

Greening the Region Metropolitan Governance and Biodiversity Protection in Montreal and Toronto

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Résumé de l'article

Reconnaissant que la perte de biodiversité et les changements climatiques sont des crises jumelles, les régions métropolitaines du monde entier cherchent à mettre en œuvre des stratégies de biodiversité par le biais de formes spécifiques de gouvernance métropolitaine ancrées dans les héritages institutionnels existants. Pour comprendre les effets des institutions métropolitaines sur la gouvernance de la biodiversité urbaine, nous examinons les structures institutionnelles et régionales des deux régions métropolitaines les plus peuplées du Canada, le Grand Montréal et le Grand Toronto. Cet article compare les conséquences politiques distinctes de la structure institutionnelle du Grand Montréal et du Grand Toronto. Il tente d'améliorer notre compréhension de la manière dont un deuxième palier de gouvernement à Montréal (la Communauté métropolitaine de Montréal), qui fixe les objectifs de protection et de conservation de la biodiversité dans la région métropolitaine de Montréal, contraste avec la région de Toronto, dont la plus grande région est plus directement gouvernée par la Province de l'Ontario. En nous appuyant à la fois sur les travaux d'Elinor Ostrom sur la gouvernance métropolitaine et sur des entretiens avec des acteurs urbains dans les deux régions métropolitaines étudiées, nous démontrons comment des arrangements institutionnels fragmentés sont dominés par la gestion provinciale (comme c'est le cas pour la région de Toronto), et conduisent à des résultats moins bons pour la biodiversité.

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Greening the Region: Metropolitan Governance and Biodiversity Protection in Montreal and Toronto

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Abstract

Recognizing that biodiversity loss and climate change are twin crises, urban regions across the world are seeking to implement biodiversity strategies through specific forms of urban governance embedded in existing institutional legacies. To understand the effects of metropolitan institutions on the governance of urban biodiversity, we examine the institutional and regional structures of Canada's two most populous metropolitan regions, Greater Montreal and Greater Toronto. This article compares the distinct policy consequences of the institutional set-up of Greater Montreal and Greater Toronto. This includes understanding how a second tier of government in Montreal (the Communauté métropolitaine de Montréal), which sets biodiversity protection and conservation targets in the Montreal region, contrasts with the Toronto region, whose larger region is more directly governed by the Province of Ontario. Drawing on both the work of Elinor Ostrom on metropolitan governance and interviews with urban actors in both urban areas under consideration, we show how fragmented institutional arrangements are dominated by provincial management (as the case is for the Toronto region), and lead to worse outcomes for biodiversity.

Résumé

Reconnaissant que la perte de biodiversité et les changements climatiques sont des crises jumelles, les régions métropolitaines du monde entier cherchent à mettre en œuvre des stratégies de biodiversité par le biais de formes spécifiques de gouvernance métropolitaine ancrées dans les héritages institutionnels existants. Pour comprendre les effets des institutions métropolitaines sur la gouvernance de la biodiversité urbaine, nous examinons les structures institutionnelles et régionales des deux régions métropolitaines les plus peuplées du Canada, le Grand Montréal et le Grand Toronto. Cet article compare les conséquences politiques distinctes de la structure institutionnelle du Grand Montréal et du Grand Toronto. Il tente d'améliorer notre compréhension de la manière dont un deuxième palier de gouvernement à Montréal (la Communauté métropolitaine de Montréal), qui fixe les objectifs de protection et de conservation de la biodiversité dans la région métropolitaine de Montréal, contraste avec la région de Toronto, dont la plus grande région est plus directement gouvernée par la Province de l'Ontario. En nous appuyant à la fois sur les travaux d'Elinor Ostrom sur la gouvernance métropolitaine et sur des entretiens avec des acteurs urbains dans les deux régions métropolitaines étudiées, nous démontrons comment des arrangements institutionnels fragmentés sont dominés par la gestion provinciale (comme c'est le cas pour la région de Toronto), et conduisent à des résultats moins bons pour la biodiversité.

Keywords:

biodiversity, governance, metropolitan, policy, federalism, Montreal, Toronto

Mots-clés:

biodiversité, gouvernance, métropole, politiques, fédéralisme, Montréal, Toronto

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Introduction

Recognizing that biodiversity loss and climate change are twin crises, urban regions across the world are seeking to implement biodiversity strategies (Renoux & Tiwari, 2020). This is the case in Canada, a federal country in which the powers municipalities possess are tightly circumscribed by the provinces where they are located. Provinces set the rules of the game for municipal governments, including the size, scope, and autonomy of regional projects they are enabled to undertake. This is due to their non-existence in Canada's constitution, and their status as 'creatures of the provinces'. A lack of constitutional autonomy exists both for municipalities and the metropolitan regions of which they are a part, meaning the legislative ability of cities to collaborate with each other on regional goals is determined by the provinces (Sancton, 2000).

Constrained municipal-provincial relationships are nothing new for municipalities in Canada. The speed with which municipalities must transform in the coming years due to climate change, however, is unprecedented. The Intergovernmental Panel on Climate Change (IPCC) is clear that governments have until 2030 to limit global emissions to 1.5 degrees Celsius. Without immediate action, ecological, economic, social, and political life will be fundamentally transformed (IPCC, 2018). For Canada to decrease its emissions, policymakers cannot ignore the role cities play in combatting the biodiversity crisis. Beneficially, biodiversity protection policy is substantially more effective at larger scales (Bush, Coffey, & Fastenrath, 2020; Miller et al., 2008; Hunter, 2007). This fact, combined with the key roles municipalities will play in reaching emissions targets, means that understanding the role of governance in metropolitan regions is essential to Canada's biodiversity protection.

To assess the effects of metropolitan institutions on the governance of urban biodiversity, we examine the structures of Canada's two most populous metropolitan regions, Greater Montreal and Greater Toronto. On top of large populations, Greater Montreal and Greater Toronto are some of the most sprawling urban regions in the country, have complex governance structures, and are located in areas with high biodiversity (a major river and a lake, respectively). These two regions therefore have the potential to provide clear insights into urban governance in Canada—the politics of which extend far more broadly than their jurisdictional boundaries.

In this article, we question whether environmental protection is better provided at a regional scale, or by smaller units of government. At the heart of this inquiry are questions regarding the efficacy of two-tier government — a regional level of government between municipalities and upper levels of government — and its impact on biodiversity protection.

Drawing on both the work of Elinor Ostrom on metropolitan governance and interviews with political and bureaucratic actors in both urban areas under consideration, this paper compares the distinct policy consequences of the institutional set-up of Greater Montreal and Greater Toronto. This includes understanding how the Toronto region, whose larger region is fragmented and more directly governed by the Province of Ontario, contrasts with Montreal, which has a large and unified second tier of government (the *Communauté métropolitaine de Montréal*). We hypothesize that fragmented institutional arrangements will be dominated by provincial micromanagement and lead to worse outcomes for biodiversity governance. We illustrate this by comparing Greater Toronto to the *Communauté métropolitaine de Montréal* (CMM), which acts as an interlocutor with the province as well

as a platform for collaboration between municipalities in the Montreal region.

We find preliminary evidence that metropolitan regions in Canada with fragmented governance are worse at providing biodiversity protection and more vulnerable to provincial interference. By contrast, we find that metropolitan regions with unified governance are better at providing biodiversity protection, though they tend to be dominated by central cities.

Metropolitan and Urban Environmental Governance

Metropolitan Governance

The theoretical starting point of our paper is the work of Elinor and Vincent Ostrom on metropolitan governance. Across various works, the Ostroms spent time unpacking the suggestion that metropolitan regions are “one large community tied together by economic and social relationships”, yet are “artificially divided by imposed governmental units” (Ostrom, 1972, p. 475). According to this perspective, the fundamental problem of regional governance is the existence of multiple independent governments within a single area, which some purport leads to institutional failure (Ostrom, 1972; Ostrom & Bish, 1973). These statements illuminate an inherent tension between what size, level, and boundary of government most effectively provide services.

Responding to postwar suburbanization and the reordering of municipal governance by higher levels of government, Elinor Ostrom (1972) and Vincent Ostrom and Robert L. Bish (1973) outline two typologies of metropolitan governance — that is, the ways in which government, power, and responsibility are organized in metropolitan areas. The first typology is grounded in the postwar conception in North America that metropolitan regions were

plagued by too much bureaucracy and too many governing units, creating redundancy and variation in the quality of services (Greer, 1961; Ostrom & Bish, 1973). Ostrom calls this perspective “metropolitan reform”. Metropolitan reform proponents believe a single local government is the ideal structure of metropolitan governance. This system of municipal governance calls for the abolition of boundaries between local governments, ensuring the redistribution of resources across a single jurisdiction (Taylor, 2020; Greer, 1961). For metropolitan reformers, increasing the geographic size of city government, and decreasing the number of governmental units within the region reduces bureaucratic delay and increases efficiency.

The second typology suggested by Ostrom is political economy (sometimes referred to as public choice), in which multiple local governments and service providers operate in a polycentric system (1972). Ostrom suggests that metropolitan governance is sometimes similar to the production of private goods. Producing private goods involves “thousands of complex private industries” that involve hundreds of enterprises producing and distributing goods and finding the most efficient scale at which to do it (Ostrom, 1972, p. 481). Since hundreds of interactions between different public agencies occur in municipalities, Ostrom argues the “large number of public enterprises operating at the local level” is neither problematic nor an indication of bureaucratic inefficiency (1972, p. 481–82). In the political economy tradition, multiple autonomous municipalities in the same region enable metropolitan residents to ‘vote with their feet’ by moving where they will receive services at the cost they prefer to pay (Taylor, 2020).

New Regionalism

More recently, scholars of urban and metropolitan governance updated Ostrom’s discussion with the concept of “new regionalism”. Ostrom’s political

economy and metropolitan reform concepts were developed in a broader framework based on public choice and public competition (Wheeler, 2002). By contrast, new regionalism developed in the late 1990s in response to widespread disparities between core cities and their suburbs. A key aim of new regionalism is to examine issues created by the fragmentation of metropolitan regions. The postmodern metropolis, according to Wheeler (2002, p. 271), is “enormous in physical extent, increasingly polycentric, [and] fragmented politically”. The argument proposed by new regionalism is that today’s metropolitan regions are harder to govern coherently due to the sheer size of metropolises and require innovative solutions. While the needs of core cities and their suburbs may seem disparate, in reality, political coalitions can help resolve issues such as “maintaining a tax base and services” (Orfield, 1999). Pertinently, Wheeler’s 2002 summary of the principles of new regionalism discuss the politics and planning of the Toronto region. Examining its growth, Wheeler describes how between the 1950s and 1990s Greater Toronto was transformed into a polycentric metropolitan region with dynamic suburbs. This happened, in Wheeler’s appraisal, with little regional coherence or planning (2002).

A central challenge of new regionalism is the political possibility of its action-oriented principles being applied in Canada because of the supreme power of provinces in municipal and regional affairs. Yet Savitch and Vogel (2000) demonstrate that, in the absence of formal institutions for regional collaboration, political actors can be innovative. They create ad hoc working groups and sign operating agreements between municipalities outside the

framework of established hierarchies (Savitch & Vogel, 1996). This reality is sub-optimal, yet displays the ability of constrained actors to take action where fragmented institutions stagnate. Yet interest in Canada’s specific constitutional setting is not new nor unique: Sancton (2000; 2005; 2015) has extensively engaged with questions of fragmentation and unification across the multiple municipal mergers that happened between the 1980s and early 2000s.

Biodiversity as a Public Good

The idea that biodiversity is a public good is not new¹. Hough (1992; 2004) argued that urban regions are areas of major ecological diversity and urban governance is inextricable from environmental processes. Yet this concept is somewhat undertheorized in the literature on urban studies, political science, and geography (Mercier et al., 2018). Economists, by contrast, have underscored the myriad public benefits of biodiversity: resilient ecosystems, higher agricultural productivity, and protection against dangerous pathogens (Heal, 2003). Yet, these attributes are what render biodiversity difficult to govern. To begin with, biodiversity’s non-excludability means it is largely unprofitable to provide in market economies. For governments, the free rider problem, in which some people use a resource, but do not contribute to its production, also renders biodiversity challenging (Heal, 2003, p. 554). Relatedly, Rands et al. (2010, p. 1301) discuss how “no single body has jurisdiction” over the biodiversity of a region².

Despite her support for the political economy tradition, Ostrom is careful to distinguish that some services operate better at regional scales than others. Like the private sector, economies of scale exist in

¹ A public good is both non-excludable (available to all) and non-rivalrous (consumption by one person doesn’t restrict another’s consumption) (Héritier, 2001).

² This is true in Canada’s metropolitan regions, which are “jurisdictional archipelagos” (Klein & Tremblay, 2010, p.569).

the public sector for certain services (Christoffersen et al., 2007). The services that are better delivered at larger scales are heterogeneous and depend on characteristics like geographical reach (i.e. sprawl), population demographics, and physical geography (i.e. lakes, rivers, forests, etc.). Ostrom, for example, highlights services including air pollution control, public transportation, and water supply as industries that benefit from economies of scale (Ostrom, 1972).

A Regional Focus on Biodiversity

There is high confidence in the literature that the biodiversity protection improves when the issue is tackled at larger scales (Bush, Coffey, & Fastenrath, 2020; Miller et al., 2008; Hunter, 2007). Administratively, biodiversity planning is already recognized as something benefitting from larger-scale and integrated institutions (Cornet, 2020; Thiffault et al., 2015). Additionally, cities are also often more biodiverse than their surrounding areas due to the monocultural character of many agricultural lands, the location of many cities in fertile ecological areas, and trade routes bringing invasive species for settlement (Gandy, 2022). However, there is a broad lack of engagement and comprehensive understanding of the impacts of biodiversity and ecosystem services in municipalities in Canada (Kai et al., 2022). These dynamics mean that it is essential for us to understand how the structures of metropolitan institutions impact biodiversity governance.

Framework and Hypotheses

This paper is framed by Elinor Ostrom's Institutional Analysis and Development (IAD) framework. The IAD assesses how the institutional structures under which people live, as well as the people themselves, affect the management of common pool resources (e.g. fish stocks or woodlands) (Ostrom, 1990). We are adapting Ostrom's IAD framework for metropolitan

governance with a caveat: this discussion focuses on regions, not individual municipalities. That means that we have adapted metropolitan reform for Montreal, where there is a single, unified, upper-tier authority for the region, and for Toronto, where regional governance is fragmented. Thus, we have applied Ostrom's initial theory to the metropolitan level, rather than the municipal level. In our paper, metropolitan governance includes upper and lower-tier governments acting as Ostrom's 'municipal' units.

Ostrom (1990) outlines multiple propositions for urban regions governed under metropolitan reform and political economy systems. We have sought to harmonize her proposals with those of the metropolitan reform perspective to provide comparability between these propositions. In this paper, the core of these variables are whether goods provision is more unified (as in the *metropolitan governance* perspective), or whether they are less unified, and are more fragmented. Inherent in this unification/fragmentation debate is the degree of subordination between the province and the city; that is, the degree to which cities and their metropolitan regions can make self-contained decisions.

Adapting political economy and metropolitan reform for metropolitan regions

The metropolitan reform perspective is based on the concept that municipalities will be more successful under a unified municipal system (Wheeler, 2002; Ostrom, 1972). Ostrom summarizes seven propositions that can be observed if this tradition is to be effective (Ostrom, 1972, p. 479). Due to space constraints, this paper only retains three.

We hypothesize that a metropolitan reform approach to governance with respect to biodiversity leads to better biodiversity protection delivery due to increased equality in service provision, more equal distribution of costs, and increased subordination to the upper tier instead of orders of government above

Table 1. Theoretical Foundation of Metropolitan Reform

Governance method: metropolitan reform	Metropolitan reform - propositions (Ostrom, 1972, p. 479)	Adaptation for regional governance (by authors)	What would be observable (by authors)
1	Increasing the size of urban governmental units will be associated with more efficient provision of services, more equal distribution of costs to beneficiaries.	A single regional governance system (in terms of territory and government size) will result in more efficient service provision, higher equality in service provision, and more coherent orientations.	Increased equality in service provision, along with more coherent operations.
2	Reducing the number of public agencies within a metropolitan area will be associated with more output per capita, more efficient provision of services, more equal distribution of costs to beneficiaries.	A regional, non-fragmented second tier of government (reducing # of public agencies) will result in better provision of services, more equal distribution of costs.	More equal distribution of costs between municipalities.
3	Increasing the reliance upon hierarchy as an organizing principle within a metropolitan area will be associated with higher output per capita, more efficient provision of services, more equal distribution of costs to beneficiaries, and increased responsibility of local officials.	Regionally sized, unified second tiers of government reduce subordination, enable higher efficiency, and improve equality in service provision.	Increased subordination to the upper tier.

the region. We summarize these ideas in [Table 1](#) (above).

For the political economy perspective, Ostrom summarizes the propositions in [Table 2](#) (below). We hypothesize that the fragmented governance style of political economy tradition leads to weaker delivery of biodiversity protection at the regional scale. Our second hypothesis is that the larger the number of upper-tier agencies in the context of metropolitan governance, the weaker they are at providing regionally scoped projects. Thirdly, we hypothesize that fragmentation enables opportunities for intervention in regional public policy from higher orders of government.

Methodology

Our research question is as follows: *How do the institutional organizations of metropolitan regions*

*affect the governance of urban biodiversity?*³ As for case selection, we have chosen the Montreal and Toronto regions because they are by far the most populous in Canada and they belong to the two largest provinces in Ontario and Quebec. They follow markedly different forms of governance, which enabled us to grasp both the diversity of regional governance in Canada as well as understand the structures other provinces may seek to emulate. To get a better and more focused analysis of the cases, we picked two major regional projects in the Toronto and Montreal regions. The projects³ are:

- 1. Highway 413 in the Toronto region;
- 2. The Grand parc de l'Ouest (*Great Western Park*) in the Montreal region.

We selected these projects using two central criteria. First, the selected projects required a size

³ Note: neither project is complete. Highway 413 was paused for federal impact assessment in 2021 and only received approval in 2024. The Grand parc de l'Ouest has no official end date, but falls within Montreal's 2030 land conservation targets.

Table 2. Theoretical Foundation of Political Economy

Governance method: political economy	Political economy - propositions (Ostrom, 1972, p. 486)	Adaptation for regional governance (by author)	What would be observable (by author)
1	Whether increasing the size of urban governmental units will be associated with higher output per capita, more efficient provision of services, more equal distribution of costs to beneficiaries depends on upon the type of public good or service being considered.	Whether a fragmented system of second-tier governance is more effective in provision than unified upper-tier governance depends on the type of good or service being provided.	Biodiversity is the type of public good that benefits from smaller units.
2	Whether reducing the number of public agencies within a metropolitan area will be associated with more output per capita, more efficient provision of service and more equal distribution of costs to beneficiaries depends upon the type of public good or service being considered.	Depending on the type of good, a fragmented upper tier of governance will result in better provision of the public good or service being considered.	Biodiversity is the kind of good that benefits from institutional fragmentation.
3	Whether increasing the reliance upon hierarchy as an organizing principle within a metropolitan area will be associated with higher output per capita and more efficient provision of services depends upon the type of good or service.	A fragmented upper tier of metropolitan government, which decreases the strict subordination of municipalities to the province, will produce higher output per capita and more efficient provision of services, depending on the type of good or service.	Decreased subordination to the upper tier.

and scope that involved more than one municipality in their respective regions. To elaborate, the project has to be within the boundary of the metropolitan region, but also transboundary in nature. This is because often, but not as a rule, intermunicipal projects in Canada generally require the involvement of a higher political authority for planning and review, whether it be the province, an upper-tier municipality, or both.

Second, the projects required a significant (positive or negative) effect on the biodiversity of the metropolitan regions, whether by design or as an externality. Large-scale metropolitan projects to protect biodiversity are becoming more common, but are generally rare in Canada. Biodiversity protection projects tend to be focused at the municipal level, as opposed to regional, and are largely limited to individual parks (ICLEI - Local Governments for Sustainability, 2010)^{4,5}.

⁴ A potential concern about the selection of the two case studies under consideration is that they are not necessarily comparable in terms of desired outcomes. For instance, the creation of a highway, meant largely to shuttle road users and goods from one place to another, has a strikingly different end goal than the creation of a park, which is explicitly meant to conserve land that may otherwise be developed. To address this potential concern, we draw on two existing contributions, one theoretical and one practical. First is John Gerring's (2004) note that case studies help reveal the causal mechanisms of causal effects by examining "the motivations of the actors involved" (2004, pp. 348–49). We use two case studies to help unveil the causal mechanisms in the relationship between metropolitan institutions and the governance of urban biodiversity. These case studies, therefore, are not necessarily about the desired outcomes of each project, but instead about what their creation says about the metropolitan governance of biodiversity. Second, we draw from Kate Neville's work on case studies in contexts challenging to compare. An explicit comparison between cases is sometimes difficult because cases are conditioned by in political, financial, and social events (Neville, 2021, p. 4). Neville consequently uses cases studies as "explanations [of] dynamics" (Neville, 2021, p. 4). A methodological approach using disparate case studies has both precedent in the literature. Despite divergences in end-uses between our cases studies, they reveal insightful things about the mechanisms of fragmented and unified metropolitan institutions.

⁵ Future projects on regional governance could look at regional public transportation agencies. Both Greater Toronto (Metrolinx) and Greater Montreal (Autorité régionale de transport métropolitain) have regional agencies and would provide a robust comparison.

To study these two cases, we employ a qualitative case study approach. We do so for two reasons. First, we were not able to collect scientific data. Our case studies assess the structure of governance within which biodiversity-affecting projects have been undertaken, not their actual effect on biodiversity. Second, because this project focuses on only two respective case studies in two respective jurisdictions, quantitative analysis was not suitable. Therefore, to find patterns across multiple jurisdictions in multiple governing institutions, from city to province, it was essential to directly interview participants involved in projects. In doing so, we sought to understand how their experiences differed and, ultimately, how they interacted with our theoretical frame around fragmented and unified upper-tier contexts. For the semi-structured interviews, we targeted interview participants in the levels of government mentioned in our case studies section. The interview participants are highlighted in [Table 3](#) below.

Regarding interview data, a central challenge was obtaining provincial interviews from the Government of Ontario. To avoid asymmetry, we did not interview actors in the Government of Quebec. This limited the number of interviews conducted for this article to 10. Yet, the 10 interviews spanned multiple

classes of actors, public servants (both junior and senior) as well as elected municipal officials in both metropolitan regions. Thus, we were able to comprehensively respond to the research question we posed. Future research, however, should include interviews with actors in provincial governments to provide a more comprehensive portrait. Respecting the choice of Highway 413, readers may wonder why we did not choose the Ontario Greenbelt. This is because the Greenbelt stretches considerably beyond the boundaries of the Greater Toronto Area. The scope of the Greenbelt is thus far beyond that of this article.

Metropolitan governance in Canada, Toronto, and Montreal

Canadian municipalities are ‘creatures of the provinces’, meaning they are legislatively subservient to the direction taken by provincial governments (Magnussen, 2015). Provincial governments have the power to redefine the boundaries of their municipalities and regions, as well as the number of elected representatives within such boundaries (Zimonjic, 2021). To manage postwar urban expansions, provinces created second tiers of government, which were tasked with managing

Table 3. List of Interviews

Greater Toronto	# of interviews	Greater Montreal	# of interviews
Town: Acton	1*	Town: Senneville	1
City: Brampton	2	Town: Sainte-Anne-de-Bellevue	1
City: Halton Hills	1	City: Ville de Montréal	1
City: Milton	1	Region: Communauté métropolitaine de Montréal (CMM)	1
Region: Halton	2	Total interviews	4
Region: Durham	1*		
Total interviews	6		

*Also an interviewee for Halton Region; not double counted.

Table 4. Greater Montreal and Greater Toronto

Region	Greater Toronto	Greater Montreal
Number of lower-tier municipalities	25	82
Number of upper tier municipalities	5	1
Population	6,471,850	4,112,792

growth between municipalities and on the outskirts of existing inner municipalities (Magnussen, 2015). The Municipality of Metro Toronto, one of the regional governments established to manage this growth, was referred to more as “a construction agency than a regional government” (Wheeler, 2002, p. 273). However, during the neoliberal reform waves of the 1990s and 2000s, many provincial governments in Canada adopted the view that more units of municipal government at different scales was administratively inefficient and too costly. While neoliberal reformers suggest this reduced costs, in reality this is unclear (Siegel, 2009).

A two-tier system is a system of metropolitan governance generally comprised of an ‘upper’ tier and ‘lower’ tier of government. In Ontario, an upper tier municipality is a municipality of “two or more lower-tier municipalities” (Government of Ontario, 2001). Quebec, by contrast, has no formal upper tier municipalities, but does have regional municipalities, which are effectively the same thing. In two-tier systems, the upper tier generally governs the larger region, setting strategic direction and regional laws (Lemieux, 2023, authors’ translation). For example, Montreal’s upper tier, the CMM, handles “equipment, infrastructures, services and activities of metropolitan scope,” including regional highways (Gouvernement du Québec, 2000). These infrastructure projects carry political weight with them: for example, as Jacques and Ferland (2021) demonstrate, governments typically spend more money in swing ridings. In provincial elections, these are often the suburbs.

Lower tiers are comprised of multiple separate municipalities that manage local issues and are generally elected. Yet, lower tiers possess the same diversity as upper tiers. In Ontario, a lower municipality is simply one that forms part of an upper tier municipality (Government of Ontario, 2001). In the case that a lower-tier municipality’s law conflicts with that of its upper tier, the law of the upper tier prevails (Ibid.) By contrast, in Quebec, the Ville de Montréal sets the general strategic direction of its upper-tier municipality, officially influencing the direction it takes while lobbying other actors within the region (Lemieux, 2023).

Greater Toronto

Despite its regional population of 6.47 million people (Table 4), Toronto has no single upper tier of government and broadly follows Ostrom’s political economy tradition. Historically, what is now the City of Toronto was a classic two-tier system called the Municipality of Metropolitan Toronto, created in 1953. It was considered a “model of governmental arrangements for city regions” in part due to its use of the regions’ “lucrative tax base” and ability to funnel growth to different areas of its territory (Sancton, 2000). Composed initially of Etobicoke, Old Toronto, York, North York, East York, and Scarborough, Metro Toronto was governed with a mix elected officials from lower-tier municipalities and specifically elected members to the regional government. However, in the 1990s, amidst Premier Mike Harris’ ‘Common Sense Revolution,’ the Province of Ontario committed to getting rid of two-tier government (Sancton, 2000). The province

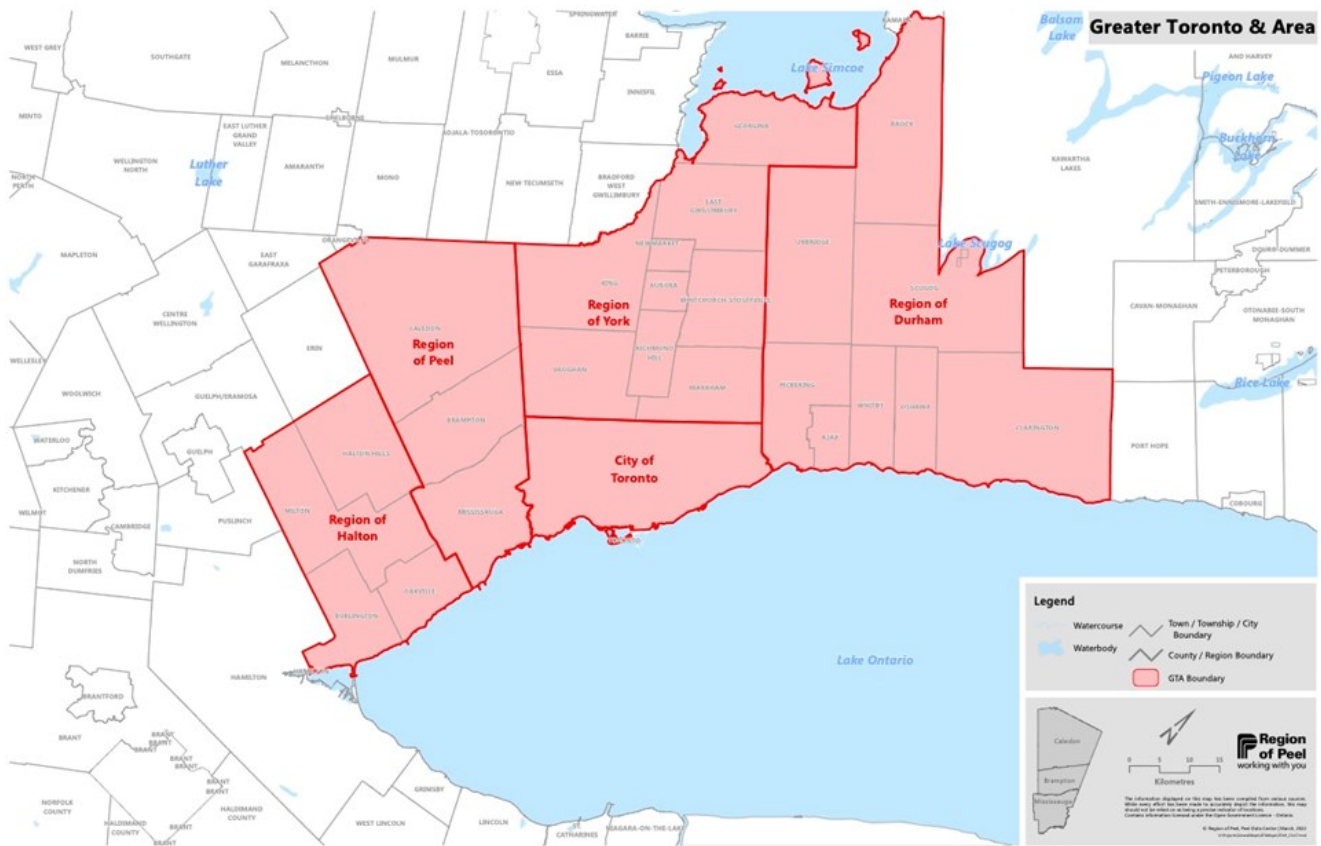


Figure 1. Map of Greater Toronto, including the upper-tier regions (Region of York, 2023)

eliminated Metro Toronto and amalgamated its municipalities into the City of Toronto, including the Greater Toronto Services Board, which would have previously had a role in managing biodiverse-rich areas.

Importantly, Greater Toronto (Figure 1) has never had a truly regional two-tier system. By this, we mean that the boundaries of Metro Toronto only encompassed a fraction of what actually constitutes today's Toronto region, better known as the Greater Golden Horseshoe (GGH). More specifically, as Taylor (2020, p. 6) establishes, the GGH has no “overarching governing institutions or authority.” This is, in part, because of the Government of Ontario’s desire to assume “the role of regional government” (Taylor, 2020). While the GGH in reality encompasses seven upper-tier regions

(Durham, Halton, Hamilton, Niagara, Peel, Toronto, and York), due to space limitations, we focus on five (Durham, Halton, Peel, Toronto, and York). These five regions contain 25 urban and rural municipalities, 3 of which (Halton, Peel, and York) contain our case study and the others are pertinent actors in the GGH (Toronto and Durham). Siegel (2009, p. 29) notes that there is weak “integration in the broader region”, in part a result of the lack of a cohesive planning structure between them⁶.

Since the amalgamations, the Province of Ontario has introduced two regional growth plans: the *Growth Plan for the Greater Golden Horseshoe* (GPGGH1) in 2006, and *A Place to Grow: Growth Plan for the Greater Golden Horseshoe* (GPGGH2) in 2020 (Government of Ontario, 2020; 2006). Both plans have set targets around housing supply,

transportation, and other pertinent issues. These plans supersede the authority of the upper tiers across the GGH, reinforcing the fact that the Province of Ontario is the GGH's regional government. In practice, however, disconnect "across scales of infrastructure and service delivery" as well as "politicization of infrastructure investment decisions" hinders the process of true regional planning (Taylor, 2020, p. 38).

Notably, Ontario has multiple Conservation Authorities (CA) that contribute to regional biodiversity protection. However, CA's do not follow the same boundaries as municipalities across the province; rather, they often follow ecological boundaries like watersheds.

Greater Montreal

Montreal follows Ostrom's metropolitan reform tradition, wherein a unified regional institution governs the entire Census Metropolitan Area (CMA). However, like Toronto, Montreal (Table 4) used to have a more fragmented metropolitan system with little formal connections between the Island of Montreal and the northern and southern suburbs. This former institution, borne out of a budgetary crisis, was called the Communauté urbaine de Montréal (CUM) (Boudreau et al., 2006). It encompassed the entirety of the Island of Montreal, which included 28 municipalities, and was chaired by the mayor of the Ville de Montréal. The goal of the CUM was to create a metropolitan fiscal system as well as to provide a mechanism for effective coordination between growing municipalities (Boudreau et al., 2006; Collin, 2001).

In the early 2000s, the CUM was transformed into two institutions: the Agglomération de Montréal and the Communauté métropolitaine de Montréal

(Figure 2). The Agglomération is not an upper-tier government and the CMM is the upper-tier government. In 2001, during the same neoliberal period when Metro Toronto was amalgamated, the Government of Quebec amalgamated the CUM. The entirety of the CUM became a "mega-city" similar to the Toronto megacity; all municipalities on the Island of Montreal were fused into the Ville de Montréal (Boudreau et al., 2006). In effect, the 'One Island, One City' (*'Une île, une ville'*) was meant largely as a fiscal redistribution measure from suburbs to central city (Boudreau, 2003, p. 189). The Ville de Montréal accumulated debt and fiscal inefficiency due to changing labour geographies, while suburbs kept most profits due to smaller geographical reach and property taxes from expensive properties (Boudreau, 2003). The amalgamations were met with vociferous resistance, principally from anglophone suburbs on the West Island of Montreal whose linguistic identities were manifested in local government (Boudreau et al., 2006; Radice, 2000). Even the Government of Quebec was hesitant: "resistance to mergers was very emotional" (Boudreau, 2003, p. 189).

Despite similar timing and scales, the 2001 amalgamations are where similarities end with Montreal and Toronto. If the dissolution of Metro Toronto was an opportunity for the Province of Ontario to assert more control over both Toronto and the region, the Government of Quebec saw it as an opportunity to knit a growing region together. The Government of Quebec also created a new upper tier of government covering the entire Metropolitan Census Area (MCA) of Greater Montreal. This upper-tier government is the CMM. The CMM's responsibilities are broad and intrinsically regional in scope: regional planning, environment, economic development, housing, transportation, and more

⁶ Certain municipalities are unhappy with being part of a two-tier system and would prefer both lower and upper-tier powers offered to the City of Toronto. As an example Peel Region was nearly dissolved by the Province of Ontario in 2022, after a long lobbying effort by the City of Mississauga, but this decision was reversed at the end of 2023.

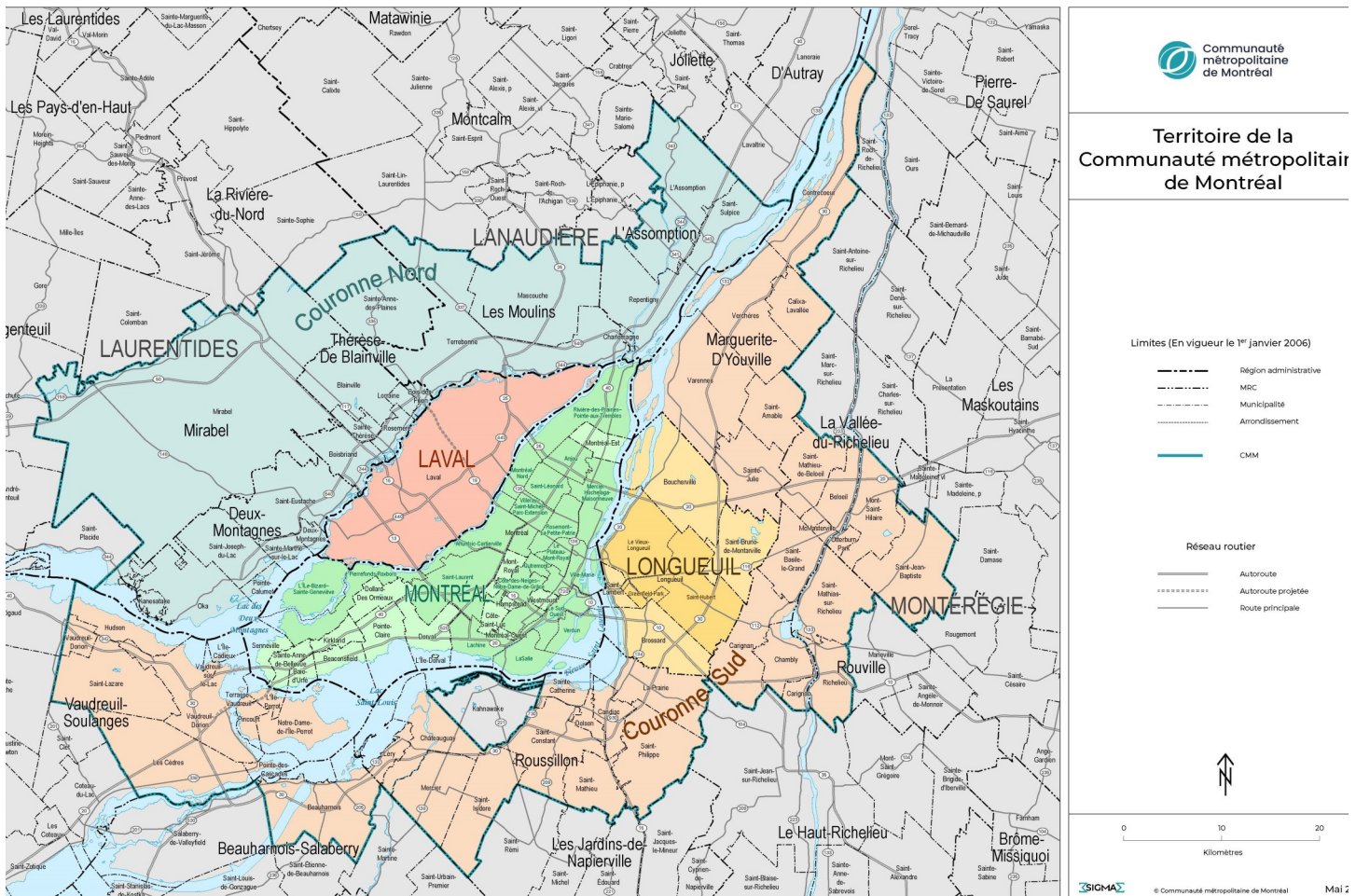


Figure 2. Map of the Greater Montreal; the Agglomeration of Montreal is green (CMM, 2017).

(Communauté métropolitaine de Montréal, n.d.). The CMM is designed as a collective planning and coordinating body (Taylor, 2020; Meloche & Vaillancourt, 2013).

The CMM fulfills a similar role to the Province of Ontario. However, it also enables the municipalities to strategically collaborate and exchange on issues of regional scope. The CMM is drafting an update of the 2011 *Plan métropolitain d'aménagement et de développement* (PMAD1) (Metropolitan Planning and Development Plan). This plan is identical in scope and size to the Government of Ontario's *Growth Plan for the Greater Golden Horseshoe* (GPGGH1) (2006) and *A Place to Grow: Growth*

Plan for the Greater Golden Horseshoe, the second regional plan (GPGGH2) (2020); the plans were even adopted in similar time frames (GPGGH1 2006/PMAD1 2011, GPGGH2 2020/PMAD2 2024).

Analysis

The following sections assess our interview data case-by-case. First, we assess Highway 413 (Figure 3), dividing our interview data into two categories: a) single-tier municipality, and b) upper-tier municipality. Second, we assess the Grand parc de l'Ouest (GPO). In each section, after interview analysis, we examine if our hypotheses were correct.

Following two sections involving one for Greater Toronto and one for Greater Montreal, we do a comparative analysis of the results.

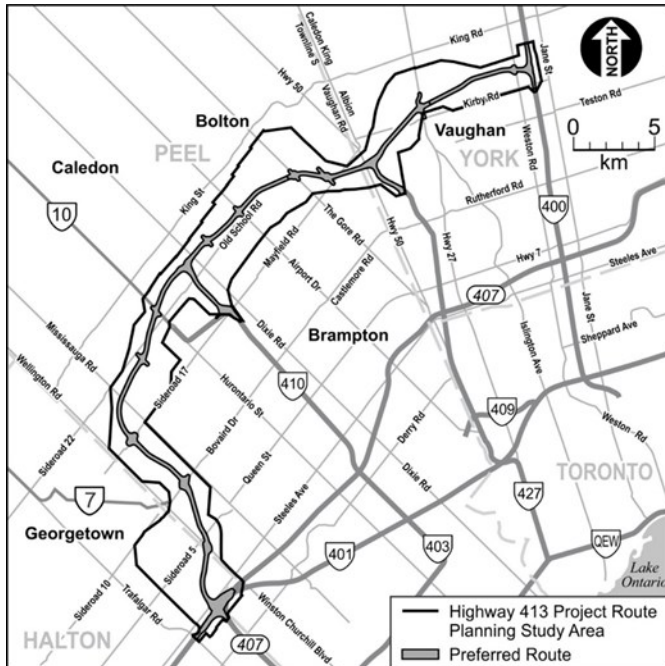


Figure 3. Proposed map of Highway 413, including municipalities and upper-tier regions (Government of Ontario, 2021).

Greater Toronto, Highway 413, and Political Economy

Despite multiple municipalities being publicly for or against Highway 413 (H413), several participants that we interviewed – irrespective their support or lack thereof – expressed frustration and resignation towards how Highway 413 was planned. One interviewee, a Transportation Policy Planner at the City of Brampton, noted that staff at their municipality “expressed concerned that [the province] hasn’t integrated issues like species, rivers, [and] water courses,” (Anonymous, 2023a)⁷. The interviewee illustrated this using an example connected to H413. Initially, Brampton was intent on developing a piece of undeveloped land near

H413 through intensification and preservation of some greenspace (biodiversity was not stated as a key concern but can be extrapolated as related to the non-development of the undeveloped land). Brampton presented the idea of connecting this development with an urban boulevard instead of H413, which would have included bike lanes, trees, and other ecologically-friendly infrastructure. However, the Province of Ontario “did not concur with the city,” and is actively “planning for it to be a freeway,” such as H413 (Anonymous, 2023a). Despite frustration, this interviewee was highly deferential to the regional hierarchy. They noted that they fully “understand that it’s a provincial” decision and that “the province will do what it wants,” even despite the upper-tier region (Peel) being opposed to the project (Anonymous, 2023a). When asked whether the Province’s role was good for municipalities, the interviewee responded: “debatable [...] not enough attention is being paid to the bigger picture” (Anonymous, 2023a). The interviewee suggested the Province is “out of step” with municipalities (Anonymous, 2023a).

On the other hand, another interviewee, a municipal (single-tier) and regional (upper-tier) councillor for Acton, in Halton Region, Clark Somerville, was not opposed to Highway 413 and, similarly, was highly deferential to the Province. Despite this deference, Mr. Somerville also proposed that environmental conservation is “best done at a watershed level” because “doing a regional-level project is cheaper, and there’s an economy of scale” (Somerville, 2023). This perspective was echoed by Colin Best, Regional Councillor for Milton in Halton Region; regional governance makes sense for services like water and biodiversity

⁷ The federal government paused the development of H413 in 2021 due to an investigation into species at risk along the proposed route, including in the Greenbelt (Callan & D’Mello, 2023). After an agreement with the Government of Ontario, the federal government approved Highway 413 in 2024. This connects to a broader discussion on the role of the federal government in protecting species at risk as well as farmland, likewise discussed by Connell (2021).

governance, especially in the context of multi-million dollar projects (Best, 2023).

Mr. Sommerville suggested that many things don't work at the regional scale, but some things do. These include goods like "water, wastewater, and transit" (Somerville, 2023). This is something that Mr. Somerville critiqued regionally, insofar as there is a lack of coherence between municipalities on regional issues like wastewater filtration. By contrast, regional highways are goods "that need to be provincial due to their enormous cost," and as for the ecological and biodiversity planning required, Mr. Somerville trusted provincial actors to do their due diligence (Somerville, 2023). Despite his support for the project, however, Mr. Somerville acknowledged "there is no interregional connection" in Greater Toronto, and critiqued the Province's "hamfisted" approach to H413, in particular the way that it came in and said the project would be going through, not whether it would be going through (Somerville, 2023). Mr. Best echoed the same perspective (Best, 2023).

Regions (Upper-Tier)

The Transportation Policy Planner from the City of Brampton extensively discussed the relationship of Peel Region to the City of Brampton and the Province of Ontario. They noted that while Peel was officially against H413, this is partly due to Peel's bottom-up decision-making processes. Peel Region "has historically not been top-down," especially compared to "York [Region], which is much more top-down" (Anonymous, 2023a)⁸. Not so in Peel, where "municipalities have much more power", particularly in transportation planning (Anonymous, 2023a). This can be viewed, in effect, in two areas of Peel's planning as it relates to intergovernmental relations. First, according to the employee interviewed, Peel Region endorsed the idea of the

urban boulevard, and were heavily involved in its design since it would connect to other regional roads. Second, the region's opposition to H413 displays the weight of Mississauga as the dominant municipality in the upper-tier Peel Region, in particular considering that the City of Caledon is neutral on the project and the City of Brampton is for the project (Anonymous, 2023a; Gray & Mahoney, 2022). The dominance of Mississauga in the decision making demonstrates that upper-tier municipalities are sometimes dominated by their larger municipalities, who influence their official position on issues from the bottom-up. Yet it also demonstrates that the regions are likely to listen to their single-tier municipalities as well, as evidenced both by the urban boulevard supported by Peel and Mississauga's position on H413.

In these interviews, there was clear tension between political interests at the provincial level versus conservation of biodiversity. Furthermore, the contrast between the upper-tier regions acting for protection of biodiversity, and the Province – the de facto regional government of the Toronto region – acting against these interests was clear, even in interviews that were supportive of a provincial role in regional politics. Overall, in the fragmented system, two trends emerge as it respects to political economy. First, many municipalities (even in fragmented regions) act collectively on biodiversity issues; Peel demonstrated a willingness to override municipal policies, and to oppose projects that go against these targets. Second, however, is that in fragmented systems, upper-tier municipalities are still strictly subordinate to the province. This is evident in both examples from Peel and Halton regions, insofar as their legislated targets and planning for environmental protection through biodiversification was washed away by provincial action toward H413.

Evaluation of Political Economy Hypothesis

⁸York Region is for H413.

These interviews permitted a few different trends to emerge related to the size of governmental units, the effects of fragmentation, and subordination to upper-tier government. First, interview data did not suggest that biodiversity is the type of public good that benefits from smaller units. Interviewees (including Mr. Somerville, Colin Best, and Rick Bonnette, all elected representatives from Halton Region interviewed) were highly supportive of environmental issues being managed at the regional level (2023a; 2023b; 2023c). Second, biodiversity does not benefit from institutional fragmentation at the regional level. Because each region in Greater Toronto is its own institution, with no connective tissue other than the Province of Ontario, cohesively planning projects related to biodiversity get left by the wayside, and are indeed vulnerable to the Province, which has its own agenda. This is evident with Highway 413, which has a variety of actors for-and-against the project with little forum to discuss the issue. Finally, the subject of decreased subordination was not found in the case of H413. Interviews with municipal officials demonstrated a general lack of enthusiasm or flexibility about what the Province's power was. They were highly deferential and very aware of their subordinate position within the region. The reality in the Toronto region is a high level of hierarchy between municipalities and the province in formal decision-making. There is no deference to lower levels of government in the current political climate in Ontario.

Greater Montreal, the Grand parc de l'Ouest, and Metropolitan Reform

Unlike Highway 413, there is general unanimity toward the creation and construction of the Grand parc de l'Ouest (Figure 4). The research interviews we did for this project illuminated, however, the interesting roles each municipality played in its creation, as well as the role of the Agglomération de

Montréal. All interviewees were clear that the Agglomération de Montréal had a more active role in the Grand parc de l'Ouest (GPO) than the Communauté métropolitaine de Montréal (CMM). An employee of the Ville de Montréal was straightforward in noting that the GPO was the “responsibility of the Agglomération”, (Anonymous, 2023b). While the project is meant to fit directly into the conservation targets of the CMM, “there was no leadership” from the CMM on the project (Anonymous, 2023b).

Complicating this portrait are the West Island municipalities in which most of the park will exist⁹. Paola Hawa, mayor of Sainte-Anne-de-Bellevue (SADB) since 2013, suggested that the GPO was created by her municipality: SADB is “a small city with a big vision; the GPO was our idea” (Hawa 2023). According to Mayor Hawa, SADB proposed the park in part to protect l'Anse-à-l'Orme, a forested site previously owned by developers, which is rich in biodiversity. However, if SADB went to protect the site alone, it would not have happened due to budgetary constraints (Hawa, 2023). This fiscal reality was shared by another participant on the West Island of Montreal, whose municipality the GPO crosses. More on the Agglomération will be discussed below, but it is crucial to note the vociferousness with which Mayor Hawa critiqued the Agglomération. The Agglomération is made up of all the municipalities of the Island of Montréal (15 total), but is dominated by the Ville de Montréal; Montréal has more voting power due to its population size. Mayor Hawa described Montreal as “a bully”, noting its “selfish” tendencies, in which it “gets everything it wants” due to the structure of the Agglomération. The West Island participant echoed similar frustrations with the Agglomération, noting that demerged municipalities “don't have much power [and the] party in power in Montréal decides

⁹This is not to suggest that it isn't found significantly in the territory of the Ville de Montréal. Much of the park is in the Pierrefonds-Roxboro and Île-Bizard-Sainte-Genève boroughs.

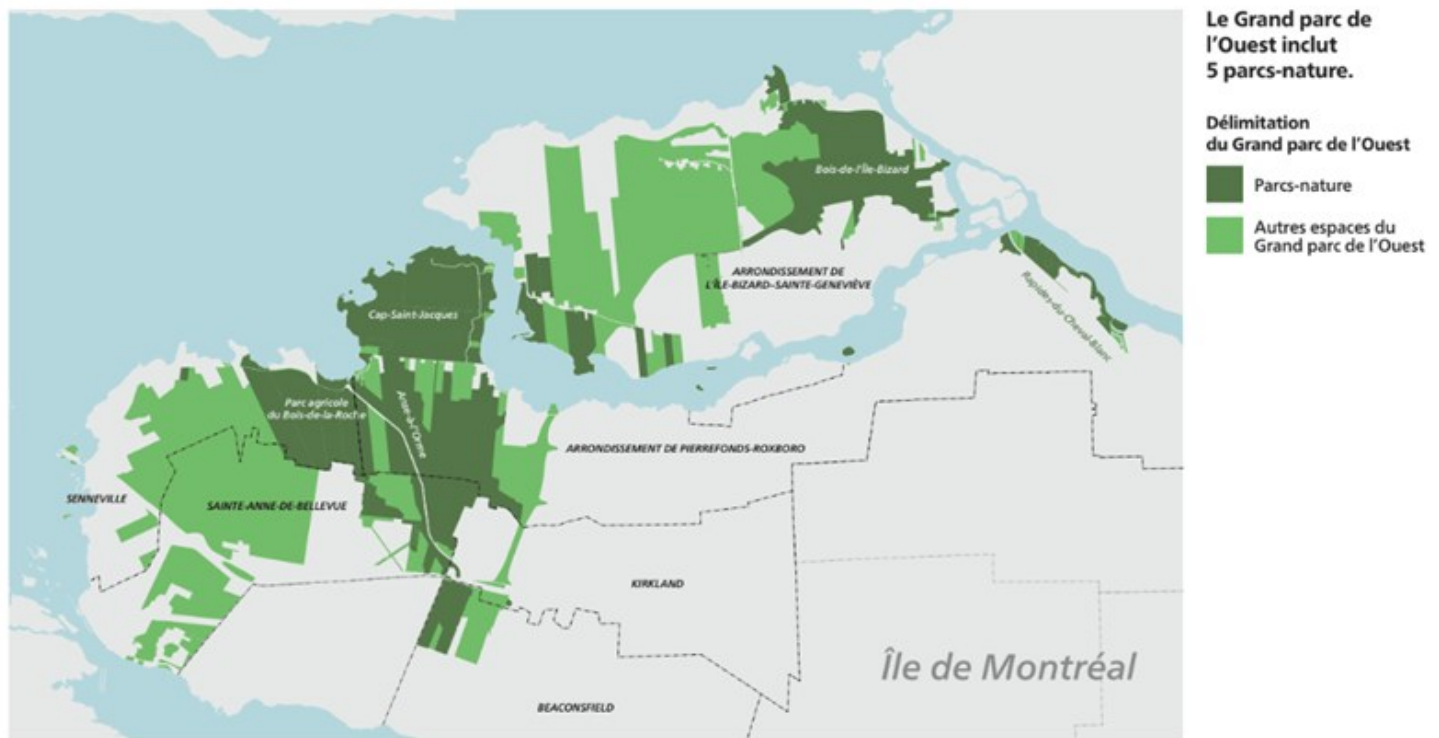


Figure 4. Proposed map of the Grand parc de l'Ouest (Ville de Montréal & L'Atelier urbain, 2020).

what happens” (Anonymous, 2023b). Thus, despite the Agglomération’s fiscal power being one of the central reasons the GPO could exist, the regional governance model here provokes serious tension between municipalities.

Yet, municipalities in the metropolitan reform system of regional governance, which is more unified, were largely able to work together to make this regional park come together. It is also noteworthy that this occurred in the context of a public good like biodiversity, one of the explicit aims of the project. Why? Because, as we explain further in the next section, municipalities within the Agglomération are *always* fighting with each other – or, more specifically, with Montreal, in the context of other public goods that are centralized and delivered regionally. This includes other Agglomération level services such as policing and public transit. In this

context, then, the fact that environmental issues are at the top of the list of issues of collaboration suggests that regional visions – and political will – are compelling ingredients for its provision.

Agglomération de Montréal and Communauté métropolitaine de Montréal (Upper-Tier)

The biggest takeaway from interviews with these actors, as well as actors related to the other municipalities in the region, is that the Ville de Montréal is, effectively, the most powerful agent in Greater Montreal – perhaps, informally, more powerful than the Government of Québec. It exerts power largely through the structures of the Agglomération and the CMM.

A key result of these interviews was discovering the larger-than-expected role of the Agglomération in

the creation of the GPO. It is not evident in the way it is administered, but the Agglomération acts as a level of regional government. It is not, however, comparable to the upper-tier municipalities in Toronto, because decision making is centralized within the bureaucracy of the Ville de Montréal. This reality was critiqued by mayor Hawa and another West Island participant (Anonymous, 2023c; Hawa, 2023). An interviewee from the Ville suggested that the Ville and the Agglomération are the “same hat, with different roles” for the Ville (Anonymous, 2023c). This creates headaches for other municipalities, who have a less decision-making power. Mayor Hawa noted that the Agglomération has effectively “no accountability” to the other municipalities on the island (Hawa, 2023). This also means that the Ville de Montréal’s vision dominates. For example, the West Island interviewee suggested adding certain sections of forested land in the middle of Highways 20 and 40, located in Senneville; Montreal, however, declined to pay for the land to add to the GPO. The West Island interviewee suggested this was because it didn’t fit within their vision of the park (Anonymous, 2023c). Yet the Agglomération, according to Mayor Hawa and other interviewees, also had the fiscal capacity to create the GPO.

Fiscal capacity was, likewise, largely the involvement of the CMM in the cadre of the GPO. Rémi Lemieux, Manager of the CMM’s *Bureau de projet de la Trame verte et bleue*, noted that it was the Ville de Montréal that approached the CMM on the subject of the GPO. The Ville did so understanding that it would be able to take advantage of a 1/3 project financing model, in which the municipality, the CMM, and the province each pay 1/3 of a project (Lemieux, 2023). According to Mr. Lemieux, the CMM finances many large parks in the region, and also strategizes on the subject with the Agglomération (Lemieux, 2023). This was

corroborated by the West Island interviewee, who noted that after being rejected from the Ville, they pursued the CMM for funding to buy and protect the land (Anonymous, 2023c).

The CMM also provides biodiversity planning advice to municipalities in the region, drawing on the expertise of CMM staff. For example, the CMM provides expertise to smaller municipalities (with less financial capacity) to figure out how to protect greenspace or do landscape planning in a biodiversity-friendly way (Lemieux, 2023). Another example is a compensation program for “smaller municipalities to protect agricultural land”. In this program, the CMM pays municipalities to protect land (forested or agricultural) from development (Lemieux, 2023). Both Mr. Lemieux and the employee of the Ville de Montréal also noted that the GPO was designed to fit within the goal the region has set of conserving or protecting 30 per cent of its territory by 2030 (Lemieux, 2023; Anonymous, 2023b). Thus, despite the CMM’s largely fiscal role in the creation of the GPO, the fact that the regional government has self-directed these targets and provides expertise on its implementation demonstrate that its presence (in addition to the Agglomération) aided in removing friction and rendering the planning process more coherent.

However, a commonality that emerged through interviews is the way in which Montreal uses both the Agglomération and the CMM to influence regional politics. As noted, the mayor of Ville de Montréal sits as the de-facto president of the CMM. Mr. Lemieux was clear that “Montreal has the veto” (Lemieux, 2023). In this set-up, it would have been highly unlikely that the CMM would have rejected the financing or planning for the GPO. In fact, it is likely (but unconfirmed) that the Ville de Montréal unilaterally shaped the 30 per cent of land by 2030 targets. The employee of the city noted that the “CMM has become much more proactive and

has made multiple acquisitions” in the governance of biodiversity in the region (Anonymous, 2023b), and this is largely after the election of the current municipal party in 2017. With its influence in the Agglomération and the CMM, Mayor Hawa suggested, and then confirmed, that the Ville de Montréal is a more active and powerful player in the Montreal region than the Government of Quebec (Hawa, 2023). The West Island participant was less critical of the CMM, noting it plays an essential regional role with the PMAD, and that “it’s logical to have a level of government over the entire region”, especially when discussing biodiversity (Anonymous, 2023).

However, while many municipalities in the region complain or are frustrated by the power of the Ville in regional affairs, the employee of the Ville was clear to say that “in the context of the GPO, there was not much conflict” between the municipalities – a rarity (Anonymous, 2023b). This echoes the same process in the Agglomération, an institution likewise ‘captured’ by the Ville de Montréal’s power, but in which the proposal, design, and vote on the GPO happened with relative speed. This may suggest that regional institutions are more ideal venues for environmental collaboration—under the right circumstances. Because the CMM collectively sets its own conservation targets, and because environmental issues are one of the competencies of the CMM, the social acceptability (and financing) of biodiversity planning seems to be served by these regional structures. Furthermore, the vigour and activity of the CMM win these structures seems to prevent a level of interference from the Government of Québec. Mr. Lemieux noted that the CMM acts as “an interlocutor with the Government of Québec”, effectively noting that the CMM, despite an occasional lack of unity or conflict within the organization, is able to act as a cohesive bloc when it

Table 5. Hypotheses and Findings

Political economy hypothesis	Political economy findings
Biodiversity is the type of public good that benefits from smaller units	No
Biodiversity is the kind of good that benefits from institutional fragmentation	No
Decreased subordination to the upper tier	No
Metropolitan reform hypothesis	Metropolitan reform findings
Increasing equality in service provision, along with more coherent operations	Yes
More equal distribution of costs	Yes
Increased subordination to the upper tier	Mixed

comes to discussing and/or negotiating issues with the province (Lemieux, 2023).

Evaluation of Metropolitan Reform Hypothesis

These interviews permitted a few different trends to emerge related to equity and coherence in service provision, distribution of costs, and subordination related to biodiversity provision. First is that the unified regional vision of the CMM does equalize biodiversity provision, at least on a surface level. Municipalities can draw from the expertise of other municipalities and CMM staff to execute their visions. The results of this distribution remain to be seen, but Mr. Lemieux was clear that the smaller and poorly resourced municipalities are able to draw from this expertise to execute their visions. Second is the generally equal distribution of costs. The CMM was principally a financial actor in the GPO, using the 1/3 model to assist the Agglomération in its construction of the GPO, including land acquisition. Third, and perhaps most interestingly, is that there is an increased subordination to the upper-tier of government. However, this is not necessarily to the CMM itself, but to the Ville de Montréal.

Interviewees were clear in saying, in part, that CMM acts as a conduit for the Ville. The structures of regional governance in Greater Montreal, though not uniformly, tend to benefit the Ville de Montréal's vision.

Comparative Discussion

Ultimately, Ostrom's theorization on political economy and metropolitan reform did not hold completely true at the regional level. That's acceptable: regions, which have several times more levels of government involved, are likely to require different theorizations than individual municipalities. In Table 5, we break down which hypothetical elements held, and which did not.

Similarities between the cases

Despite having regions governed very differently, a couple of shared trends emerged that warrant discussion. First is the dominant role of certain municipalities in upper-tier regional bodies. In interviews, Mississauga, the largest city in Peel Region, demonstrated a similar dominance in regional environmental affairs as the Ville de Montréal. Despite Highway 413 not crossing through Mississauga, it was steadfast in opposition to the project, helping persuade the regional council to formally reject the project. Interviewees from Greater Toronto were likewise highly recalcitrant about the possibility of a CMM-style institution for fear of the City of Toronto being the dominant actor of the region. Indeed, these seem to be about the differences between 'lifestyle' among suburban, peri-urban municipalities and the centre-city. Nevertheless, this was a salient similarity through interviews and suggests that big cities in regions are formidable, occasionally domineering, players.

Another similarity is the effect of regional governance on subordination to certain levels of government. While metropolitan reform-style

systems seem to decrease subordination to the provinces through the collective unification ability, they may simply just be transferring the subordination from one actor to another. All interviewees acknowledged the powerful role the Ville de Montréal plays in both the Agglomération de Montréal and the Communauté métropolitaine de Montréal. Certainly on the Island, despite democratic decision-making based on population, the suburban municipalities are largely subordinate to the whims of the Ville de Montréal. This seems to not be a problem on issues with less friction (i.e. provision of biodiversity), but highly challenging on others. Likewise, the dominance of Mississauga in Peel effectively renders the other municipalities in the region subordinate to its influence in the region. While this subordination is not constitutional (i.e., the province can reorganize this reality as it wishes), in practice, some municipalities may still feel subordinate to the dominant municipality in its respective region.

Differences Between the Cases

In reality, there are more differences than similarities between these two regions. One key difference, which may be related to the case study, is the lack of consensus in terms of project support. As noted, Highway 413 is a highly contentious project in the Toronto region, with little agreement both intra- and interregionally. By contrast, the Grand parc de l'Ouest has unanimous support from effectively all actors, both municipally, regionally, and provincially. Yet H413, with its region-sized scope, also created strife in Peel Region. This could simply be because biodiversity protection is not on the agenda, or perhaps that the upper-tier municipalities in Ontario are simply more deferential to the province to intervene when the municipalities and/or regions cannot come to an understanding.

Another essential difference between the two cases is the clear lack of provincial interference in one case (Montreal) and the very high level of interference from the province in the other (Toronto). The literature suggests that the Province of Ontario largely acts as the ‘mayor’ of the Toronto region. This idea largely holds up in our research. This basic fact shapes the provision of biodiversity in both regions. In Montreal, a more unified CMM provides an interlocutor between municipalities and the province, effectively acting as a lobby to the province and reducing the need for one domineering actor to interfere from above. The Agglomération and the CMM also provide consistent formal and informal opportunities for exchange, strategizing, and, perhaps more importantly, debate. If municipalities cannot agree on a planning decision, they can exchange in the context of the CMM, because that is what it exists for.

Conclusion

Our preliminary research suggests a single, unified regional governance systems may better support action to protect biodiversity than fragmented systems. As demonstrated, the metropolitan reform system – a unified and broad regional institution with diversity in its individual municipalities – supports efforts to preserve biodiversity. By contrast, the political economy system, with its fragmented, decentralized design is worse at providing this good and also enables more opportunity for intervention from a higher authority. This is not to suggest that the metropolitan reform system does not enable dominating power dynamics. In the case of the CMM, it clearly funnels power to one actor in the Montreal region: the Ville de Montréal, which has significant power over the Agglomération and the CMM itself – perhaps more, informally, than the Government of Quebec. Yet as climate change and biodiversity loss are increasingly on the agenda of

policymakers, the metropolitan reform system is a model to consider.

Finally, we outline three components of an agenda for future comparative policy research on metropolitan governance and biodiversity protection policy in Canada. First, a discussion of political cultures and ideology is missing. This is important because Ontario and Quebec possess markedly different political cultures (Blanchard, 2023; Haddow, 2015). The effect of political culture on regional governance should not be discounted, particularly considering the particularities of each city’s relationship with their province. Likewise, ideological commitments are a crucial aspect of why actors act in the ways they do. Future efforts to include political culture, ideology, and provincial data will be done in tandem with ensuring interview data from provinces themselves. Second, this issue could easily be widened to encompass different goods. The ideal provision of goods in metropolitan areas have long fascinated urban researchers, and that could be accounted for in future research. For example, an interesting, understudied good that crosses metropolitan scales could be regional bike lanes. Third, and finally, Canada’s urban regions are governed in diverse ways. Future research could easily compare the regional governance of biodiversity in Vancouver (with a unified upper-tier), Calgary (a unified lower-tier), and Halifax (which acts as both a single-tier and regional municipality).

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