# Dynamics across multi-level planning systems and nongovernmental participation groups A case study of Greater Toronto's Don River Valley

by Emma Bunting

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#### UNIVERSITY COLLEGE LONDON FACULTY OF THE BUILT ENVIRONMENT BARTLETT SCHOOL OF PLANNING

Dynamics across multi-level planning systems and non-governmental participation groups: A case study of Greater Toronto's Don River Valley

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Being a dissertation submitted to the faculty of The Built Environment as part of the requirements for the award of the MPlan City Planning at University College London: I declare that this dissertation is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

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#### Abstract

This research utilizes a socio-institutionalist approach, adapted for ecologically complex systems, to develop a framework for evaluating: how and to what extent have the characteristics of multi-level planning regimes and non-governmental initiatives operating within the Don River Valley (DRV) and watershed, reflected and transformed one another? The framework developed utilizes the visual metaphor of a river system, exploring the literature, contexts and contemporary characteristics of three 'tributaries': regional planning structures, the Don watershed as an independent agent, and non-governmental advocacy groups. Then, changes across the tributaries are examined during collaborative episodes, within the main body of the 'river,' where the tributaries merge. By adding these key characteristics to a consideration of the form and impacts of collaborative episodes, the question, examining the reflections and transformations of regional planning structures and non-governmental groups as a result of their collaboration, is addressed.

Three key findings are presented: firstly, non-governmental participant groups deeply internalize the fragmented, asymmetrical regional structures which frame governance of the Don watershed. Groups which are able to participate on strategic levels, must be integrated into official governance structures, becoming vulnerable to the constraints inherent in both governmental protocols, and non-governmental organizing. Secondly, environmental 'stewardship' has been actively appropriated by all planning jurisdictions operating within the watershed, taken from its original usage within the context of non-governmental protection of the Don, a tactic for filling gaps in planning and governance abilities. By making public stewardship an articulated policy item, planning jurisdictions ignore the necessity of strategic coordination of stewardship initiatives towards wider, ecologically-minded goals. Finally, active restoration projects initiated by non-governmental groups have been recognized and incorporated into official planning policy, not through appropriation, but intentional inclusion and recognition of strengths and abilities. Non-governmental partners are actively sought by staff to lead site-based restoration projects, creating genuine partnerships.

#### **Chapter 1: Introduction**

#### 1.1 Introducing urban rivers

Urban rivers are a perennial feature of our cities, ceaselessly dynamic both physically, through seasonal flows, tides and floods, and conceptually, shifting from places of industrialized commerce, to peripheral waste disposal systems, to collective recreational amenities. But no two river systems are alike, each having undergone "complex environmental transformations, cultural expressions, and infrastructural systems" (Way 2018, 1), producing rich ground for studying the planning systems and relationships which encase an urban river system. Thaïsa Way's (2018) edited collection on urban rivers makes a distinction between the River City, defined by and centered around its river, and the city river, an urban river which is smaller in scale, has shifted more frequently in public consciousness, and has been subject to intensive planning projects which have fundamentally altered it geography and ecology. This latter river is studied here, in the hope to add to scholarship on urban planning for river systems, as both "landscapes in themselves" and "agents for urban transformation" (Way 2018, 1).

The city river is a constant reminder to urban residents "that their attempts to control nature and keep it in check could only ever be fragmentary and never entirely successful in the long run" (Knoll et. al. 2017, 4). The push and pull of water systems present complex planning problems which demand flexibility, cooperation and future-proofing, all while accommodating for the inherent unpredictability of natural systems. But as much as the city river is a technical planning exercise, it is also a social construct, representing narratives of deindustrialization, sustainability, gentrification, and re-naturalization, formed by historical precedent, policy transference, and nongovernmental advocacy (Wessells & Lejano 2017, 109). So here, running along the seemingly common urban river, is a deep, complex planning problem, one which seeks to establish the connection between urban ecology, territorial planning differences, and the experiences of the people who live along its banks.

#### 1.2 Introducing planning for Greater Toronto's Don River Valley

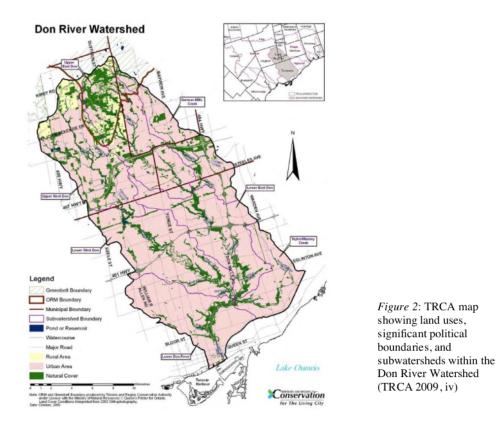
Greater Toronto's Don River Valley (DRV) exemplifies the conflicts and opportunities surrounding the city river. Greater Toronto, Canada's most populous urban region (Sewell 2009,

6), is home to multiple municipalities, river systems and watersheds. The DRV and watershed begins, north of Lake Ontario in the City of Vaughan to the west, the City of Markham to the east, and the City of Richmond Hill between them, all three within the Regional Municipality of York. The tributaries flow south, eventually merging within the City of Toronto, forming the main body of the river, which flows out into Lake Ontario, its mouth in Toronto's dock lands (see *Figure 1* and *Figure 2*). The entire watershed is governed by the Province of Ontario, the Toronto Region Conservation Authority (TRCA) and the municipalities and regional government listed above.



*Figure 1*: The Don River watershed boundary, overlaying the boundaries of the 4 municipalities, Vaughan, Richmond Hill and Markham in the north, and Toronto in the south, with points of interest labeled throughout. Note the Don Valley Parkway (DVP) travelling south along the banks of river. (TRCA 2020)

The river system has a long history, pre- and post-colonization, and has at various points over hundreds of years been used as a trade route, bucolic cottage location, planned center of government, rail and cattle yard, open sewer, main suburban-urban transport artery, informal housing settlement, and vital urban environmental amenity (Bonnell 2014, xix). The valley will be described more fully in Chapter 4, but through its transformations, it represents vast changes in approaches to planning for river systems, as well as planning across regional jurisdictions. Most importantly, it is representative of the territorial compromises which characterize patterns of planning and governance in the Greater Toronto region (Desfor & Keil 2000, 17), through conflicts and negotiations between urban and suburban planning territories, impulses for development



versus conservation, and upstream versus downstream policy and power.

#### 1.3 Introducing participation within the DRV

Before there was a government-led Conservation Authority in the DRV, there was a resident's Conservation Association, formed in 1947 with 300 members (Bonnell 2014, 123). The TRCA was founded in 1957, as a direct result of the devastation caused by flooding in valley lands during Hurricane Hazel (Bonnell 2014, 127). The Don Valley Conservation Association was a direct partner with the TRCA, so beginning a long, and complicated relationship between official planning authorities and non-governmental advocacy and participation groups within the Don Valley watershed. It is difficult to untangle the influence of these groups on each other, but both have had indelible impacts on valley landscape, ecology and awareness.

#### 1.4 The aim of this research

This research aims to employ a socio-institutionalist approach to prioritize the exploration of the dynamic relationships between cross-scale regional planning authorities and non-governmental participants, by investigating points of contact between groups and forms cooperation within planning projects (Barry 2011, 1117; Healy 2006, 205). Thematically, this research will utilize a non-binary, three-dimensional conception of investigation, in order to facilitate overlap between groups and across governmental scales, as well as avoiding oversimplifications of conflict and negotiation. By using a single case study approach, the intricacies and complexities of planning systems across the DRV and watershed can be brought into sharper relief.

This research, while studying a physical river system, will also employ the visual metaphor of a river system to demonstrate a structuring theoretical framework. This represents a holistic approach to investigating and evaluating natural urban systems, through 3 separate, tributary-like strands of focus, merging to establish the body of the river/research. The first examines the individual planning systems operating throughout the watershed, and the quality of policy discourse surrounding river system within their jurisdiction. The second establishes an ecologically-minded scalar fix, which spans political territorial boundaries to examine the urban river system as an independent agent. The third tributary examines the characteristics of nongovernmental participation and advocacy within the river system, and how their approaches and learnings are utilized and shared. By establishing these strands or tributaries individually, their points of contact or cooperation within the main body of the river/research can be more easily untangled and explored. As they merge and interact, planning systems, with urban ecologies and non-governmental participants, conclusions regarding the interplay between their key characteristics can be drawn, both adding to understandings of regional planning in Greater Toronto, while generating a framework for evaluating other city rivers.

Therefore, this dissertation's central question is:

How and to what extent are the key characteristics of multi-layer planning regimes and non-governmental initiatives operating within the Don River Valley watershed, reflected in and transformed by one another? The key objectives drawn from this question are to determine:

- 1. What are the key characteristics of planning authority policies and non-governmental groups operating within the DRV and watershed?
- 2. How are the ecological needs of the DRV and watershed being met through current regional planning systems and advocacy work?
- 3. To what extent have the characteristics of these three elements, territorial planning policy, river ecology and non-governmental participation, interacted to influence each other and the contemporary DRV?

#### **Chapter 2: Theoretical Framework and Literature Review**

2.1 Theoretical framework: Adapting a socio-institutionalist approach for environmental planning

This framework integrates the key characteristics and confluences of three elements, regional planning in Ontario, the Don River as a complex ecology and non-governmental participation within the Don River watershed. In order to best integrate these key elements, this research utilizes Healy's (2006) socio-institutionalist approach for studying fragmented societies, and adapts it to best fit the ecological scale of the DRV and watershed.

Healy (2006) views the comprehension and practice of planning as "the interlocking of the study of the dynamics of urban and regional change, and the study and normative practice of governance" (4). There are a few key analytical elements utilized to achieve this multi-faceted understanding: first, is the study of past institutional power relations and experiences (Healy 2006, 58), paired with understanding current institutional capacities in terms of existing networks and relationships (Healy 2006, 61). Next, this study of institutions must be paired with an understanding of the places they govern, while maintaining a critical analysis of potentially problematic and exclusionary conceptions of 'community' in these places (Healy 2006, 124). Instead, traditional definitions of 'community' are shifted to a definition of 'political community', in which "those who, by prior law, or common consent or by organizational membership, find themselves part of a collective entity" (Healy 2006, 206). This varied conception of space is also reflected in Massey's (2005) work, in which space allows for "heterogeneity; it holds out the possibility of surprise; it is the condition of the social in the widest sense, and the delight and the challenge of that" (105). The final key analytical element is a conception of the environment that also prioritizes networks, so much so that "localities become an important focus of attention to the extent that they correlate with key natural systems, such as water basins." (Healy 2006, 180)

These three key analytical elements are expressed primarily within systems of processes, through "the way social networks wave in and out of the formal institutions of government and develop governance mechanisms within themselves." (Healy 2006, 205) The development of these new mechanisms represents an important form of social learning, but these manifest learnings must

be paired with an analytical understanding of latent power relations, embedded in existing structures, transmitted, and covertly dictating accepted ideas, frames, behaviors and resource distribution (Healy 2006, 259).

Healy's (2006) socio-institutionalist approach is the central analytical tool for generating the framework for this research, but it is adapted using other theoretical approaches, in order to more fully examine the three key elements of this framework. Firstly, this research integrates Hall and Tewdwr-Jones' (2011) conception of planning as the management of complex systems, through processes and beyond the outcomes of single plans (9), as well as being a "continuous participation in conflict" (249). Therefore, conflict is never the end in itself, but a continuous moving state of interactions. This view of conflict is reflected in Innes & Booher's (2004) work, which integrates elements of participation and rejects dualist frameworks, as they fail to take account of pluralist systems, and "fluid networks of interacting agents" (422). To adequately address these fluid relationships, instead of examining actors versus actors, the analytical frame can utilize narratives and networks, examining plots and characters involved in collaborative episodes (Wessells & Lejano 2017).

The second adaptation shifts the socio-institutionalist framework towards an ecological focus, which can be seen in Barry's (2011) study of collaborative natural resource management strategies in Ontario's Kawartha Lakes and Mills' et al (2014) study of the role of social networks in regional conservation planning. Both of these studies seriously consider the role of social groups in impacting the governance of complex ecological systems, while also treating the ecological system as an independent, non-anthropocentric agent.

The third adaptation is methodological in nature, and will be explained more fully in Chapter 3. It informs the approach by integrating the value of qualitative research (Leavy 2014) and single case study research (Yin 2018) with the consideration of ecological systems as a serious analytical scale (Cohen & Bakker 2014), stepping away from traditional technocratic, science-based appraisals of ecological systems. While these approaches are important in certain circumstances, here, the focus is on how social groups reflect and internalize the forms of ecological systems.

The final adaptation to the socio-institutionalist approach is perhaps the most important, as

it justifies the use of the visual metaphor of the river as a frame for the three key elements of the theoretical framework. The final adaption embraces the river as a physical and representative form with agency and influence on its surroundings. This conceptualization of rivers as transformed and transformative can be seen in recent work by Knoll, Lübken and Schott (2017), and Way (2018), in which rivers and their context are the sole focus on analysis.

#### 2.2 Key terms and definitions

Before exploring relevant academic literature on the three components of the theoretical framework, some key terms and definitions will be briefly presented. Firstly, 'river valley' and 'watershed' are used throughout this research, and there are important distinctions between the two. The DRV is the protected low land running along the length of the river. Here, development is prohibited because of environmental sensitivity, flood risk, and unstable valley walls and river banks, both prone to erosion. The Don River watershed includes the river and its low valley lands, as well as all the land which contributes to run-off into the Don River. Here, development is permitted, with multiple allowed land uses, but those uses and infrastructure have a direct impact on the water quality of the river and its surround low lands and tributaries.

Next, 'regional planning' is used here both to indicate planning in its official institutional form, and its informal, networked form (van Straalen & Witte 2018). This allows for the inclusion of informal, socially-produced methods of regional coordination to be examined and differentiated from coordination facilitated through institutionalized channels. When 'multi-layer planning regimes' is used, it refers to the entire system of both regional authorities, and highly localized authorities. Finally, 'territorial' planning and policy is used to refer to governance and planning practice which are explicitly bounded, where functional units are defined, as well as the nature of appropriate interactions with other units (Lidström 2007, 499).

Used here, 'non-governmental participation and advocacy' will be limited to include groups of residents, river enthusiasts and/or professionals who assemble to form political communities working to hold events in, or advocate for the DRV and watershed. While academic institutions, business associations and large-scale environmental organizations undoubtedly form non-governmental groups, for the purposes of narrowing this research, as well as keeping it as relevant to the river system as possible, the definition has been limited. Finally, the word 'characteristic' is used in the question as a variable for determining the nature of multi-level planning authorities and non-governmental participation and advocacy groups. Here, characteristic is used to denote an identifiable pattern of group behavior, which is either implicitly or explicitly identifiable as an important component of their work and actions within the DRV and watershed.

#### 2.3 The first tributary: Dynamics of regional planning

#### 2.3.1 Common constructions of regional planning theory

The study of regional planning is incredibly various and complex. Generally, it involves the construction of governmental units, their borders, relative autonomy, function, as well as "patterns of co-operation and collaboration, both between units of government and between governmental and non-governmental actors" (Lidström 2007, 499). There is general acknowledgment of the inherent tension between establishing physical borders for governmental planning units, when the issues of planning, like infrastructure, labor flows, or environmental risks, do not always conform to those units (Hall & Tewdwr-Jones 2011, 124).

Within the European context, conceptions of polycentricity and a 'space of flows' is often used to conceptualize regional urban relationships, where "the resulting city region is highly networked through its multiple nodes and links, but there is a recognizable urban hierarchy that operates at a regional scale" (Hall & Pain 2006, 54). But some theorists argue against the inclusion of a form of urban hierarchy, instead only analyzing the methods "of interconnection and articulation" (Cattan 2007, ix). The European Union (EU) is an important arena for studying regional planning, and studies have identified key institutional characteristics within patterns of regional change, as well as general trends in territorial governance (Hogwood & Burch 2000; Loughlin 2007).

Certain key variables of differentiation and change within regional planning systems are fragmentation and decentralization of planning authorities across a formerly cohesive territory (Tremblay-Racicot & Mercier 2014), asymmetric power structures across planning authorities, either within or across scales (Daoudy 2009; Li & Wu 2014), the downloading of responsibilities but not powers from upper to lower planning authorities (Sancton 2010), or simply conflicting

conceptions of policy priorities between scales (Searle & Filion 2011). While the focuses on these regional investigations are important, they generally lack consideration beyond the institutionalist scale, and forgo purposeful consideration of ecological or non-governmental influences.

#### 2.3.2 Tensions in regional governance and planning

Looking beyond the institutionalist perspective of regional planning, there have been many studies which examine non-governmental influences on multi-level planning systems. Holman and Thornley (2015) examine the strategic tensions when integrating suburban and urban populations into one planning authority, especially when considering housing and infrastructure needs. Other studies examine the tensions between formal and informal regional planning arrangements, and the inherent value of informal social networks, compared with the ethical need for transparency in governance structures (van Straalen & Witte 2018). Finally, there are also studies on the social fallacy of the concept of 'centrality' inherent within some strands of regional theorization, which ignore the benefits and privileges of the city at the center of the network, while also overshadowing the commitment of governments and planners to individually distinctive cities (Boje Groth & Smidt-Jensen 2007; Davoudi 2007).

#### 2.3.3 Regional planning in Canada and Ontario

The study of regionalism in Canada includes both the institutionalist and socioinstitutionalist approaches, but it is important to note that there is no overarching 'Canadian' practice of regionalism. This is because only provincial governments have the ability to govern municipalities, as established through the Constitution (Brunet-Jailly & Martin 2010; Graham 2011). In fact, "the existence of municipalities is not guaranteed under the Canadian Constitution, which leaves provincial governments free to create, modify, or destroy any and all units of local government" (Brunet-Jailly & Martin 2010, 24). The question of municipal autonomy within this system is therefore extremely contested, has launched referendums and won or lost elections (Graham 2010). This reflects wider debates in Canadian constitutionalist theory, about the balance of unity and diversity, and well as the general trend away from symmetrical power structures, shifting heavily in favor of provincial power (Bickerton 2018; Brouillet & Gagnon 2018). Generally, there has been a large variety of municipal and regional changes across Canada, including annexations, mergers, two-tier metropolitan government, amalgamations, and demergers, with multiple methods being employed by the same provincial government, or applied multiple times to the same city (Sancton 2005). It is because of this complexity, that a focus on regionalism within Ontario provides a more thorough analysis.

The question of the optimal municipal form in Ontario is hotly contested, ideologically driven and largely unresolved (Graham 2011). But there are general trends in regional relationships identified through various territorially-based studies. Firstly, planning powers are highly centralized with the province, and often do not work in favor of municipalities (Christidis & Law 2012; Courtney 2009). Following in this trend, planning systems are generally top-down, both in terms of provincial-municipal relations and municipal-citizen relations (Downey & Williams 1997; Phillips 2010). Finally, there is strong suburban power, both politically and within planning policy (Sewell 2009; Sorensen & Hess 2015). Within Ontario, federal-municipal relationships are generally fluid, especially when funding capital projects of national importance, though the federal government does not establish urban planning policy (Stoney & Graham 2009). Finally, crossmunicipal relationships in Ontario are generally understudied, with the focus primarily on the provincial-municipal dynamic, though there is one study of municipal relationships in British Columbia, which attempts to develop a theory of municipal cooperation beyond public choice theory (Brunet-Jailly 2011). The dynamics of regionalism in Ontario, beyond provincial-municipal relationships, is understudied, which is why this research takes a multi-layered approach, examining hierarchical as well as lateral cooperation in planning.

#### 2.4 The second tributary: Planning for complex ecologies

#### 2.4.1 Why plan for urban ecologies

There is a plethora of degraded, underutilized natural urban spaces, and the post-industrial city river is one such space, representing opportunities for planning professionals and urban residents to remake a more resilient, people-oriented city (Steiner 2014). But these spaces are often contextualized by complex natural systems, like watersheds, which demand coordination beyond conventional political boundaries (Cohen & Bakker 2014; Durley 2007). Wetlands and rivers represent examples of this, as they have been systematically degraded, have ecological impacts beyond the political boundaries which surround them, and have proven benefits for the health and wellbeing of the human and non-human populations, which utilize them as amenities and habitats

(Pearsell & Mulamoottil 1994; Pitt 2018). In this way, rivers can be transformed, through purposeful collaborative planning, from dangerous, burdensome sites, to places for recreation, ecological wellbeing and civic pride (Knoll et al. 2017, 5).

#### 2.4.2 Land-use planning and water management

The most common study which seriously considers planning alongside watersheds are found in water management fields. These studies argue for more comprehensive integration of land-use planning and water management, in order to both protect ground water, and support safe urban land-use practices (Mitchell 2005; Plummer et. al. 2011). These studies prove that siloed practice harms both appropriate land uses and water quality, but lack a grounding in regional planning literature, collaborative approaches and ecologies beyond water quality.

#### 2.4.3 The role of conflict in environmental planning

Most studies on environmental planning examine the causes or impacts of conflict between competing jurisdictions or advocacy work. Some employ a historical perspective to explain how conflicts over restoration of waterways are constructed (Closman 2008; Rotherham 2012), while others examine the catalyzing power of conflict to initiate contemporary change (Hanna & Webber 2010). Some studies examine the nature of the collaborative episode itself, and seek to explain why agreed upon changes were not implemented (Roth & Loë 2017), while others examine why collaborative episodes could not occur because of differentials in power between upstream and downstream authorities (Daoudy 2009). A common area of study is how environmental planning initiatives can become appropriated for economic development or urban identity-making, supporting an anthropocentric view of nature which undermines attempts to truly protect and revitalize ecological systems (Merchant 2004, 184; Wessells & Lejano 2017).

Finally, most relevant to this research is the conflict between conceptions of river systems as technical or ecological projects. The technical project is engineered and controlled for the benefit of infrastructure and property, while the ecological project is 'restored' as much as possible to its state before colonization. Are either of these projects possible, or is there a state somewhere between, which can be achieved for the public good? Platt's (2017) work on the Chicago River, Stradling's (2017) on the Cuyahoga, and Di Palma and Robsinson's (2018) on the Los Angeles

River all explore these ideas. These three studies also represent balanced and integrated approaches to governance, ecology and participation which this research seeks to emulate, though with a more explicit analytical framework.

#### 2.5 The third tributary: Non-governmental participation in environmental planning

#### 2.5.1 Theorizing participation in environmental planning

The key contribution of theorizing participation within environmental planning systems is the need to reject dualist perspectives of citizen versus government and instead view participation through "the complex systems imagery of a fluid network of interacting agents, gathering information from each other and the environment and acting autonomously based on their needs, understandings and shared heuristics" (Innes & Booher 2004, 422). Work has also been done to identify how planners can initiate and react to collaborative episodes using frameworks which outline participatory choices and are integrated in any collaborative setting (Oulahen & Doberstein 2011). Within Ontario, Barry (2011) has done extensive work on theorizing collaborative episodes through socio-institutionalist approaches, with added consideration for historical context, though her work focuses on rural planning settings, and could be extended into urban environmental contexts.

#### 2.5.2 Stewardship and environmental planning

One common conception of an acceptable role for the public in environmental planning systems is 'stewardship'. Stewardship allows private individuals to take care of natural environments either independently or with a group, within an established and acceptable framework put forward by the authorities. There are many studies on which form of stewardship is the most effective in achieving changes in environmental planning practices and improved ecological systems. Some utilize citizen learning frameworks focused on collaboration between multiple groups (Alexander 1999), while others argue citizen science generates legible evidence and is therefore best suited for achieving change within government (Macaraig 2015). Other more sociologically-based approaches argue only strong place attachment can spur people to protect their natural environments (Manzo et al 2006; McElhinny 2006) or that only by gaining media attention through successful and legible agenda-setting can stewards achieve changes within

environmental planning structures (Edey et al 2006). While these studies offer enlightening findings, they generally do not place causal weight on pre-existing institutional frameworks, and the manner in which they can be determining factors in the form of stewardship that is allowed to take place.

#### 2.5.3 Problematizing participation in environmental planning

A wide variety of scholarship highlights the importance of problematizing participation in environmental planning systems, in order to show the inherent conflicts in prioritizing the views of specific, involved participants over others. Additionally, as Anderson (2016) argues, "if the balance swings too far in favour of civic engagement, the role of the professional planner will be diminished, and communities will develop in accordance with the interests of the group that has the loudest voice in council chambers" (20). Public participation can be a central tool to effective planning for ecologically significant systems, but it can also be a "manipulative process" (Sorensen & Sagaris 2010, 298), especially when 'community' becomes coded language for exclusionary practices (Norton & Hughes 2018). Therefore, the analysis of collaborative, participatory episodes throughout this research is equally critical of all actors, without romanticizing participants or idealizing planners, and focusing on the quality and changes of place, not 'community'.

#### 2.6: The river: Scholarship on the Don

#### 2.6.1 Historical analysis

There is a small but critically important body of scholarship on elements of the Don River, the most important of which is Jennifer Bonnell's (2014) book on its history as an explanation for its contemporary conditions. Critical to this research, it proves the importance of non-governmental participation and regional planning initiatives on the contemporary state of the river valley, while also utilizing the concept of 'borderland' to describe the valley itself as a land on the periphery, overlapping multiple forms and functions, so much so that it disappears into the urban landscape (xxvi). This 'borderland' conceptualization inspired this research to examine how the 'borderland' can be translated into contemporary planning terms, through an examination of its treatment as it passes through different regional scales. A full summary of Bonnell's (2014) work will be presented in the case description in Chapter 4. Another important historical analysis is

Donald's (1997) work on the role of volunteers in achieving protective measures for the valley and its river.

#### 2.6.2 Contemporary scholarship

Contemporary scholarship on the DRV and watershed focuses on a few specific localities and initiatives. Two studies examine the impact of capital revitalization projects at the mouth of the river, and upriver at the old brickworks, and how they negatively impact accessibility to the valley system and act as catalysts for gentrification (Desfor & Bonnell 2013; Foster 2005). Desfor and Keil (2000) compare the Don River to the Los Angeles River, explaining how they are reflections of their respective urban contexts, while Nichols (2009) examines the impacts of ad hoc reforestation through the watershed and valley lands, arguing for a more systematic, land-use approach to tree planting. Finally, De Sousa (2003) examines how community groups have been utilized by municipal authorities in Toronto to carry out brownfield restoration activities along the banks of the river at Chester Springs Marsh.

These studies have informed this research's approach to the DRV and watershed, but they lack a few key analytical components for explaining elements of the contemporary watershed. Firstly, they are extremely Toronto-centric, employing the fallacy of centrality discussed in section 2.3.2, which is problematic because it ignores a fundamental characteristic of river ecologies: what happens upstream, impacts what happens downstream. The northern municipalities and their regional governments need to be considered to establish the complete state of the river system. They all also utilize a dualistic perspective on participation, without considering the extent to which non-governmental groups have been integrated into governance systems. Ultimately, this research hopes to offer a more complete perspective of how key elements of the DRV and watershed, regional governance structures, non-governmental participants, and contemporary ecology, interact and shape their surroundings.

#### **Chapter 3: Research Design and Methodology**

#### 3.1 Research design

This dissertation's research design is based on the question: How and to what extent are the key characteristics of multi-layer planning regimes and non-governmental initiatives operating within the DRV watershed, reflected in and transformed by one another? It purposefully begins with 'how' because of its primary interest in "tracing operational processes over time" (Yin 2018, 10), and 'to what extent' allows for differentiations between the processes of change utilized by different actors.

The genre of research is distinctly qualitative, justified as a method of deeply describing social phenomenon (Leavy 2014, 2). Importantly, a single case study approach is utilized, defined by Yin (2018) as "an empirical method that investigates a contemporary phenomenon...in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident" (15). The element of boundaries is especially important, as it sets a clear definition of the case, allowing for a clear aim. Typical boundaries can be spatial, temporal or organizational (Yin 201, 31). In the case of the DRV and watershed, the spatial boundary is apparent, and explicitly built into the question. The temporal and organizational boundaries were more difficult to determine, and to maintain a focused analysis, the organizational boundaries include governmental and non-governmental groups with policies or projects explicitly focused on the Don River. Establishing temporal boundaries highlights the tension between focusing on contemporary data and allowing for an evaluation of processes. It therefore sets a boundary of 25 years for projects and policy documents, because the most recent change to the regional planning structures surrounding the Don occurred in 1995. Any other historical data on the valley or watershed then became context. Put together, the qualitative and single case study approaches of this research design, are drawn from the process-oriented nature of the question.

Key elements of the research design are the main methodological approaches to collecting data. The first is the use of critical policy discourse analysis (CPDA) on all text governing the river and watershed. This methodological choice "combines a detailed analysis of texts with theoretically informed accounts of the phenomenon under investigation, in order to identify the

processes by which language (re)produces social practices and...privileges" (Mulderrig et al 2019, 1). This approach recognizes that text does not exist in isolation, and must be paired with an understanding of the social and political contexts in which it occurs. For CPDA to be effective, it was paired with interviews, to help contextualize and question official planning policy discourse. A methodological choice to interview participants and planners is not free of risks, as the line between anecdote and pattern is not always readily apparent to either the interviewee or interviewer, but it does offer a foil to the official perspective seen through policy documents. Five 30 to 40-minute interviews with six participants were conducted, with sets of questions for non-governmental participants and planners (see Appendix A), focused on processes and methods of collaboration. The interview process was severely impacted by the COVID-19 pandemic, and these limitations will be explained in section 3.6.

With these four key elements of the research design in mind, the three objectives will be presented in the subsequent sections, with description of how these methodologies were operationalized to collect data, and which analytical strategies were used to interpret the results.

#### 3.2 Objective 1: Identifying and describing key characteristics

The first objective is: What are the key characteristics of planning authority policies and non-governmental projects operating within the DRV and watershed? This objective was important because the data collected highlighted patterns of behavior and protocols within planning authorities and non-governmental participants. This objective also encompasses two of the tributaries of the framework: regional planning for the DRV and watershed, and its non-governmental participants and advocates.

Planning authority data for this objective was first collected through a CPDA of planning policy documents, investigating policies explicitly describing the Don River or urban watershed, as well as protocols for conducting collaborative episodes of environmental planning. This involved identifying key objectives, and representations of subjects of those objectives, either the natural system or the participating group. Patterns were then established by identifying key categories of objectives and representations, using Farrelly's (2019) subject identification analytical strategy. Another key analytical strategy was identifying variables which indicated power over decision-making and project outcomes, and in this way, characteristics like asymmetric

or fragmented planning structures could be identified both laterally and hierarchically (Daoudy 2009; Tremblay-Racicot & Mercier 2014). This analytical strategy also relied on data from interviews, in which planners described the character of collaborative episodes with other planning authorities. Questions for planners asking about inter-departmental planning cooperation focused on which departments approached first, and how projects were coordinated between areas of government.

For establishing patterns of behavior and protocols for non-governmental participants and advocates, a critical content analysis (Barry 2011) was used on internet records of collaborative episodes and organizational structures, as well as an interview with a participant, in a leadership position in a citizen-led conservation and advocacy group. Paired with this was an additional analytical strategy, focused on agenda setting (Edey et al 2006) for issues related to the Don, either through analyzing media interviews, or event descriptions. To allow for regional reflections within non-governmental participant groups, projects and organizations from the various jurisdictions were selected.

#### 3.3 Objective 2: Evaluating the ecological needs of the Don River

The second objective examined: How are the ecological needs of the DRV and watershed being met through current regional planning systems and advocacy work? This objective encompasses the third tributary of the framework, and considers the DRV and watershed as a scale of analysis in and of itself. Again, a textual analysis was used here, to examine reports produced by regional planning agencies and non-governmental groups on the ecological health and changes within the watershed. This was paired with planner and participant interviews, in which they were asked about their perceived successes within the watershed, as well as what kind of river-wide events or projects they initiated. Ultimately, to adequately address this objective, the scale and form of the river was mirrored in the analysis, which expanded the analysis presented through objective 1, beyond the socio-institutional scale.

### 3.4 Objective 3: Evaluating the impacts of collaborative episodes on the Don River and its participants

The final objective seeks to determine: To what extent have the characteristics of these

three elements, territorial planning policy, river ecology and non-governmental participation, interacted to influence each other and the contemporary DRV? This objective represents the body of the river in which the three tributaries of the framework interact. Descriptions of the impacts of collaborative episodes in policy, reports and news articles were paired with interview responses, and analyzed based on a typology of collaborative characteristics expanded from Barry (2011). Then, this typology was paired with the results from the other two objectives, and pattern identification was again used to determine how, if at all, organizational structures, ecological and collaborative characteristics led to desired impacts. In addition to pattern identification, a narrative-network model is used to identify elements of different actors within singular narratives (Wessells & Lejano 2017). The confluence of these three factors leads to the ability to identify mirrored or transformed characteristics between them, both answering the question and generating a holistic view of changes in planning for the DRV and watershed.

#### 3.5 Ethical considerations

This research topic did not engage with any of the groups identified by the UCL Research Ethics Committee as demanding special permission for research. Based on the investigation into non-governmental participation, regional planning structures, and the nature of their interactions with a natural landscape, interview questions and responses included references to group dynamics, opinions and thoughts on partner organizations and government. To mitigate the potentially harmful implications of this information, all participants had the option of not answering questions they were not comfortable with, while being completely anonymized, and consented to the form of their anonymization. Before the interview, they were presented with the interview consent form and the list of questions. No interview responses contained personal information but were nevertheless stored on a secure secondary hard drive. The same person conducting the interviews, analyzed the data and presented the findings, and therefore made their role and accountability to the interviewee clear. Finally, all participation was voluntary and informed, and interviewees are partners in exploration, and active sharers of their knowledge, not subjects used for their experience, and were therefore treated as such. (See Appendix E for complete Risk Assessment Form)

#### 3.6 Limitations of methodology and negative impacts of the COVID-19 pandemic

The limitations of utilizing a text-based analysis as a methodology for investigation are discussed in section 3.1, showing that text can be unreliable, out-of-date or biased. To mitigate this, the critical textual analysis was paired with an analysis of interview responses, but the COVID-19 pandemic influenced the effectiveness of interviews as a methodology. Firstly, 5 inperson interviews were conducted in January 2020, in Toronto, but these interviews prompted a change of focus in the research, shifting to an investigation of the relationships between planning authorities and non-governmental groups, whereas the focus previously was exclusively on nongovernmental groups. By the time of this shift, more interviews were needed, but lock-down and large-scale global viral transmission prohibiting international travel were in full effect, necessitating at home, virtual interviews. Fifteen requests were made to various planning and nongovernmental actors, but ultimately only 5 interviews, with 6 interviewees, were possible, almost none of which came from individuals outside the City of Toronto. This is a regrettable, but completely understandable response rate, as the impacts of working from home and a global pandemic have no doubt disrupted people's daily lives, making interviews for a master's dissertation low on the list of priorities. Unfortunately, this has negatively impacted the body of data available through interview responses, but the limitation is acknowledged here and is hopefully mitigated through pairings with other data collection methods. It is also interesting to note that the impacts of the pandemic and lockdown were mentioned or discussed by every interviewee.

#### Chapter 4: The Don River Valley and Watershed as a Case Study

Before describing the context of the DRV and watershed through the lens of the tributaryriver theoretical framework, its physical form and contextual built form will be presented. The river body begins in the Oakridges Moraine headwaters, and travels 38 km south into Toronto Harbour, draining 360km<sup>2</sup> of watershed (Bonnell 2014, xix). There are three main branches of the river, the East Don, West Don, and major tributary Taylor-Massey Creek, with the singular Don River forming 8km north of Lake Ontario (Bonnell 2014, xix). The West Don begins in the City of Vaughan, while the East Don is fed by German Mills Creek in the City of Markham and the City of Richmond Hill, while the Wilket Creek tributary joins the bulk of the river in the City of Toronto (Bonnell 2014, xix). Almost 90% of the land within the Don River watershed has been developed for residential, commercial or industrial uses, with the population of the watershed growing to over 1.2 million people (Bonnell 2014, xix). The current urban form of the watershed occurred over 200 years of urbanization, which has resulted in the eradication of almost all wetlands, as well as six tributaries buried or enclosed as a part of the sewage system (Bonnell 2014, xix). This is the physical context of a thoroughly urban city river, which sets part of the background for this research.

#### 4.1 The first tributary: Planning projects within the DRV and watershed

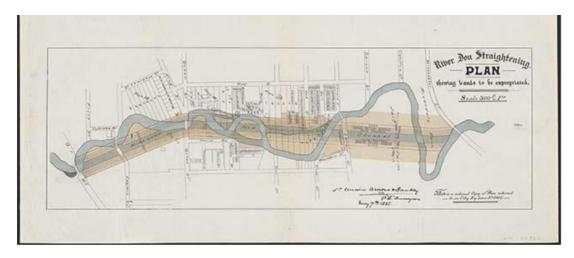
The current, and predominate planned formed of the river and its watershed is that of a metropolitan corridor, a valley home to a highway, and a facilitator of suburban growth (Bonnell 2014, xxiv). At the point of colonization, the river was also a corridor for trade and travel into the headwaters of the Anishinaabe Mississaugas, but was quickly transformed into the image of an ordered colonial garden, with the planned center of government for Upper Canada at the base of the river (Bonnell 2014, 3) (see *Figure 3*). This conception of the Don River quickly evaporated, as the turn of the 19th century saw Toronto, then York, lose the possibility of being a center of government, and the mouth of the Don became a rail and cattle yard (Bonnell 2014, 35). This caused large amounts of pollution and the extreme stagnation of the marshy mouth of the river, which, paired with the raw sewage being dumped into the river upstream, caused extreme public health concerns (Bonnell 2014, 24). This marked the first, true planning project centered around the Don River, the creation of a parallel trunk sewer which could release untreated effluent further

into Toronto Harbour. Calls for a trunk sewer began in the late 1800s, and continued into the early 1900s, with City Council ignoring 12 reports highlighting the necessity of the infrastructure between 1873 and 1909, when the project finally began (Bonnell 2014, 207).



Figure 3: The first Plan of York Harbour (now Toronto Harbour), showing the intact marshland and peninsula at the mouth of the Don, now filled and the separated Toronto Islands (Bouchette 1815)

The next dramatic, planned alteration of the Don River was the straightening of its lower half, to allow for rail line construction, planned industrial canal boat use, and improved flow at the marshy mouth of the river, to prevent disease (Bonnell 2014, 45) (see *Figure 4*). The Don was permanently altered, straightened, but without completely solving the issue of flooding and was not dug deep enough to allow river boat use (Bonnell 2014, 55). This project also represents the first occurrence of multi-level planning authority conflict, in which the City of Toronto was primarily concerned with upstream flooding and pollution, while the Harbour Trust and Authority was concerned with the mouth of the river, allowing access up towards river industries and preventing siltation at the rivers end (Bonnell 2014, 45). This conflict was never solved and ultimately contributed to the partial success of the project (Bonnell 2014, 73).



*Figure 4*: The Don River Straightening Plan, showing the canalization of the Lower Don, with the river's mouth on the left, and its headwaters continuing north, on the right side of the plan (Don River Valley Park 2020)

The first regional planning authority for river valleys in the Greater Toronto region was the Metropolitan Toronto and Region Conservation Authority, now the TRCA, formed in 1957 (Bonnell 2014, 127). It was, at the time, primarily concerned with protecting populations from flood prone river valleys, after the devastation of Hurricane Hazel (Bonnell 2014, 127). Its disconnection from conservation can be seen through the next and most significant planning project within the DRV, the construction of the Don Valley Parkway (DVP) between 1958 and 1966 (Bonnell 2014, 139). This highway ultimately became "a catalyst and an enabler of suburban growth" (Bonnell 2014, 157) beyond the borders of the City of Toronto. This project also highlights an instance of friction between two branches of provincial planning authorities, as in 1950, the planning department issued a report stating the need to preserve the Don Valley, while that year, the Highways Department was planning a parkway through the same valley (Sewell 2009, 50).

In 1959, there was another conflict over planning matters, but this time between two neighbouring municipalities, Toronto, and the fast-growing City of Markham. In order to protect the Don River from continued water pollution, the City of Toronto was forced to build a plant within Markham, and extend its service north to Markham residents, in order to ensure the water quality of run off into the Don Valley (Sewell 2009, 114). But ultimately, the City of Toronto could do nothing to control development beyond its borders, with the Province of Ontario and

enthusiastic developers encouraging unfettered suburban development (Sewell 2009, 126).

Ultimately, the narrative of the planned DRV and watershed is one of straightening and containment, through infrastructure construction, suburban development, and siloed departmental divisions of watershed-related responsibilities.

#### 4.2 The second tributary: Ecological transformations of the DRV and watershed

The river and its surrounding lands reveal different contexts and forms when viewed as a whole, without political and bureaucratic boundaries arbitrarily fragmenting it. But the holistic picture of the river as an ecological system is not positive. 1200 untreated storm sewers flow into the Don and its tributaries, it in unsafe to wade or swim in, and is especially toxic for wildlife, with a very high chloride level from road salt (Bonnell 2014, 193). Traditionally, 42 fish species populated the Don, but now, only 21 remain, with wetland habitats making up less than 0.5% of watershed lands (Bonnell 2014, 193).

This is an incredibly degraded landscape, but within the context of one of North Americas largest city regions, it offers elements of hope. There are multiple restoration efforts throughout the watershed, focusing on wetlands, water quality and bank-side habitat quality. But some of these restoration initiatives have been largely anthropocentric, with the outcomes focusing on human experiences of nature, without undertaking ecologically-rooted restoration projects. One example of this is the Don Valley Brickworks, a repurposed brickworks which now holds farmers markets, events venues, and guided valley experiences. It touts environmentally-minded credentials, but its construction failed to remediate the heavy metals-filled soils it sits on, which do not support the growth of local plant life or protect valley lands from harmful run off (Foster 2005, 342). This conception of nature as a fragmentary commodity is also seen within the redevelopment of Toronto's lake front and port lands, at the mouth of the Don, where natural features are seen as decorative and a component of urban form, not an ecological system (Desfor & Bonnell 2013, 166). Restoration projects that are environmentally-minded, like tree-planting or wetland restoration initiatives, though intended only to benefit at risk habitats, can lack strategic oversight, making planning for ecological systems ad hoc and fragmented (Nichols 2009, 4).

Ultimately, the ecological context of the Don River shows the immense difficultly of

planning for an environmental system which is intertwined with its surrounding urban form to the point of disappearance (see *Figure 5*). The river and its watershed have been transformed beyond the ability of complete restoration to its 'natural' state, which therefore demands new conceptions of healthy urban ecologies within its specific context. As Bonnell (2014) argues:

"Urban landscapes and urban infrastructure...are produced, therefore, not only through networks that bring together raw materials from far-off places, but also through the ideologies that support city life. Attempting to differentiate what is natural from what is constructed becomes in this context a fruitless task." (xxvii)



*Figure 5*: A contemporary image of the Don River, in Toronto, travelling along its canalized path, parallel to the DVP, looking southward towards Dundas St. East (Pelley 2019).

# 4.3 The third tributary: Non-governmental participation within the DRV and watershed

The first instance of citizen activity in 'planning' decisions surrounding the DRV was in the early 1890s with a group of Ashbridge's Bay property owners who petitioned the city to stop the outflow of raw sewage into the river, move the cattle byres downriver, and stop the stench which wafted with the wind toward their homes (Bonnell 2014, 28). This marks the beginning of one prominent form of engagement with the river system throughout its history, through work to end 'nuisance' and 'filth'. But conservation has been another equally important motivation for non-governmental engagement, and as mention already, the Don Valley Conservation Association was created before the governmental Conservation Authority (Bonnell 2014, 123). Originally, the resident-led conservation association ran nature walks, tree planting days, and watershed tours throughout the valley (Bonnell 2014, 123).

The Conservation Foundation of Greater Toronto, another citizen-led conservation body, was responsible for fundraising to purchase 15% of the remaining natural lands within the Don Valley between 1957 and 1994 (Bonnell 2008, 270). Citizen organizations had major impacts on the Don Valley and wider awareness of its importance in the late 20th century. The 1969 Pollution Probe's mock funeral march for the Don gained substantial media attention; the 1971 Ontario Water Commission was able to increase oxygen levels in the river; the 'Don Patrol' removed 200 tons of waste from valley walls; and the Task Force to Bring Back the Don launched hundreds of clean up, planting and restoration initiatives with over 10,000 volunteers (Bonnell 2014, 132-136).

But the success of non-governmental groups is not limited to the Toronto area. Residents of Richmond Hill were central in pushing development challenges to the planning adjudication body in Ontario, the Ontario Municipal Board (OMB), and ensuring the creation of the protected Oak Ridges Moraine, through the 2001 Oak Ridges Moraine Protection Act (Hanna & Webber 2010, 177; Sewell 2009, 188)

The narrative of non-governmental participation in the valley and watershed is one of great initiative from volunteers and stewards (Donald 1997). Their impacts have fundamentally altered the conception of the contemporary valley, as Bonnell (2014), again, so clearly argues:

"The attempts of citizen activists to grapple with the potential of the Don for restoration within the constraints of the existing built environment have yielded, over the past 2 decades, a newfound appreciation for the hybridity of urban landscapes that are neither fully constructed nor fully natural, but a combination of the two." (192)

# 4.4 The river: A history of complex collaborative episodes within the DRV and watershed

Finally, to completely understand the DRV and watershed as a case study, the three tributaries must be examined as they interact with one another. The best example of this is the Task Force to Bring Back the Don initiative from the early 1990s, which made building relationships with city officials, federal and provincial agencies a key part of its mandate (Bonnell

2008, 274). This generated much of its success, as they gathered a large funding portfolio, and were able to carry out many small restoration projects, without being constrained by long-term capital-heavy projects (Bonnell 2008, 275; De Sousa 2003, 194). It was eventually integrated into an official City of Toronto task force, developing the Forty Steps to a New Don report in 1994, though it was disbanded under a conservative municipal government in 2011 (Bonnell 2008, 176).

The narrative of collaboration on DRV projects has been one of presence and integration, with a focus on civic responsibility, which though important in achieving government buy-in, does not always lead to radically progressive initiatives (Desfor & Keil 2000, 18). The question of how to best plan for the DRV and watershed is far from resolved, and still hotly contested. Some of the challenges associated with complicated governance structures include: lack municipal power to guarantee funding, absolute agreement and approval from multiple, conflictual levels of government, and the need to consult with multiple lateral bureaucratic planning departments, all with different responsibilities within the Don (Bonnell 2014, 184). There has been a general "tendency of…plans to fail or 'underdeliver'" (Bonnell 2014, 191), which reflects the difficulties of inadequate budgets, fair-weather political will and complex environmental conditions. But in this way, there is incredibly significant value in the history of small-scale restoration projects, which, though humble in nature, can guarantee rapid implementation and economically-minded budgets (Bonnell 2014, 194). When these projects are properly facilitated "efforts by municipal, regional and citizen groups to protect and promote the river and remove obstacles to citizen access opened possibilities for new relationships with the Don" (Bonnell 2014, 192).

## **Chapter 5: Findings**

## 5.1 Objective 1: Identifying and describing key characteristics

The findings presented in this section are relevant for the first objective: What are the key characteristics of planning authority policies and non-governmental groups operating within the DRV and watershed? They represent two of the tributaries used within the theoretical framework, the first, examining regional planning structures, and the third, examining non-governmental participation and advocacy groups.

#### 5.1.1 The first tributary: Regional planning for the DRV and watershed

To adequately determine the key characteristics of planning authority policies operating throughout the Don, first, the contents of key policy documents are outlined, followed by summaries of interviews with 5 planners from various authorities. The focus is on conceptualizations of and approaches to the Don, and methods or protocols for multi-level planning projects.

#### A. Policy document summary

Beginning at the top of the planning hierarchy for ravines and watersheds, the Province of Ontario does not have any policies which explicitly govern the Don, while it does have legislation which outlines policy for ravines as an environment. These include the Planning Act 1990, the Conservation Authority Act 1990, the Oak Ridges Moraine Conservation Act 2001, the Greenbelt Act 2005, and the Growth Plan for the Greater Golden Horseshoe 2019. Throughout these documents, ravines are either the subjects of protection or of risk mitigation, and there are no references to methods of regional coordination, besides the existence of Conservation Authorities based on watershed areas, of which the TRCA is one of 36.

The TRCA is one of the two planning authorities with a plan explicitly for the DRV and watershed, called the Don River Watershed Plan: Beyond 40 Steps (2009). The first thing to note is the title, a reference to one of the first strategic plans for the Don, which outlined 40 steps to save it, put together by the non-governmental Task Force to Bring Back the Don (TFBBD). This begins a pattern of intertextuality throughout the plan, in which sustainability and public space

strategies, as well as master plans, from other municipalities and regional authorities are referenced (TRCA 2009, 5-1, 5-42, 6-1). The thematic center of the plan is cross-jurisdictional environmental stewardship, seen here:

"Specifically, the watershed plan is intended to inform and guide municipalities, provincial and federal governments, TRCA, non-government organizations and private landowners as they update their policies and practices for environmental stewardship. Implementation of these strategies will be most effective if existing partners coordinate their efforts, making creative use of both new and existing tools." (TRCA 2009, v)

Through this passage, it is clear the TRCA views its role as the coordinator of stewardship policies, but the alignment of watershed strategies should be carried out between partners, already highlighting a potential disconnect between strategy creation and implementation. The importance of nature-based experiences throughout the Don River watershed feature heavily within the plan (TRCA 2009, 5-46), as an agent for activating public stewardship. Beyond this central concept of stewardship, it is a highly technical plan, with site plans for regeneration projects, within the context of a holistic watershed plan (TRCA 2009, 6-8). It includes management strategies for aquatic (5-19), terrestrial (5-27), cultural and community systems (5-36) throughout the watershed. In this way, it is the only Don River watershed plan to offer both a highly technical and holistic approach, its single weakness being a lack of mechanisms for multi-level implementation and coordination. This plan is paired with a community engagement strategy (CES) (TRCA 2017A), which seeks to expand TRCA methods of engagement, outlining traditional methods, like greening programs, educational events, and visits to conservation areas (7), and potential expanded practices, like an Indigenous Liaison Committee, Watershed Working Group and Youth Council (32). It is important to note that the CES is limited through a stipulation that regulatory frameworks for mandatory consultation prevail over policies in the CES (TRCA 2017A, 7).

The third and final regional government, the Regional Municipality of York, does not reference the Don watershed as a strategic area of policy. The York Region Official Plan (2010) mentions the Don River as a component of the history of regional development and does not contain any ravine strategies, though it is home to the Humber and Don River ravine systems. That being said, it does include a chapter on policies for river systems, in the context of water management. Generally, the plan is focused on housing and intensification strategies in line with

provincial growth guidelines. The Official Plan is paired with a Community Greening Strategy (2019), which focuses on community buy-in to environmental initiatives, very much in line with the reoccurring stewardship focus found within other plans and policy documents.

The City of Vaughan, in its Official Plan (2010), views environmental planning as a multilayer exercise, stating:

"Environmental management is a multi-jurisdictional effort. Vaughan must work in consultation with the Toronto and Region Conservation Authority, whose mandate it is to further the conservation and restoration of the Humber and Don watersheds in Vaughan. York Region is also a significant partner as together the City and Region are responsible for various components of environmental management. Finally, the Province has a major role to play." (46)

It is interesting to note the nature of 'multi-jurisdictional' used here. First, it is implicitly hierarchical, with only the senior planning authorities articulated as partners, and no mention of lateral municipal partners or non-governmental groups, a stark contrast to the TRCA's strategic approach. The plan also seems to conceptualize the planning responsibility within Vaughan as a layering of existing policy on environmental management, simply implementing pre-constructed policy, without generating its own, locally-specific approach. In this way, regional planning is expressed as a passive action, trickling down, to be implemented but not expanded.

Moving eastward, the City of Richmond Hill has a different approach to conceptualizing the Don and planning through regional coordination. It actively generated a Greenway System, in coordination with the City of Markham to the east, which seeks to integrate natural features and functions of multiple river systems, building upon the existing Greenbelt and Oak Ridges Moraine systems developed by the province (City of Richmond Hill 2010, 3-5). The plan also employs a more active conception of regional planning for watersheds, seen through policy 3.2.2.1:

"Richmond Hill contains portions of four different watersheds including the Don, Rouge, Humber, and East Holland Rivers, as well as numerous sub-surface water systems that exist across the Town. This Plan emphasizes the importance of managing both surface and sub-surface water systems on a co-ordinated and comprehensive basis. The Town will work with York Region, the Conservation Authority, adjacent municipalities, and other agencies to co-ordinate and implement updates to watershed planning initiatives and implement watershed plan objectives" (3-44) The inclusion of 'adjacent municipalities' is key here, as it highlights the need to plan for watersheds beyond political boundaries, utilizing an ecological scale. The Official Plan is paired with Richmond Hill's Green the Hill (2014) community guide to engagement with environmental planning. Again, this plan is very focused on stewardship by residents and partner organizations in order to protect and enhance the environment.

The last of the northern 3 municipalities is the City of Markham, which in partnership with Richmond Hill, utilizes the Greenway system to build upon existing environmental protection measures within its Official Plan (City of Markham 2014A, 2-4). This plan utilizes the same conception of active multi-layered regional planning as Richmond Hill, with both municipalities offering contrasting approaches, when compared to Vaughan's Official Plan. But unlike the other two municipalities, Markham's Official Plan is paired with a Public Space Strategy (2014B) and a Pathways and Trails Masterplan (2009) which offer technical guidelines for public use of ravine lands, the Don Valley included, representing an important step beyond stewardship, towards strategic government-led guidance.

The final of the 4 municipalities, the City of Toronto, is the only one to have a Ravine Strategy. The Ravine Strategy (2020A) has an explicit natural systems and climate change focus, as well as an active use of regional cooperation, identifying the TRCA, other agencies, the province and neighbourhing municipalities as partners is acquiring land to adequately buffer the ravine systems (iii). Though not as technical as the Don Strategic Plan from the TRCA, it does include all the ravine systems in Toronto, the Etobicoke Creek, Humber River, Don River, and Rouge River systems. This strategy falls under the Toronto Official Plan (2006), which is the most explicitly regional Official Plan examined here. This can be seen through Chapter 2.1:

"Toronto cannot plan in isolation or expect to stand alone in dealing with the effects of urban growth. Our view of the quality of urban life tends to be based on the local conditions in our own neighbourhoods. These conditions are in turn affected by events happening in the larger region. The quality of the air, water, services and region-wide transport systems all affect the quality of life in our neighbourhood, where we work and where we play. The way in which growth and change are managed in Toronto must mesh with that of our neighbours because we are integrally linked in many ways." (2-1)

This explicit regional discourse is not present in the York Region Official Plan, which makes no

references to municipalities outside of its jurisdiction. The above example is also interesting because it links environmental qualities with regional planning, in addition to the more traditional inclusion of services and transportation. But when it comes to conceptualizing the Don, unlike the Ravine Strategy, which discusses an environmental system, this document sees it as a question of flood risk management and subject of stewardship initiatives (City of Toronto 2010, 3-35).

Overall, patterns of key characteristics between multi-layer and territorial planning authorities operating within the Don River watershed, seen through planning documents, include: conceptions of the Don are an environmental system, an opportunity for public environmental stewardship or a technical, management exercise; conceptions of regional cooperation are actively collaborative, or passively hierarchical; lateral authorities utilizing different conceptions of the extent of their responsibilities.

B. Interview summary

Five planners from different authorities were interviewed: Planner A, an environmental planner in a leadership position with the City of Toronto, Planner B, a planning and policy professional with one of the Toronto Wards along the Don River, and Planner C, a planner in a leadership position at the TRCA. Planner D, a managing policy professional at the City of Toronto, and Planner E, a senior engagement professional at the City of Toronto, were interview together, because of their frequent collaboration through the Ravine Strategy and engagement programs. A few key patterns emerged through all of their interviews. Firstly, the province has little input or role in planning for the DRV and watershed, and secondly, planning for the watershed is an inherently cooperative process with different lateral internal departmental cooperation, as well as cross-territorial cooperation. Within the City of Toronto, Planning and Parks, Recreation and Forestry work closely when considering everything from minor Committee of Adjustment (CofA) applications for by-law alterations, to large scale infrastructure throughout the valley, while also seeking input from the TRCA.

Planner A said this on the question of regional cooperation, offering a lot of insight on the importance of scale and upstream-downstream relationships:

"...the province really doesn't do much to be honest with you, they set policies and we'll react to their policies, but mostly we've been ahead of where the province is.

If there is an issue or a need for conservation [with other municipalities] there definitely is, and its long been Toronto's complaint, because we've tended to have stricter, stronger environmental policies for the rivers valleys than York has in the past, but we have suffered the impact...The province did input, identify, the river valleys as part of the Greenbelt Plan, which unfortunately undermined us, because it only applied, everybody thinks perceptually it's a great idea, but actually it undermines us because it only applies to public portions of the land, but not the privates. So suddenly, why is public more valuable than private? And our message is its all valuable and you have to have the same consideration." (Planner A, 2020)

This comment offers a lot of insight into the workings of multi-level planning relationships, highlighting firstly, Toronto's active approach to expanding policy which comes from upper planning authorities, the conflicts with York upstream, not demonstrating the same initiative to build upon existing policies, and provincial legislation, which fails to empower valley land protection through a lack of consideration.

Planner C (2020) highlighted political tensions when moving between lateral planning authorities with different priorities within the same regional municipality. They described the issues with advising a municipality with strong growth and economic priorities, especially when neighbouring municipalities have strong environmental protections, which makes maintaining regionally consistent conservation efforts difficult.

Planner B also offered insight into the complex relationships between internal departments, describing resident confusion during some CofA processes:

"Sometimes, in the extreme cases, there will be cases where, because of how siloed things are, TRCA would be fine with an application, but urban forestry has issues with them cutting down trees. But the CofA still goes ahead to approve, and then we're caught in this dilemma, of ok, the CofA approved this application, and the resident gets the impression that I can just go ahead, but then they still need to go back and get a tree removal permit...This is where our office gets involved the most, because we're sort of the ones, coordinating, and trying to communicate with all sides." (Planner B, 2020)

This comment highlights the importance of utilizing planning professionals in Ward offices to coordinate between residents and planners within lateral bureaucracies, especially when operating within a complex and sensitive environmental system like a ravine, which needs to be monitored for flood, erosion, and habitat risks. Planner E also highlighted the importance of using Ward office resources, saying "sometimes we'll ask the councillors office: 'hey, who do you know in this area?

Have you had inquiries about this specific area?' We'll use their contacts, like, using a Councillor's newsletter is always really helpful'' (Planner E 2020).

#### 5.1.2 The third tributary: Non-governmental participation in the DRV and watershed

To adequately determine the key characteristics of non-governmental participation and advocacy groups operation within the DRV and watershed, first, the contents of events pages, websites, and new interviews will be summarized, followed by a summary of an interview with a person in a leadership position at the Toronto Field Naturalists. The focus will be on conceptions of the Don, as well as methods of participation.

#### A. Website summary

A significant group working with the DRV and watershed is the Toronto Environment Alliance (TEA), one of the groups which lobbied for the inclusion of the Don Valley in the Greenbelt. One of their webpage resources (TEA 2017) chronicles this effort, an 8-year journey which began in 2009, and was characterized by advisory panels, multiple Toronto Council review processes, meetings with TRCA and provincial officials, and public awareness raising events (TEA 2017). This effort can be contrasted with the Don River Clean Up Event, held in collaboration with Greenpeace and Don't Mess with the Don (Greenpeace 2019), a one day event, held annually, as a direct response to municipal and provincial inaction on litter clean up, operating without governmental partners (Draaisma 2019A). Or, looking at community groups outside of Toronto, the Pomona Mills Park Conservationists (Ward 1 2010), ran over 10 years of restoration events with the TRCA and City of Markham to clean up, naturalize and restore Pomona Mills Park, a public space within the DRV.

These three records offer very different approaches to non-governmental stewardship, initiated across scales, utilizing different forms of relationships with authorities, and different conceptions of the river valley. They represent forms of advocacy either operating within governmental structures or outside of them; and impacts on the river valley that are either site-based and hyper-localized, or cross-territorial and broadly policy-oriented.

B. Report summary

One report examining the reemergence of community engagement in the Don recognizes the appeal of participating in a river, stating that "when a major city grows around a river, the river becomes a community commons, part of its defining identity" (Syring 2014, 2). It then examines TFBBD and the extent to which participation has expand since the groups inception in the early 1990s, with participants of the Don Watershed Regeneration Council saying that "no one group is in charge of this anymore" and that "it's quite nice to have it out of control" with initiatives going on that are independent from each other (Syring 2014, 8). This is an interesting perspective on the ad hoc nature of non-governmental participation, which is a characteristic of some of the participation initiatives within the Don, which are not generally reflected by the planning documents describing non-governmental initiatives.

#### C. Interview summary

One interview was conducted with a person in a leadership position at the Toronto Field Naturalists (TFN), who will be referred to as Participant A. Provincial absence was again discussed, but mostly, responses focused on one of their restoration project, Cottonwood Flats, in the valley, as well as their organization's focus on volunteers and legitimacy through building long term, trusting relationships with City of Toronto officials. Participant A described TFN's strategy for working with City of Toronto on restoration projects:

"The Toronto Field Naturalists have had a long effort, and long term strategy of working with the city as much as we can. So, taking a long view, being willing to hold our breath when the city isn't ready and you often need to do that. And we had the expertise within our volunteer network, so people are, in their private lives, restoration consultants...so there's a good mix of the science and the legitimacy on our team." (Participant A, 2020)

This response highlights the importance of both legitimacy and long-term relationships when initiating and monitoring restoration programs, traits that the TFN have in common with TEA and other site-based and strategic non-governmental groups. TFN's strategy has been effective, as Planner D explained that "there are certain groups we go to for certain things. And for TFN, we know that they are very, very, knowledge about natural environment issues" (Planner D 2020).

Participant A also highlighted the lack of substantive consultation and cooperation by the TRCA, which contrasts their Don River Official Plan and CES. This can be seen in the response

to Question 4, specifically for TRCA involvement in TFN restoration initiatives:

"The TRCA doesn't really do that level of consultation. They will let people know what they're up to and they're up to a lot of good things, but the partnerships with other groups, or the hands on, at least they don't do it with a group of our size or, you know...There isn't so much 'what do you think of this?' or 'how could we do it better?' They might say it but they don't really mean it." (Participant A, 2020)

This is a very interesting observation and highlights the importance of interviews as a methodological counter point to document analysis. In this way, the TFN have a local, Torontobased focus, with limited regional scope, but in-depth knowledge of local planning authorities and habitats.

## 5.2 Objective 2: Evaluating how the ecological needs of the Don River are governed

The findings presented in this section will provide support for the second objective: How are the ecological needs of the DRV and watershed being met through current regional planning systems and advocacy work? This objective represents the second tributary, the river as an active agent and complete ecology in and of itself, beyond political boundaries.

#### 5.2.1 The second tributary: Ecological transformations of the DRV and watershed

To determine how, if at all, the rivers ecological needs are being met, first the contents of ecological reports will be summarized, followed by a summary of the sections of interviews in which respondents discussed the current health of the watershed as a whole.

#### A. Report summary

The most substantial report of the ecological health of the watershed was the 2018 Toronto Ravine Study, carried out by the Department of Forestry at the University of Toronto. This is a highly contentious report, as it was not peer reviewed, but achieved large amounts of public attention with its claim that the DRV and ravine is ecologically dead (Davies et al 2018, 6). It surveys the reports of citizen scientists monitoring the Don between 1977 and 2017, as well as current conditions. The report associated with the Toronto Ravine Strategy directly confronts this claim, both questioning the validity of the findings, as well as the approach, which arguably lacked

comparative urban contexts (City of Toronto 2020A).

The TRCA also publishes brief, yearly 'report cards' on the health of the DRV and watershed, examining ground water quality, surface water quality, forest conditions and land cover (TRCA 2018). The watershed usually receives between a C and a F across these categories. These are two of the very few instances in which the watershed is evaluated as a whole, and discourses focus on ecological wellbeing, beyond territorial governance bodies or stewardship.

#### B. Interview summary

Planner A commented directly on the 2018 Davies et al report, saying that it contained incorrect facts and misinformation, but more broadly, they discussed the need to view the ecological health of the DRV and watershed within a comparative urban context:

"Our other problem is the Conservation Authority, they have to rate all their areas, even their very rural forested areas, and then Toronto comes up with D. Well of course it comes up with D! It's never going to be better than D because it's a city. So, I will say, this is not fair, because unless you knock down all the houses, and restore them to woodland, you are not going to get A. So, it's very disappointing. It has to be relative and you have to know how you're improving relative to other cities of similar size. I think we're probably better and luckier than other cities because we do have this untouched area, I mean not totally, but relatively untouched area." (Planner A 2020)

By highlighting the need for contextual analysis, Planner A identified the weakness with current systems of evaluating the ecological health of the Don: they utilize the same ratings for different contexts.

Participant A identified the same issue, highlighting that we need "a mature understanding of: why protect nature in the heart of a big city? It's not as good a habitat as you could get elsewhere, and it could never be, but, fundamentally, it's for the people" (Participant A, 2020). This is a reoccurring theme for establishing how to best govern for the entire watershed, that evaluation must be within an urban context, with an understanding of what is ecologically possible, while valuing the fragments that remain. Ultimately, the watershed scale matters, as Planner B articulated, there is value in "seeing planning from a watershed perspective, because I think we're so engrained in thinking about ward boundaries and using roads and property lines as the boundaries for how we plan for things" (Planner B, 2020).

Planner D expanded on this point, showing that the ravines and watersheds are a conglomeration of multiple elements, and need to be seen holistically: "I always like to remind people that the ravines aren't just natural areas, they're major transit routes, major active transportation routes, major areas of infrastructure, and for storm water management" (Planner D 2020).

# 5.3 Objective 3: Evaluating the impacts of collaborative episodes on the DRV and its participants

In this section, the findings presented address the third objective: To what extent have the characteristics of these three elements, territorial planning policy, river ecology and non-governmental participation, interacted to influence each other and the contemporary DRV? This objective represents the confluence of the tributaries within the theoretical framework.

#### 5.3.1 The river: Impacts of collaborative episodes

To determine the influences of the three elements on each other, records of collaborative episodes will be summarized. These records are found in policy documents, online sources, and reports, while also recounted by interviewees.

#### A. Policy document summary

The TRCA (2009) Strategic Plan for the Don presents a successful collaborative episode from 1996, with a group of residents in Harding Park, Richmond Hill, in collaboration with the municipality. It was a retrofit project, in which a storm water pond was naturalized, so that run off could be filtered and cleaned before entering German Mills Creek, and the pond could be integrated with public trails (7-3). This collaborative episode was short term, and an integrated part of a development plan. Comparatively, the Richmond Hill community engagement strategy (2014), referenced a collaborative episode with the TRCA and residents, to create a sustainable neighborhood action plan at Lake Wilcox, a new housing development (23). This is a long-term collaborative episode, but still integrated into an official development plan

Within the Toronto Official Plan (2006), the TFBBD is referenced extensively as an example of a successful community-led campaign, which actively worked with and was integrated

into the City of Toronto (5-17). The success of this task force is based on their ability to attract volunteers, investment, and complete recognized regeneration projects (City of Toronto 2006, 5-17). Again, this is another non-governmental group that is recognized based on its ability to be integrated into existing government frameworks, while also raising awareness publically.

## B. Website summary

The TRCA community engagement webpage describes two event-based forms of collaborative episodes, the Mill Pond Splash in Richmond Hill and the Paddle the Don canoe day (TRCA 2017B). The Mill Pond Splash has happened in collaboration with the municipality, Richmond Hill Field Naturalists and Conservation Foundation, for 20 years, and is a family summer tradition (TRCA 2017B), while the Paddle the Don event, with the City of Toronto, began in 1993 as a direct result of collaboration between a TRCA staff member and Toronto city councilor, raising money for TRCA restoration projects (Krawchuk 2014) (see *Figure 6*). Another events-based non-governmental collaborative episode is the Don't Mess with the Don clean-up, which had over 1000 volunteers in 2019, in collaboration with Evergreen and corporate sponsors, but purposely no governmental partners (Draaisma 2019B). These events-based collaborative episodes may be organized by sustained groups, but are reliant on large amounts of volunteers and participants at one time.



*Figure 6*: Image of the 2018 Paddle the Don event, beginning in the northern section of the river, travelling south, seen here, and ending in Toronto Harbour (Manulife 2019) Another form of collaborative episode, also based on volunteers, but organized by governmental authorities in the City of Toronto Community Stewardship program, which provides rehabilitation and monitoring programs to various sites throughout the watershed (City of Toronto 2020B). This is a direct use of tactics from non-governmental groups, but utilized to support governmental initiatives.

Finally, there are records of experiences and arts-based collaborative episodes, like the Lost Rivers projects, which leads walks along the Don tributaries which no longer exist, and is a collaborative project between the TFN and Toronto Green Community (Lost Rivers 2008; Silver 2018). These are uniquely nostalgic and contemporary explorations of the Don as an independent ecological system, as they are directly informed by the lost history of the Don, while recording how fragments of the original river system can be found throughout the city. The Don Was Here project also offers this perspective as a collaborative episode, as a collaboration with Toronto-based artists and Todmorden Mills, it highlights where natural features once were, overtop of the planned features which city residents interact with everyday (Lavoie 2014). Collaborative episodes influence participants and non-participants, and can facilitate passive awareness-raising, or an active creation of new perspectives on how the Don interacts with the city.

#### C. Interview summary

Some interviewees recounted the impacts of collaborative episodes on planning for watersheds and the Don. Planner C (2020) discussed the lunch-and-learn session they hold with non-governmental professionals on TRCA policies regarding the built form adjacent to ravine systems, and how they can take that knowledge back to clients to allow for more effective communication of protective ravine measures. Planner A (2020) described the extensive consultation process held for the creation of the Ravine Strategy, and how non-governmental groups came back with addition sites to be included as natural heritage designations within the plan. Participant A (2020) described the informal, and trust-based relationships the TFN have with other non-governmental groups, to help with restoration projects and events, like the Wild Flower Preserve maintained in collaboration with Todmorden Mills and volunteer support offered at the Ravine Symposium at the Toronto Botanical Gardens. Planner E described the need for strategic, targeted engagement, especially when professional planning knowledge falls short, saying "we

identify some of the strengths of these non-profits and non-government organizations have, that we can say, we kind of need you here, because this is what you can bring" (Planner E 2020). These first-hand accounts show the direct and immediate impacts of collaborative episodes, either through policy expansion, changes in daily practice or volunteer support.

## **Chapter 6: Analysis**

## 6.1 Objective 1: Identifying and describing key characteristics

This objective identifies the key characteristics of planning authority policies and nongovernmental groups operating within the DRV and watershed, through the lens of the framework's tributaries, regional planning and non-governmental participation.

Firstly, through utilizing a CPDA of planning authority documents, common objectives for and representations of the Don River watershed and multi-level collaboration were identified (Farrelly 2019). Objectives for the watershed were mainly 'to restore', 'to protect' or 'to manage', while representations of the watershed were either site-based, recreation-based or ecologicallybased. Some authorities used elements of all these categorizations, but there were distinguishing patterns between them. The TRCA's strongest objective is to protect, utilizing management and restoration techniques, and it is the only authority to represent the watershed ecologically, as a holistic agent. But this does not translate to other constituent authorities. The Region of York uses management objectives, with conceptions of the river being site-based and contextual. These characteristics are similar to the City of Vaughan. Richmond Hill and Markham have stronger protection objectives, and represent the river primarily as a collection of sites for recreation. The City of Toronto is the most similar to the TRCA, utilizing primarily protection objectives, and is the only authority to acknowledge the ecological realities of the watershed.

The planning authorities also have different objectives for and representations of regional collaboration for governing the Don River watershed. Objectives for collaboration are based on needs for conforming to existing policies, actively networked infrastructure or additional ecological systems, while representations of collaboration are either hierarchical or lateral. The TRCA utilizes all three objectives, while mostly viewing collaboration as hierarchical, an issue of conforming to existing controls and policies. York Region's objectives for collaboration are conformity, and its policy documents depict collaboration as a hierarchical exercise. Again, this is essentially the same for the City of Vaughan. Comparatively, Richmond Hill and Markham utilize networked infrastructure objectives within their policies, specifically through the Greenway and water management techniques, while representations of collaboration are mostly hierarchical, with

small amounts of lateral representation when it comes to other municipalities in the York Region. Finally, the City of Toronto uses objectives for collaboration which build upon existing policy through additional ecological systems, while it is the only authority which views collaboration as a hierarchical and lateral exercise, with senior and neighbouring authorities.

These key characteristics lead to the conclusion that the planning authorities operating within the watershed are asymmetrically responsible, with fragmented priorities, even though they all exist within two governing jurisdictions which set priorities and responsibilities. Generally, the province has been absent, which has been found both through the contents of its policy documents and responses from interviewees, which leaves the TRCA, which while having strong building control guidelines on site-by-site bases, cannot force planning authorities to work together on a strategic basis. The difference between municipalities can be explained through the pressures they face from their urban populations, forms and politics. The City of Vaughan is the most concerned with accommodating growth, while Richmond Hill and Markham have more green space, while also being more protected through the Oak Ridges Moraine and Greenbelt Acts. The City of Toronto is the most populated and densest, with extreme pressure to protect the few remaining green spaces and natural systems it has left for a growing population.

Now, when describing the key characteristics of non-governmental groups, a critical content analysis was used, as well as a consideration of methods for agenda setting. Key typologies of characteristics are strategy, objectives or agendas and tactics. Two types of strategies emerged: purposeful governmental collaboration and purposeful non-governmental collaboration. Key objectives, or agendas included: site-based objectives, policy change-based objectives, events-based objectives, and watershed-based objectives. Finally, tactics included: volunteer-run, lobbying tactics, and scientific studies for validity. Organizations like the TFN purposefully seek out government collaboration, though informal networks often result in non-governmental collaboration on other, non-TFN projects. Primarily, they set site- and events-based agendas, while their tactics are almost exclusively volunteer-run, though they do use scientific monitoring and lobbying tactics in more limited contexts. The Pomona Mills group in Richmond Hill also used governmental collaboration, site-based objectives, and volunteer-run tactics, though they were not a long-lived group, compared to the TFN. Don't Mess with the Don is purposefully non-governmental in its collaboration, events-based throughout the watershed, and volunteer-run.

Finally, TFBBD, the now-defunct template referenced throughout interviews and documents, was purposefully oriented towards government collaboration, focusing both on site-based and Donwide agendas, and utilized all three tactics.

What patterns can be seen across these characteristics? Generally, those organizations which actively seek governmental collaboration, must align with their structures and protocols, and those which use lobbying government as a tactic, have more difficulty being run by volunteers and must employ some staff. Patterns across agenda setting are very interesting, as most non-governmental groups utilize site- and events-based tactics, both because of limited capacity, but also because of the need to fill spaces that governmental planning authorities overlook or do not have the resources to service. But this also enhances the fragmented, ad hoc nature of planning for the Don watershed, as it is difficult to coordinate across this large, ecologically complex area with limited capacities, and opposing governmental objectives and priorities.

### 6.2 Objective 2: Evaluating how the ecological needs of the Don River are governed

This objective presents how the ecological needs of the DRV and watershed are being met by planning authorities and non-governmental groups, in line with one of the tributaries of the framework, which examines the watershed system beyond its regional divisions. The only organization which makes this lens central to its approach is the TRCA, as its structure is predicated on this ecological scale. But this may not be fully articulated within practice, as some interviewee responses, and email responses from employees highlighted their primary role as giving technical advice on a site-basis, especially in the context of by-law and building control. The City of Toronto is the only other jurisdiction that utilizes this watershed lens beyond its own political boundaries, and says so explicitly in its policy documents, as well as in interviewee responses, but it is practically limited, because it does not have the legislative authority to compel upstream conformance with its environmentally protective policies downstream.

Non-governmental groups experience more constraints in their ability to use a watershed lens, but attempt to offset this deficit by investing time and volunteers into sustained restoration of specific, significant sites along the watershed. This piecemeal approach may not allow for strategic, wide spread change, but it protect and improves small fragments of habitat, both for the enjoyment of residents and as components of systems of restored environments throughout the watershed. The success of these initiatives in protecting small components of ecological systems also generates a positive feedback loop both in terms of wider awareness of environmental issues, and proof to government officials that small-scale restoration efforts can be worthwhile investments.

# 6.3 Objective 3: Evaluating the impacts of collaborative episodes on the Don River and its participants

The third objective integrates the three tributaries into the 'river' of the framework, to examine their impacts on one another, by establishing a typology of collaborative episodes (Barry 2011) and linking them with their impacts on the watershed. Firstly, using Barry's (2011) infrastructures of collaboration, episodes can utilize soft infrastructure, like systems of communication and argumentation, or hard infrastructure, like laws, protocols or legislated roles (1118). Collaborative episodes are characterized by their duration as: continuous, project-based, or event-based, as well as their participants, bi-lateral or multi-lateral showing the number of participants; governmental or non-governmental, showing their place within official planning projects; and hierarchical or non-hierarchical, showing their structure within the regional framework.

Harding Park in Richmond Hill utilized hard infrastructures of collaboration, as a component of a development plan, was project-based, with a completion date, was multi-lateral, governmental and hierarchical, as it occurred between residents, the City of Richmond Hill and the TRCA. The TFBBD comparatively, actively used both types of collaborative infrastructure, because of its transition into a governmental task force, was intended to be continuous, until a change in government eliminated its funding, was multi-lateral, and at different points in it evolution was both governmental and non-governmental, as well as hierarchical and lateral. Collaborative episodes that have not gone through periods of such dramatic transition are usually events-based, like the Paddle the Don event, which has always been organized by the TRCA, with a strong governmental framework, or Don't Mess with the Don events, which have always utilized soft infrastructures for collaboration, with strong multilateral and non-governmental characteristics. Alternatively, restoration and monitoring projects, like Cottonwood Flats or the Todmorden Mills Wild Flower Preserve fill another typology, as projects which operationalize

both soft and hard infrastructures of collaboration, while utilizing governmental collaboration to gain official approval, but non-governmental collaboration for implementation, and in this way, maintain multi-lateral collaboration.

All of these initiatives have impacted the ecology of the Don River watershed in some way, but the extent to which they've impacted the practices of their partner organizations, and approaches to the waterway as an urban form will be examined in the next section.

## 6.4 The question: Reflections and transformations

This section brings together the analyses of the three objectives to address the overarching question: How and to what extent are the key characteristics of multi-layer planning regimes and non-governmental participation initiatives, operating within the DRV watershed, reflected in and transformed by one another? This question is focused on processes of change, as dictated by it socio-institutionalist approach, and in order to map that change, a narrative-network analysis has been applied to the processes of change within planning authorities and methods of participation within the Don, ultimately, to determine the effects of the 3 elements within the framework on each other.

The first substantial narrative is of regional change and fragmentation across the watershed, which is a small component of the same trend across the Province of Ontario. The watershed governance level practiced within the TRCA has existed since the 1950s, but within that watershed, the governance levels have shifted, along the boundaries of major roads or historic precedent. Within this narrative, suburban municipalities, like Vaughan, Richmond Hill and Markham, form a network primarily concerned with growth and housing, while municipalities like Toronto, are concerned with protecting limited amenities for a growing urban population, while facilitating the large flows of people coming into the municipality from the surrounding suburbs. The Don watershed sits across this territorial divide in priorities and responsibilities, literally acting as the connection between north and south with its highway, shadowing the river below. The non-governmental groups operating within this watershed internalize these territorial differences, with suburban groups protecting existing green space by working conditions into development deals, and urban groups working to bring back and restore parts of the watershed that had already been lost to those same growth processes. The overriding division along political

municipal boundaries is also seen within these non-governmental groups, as there are almost none that operate watershed-wide projects which cross these boundaries. Though one governance system utilizes this watershed framework, it doesn't seem easily translatable to non-governmental participation groups, who are contained by the realities of asymmetric and fragmented planning priorities used by the municipalities they are based in.

The second substantial narrative found throughout the interactions of the three tributaries is stewardship as the prominent approach to environmental planning within policy documents. But a historically informed analysis of the stewardship narrative shows that it originated as an approach to environmental protection from resident groups already operating within the watershed, and has now been operationalized by planning policy and practice to place part of the responsibility of environmental planning on users and residents. Arguably, this allows capacity building within non-governmental groups, while saving resources for planning departments, but it could also be interpreted as an abandonment of the necessity of strategic coordination, a responsibility of regional and environmental planning practice, to adequately protect natural resources and amenities. Stewardship, in this context and as a practice, was originally used to fill a gap in the presence of planning policy for ecological systems, and instead of that strategic gap being addressed, every planning authority within the watershed, including the TRCA, now uses stewardship as a central tenant of its environmental policy, without methods of coordinating or strategically guiding the practice.

The final substantial narrative of interaction is the salvation of the urban river through restoration and naturalization. This is the most recent narrative within the Don River Watershed, generating strength through non-governmental-led restoration projects by the TFBBD in the early to mid 1990s. The success of these projects led to their institutionalization within the planning structure at the City of Toronto, as an official task force. Unlike the changing meaning and processes of 'stewardship', municipal and regional governments have taken active roles in coordinating site-based restoration projects within the watershed, utilizing both government resources, and active partnerships with non-governmental groups already working within the watershed. This approach to environmental planning actively utilizes multi-level resources, both governmental and non-governmental, and attempts to address the negative impacts of urbanization on ecologically complex systems. It recognizes the inherent limits of 'naturalization' because of

urban contexts, but actively utilizes long-term, process-oriented plan-making to make incremental change. This approach to environmental planning in the DRV and watershed is the direct responsibility of successes demonstrated by non-governmental groups operating, piece by piece, within the constraints of the urban river, while recognizing the potential of reinvigorated natural systems.

## **Chapter 7: Conclusion**

In conclusion, this research utilized a socio-institutionalist approach, adapted to fully consider ecologically complex systems, to develop a framework for evaluating: how and to what extent have the characteristics of multi-level planning regimes and non-governmental participation initiatives, operating within the DRV and watershed, reflected and transformed one another? The framework developed utilized the visual metaphor of a complex river system, exploring the literature, contexts and contemporary characteristics of three 'tributaries': regional planning structures, the Don watershed as an independent agent, and non-governmental participation groups, then examining changes across the tributaries at points of collaboration, or collaborative episodes, within the 'main body of the river'. By adding these key characteristics to a consideration of the form and impacts of collaborative episodes, the question, examining the reflections and transformations of regional planning structures and non-governmental participant groups, as a result of their collaboration, is fully addressed.

Three key findings were presented: firstly, non-governmental participant groups deeply internalize the fragmented, asymmetrical regional structures which frame governance of the Don watershed. Groups largely stay within a single territorial jurisdiction, and groups which are able to participate on strategic levels, must be integrated into official governance structures, becoming vulnerable to the constraints inherent in both governmental protocols, and non-governmental organizing. Secondly, environmental 'stewardship' has been actively appropriated by all of the planning jurisdictions operating within the watershed, taken from its original usage within the context of non-governmental protection of the Don, a method of filling a gap in planning and governance abilities. By making public stewardship of the watershed an articulated policy item, planning jurisdictions ignore the necessity of strategic coordination of stewardship initiatives towards wider, ecologically-minded goals. Finally, active restoration projects initiated by nongovernmental groups have been recognized and incorporated into official planning policy, not through appropriation, but intentional inclusion and recognition of strengths and abilities. Nongovernmental partners are actively sought out by city staff to spearhead site-based restoration projects, creating genuine partnerships, working towards improving components of the watershed as best as possible.

This research contributes two elements towards existing literature: firstly, regarding the DRV and watershed, this research adds a distinctively regional perspective to existing scholarship, which has traditionally focused on the role of non-governmental groups, the history of change within the DRV, or a strong Toronto-centric focus. By examining the watershed within its physical, regional contexts, this research allowed an examination of both the watershed as a significant urban form in and of itself, while investigating the impacts of its fragmented context. The second contribution is a framework for examining heavily urbanized but ecologically significant city rivers. This theoretical framework allowed for an independent analysis of significant factors operating within the watershed, while also considering their impacts at points of collaboration. This framework actively utilizes the city river as a liminal space, a borderland, not completely of the city, but no longer a river in its 'natural' form, accepting all of its complexity while finding ways to untangle and evaluate its constituent parts.

To consider the conclusions for planning policy and practice, this research presents the need to integrate small-scale, peripheral city rivers as complex, applied components of environmental planning for dense, urbanized cities. This is one part of a wider trend in academic planning literature and public attention which calls for the revitalization of previously industrialized, degraded waterways, and importantly, this research adds regional perspectives to this focus. By acknowledging that the headwaters of these city rivers begin somewhere less urbanized, but perhaps on significant growth trajectories, planners can develop collaborative protocols across political boundaries, allowing for collaborative policy and plan-making that integrates a watershed perspective, for the benefit of its residents and ecologies. In the Greater Toronto Region, one such collaborative body exists, but it has limited resources for such largescale collaborative processes, and thus needs more serious, considered buy-in from constituent municipalities. This presents opportunities for further research: an exploration of the various roles of the TRCA and how much labour and time is dedicated to site planning compared to strategic coordination, or an exploration of the informal relationships between employees and departments across the authorities, to consider the forms and levels of networks. Ultimately, while this research adds important findings to the current body of literature, city rivers and their governing structures are in a constant state of flux, presenting continuous opportunities for questioning and exploration.

# Works Cited

## Academic literature

Alexander, D. (1999) 'Planning as learning: Sustainability and the education of citizen activists.' *Environments*, 27 (2), 79-87.

Anderson, A. (2016) 'Giving residents a say: Expanded public participation in Ontario's planning process.' Municipal World, Civic Engagement, May 2016.

Barry, J.M. (2011) 'Mobilized bias and multistakeholder protected-area planning: A socioinstitutional perspective on collaboration.' *Society & Natural Resources, An International Journal*, 24 (10), 1116-1126.

Bickerton, J. (2018) 'Diversity accommodation as a strategy of national unity: The case of Canada.' in A.G. Gagnon & M. Burgess (ed.) *Revisiting Unity and Diversity in Federal Countries: Changing Concepts, Reform Proposals and New Institutional Realities*. Leiben: Brill Nijhoff, 233-258.

Boje Groth, N., & Smidt-Jensen, S. (2007) 'The ideo-centricity of urban poly-centrism.' in N. Cattan (ed.) *Cities and Networks in Europe: A Critical Approach of Polycentrism*. Paris: John Libbey Eurotext, 81-91.

Bonnell, J.L. (2014) *Reclaiming the Don: An Environmental History of Toronto's Don River Valley*. Toronto: University of Toronto Press.

Brouillet, E. & Gagnon, A.G. (2018) 'Chapter 5: The Canadian constitution and the metaphor of the living tree.' in A.G. Gagnon & M. Burgess (ed.) *Revisiting Unity and Diversity in Federal Countries: Changing Concepts, Reform Proposals and New Institutional Realities*. Leiben: Brill Nijhoff. 116-140.

Brunet-Jailly, E. (2011) 'Metropolitain cooperation, theory and practice: Looking at Vancouver, BC, Canada.' *Regions & Cohesion*, 1 (1), 78-100.

Brunet-Jailly, E. & Martin, J.F. (2010) 'Local government in a global world: Australia and Canada in comparative perspective.' in E. Brunet-Jailly & J.F. Martin (ed.) *Local Government in a Global World*. Toronto: University of Toronto Press, 3-34

Cattan, N. (2007) 'Introduction.' in N. Cattan (ed.) *Cities and Networks in Europe: A Critical Approach of Polycentrism*. Paris: John Libbey Eurotext, ix-xiv.

Christidis, T., & Law, J. (2012) 'Annoyance, health effects and wind turbines: Exploring Ontario's planning processes.' *Canadian Journal of Urban Research*, 21 (1), 81-105.

Closman C.E. (2008) 'Holding the line: pollution, power, and rivers in Yorkshire and the Ruhr, 1850–1990.' In C. Mauch & T. Zeller (ed.) *Rivers in History: Perspectives on Waterways in Europe and North America*. University of Pittsburgh Press, Pittsburgh, 89–109.

Cohen, A. & Bakker, K. (2014) 'The eco-scalar fix: Rescaling environmental governance and the politics of ecological boundaries in Alberta, Canada.' *Environment and Planning D: Society and Space*, 32, 128-146.

Courtney, K.E. (2009) 'Sustainable urban transportation and Ontario's new planning regime: The Provincial Policy Statement, 2005 and the Growth Plan for the Greater Golden Horseshoe.' *Journal of Environmental Law and Practice*, 19, 71-104.

Daoudy, M. (2009) 'Asymmetric power: Negotiating water in the Euphrates and Tigris.' *International Negotiations*, 14, 361-391.

Davoudi, S. (2007) 'Polycentricity: Panacea or pipedream?' in N. Cattan (ed.) *Cities and Networks in Europe: A Critical Approach of Polycentrism*. Paris: John Libbey Eurotext, 65-73.

De Sousa, C.A. (2003) 'Turning brownfields into green space in the City of Toronto.' *Landscape and Urban Planning*, 62, 181-198.

Desfor, G. & Bonnell, J. (2013) 'Chapter 9: Planning nature and the city: Toronto's Lower Don River and Port Lands' in L.A. Sandberg, S. Bocking, C. Coates & K. Cruikshank (ed). *Urban Explorations: Environmental Histories of the Toronto Region* Hamilton: McMaster University Press. 165-186

Desfor, G., & Keil, R. (2000) 'Every river tells a story: The Don River (Toronto) and the Los Angeles Rive (Los Angeles) as articulating landscapes.' *Journal of Environmental Policy & Planning*, 2, 5-23.

Di Palma, V. & Robinson A. (2018) 'Willful Waters: The Los Angeles River.' in T. Way (ed) *River Cities, City Rivers*. Washington DC: Dumbarton Oaks, 153-184.

Donald, B.J. (1997) 'Fostering volunteerism in an environmental stewardship group: A report on the Task Force to Bring Back the Don, Toronto, Canada.' *Journal of Environmental Planning and Management*, 40 (4), 483-505.

Downey, T.J., & Williams, R.J. (1997) 'Provincial agendas, local responses: The 'common sense' restricting of Ontario's municipal governments.' *Canadian Public Administration/Administration Publique Du Canada*, 41 (2), 210-238.

Durley, J.L. (2007) 'Linking integrated community sustainability planning and watershed planning in Ontario, Canada.' *Environments*, 35 (1), 57-77.

Edey, R.C., Seasons, M. & Whitelaw, G. (2006) 'The media, planning and the Oak Ridges Moraine.' *Planning, Practice and Research*, 21 (2), 147-161.

Farrelly, M. (2019) '7. Analysing the representation of social actors: The conceptualisation of object of governance.' in J. Mulderrig, N.M. Montessori & M. Farrely (ed.) *Critical Policy Discourse Analysis: Advances in Critical Policy Studies*. Cheltenham: Edward Elgar Publishing. 147-168.

Foster, J. (2005) 'Restoration of the Don Valley Brick Works: Whose restoration? Whose space?' *Journal of Urban Design*, 3, 331-351.

Graham, B. (2011) 'Chapter 4: Ontario's Growth Plan for the Greater Golden Horseshoe.' in C.K. Montgomery (ed.) *Regional Planning for a Sustainable America*. New Brunswick: Rutgers University Press, 69-74.

Graham, K.A.H. (2010) 'No Joke! Local government and intergovernmental relations in Canada.' in E. Brunet-Jailly & J.F. Martin (ed.) *Local Government in a Global World*. Toronto: University of Toronto Press, 213-237.

Hall, P. and Pain, K. (2006) *The Polycentric Metropolis: Learning from Mega-City Regions in Europe*. London: Earthscan.

Hall, P. and Tewdwr-Jones, M. (2011) Urban and Regional Planning, Fifth edition. London: Routledge.

Hanna, K., & Webber, S. (2010) 'Incremental planning and land-use conflict in the Toronto region's Oak Ridges Moraine.' *Local Environment*, 15 (2), 169-183.

Healy, P. (2006) *Collaborative Planning: Shaping Places in Fragmented Societies*. Basingstoke: Palgrave MacMillan.

Hogwood, P., & Burch, M. (2000) 'Devolution and EU policy making: The territorial challenge.' *Public Policy and Administration*, 15 (2), 81-95.

Holman, N. & Thornley, A. (2015) 'Backlash in the London suburbs: The local-strategic tensions in multi-level governance' *Environment and Planning C: Government and Policy*, 33, 496-511.

Innes, J. E., & Booher, D. E. (2004) 'Reframing public participation: Strategies for the 21st century.' *Planning Theory and Practice*, 5 (4), 419-436.

Knoll, M., Lübken, U., & Schott, D. (2017) 'Introduction.' in M. Knoll, U. Lübken, & D. Schott (ed.) *Rivers Lost, Rivers Regained*. Pittsburgh: University of Pittsburgh Press, 3-22.

Leavy, P. (2014) 'Introduction' in P. Leavy (ed) *The Oxford Handbook of Qualitative Research*. Oxford: Oxford University Press. 1-21.

Li, Y., & Wu, F. (2014) 'Reconstructing urban scale: New experiments with the 'Provincial Administration of Counties' reform in China.' *The China Review*, 14 (1), 147-173.

Lidström, A. (2007) 'Territorial governance in transition.' *Regional and Federal Studies*, 17 (4), 499-508.

Loughlin, J. (2007) 'Reconfiguring the state: Trends in territorial governance in European states.' *Regional and Federal Studies*, 17 (4), 385-403.

Macaraig, J.M.R. (2015) 'Citizen science and greenspace planning in the Rouge River Watershed.' *Journal of Environmental Policy & Planning*, 17 (4) 435-451.

Manzo, Lynne C. & Perkins, Douglas D. (2006) 'Finding common ground: The importance of place attachment to community participation and planning.' *Journal of Planning Literature*, 20 (4), 335-350.

Massey, D. (2005) For Space. London: Sage Publications.

McElhinny, B. (2006) 'Written in sand: Language and landscape in an environmental dispute in southern Ontario.' *Critical Discourse Studies*, 3 (2), 123-152.

Merchant, C. (2004) *Reinventing Eden: The Fate of Nature in Western Culture*. London: Routledge.

Mills, M., Álvarez-Romero, J.G., Vance-Borland, K., Cohen, P., Pressey, R.L., Guerrero, A.M., & Ernstson, H. (2014) 'Linking regional planning and local action: Towards using social network analysis in systematic conservation planning.' *Biological Conservation*, 169, 6-13.

Mitchell, B. (2005) 'Integrated water resource management, institutional arrangements, and landuse planning' *Environment and Planning* A, 37, 1335-1352.

Mulderrig, J., Montessori, N.M., & Farrely, M. (2019) '1. Introducing critical policy discourse analysis.' in J. Mulderrig, N.M. Montessori, & M. Farrely (ed.) *Critical Policy Discourse Analysis: Advances in Critical Policy Studies*. Cheltenham: Edward Elgar Publishing. 1-22.

Nichols, P.L. (2009) 'Constructing connections: Urban forestry and Toronto's West Don Lands revitalization.' *Environnement Urbain/Urban Environment*, 3, 1-15.

Norton, P., & Hughes, M. (2018) *Public consultation and community involvement in planning: A Twenty-first century guide*. London: Routledge.

Oulahen, G. & Doberstein, B. (2011) 'Citizen participation in post-disaster flood hazard mitigation planning in Peterborough, Ontario, Canada.' *Risk, Hazards and Crisis in Public Policy*.

Pearsell, G., & Mulamoottil, G. (1994) 'Wetland boundary and land-use planning in Southern Ontario, Canada.' *Environmental Management*, 18 (6), 865-870.

Phillips, S.D. (2010) "You say you want an evolution' From citizen to community engagement

in Canadian cities.' in E. Brunet-Jailly & J.F. Martin (ed.) *Local Government in a Global World*. Toronto: University of Toronto Press, 55-80.

Pitt, H. (2018) 'Muddying the waters: What urban waterways reveal about bluescapes and wellbeing.' Geoforum, 92, 161-170.

Platt, H.L. (2017) 'Chapter 13: 'A ridiculous failure of government' – The Chicago River in the age of ecology.' in M. Knoll, U. Lübken & D. Schott (ed.) *Rivers Lost, Rivers Regained*. Pittsburgh: University of Pittsburgh Press, 255-272.

Plummer, R., de Grosbois, D., de Loë, R. & Velaniškis, J. (2011) 'Probing the integration of land use and watershed planning in a shifting governance regime.' *Water Resources Research*, 47, 1-13.

Roth, A.P. & de Loë, R.C. (2017) 'Incorporating outcomes from collaborative processes into government decision making: A case study from low water response planning in Ontario, Canada.' *Ecological Economics*, 132, 169-178.

Rotherham, I.D. (2012) 'Chapter 9: The River Don as a linear urban wildscape' in A. Jorgensen & R. Keenan (ed) *Urban Wildscapes*. Routledge: Oxon. 131-140.

Sancton, A. (2005) 'The governance of metropolitan areas in Canada.' *Public Administration and Development*, 25, 317-327.

Sancton, A. (2010) 'Restructuring and reform: Canada.' in E. Brunet-Jailly, & J.F. Martin (ed.) *Local Government in a Global World*. Toronto: University of Toronto Press, 108-129.

Searle, G. & Filion, P. (2011) 'Planning context and urban intensification outcomes: Sydney versus Toronto.' *Urban Studies*, 48 (7), 1419-1438.

Sewell, J. (2009) *The Shape of the Suburbs: Understanding Toronto's Sprawl*. Toronto: University of Toronto Press.

Sorensen, A. & Hess, P. (2015) 'Building suburbs, Toronto-style: Land development regimes, institutions, critical junctures and path dependence.' *Town Planning Review*, 86 (4), 411-436.

Sorensen, A., & Sagaris, L. (2010) 'From participation to the right to the city: Democratic place management at the neighbourhood scale in comparative perspective.' *Planning Practice and Research*, 25 (3), 297-316.

Steiner, F. (2014) 'Frontiers in urban ecological design and planning research.' *Landscape and Urban Planning*, 125, 304-311.

Stoney, C., & Graham, K.A.H. (2009) 'Federal-municipal relations in Canada: The changing organizational landscape.' *Canadian Public Administration/Administration Publique Du Canada*, 52 (3), 371-394.

Stradling, D. (2017) 'Chapter 5: The new Cuyahoga – Straightening Cleveland's crooked river.' in M. Knoll, U. Lübken & D. Schott (ed.) *Rivers Lost, Rivers Regained*. Pittsburgh: University of Pittsburgh Press. 107-122.

Tremblay-Racicot, F.R. & Mercier, J. (2014) 'Integrating transportation and land use planning at the metropolitan level in North America: Multilevel governance in Toronto and Chicago.' *Brazilian Journal of Urban Development*, 6 (2), 184-200.

van Straalen, F.M. & Witte, P.A. (2018) 'Entangled in scales: multilevel governance challenges for regional planning strategies.' *Regional Studies, Regional Science*, 5 (1), 157-163.

Way, T. (2018) 'Introduction: River Cities, City Rivers.' in T. Way (ed) *River Cities, City Rivers*. Washington DC: Dumbarton Oaks, 1-12.

Wessells, A.T., & Lejano, R.P. (2017) 'Urban waterways and waterfront spaces: Social construction of a common good.' *Journal of the Southwest*, 59 (1-2), 106-132.

Yin, R.K. (2018) *Case Study Research and Applications: Design and Methods, Sixth Edition*. London: Sage Publications.

## Images

Bouchette, J. (1815) 'Plan for York Harbour.' *Toronto Public Library Collection* (public domain) Last date accessed: 15 July 2020. https://www.torontopubliclibrary.ca/detail.jsp?Entt=RDMDC-MAPS-R-44&R=DC-MAPS-R-44

Don River Valley Park (2020) 'History.' Last date accessed: 15 July 2020. https://donrivervalleypark.ca/about-the-park/history/

Pelley, L. (2019) 'How climate change gave added urgency to a \$1.25B project to prevent flooding in Toronto.' CBC News, Toronto. 25 September 2019. Last date accessed: 15 July 2020. https://www.cbc.ca/news/canada/toronto/toronto-flooding-climate-change-1.5290037

Manulife Paddle the Don (2019) BlogTO, Events. 15 May 2019. Last date accessed: 15 July 2020. https://www.blogto.com/events/paddle-the-don-toronto-2/

Toronto and Region Conservation Authority (TRCA) (2009) 'Don River Watershed Plan: Beyond 40 steps.' *Toronto and Region Conservation Authority, Don Watershed Regeneration Council.* 

Toronto and Region Conservation Authority (2020) 'Watershed features – Don River. Last date accessed: 15 July 2020. https://trca.ca/conservation/watershed-management/don-river/watershed-features/

## Interviews

Participant A (2020) 29 June 2020, 2pm GMT, 9am EST. Zoom video conferencing software.

Planner A (2020) 2 July 2020, 4:30pm GMT, 11:30am EST. Zoom video conferencing software.

Planner B (2020) 9 July 2020, 2:30pm GMT, 9:30am EST. Zoom video conferencing software.

Planner C (2020) 13 July 2020, 4:30pm GMT, 11:30am EST. Microsoft Teams video conferencing software.

Planner D & Planner E (2020) 14 July 2020, 6:30pm GMT, 1:30pm EST. Zoom video conferencing software.

### Policy documents, reports, online sources

City of Markham (2009) 'Pathways and trails master plan: Report and design guidelines.' City of Markham, MMM Group Limited.

City of Markham (2014A) 'Planning Markham's Future: Markham Official Plan.' June 2014, regional approval: 9 April, 2018.

City of Markham (2014B) 'Shared places, our spaces: Markham's public realm strategy.' City of Markham

City of Richmond Hill (2010) 'Richmond Hill Official Plan: A new kind of urban.' July 2010, provincial approval 23 January, 2018.

City of Richmond Hill (2014) 'Greening the Hill: Our community, our future – A public guide to the environment strategy.' 28 April, 2014.

City of Toronto (2006) 'Toronto Official Plan.' February 2019 office consolidation.

City of Toronto (2020A) 'Toronto Ravine Strategy.' 29 January 2020.

City of Toronto (2020B) 'Community Stewardship Program.' Toronto, Volunteer with the City. Last date accessed: 12 July 2020. https://www.toronto.ca/community-people/get-involved/volunteer-with-the-city/community-stewardship-program/

City of Vaughan (2010) 'City of Vaughan Official Plan: A Plan for transformation.' 29 May 2019 office consolidation.

Davies, E., Dong, A., Berka, C., Scrivener, P., Taylor, D., & Smith, S.M. (2018) 'The Toronto ravine's study: 1977-2017 – Long term changes in the bio-diversity and ecological integrity of Toronto's ravines.' *Faculty of Forestry, University of Toronto*. July 2018.

Draaisma, M. (2019A) "Don't Mess with the Don' ravine clean up expected to draw over 1000 people." *CBC News, Toronto*. 22 April, 2019. Last date accessed: 12 July 2020. https://www.cbc.ca/news/canada/toronto/don-valley-ravine-cleanup-do-not-mess-with-the-don-community-group-1.5106600

Draaisma, M. (2019B) 'Estimated 1,000 volunteers pick up trash in Don Valley as part of ravine clean up.' *CBC News, Toronto*. 27 April, 2019. Last date accessed: 12 July 2020. https://www.cbc.ca/news/canada/toronto/dont-mess-with-the-don-ravine-cleanup-success-garbage-1.5114044

Greenpeace, Greenwire, Events (2019) 'Toronto: Don River clean up and revitalization.' Last date accessed: 12 July 2020. https://greenwire.greenpeace.org/canada/en/events/toronto-don-river-clean-revitalization-2019

Krawchuk, L. (2014) 'The little paddle that just grew and grew.' *Leaside Life, Recent Stories, Community*. Last date accessed: 12 July 2020. https://leasidelife.com/the-little-paddle-that-just-grew-and-grew/

Lavoie, J. (2014) 'Don Was Here project explores the historical path of the lower Don River.' *Toronto, News Story*. 4 July, 2014. Last date accessed: 12 July 2020. https://www.toronto.com/news-story/4615091-don-was-here-project-explores-historical-path-of-the-lower-don-river/

Lost Rivers. (2008) 'Riverdale Woodlands & other Task Force to Bring Back The Don projects at Riverdale.' Last date accessed: 12 July 2020. http://www.lostrivers.ca/content/points/rvdlpjts.html

Province of Ontario (1990) *Conservation Authorities Act, R.S.O. 1990, c. C.27.* Ministry of Environment, Conservation and Parks.

Province of Ontario (1990) *Planning Act, R.S.O. 1990, c. P.13*. Ministry of Municipal Affairs and Housing.

Province of Ontario (2001) Oak Ridges Moraine Conservation Act, S.O. 2001, c. 31. Ministry of Municipal Affairs and Housing.

Province of Ontario (2005) Greenbelt Act, S.O. 2005, c. 1. Ministry of Municipal Affairs and Housing.

Province of Ontario (2019) A Place to Grow: Growth Plan for the Greater Golden Horseshoe. Ministry of Municipal Affairs and Housing.

Regional Municipality of York (2010) 'York Region Official Plan.' April 2019 office consolidation.

Regional Municipality of York (2018) 'Regional Municipality of York Greening Strategy: Inspiring Action.' *York Region Forestry*.

Silver, R. (2018) 'People of Toronto: Helen Mills (Lost Rivers)' *Torontoism, News*. Last date accessed: 12 July 2020. https://torontoism.com/toronto-news/2018/07/helen-mills-lost-rivers

Syring, D. (2014) 'The Don River: Reawakening community engagement with the commons.' *Fresh Water Future & Alliance for the Great Lakes*.

Toronto and Region Conservation Authority (TRCA) (2009) 'Don River Watershed Plan: Beyond 40 steps.' *Toronto and Region Conservation Authority, Don Watershed Regeneration Council.* 

Toronto and Region Conservation Authority (TRCA) (2017A) 'Community engagement strategy, 2017-2027.' June 2017.

Toronto and Region Conservation Authority (TRCA) (2017B) 'Don River Community Engagement.' Last date accessed: 12 July 2020. https://trca.ca/conservation/watershed-management/don-river/community/

Toronto and Region Conservation Authority (TRCA) (2018) 'Don River – Watershed report card 2018.' *Toronto and Region Conservation & Conservation Ontario*.

Toronto Environment Alliance (TEA) (2017) 'Timeline – Growing the Greenbelt into Toronto.' Last date accessed: 12 July 2020. https://www.torontoenvironment.org/timeline\_growing\_the\_greenbelt\_into\_toronto

Ward 1 (South) Thornhill Residents (2010) 'Pomona Mills Park Conservationists.' Thornhill Ward 1. Last date accessed: 12 July 2020. http://www.thornhillwardone.com/pomona.shtml

# Appendix

## Appendix A: Interview Questions

Non-governmental group questions

- 1. What kind of initiatives do you or your group undertake within the Don River Watershed?
- 2. How do you or your group determine the best location for your initiatives?
- What is your knowledge of other community-led initiatives within the Don?
   a. What are your relationships with these organizations?
- 4. How often do you or your organization have to consider the different levels of planning authorities operating through the watershed?
  - a. How do you or your organization approach relationships with the different authorities?
- 5. To what extent is the success of the above initiatives related to how you or your organization engages with the different authorities?
  - a. What reasons have you identified for initiatives not succeeding?

Planning authority questions

- 1. What are some of the ways non-governmental group and private individuals approach you and your colleagues changes they want to see in the Don River Watershed?
- 2. What are some of the ways you and your colleagues approach non-governmental groups and private individuals with changes being initiated within the watershed?
- 3. What kinds of partnerships do you and your colleagues have with other planning authorities within the watershed?
- 4. Does the form of engagement with non-governmental groups and private individuals change when a project or initiative within the watershed takes place across multiple spatial or governmental scales?
  - a. If so, how?
- Do non-governmental or private individual understandings of multi-level planning functions within the watershed influence your role or initiatives?
   a. If so, how?
- 6. What do you see as the traits of the most successful non-governmentally initiated projects or initiative within the watershed?

## Appendix B: Sample interview transcript

Participant A: Response to Question 5 of the non-governmental group question set

"I think we try to go for the long-term relationship with the city and to develop and maintain the trust and to help the city evolve towards a more mature understanding towards the role of nature within their realm of responsibility. There are lots of different ways to approach what the city is doing, not everybody takes that sort of go slow...It's not that we want to go slow, but we're resigned to slow progress. There are a lot of groups who are very very frustrated by the slow rate of progress, so they will say 'we don't see any presence in protecting nature,' and the city is not doing its job and therefore volunteer organizations need to do it independently, and of course the city gets hyper anxious about that sort of thing, and the cities lawyers get hyper anxious about that sort of thing.

I guess essentially what we're doing, and we don't ever say this formally, but you do have to recognize that the city is supposed to integrate the many different desires of its population visa vie green space, and so they have to pay attention when their population wants more soccer fields or more off leash areas for dogs or more trail bikes. Those are all legitimate needs, and they have to be integrated. And of course, we think the needs of nature are legitimate as well and can't be forgotten, but getting them to hold it all together and particularly those few moments a year in a councillor's life when the councillor can imagine a remnant nature area in the city and what his or her responsibility is towards that. You know, they have maybe 3 or 4 minutes a year to think about that, they are legitimately extremely busy politicians, being torn in a lot of different areas.

And it's such a fascinating period of time right now about public space and what it's good for and what it's needed for and you know, in some ways its quite scary, because it may polarize further. There definitely are groups who talk about the destructive efforts of making cities more dense, and that really, that's a problem, and there's a debate that needs to be had again and again, and I don't feel that way and the board of the Toronto Field Naturalists doesn't feel that way either. Cities need to be dense."

#### Planner D & Planner E: Responses to Question 6 of the planning authority question set

Planner E: I'll go back to TFN as an example, because we identify what they're strengths are, and we identify that they understand where we're coming from. And there have been times when we've gone to TFN an just said, in a causal conversation, 'you're probably interested in this thing, and here's what I think you can bring to it', which is a level headedness, it might just be that ecological protection perspective that they have and we want to emphasize but it just has so much weight coming from them. That's an example that I can think of, that we identify some of these strengths of these non-profits and non-government organizations have, that we can say, we kind of need you here, because this is what you can bring.

Planner D: Yeah, I agree, it depends on the type of work. There are certain groups we go to for certain things. And for TFN, we know that they are very very knowledgable about natural environment issues. One of my old profs I see all the time at TFN things, and I'm like, 'I'm going to defer to TFN on this, because I know how smart this woman is'. On the other hand, there are other groups that we know are really good at connecting to their community. So, they don't actually have a defined skill set, like knowledge of natural environment, but they are good...I'm thinking of East Don Parkland when Phil was still around. He had the pulse of the community, he was really good at reaching out to his neighbours, and literally stopping people on the trails, and talking to them about work that was going on. And there's other aspects when we look at NGOs for their ability to fundraise, which the city is not great at. I think we, through our experience with the NGOs, have a sense of the type of skills that would align with the type of work we want to do. So, we're not always reaching out to the same folks.

Planner E: Another group is the mountain bike group. Our group has worked a lot with mountain bike trails, specifically in the Don, and the City of Toronto, we're not mountain bike experts. Mountain biking was very new to us, and Parks, Forestry and Recreation, this was about 20 years ago, when our old supervisor started engaging with them. But they we're a specific group that I would ask to speak up and talk about mountain biking in Toronto, because people didn't believe me that it was a thing, and it's a very active, and sometime vocal group. And they're quite eloquent in explaining to people, 'oh yeah there's mountain biking trails in Toronto, and here's the equipment I buy, here's the amount of times I go out, here's an extremely valuable recreational asset that nobody knows about'. So, I would have them explain mountain biking to people, because I couldn't, I'm not a mountain biker. So, we have groups like that, we really use their targeted expertise and their voices to help assist us.

Planner D: And I will just add that at the community level, the message is sometimes better received if it's from a community member than from us. We could be saying the same message, but there's a certain level of distrust of what our motives are.

Planner E: All the time. Which, is a very valid point. We can use these groups, to vocalize the exact same thing that we're saying, but it just has more authenticity and more weight, because its coming from them and not from us. Which is a totally valid point, sometimes people don't want to hear what the City of Toronto has to say, and I totally understand that.

# Appendix C: Interviewee consent forms and anonymizations

Participant A: An individual in a leadership position at the TFN

	u are happy to participate, please complete this consent form by ticking nowledge the following statements and signing your name at the botton		
Please give the signed form to the researcher conducting your interview at the interview. The also be able to explain this consent form further with you, if required.			
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3.	I understand that my participation is entirely voluntary.	M	
4.	I understand that I may withdraw at any time without giving a reason and with no consequences.	10	
5.	I agree for the interview to be audio recorded.	Ø	
6.	I understand that I may see a copy of the interview transcript after it has been transcribed and agree any amendments with the researcher.	đ	
7.	I understand that the intention is that interviews are anonymised and that if any of my words are used in a research output that they will not be directly attributed to me unless otherwise agreed by all parties.	ď	
8.	I understand the data from this project will be considered for repository in the UCL Open Access repository as described on the Information Sheet but that this will be anonymised data only.	ø	
9.	I understand that I can contact the student who interviewed me at any time using the email address they contacted me on to arrange the interview, or the dissertation supervisor using the contact details provided on page X of the information sheet.	Ъ	
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Planner A: An environmental planner in a leadership position at the City of Toronto

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Planner B: A planning and policy professional with one of the Ward offices bordering the Don River Valley in the City of Toronto

Participation within territorially asymmetric planning systems: The Don River Valley are happy to participate, please complete this consent form by ticking wledge the following statements and signing your name at the bottom give the signed form to the researcher conducting your interview at the able to explain this consent form further with you, if required. have read and understood the information sheet.	the boxes to of the page.	
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## Planner C: A planner in a management position at the TRCA

#### Informed Consent Sheet

Participation within territorially asymmetric planning systems: The Don River Valley

If you are happy to participate, please complete this consent form by ticking the boxes to acknowledge the following statements and signing your name at the bottom of the page.

Please give the signed form to the researcher conducting your interview at the interview. They will also be able to explain this consent form further with you, if required.

1.	I have read and understood the information sheet.	
2.	I agree to participate in the above research by attending a face-to-face interview as described on the Information Sheet.	Ø
3.	I understand that my participation is entirely voluntary.	
4.	I understand that I may withdraw at any time without giving a reason and with no consequences.	Ø
5.	I agree for the interview to be audio recorded.	Þ
6.	I understand that I may see a copy of the interview transcript after it has been transcribed and agree any amendments with the researcher.	۵
7.	I understand that the intention is that interviews are anonymised and that if any of my words are used in a research output that they will not be directly attributed to me unless otherwise agreed by all parties.	Þ
8.	I understand the data from this project will be considered for repository in the UCL Open Access repository as described on the Information Sheet but that this will be anonymised data only.	Þ
9.	I understand that I can contact the student who interviewed me at any time using the email address they contacted me on to arrange the interview, or the dissertation supervisor using the contact details provided on page X of the information sheet.	B

Participant name: Steve Heuchert

Signature: Stuttent.

Date: July 13 2020

Date:

Researcher name:

Page 3

Signature:

## Planner D: A managing policy professional at the City of Toronto

### Informed Consent Sheet

#### Participation within territorially asymmetric planning systems: The Don River Valley

If you are happy to participate, please complete this consent form by ticking the boxes to acknowledge the following statements and signing your name at the bottom of the page.

Please give the signed form to the researcher conducting your interview at the interview. They will also be able to explain this consent form further with you, if required.

1.	I have read and understood the information sheet.	Y
2.	I agree to participate in the above research by attending a face-to-face interview as described on the Information Sheet.	Y
3.	I understand that my participation is entirely voluntary.	Y
4.	I understand that I may withdraw at any time without giving a reason and with no consequences.	Y
5.	I agree for the interview to be audio recorded.	Y
6.	I understand that I may see a copy of the interview transcript after it has been transcribed and agree any amendments with the researcher.	Y
7.	I understand that the intention is that interviews are anonymised and that if any of my words are used in a research output that they will not be directly attributed to me unless otherwise agreed by all parties.	Y
8.	I understand the data from this project will be considered for repository in the UCL Open Access repository as described on the Information Sheet but that this will be anonymised data only.	Y
9.	I understand that I can contact the student who interviewed me at any time using the email address they contacted me on to arrange the interview, or the dissertation supervisor using the contact details provided on page X of the information sheet.	Y

Participant name: Wendy Strickland	Signature:	<b>Date:</b> July 14, 2020
Researcher name:	Signature:	Date:



(signature is separate, interviewee did not have access to a printer or electronic signature)

## Planner E: A senior engagement professional at the City of Toronto

#### Informed Consent Sheet

Participation within territorially asymmetric planning systems: The Don River Valley

If you are happy to participate, please complete this consent form by ticking the boxes to acknowledge the following statements and signing your name at the bottom of the page.

Please give the signed form to the researcher conducting your interview at the interview. They will also be able to explain this consent form further with you, if required.

1.	I have read and understood the information sheet.	
2.	I agree to participate in the above research by attending a face-to-face interview as described on the Information Sheet.	
3.	I understand that my participation is entirely voluntary.	
4.	I understand that I may withdraw at any time without giving a reason and with no consequences.	
5.	I agree for the interview to be audio recorded.	
6.	I understand that I may see a copy of the interview transcript after it has been transcribed and agree any amendments with the researcher.	
7.	I understand that the intention is that interviews are anonymised and that if any of my words are used in a research output that they will not be directly attributed to me unless otherwise agreed by all parties.	
8.	I understand the data from this project will be considered for repository in the UCL Open Access repository as described on the Information Sheet but that this will be apopypised data only.	
9.	I understand that I can contact the student who interviewed me at any time using the email address they contacted me on to arrange the interview, or the dissertation supervisor using the contact details provided on page X of the information sheet.	×

Participant name:Scott Laver Signature:

Oco----- Date: July 14 2020

Researcher name:

Date:

Page 3

C

Signature:

Appendix D: Risk assessment form, completed in September 2019

# RISK ASSESSMENT FORM FIELD / LOCATION WORK



The Approved Code of Practice - Management of Fieldwork should be referred to when completing this form

http://www.ucl.ac.uk/estates/safetynet/guidance/fieldwork/acop.pdf

## DEPARTMENT/SECTION: MPLAN CITY PLANNING, BARTLETT SCHOOL OF PLANNING LOCATION(S): DON VALLEY RIVER, ONTARIO PERSONS COVERED BY THE RISK ASSESSMENT: Emma Kate Bunting

BRIEF DESCRIPTION OF FIELDWORK: Site visits of public spaces within urban ravine system and interviews with planners and participants, involved with the use of above spaces

Consider, in turn, each hazard (white on black). If **NO** hazard exists select **NO** and move to next hazard section.

If a hazard does exist select **YES** and assess the risks that could arise from that hazard in the risk assessment box.

Where risks are identified that are not adequately controlled they must be brought to the attention of your Departmental Management who should put temporary control measures in place or stop the work. Detail such risks in the final section.

ENVIRONMENT	The environment always represents a safety hazard. Use space below to identify and assess any risks associated with this hazard
e.g. location, climate, terrain, neighbourhood, in outside organizations, pollution, animals.	Examples of risk: adverse weather, illness, hypothermia, assault, getting lost. Is the risk high / medium / low ? Low

CONTROL MEASURES	Indicate which procedures are in place to control the identified risk

- work abroad incorporates Foreign Office advice
- \_\_\_\_ participants have been trained and given all necessary information
- \_\_\_\_ only accredited centres are used for rural field work
- x participants will wear appropriate clothing and footwear for the specified environment
- trained leaders accompany the trip
- x refuge is available

- work in outside organisations is subject to their having satisfactory H&S procedures in place
  - OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

EMERGENCIES	Where emergencies may arise use space below to identify and assess any risks	
e.g. fire, accidents	Examples of risk: loss of property, loss of life	

Low to no risk

CONTROL MEASURES		Indicate which procedures are in place to control the identified risk	
	participants have registered with LOCATE at http://www.fco.gov.uk/en/travel-and-living- abroad/		
_	fire fighting equipment is carried on the trip and participants know how to use it		
_	contact numbers for emergency services are known to all participants		
x	participants have means of contacting emergency services		
_	participants have been trained and given all necessary information		
_	a plan for rescue has been formulated, all parties understand the procedure		
_	the plan for rescue /emergency has a reciprocal element		
-	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:		

FIELDWORK 1			May 2010
EQUIPMENT	Is equipment used?	NO	If 'No' move to next hazard If 'Yes' use space below to identify and assess any
			risks
e.g. clothing, outboard motors.	Examples of risk: inappropriate, failure, insufficient training to use or repair, injury. Is the risk high / medium / low ?		

Low

CONTROL MEASURES		Indicate which procedures are in place to control the identified risk	
_	the departmental written Arrangement for equipment is followed		
_	participants have been provided with any necessary equipment appropriate for the work		
_	all equipment has been inspected, before issue, by a competent person		
	all users have been advised of correct use		

- all users have been advised of correct use
- special equipment is only issued to persons trained in its use by a competent person
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

LONE WORKING	ls lone working	YES	If 'No' move to next hazard
	a possibility?		If 'Yes' use space below to identify and assess any
			risks
e.g. alone or in isolation lone interviews.	Examples of risk: low?	difficult to	o summon help. Is the risk high / medium /
			pers and friends, who live close by, in addition rviews will rarely be 1 on 1
CONTROL MEASURES	Indicate which p	orocedure	es are in place to control the identified risk

_	the departmental written Arrangement for lone/out of hours working for field work is followed
	lone or isolated working is not allowed
х	location, route and expected time of return of lone workers is logged daily before work commences
х	all workers have the means of raising an alarm in the event of an emergency, e.g. phone, flare, whistle
х	all workers are fully familiar with emergency procedures
_	OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

FIELDWORK 2	May 2010
ILL HEALTH	The possibility of ill health always represents a safety hazard. Use space below to identify and assess any risks associated with this Hazard.
e.g. accident, illness, personal attack, special personal considerations or vulnerabilities.	Examples of risk: injury, asthma, allergies. Is the risk high / medium / low? Low
CONTROL MEASURES	Indicate which procedures are in place to control the identified risk
	e number of trained first-aiders and first aid kits are present on the field trip s have had the necessary inoculations/ carry appropriate prophylactics

- x participants have been advised of the physical demands of the trip and are deemed to be physically suited
   x participants have been adequate advice on harmful plants, animals and substances the
- x participants have been adequate advice on harmful plants, animals and substances they may encounter
- \_\_\_\_ participants who require medication have advised the leader of this and carry sufficient medication for their needs
- OTHER CONTROL MEASURES: please specify any other control measures you have implemented:

TRANSPORT	Will transport be	NO	X Move to next hazard
	required	YE S	Use space below to identify and assess any risks
e.g. hired vehicles	Examples of risk: a or training Is the risk high / me		ts arising from lack of maintenance, suitability
CONTROL MEASURES	Indicate which pro	ocedure	es are in place to control the identified risk
<ul> <li>transport mu</li> <li>drivers comp</li> <li>http://www.ue</li> <li>drivers have</li> </ul>	bly with UCL Policy or cl.ac.uk/hr/docs/colled been trained and hol	ined in o Drivers ge_drive d the ap	compliance with relevant national regulations s ers.php
adequate res	st periods parts carried to meet fore NTROL MEASURES:	eseeable	ent driver/operator fatigue, and there will be emergencies specify any other control measures you have
adequate res sufficient spare OTHER CON implemented	st periods parts carried to meet fore NTROL MEASURES:	eseeable	emergencies
adequate res sufficient spare OTHER CON implemented	st periods parts carried to meet fore NTROL MEASURES: 1:	please	emergencies specify any other control measures you have
adequate res         sufficient spare         OTHER CON         implemented         DEALING WITH         THE	st periods parts carried to meet fore NTROL MEASURES: 1: Will people be dealing with public	YES	emergencies specify any other control measures you have If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
adequate res sufficient spare OTHER CON implemented	st periods parts carried to meet fore NTROL MEASURES: 1: Will people be dealing with public Examples of risk: Is the risk high / me Low	yES please	emergencies specify any other control measures you have If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks
adequate res sufficient spare OTHER CON implemented	st periods parts carried to meet fore NTROL MEASURES: 1: Will people be dealing with public Examples of risk: Is the risk high / me Low	YES please ylease YES persona edium /	emergencies specify any other control measures you have If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks al attack, causing offence, being misinterpreted low? es are in place to control the identified risk techniques
adequate res sufficient spare OTHER CON implemented	<ul> <li>st periods</li> <li>parts carried to meet fore</li> <li>NTROL MEASURES:</li> <li>Will people be</li> <li>dealing with</li> <li>public</li> <li>Examples of risk: pls the risk high / me</li> <li>Low</li> <li>Indicate which presents</li> </ul>	YES please ylease YES persona edium /	emergencies specify any other control measures you have If 'No' move to next hazard If 'Yes' use space below to identify and assess any risks al attack, causing offence, being misinterpreted low? es are in place to control the identified risk techniques

participants x interviews a	re conducted at neutra NTROL MEASURES:	nat might al locatio	been sought cause offence or attract unwanted attention ns or where neither party could be at risk specify any other control measures you have
FIELDWORK	3		May 201
WORKING ON OR NEAR WATER	Will people work on or near water?	YES	If 'No' move to next hazard If 'Yes' use space below to identify and assess any
marshland, sea.	high / medium / low	V?	, malaria, hepatitis A, parasites. Is the risk
Low			
			s are in place to control the identified risk
CONTROL         MEASURES         x       Ione working of coastguard in could prove a all participants all participants all boat is operat	Indicate which pro- on or near water will n formation is understoo threat s are competent swim lways wear adequate ted by a competent pe equipped with an altern ave received any appr TROL MEASURES: p	ocedure ot be allo od; all wo mers protectiv rson native mo ropriate i	s are in place to control the identified risk owed ork takes place outside those times when tides e equipment, e.g. buoyancy aids, wellingtons eans of propulsion e.g. oars
CONTROL         MEASURES         x       Ione working of coastguard in could prove a         x       all participants al	Indicate which pro- on or near water will n formation is understoo threat s are competent swim lways wear adequate ted by a competent pe equipped with an altern ave received any appr TROL MEASURES: p	ocedure ot be allo od; all wo mers protectiv rson native mo ropriate i	s are in place to control the identified risk owed ork takes place outside those times when tides e equipment, e.g. buoyancy aids, wellingtons eans of propulsion e.g. oars noculations

HANDLING	Do MH activities	NO	If 'No' move to next hazard
(MH)	take place?		If 'Yes' use space below to identify and assess any
			risks
e.g. lifting, carrying, moving large or heavy equipment, physical unsuitability for the task.	Examples of risk: s low?	train, cu	ts, broken bones. Is the risk high / medium /
CONTROL MEASURES	Indicate which pr	ocedure	s are in place to control the identified risk
the department	al written Arrangeme	ent for M	H is followed
the supervisor h	nas attended a MH r	isk asse	ssment course
<ul> <li>all tasks are wit prohibited from</li> </ul>		s, persor	ns physically unsuited to the MH task are
	orming MH tasks are	e adequa	a tra la stata da se al
· · ·			-
equipment com	ponents will be asse	embled o	on site
<ul><li>equipment com</li><li>any MH task out</li></ul>	itside the competend	embled of stat	-
<ul> <li>equipment com</li> <li>any MH task ou</li> <li>OTHER CONTI</li> </ul>	itside the competend	embled of stat	n site ff will be done by contractors
<ul> <li>equipment com</li> <li>any MH task ou</li> <li>OTHER CONTI</li> </ul>	itside the competend	embled of stat	n site ff will be done by contractors
<ul> <li>equipment com</li> <li>any MH task ou</li> <li>OTHER CONTI</li> <li>implemented:</li> </ul>	itside the competend	embled of stat	n site ff will be done by contractors becify any other control measures you have
<ul> <li>equipment com</li> <li>any MH task ou</li> <li>OTHER CONTR</li> <li>implemented:</li> </ul>	itside the competend	embled of stat	n site ff will be done by contractors

		I			
	work with	NO	If 'Yes' use space below to identify and assess any		
	substances		risks		
e.g. plants, chemical, biohazard, waste	Examples of risk: il risk high / medium		poisoning, infection, illness, burns, cuts. Is the		
CONTROL MEASURES	Indicate which pro	ocedure	s are in place to control the identified risk		
the departmenta are followed	al written Arrangeme	nts for de	ealing with hazardous substances and waste		
all participants a substances they	•	, training	and protective equipment for hazardous		
participants who medication for the medica		advised	the leader of this and carry sufficient		
·	•				
<ul> <li>suitable containers are provided for hazardous waste</li> <li>OTHER CONTROL MEASURES: please specify any other control measures you have</li> </ul>					
OTHER CONTF	•				
	•				
OTHER CONTF	•				
OTHER CONTF implemented:	ROL MEASURES: pl		ecify any other control measures you have		
OTHER CONTF	OL MEASURES: pl				
OTHER CONTF implemented:	ROL MEASURES: pl Have you identified any other	ease spe	cify any other control measures you have		
OTHER CONTF implemented:	ROL MEASURES: pl	ease spe	If 'No' move to next section If 'Yes' use space below to identify and assess any		
OTHER CONTR implemented:	Have you identified any other hazards?	ease spe	ecify any other control measures you have If 'No' move to next section If 'Yes' use space below to identify and		
OTHER CONTR implemented:     OTHER HAZARDS     i.e. any other	ROL MEASURES: pl Have you identified any other	ease spe	If 'No' move to next section If 'Yes' use space below to identify and assess any		
OTHER CONTR implemented:	Have you identified any other hazards? Hazard: Risk: is the	ease spe	If 'No' move to next section If 'Yes' use space below to identify and assess any		
OTHER CONTR implemented:     OTHER HAZARDS      i.e. any other     hazards must be	ROL MEASURES: pla Have you identified any other hazards? Hazard:	ease spe	If 'No' move to next section If 'Yes' use space below to identify and assess any		
OTHER CONTR implemented:     OTHER HAZARDS      i.e. any other     hazards must be     noted and assessed	Have you identified any other hazards? Hazard: Risk: is the	ease spe	If 'No' move to next section If 'Yes' use space below to identify and assess any		
OTHER CONTR implemented:     OTHER HAZARDS      i.e. any other     hazards must be     noted and assessed	Have you identified any other hazards? Hazard: Risk: is the risk	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any		
OTHER CONTR implemented:  OTHER HAZARDS  i.e. any other hazards must be noted and assessed here.	Have you identified any other hazards? Hazard: Risk: is the risk	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any risks		
OTHER CONTR implemented:  OTHER HAZARDS  i.e. any other hazards must be noted and assessed here.  CONTROL	Have you identified any other hazards? Hazard: Risk: is the risk Give details of co	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any risks		
OTHER CONTR implemented:  OTHER HAZARDS  i.e. any other hazards must be noted and assessed here.  CONTROL	Have you identified any other hazards? Hazard: Risk: is the risk Give details of co	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any risks		
OTHER CONTR implemented:  OTHER HAZARDS  i.e. any other hazards must be noted and assessed here.  CONTROL	Have you identified any other hazards? Hazard: Risk: is the risk Give details of co	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any risks		
OTHER CONTR implemented:  OTHER HAZARDS  i.e. any other hazards must be noted and assessed here.  CONTROL	Have you identified any other hazards? Hazard: Risk: is the risk Give details of co	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any risks		
OTHER CONTR implemented:  OTHER HAZARDS  i.e. any other hazards must be noted and assessed here.  CONTROL	Have you identified any other hazards? Hazard: Risk: is the risk Give details of co	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any risks		
OTHER CONTR implemented:  OTHER HAZARDS  i.e. any other hazards must be noted and assessed here.  CONTROL	Have you identified any other hazards? Hazard: Risk: is the risk Give details of co	NO	If 'No' move to next section If 'Yes' use space below to identify and assess any risks		

Have you identified not	any risks that are	NO	X	Move to Declaration
adequately control	led?	YE S	_	Use space below to identify the risk and what
				action was taken
Is this project subj Human Research?	ect to the UCL requi	remen	ts o	n the ethics of Non-NHS
If yes, please state	your Project ID Num	nber		
For more information	on, please refer to: I	http://e	thic	s.grad.ucl.ac.uk/
DECLARATION				whenever there is a significant change and at
	priate statement:	ose pa	rticip	pating in the work have read the assessment.
	d have assessed the	activity	/ an	d associated risks and declare that there is no
	d have assessed the	activity	/ an	d associated risks and declare that the risk
will be controlled	•			
the method(s) lis	sted above			
	ISOR Iqbal Hamiddut	nin		
NAME OF SUPERV		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
** SUPERVISOR AP	PROVAL TO BE CO	NFIRM	IED	VIA E-MAIL **
FIELDWORK 5				May 2010
				85