Farming, Good Neighbours, and Protecting the General Interest in Water Resources: How Effective is the Promise of Sustainable Watershed Management in Quebec?

Mark L. Shepheard*

The framework for implementation of sustainable watershed management in Quebec comprises a mix of statutory accountability, compliance with plans, and civil liability. At the centre of this framework is the goal of realizing collective responsibility for the protection and preservation of water now and for future generations. Implementation of this framework to achieve that goal, and the extent to which it enables farmers to deliver sustainable watershed management practices, is a case study in natural resource governance arrangements and sustainable resource management behaviour change. This article reviews governance arrangements for sustainable watershed management in Quebec and presents research on farmer accountability within sustainable watershed systems. The analysis considers the extent to which farmer accountability for protection of water is defined by sustainable watershed management planning processes. Such processes are focussed on strategic imperatives that are not effectively connected with the practice of private rights and interests. With this in mind, I question how effectively accountability for sustainable watershed management translates into practical guidance that enables farmers to manage resources as good neighbours and meet their duty of water protection. Obstacles identified include: a tendency for the National Assembly, regulators, and courts to absolve farmers from liability for environmental harm; the lack of sanctions for non-compliance with a plan; a lack of financial incentives to modify farm practices; and the fact that watershed organizations lack powers to compel participation in the adoption of a plan.

* Dr Mark L. Shepheard is a researcher and teacher in water law and sustainable resource governance arrangements with experience as a postdoctoral fellow and tutor at The University of New England (Australia) 2014–present; Banting Postdoctoral Fellow 2012–2013 at the Faculty of Law, McGill University; Centre for Socio Legal Studies at the University of Oxford 2013; Department of Public Law at the University of Lucerne 2011, and as an Endeavour Award Postdoctoral Fellow at Lincoln University (New Zealand) 2010. Dr Shepheard was a recipient (with Bettina Lange, Oxford) in 2014 of the Richard Macrory Prize for the best article in the Journal of Environmental Law. This was awarded for work on an Eco-Socio-Legal analysis of catchment-based water governance reforms. Research reported in this article was undertaken while the author was recipient of a Banting Postdoctoral Fellowship at McGill University's Faculty of Law. He acknowledges the mentoring provided by Associate Professor Jaye Ellis during this period, and the guidance from Professor Robert Godin. He also particularly acknowledges the work of Maria Mourot in providing translation of research data from French to English.

Le cadre de mise en œuvre de la gestion durable des bassins hydrographiques au Québec englobe la responsabilité législative, le respect des plans et la responsabilité civile. Ce cadre a pour objectif principal d'obtenir la responsabilité collective pour la protection et la préservation de l'eau maintenant et pour les générations futures. La mise en œuvre de ce cadre en vue d'atteindre cet objectif et la mesure dans laquelle il permet aux agriculteurs d'appliquer des pratiques durables de gestion des bassins hydrographiques sont des exemples patents de mécanismes de gouvernance des ressources naturelles et du changement de comportement concernant la gestion durable des ressources. Le présent article passe en revue les mécanismes de gouvernance pour la gestion durable des bassins versants au Québec et présente des recherches effectuées sur la responsabilité des agriculteurs par rapport aux systèmes de bassins versants durables. L'analyse aborde dans quelle mesure la responsabilité des agriculteurs vis-à-vis de la protection de l'eau est définie par des processus de planification de gestion durable des bassins versants. Ces processus sont axés sur des impératifs stratégiques qui ne sont pas effectivement liés à la pratique des droits et intérêts privés. Dans cet esprit, je me demande dans quelle mesure la responsabilité de la gestion durable des bassins versants se traduit par des conseils pratiques qui permettent aux agriculteurs de gérer leurs ressources en bons voisins et de s'acquitter de leur devoir par rapport à la protection de l'eau. Parmi les obstacles identifiés citons la tendance de l'Assemblée nationale, des régulateurs et des tribunaux à exonérer les agriculteurs de toute responsabilité pour les dommages environnementaux, l'absence de sanctions en cas de non-respect d'un plan, le manque d'incitations financières pour modifier les pratiques agricoles et le fait que les organisations des bassins versants n'ont pas le pouvoir d'encourager la participation à l'adoption d'un plan.

1. INTRODUCTION

Sustainable development is widely defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs.[1] It follows that the purview of sustainable development is the management of human behaviour in the general interest of the environment and society, to connect development with resource protection.[2] Implementation of the regime for sustainable watershed management in Quebec provides a case study for this relationship; between resource protection and development by farmers.

This research questions how effectively two sources of accountability for sustainability in Quebec translate into practical guidance that enables farmers to manage resources as *good neighbours*, and meet their duty of water protection in the context of sustainable watershed management plans. These two sources are the *National Water Policy* for Quebec (the "*Policy*"),[3]

1 *Our Common Future: Report of the World Commission on Environment*, UN WCED, 42d Sess., Annex, Provisional Agenda Item 83(e), UN Doc. A/42/427 (1987) ch 2 para 1; *Sustainable Development Act*, CQLR 2006, c D-8.1.1, s 2.

2 See generally Paul Martin & Miriam Verbeek, *Sustainability Strategy* (Sydney: The Federation Press, 2006); Douglas Fisher, *The Law and Governance of Water Resources: The Challenge of Sustainability* (Cheltenham: Edward Elgar, 2009).

3 Ministry for the Environment and Water, *Water Our Life Our Future: Quebec Water Policy*, (Government of Quebec, 2002) [*Quebec Water Policy*].

together with the 2009 *Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection* (the "*Water Protection Act*").[4]

Both sources are enabling instruments for sustainable development in Quebec. The first, the *Quebec Water Policy*, aims to achieve sustainable development in the regulation and management of water within the administrative unit of a watershed.[5] Intensifying agricultural clean-up efforts is identified in the *Policy* as a substantial part of achieving this aim,[6] recognising the significance of impacts on water from agriculture,[7] and acknowledging that previous education and regulation has not been sufficient to initiate behaviour changes for water resource protection.[8]

Meanwhile the second, the *Water Protection Act*, explicitly identifies sustainable development as being linked to the protection, restoration, improvement, and management of water in the general interest.[9] This paper contains a proposal that this connection subjects farmers and their management practices to closer scrutiny from the community and regulators about the extent of agricultural impacts on water, and when farming practices might be constrained in the interests of sustainable watershed management. The *Act* contains two behaviour adjustment mechanisms relevant to sustainable management of water by farmers: first, the duty to protect water;[10] and second, watershed planning, wherein sustainable management of watersheds is defined.[11]

The analysis of these two sources of accountability contained in this paper demonstrates that substantial limits remain to translating the intent of sustainable watershed management into practical accountability for *good neighbour* relations that protect the general interest in water. In this research I consider how effectively the normative framework of sustainable water management—provided by a statutory duty for water protection, watershed planning processes, and the general interest in water—places farmers in a position to meet expectations of their responsibility for resource use to help achieve sustainable watershed management. To this end, I examine the extent to which the statutory duty and watershed planning processes provide guidance on the exercise of resource access and use rights by farmers within a sustainable watershed. My research suggests that obstacles to realizing farm resource use for sustainable watershed systems are likely to include the watershed management plan process, the lack of formal accountability, the lack of connection between watershed management and farming, the lack of incentives to change practice, and the reliance on watershed contracts—with their lack of binding provisions—to deliver action.

4 *Act to Affirm the Collective Nature of Water Resources and Provide for Increased Water Resource Protection*, CQLR 2009, c C-6.2 [*Water Protection Act*].

5 *Quebec Water Policy*, *supra* note 3 at 12.

6 *Ibid* at 56.

7 See generally Commission sur la gestion de l'eau, *L'eau, ressource à protéger, à partager et à mettre en valeur* (Quebec: Bureau d'audiences publiques sur l'environnement, 2000) [Commission sur la gestion de l'eau].

8 *Quebec Water Policy*, *supra* note 3 at 17.

9 *Water Protection Act*, *supra* note 4, s 3.

10 *Ibid*, s 5.

11 *Ibid*, s 14(2).

A primary source of expectation about farmer resource use is the statutory duty to protect water. This is a central liability mechanism to enforce the general interest in water under the act. I review the potential of this duty to influence reasonable water management behaviour by farmers so that they may meet sustainable watershed accountabilities. The watershed planning process theoretically transposes statutory ambitions into region-specific accountability of farmers (and other water users) for their management of resources in a sustainable watershed. However, this duty and watershed planning do not stand alone as an expression of accountability. They are interpreted in the context provided by the *Civil Code of Quebec* with its provisions for water as a general interest (that is, something in common and of interest to all),[12] tolerance for neighbourhood annoyance,[13] and the exercise of private water use rights relative to the general interest.[14] This mix of statutory obligations, planning regime, and liability for harm implies a connection between a farmer's resource use practices and the result of their impacts upon others in a watershed. The effect of this is to recast on-farm land and water management practice as a matter of general interest related to watershed sustainability.

The discussion begins by identifying the context of the research in Section 2. Section 3 then identifies the formal (rules-based) framework that recasts farmers' natural resource use practices as a matter of general interest relating to promoting sustainable watersheds. The research approach is described in Section 4, followed by a detailed discussion in Section 5 of the promise of sustainable water management in Quebec, resource management behaviour of a *good neighbour* in a sustainable watershed, and links to the general interest in water. There are a number of obstacles to realising the promise of sustainable watershed systems. These are identified in Section 6 along with my conclusion about the extent to which the promise of sustainable watershed management is likely to be fulfilled when the formal instruments driving it are applied to place farmers as *good neighbours* with their farm natural resource use practice as part of protecting the general interest in water.

2. SUSTAINABLE WATERSHEDS IN QUEBEC: CASE STUDY CONTEXT

An extensive public enquiry into the state and management of Quebec's water resources published in 2000 identified a range of agricultural resource use and management actions linked to pollution of waters and degradation of waterways in Quebec.[15] The report highlighted that since the 1950s, farming has become more industrial in Quebec (as elsewhere) through increasing intensive production of monocultures and a heavy reliance on chemical inputs.[16] Examples of the ways that agricultural practices have negatively impacted water resources and watershed systems included in the report were: dredging for drainage; vegetation management and clearing; and land use encroaching on riparian land.[17] These issues are reflected in more recent analyses by watershed organizations. For example, Abrinord has identified a high risk

12 Art 913 CcQ.

13 Art 976 CcQ.

14 Art 982 CcQ.

15 Commission sur la gestion de l'eau, *supra* note 7.

16 *Ibid* at 3–4.

17 *Ibid.*

of nuisance associated with agricultural activity,[18] even though agriculture accounts for only 13 percent of land use in the "du Nord" River basin (bassin versant de la rivière du Nord).[19] Some risks relate to poor farming practices such as: bare ground on floodplains; a lack of, or insufficient size of riparian buffer strips; allowing livestock access into waterways; increasing land drainage; and land leveling.[20]

In Quebec, the watershed is a unit of analysis and basis for processes to implement sustainable use and management of resources.[21] The sustainable watershed management planning process seeks to coordinate various interests, resource uses, concerns, and actions from communities and industries within a geographical watershed.[22] The process for developing and implementing a plan is common to all watershed regions in Quebec and includes:

1. Developing a portrait and diagnosis of the watershed;
2. Identifying issues and directions;
3. Setting goals and choosing indicators;
4. Developing an action plan;
5. Implementing the action plan;
6. Monitoring and evaluating the plan.

To facilitate this process, the *Water Protection Act* provides for the creation of watershed organizations that are responsible for developing a watershed blueprint through stakeholder consultation.[23] The administrative powers and responsibilities of watershed organizations are to be exercised in pursuit of sustainable development,[24] achieved by framing watershed management with Quebec's *Principles of Sustainable Development*.[25]

18 Agence de bassin versant de la rivière du Nord Abrinord, *Portrait et Diagnostic du bassin versant de la rivière du Nord* (2007) at 211.

19 *Ibid* at figure 2.

20 *Ibid* at 206.

21 This approach is part of broader trends toward integrated management or resource use. See generally Mark Shepheard & Roland Norer, "Increasing Water Stewardship Responsibility: Water Protection Obligations and the Watershed Management Policy Affecting Farmers in Lucerne, Switzerland" (2013) 15:2 Environmental L Rev 121 (watershed management in Switzerland); Bettina Lange & Mark Shepheard, "Changing Conceptions of Rights to Water? — An Eco-Scio-Legal Perspective" (2014) 26 J Envtl L 215 (catchment management in England); Mark L Shepheard, "The Potential for Improved Water Management Using a Legal Social Contract" (2011) 22 Water L 95 (watershed management in New Zealand).

22 *Quebec Water Policy*, *supra* note 3 at 11–12.

23 *Water Protection Act*, *supra* note 4, s 14(3)(a).

24 *Ibid*, s 13 (the principles are reviewed in greater detail on the following page).

25 *Sustainable Development Act*, *supra* note 1, s 6.

3. THE FORMAL INSTRUMENTS OF SUSTAINABLE WATERSHED MANAGEMENT

This section identifies the formal instruments governing sustainable watershed management in Quebec and discusses their potential as a normative guide to support resource use by farmers for sustainable watershed management. Three categories of instruments are identified: (1) Quebec's *Water Policy* and legislation; (2) the *Civil Code of Quebec*; and (3) the administrative arrangements for developing sustainable watershed plans. These formal instruments aim to affirm water as a common resource, specify the duty of everyone to commit to water protection and its sustainable use, and provide a legal regime enabling the general interest in water to be protected through *good neighbour* relations.[26]

3.1. Quebec's Water Policy, the Water Protection Act, and its Statutory Duty

The 2002 *Water Policy* laid out an approach to water management rooted in a vision of sustainable development.[27] The premise underlying the *Policy* is that it is the responsibility of all people in Quebec to protect and preserve water as a source of life now and for future generations.[28] What this means is subject to the interpretation of a range of rights and responsibilities associated with water resource protection. A primary source of these rights and responsibilities is the *Water Protection Act*, which specifies that water is part of the common heritage of Quebec and is subject to efforts to improve management and preservation for present and future generations.[29] The powers to protect and manage water resources are vested in the province as custodian of the common heritage in water. But the exercise of these powers is a collective responsibility, defined by the principles set out in the *Water Protection Act* and Quebec's *National Water Policy*, and summarized in Table 1 (following page).

26 Quebec, National Assembly, *Hansard*, 39th Leg, 1st Sess, No 44 (11 June 2009) at 2732 (Line Beauchamp) [*Hansard No 44*].

27 *Quebec Water Policy*, *supra* note 3 at iii (foreword from former Premier Bernard Landry, "A Word from the Premier: A Water Policy Rooted in a Vision of Sustainable Development").

28 *Ibid.*

29 *Water Protection Act*, *supra* note 4, Preamble.

Table 1: Collective Responsibility for Sustainable Water Management in Quebec

Principle	Definition
User Pays[30]	The costs related to water use, including protection, restoration, improvement, and management are to be borne by water users—including citizens, environment groups, industry, farmers, conservation agencies, and the municipal water sector.[31] This is on the basis of environmental, social and economic consequences, and the polluter pays principle.
Prevention[32]	Every person has a duty, under the conditions defined by law, to prevent or at least limit the damage the person may cause to water resources and thus join in the effort to protect water resources.
Reparation[33]	Every person must repair the damage the person cause to water resources, under the conditions defined by law.
Transparency and Participation[34]	Under the conditions and within the limits defined by law, every person has a right of access to any information on water resources that is held by public authorities and a right to participate in public decision making that affects those resources.

The principles above serve as the elements of the way the Quebec National Assembly has defined the general interest as a collective responsibility for sustainable water management. Enacting this statutory expression of the general interest in water and applying it to intensify farmers' land and water clean-up efforts requires interpretation in the context of the *Civil Code of Quebec*,[35] discussed below.

3.2. *Good neighbours*, Water, and the General Interest in the Civil Code of Quebec

Jurisprudence interpreting article 976 of the *Civil Code of Quebec* (the *good neighbour* principle) is important for the implementation of sustainable watershed management in Quebec as it delineates the general interest in water. Interpretation of article 976 by the Supreme Court of Canada (SCC) provides guidance about community tolerance of environmental harms. The Court has set the overall tone for natural resource use obligations and the consequences of subjecting neighbours to intolerable annoyance by establishing that the *good neighbour* principle limits absolute rights of private ownership.[36] The approach taken by the Supreme Court affirms a Superior Court of Quebec finding that a neighbour should

30 *Ibid*, s 4.

31 *Quebec Water Policy*, *supra* note 3 at 26–27.

32 *Water Protection Act*, *supra* note 4, s 5.

33 *Ibid*, s 6.

34 *Ibid*, s 7.

35 "Unless it is contrary to the general interest, a person having a right to use a spring, lake, sheet of water, underground stream or any running water may, to prevent the water from being polluted or depleted, require the destruction or modification of any works by which the water is being polluted or depleted." Art 982 CCQ.

36 *St. Lawrence Cement Inc v Barrette*, 2008 SCC 64 at para 86, [2008] 3 SCR 392 [*St. Lawrence Cement*].

have certain geographic proximity, while acknowledging that, overall, the term "neighbour" should be defined liberally.[37] Thus, neighbours are identified as a general community in proximity to an abnormal annoyance,[38] emphasizing the importance of linking resource use accountability to a proximate community. Importantly, the behaviour of a good neighbour is judged by the results produced and whether they are tolerable,[39] rather than whether the conduct is reasonable, prudent and diligent in the circumstances.[40] Results may encompass: community and economic interests, fiscal considerations and environmental concerns as relevant considerations in particular circumstances.[41] These are the type of issues that may be raised in a watershed management plan.

The *good neighbour* principle in article 976 functions as the preamble, or general provision, for the entire section of the *Civil Code of Quebec* that deals with special rules about the ownership of immovables.[42] This contextual role cannot be underestimated. When the National Assembly introduced this principle into the *Civil Code of Quebec*, it explicitly did so to take greater account of environmental concerns, the value of water, and quality of life.[43] Of particular note for this discussion is the level of tolerance described by article 982, giving a person with water access rights the ability to prevent water sources from being polluted or depleted by seeking the modification or destruction of water access and use works.[44] The practical implication of this article is to make water quality and quantity relevant considerations of good neighbourly conduct. The general interest in water is pivotal to the assessment because it provides the standard—defined in particular circumstances—beyond which a neighbour has grounds to act.[45] The *Water Protection Act* specifies the general interest as protection, restoration, improvement, and management of water in pursuit of sustainable development.[46] This has the potential to link farm water management practice and accountability with sustainable management outcomes at a watershed scale, making community interests and environmental

37 *Ibid* at para 96.

38 *Ibid* at para 54; Jasmine Lefebvre, "Time to rethink neighbourhood relations" (January 2009), De Granpré Chait (case comment), online: <www.degrandprechait.com/en/publications-realestate/149-time-to-rethink-neighbourhood-relations> (commenting on *St. Lawrence Cement*, *supra* note 36).

39 *St. Lawrence Cement*, *supra* note 36 at para 86; Dominique Amyot-Bilodeau & Michel Gagné, "The Supreme Court of Canada recognizes a no-fault liability regime in an environmental matter in *St. Lawrence Cement Inc. v. Barrette*" (17 December, 2008), McCarthy Tetreault (case comment), online: <www.mccarthy.ca/article_detail.aspx?id=4268>.

40 *St. Lawrence Cement*, *supra* note 36 at paras 71–74.

41 Robert P Godin, "Short Essay on the Notion of General Interest in Article 982 of the Civil Code of Quebec or je puise mais n'épuise" (2010) 34 Vermont L Rev 869 at 876.

42 "Neighbours shall suffer the normal neighbourhood annoyances that are not beyond the limit of tolerance they owe each other, according to the nature or location of their land or local custom" at art 976 CCQ; the CCQ covers waters is at arts 979–983.

43 Ministère de la Justice, *Commentaires du ministre de la Justice : Le Code civil du Québec — Un movement de société*, vol 1 (Quebec: Publications du Québec, 1993) at 570.

44 See art 982 CCQ, *supra* note 35.

45 Godin, *supra* note 41 at 875.

46 *Water Protection Act*, *supra* note 4, s 3.

concerns relevant to defining what it means for a farmer to be a good neighbour in the use and management of resources.[47]

3.3. Administrative Arrangements for Sustainable Watershed Management

The watershed forms an administrative unit for the implementation of sustainable watershed management.[48] Within this administrative unit, the instrumental framework (policy, legislation, Civil Code of Quebec, and watershed plans) identified thus far is directed at achieving sustainable watershed systems. In this section, I identify the framework for implementation of sustainable watershed management in Quebec. The framework incorporates watershed management institutions, a collaborative planning process, and a plan that seeks to enable the sustainable management of resources in a particular watershed.

The administrative arrangements for sustainable watershed management provide formal expectations about anticipated behaviour and good neighbourly relations. The *Civil Code of Quebec* promotes good neighbourly conduct,[49] protects the legitimate use of watercourses by riparian landowners,[50] and emphasizes water as a *chose commune* (something common to all) and in the general interest.[51] The expectations of good neighbourly conduct, legitimate use, and water as a common thing are reinforced by the *Water Protection Act*.[52] Together these sources of legal expectation establish a public interest in private natural resource use and its impacts on the sustainability of resource management in a watershed.[53] Conceptually, the instrumental framework places farm decision making into the context of watershed performance accountability by intensifying agricultural clean up efforts,[54] upholding the common life-sustaining nature of water and the protection of this as paramount in decision-making processes.[55]

For agriculture in particular, the framework identified above seeks to achieve sustainable watershed systems by promoting better environmental performance from farmers.[56] Better performance encompasses: reduced soil loss; reducing fertiliser and pesticide runoff to water; conserving habitat; stabilising riparian land; and buffering the effects of flow variation in the landscape.[57] Such a range of expectations anticipates resource-user accountability that extends

47 Godin, *supra* note 41 at 876.

48 *Quebec Water Policy*, *supra* note 3 at 12.

49 Through articles on property limits and bounds, access, protection of another's property, encroachment, direct views, right of way, water runoff, fencing, trees, and, noise at arts 976–1008 CCQ.

50 The rights of riparian owners, at arts 980–982 CCQ.

51 Art 913 CCQ.

52 *Water Protection Act*, *supra* note 4, s 1.

53 Madeleine Cantin Cumyn, "Le régime juridique de l'eau, chose commune" in Catherine Choquette & Alain Létourneau, eds, *Vers une gouvernance de l'eau au Québec* (Québec: Éditions MultiMondes, 2008) 67 at 68.

54 *Quebec Water Policy*, *supra* note 3 at 56.

55 Madeleine Cantin Cumyn, "The Legal Status of Water in Quebec" (2006) 42 Quebec Studies 7 at 11; *Québec Water Policy*, *supra* note 3 at 56.

56 See generally *Quebec Water Policy*, *supra* note 3 at s 6.1.

57 *Ibid* at 58.

beyond the boundary of a farm, connecting individual practice to the management of the entire watershed. The intent is to achieve sustainable resource use and management practice,[58] defined by deliberation and negotiation between stakeholder interests when developing a watershed plan.[59] The watershed is the geographic space and social context in which responsible use and management of natural resources is defined and interpreted. This emphasizes that sustainable watershed management is a social project, where individuals interact in an institution (a watershed organization) and via a planning process,[60] to help define what the goal of watershed sustainability looks like for their area.

Placing sustainable watershed management in this social context acknowledges the importance of accounting for local circumstances and the effect of locally unique power relations between stakeholders in achieving sustainable watershed systems.[61] Achieving sustainability anticipates a process that can effectively adjust private management decisions to take greater account of the general interest in water. Farmer confidence in the outcome (as with all stakeholders) stems from their trust in the planning process and in each other to act as agreed.[62]

Under the *Water Protection Act*, watershed organizations are responsible for developing a water blueprint (plan de gestion l'eau, PDE) for their watershed area. For example, the *Organisme de bassin versant de la rivière du Nord* (Abrinord) is responsible for developing the water blueprint for the Rivière du Nord. The organization coordinates this process, directed by a board of stakeholders drawn from the municipal, community, economic, and government sectors.[63] This board participates in a round table forum of consultation and planning for their designated watershed.[64] The process defines sustainable management and protection of water resources by specifying outcomes that address various interests, uses, concerns, and actions associated with water access, use, and management in the designated watershed.[65] The plan

58 *Ibid* at 15.

59 Peter P Mollinga, Ruth S Meinzen-Dick & Douglas J Merrey, "Politics, Plurality and Problemsheds: A Strategic Approach for Reform of Agricultural Water Management" (2007) 25:6 Development Policy Rev 699 at 713; see generally François Rangeon, "L'intérêt général et les notions voisines" in Bartha Maria Knoppers & Yann Joly, eds, *La santé et le bien commun* (Montréal: Thémis, 2008) 19.

60 Catherine Choquette, "Le contrat de bassin : un outil de gestion à géométrie variable" in Catherine Choquette & Alain Létourneau, eds, *Vers une gouvernance de l'eau au Québec* (Québec: Éditions MultiMondes, 2008) 281 at 289.

61 Stewart Lockie et al, "Capacity for Change, Testing a Model for the Inclusion of Social Indicators in Australia's National Land and Water Resources Audit" (2002) 45:6 J Environmental Planning & Management 813 at 814.

62 Kathleen Bowmer, "Agriculture for the Australian Environment — Learning from Existing Practice. Reflections of Developing a Water Sharing Plan" (Paper delivered at the Fenner Conference on Agriculture and the Environment, Albury, NSW 2002), online: <www.researchgate.net/publication/237292574_agriculture_for_the_australian_environment_learning_from_existing_practice_reflections_on_developing_a_water_sharing_plan>.

63 *Water Protection Act*, *supra* note 4, s 14(3)(a).

64 Pierre Baril, Yvon Maranda & Julien Baudrand, "Integrated Watershed Management in Québec: A Participatory Approach Centred on Local Solidarity" (2006) 53:10 Water Science Technology 301 at 305–307.

65 Cantin-Cumyn, *supra* note 55 at 11.

must reflect the statutory sustainable development principles,[66] and effectively place watershed management planning as central to sustainable resource use decision making by all stakeholders in a watershed.[67] Plans produced by this process are to be approved by the relevant Minister before they can be implemented.[68]

Moving from expectations in a plan to action for watershed management requires a driver of individual behaviour modification.[69] Integration of views in the watershed management process plays an important role here by building collaboration among stakeholders, providing a forum for reconciling differences, developing local solutions based on particular circumstances, and sharing responsibility for integrated management and protection of water resources.[70] The following section examines how sustainable watershed management behaviour is formed.

3.4. Forming Sustainable Watershed Management Behaviour

The watershed provides a territorial context in which behaviour is defined and interpreted by a planning process that anticipates responsibility beyond the boundary of a farm. Sustainable watershed management in the general interest emphasises farmers' responsibility to care for water, including: their property management practices, the extent to which these generate impacts upon water, and how these are constrained in the interests of sustainability. In this sense, sustainability is an expression of expected behaviour, where farmers' access and use of natural resources is connected to legal and social expectations about sustainable watershed systems.

Sustainable watershed management involves a relationship between people representing various interests associated with the use of water resources.[71] Within this relationship

66 *Water Protection Act*, *supra* note 4, s 13. The principles are laid out in the *Sustainable Development Act*, RSQ, c D-8.1.1 s 6: health and quality of life; social equity and solidarity; environmental protection; economic efficiency; participation and commitment; access to knowledge; subsidiarity; inter-governmental partnership and cooperation; prevention; precaution; protection of cultural heritage; biodiversity preservation; respect for ecosystem support capacity; responsible production and consumption; polluter pays; and internalisation of costs.

67 Daniel Bouchard & Marie-Eve Clavet, "Gestion de l'eau : une Politique nationale de l'eau à mettre en œuvre ou à revoir ? (Water Management: A national water policy to implement or review?)" (2009) 300 Développements récents en Dr de l'environnement 117.

68 *Water Protection Act*, *supra* note 4, s 15.

69 Oliver Brandis & Tony Maas, "What We Govern and What Governs Us: Developing Sustainability in Canadian Watershed Management" (Paper delivered at the Canadian Water Resources Association 59th Annual Conference, Toronto, Ontario, 4–7 June 2006), online: <www.polisproject.org/PDFs/whatwegovern_june06.pdf> at 6-7.

70 See Environnement Québec, *Gestion intégrée de l'eau par bassin versant : concepts et application* by Georges Gangbazo (Quebec: Ministère de l'environnement, 2004).

71 See generally William NR Lucy & Catherine Mitchell, "Replacing Private Property: The Case for Stewardship" (1996) 55:3 Cambridge LJ 566 at 567–568; Murray Raff, "Toward an Ecologically Sustainable Property Concept" in Elisabeth Cooke, ed, *Modern Studies in Property Law*, vol 3 (Oxford: Hart Publishing, 2005) 65; Christopher P Rodgers, "Nature's Place? Property Rights, Property Rules and Environmental Stewardship" (2009) 68:3 Cambridge LJ 550 at 550; Mark Stallworthy, *Sustainability, Land Use & Environment: A Legal Analysis* (London, UK: Cavendish Publishing, 2002).

expectations emerge about the utility and protection of water in a watershed system,[72] and for changing resource user behavior to promote the general interest in water for posterity.[73] Such expectations are based on water being a common resource to all,[74] with individual responsibility extending to the broader community of interests in a watershed. Individual responsibility in a broader social context implies that water governance is a social project where the sustainable management of water is achieved through watershed management plans.[75]

Sustainable watershed management establishes a systems approach to behaviour management. The system includes formal dimensions through water policy, legislation, administrative organizations, and *Civil Code of Quebec* obligations, but also involves informal expectations about resource management practices and the contribution of individuals to society. Sustainable watershed management links these formal and informal systems[76] by connecting the economic use of natural resources with their protection in the broader societal interest.[77]

In short, there are multiple and competing meanings about anticipated behaviour and good neighbourly relations that need resolution in order to determine what level of behaviour is expected. A collaborative watershed planning process tries to reconcile a range of ecological, economic, and social responsibilities into a plan for changing resource use behaviour.[78] The planning process is intended to provide a means to clarify the factors that must be considered, purposes that must be respected, and voices that must be heard in defining legitimate behaviour.[79] It does this firstly by defining the water issues and impacts that farmers can be held to account for in a sustainable watershed system,[80] and secondly by identifying the institutional context, political risks, and potential for conflict that act as drivers of resource use decision making.[81] Norms play an important role in shifting patterns of decision-making

72 See Barry Barton, "Property Rights Created under Statute in Common Law Legal Systems" in Aileen McHarg et al, eds, *Property and the Law in Energy and Natural Resources* (Oxford: Oxford University Press, 2010) 80.

73 See generally Richard Barnes, *Property Rights and Natural Resources* (Oxford: HART Publishing, 2009).

74 Art 913 CCQ; *Water Protection Act*, *supra* note 4, s 1; *Quebec Water Policy*, *supra* note 3 at 9.

75 *Quebec Water Policy*, *supra* note 3 at 56.

76 Jaye Ellis, "Sustainable Development as a Legal Principle: A Rhetorical Analysis" in Hélène Ruiz Fabri, Rüdiger Wolfrum & Jana Gogolin, eds, *Select Proceedings of the European Society of International Law* vol 2 (Oxford: HART Publishing, 2008) at 641.

77 Fisher, *supra* note 2.

78 Paul Martin, Jaqueline Williams & Amanda Kennedy, "Creating Next Generation Rural Landscape Governance: The Challenge for Environmental Law Scholarship" in Paul Martin et al, eds, *Environmental Governance and Sustainability* (Cheltenham: Edward Elgar, 2012) 46 at 55ff.

79 Cushla Matthews, Robert B Gibson & Bruce Mitchell, "Rising Waves, Old Charts, Nervous Passengers: Navigating Toward a New Water Ethic" in Karen Bakker, ed, *Eau Canada: The Future of Canada's Water* (Vancouver: UBC Press, 2007) 335 at 336–337.

80 Mark Shepheard & Paul Martin, "The State of Social Impact Indicators: Measurement Without Meaning?" in Jaqueline Williams & Paul Martin, eds, *Defending the Social Licence of Farming: Issues, Challenges and New Directions for Agriculture* (Collingwood: CSIRO Publishing, 2011) 127.

81 Martin, Williams & Kennedy, *supra* note 78 at 55.

behaviour.[82] For sustainable watershed management, behavioural expectations associated with resource use may be drawn from:[83]

1. Awareness of alternate ethical accountabilities (for example, organic production);
2. Social norms about resource use;
3. A broader social licence held within an industry;
4. Applying a particular legal standard of practice; and
5. Determining justice in the distribution of costs and benefits.

Section 3 has described how sustainable watershed management is made up of legal rules, an administrative institution (the watershed organization), and a planning process that aims to integrate formal and informal accountability into a regionally-agreed plan for implementing sustainable land and water management. Accountability is applied with reference to the proximate watershed community and seeks to ensure that the general interest in water is upheld. What accountability means is that the standard of good neighbourly conduct (tolerance for excessive annoyance due to changed water quality or quantity) has not been breached as a result of resource management practice. In the context of the sustainable watershed regime, this is a standard that is expressed within a watershed plan. In theory, a resource manager ought to be confident of not breaching their responsibility as a good neighbour by following the expectations laid out in the relevant watershed plan.

However, this research finds that implementation of sustainable watershed management accountability by the farming sector is affected by five significant issues that emphasize the difficulty of realising *good neighbour* requirements in the farming sector through sustainable watershed management. These are: a perceived lack of legal responsibility; the lack of practical application of plans to farming; the lack of financial incentive for farmers to participate; uncertainty about the status and effectiveness of watershed contracts as enforceable instruments; and limitations to accountability for behaviour which does not fulfil the requirements of a *good neighbour*. After setting out the methodology of this research in Section 4, these five issues are discussed in Section 5, which emphasizes the complexity of bringing the concept and practice of accountability together to realize sustainable watershed systems.

4. RESEARCH APPROACH

This research presents a qualitative analysis of how policy and law is used to hasten farmland and water management clean-up efforts within sustainable watershed systems. Interviews were conducted in person by the author, recorded, and later transcribed for detailed analysis. Some native French speakers agreed to participate by providing a written response to the questions in French, due to language differences. In these instances, a research assistant translated the interview questions into French. The written responses (in French) were then translated into English. Participants consented to anonymously take part in the research and to have their views incorporated into publications.

[82] *Ibid* at 57.

[83] Choquette, *supra* note 60 at 282.

Questions were put to representatives from three watershed management organizations in Quebec: Organisme de bassin versant de la rivière du Nord (Abrinord), Conseil des bassins versants des Mille-Îles (COBAMIL), and Comité de concertation et de valorisation du bassin de la rivière Richelieu (COVABAR). A farm adviser, a government resource management officer, and an environmental lawyer were also interviewed. Responses from these respondents were complemented with analysis of Hansard from committee hearings and bill readings in the Quebec National Assembly related to the development and enactment of the *Water Protection Act*.[84] Together, these sources provide interpretation as to the meaning of farmer responsibilities for sustainable resource use in a watershed, the general interest in water, and what resource use behaviour is reasonable to fulfil the duty for water protection in the context of a sustainable watershed plan.

5. IMPLEMENTATION OF SUSTAINABLE WATERSHED MANAGEMENT BY THE FARMING SECTOR

5.1. Lack of Legal Responsibility for Sustainable Watershed Management

Watershed management planning generates little more than statements of strategic intent due to a perceived lack of clear legal responsibility and reliance on voluntary implementation. The practical impact of this is the risk of minimal compliance by farmers due to a lack of enforcement mechanisms to ensure compliance. This section reviews these factors and then examines the effect of watershed contracts as a means to overcome issues of clear responsibility.

A statute for water resource sustainability that emphasizes the importance of the general interest places a heavy burden upon farmers, through private decision making about water and by defining liability between neighbours for environmental harm. However, the burden is likely to be slowly realized when contemporary government decision making and court findings suggest the view that: "regulations remain timid and do not oblige agricultural producers to change their practices with regard to sustainable development."[85] For example, despite a 1997 regulation with measures to reduce diffuse source nutrient pollution of waters from farms,[86] amendments made during 1998,[87] and again in 1999,[88] created exemptions for farmers from the requirement to both prepare an agro-environmental fertilisation plan and stop or minimize the spreading of livestock manure and farm compost in protected areas. The exemptions also extended the timeframes for compliance, allowing farmers more time to adjust practices before being held to account for non-compliance with more stringent nutrient discharge standards. With such decisions made by regulators, and despite a clear message from the Commission on

[84] *Water Protection Act*, *supra* note 4.

[85] Letter from watershed organization 2 to Dr Mark Shepheard (18 December 2012) [translated by Maria Mourot] [Letter from watershed organisation 2].

[86] *Regulation respecting the reduction of pollution from agricultural sources*, OIC 742-97, (1997) GOQ II, 3483.

[87] *Regulation to amend the regulation respecting the reduction of pollution from agricultural sources*, OIC 737-98, (1998) GOQ II, 3059.

[88] *Regulation to amend the regulation respecting the reduction of pollution from agricultural sources,* OIC 247-99, (1999) GOQ II, 733.

Water Management of the need for change to land and water management practices,[89] it is a challenge to ensure that the 2009 statutory aspirations for water protection become reality.[90]

A further example demonstrates the potential legal limitations that may be placed on integrated resource management in a watershed. In 2003, the Superior Court of Quebec refused to enforce a municipal levy on all landholders in a watershed to pay for downstream desilting work in a river when there was no evidence of a connection between upstream landholders land management practices and the necessity for downstream work, and therefore no obligation to contribute.[91] Sustainable watershed management was used in this case as a means to try and argue for the imposition of a levy. The outcome highlights that a general notion about good environmental practice is unlikely to be substituted for hard evidence when seeking to apportion liability to remedy a downstream harm.[92] Decisions like this may provide a judicial check to implementation of broad statutory obligations for sustainability.

The research respondents for this study offered views supporting these limits on the extent that regulators and courts are likely to hold farmers to account for sustainable management of water. The environmental lawyer interviewed highlighted that the development of responsible watershed management by farmers is potentially hindered by environmental law in Quebec predicated on the idea that farmers are culturally and economically important and need to be protected.[93] Meanwhile, a representative from one of the watershed organizations remarked that: "[w]ater is still wrongly considered as being inexhaustible [in Quebec], with a lack of willingness to take responsibility for its protection."[94] As a result of this, there is a "notion that any river in Quebec that you discharge pollutants [into] is [going to] flow into the St Lawrence … which is [going to] flow into the Atlantic Ocean, so who cares?"; the result is that rivers in the St Lawrence Valley "are incredibly polluted by agriculture."[95] This suggests that having farmers "think beyond the limits of [their] land"[96] and assume a leadership role in watershed protection is likely to be challenging:[97]

> A farmer's interests are [in] his land. [The land may have] been passed down from [previous] generations, and [the farmer has probably] been doing things the way he's been doing it for a while. It's part of who he is. [Now] environmental policies come in—[like the *National Water Policy* and legislation]—to make him change the way he views or does things, and there's [likely to be] conflict related to that.[98]

Such a view emphasizes that any unelected body of stakeholder representatives overseeing a watershed management process may not be seen as legitimate, particularly when such a body seeks to adjust management practices on the private domain of farmland.[99]

Watershed organizations have no regulatory powers to enforce watershed plans in relation to uses of water or other organizations with responsibility for administering water and/or regulating impacts upon water. Once produced, a watershed plan is circulated to all relevant government departments, metropolitan regions, and municipalities. But these bodies only have to consider the plan when exercising their powers and duties in relation to water or sectors impacting on water.[100] The ability of administrative agencies to opt in or out of considering a watershed plan relative to operations is a source of tension for watershed organizations and their stakeholders, because their efforts are not binding upon other administrative bodies.[101] Furthermore, watershed plan implementation is often not supported by complementary funding programs from other agencies.[102] These issues represent a significant obstacle in converting collaborative effort on integrated sustainable watershed management planning to action.

Concerns have been expressed about the capacity of stakeholders to develop a vision, formulate a plan for sustainable management, and assume responsibility for implementing the plan.[103] This is no simple task; complexity is inevitable given the range of factors relevant to managing a watershed. These include: surface and groundwater hydrology; provincial limits, administrative regions and local government areas; population density; previous community cooperation with government agents; cohesion and harmony between stakeholders; and the environmental, social and economic homogeneity of development activities.[104] These contribute a large degree of complexity and uncertainty to watershed management.[105]

There is also concern about a general lack of understanding between the various stakeholders in a watershed—including among other agencies with water management responsibilities—about the existence of watershed organizations and the integrated management of water.[106] The

89 See Commission sur la gestion de l'eau, *supra* note 7, Vol II at 4.

90 Madeleine Cantin Cumyn, "Recent Developments of the Law Applicable to Water in Québec" (2010) 34:4 Vermont L Rev 859 at 868.

91 *Jardins-de-Napierville c Haut Saint-Laurent (Municipalité régional de comté de),* [2003] JQ No 7162, REJB 2003-43490.

92 Mark Shepheard & Paul Martin, "Using the moot court to trial legislation about land stewardship" (2011) 28 Land Use Policy 371 at 375.

93 Interview of lawyer by Dr Mark Shepheard (7 December 2012) in Montreal, Quebec [Interview of lawyer].

94 Letter from watershed organization 2, *supra* note 85.

95 Interview of lawyer, *supra* note 93.

96 Letter from watershed organization 3 to Dr Mark Shepheard (13 December 2012) [translated by Maria Mourot] [Letter from watershed organization 3].

97 Interview of lawyer, *supra* note 93.

98 Interview of watershed organization 1 representative by Dr Mark Shepheard (7 September 2012) in St-Jérôme, Quebec [Interview of watershed organization 1].

99 Alice Cohen & Seanna Davidson, "An Examination of the Watershed Approach: Challenges, Antecedents, and the Transition from Technical Tool to Governance Unit" (2011) 4:1 Water Alternatives 1 at 3.

100 *Water Protection Act*, *supra* note 4, s 15.

101 Organisme de bassin versant de la rivière du Nord, *Diagnostic de la zone de gestion intégrée de l'eau d'Abrinord, version préliminaire*, (Saint-Jérôme: Abrinord, 2012) at 127 [Abrinord].

102 *Ibid.*

103 Baril, Maranda & Baudrand, *supra* note 64 at 311.

104 *Water Protection Act*, *supra* note 4, s 14(2).

105 Cecilia Ferreyra, Rob de Loë & Reaid Kreutzwiser, "Imagined Communities, Contested Watersheds: Challenges to Integrated Water Resources Management in Agricultural Areas" (2008) 24 J of Rural Studies 304 at 304.

106 Abrinord, *supra* note 101.

combined effect of these factors is to emphasize that the watershed organization is effectively a planning facilitator with seemingly little impetus (or power) to translate plans into action.

5.2. Lack of Connection to the Practice of Farming

The watershed management process is unlikely to address concerns about the responsibility of agriculture for environmental harm because it lacks connection with the practice of farming. For example, watershed plans do not feed into the environmental permitting decision process, making their practical legal use of little importance.[107] As the environmental lawyer who was interviewed put it: "[t]here is no legal [requirement] to oblige actors [farmers] within a watershed to participate [in the process]." The only obligation is "[for the watershed organization] to produce a Water Master Plan."[108] It is up to the municipal, regional, and provincial departments with the powers and funds to implement programs whether they enact the recommendations found in watershed plans.[109] In other words, "[t]he Master Water plans of the watershed organizations of Quebec have no legal power … the actors don't have an obligation to respect its contents, nor to act [on its recommendations] … The only means of achieving this is to convince the Regional County Municipality, the municipalities, and other levels of government to modify the legal frameworks [that they are responsible for]."[110]

5.3. Financial incentives and on-farm practices

The lack of regulatory connection between a watershed plan and farming practice is exacerbated by the perceived lack of financial incentives to enable implementation by farmers. Several research respondents identified the lack of funds available to act as an incentive for farmers (or any other water users and managers) to follow recommendations of a watershed plan and assume responsibility for broader impacts in the watershed as an issue. One watershed organization that was interviewed observed that: "farmers are now more aware of the watershed approach, and understand the broader impacts [of their practices]. But unfortunately, the cornerstone is always the cost of taking action … Farmers are willing to change practices, but they often need financial support, particularly if there aren't any regulations [to require change]."[111] Under these circumstances, funding programs are important to incite farm practice change.[112] For example, the Prime-Vert program finances actions on farmland to promote water protection, but this is independent of watershed management plans.[113] Such schemes are how farmers become directly aware of the need for change because it affects them financially.[114]

107 Interview of lawyer, *supra* note 93.

108 Letter from farm adviser to Dr Mark Shepheard (7 December 2012) [translated by Maria Mourot] [Letter from farm adviser].

109 Quebec, National Assembly, Standing Committee on Transport and the Environment, "Bill 92, An Act to Affirm the Collective Nature of Water Resources and to Strengthen Protection", special consultations, *Hansard*, 38th Leg, 1st Sess, No 47 (23 September 2008).

110 Letter from watershed organization 2, *supra* note 85.

111 Letter from watershed organization 3, *supra* note 96.

112 Letter from farm adviser, *supra* note 108.

113 Letter from watershed organization 3, *supra* note 96.

114 Interview of lawyer, *supra* note 93.

The Prime-Vert program is run by the Quebec Ministry of Agriculture (MAPAQ) to help farmers meet their environmental protection responsibilities. It aims to promote good agricultural practices, support production that respects the environment and meets expectations of citizens and consumers, and promote collective initiatives.[115] Financial support (also known as an eco-conditionality payment) is available to farmers who manage their farms in accordance with an approved agri-environmental support plan, including water protection measures. The connection between agri-environmental support plans and financial support makes them of more direct and binding relevance to farmers' actions on sustainable land and water management.

In September 2013, the Quebec Ministry of Agriculture announced that funding would be available under the Prime-Vert program to support watershed management projects.[116] Funding is available between 2013 and 2018 to support collective action on watershed planning and implementation. The availability of funding appears to remove a limitation identified earlier associated with lack of incentives, but in practice funding remains limited, and competition is fierce. For example, there are five watershed organizations located in the Montérégie region of southern Quebec. Only one of these received Prime-Vert funding during 2014, and there is only one call for funding per year.[117] In addition, watershed organizations are only one type of group eligible to apply. Watershed organizations are in competition for funding with incorporated farmer groups and agri-environmental advisory clubs.[118] These circumstances highlight that in a harsh fiscal climate where public budgets are under pressure, an initiative like this amounts only to the allocation of scarce public funds to a limited number of applicants who emerge in a competition as successful watershed service providers.[119]

Discussion in this section has found that notions of responsible behaviour embedded within a watershed plan need to be reinforced with legislation that is clear about the status of watershed management plans relative to farming practice and the consequences of non-compliance. At the same time, incentives are required to achieve implementation and help shift legitimate farmer resource use practices to a new watershed standard.

5.4. The Status of Watershed Contracts

In the absence of financial incentives to influence land and water management actions, the one tool that watershed management organizations have to encourage action on farms is the ability to enter into a watershed contract or agreement. However, the intent of such documents to provide particular guidance about sustainable watershed management may be difficult to realize.

An anticipated benefit of the watershed planning process is having citizens who are much more involved in the management of the general interest in water.[120] Significant challenges exist

115 Quebec, Department of Agriculture, Fisheries and Food, *Prime Vert : programme d'appui en agroenvironnement 2013-2018* (Quebec: Government of Quebec, 2013) at 1 [*Prime Vert*].

116 *Ibid* at 10.

117 Letter from regulator to Dr Mark Shepheard (22 October 2014).

118 See *Prime Vert*, *supra* note 115.

119 Shepheard & Norer, *supra* note 21 at 137.

120 Baril, Maranda & Baudrand, *supra* note 64 at 306.

to transform watershed plans into action when the watershed organizations are decentralised, with no distinct statutory powers, and reliant on the voluntary participation of stakeholders.[121] Stakeholders are then asked to voluntarily enact the agreed plan within the scope of their own powers and responsibilities.[122] Watershed contracts are one possible way to overcome these challenges.

Watershed contracts or agreements are used by watershed organizations to specify arrangements and responsibilities for local projects within a watershed.[123] Their purpose is to have farmers carry out management activities based on the agreed *needs* of the watershed (the general interest). However, in practice, a watershed contract has more of a moral rather than legal value:

> When we sign it [a watershed contract], we understand what the problems are, what [needs to be done] and how it's going to help. Having them sign it … they put their moral value on the fact that [what's being agreed] can bring something better … It's like a stewardship project on private lands. When you want to conserve your land, you write this declaration of stewardship with the conservation organization. It doesn't have a value necessarily because it's just a moral way of the landowner agreeing to try and conserve his land [in accordance with the watershed plan].[124]

The contract is only a moral agreement to engage with the plan and take action; there is no legal responsibility to act.[125] As one regulator notes, "a farmer can sign [the basin contract], not respect it, and there are no consequences for not following through on what was agreed."[126] As noted by Choquette, who has studied such contracts, effective watershed contracts require specific actions if they are to be used to apply and enforce particular management standards.[127] A contract that only provides unspecific statements of principle is little more than an acknowledgement of the general interest in improving land and water management regimes to protect the environment.[128] Such agreements fail to recognize the commercial realities facing farmers, especially that they are affected by—and respond more to—the needs of the economic commodity chains within which they are embedded rather than general social expectations about improved local management regimes.[129]

The informal nature of watershed contracts is reflected by one watershed organization referring to its contracts as moral agreements (une entente morale) that represent an agreed commitment to tackle a problem identified in the watershed plan, enforced largely by moral

121 *Ibid* at 308.

122 *Ibid* at 303.

123 Choquette, *supra* note 60 at 289.

124 Interview of watershed organization 1, s*upra* note 98.

125 Interview of regulator by Dr Mark Shepheard (28 February 2013) Longueuil, Quebec.

126 Letter from watershed organization 2, *supra* note 85.

127 Choquette, *supra* note 60 at 292.

128 Bouchard & Clavet, *supra* note 67.

129 Cohen & Davidson, *supra* note 99 at 5; Mark Shepheard & Bettina Lange, *Is there still an Economic Right to Water? An Analysis at the Intersection of Rights and Regulatory Regimes* (Oxford: The Foundation for Law, Justice and Society, 2013) at 6, online: <www.fljs.org/files/publications/Shepheard-Lange.pdf>.

suasion.[130] The representative from watershed organization 3 notes that a legally binding contract is the exception.[131]

Being subject to the general interest in water in the context of sustainable resource use practice means that farmers' land and water management efforts need to demonstrate that social gains are maximized, social costs are reduced, and social risk is minimized.[132] But this impetus of the general interest is not recognized as a clear choice in terms of land and water management, as is highlighted by the view of one watershed organization that "farmers are beginning to understand more and more that they have a role to play concerning the quality of water, but there is still a lot of resistance."[133] The representative of watershed organization 1 observed a general tendency to dismiss collaboration from any representative of government as interference.[134] As the environmental lawyer interviewed for this research remarked: the challenge is to have farmers realize that they can take a leadership role in dealing with these issues—for "the farming community to espouse [less environmentally harmful practices], adopt them, and become the voice for doing things better"; otherwise "imposing [measures] from the outside is particularly difficult."[135]

5.5. Neighbourly Relations and Developing Accountability for Sustainable Watershed Management

This section presents the results of research into perceptions of whether farmer accountability for *good neighbour* relations is an effective way for the formal water governance regime to support resource use in pursuit of sustainable watersheds. The formal instruments associated with sustainable watershed management (identified in Section 3) affirm water as a common resource, specify the duty of everyone to commit to the protection and sustainable use of the resource, and provide a legal regime enabling the general interest in water to be protected through *good neighbour* relations.[136]

The general interest amounts to a responsibility of all in a watershed to use, preserve, and protect water.[137] This is a shared responsibility for the problems, impacts, and actions needed to protect water.[138] It comprises society's right to establish the rules, policies, regulations or laws concerning the use of water as something common to all, the farmer's responsibility to use water in a sustainable way, return it to the environment in equal quantity and superior or equal quality, and make sure that their actions have no negative impact on the environment. Such

130 Agence de bassin versant de la rivière du Nord, *Plan directeur de l'eau*, (Saint-Jérôme: Abrinord, 2012) [translated by author].

131 Interview of watershed organization 1, *supra* note 98.

132 Paul Martin & Mark Shepheard, "What is Meant by Social Licence?" in Jaqueline Williams & Paul Martin, eds, *Defending the Social Licence of Farming: Issues, Challenges and New Directions for Agriculture* (Collingwood: CSIRO Publishing, 2011) 127.

133 Letter from watershed organization 3, s*upra* note 96.

134 Interview of watershed organization 1, *supra* note 98.

135 Interview of lawyer, *supra* note 93.

136 *Hansard No 44*, *supra* note 26 at 2732.

137 Letter from watershed organization 2, *supra* note 85.

138 Interview of watershed organization 1, *supra* note 98.

constraints are necessary for the common good: they do not prevent cultivation, but regulate management practices to make sure that water is protected.[139]

These views about the nature of responsibility for the general interest in water emphasize that private resource management decisions affecting water must be made with consideration of the general interest to reduce the risk of harm. Conceptually this connection places farmer resource decision making in the context of the general interest in water, defined and interpreted through watershed management plans.[140] Decisions in this context ought to include consideration of actions for the protection, restoration, improvement and sustainable management of water that are within the limits of tolerance defined by the relevant watershed plan.[141]

The watershed planning and management process is intended to provide the various stakeholders in a watershed with the ability to guide the allocation of resources from a sustainable development perspective.[142] This is an important community responsibility,[143] as water governance is everybody's business and collective commitment in the general interest is essential.[144] This sort of language is used to equate resource management practice with sustainable behaviour so that "people understand that they've got to consider other factors, environmental factors, to make them change … what they do."[145] As one watershed organization put it,

> [h]umans needs to feed themselves from agriculture, which necessarily has an impact on water. … Water is a collective resource. ...
>
> Since water is a collective resource, society has a right to establish rules, policies, regulations or laws concerning the use of water, whether it is for a farmer or another user of this resource.[146]

The watershed scale provides for a holistic view of problems and the development of solutions that can be used to guide sustainable resource use practice at a smaller scale. Watershed organizations have been created to facilitate this integrated approach by "collaborating with different actors on specific issues; to see what the problem is, what their preoccupations are, what they can and cannot do, and [what to do next]. [They bring] people [together] to speak to each other [and help them] solve problems."[147] Collaboration in developing a more sustainable approach to managing water involves:[148]

1. Identifying who is interested (or not);

139 Letter from farm adviser, *supra* note 108.

140 See *Quebec Water Policy*, *supra* note 3.

141 Godin, *supra* note 41 at 880.

142 Quebec, National Assembly, *Hansard* 39th Leg, 1st Sess, No 17 (8 April 2009) (Line Beauchamp) at 1625 [*Hansard No 17*].

143 *Hansard No 44*, *supra* note 26 at 2732.

144 *Hansard No 17*, *supra* note 142 at 1625.

145 Interview of watershed organization 1, *supra* note 98.

146 Letter from farm adviser, *supra* note 108.

147 Interview of watershed organization 1, *supra* note 98.

148 *Ibid.*

2. Improving interaction between stakeholders so that different interests, needs, and preoccupations are known;
3. Introducing new stakeholders who may bring a different viewpoint for dealing with the problem(s);
4. Identifying what is known, and who or what is missing; and
5. Considering how a problem may be related to what happens upstream and that it may also cause other problems downstream.

The watershed organization and planning process provides a forum for raising awareness and exchanging information between farmers and other stakeholders. In particular, access to the forum "allows farmers to be a part of a global project, to better see the impacts of certain practices on water resources, and to become aware of their responsibilities."[149]The process also allows the public to become educated and mobilize around an issue to ensure politicians are aware of what people really want.[150] Through the process people come together, participate in discussions, and learn about issues that have real effects on their lives.[151] This helps overcome a perceived lack of awareness among farmers in general about the negative impacts their practices have on water and the environment.[152]

But participation in the process is not guaranteed: "[t]he most complicated part is to interest farmers [in the process] and demonstrate to them the necessity of getting actively involved."[153] With agriculture accounting for large watershed areas in southern Quebec, it is important to have farmers at the table when developing plans that will improve the quality of water.[154] This means that farmers have the chance to be exposed to their neighbours—who may be affected by what they do—which can serve as a strong motivation to change farming practices.

Watershed organizations undertake these processes to prepare a watershed plan primarily for the Government. But the process is instrumental in developing responsible behaviour among stakeholders through their participation in problem solving, encouraging commitment to watershed contracts, raising awareness of and participation in monitoring of progress, and revising the plan based on implementation experience.[155] In this way, the watershed organization is more like a social stakeholder organization, working with people to change what they do.[156]

The collaborative process for developing sustainable watershed management provides an opportunity for multiple interests to sit at the table and put forward views about resource

149 Letter from watershed organization 2, *supra* note 85.

150 Interview of lawyer, *supra* note 93.

151 *Ibid.*

152 Letter from farm adviser, *supra* note 108.

153 Letter from watershed organization 2, *supra* note 85.

154 "Bill 92, An Act to Affirm the Collective Nature of Water Resources and to Provide for Increased Water Resource Protection", Quebec, National Assembly, Standing Committee on Transport and the Environment, special consultations, *Hansard*, 38th Leg, 1st Sess, No 45 (10 September 2008).

155 Letter from watershed organization 3, *supra* note 96.

156 Letter from watershed organization 2, *supra* note 85.

management. The process may be a suitable way to expose farmers to the broader sustainability framework in which they operate. Working through the negotiation of a plan with a full range of interests from a watershed territory is seen by respondents in this research as an important social process—facilitated by the administrative watershed organization—to flesh out the meaning of a general interest in water, its implementation, and review. Despite this optimism for the strategic intent of a sustainable watershed management regime, substantial limits remain to translating this into practical accountability for *good neighbour* relations to protect the general interest in water, and by doing so realize the promise of sustainable watershed management.

To reiterate, there are five dimensions identified that illuminate whether the governance aspirations for sustainable watershed management are likely to be achieved through implementation:

1. The absence of legal accountability for sustainable watershed management (Section 5.1);
2. The lack of concurrence between watershed strategy and farm practice (Section 5.2);
3. The impact of financial incentives on farmer decision making (Section 5.3);
4. The practical effectiveness of watershed contracts (Section 5.4); and
5. The development of accountability for *good neighbour* relations (Section 5.5).

6. FULFILLING THE PROMISE OF SUSTAINABLE WATERSHED MANAGEMENT

This section concludes the paper by addressing the question of whether the promise of sustainable watershed management articulated by the *Quebec Water Policy*, enacted in the *Water Protection Act*, underscored by the *Civil Code of Quebec*, and implemented through collaborative planning process, is likely to be achieved.

The promise of sustainable watershed management in Quebec is for all persons to realize their responsibility to protect and preserve water as a source of life now, and for future generations. This research has questioned whether the promise is being fulfilled by the farming sector. The protection, restoration, improvement, and management of water in the general interest subjects farmers and their management practice to closer scrutiny from the community and regulators about the extent of agricultural impacts on water, and the extent to which farming practices are constrained in the interests of sustainable watershed management. This research raises concerns about the extent to which farmer accountability for protection of water in the general interest is defined by sustainable watershed management processes and plans. The findings of this research suggest that realizing the promise of sustainable watershed management will remain difficult if the normative framework for the implementation of plans remains too focussed on strategic imperatives that are not effectively connected with resource use practice.

The framework for sustainable watershed management includes a mix of statutory accountability, compliance with planning, and civil liability. The statutory duty in section 5

of the *Water Protection Act* and sustainable watershed plans are intended to provide guidance about the exercise of resource access and use rights, but these are not the sole expression of accountability for the general interest in water. The *Civil Code of Quebec* provides context for interpretation of rights and interests with its provisions for water as a general interest, tolerance for neighbourhood annoyance, and the exercise of private water use relative to impacts on water quality and quantity.

The individual duty to protect water resources provides a formal legal mechanism for achieving responsible behaviour by assigning liability for environmental harm. Interpretation of such a duty is likely to also draw upon the general interest in water from the *Civil Code of Quebec*, and liability for harm that is based on tolerance between neighbours for changes in water quality and quantity as relevant considerations. The scope of liability is broadened by a liberal view of neighbours. So the question "who is my neighbour?" is answered as those in a general community of proximity, who suffer abnormal annoyance as a consequence of my conduct: irrespective of my compliance with relevant environmental standards.[157] The National Assembly has emphasized that the type of responsibility embodied within the duty for water protection is to be guided by sustainable watershed management plans. This melange of statute, planning regime, and liability for harm implies a connection between the resource management practice of a farmer and accountability for the impacts of these practices upon others in a watershed.

This research questions how effectively these sources of accountability translate into practical behaviour guidance that enables farmers to manage resources as a *good neighbour* and meet their duty of water protection. Stakeholder observations and the literature suggest a number of obstacles: a tendency for the National Assembly, regulators and courts to absolve farmers from liability for environmental harm; the lack of sanctions for non-compliance with a plan (even in the presence of a watershed contract); the lack of financial incentives to modify farm practices (although this has recently been remedied by allowing farmers to make bids for funding for watershed management projects); and implementation by watershed organizations without powers to compel other governance bodies—municipal, regional or provincial—to adopt the plan. Overall, the voluntary nature of compliance appears to make watershed plans little more than a plan of outcomes for responsible land and water management in a watershed without means to achieve adoption.

Collaboration with stakeholders is an important part of the planning and implementation process. Bringing stakeholders or actors from various sectors within a watershed together around a table to interact and understand each other was seen by those interviewed as critical to achieving behavioural change in the absence of financial incentives or other enforcement mechanisms. The collaborative nature of watershed plans may also be important in providing a standard for enforcing the general interest in water. The collaboration embedded within the plan-making process results in plans that are the expression of tolerance between neighbours relative to the general interest in water under the *Civil Code of Quebec*. This cultivates expectations among neighbours as to their obligations and potential liabilities for water protection.

With this in mind, bringing the general interest to the fore in farmer decision making about land and water management involves making the duty for water protection enforceable

---

157 Godin, *supra* note 41 at 879.

in the general interest. Article 982 of the *Civil Code of Quebec* enables this by allowing private claimants to seek an injunction or damages for environmental harm. Such private enforcement is likely to enhance the definition of responsibility under the statutory duty to protect water resources and improve its behavioural effectiveness as a standard for the sustainable use of resources.