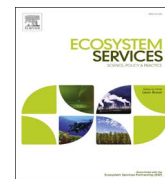


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## Ecosystem Services

journal homepage: [www.elsevier.com/locate/ecoser](http://www.elsevier.com/locate/ecoser)

## Does slow and steady win the race? Ecosystem services in Canadian and Chilean environmental law

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### ARTICLE INFO

#### Keywords:

Ecosystem services  
Environmental law  
Adjudication  
Environmental harm  
Use value  
Passive value  
Existence value

### ABSTRACT

This paper examines and compares the extent to which ecosystem services have been incorporated in Canadian and Chilean environmental law and policy. The focus is on the adjudication of environmental disputes but the analysis is contextualized by the broader environmental law and policy developments of each country. As will be seen, Canada's judiciary was relatively quick to embrace ecosystem services but subsequent progress has been slow. In Chile, on the other hand, ecosystem services have been referred to only recently but that country's Environment Courts appear intent on giving the concept a greater role in the resolution of environmental disputes.

### 1. Introduction

It has been almost two decades since ecosystem services broke into the mainstream of environmental thought (Daily, 1997; Ruhl et al., 2007) and a decade since the concept was adopted as the governing framework for assessing ecosystem health by the United Nation's *Millennium Ecosystem Assessment* (MEA, 2005a). In "Living beyond our Means," the MEA Board warned that "two thirds of the services provided by nature to humankind are found to be in decline worldwide" and urged countries to "learn to recognize the true value of nature" (MEA, 2005b, p. 5).

As a general matter, the past two decades have seen considerable progress: "From their origins as an obscure phrase ... 'ecosystem services' have gone mainstream, with new initiatives and markets for provision of services blossoming around the world" (Salzman, 2005, p. 104). As noted in the call for papers for this special issue, however, one exception is the incorporation of ecosystem services in domestic laws, whether in terms of legislation, subordinate rules and regulations, or adjudication. In this paper, we consider the experiences of Canada and

Chile. Although our analysis is contextualized by the relevant environmental law and policy developments of each country, our primary focus is on the role that ecosystem services have played in the courts and other adjudicative contexts. As will be seen, the Canadian judiciary was relatively quick to embrace the ecosystem services concept but the reluctance of Canadian governments to do their part, especially to build the necessary capacity internally, appears to have slowed progress considerably. In Chile, on the other hand, ecosystem services have been embraced only recently but that country's environment courts appear intent on giving the concept a strong role in the adjudication of environmental disputes.

The paper proceeds as follows. Part 2 sets out the methodology used to identify Canadian and Chilean judicial and quasi-judicial decisions that consider ecosystem services, both explicitly and implicitly. Part 3 focuses on the Canadian experience, beginning with an overview of ecosystem services-relevant developments in that country's environmental law and policy before turning to the jurisprudence. Similarly, Part 4 begins by setting out relevant developments in Chilean environmental law and policy before turning to the judicial considera-

*Abbreviations:* Lauzon, Québec (Procureure générale) c. Automobile E. Lauzon inc., 2015 QCCS 5860; Bérubé c. Savard, Bérubé c. Savard, 2006 QCCQ 2077; Canfor, British Columbia v. Canadian Forest Products Ltd. 2004 SCC 38; Carrière, R. v. Carrière, 2005, 272 Sask. R. 13; Caseley, R. v. George M. Caseley & Sons Inc, 2004, 10 C.E.L.R. (3d) 178; Decker, R. v. Decker, [2013] N.J. No. 309; Dickie, Dickie v. British Columbia (Assistant Regional Water Manager) [2013] B.C.W.L.D. 361; Fisco, Fisco c. Superintendencia del Medio Ambiente, (Rol R38-2014); IRE-YONGE, IRE-YONGE Developers Inc. v. Toronto (City) [2013] O.M.B.D. No. 453; Jaque Blu, Jaque Blu, Juan Carlos y Otro con Inmobiliaria Quilamapu Ltda. y Otro, Rol No. D-5-2015; McFadyen, McFadyen v. Mining and Lands Commissioner, 2007 ON SCDC 153/07; Municipalidad de Río Negro, Municipalidad de Río Negro c. Seimura Carrasco Valdeavellano (Rol D3-2014); Québec inc. c. Sutton, 9034-8822 Québec inc. c. Sutton (Ville de), 2008 QCCS 1839; Superintendency, Chilean Superintendency of the Environment (Superintendencia del Medio Ambiente); Templeton, R. v. Templeton, 2015 PCNL 1315A00081; Terranova, Terranova Developments Ltd. v. Toronto (City) [2010] O.M.B.D. No. 57

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<http://dx.doi.org/10.1016/j.ecoser.2016.11.013>

Received 30 June 2016; Received in revised form 24 October 2016; Accepted 22 November 2016

Available online xxxx

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tion of ecosystem services. Part 5 contains a discussion of the general trends and observations gleaned from Parts 3 and 4, while Part 6 concludes with some thoughts on the future direction of ecosystem services in Canadian and Chilean environmental law.

## 2. Methodology

### 2.1. Comparing Canada and Chile

Admittedly, the decision to focus on Canada and Chile was somewhat arbitrary; these are the countries in which the authors reside and with respect to which they have the most knowledge and experience. That being said, while Canada and Chile have clear differences that must be noted here, including with respect to their legal systems, they also have their similarities and a history of economic and environmental cooperation that makes them amenable to comparison (Dymond, 2008).

From a legal perspective, the most important difference is that Chile is a civil law jurisdiction while Canada, with the exception of the province of Quebec, is a common law jurisdiction. Although this distinction has arguably taken on less significance with the diminishing influence of private law and the ever growing importance of the administrative state throughout the developed world, there nevertheless remains an important difference in the manner that laws are applied and allowed to evolve under these two systems. Generally speaking, when applying a legal rule or interpreting a statute, common law judges are bound by the principles enunciated in previous decisions (*i.e.* precedent), at least where such precedent exists. Recognizing that precedent will not always be perfectly applicable, however, and also the need for common law rules to keep up with changes in societal norms and values, common law judges retain some discretion – which is easily overstated – to adapt existing common law rules and principles to new circumstances (Cardozo, 1921, p. 178). In civil law jurisdictions, on the other hand, the text of laws as passed by the legislature remains primary (Devlin, 1979). Previous decisions are persuasive but are not binding and there is little room for judicial law-making.

Returning to ecosystem services and their incorporation into a country's legal system, then, one might assume that common law jurisdictions would prove more favourable ground than civil law jurisdictions insofar that the matter is not entirely dependent on the legislative or executive branches. Indeed, as will be seen, ecosystem services were embraced as a matter of Canadian common law well before their legislative debut, which is actually still pending.

Another important and relatively recent difference between Canada and Chile is the establishment in Chile of its Environment Courts (Law No. 20600, 2012). The jurisdiction of Chile's Environment Courts is threefold: First, they review decisions made by the executive branch with respect to environmental matters, including environmental impact assessment certificates, fines for non-compliance with statutory requirements, and regulations for implementing environmental quality standards (Law No. 20600, 2012, article 17, num. 1, 3–8). Second, they authorise certain interim measures applied for by Chile's environmental agency, the Superintendency of the Environment (“*Superintendencia*”), such as the temporary closure of a facility, the cessation of operations, and the suspension or even revocation of environmental licences. Third, they have primary jurisdiction with respect to actions for environmental damages (Law No. 20600, 2012, article 17, No. 2). In all cases, decisions adopted by the Environment Courts are appealable only with respect to errors of law (“*recurso de casación*”) to the Chilean Supreme Court. While most Canadian provinces have created specialized environmental boards, variously referred to as Environmental Appeals Boards or Environmental Review Tribunals (Environmental Management Act, SBC, 2003, c 53; Environmental Protection and Enhancement Act, RSA, 2000, c E-12; Adjudicative Tribunals Accountability, Governance and Appointments Act, 2009, S.O. 2009, c. 33, Sched. 5), there is no such tribunal at the

federal level. Moreover, while the tribunals that do exist have some of the characteristics and powers of a court, their jurisdiction is generally more limited and subject to judicial supervision at the lowest court level.

There is considerable literature with respect to the benefits of specialist environment courts (Preston, 2008; Bankes, 2006). Among these are rationalisation, specialisation, responsiveness to environmental problems, and flexibility and innovation (Preston, 2008). Thus, while Canada's status as a common law jurisdiction can be considered as increasing its potential to incorporate ecosystem services into its environmental law, the creation of environment courts could be expected to have a similar effect for Chilean environmental law.

### 2.2. Judicial and quasi-judicial (administrative) decisions considering ecosystem services

For the purposes of our analysis and discussion, we conducted a search for all Canadian and Chilean judicial decisions that have considered ecosystem services, whether explicitly or by implication (see Tables 1 and 2, below). By implication, we mean decisions that have considered the societal benefits of functioning ecosystems without explicitly referring to them as “ecosystem services.”

With respect to Canada, we searched several online legal databases (CanLII and Westlaw) for the term “ecosystem services” and variations thereof (*e.g.* the terms “ecosystem” and “services” within twenty words of one another). Recognizing the relationship between ecosystem services and the field of environmental valuation – and specifically the concepts of use and non-use value (National Research Council of the National Academies, 2005), we also searched for decisions containing those terms. Finally, the Canadian search included not only judicial decisions but also the quasi-judicial, or administrative, tribunals of each province in order to capture decisions from the previously mentioned provincial environmental boards and tribunals.

With respect to Chile, we searched judicial decisions contained in the Legal Publishing Database as well as administrative law decisions found in the decision database provided by the Comptroller General of the Republic (“*Contraloría General de la República*”). As with Canada, we searched for decisions referring to “ecosystem services” in various combinations, as well as related terms.

## 3. The Canadian experience

### 3.1. Relevant developments in Canadian environmental law and policy

As noted above, ecosystem services first entered into mainstream environmental thought in 1997 with the publication of *Nature's Services*. That same year, and with support from various partners internationally, Canada's primary environmental agency, Environment Canada, established the Environmental Valuation Reference Inventory (EVRI), described as “a searchable storehouse of empirical studies on the economic value of environmental benefits and human health effects” (EVRI, n.d). EVRI is also intended to “help policy analysts use the benefits transfer approach” (EVRI, n.d), pursuant to which existing valuation studies (*e.g.* of a certain ecosystem type or resource, such as a wetland) are used to assign or at least approximate values for similar sites or resources that have not been directly valued (Figueroa and Pastén, 2011).

The next two developments occurred several years later, in 2004. Nancy Olewiler published one of the first valuation studies in Canada, estimating the annual value of wetlands in British Columbia's Fraser River Valley at \$ CAD 231.7 million and calling on the federal government to create a national task force to “fund and coordinate the comprehensive measurement of baseline data on the state of Canada's natural capital...and ensure traditional economic analyses and forecasting approaches are revised to properly account for the

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