proposed changes of use or regulations. |

## Strategic Orientation 3 - objectives and actions

| Orientation | Conservation objectives | Actions | Duration | Monitoring indicators | Key stakeholders and partners involved (responsible actor in bold) |
|---|---|---|---|---|---|
| **3. Mobilize the community for active participation in conservation efforts** | 3.1. Increase public participation in conservation efforts | 3.1.1. Offer awareness-raising activities and roundtables to inform citizens of the various biodiversity issues and discuss possible solutions. | Continuous | Number of activities offered | **Town**, conservation NPO |
| | | 3.1.2. Develop and distribute communication tools on conservation issues. | Continuous | Number of tools developed and distributed | **Town**, environment committee |
| | | 3.1.3. Set up a participatory environmental budget, where citizens vote on conservation projects to be funded | 1 year | Budget set up and annual amount allocated to the participatory environmental budget | **Town**, environment committee, citizen participation |
| | 3.2 Creating partnerships for conservation | 3.2.1. Create a group of volunteer residents to help restore sensitive public ecological habitats. | 1 year | Number of restoration activities organized | **Town**, environment committee, citizen participation |
| | | 3.2.2. Mobilize and support private landowners on possible pro-biodiversity landscaping solutions for creating wildlife and plant habitats on private land (ecological garden design, permaculture, etc.), in collaboration with organic farming organizations. | 3 years | Citizen support program developed and implemented and number of pro-biodiversity action implemented | **Town, environment committee**, organic farming organizations, conservation NPOs, private landowners |

## Mapping the areas of influence of Strategic Orientation 3 - Engaging the community in conservation

Strategic Orientation 3 focuses on engaging the public in the conservation of natural areas. The actions presented require the participation of a number of actors, such as citizens, businesses and organizations working in the environment[1], as well as schools. The following map shows the areas where projects involving the community on private land could be carried out.




[1] The environmental organizations shown on the map are those with a fixed address. Other environmental organizations are also active in the region (see players on page 112).

## Strategic Orientation 4 - Improving access to nature

### Objectives:

Hudson's network of trails, ecological corridors and riverbanks offers the public direct contact with a natural environment of the highest quality. This richness, however, remains underused or unevenly accessible. The challenge is not only to broaden access to nature, but also to manage it responsibly, promoting sustainable, inclusive and educational uses.

Improving the trail network involves rehabilitating existing routes, including uniform marking, clear signage and improved safety for users, especially children and people with reduced mobility. Special features, such as rest areas, observation points and access to wetlands, can enhance the experience while limiting environmental impact. Educational enhancement should also be considered: the addition of interpretation panels and interactive tools (QR codes, podcasts, online maps, etc.) at key points along the network would strengthen the link between the population and the territory, by disseminating content on local biodiversity, ecosystem services and the history of the area.

Hudson can also innovate on a regional scale: by collaborating with the municipalities of Rigaud, Saint-Lazare, Vaudreuil-Dorion and the Vaudreuil-Soulanges RCM, the town could plan a network of interconnected trails that would reinforce ecological continuity.

Finally, with regards to the oversight of uses, the introduction of a nature tourism management plan and ecological rest periods for the most fragile sites, as well as the compulsory cleaning of boats on bodies of water to limit the propagation of IAS, would make it possible to protect sensitive habitats while maintaining responsible access to these environments.

### Other related plans or studies :

The actions presented in Strategic Orientation 4 are complementary to the Town of Hudson Parks and Open Spaces Master Plan (available in summer 2025). They also respond to a need identified by Hudson residents and conservation organizations during consultation activities carried out as part of the Natural Areas Conservation Plan.

### Implementation constraints and challenges :

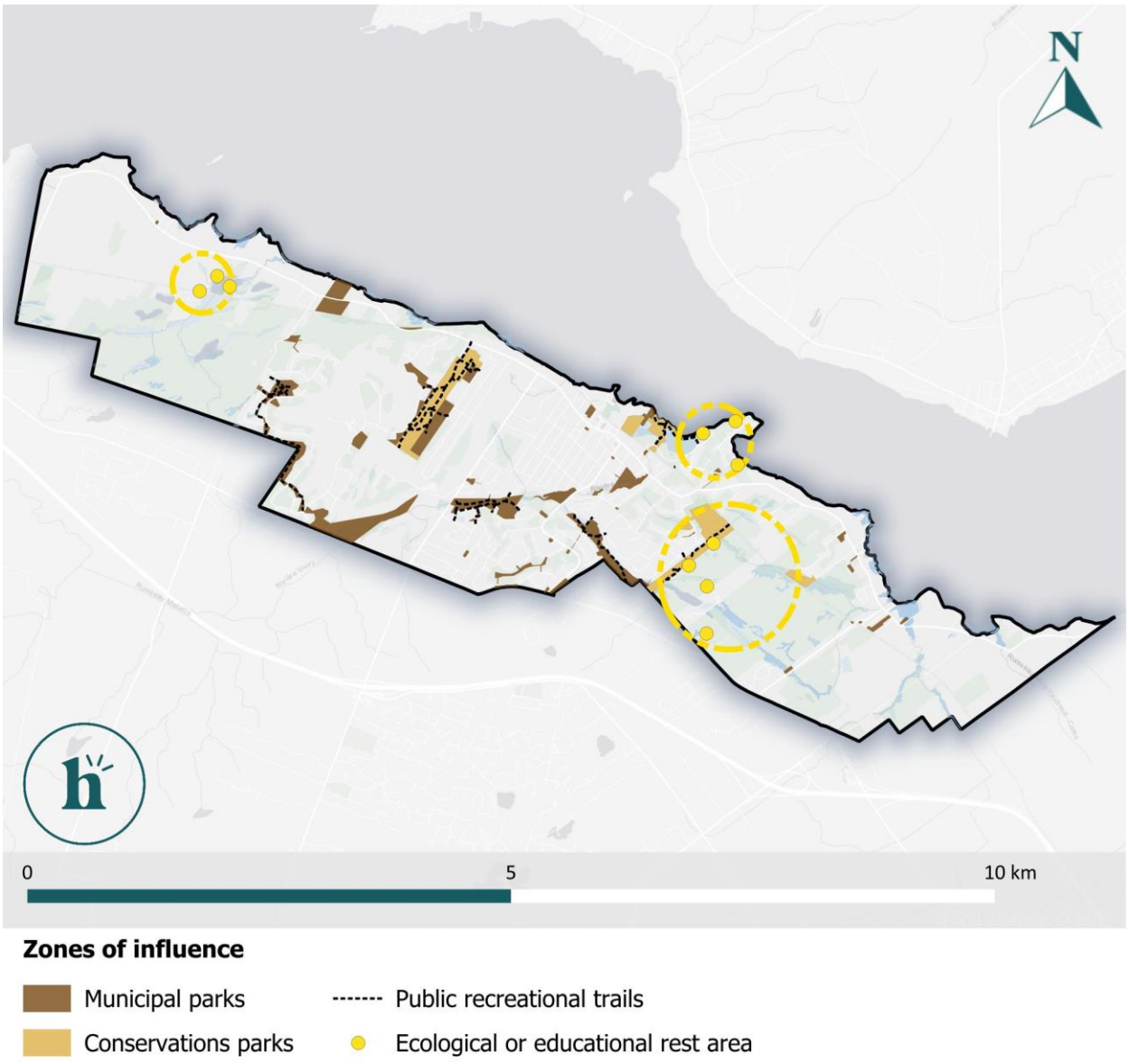
| CONSTRAINT | CHALLENGE |
|---|---|
| **Unsupervised use of natural areas** | • Risk of degradation in sensitive areas (riverbanks, wetlands).<br>• No nature tourism management plan or ecological rest period. |
| **Conflict of use and noise** | • Incompatible uses on certain stretches (cycling, walking, dogs).<br>• Problems of noise pollution or disrespect for the natural environment. |
| **Private or unprotected rights-of-way** | • Trails on private land without formal agreement.<br>• Difficulty maintaining or improving trails. |
| **Insufficient regional coordination** | • Little formal collaboration with Rigaud, Vaudreuil-Dorion and the RCM to connect trail networks.<br>• Lack of shared tools to promote intermunicipal routes. |
| **Lack of monitoring** | • No system for assessing infrastructure condition or measuring the social and ecological benefits of access to nature. |
| **Unequal access to nature** | • Few trails accessible to people with reduced mobility or families with children.<br>• Natural areas difficult to access without a vehicle.<br>• Need for improved signage on trails and parks (recreational or conservation vocation). |
| **Limited municipal capacity** | • Insufficient human and financial resources to maintain and develop the trail network.<br>• Difficulty hosting interpretation programs or educational events. |

## Strategic Orientation 4 - objectives and actions

| Orientation | Conservation objectives | Actions | Duration | Monitoring indicators | Key stakeholders and partners involved (responsible actor in bold) |
|---|---|---|---|---|---|
| **4. Facilitating equitable access that respects nature** | 4.1. Enhance and improve the trail network | 4.1.1 Identify strategic locations (trails, parks, ecological corridors) for interpretive panels and other educational aids. | 3 years | Number of signs installed | **Town,** environment committee, tourism groups |
| | | 4.1.2. Raise citizen awareness of trail marking to prevent off-trail trampling. | 3 years | Number of trails rehabilitated | **Town**, conservation NPOs, tourism groups |
| | | 4.1.3 Install interactive educational infratructures, such as QR codes leading to awareness-raising tools. | 3 years | Number of infrastructures and tools created | Town, **conservation NPO** |
| | 4.2. Educating through the interpretation of nature | 4.2.1. Develop panel content in partnership with local stakeholders | 3 years | Number of signs installed | **Town**, environment committee |
| | | 4.2.2. Organize various annual events to raise public awareness of environmental issues. | 1 year | Number of events offered | **Town**, environment committee |
| | | 4.2.3. Evaluate the use of integrated facilities at interpretive sites, making adjustments where necessary to improve the user experience. | 5 years | Continuous monitoring | **Town**, environment committee |
| | 4.3 Encouraging sustainable recreational practices in ecological corridors | 4.3.1. Create an ecological code of conduct for trail users | 3 years | Code of conduct created | **Town,** environment committee |
| | | 4.3.2. Reduce the impact of recreational activities on water bodies, in particular by cleaning boats | 3 years | Number of boat cleaning operations carried out | Town, population, **conservation NPO** |
| | | 4.3.3. Providing environmentally-friendly public access to water | 5 years | Number of new or improved public water access points | **Town**, COBAVER-VS |

### Mapping the areas of influence of Strategic Orientation 4 - Facilitate equitable access to and respect for nature

The actions proposed in this final strategic orientation are aimed at improving access to nature for the Hudson population as a whole. To achieve this, it is important to differenciate between conservation and recreational zones. The following map shows these vocations in various parks on the territory.



### Potential actors for implementing Action Plan

The responsible actor is the person or organization responsible for implementing the action. It is the responsible actor who will monitor the progress or completion of the action using the proposed monitoring indicator.

Potential responsible actors:

- Town of Hudson: Environment department
- Private landowners: citizens of the Town of Hudson wishing to carry out voluntary conservation actions or participate in conservation efforts on their land
- Agricultural landowners: owners of agricultural land in the area, particularly in the ecological corridors targeted by the conservation plan
- Golf course owners: owners of golf courses in the area
- Population: All citizens of the Town of Hudson
- Conservation NPOs: organizations working in the field of conservation or the environment on Town of Hudson territory (e.g. Creek 53 Conservation Trust, Nature Hudson, Nature Conservancy of Canada, Hudson Forest Play, Le Nichoir, etc.)

The various partners involved support the responsible actor through one or more stages of an action (planning, implementation, monitoring).

Partners for the implementation of actions :

- RCM: Regional County Municipality of Vaudreuil-Soulanges
- Neighbouringy towns: Rigaud, Saint-Lazare, Vaudreuil-Dorion
- Organic farming organizations: organizations on the Hudson territory that promote organic farming practices (e.g. Le Verger de Hudson Bio, Ferme communautaire *Betterêve/Heartbeet Community* Farm)
- Social NPOs: organizations offering social and community services on the Hudson territory
- Provincial government
- Federal government
- Local history associations
- Local and regional tourism groups
- COBAVER-VS and Conseil Région de l'Environnement (CRE) Montérégie
- Indigenous communities (e.g. Kanesatake)

## 3. SECTION 2 - STRATEGIC PLANNING BY PRIORITY SECTOR

**Objective:** Phase 2 of the action plan targets priority sectors for conservation, where specific interventions are needed to protect and restore all ecosystems. However, all three targeted areas—the Viviry corridor, the Black Creek corridor, and the western wooded area (Western Forest)—face specific challenges related to development pressure, the vulnerability of natural environments, and the complexity of land use planning. This component therefore allows conservation actions to be tailored to the ecological and social characteristics of each site, while focusing on the ecological and landscape functions of watercourses as the backbone of the Hudson ecological network.

### **3.1.** Mapping interventions on priority corridors

The maps in Section 2 illustrate in a targeted way the proposed interventions in the three priority corridors of the Hudson territory. Unlike the zone-of-influence maps in Section 1, these maps spatialize the types of intervention to be implemented, such as restoration projects, trail development or areas to be protected. These maps are intended to support the implementation of actions by facilitating their visualization, spatial planning, and monitoring. They also provide a better understanding of the ecological characteristics of each corridor and reinforce the coherence between the strategic orientations of the plan and the realities on the ground in each sector.

## 3.2. Corridor planning

### Priority Area 1 - Viviry Corridor

**Site description:**

The Viviry corridor occupies a central and symbolic place in the Hudson territory. It follows the Viviry River valley, a watercourse that starts in Saint-Lazare, flows through Vaudreuil-Dorion, then crosses through Hudson before emptying into the Ottawa River. This corridor forms an ecological backbone within the heart of the town, linking wetlands, marshes, riparian zones and mixed forests.

Around Sandy Beach, at the river outlet, the landscape is dominated by extensive open and forested wetlands, providing high quality habitats for a diverse range of wildlife, including nesting birds, amphibians and several mammal species. The presence of the river, combined with the site's wooded and marshy features, creates a particularly rich and functional ecosystem.

In addition to its ecological importance, the Viviry corridor has great historical, cultural and sentimental value for residents. A place of strong attachment for the population, it is often perceived as a symbol of Hudson's identity. However, the presence of the urban core at the heart of the corridor fragments this natural space and limits the movement of wildlife, except in areas that are still connected, such as along the Viviry River and the Taylor Bradbury Trail, which act as an ecological link between the natural areas at either end of the territory.

**Specific issues related to Conservation Plan analyses:**

- Classified asLevel 1 (highest) conservation priority[2]
- High ecological connectivity
- Ecological fragmentation due to urbanization and land pressure
- Bank erosion and water quality deterioration in the downstream portion of Viviry River
- Hotspot for avifauna and herpetofauna throughout the corridor, particularly within Sandy Beach
- Multiple animal habitats upstream of the Viviry River
- Presence of IAS (buckthorn, phragmites, purple loosestrife)[3]
- SAR in Sandy Beach's natural environment

[2] Eco2Urb 2020 report, in which conservation levels were proposed for natural areas (section 4.2.1).
[3] Eco2Urb 2020 report, in which the Viviry corridor was identified as one of the areas with a very high distribution of invasive alien species.

**Specific interventions to be undertaken:**

| INTERVENTION | DESCRIPTION | INDICATOR |
|---|---|---|
| **Ecological restoration** | 1. Stabilize of eroded Viviry River banks using plant engineering techniques (native planting).<br>2. Restore fragmented connectivity zones (shrub hedges, wooded islands, etc.).<br>3. Identify areas to be revegetated upstream of the river to promote wildlife habitats (amphibians, birds).<br>4. Monitor water quality and regeneration of native vegetation. | 1. Number of linear metres of riverbank stabilized using plant-based techniques.<br>2. Area (in m² or ha) of ecological "connectors" created or restored.<br>3. Number of critical areas identified and mapped for wildlife revegetation.<br>4. Survey frequency (annual, seasonal, etc.). |
| **Legal protection and conservation / Improving connectivity** | 1. Negotiate voluntary agreements with private landowners to establish conservation easements to secure core natural areas at risk of development and in unprotected portions of the corridor (e.g., a portion of Pine Lake and wetlands adjacent to the Viviry corridor).<br>2. Register a right of pre-emption on private land with high ecological potential to avoid subdivision.<br>3. Integrate priority natural areas of high ecological value into conservation zoning.<br>4. Apply for Man-made Landscape status for the Viviry corridor. | 1. Number of agreements negotiated.<br>2. Number of plots acquired by right of pre-emption.<br>3. Zoning update / inclusion of zones in the urban plan.<br>4. Official filing of a designation request with the MELCCFP, granting of status obtained (yes/no) and area covered. |
| **Elimination and/or control of invasive species** | Manual uprooting, covering or cutting, followed by planting of native vegetation. | Percentage reduction in cover of the dominant IAS at target sites. |
| **Access and usage management** | Redevelop Taylor Bradbury trails (trail markers, closure of critical areas, educational signage). | Length of trail / reduction in off-trail use. |

## Mapping interventions on the Viviry corridor:

## Priority Area 2 - Black Creek Corridor (Como Forest)

### Site description:

Located in the east of Hudson, the Black Creek corridor is an important ecological axis around the eponymous creek. This watercourse crosses the physiographic units of the Hudson slopes and the Como plain, linking several high-value natural areas, forested wetlands, farmland and mature forests.

The Davidson Park area, included in this corridor, is a habitat for the map turtle, a species of conservation status. Nearby, the Como golf course occupies a vast area within the corridor's green space. Although used for recreational purposes, this site offers conservation potential if managed sustainably. Further north, the Como Forest, a major forest area, is characterized by mature forest cover and remarkable ecological diversity. The Davidson Park recreational trail, which crosses a wooded portion of the corridor, is the main link between the Como sector and the Viviry corridor, providing ecological continuity across the territory.

Finally, the adjacent farmland and natural meadows provide a favorable habitat for pollinating insects and serve as important buffer zones between the open environments and the surrounding forests, notably the Como Forest.

### Specific issues related to Conservation Plan analyses:

- Classification as level 1,2 and 4 conservation priority[4]
- Vulnerable to recreational development around the Como Forest
- Risk of water contamination from adjacent human activities (recreational and agricultural)
- High functional diversity in the woodlands near Como golf course
- Bank erosion caused by flooding and loss of riparian vegetation
- Disturbance of wildlife habitats caused by heavy anthropogenic disturbance
- Large number of SAR
- Very high herpetofauna hotspot near Como Forest and Black Creek
- Presence of IAS such as phragmites and buckthorn

[4] Eco2Urb 2020 report, in which conservation levels were proposed for natural areas (sections 4.2.1, 4.2.2 and 4.2.3).

**Specific interventions to be undertaken:**

| INTERVENTION | DESCRIPTION | INDICATOR |
|---|---|---|
| **Ecological restoration** | 1. Stabilize eroded Black Creek banks using plant engineering techniques (native plantings).<br>2. Create riparian buffer zones in agricultural areas near Black Creek and ecologically valuable wetlands to filter nutrients and sediments (reduction of drains, control of trampling).<br>3. Identify and secure (shoreline protection, reduced disturbance) critical habitats for map turtles and other herpetofauna in sensitive areas.<br>4. Monitor water quality and regeneration of native vegetation. | 1. Length (m) of restored banks.<br>2. Number or area (ha) of buffer zones created.<br>3. Number of specific management action for map turtle protection.<br>4. Number of micro-habitats created.<br>5. Survey frequency (annual, seasonal, etc.). |
| **Legal protection and conservation/ Improving ecological connectivity** | 1. Negotiate voluntary agreements with private landowners to establish conservation easements to secure natural area sensitive to development and in unprotected portions of the corridor (the portion between Davidson Park and Como Forest, etc.).<br>2. Register a right of pre-emption on private land with high ecological potential to avoid subdivision.<br>3. Integrate priority natural lands of high ecological value into conservation zoning.<br>4. Planting of windbreaks and shrub hedges between natural meadows/agricultural land and the Como Forest. | 1. Number of agreements negotiated.<br>2. Number of plots acquired by right of pre-emption.<br>3. Updating zoning / inclusion in urban plans.<br>4. Length of hedges and windbreaks planted. |
| **Elimination and/or control of invasive species** | Manual uprooting, tarping or cutting, followed by planting of native vegetation (mainly on Davidson Park trails). | Percentage reduction of the dominant IAS at targeted sites. |
| **Access and usage management** | 1. Redevelop Davidson Park trails (marking, closing critical areas, educational signage).<br>2. Work with Como golf course managers to adopt eco-responsible practices (pesticide reduction, shoreline protection, etc.). | 1. Reduced off-trail use.<br>2. Number of sustainable practices implemented. |

Mapping interventions on the Black Creek corridor:


Wetlands
Forested wetlands
Open wetlands

Parks
Trails

West Corridor actions
A Ecological restoration
B Improve connectivity
C Invasive species control
Access and use management

## Priority area 3 - West Forest Corridor

### Site description:

Located to the west of the Hudson territory, the West Forest corridor is characterized by a particular concentration of natural areas of interest, combining rivers, marshes, swamps, peat bogs and mature woodlands. Structured around the Alstonvale escarpment, it extends as far as the Choisy Plain, where open farmland and natural grasslands complement the other environments as transitional and foraging environments for wildlife, particularly grassland birds and pollinators.

This area contains several large, open wetlands with little human intervention, offering ideal conditions for nesting, hydrological regulation and carbon storage. Recurrent observations of avifauna in the central part of the forest massif underline the importance of these marshes and bogs as migratory stopover and breeding sites. It includes the northern part of the Creek 53 Conservation Trust, whose mission is to preserve the biodiversity and ecosystem integrity of the area's mosaic of wetlands, meadows and forests.

Alstonvale Forest, on the eastern edge of the corridor, is a relatively continuous wooded area which, together with the Clark-Sydenham Private Ecological Area, forms a strategic forest corridor for ecological connectivity. These wooded areas provide refuges for small wildlife and movement corridors for species more sensitive to fragmentation.

### Specific issues related to Conservation Plan analyses:

- Classified as conservation priority levels 1, 3 and 4[5]
- Strong importance for regional connectivity
- High vulnerability to anthropogenic threats (susceptibility to development)
- High functional diversity of forests north of the Alstonvale escarpment, near the Ottawa River
- Presence of IAS
- River drought vulnerability index higher in Alstonvale escarpment

[5] Eco2Urb 2020 report, in which conservation levels were proposed for natural areas (sections 4.2.1, 4.2.2 and 4.2.3).

**Specific interventions to be undertaken:**

| INTERVENTION | DESCRIPTION | INDICATOR |
|---|---|---|
| **Ecological restoration** | 1. Stabilize eroded banks of the Fiefs River using plant engineering techniques (native planting).<br>2. Create riparianbuffer zones around agricultural areas near the Fiefs River and ecologically valuable wetlands to filter nutrients and sediments (reduction of drains, reduce trampling).<br>3. Identify and secure (shoreline protection, reduced disturbance) critical habitats for herpetofauna and avifauna species in sensitive areas.<br>4. Monitor water quality and regeneration of native vegetation. | 1. Length (m) of restored banks.<br>2. Number of buffer zones created.<br>3. Number of specific actions for map turtles.<br>4. Number of micro-habitats created.<br>5. Survey frequency (annual, seasonal, etc.). |
| **Legal protection and conservation/**<br>**Improving ecological connectivity** | 1. Negotiate voluntary agreements with private landowners to establish conservation easements to secure natural areas sensitive to development and in unprotected portions of the corridor.<br>2. Register a right of pre-emption on private land with high ecological potential to avoid subdivision.<br>3. Integrate priority natural lands with high ecological value into conservation zoning.<br>4. Maintain and expand wooded corridors between Alstonvale Forest and Clark-Sydenham Conservation Area by planting native tree species. | 1. Number of agreements negotiated.<br>2. Number of plots acquired by right of pre-emption.<br>3. Updating zoning / inclusion in urban plans.<br>4. Number of plantings / area planted. |
| **Elimination and/or control of invasive species** | Manual uprooting, tarping or cutting, followed by planting of native vegetation (mainly Gary Cirko trails). | Percentage reduction of the main IAS at targeted sites. |
| **Access and usage management** | Redevelop Gary Cirko trails (marking, closing critical areas, educational signs). | Reduction off-trail use. |
| **Reducing vulnerability to climate change** | Identify and restore drought-sensitive areas (Alstonvale escarpment) by promoting drought-resistant species and forest regeneration. | Area (ha) restored in vulnerable zones. |

## Mapping interventions on the West Forest Corridor:


Wetlands
- Forested wetlands
- Open wetlands

- Parks
- Trails

West Corridor actions
- A Ecological restoration
- B Improve connectivity
- C Invasive species control
- Reduce vulnerability to climate change

## 4. A FINAL WORD

The Town of Hudson's Natural Areas Conservation Action Plan is structured around two complementary components: i) strategic orientations, which define a framework for intervention on a territory-wide scale, and ii) priority sites, which target key corridors requiring measures adapted to their ecological and social realities. These two components are not isolated, but rather are mutually reinforcing-dependent. For example, several general actions, such as zoning changes, incentives for voluntary conservation or restoration of degraded environments, will find their full application within the corridors identified as priorities. Conversely, the issues observed in these sites - such as erosion, fragmentation or the presence of species at risk - justify and guide the nature of the actions proposed throughout the territory. It is this articulation that ensures coherent action, optimizing available resources, acting at different scales and responding to local priorities while respecting regional and international biodiversity targets.

One thing is certain: citizen involvement remains fundamental. Such participation cannot be not limited to the planning phase but is essential that citizens remain engaged through implementation and maintenance activities include pro-biodiversity landscaping, participation in citizen science, and support for voluntary conservation. It is through collective mobilization - where the Town, organizations, private landowners and citizens all move in the same direction - that Hudson can become an inspiring model of community conservation and ensure the sustainability of its natural areas for future generations.

## APPENDIX 1 - CONSERVATION TOOLS AND MECHANISMS

| SCALE OF APPLICATION | CONSERVATION TOOL OR MECHANISM | LEGISLATION | PROTECTION LEVEL | PERPETUITY |
|---|---|---|---|---|
| **Vaudreuil-Soulanges RCM** | **Special ecological allocations** mentioned in the SADR<br>These zones may be subject to strict restrictions on land use. | Urban Planning and Development Act (LAU) | Medium | - |
| | **Areas of ecological interest**<br>The SADR presents development intentions for the protection of identified areas of ecological interest. These include protected areas of ecological interest, exceptional forest ecosystems and wildlife habitats. | | | |
| | **Interim Control Regulations (RCI)**<br>Temporarily freezes development in specific areas until permanent conservation measures or new regulations are adopted. | | | |
| | **Identification of areas of interest in the Regional Wetlands and Water Management Plan (PRMHH)**<br>Identify wetlands and water environments of interest and propose guidelines and objectives for their protection, restoration and sustainable management. | | | |
| | **Strategies for acquiring** natural areas<br>The RCM can purchase or secure ecologically sensitive land to become nature reserves or protected parks. | | | |
| | **Conservation easement**<br>Landowners agree to permanent restrictions on the use of their land, without the RCM purchasing the parcel. | | | |
| | **Incentive or compensation programs**<br>Require funding for restoration, following the destruction of another natural environment, or include tax breaks, subsidies for ecological restoration projects in development projects. | | | |
| | **Tree and woodland protection policy**<br>Adoption of by-laws to limit tree felling in sensitive areas. | | | |

| SCALE OF APPLICATION | TOOL OR MECHANISM | PROTECTION LEVEL | PERPETUITY |
|---|---|---|---|
| **RCM Vaudreuil-Soulanges, Town of Hudson and citizens** (voluntary conservation) | **Designation of a "Man-made" landscape (minimum 25 years)**<br><br>Protected area designated by the Quebec government, recognized for its ecological, landscape, heritage or cultural value, while actively inhabited or used by humans. It is a voluntary conservation tool designed to protect a territory shaped by sustainable human activities, while maintaining its natural characteristics.<br><br>This type of designation is particularly well suited to agricultural, forested or semi-rural areas, such as those in Hudson, where the cohabitation of nature and human occupation is well established.<br><br>E.g., designate a "man-made" landscape in a portion of its agricultural territory bordered by wetlands and woodlands, where sustainable agricultural practices coexist with rich biodiversity and important ecological corridors.<br><br>Advantages:<br><br>• Allows human use and conservation to coexist, unlike many other protected areas<br>• Strong, lasting legal protection of the territory<br>• Provincial recognition of ecological and cultural heritage<br>• Can promote agri-tourism, education and community involvement<br>• A good tool for agricultural and populated areas like Hudson<br><br>Limits:<br><br>• Long designation process, requiring coordination between several actors (municipality, citizens, land owners)<br>• Requires a structured conservation project, an action plan and clear governance<br>• Human activities must already be compatible with conservation - this is not a tool to correct existing problematic uses<br>• No direct financial compensation for owners<br>• Monitoring and supervision depend on local resources, which can limit effectiveness without external support | High | Yes |

| SCALE OF APPLICATION | TOOL OR MECHANISM | LEGISLATION | PROTECTION LEVEL | PERPETUITY |
|---|---|---|---|---|
| **Town of Hudson** | **Zoning by-laws**<br>Designates areas for conservation, limiting human activities and development. | Urban Planning and Development Act (LAU)<br>- Cities and Towns Act | Moderate | - |
| | **Site planning and architectural integration program (PIIA)**<br>Although it mainly regulates the layout and architecture of specific zones, this type of plan can include criteria for the protection of natural areas, setbacks for watercourses, and requirements for the maintenance of vegetation. It empowers the CCU (Comité Consultatif d'Urbanisme) and Town Council to make qualitative assessments of projects. | | | |
| | **Comprehensive development plan (PAE)**<br>Coordinate the long-term development of an area in an integrated manner, including portions of land dedicated to the conservation of natural areas. | | | |
| | **Special planning programs (PPU)**<br>Restrict development activities or impose measures to preserve the integrity of natural areas, by taking a detailed, sector-based approach. | | | |
| | **Specific project for the construction, alteration or occupancy of an immovable (PPCMOI)**<br>Override measure that allows projects to deviate from the usual regulations, to enable value-added projects for the community. Can be used proactively by creating specific regulations. | | | |
| | **Contribution for park purposes (fund)**<br>Requires the developer to make a contribution, either in the form of green space in the project, or in the form of financial compensation. Funds raised can be used to acquire land, and help finance conservation. | | | |
| | **Inter-municipal conservation agreements**<br>Creates agreements directly with landowners or developers, imposing targeted restrictions or including ecological restoration commitments. Local municipalities can also join forces with an RCM. | - Municipal code<br>- Cities and Towns Act | | |

| SCALE OF APPLICATION | TOOL OR MECHANISM | PROTECTION LEVEL | PERPETUITY |
|---|---|---|---|
| **Citizen and/or municipal** (Voluntary conservation) | **Conservation easement (gift or sale**)<br><br>A legal instrument establishing a permanent restriction on the use of a parcel of land, often privately owned, without transferring ownership. It is concluded between the landowner and a conservation organization (municipality, environmental organization, etc.) and includes a prohibition on building, clearing, draining wetlands or exploiting natural resources on the land, which is transferred to future owners. Conservation restrictions follow the land, regardless of changes in ownership. This enables private land management to complement public conservation measures, by restricting resource exploitation without requiring acquisition by a conservation organization. A conservation easement is often concluded with a conservation organization, which is responsible for monitoring and ensuring compliance with the restrictions imposed on the land.<br><br>E.g., Servitude for the protection of wetlands, wildlife habitats or woodlands and forests<br><br>Advantages:<br>• It offers long-term legal protection that continues even if there is a change of ownership.<br>• Landowners can retain the use of their land while actively contributing to the conservation of the environment.<br><br>Limits:<br>• May entail administrative costs and regular monitoring<br>• Difficult to achieve ambitious conservation goals without regulatory support<br>• Variations in commitments make coordination complex | Medium | - |
| | **Donation/sale/transfer to a conservation organization**<br><br>A strategy in which a landowner transfers all or part of their land to a conservation organization (municipality, environmental organization, conservation trust, etc.). By transferring ownership to a conservation organization, the land becomes permanently protected, as the organization manages the land with the explicit aim of conserving natural areas. In the case of sale, there may be a discounted sale, where the owner sells the land at less than market value to support conservation efforts while receiving compensation, or a direct sale, where the land is sold at full value, but with the commitment that the organization will use it solely for conservation purposes.<br><br>E.g.-Donation of land to a conservation trust<br><br>-Transfer of wildlife habitat to a municipality for inclusion in a larger conservation area.<br><br>Advantages: | High | Yes |

| | | | |
|---|---|---|---|
| | • Protection in perpetuity<br>• Conservation organizations have the expertise to manage and protect land for ecological value<br>• Owners benefit from tax and financial compensation, particularly in the case of gifts or sales at reduced prices.<br>Limits:<br>• Loss of landowner's property rights on transfer.<br>• In certain cases, the organization may decide to limit public access to the land for ecological protection reasons. | | |

| SCALE OF APPLICATION | TOOL OR MECHANISM | PROTECTION LEVEL | PERPETUITY |
|---|---|---|---|
| **Citizen** (Voluntary conservation) | **Floristic habitat designation**<br>A legal mechanism provided for under Quebec's Act respecting threatened or vulnerable species (LEMV). It aims to protect natural areas essential to the survival of plants designated as threatened or vulnerable, in partnership with landowners, without resorting to expropriation.<br>E.g., A privately-owned property in Hudson containing a population of the vulnerable orchid platanthère could be designated as a floristic habitat if the owner applies to the Ministry and the site is deemed eligible.<br>Advantages:<br>• Strong, lasting legal protection of the environment without loss of ownership.<br>• Official recognition by the Quebec government.<br>• No obligation to open the property to the public.<br>• Complementarity with other voluntary conservation tools (easements, donations).<br>• Increased credibility for landowners wishing to highlight their environmental role.<br>Limits:<br>• Restricted to plant species listed as threatened or vulnerable in Quebec. Other types of habitat (wildlife, ecosystem) are not eligible.<br>• Identification of the species required on site - often requires botanical expertise or government validation.<br>• Voluntary commitment required: a landowner can refuse. | High | Yes |

habitat-nature.com

5605 Av de Gaspé - Suite 801, Montréal, QC H2T 2A4

+1 438 825-445
info@habitat-nature.com