Extraterritorial Application of Environmental Law to Transnational Corporations and their Affiliates.

Annotated Bibliography

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This web page provides information on the books and articles I read in my research on my thesis. A brief overview of my proposed thesis has been placed directly after this in order to help the reader better appreciate the choice of works in this bibliography.

Transnational corporations [1] operate in more than one country through affiliates. In order to take advantage of the “better business opportunities” these affiliates are usually incorporated in the host country. Transnational corporations wield great deal of power especially in developing countries where their investments are desperately needed. There are widespread allegations of bad environmental practices of transnational corporations leading to environmental harm.

There is the need for some authority, more powerful than transnational corporations, to regulate the environmental activities and enforce environmental obligations of transnational corporations especially in developing countries. Voluntary regulations have problems of enforcement and lack of uniform standards. There is very little hope of treaty providing the answer because transaction costs for treaties are high and many proposed treaties are never agreed on. Most host developing countries are not able to enforce environmental standards due to inadequate personnel and the need to attract investors.

My thesis proposes that home countries, in instances where host developing countries are unable to regulate the affiliates of transnational corporations, exert some control over the activities of these affiliates in those countries to ensure that they abide by some minimum environmental standards.

Port state control has evolved to the stage where states are using it to regulate environmental harm in common resource areas. This regime could be adopted and used in the extraterritorial regulation of the affiliates of transnational corporations.

Environmentalists see sovereignty as a problem in efforts to prevent or resolve ecological and environmental harms because it restricts the addressing of issues to a territorial locus. Environmentalists see sovereignty as a problem in efforts to prevent or resolve ecological and environmental harms because it restricts the addressing of issues to a territorial locus. Changing notions of sovereignty from independence and non-intervention to cooperation means that sovereignty is no longer a stumbling block to solving common problems including environmental harm.

This web page is organized according to the three major chapters of my thesis.

The first section is focused on transnational corporation activities and relations between transnational corporations and host state. This section will also focus on the various forms of regulation available for transnational corporations. I have chosen a few treatises on multinational corporations I found useful.
when I begun reading on transnational corporations. There are also some good articles on transnational corporations and environmental harm. These have also been added.

The second section focuses on the concept of sovereignty – internal sovereignty and nonintervention to be exact. Some books on sovereignty highlighting the forms and theories I found useful when reading on the concept have been chosen. Other books on sovereignty in relation to natural resources have been added as this relates specifically with my thesis. Books and articles on modern conception of sovereignty and its changing facets have been added to bring the reader up to date with the modern concept of sovereignty.

The third section deals with the extraterritorial application of law. The information on extraterritorial application of law is mainly in articles. There are a few books on the issue and these have been noted here. Readings on jurisdiction have been added as this creates a background for a better understanding of the concept of extraterritorial application of law. The literature here includes that on port state jurisdiction since it is a form of extraterritorial application of law.

I. Transnational Corporations

Monographs


This book has the most up to date information on multinational corporations. Wallace summarizes the information on and traces the history of multinational corporations until 2001. She also deals with the legal aspects of the relations between the host country and the corporations. She puts together the relevant information on the activities of multinational corporations in host states and attempts to regulate them by treaties and other agreements. She also traces the extraterritorial application of laws to multinational corporations and the response of states and corporations to that regulation. Hers is the most modern book on multinational corporations presently.


Muchlinski takes a critical look at the law governing the activities of multinational corporations. He traces the history of transnational corporation and puts together the relevant literature on their activities. He looks at forms of control for host states and theories of regulation. He also traces the jurisdictional limits of regulation through national and regional law. He then focuses his attention on international regulation and the problems transnational corporations face generally with an emphasis on the problems that arise for multinational corporations as a result of the regulation by both home and host states.


The authors’ aim is to take a look at the law regulating transnational corporations. They start off with a look at the relation between sovereignty and jurisdiction, transnational business activity and the problem of regulation. They then trace the jurisdictional principles in international law permitting home states to apply their laws to transnational corporations. They also trace the extraterritorial application of law in antitrust cases. They devote a part of the book to setting out other claims to extraterritorial jurisdiction. They conclude with the arguments given by the United States as justification for applying its laws...
extraterritorially to transnational corporations.

The authors concentrate in issues in International Environmental Law in general. Of particular importance to my thesis are chapters six, eighteen and nineteen concentrating on international environmental law making, international corporate standards and extraterritorial application of domestic environmental law respectively. The last concentrates on the extraterritorial application of United States environmental law to transnational corporation activities offshore.


**Articles**

This article is about international criminal law liability for violations of human rights by transnational corporations. The author also examines the case for corporate liability in international and national law for breaches of human rights standards.

This article highlights the activities of transnational corporations in general with a special emphasis on their activities with and in developing countries. The author takes a brief look at the mechanisms for holding MNCS accountable presently. She also examines the possibility of holding Multinational Corporations personally liable for breaches of human rights standards.

Meeran, Richard, “Liability of Multinational Corporations: A Critical Stage” (Autumn 1999) online:
<http://www.labournet.net/images/cape/campanal.htm>
The author discusses the problems plaintiffs face in trying to hold transnational corporations liable for harm in developing countries. He identifies the corporate veil and *forum non-conveniens* as some of the roadblocks to accountability. He uses the cases in the United Kingdom to illustrate how these problems have affected the out come of cases. He urges that the courts should not look at the problem case by case but look at the issue and address it accordingly.

**II. Sovereignty**

**Monographs**
This book is a compilation of articles on sovereignty. Staden and Vollard have an article assessing whether state sovereignty has been eroded in the modern state. Scermer also has an article on the different aspects of sovereignty. This looks at internal sovereignty and other aspects of sovereignty and how they are changing presently as the functions of sovereignty change.

Perrez traces the evolution of sovereignty for the purposes of relating it to environmental law. He takes a look at the new realities in the relation among states brought about by internationalization, multinationalization, globalization and interdependence. He then relates these to the changes and the practical implications for sovereignty. He notes that environmental interdependence among states in the present day has resulted in the requirement of cooperation as one of the functions of sovereignty. He therefore terms present day sovereignty as cooperative sovereignty. He concludes that present-day sovereignty and permanent sovereignty over natural resources are cooperative in nature.

This book traces the history of sovereignty over natural resources from the United Nations General Assembly Resolution G.A. Res. 1803 (XVII) to its present practice among states. The author also devotes part of the book to natural resource in practice; tracing it from creeping national jurisdiction to international cooperation. He then concludes by focusing on balancing the rights and duties that flow from this claim of sovereignty.

As its name suggests, the authors examine the evolution and application of the concept of sovereignty by states. They acknowledge that sovereignty as a concept is derived from the practice of states and as state practice change so does the concept. They analyze why sovereignty is ambiguous, why it is important to states and how it is applied in theory and practice. The authors then take time to consider whether sovereignty will prosper or decline in the years to come. They conclude that sovereignty is prospering and not declining and so long as it contributes to world stability, security and peace the concept will remain the foundation for international politics.

This book traces the origin and foundation of the concept of sovereignty. Parts of the book I found useful in relation to my thesis include the evolution of sovereignty and theories of sovereignty.

*Articles*

Schwarzenburger looks at the various forms of sovereignty. He notes that there are basically six forms and they can overlap. He identifies them as positive, negative, political, legal, absolute and relative sovereignties. He uses illustrations to show how these work in practice for states. He places most states in the area of interdependence and not either at absolute or dependence – the two ends of his illustration.

**Mische, Patricia M., “Ecological Security and Sovereignty” (1990) 26(2), Peace Dossier.**
This article is an analysis of the relationship between sovereignty and ecological security. The author sees ecological security as primary for the survival of the planet and that present notions of sovereignty are not congruent to the prerequisites of ecological security. She states that sovereignty of the world is indivisible. She argues that absolute sovereignty, a myth, is being challenged by realities of global interdependence. The article also focuses on the problem of balancing conflicting needs in the relations of states. She concludes by urging for the establishment of a strong effective global polity, especially an ecological security council.

Philpott traces the evolution of the concept of sovereignty to the present day. He begins tracing the evolution to the period before Westphalia and he draws a chart illustrating the various major evolutions in sovereignty. He analyzes the concept of sovereignty representing non-intervention in the years immediately after the birth of the concept to its modern requirement of intervention by the international community in certain instances.

### III. Extraterritorial Application of Law

#### 1. Rules on jurisdiction at international law

**Monographys**

Chapter fifteen of this book focuses on the rules of public international law on jurisdictional competence. It lists and explains when a state can exercise jurisdiction in international law. This lays a foundation for a better understanding of the issue of extraterritoriality. I found chapter fourteen of this book also useful because it discusses sovereignty and equality of states. Since the whole area of extraterritorial application of law has its basis in international law, I found this book is invaluable as a beginners guide.

This monograph is a compilation of cases and materials on international law. Chapter six, on state’s jurisdiction was quite useful for a beginners understanding of the rules on jurisdiction. He also cites materials from authors such as Jennings, Akehurst Olmstead and Dickson and highlights the dissenting views of the various authors on jurisdiction at international law.

**Articles**

Akehurst, M., “Jurisdiction in International Law” (1972-3) 46 Brit. Y. B. Int’l L.
This article is a comprehensive analysis of the rules on jurisdiction at international law. It is one of the *locus classicus* on jurisdiction at international law. He divides his article into three parts: judicial jurisdiction, legislative jurisdiction and recognition of jurisdiction by other states. He discusses the rules on jurisdiction for both criminal and civil trials. He also looks at the general principles governing jurisdiction. He points out the inadequate information and state practice in the area of civil jurisdiction at international law.

Though old, this article is still a good introduction to the concept of jurisdiction at international law because international law changes slowly in this area. This article is a comprehensive summary of the rules on criminal jurisdiction at international law as evidenced by state practice. The summary of the rules is accompanied by an extensive commentary on the various rules and how other states react to its invocation.

2. **Unilateral extraterritorial application of law**

**Monographs**

This book is a collection of essays on the various legal areas where states have applied their laws extraterritorially. It examines the extraterritorial application of law in the area of criminal law, conflicts mergers and competition law and environmental law. Francioni writes on the extraterritorial application of environmental law. He looks briefly at the argument for the extraterritorial application of environmental law and its limits. He then considers the legitimacy of the extraterritorial application of environmental law and whether there is a duty to apply environmental law extraterritorially.

This is a compilation of papers presented at a seminar on the extraterritorial application of law and how it affects trade and the economy. I particularly found the presentations on how the United States applies its laws extraterritorially, how the United Kingdom does it and ways to cooperate to create common acceptable standards for the extraterritorial application of law, very insightful.

**Articles**

This article is mainly about the activities and environmental performance of multinational corporations. He examines the double standards of multinational corporations and urges the extraterritorial application of environmental law to the activities of multinationals corporations to ensure that they are rendered accountable for environmental harm. He explores the possibility of creating standards for multinational corporations through soft law, application of domestic law and self-regulation by the multinational corporations them selves.
This article is about how the American Alien Tort Claim Act has dealt with the problem of environmental damage caused by transnational corporations. Anderson analyzes the existing literature on the application of the Alien Tort Claim Act of the United States to various harms and assesses the possibility of using it to address environmental harm.

I found this a comprehensive article on the extraterritorial application of environmental law. The author discusses the international law principles that regulate jurisdiction and traces the extraterritorial application of law in the United States courts. She then traces efforts by states to regulate the environmental activities of multinational corporations. She advocates for an ombudsman for future generations who will enforce environmental standards against corporations.

Jennings traces the principles under international law which permits states to apply their laws extraterritorially and compares it to the justifications given by the United States courts for the extraterritorial application of law, especially in relation to antitrust laws.

In her article Goldfarb concentrates on analyzing the extraterritorial application of the National Environmental Policy Act (NEPA) to offshore activities. She starts with a look at the basis for the extraterritorial application of law and the presumption against extraterritoriality. She analyzes the various interpretations of NEPA by the legislature, executive and judiciary and concludes that there is a policy conflict in the various interpretations. She then considers international environmental law regulation of environmental harm and its relation to sovereignty. She tries to balance NEPA and foreign policy. She concludes by urging that there should be a presumption that NEPA applies extraterritorially.

This article compares and contrasts the European Community (EC) approach to extraterritoriality to that of the United States. The author compares the principles adopted by the EC in the extraterritorial application of law. In particular he compares the United States’ use of the “effects doctrine” with the EC’s use of the same doctrine but with different results. He also traces the history of both approaches and their use in Antitrust enforcement. He concludes by predicting further changes in the approach of both the United States and EC to the extraterritorial application of law.

The article traces developments in international environmental law. Part of the article is devoted to extraterritorial application of law. The authors discuss the assertions of advocates for extraterritoriality and the confusion surrounding. They as it also note the lack of information on how it can be done in practice.
3. Cooperative state action in extraterritorial application of law

Monographs

This book is a collection of articles on sustainable development and environmental law. Anderson has written an article on port states. He traces the evolution of port state regime from the convention on Marine Pollution to its present application to fisheries. It is more of a brief overview of the whole regime to date.

The author traces the history of port state jurisdiction and its evolution up until 1992. He covers extraterritorial application of law by states before the creation of treaties to govern the seas. He also traces the problem of flag states and other efforts of states to regulate pollution at sea. He traces the evolution of the port state jurisdiction to 1992.

The book is a collection of articles on recent trends in international environmental law in practice. Kasoulides’ article gives a summary of the port state jurisdiction and how it has worked up until 1996. I found this to be a good overview of the port state control regime and an update on his book *Port State Control Jurisdiction: Evolution of Port State Regime* (Netherlands: Nijhoff, 1993).

I found this monograph very useful in learning about the various provisions on the law of the sea convention. The editors trace the history of some of the provisions of the convention and its reception by states at the Third United Nations Conference on the Law of the Sea. They also note any changes in the original draft and how the final provisions were worded to incorporate those changes.

The author of this article traces the history and origin of the port state control regime and analyzes its performance until 1996. He also traces the role of the International Maritime Organization (IMO) and the International Labor Organization (ILO) in the development of the regime. The IMO appears to be the main coordinator of the regime and ensures that the various port states use the same standards in their enforcement procedures. It has also helped to set up other port state control regimes around the globe.

This article is one of the working papers of the Food and Agriculture Organization of the United Nations. The author advocates for the adoption of the port state control regime in the regulation of Illegal, Unreported and Unregulated fishing (IUU). In this article he tries to adapt the format of the Paris Memorandum of Understanding to the regulation of IUU.

[1] The term transnational corporation and multinational corporations are used interchangeably.
THE TRANSFERABILITY OF THE ALBERTAN GAS FLARING REDUCTION REGULATORY FRAMEWORK TO NIGERIA

ANNOTATED BIBLIOGRAPHY

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This annotated bibliography provides the sources of information for my LL.M. research at the University of Calgary. My research focuses on the issue of the transferability of the Albertan regulatory mechanism for gas flaring reduction to Nigeria. This annotated bibliography is divided into three parts: General works: Administrative Regulation and Oil and Gas Regulation in Alberta and Nigeria; Legal Transferability: Theories and Predictability of Legal Transplants; and Theories of Regulation. Each section includes a part on monographs, and another, on the relevant articles.

The first section of this bibliography consists of general works on the natural gas sector, gas flaring in Nigeria, oil and gas regulation in Alberta and general works on administrative regulation. These are supposed to provide a general framework and background for the research.

The second section, deals with literature on the transferability of laws across jurisdictions, and the factors that contribute or militate to the success of these transfers. Most of the works attempt to formulate theories of legal transplants or work on proposed theories and apply those theories to concrete examples of legal transplants.

The last section is devoted to works on the theories of regulation – the neopluralist, public choice, public interest and civic republican theories. This section also includes literature that analyze these theories of regulation and incorporate the administrative process. I have included these literature on regulatory theories because they have enabled me to develop criteria for measuring the performance of regulatory institutions and their regulatory outcomes.

GENERAL WORKS: ADMINISTRATIVE REGULATION AND OIL AND GAS REGULATION IN ALBERTA AND NIGERIA
Monographs


The author, in this thesis examines inter alia, justification for regulation of the energy sector and four theories of regulation and applies them to decommissioning of oil and gas facilities in Nova Scotia and Newfoundland.


This book refers to Nigeria as the largest petroleum producer in Africa and the largest producer of sweet (almost sulphur free) crude oil among OPEC member countries. It discusses the politics and economic implication of oil in Nigeria. Chapter 7 discusses the natural gas industry and in particular the prospects of the Nigeria Liquefied Natural Gas (NLNG) project. Chapter 2 is a broad overview of the Nigerian oil industry including the legal and institutional frameworks, the NNPC – its structure and place in the Nigerian oil industry.


This book discusses the history and evolution of the conservation and regulation of the oil and gas sector in Alberta through legislation and the establishment of conservation boards i.e. the predecessors of the Alberta Energy and Utilities Board. Conservation began as a result of gas flaring in Turner Valley and the problems and successes of regulation of the industry are discussed.


The essays in this book, focus on the administrative process in Canada, and discuss both the theory and practice of administrative law.


This is the first book of its kind in Nigeria and it gives a broad overview of the Nigerian oil and gas sector. It includes a history of the development of the sector and participation through the
Nigerian National Petroleum Corporation. In Chapter 3, the author discussed the problem of the definition of discovered and produced natural gas as defined by the provisions of the Petroleum (Amendment) Act 1973.


This edited work contains nine essays examining the costs and benefits of government regulation and the case of implementation of such government regulatory policies.


The text addresses the problem of the traditional command and control regulation and how regulatory policy is to be developed in environmental regulation.


This thesis identifies the problems involved in environmental regulation in Nigeria and the failure of regulatory agencies set up to control environmental degradation. It discusses the lessons which can be learnt from the Alberta Energy and Utilities Board which is the major regulatory agency for the oil and gas sector in Alberta.


The author developed objective criteria for energy regulation and analyzed two models of energy regulation and applied them to the energy sector in South Africa.

Omorogbe, Y. *The Oil and Gas Industry: Exploration and Production Contracts* (Lagos: Malthouse Press, 1997)

This book discusses industry contracts including a service contract between the Nigerian National Petroleum Corporation and a private oil company in Appendix 3. These contracts include a definition of natural gas and clauses for the utilization of natural gas.

Omotola, J.A. ed., *Environmental Laws in Nigeria including Compensation* (Lagos: Faculty of Law, University of Lagos, 1990)
This edited work contains essays on environmental laws in Nigeria including environmental regulation.


The text gives a broad view of the administrative process and in Chapter 6 discusses regulation and some regulatory mechanisms.

**Articles**


This essay gives an historical perspective of natural gas development and utilization in Nigeria and discusses the problems involved in development of a Nigerian natural gas market. It goes ahead to make suggestions for developing a domestic gas market in Nigeria.


This article focuses on Nigeria’s natural gas policy and the problems of utilization of Nigeria’s produced natural gas. It also discusses the gas projects in place in the country and their effects on the industry.


This article is an assessment of the Liquefied Natural Gas project in Nigeria, and its benefits to the nation in terms of additional revenue.


This essay gives a survey and brief history of Nigeria’s gas reserves and production, the economics of gas flaring, the efforts of government to curb gas flaring and the problems and prospects of Nigeria’s LNG.

The essay is an appraisal of the Nigeria Liquefied Natural Gas project and the Nigeria LNG Decree, which is the legislation designed to provide financial incentives for the utilization of Nigeria’s natural gas through the LNG project.

Crommelin, M. “Government Management of Oil and Gas in Alberta” (1975) 13 Alta. L. Rev. 146

This article is a survey of the legislation and regulations relating to the downstream and upstream oil and gas sectors in Alberta. Evaluation is based on the principles of efficiency and fairness and on these criteria proposals for specific changes are made.


The essay discusses, inter alia, the problems of the flaring of associated gas in Nigeria and the lack of incentives to enable international oil companies participate in gas utilization projects.


This article gives a broad overview of the relevant legal issues in the Nigerian oil and gas sector and the various legislation that relate to them. It also provides a brief historical overview of the legal regime of the oil and gas industry in Nigeria.

Kassim-Momodu, M. “Gas Re-Injection and the Nigerian Oil Industry” Vols. 6 & 7 J.P.P.L. 69

The essay gives a brief overview of the oil and gas industry in Nigeria, examines the issues involved in gas flaring and gas re-injection, and makes proposals based on the law and practice of some developing oil and gas producing nations.


This article examines recent policy measures of the Nigerian government in encouraging the utilization of associated gas which is mainly in the area of providing tax incentives.
Ojinnaka, I. P. “Natural Gas in Nigeria’s Energy Future” (A paper presented at the first Annual Workshop of the Nigerian Gas Association held in Abuja on Monday November 1, 1999)

This paper provides an evolution of the energy sector in Nigeria and an overview of the future of the natural gas sector in Nigeria.

Omorogbe, Y. “The Question of the Ownership of Natural Gas in Nigeria” (1988/89) 3 O.G.T.L.R. 75

This essay addresses the issue of the controversy caused by the ambiguous wordings of the amendment to the Petroleum Act 1969, on the ownership, and necessarily, the utilization of produced associated natural gas in Nigeria.


This essay discusses the three international gas markets, forms of natural gas sales agreements and their application to the Nigerian natural gas sector.


In this paper, the authors argue that the dichotomy between command and control regulation, and voluntary approaches is false.

Steinzor, Rena I. “Re-inventing Environmental Regulation: The Dangerous Journey from Command to Self Control” (1998) 22 Harv. Env. L. Rev. 103

The paper considers experiments in reinventing the system that controls pollution through the encouragement of industry self-regulation as an alternative to traditional command and control, and concludes that the journey from traditional command and control to a more flexible system of self regulation, poses dangers to the environment.


This essay discusses the view that natural gas has become a fuel of choice and the viability of
the Liquefied Natural Gas project with some references to the workings of the project in Nigeria.

LEGAL TRANSFERRABILITY: THEORIES AND PREDICTABILITY OF LEGAL TRANSPLANTS

Monographs


This edited work is a large volume which discusses multiple aspects of comparative law and also specifically addresses comparative law and the unification of law. The reports in this work cover many fields of legal studies.


This book discusses the agenda of comparative law in the 20th century and its focus for the 21st century. Comparative law might just have been a hobby in the last century, but it is referred to as the science of tomorrow. It is a movement away from the traditional trend of comparative law’s division of law into legal families, but a movement and transfer of laws across these different families.


This book, a collection of articles on the migration of law and legal systems around the world, examines the recent movement of law across geographic, cultural and linguistic borders. Law is on the move again, the authors say. The book is mainly on research into the building of a theoretical and analytical framework for the movement of law across jurisdictions.

This edited work is a collection of articles on the relationship between comparative legal studies and the sociology of law; comparative legal studies and its theories; comparative legal studies and its legacies, which includes colonialism; comparative legal studies and its boundaries and the future of comparative legal studies.


Contributors to this work generally pursue a sociolegal approach to transnational legal processes and there is also a preoccupation with power disparities. It is a survey on law and globalization. The book presents a framework for understanding the concept of globalization, discusses and analyzes transnational commerce and processes of state change, and the relationship between public international law and globalization.


Contributors to this edited work attempt to present the best explanatory model of external forces acting on any legal system and the internal reasons for legal evolution and change in the legal culture. They address the often deliberate adoption of legal cultures and the relationship to the economic, political and social factors that condition the attractiveness of foreign models of law.


Professor Watson in this text develops a theory of legal transplants which is based on the autonomy of law. Legal transplants i.e. the transfer of legal rules and legal systems from one jurisdiction to another occurs all the time irrespective of socio-cultural differences.


This text presents the concepts of colonialism, imperialism, neocolonialism and postcolonialism in an historical context. It is significant in that it provides definitions of these terms and they can be related to the present trend towards globalization.

The authors attempted to present a broad overview of comparative law as an academic discipline. The concept, functions, aims, method and history of comparative law are presented in a systematic pattern and related to several legal families of the world. Specifically, in the second chapter, there is a general discussion of the concept of legal transplants and its relationship to the general subject of comparative law.

**Articles**


The article is a comment on the relationship between comparative law and the sociology of law. It departs from the transplant theory of Ewald in his discussion of Watson. The author suggests a new conceptual framework for the relationship between comparative law and the sociology of law.


The authors discuss the terms legal transplant and legal culture. The question asked on globalization is whether the accumulation of legal transplants across legal families transforms legal cultures and lead perhaps to a universal family of global legal culture. There is also a discussion on successful and unsuccessful legal transplants. The authors do not ask whether the transplant fits into the culture or not, but seek to examine the structures and processes that challenge and transform structures.


William Ewald, in this article, attempted to formulate a logic of legal transplants from Professor Watson’s theory. He explains what Watson’s theory is, why it is important, and why it has been open to so much misinterpretation. He also criticizes the view that law is not autonomous and that it is a mirror of society.


The author in commenting on Cotterrell’s views, agrees with Cotterrell, and totally disagrees with Watson’s theory on the autonomy of law. He states that Watson’s theory is unhelpful but
Cotterrell’s views provide a valuable beginning for a sociology of legal borrowing, imposition and diffusion.


This article discusses the concepts of legal transplants especially, Professor Watson’s version of the theory. It also examines Professor Otto Kahn-Freund’s postulations. He applies their divergent views on what constitutes legal transplants to the general concept of a servitude system. He recognizes that on the one hand, legislators may simply transplant legal institutions and rules from states that have created viable solutions to specific problems and on the other, each state has its own unique history and identity that may cause transplanted rules or institutions to fail.


This is the seminal work on the mirror theory of law as a concept of legal transplants. In this article, the author identifies with Montesquieu, that legal transplants constitute “un grand hazard.” He concedes that legal transplants are possible, but the political, social and economic differences in the jurisdictions involved, play a great role in the transferability of legal rules and institutions and these factors must be taken into consideration in any proposed legal transplant.


Legrand is of the view in this article that legal transplants are impossible. He posits that if anything is transferred from one jurisdiction to another, it is not the law as it is known in the export jurisdiction, but a meaningless form of words. He argues that in every jurisdiction, law has a particular meaning attached to it and this meaning cannot be transferred across borders.


Mattei develops a theory that legal transplants are based not on prestige as argued by Watson and other comparative law theorists, but on the concept of economic efficiency. He argues that from the standpoint of a legal system, efficiency is whatever avoids waste, whatever makes a system work better by lowering transaction costs, whatever is considered better by the consumers in the legal market place, whatever does not pointlessly foreclose the development of a better organized human society, whatever legal arrangement wanted in a jurisdiction because it is believed that the jurisdiction that has it is better off because of it.


This comment examines the viability of the concept of transferability of labor law from one country to the other, and in this case, from the U.S. to Britain. Through an application of the works of Professors Alan Watson and Otto Kahn-Freund, and the examination of specific events in British industrial relations, an attempt is made to identify the elements and factors which will enable a legal reformer to predict the transferability of a given law from one country to another.


The author discusses the future of comparative law by analyzing two main departments of the discipline: the culture/difference sector and the import/export store. In discussing the second part, he analyses literature on legal transplant and the spread and dissemination of legal models. He also discusses the relationship between law and society, which is the major area of divergence among legal transplant theorists.


Nelken, in this article, studies the ways legal cultures change and the factors that affect those changes. There is also a discussion on the relationship between legal change and social change. The role played by legal transfers, the adaptation of laws to their environment and the meaning of success in legal transfers are some of the issues that are analyzed in the study of legal and social change.


Law, according to this author is on the move, and he discusses the concept of social engineering. He discusses such issues as whether respecting differences rule out a social science of legal transfers, or whether there is any point in asking if legal transfers will fit into the societies into which they are adopted. He also delves into the issue of the meaning of success in legal transplants.


The author attempts to formulate a theoretical framework for the metaphors of legal transplants. He analyzes the relationship between the law and the socio-cultural environment within which it
exists. He reviews the competing approaches to legal transplants i.e. the views of Watson, Ewald and Kahn-Freund. To Nelken, any sharp distinction between legal transplants and the sociology of law is artificial.


In this article, Nelken discusses the increasingly common incidence of legal transfers and borrowings across jurisdictions and borders. Specifically, in this article, he attempts to bring together the various views on the meaning of success in legal transfers and the factors that affect such success, such as the type of legal transfer under consideration. He focuses on issues such the measurement of the success of legal transfers.


The author provides an overview of the matters raised by legal transplants and its relationship to sociolegal cultures. His primary thesis is on the relationship between adaptations and legal cultures.


The author attempts to develop a theoretical framework and an analytical approach to the migration of laws across borders. She discusses the various products of these transfrontier migrations and the combinations that result from these mixings.


The author is of the view that law moves, connects, disconnects, changes and contributes to change. This all is a process of transposition: tuning and fitting. The future development of law, the author argues, is tied to the transfer of legal ideas and institutions, and the transplant theory needs reconsideration. The author believes that the term transposition is more appropriate than transplant, as what occurs is a tuning and a process of fitting.

This article discusses the various faces and relationships of comparative law and its place in the 21st century. There is first, a discussion on comparative law as we know it and at the end of the 20th century, comparative law and jurisprudence, comparative law and culture, comparative law and economics, critical comparative law etc. There is also an analysis of the effects of convergence and divergence among legal cultures of the world. Legal transposition, i.e. the tuning of a transplanted law to fit into its new environment and several other legal transplant metaphors are discussed.


The author discusses the intentional import of foreign legal models by countries. He concedes that import might not sometimes be voluntary, and also discusses the part played by legal aid institutions like the World Bank in the import and export of foreign legal models.


He discusses the aims of comparative law and justifications for it. He opines that a study of comparative law can be helpful, not only in achieving uniformity, but also whenever foreign models are imitated. He also states that the primary and essential aim of comparative law as a science is better knowledge of legal rules and institutions.


In this second installment of his work on legal formants, Professor Sacco discusses the meaning and effects of sources of law and interpretation in comparative law. He is also of the view that the causes of imitation of legal rules and institutions include imposition and prestige.


This author takes the view that when laws are transplanted, it works as a fundamental irritation of the whole system and something else happens. It irritates law’s binding arrangements. He disagrees with the use of the term ‘legal transplants’ and advocates for a replacement of the term by ‘legal irritants’. Legal irritants cannot be domesticated and cannot be adapted into a new cultural context.
Watson, A. “Aspects of Reception of Law” (1996) 44 Am. J. Comp. L 335

In this article, Professor Watson argues that in many places, at not times, borrowing is the most fruitful source of legal change. He also discusses the factors that aid the transplant of legal rules and institutions. He refers to these as extreme practical utility or economic efficiency and chance.

Watson, A. “Comparative Law and Legal Change” (1978) C.L.J. 313

Professor Watson, in this article, recognizes that law exists in society and for society’s needs and is inconceivable without society. But the apparent ease with which legal rules are transplanted from one jurisdiction to another and their capacity for long life is startling. He also discusses nine factors that are relevant for legal change and their roles in the legal transplant process.


This article is a reply to Professor Kahn-Freund’s work on legal transplants. Professor Watson disagrees with Kahn-Freund’s view that the degree to which any rule can be borrowed depends on how closely it is linked with the foreign power structure, and that the use of the comparative method requires knowledge not only of the foreign law, but of its political context.

THEORIES OF REGULATION

Monographs


This book provides economic justifications for regulation and an economic approach to law. On regulation, it focuses mainly on the public regulation of the market.
Brest, P. “Further beyond the Republican Revival: Toward Radical Republicanism” (1988) 97 Yale J. 1623

The paper focuses on the basic tenets of the civic republican theory of regulation and specifically on citizenship, political equality and deliberative decision making. It is suggested that it is necessary to go far beyond the current republican revival, if republican aims are to be achieved. It is fundamental that programs of genuine participatory democracy must be designed and carried out in the multifold spheres of human activity.


This paper argues that regulation ought to be in public interest and not for the private of any particular group to the detriment of the public. It also examines the conditions, which are politically and legally necessary for public interested regulation, rather than special interest regulation by regulatory bodies.

Croley, Steven P. “Theories of Regulation: Incorporating the Administrative Process” (1998) 98 Colum. L.R. 1

Here, Steven Croley discusses four major regulatory theories – public choice, neopluralism, public interest and civic republican theories – and their application to administrative process. The tenets of each theory is discussed and analyzed and it is opined that none of the theories incorporates any well developed vision of the administrative process. In this article, the author begins to bridge the gap between theoretical work on regulation, and the legal-doctrinal work on the administrative process.

Fitts M.A. “Look before You Leap; Some Cautionary Notes on Civic Republicanism” (1988) 97 Yale L.J. 1651

Professor Fitts discusses proportional representation, insulation and enhanced judicial review, which he regards as the basic civic republican philosophy for promoting public regarding dialogue among political actors. He expresses his skepticism on rational dialogue – a fundamental tenet of civic republicanism – and states that it could be pursued at the expense of political equality, participation and innovation, which are also components of the civic republican ideal.


This paper is a critique of civic republicanism, especially because of its focus on the capacity of humans to do good, and the possibility of the theory giving room to government’s unlimited power.

The article is essentially an argument in favor of the public interest theory of regulation and this is contrasted with the public choice theory. The authors discuss the effects of regulatory shirk and slack, and develop possible solutions, which include proper dissemination of information and the activities of slack reducing institutions, to them.


Professor Macey presents a pluralist view of public law and public life. He argues that the republican’s only limitation to the power of the sovereign is the requirement of deliberation, but pluralism places little or no faith in the outcomes generated by a factionalized political process, irrespective of the presence or absence of deliberation.


This article is a critic of a text that deals with the issue of imperfect alternatives in public law. The argument is that one institution cannot replace another or curb interest group influence on other institutions.


This article is an answer to the objections to civic republicanism, that traditional republicanism was a solidaristic doctrine presupposing a degree of moral consensus, which is non-existent in modern society, and that the majoritarian doctrine of popular legislative supremacy is fundamentally incompatible with the modern constitutionalist aim of securing individual rights against political oppression through judicially enforced higher law. Michelman posits that a government of the people by the people and a government of laws and not of men can only be achieved through civic republicanism.

Michelman, F. “The Supreme Court, 1985 Term Forward: Traces of Self Government” (1986) 100 Harv. L. R. 4

This paper is a basic work on the tenets of the civic republican theory and its applications. Professor Michelman discusses civic virtue, which is the animating principle of republicanism, and the general good. He also argues that neither civic virtue, nor the common good is where the path to understanding begins, but practical reason.
Seidenfeld, M. “A Civic Republican Justification for the Bureaucratic State” (1992) 105 Harv. L. Rev. 1512

The author states the basic tenets of civic republicanism and argues that the theory is of more practical significance when applied to administrative agencies. Civic republicanism promises greater citizen involvement, and the administrative state is that part of government, which is most suited to fulfilling the civic republican ideals. Professor Seidenfeld suggests political and legal reforms applicable to the three arms of government and the bureaucracy.


In this article, a new public choice theory that advocates the delegation of policy-making powers to administrative agencies is applied to the administrative state. Emphasis is also placed on administrative proceduralist, neoprogressve justifications for agency autonomy.


The authors argue that while public choice scholarship may seem hostile to the delegation of policy-making by administrative agencies, the public choice theory is not by nature anti-delegation. Agency policy-making is consistent with democracy and should be encouraged. The authors’ position represents a modern view point of the public choice theory.


It is the seminal work on the public choice theory of regulation. The author provides an economic justification for regulation.


This article states the basic commitments of civic republican theory which include deliberation, political equality, universality and citizenship. The theory states that the motivating force of political behavior should not be narrowly defined self-interest, but that civic virtue should play an important role in political life. Citizens and their representatives should not seek their private interests, but that which will best serve the community in general.

This paper is the author’s fundamental work on the revival of the civic republican theory. Three seemingly disparate areas of public law theory are linked to provide a modern theory of civic republicanism.
Water Rights in Alberta  
Annotated Bibliography

Compiled by Maureen Bell  
LL.M. Candidate  
University of Calgary

Structure

This annotated bibliography includes literature related to entitlement to water. It is organized along jurisdictional boundaries beginning with Alberta, followed by Canada, International jurisdictions (primarily the United States and Australia) and concluding with a section on environmental law matters which are related to water quality. In each section I have made every effort to include the leading authorities. Each section is further divided according to standard legal bibliography by McGill Law Journal’s Canadian Guide to Uniform Legal Citation 4th Edition published by Carswell, for secondary material. The majority of the works are articles.

The first section of this bibliography deals with literature on water entitlements and issues in the Province of Alberta, Canada. In this province the law changed substantially in 1999 upon the proclamation of the Water Act RSA 2000 c.W-3. Little has been written on this statute to date and as a result the bibliography focuses on literature which predates this new act. Literature written prior to 1999 will provide background to the new Act, and inform the reader on sections of the Act which have been carried forward.

The second section deals with literature on Canadian water issues. Because water moves both on the surface and underground, it is difficult to restrict it to one jurisdiction.

The third section consists of literature on international water entitlement issues with a focus on those jurisdictions, which Alberta’s legislation is based on, or the issues and jurisdictional structure are similar. These jurisdictions include Australia and the southwestern United States.

The last section concerns environmental matters because it has become apparent to me that it is not possible to study water entitlement without considering, at some point, water quality.
Alberta:

Monographs

Gisvold, P., *A Survey of the Law of Water in Alberta, Saskatchewan and Manitoba* (Ottawa: Prairie Farm and Rehabilitation Administration and Economics Division, Canada Department of Agriculture, 1956)

This historical legal resource surveys the laws, both statute and common law, in relation to the South Saskatchewan River that flows through these three Prairie Provinces.


This monograph addresses section by section the objections of the authors to the proposed legislation, which focuses on environmental concerns.


Written for the layperson, this monograph asks and answers a comprehensive list of questions appropriate for a manager of wetlands in Alberta.

Articles


The writer suggests ways in which the proposed Water Conservation and Management Act could regulate existing non-exempt water entitlements as an alternative to the method proposed in the Act.


The author, David Percy, is a leading authority on water in Canada and is currently Dean of the Faculty of Law, University of Alberta. This article discusses the rights to divert surface water as they existed in 1977 beginning with the history of the legislation from the Northwest Irrigation Act (federal) in 1894. He highlights the fact that the Act was designed to provide a system that would permit large scale irrigation, which riparian rights did not do. He also notes the two
fundamental principles of Alberta water rights are modelled on foreign jurisdictions) – control in the crown is based on the water model in Victoria, Australia and ii) the first in time, first in right principle is based on the American appropriation principle. He also traces the histories of irrigation licenses and districts, which are relevant to licenses today.


This article is more detailed and builds on Percy’s 1977 work of 1977. He traces the history of water rights in Alberta from riparian rights through the Northwest Irrigation Act 1894 (federal), Irrigation Act (federal) and its amendments of 1920, the transfer to the provinces under the Natural Resources Transfer Agreement of 1930, the Water Resources Act of 1931 and amendments in 1962 and finally the Water Act R.S.A. 1996, C. W-35. In this article, Percy sets out the purpose of the legislation and identifies the strengths and weaknesses of the both the legislation and the administration of it, which he has an in-depth knowledge of due to his study of water over an extended period of time. This article provides a basis for the current legislation and practice.


This book uses to case studies to illustrate the way in which ground water was managed noting where practices diverge from the law.

Canada

Monographs

Bartlett, R.H., Aboriginal Water Rights in Canada: A study of Aboriginal Title to Water and Indian Water Rights (Calgary: Calgary, Canadian Institute of Resources Law, University of Calgary, 1988).

Written in 1988, this book is a source for the law respecting Aboriginal matters. He discusses aboriginal title to water in Canada from the perspective of aboriginal rights – traditional uses, priority for time immemorial, treaty rights – contemporary uses, priority from the date of registration, ownership of beds of rivers and lakes including a discussion of riparian rights in beds underlying navigable water, and the lack of ownership in foreshore or beds of tidal waters. He raises issues such as the Prairies and Quebec rejection of the presumption of ownership of the water – bed of navigable waters in favour of the riparian owner which, in his opinion, if it were
to result in the denial of Indian ownership of the water-bed, it would deny to the Indians significant of the traditional waterways unless it was otherwise provided in the reserve lands. He notes the appropriateness of an examination of United States cases to certain Canadian issues including similar presumptions of ownership such as that which abhors the transfer of the riverbed excluding federal jurisdiction and the interpretation of treaties bounded by water that are interpreted to extend to the centre of the river. He includes extensive case authority and provides his comments on whether they ought to apply in Canada. Likewise, his chapter on Constitutional Jurisdiction and Protection with respect to water rights is a good basis from which to start an analysis of the scope of federal jurisdiction, the protection accorded to aboriginal title to water, the regime applicable to Indian reserves, the power of the provinces, and the entrenchment of constitutional rights.

He makes recommendations such as a “comprehensive” water rights adjudication system and an institutionalized negotiating process similar to the Fort Peck/Montana Compact Board.


This book sets out the history of wetlands and the current laws pursuant to which they can be protected.


This monograph describes in detail the issues arising from the management of interjurisdictional water and the problems, which arise in seeking solutions. He reviews three solutions – intergovernmental agreements, adjudication and the exercise of federal jurisdiction.


Although this text purports to include all of Canada, it focuses on the water laws in the Maritime Provinces. The author is a former judge of the Supreme Court of Canada who has written other matters related on water and the environment. This book is recommended for the discussion of constitutional issues, it was referred to by the court in the case of *Friends of the Oldman River Society v. Canada (Transport)* [1992] 1.S.C.R.


Professor A. Lucas writes in areas of Administrative Law, Environmental Law and Water Law. In this monograph he considers the issues that affect the transferability of water rights, primarily in Alberta. Although it is written prior to the new Water Act, the discussion is relevant to
licenses which precede the Act and the case studies set out terms and conditions of licenses which are still valid. One of the primary impacts of the book is the suggestion that conditions of the licenses may be ultra vires the Act as it then was which would make the indefinite term license of questionable validity.


The writers address the impact of cumulative point and non-point source pollution, the legislative schemes that may apply and recommend alternatives.


This book divides Canada into three areas – Western Canada, Northern Canada and Ontario and describes the framework for water rights of each.

Saunders, O., *Interjurisdictional Issues in Canadian Water Management* (Calgary: Canadian Institute of Resources Law, University of Calgary, 1988).

The writer focuses on the issues arising from the arrangements between the federal government and the provinces concerning interprovincial waters.


Mr. Wenig compiles an extensive historical and jurisprudential database of history and cases concerning the Fisheries Act and the potential for use of this legislation for managing watersheds as ecosystems. His review of the Fisheries Act focuses on the sections dealing with fish habitat and his authorities are extensive. He concludes that the existing legislative framework will permit the ecosystem approach to watershed management if federal Department of Fisheries and Oceans acts. To date, there has been very little action and the provinces are moving into the breach.

This thesis reviews the authority of each of the provinces over provincial water and identifies the ways in which the jurisdiction of each can be challenged, particularly in the event a exercises control over water transfer between basins, provinces and countries.

ARTICLES - Canada


In this article the author identifies legal issues arising from the federal and provincial jurisdictions over water. He argues that an interjurisdictional basin management structure, which takes the focus off who has jurisdiction, is a viable option.

**La Forest, G., “Interprovincial Rivers” (1972) 50 CBR 39**

The writer deals exclusively with the agreements affecting interprovincial rivers. He considers whether the international principle of thalweg, the central channel of the river, or the common law principle of *ad medium filum aquae* ought to apply to the boundaries between provinces formed by rivers and identifies issues arising from each.

**Laskin, B. “Jurisdictional Framework for Water Management” in Resources for Tomorrow Conference Background Papers Volume I Minister of Northern Affairs and National Resources 1961 (Ottawa: Queen’s Printer, 1961) 211.**

This is a seminal article that lays out both the common law and constitutional jurisdiction of the federal and provincial governments to manage water in Canada.


In this recent article, Valiante explores the extent of the authority of the provinces of Ontario and Quebec to enter into Annex 2001, an agreement among these provinces and eight states to manage the water in the Great Lakes and the related ecosystems. The author focuses on Ontario setting out the common law and statutory basis for the Ontario water management strategy. Although the bottom line is that the agreement will likely be supported because there is a tradition of political respect, she notes that the federal government has not been consulted with respect to fisheries, navigation and shipping, federal environmental jurisdiction and First Nations, which ought to be done. To further support Annex 2001, she challenges the residents of the Great Lakes Basin to rethink their assumptions (unlimited supply) and priorities (unlimited use) to include the whole Basin and future generations.
International Works On Water Entitlements

Monographs - International


This is a primary legal resource on water rights, which in eight updated volumes, describes water rights in the United States and bordering countries.


The section of this book titled “Current Litigation” describes the Mono Lake litigation in which the public trust doctrine was successfully used to conserve water.


This book is an overview of water law in the United States.

MacDonnell, L., Rice, T., & Shupe S., eds., Instream Flow Protection in the West (Boulder: Natural Resources Law Centre, 1989).

This work is a compilation of essays on the various aspects of instream flow needs and protection created by federal, state, tribal or private authority.


This seminal work describes the history of the water supplied to Southern California, including the purchase of appropriation rights, the construction of the aqueduct from Mono Lake in Northern California and the construction of major dams.


This book is a significant compilation of the law of water generally in the United States. The book endeavours to be on the cutting edge of an area of law that is changing and is a
comprehensive resource for categories of issues in water law including surface water, ground water, aboriginal rights, and water quality.


This book is a resource textbook of American water law.

**Articles - International**


This article discusses the negative or pathological impact private property norms have had on use and management of ecological systems. The theory of the writer is that private property rights must change to include environmental responsibility according to the ecological consequences of use. An scenario discussed by the author is the difference between using water at a time when it is abundant and therefore less ecologically damaging versus using water when very little is available.


This article discusses the history of water rights in Australia from common law rights, through the discretionary administration and disposition of statutory privileges. He discusses the problems with discretionary licenses in relation to trading including non-transferability and questions of compensation when the terms of a license are varied as permitted by its terms. The experience in Australia continues to be relevant to Alberta law due to the fact that the original act was based on the control of water being in the crown.


This article describes the conflict between appropriators with strong water rights, based on the first in time, first in right principle, and the federal Endangered Species Act over whether the water is used for irrigation or left in the Klamath Lake, Oregon, for endangered species. The writer is of the opinion that a water right is to use only, the ownership of water remains in the public. Although the article focuses on the American private property right to compensation in
the event of a taking by the federal government, it is useful from a Canadian perspective as a case history of the conflict and the legal issues that must be resolved, such as compensation.


This article sets out the principles of aquifer safe yield, which are intended to limit aquifer mining to a sustainable level in a jurisdiction in which underground water is considered to be private property. He argues for limited term rights with options in the government to manage use, during the term, in emergencies.


Smith reviews how Arizona, Vermont, and Orange County, California address five common groundwater management problems - waste, well interference, restrictions on the transfer, failure to acknowledge the interaction with surface water, and overdraft. She concludes boldly that "coercion in groundwater management" is necessary to remedy these problems; in addition to the establishment of market-type mechanisms that encourage efficient transfer of water supplies to areas where they are most needed. The academics must support this position, as there is very little support in the community for such drastic measures.


The author, counsel for a major international company, describes legal issues faced by a business reliant on water in several national and international jurisdictions including the United States, Europe, Latin America, India and Africa. The doctrine of equitable utilization of apportionment as an international principle of apportionment is discussed.
ENVIRONMENTAL WORKS RELATED TO WATER

Monographs - Environmental


This book provides a well researched, well-organized and dispassionate source of factual information on water exports as they were at the time of writing, drinking water standards focusing on source protection, water pollution point sources and water conservation options.


This monograph is the seminal work on sustainability.


This book describes the cumulative impact human-made chemicals have on hormonal systems in water among other mediums.


This book is an edited compilation of sources setting out current law and policy issues in Canadian Environmental Law, including water. It is the primary reference for the introductory environmental law course for the University of Calgary.
Takako Ono Bibliography

Research on Ecosystem-based Integrated Land Use Planning in British Columbia: Can an integrated land use planning approach conserve the forest ecological functions?: Comparative study of the Muskwa-Kechika Management Area Act in BC and Hoanrin-seido in Japan

Annotated Bibliography

Composed by Takako Ono

LL.M. Student

University of Calgary

This annotated bibliography presents books, articles, and websites referenced for my proposed thesis.

Objective of my proposed thesis

The objective of my proposed thesis is to study whether or not integrated land use planning procedure protects ecosystems from degradation. Because ecosystems contain interrelated mechanisms, we need to conserve ecosystems by integrated methods of land use. Land is not merely real estate which we can divide arbitrarily; land consists of interrelated ecosystems which must be used from an integrated perspective.

Methodology of the proposed thesis

The proposed thesis will analyze the process of integrated land use planning using a comparative method. The thesis will compare two legal methods to conserve ecological functions: ecosystem-based integrated land use planning in British Columbia and zoning system protecting forest ecological functions in Japan. British Columbia enforces ecosystem-based integrated land use planning in Muskwa-Kechika. The Muskwa-Kechika Management Area Act declares in the preamble that ecosystem-based integrated land use planning has been adapted in the area; yet, the Act does not have clear definitions of what ecosystems and ecological functions are. On the other hand, the forest law in Japan has the legal system called Hoanrin-seido which has clear definitions about forest ecological functions. But the legal system in Japan is command and control based legally land use administration which does not apply integrated land use planning method. The legal system in Japan designates a forest for protecting only one forest ecological function even though forests have numerous ecological functions. The proposed
thesis examines these two legal systems by pointing out both the advantageous and inferior ways to address conserving ecosystems.

**Structure of this annotated bibliography**

This annotated bibliography contains four main parts. First part presents the referenced materials related to the concepts of ecosystems, history and relationship between ecosystems and human society. This part provides fundamental knowledge for considering what ecosystems are, how human beings have used the ecosystems, and how we should conserve the ecosystems. The materials in the second part are referenced for examining perspectives towards nature and ethical and philosophical concepts of land use which are important for considering ecosystem conservation. Because ecosystem conservation issues include the thought of what nature is and how we should deal with natural ecosystems, these perspectives and concepts are important when we examine ecosystem conservation. Third part contains referenced material related to the concepts of land use planning including conventional land use planning, integrated land use planning, and ecosystem-based integrated land use planning. These materials will become fundamental knowledge for examining ecosystem-based integrated land use planning. The materials in final part are related to two case studies which will be examined in the proposed thesis: ecosystem-based integrated land use planning in British Columbia and command and control based land use legal administration for conserving ecosystems in Japan.

**Concepts of Ecosystems, History and Relationship between Ecosystems and Human Society**

**Monograph**


The book discusses historical environmental issues from the perspective of economic anthropology, environmental archaeology, and comparative civilization scholarship. The authors argue that human history is the history of environmental alteration and deforestation is a key issue to consider environmental degradation. The book is helpful to consider environmental problems from the historical perspective.

This book describes how old Japanese people reforested and afforested. The basic perspective toward forests and the fundamental philosophical concepts of forest administration in Japan are examined in this book. This book tells us why Japan can avoid serious deforestation which have occurred worldwide.


This book explains the relationship between terrestrial ecosystems and marine ecosystems from the perspective of ecology. The author argues that the condition of terrestrial ecosystems is strongly connected with that of marine ecosystems. The book is helpful to examine the relationship among ecosystems.

Miyawaki, Akira (Tokyo: NHK [NHK Books], 1970)

This book examines the relationship between natural vegetation and human activities from the perspective of botany. The author argues that human misusing of ecosystems gives negative impacts to the balance of natural vegetation. The book is helpful to consider how we should use ecological resources and restore the natural vegetation.


This book analyzes the historical relationship between human societies and environmental degradations. The author argues that human societies tended to ignore environmental issues for getting human social prosperity. As a result of that, the author indicates that environmental degradations were occurred. Especially, the author mentions that local deforestation caused to energy conversion from firewood to fossil fuel, global expansion of deforestation by timber trading and forestland conversion to plantation. This book is useful to consider the environmental issues from the historical perspective.


This book explains the characters, roles, and states of ecosystems from the scientific perspective. The book mentions how important ecosystems are for human society and how ecosystems have been

This book analyzes the relationship between deforestation and human cultures from the perspective of environmental archaeology. The author uses the method of pollen analysis to examine the transition of natural vegetation and analyzes the relationship the transition and human use of forest resources. The research fields are Europe, Middle East, and Asia. The author argues that the rise and fall of human societies’ prosperity are strongly related to the condition of natural vegetation, especially forests.

Yasuda, Yoshinori. (Tokyo: [Chikuma Shinsho], 1995).

This book surveys the various relationships between forests and human societies. The author overviews the relationships in Mesopotamia, Europe, Easter Island, and Japan. The author states that human societies basically deforested for constructing the prosperity of human societies. The author argues that human beings should reconsider the perspective toward forests because deforestation is related to the rise and fall of human prosperity. The book is helpful to consider the importance of forests for human prosperity.


This book analyzes the relationship between religions and nature. Comparing eastern and western religious cultures, the author argues that Buddhism and Shintoism worked to protect forests while Christianity promoted overharvesting forests. The author mentions that the differences between the two situations are due to the differences of the perspectives toward nature. This book is useful to consider the fundamental perspective toward nature.

Website

UN, Secretariat of the Convention of Biological Diversity, Sustaining Life on Earth: How the

This website presents the reason why biodiversity is important for human beings, the state of biodiversity, and the national and international actions for conserving biodiversity. Because biodiversity is an important part of ecosystems, the website is useful to understand the importance and roles of biodiversity in ecosystems.

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Perspective towards Nature, Ethical and Philosophical Concepts of Land Use

Monograph


This book examines indigenous people’s insight toward nature in many parts of the world. A chapter examines traditional Buddhist way of thinking toward nature in Japan. The author mainly focuses on the thought of *Kukai* who lived from 774 to 835 in Japan. The chapter is good for understanding the concepts of nature from a Buddhist perspective in Japan.


A chapter in this book presents the holistic perspective of environmental conservation. The author examines the concepts of Aldo Leopold’s holism in the chapter. The author also illustrates several arguments both interpretation and criticism to Leopold’s holism. The chapter is helpful to overview Leopold’s holism and related arguments.


This book examines forest management from the perspective of sustainability of forest ecosystems and
human society. The author argues that forest ecosystem conservation is important for preventing environmental degradation. The author describes forest ecosystems, forest ecological functions, and management methods for conserving forest ecosystems. The book is helpful to examine forest management from the perspective of forest ecosystem conservation.

Hirano, Hideki. (Tokyo: [Chuo-kouron-sha], 1996)

This book analyzes the relationship between urban areas and forests. The author argues that human society should construct the symbiotic relationship with forests. The book is helpful to examine the relationship between human society and forests.


This book examines animal prosecutions which held in medieval Europe. The author also analyzes the transition of the perspective toward nature in Western Europe from twelfth century to thirteenth century. The book is good to examine the origin of the perspective in western civilization, which regards nature as the objects such as natural resources.

Kito, Shuichi. 1996 <Environmental Ethics>

This book examines current ethics related to environmental issues. The author overviews the present ethics and argues that the ethically critical issue of environmental problems is separated relationship between individuals and environment phenomena. The author mentions that the separated relationship makes it difficult to understand the environmental issues comprehensively. The book is helpful to consider comprehensive solution of environmental issues.

Leopold, Aldo. *A Sand County Almanac and sketch here and there* (New York: Oxford University Press, 1949)

This book indicates the importance ecosystem conservation. The author argues that ecological degradation such as soil erosion has occurred because human use has ignored ecological condition in the
land and ecological balance has been collapsed. The book is important to consider ecosystem conservation.


This book collects Aldo Leopold’s published and unpublished essays. Several essays indicate that human beings need to become stewards of nature. The book is helpful to consider ecosystem conservation.


This book argues that people should use natural resources wisely. The author mentions that conservation means wise use of natural resources. To fulfill the meaning, the author indicates that people should avoid wasteful overuse from the shortsighted perspective. The author also mentions that fragmented state of land use should be integrated. It can be said that the book is the initial argument of the importance of integrated land use.


In this book, the author criticizes Aldo Leopold’s holism. The author argues that Leopold’s ethic a possibility of ignoring individuality and sacrificing it for the greater biotic good. The author regards that Leopold’s holism lacks the vision to see individual rights as important.

**Seta, Katsuya . (Tokyo: [Asahi-sensho], 2000).**

The book examines Japanese perspective toward trees and forests. The author explains that Japanese believed trees are holy existence and that cutting trees caused divine punishments. The book is useful to examine Japanese traditional ways of thinking toward nature.
Tsutsui, Michio ed. . (Tokyo: [Chikyu-sha], 1983).

This book analyzes general issues related to forest administration in Japan. In this book, five issues in forest administration in Japan are analyzed: the philosophies of forest administration, the problems of forest management and mountainous villages, the employment issues, the market structures, and the environmental evaluation. This book is helpful to survey Japanese forest issues.


This book includes several essays about forest use. The introductory chapter overviews the history of forest uses in Japan. This chapter shows historical deforestation and reforestation in Japan, the methodologies of forest use, the concepts of forest use, and so on. This book is useful to overview the Japanese perspective toward forests.

Tsutsui, Michio ed. , (Tokyo: [Chikyu-sha], 1987).

This book describes the history of administrative methodologies and concepts in Japanese forest use. In this book, the factors of Japanese forest administrations are surveyed from ancient era to modern era. Therefore, this book is good to consider Japanese forest administration from the chronological perspective.

**Articles**


The article analyzes Aldo Leopold’s holism. The author interprets that Leopold’s holism claims to integrate the whole world including human societies and natural biotic communities and to adopt only one certain rule to the world.

The article explains the background of Aldo Leopold’s ethic. The author mentions that Leopold’s trained professional perspective is a foundation of his ethic. The article is helpful to examine the background of Leopold’s ethic.


The article examines Aldo Leopold’s life. The author mentions that Leopold had the eyes to see forests not only as an admirer of nature but also as a scientific and administrative professional as a forester and wildlife ecologist. The article is helpful to understand the background of Leopold’s ethic.


The article criticizes Aldo Leopold’s holism. The author argues that Leopold’s distinction between the concept of community and organism is not clear. Though the author basically agrees with the definition as “community” in Leopold’s ethic, he states that the definition of ecosystem as “organism” causes the lack of an individually intrinsic value.


The article explains the Aldo Leopold’s experiment of restoration in Wisconsin. The author describes that Aldo Leopold examines the possibility of natural vegetation restoration and argues that ecosystem restoration will be an important concept of land use. The article is good for understanding Aldo Leopold’s ethic through examining his practical activities.


The article narrates the life and role of Gifford Pinchot who is a pioneer to argue the concept of “conservation”. The article interprets Pinchot’s argument of land use. The article is helpful to understand the background from which the concept of conservation emerged.

The article examines Aldo Leopold’s ethic. The author mentions that Leopold’s holism is the principle at the strategic level to set us some limits of agreeable change for conserving the whole ecosystem. The article is helpful to examine what Leopold’s ethic says.


The author indicates that the land use administration in the United States was reconsidered from allocation to individuals to integrated conservation in late nineteenth century. The article discusses the role of Major John Wesley Powell who is a pioneer of mentioning the relationship between fragmented state of land use and environmental degradation such as soil erosion in the United States. The article is useful to examine the initial movement toward integrated land use planning in the United States.


The article analyzes Aldo Leopold’s ethic from a pragmatic perspective. The author states that Leopold’s proposal is a basic principle of remediying ecosystems that is not easy to accomplish because the people who would work to put these remedies into practice need to come to a general consensus about the principle before any changes can be made. The author also indicates that Leopold’s actual concern is to sustain and conserve ecosystems by focusing on ecological functions. The article is useful to consider the application of Leopold’s ethic intro practice.


Jurisprudence

The Agenda 21 Chapter 10 declares that land use planning should take the integrated approach for conserving ecosystems. To fulfilling the Agenda’s recommendation, integrated land use planning in Canada must play an important role to show the other countries an example of integrated land use approach.

Monograph


This book collects articles related to urban and rural land use planning in the United Kingdom and the United States. In the introduction, the book tells that land use planning was started in urban areas in the United Kingdom and the United States and compares the differences of planning methods between the two countries. Because Canada’s land use planning has been constructed under the effects of the United Kingdom and the United States, this book is helpful to review the basic methods and concepts of land use planning in Canada.


The author analyzes the basic concepts of environmental law in the chapter one of this book. The important examinations for the proposed thesis are those about the concepts of “conservation”, “ecosystem protection and sustainability”, and “biodiversity and ecological integrity”. This book is helpful to examine the basic concepts of ecosystem-based integrated land use planning.


This book provides a basic introduction to natural resource policy issues in Canada. The author describes the historical perspective to natural resource policy issues in Canada in the part one. The part shows the transition of the concepts of natural resource use in Canada. Especially, the chapter explains the reason why the concept of conservation emerged in Canada. The book is valuable to understand the historical transition of the concepts of land use from the perspective of natural resource use.

The monograph describes the methods how to accomplish ecosystem approach in Canada. The monograph presents the concepts of ecosystems and ecosystem approach. For dealing with ecosystem approach, the monograph indicates six concepts: conserving, protecting, restoring, knowledge gathering, integration, and dissemination. The monograph is good for understanding the basic concepts of ecosystem approach in Canada.


The report discusses the philosophy and concepts, examples, analysis, technical implementation, and requirement of research and education in integrated land use planning. The report argues that integrated land use planning should be introduced for accomplishing well-balanced land use. The report is useful to understand the initial concepts of integrated land use planning in Canada.


The book starts with description of zoning-based land use planning in the United States. In the second chapter, the author examines the historical background of land use administration in the United States. The author argues that administrative land use control has a long history from seventeenth century in the United States. The author compares the land use plannings among Canada, the United Kingdom, and the United States. The comparative study is beneficial for understanding the characteristic land use planning in each country.


The booklet indicates the growing awareness of the value of natural ecosystems. The booklet states that land is not merely real estates but includes many ecological functions. The booklet is useful to examine the ecological and social functions in land.

This book examines detailed land use in the United States from the historical perspective. In the chapter twenty eight, the author reviews the historical land use in the United States and criticizes that the historical land use policies caused fragmented states of land which produced environmental degradation. The book is useful to consider the land use in North America because the land uses in Canada and the United States have common characters in the several points.

Kennett, Steven A. *New Directions for Public Land Law CIRL Occasional Paper No.4* (Calgary: Canadian Institute of Resources Law (CIRL), 1998).

This paper examines the role and characters of public land law in Canada. The paper analyzes two main approach of public land law from the normative perspective: the multiple use approach and ecosystem management. The paper is helpful to consider the legislative needs of integrated land use planning.


This book surveys the Canadian resource management from the historical perspective in the overview. The overview shows us the state that the priority of Canadian integrated land use planning historically swung from the economic development to environmental protection as a pendulum. The overview is useful to examine the historical state of Canadian integrated land use planning.


A chapter of “Conservation, Conservationists and the Canadian Scene” describes the concept of “conservation” in Canada. The authors examines the historical background of conservation, the differences between conservation and multiple use, the application of the concept to renewable and non-renewable resources, and so on. This chapter is helpful to consider the concept of conservation in integrated land use planning in Canada.

Patricios, Nicholas N. ed. *International Handbook on Land Use Planning* (New York: Greenwood

This book examines various countries’ land use planning separately. Especially, the chapters of the book overviewing the states of land use planning in Canada, Japan, and the United States are useful to compare the characters of each country’s land use planning.


This book analyzes an ecological planning method of land use from the perspective of landscape. The author examines the basic concepts of land use planning focused on ecological planning method in the chapter one. The author indicates that the landscape perspective is effective to consider wide range land use planning.

**Articles**


The article mentions that strategy is the concept above individual development proposals. The authors state that strategic planning and policies established in advance of individual development proposals are important to construct a framework for dealing with land use issues comprehensively. The article is useful to consider the role of strategy in integrated land use planning.


The article examines the importance of shaping explicit principles for conserving ecosystems. The authors argue that land use includes diverse goals each of that has a different direction about a benefit which each stakeholder gets from the land. The authors mention that such non-integrated different directions fail to keep ecological integrity that needs to sustain ecological benefits that all living things rely on to live.

This article examines the federal land management policy in the United States. The author mentions that the federal land management tends to give priority to economic multiple use over environmental conservation. The author argues that the federal land management should be focused on protecting environmental values. Since the federal land management in the United States has affected integrated land use planning in Canada, the article is helpful to consider the concept of the integrated land use planning.


The article analyzes the characters of conventional land use planning and integrated land use planning. The article is useful to get hold of the detailed characters of land use planning.


The article discusses the components of integrated resource management, evolution of integrated resource management in North America. The author indicates the interrelated evolution between Canada and the United States about land use. The article is helpful the overall outline and evolution of integrated land use planning in North America.


This article examines the length of time for considering effective environmental conservation. The author argues that one thousand years is needed for the long-term survival to humanity and other life on earth. The article is effective to consider the length of time which we should consider in integrated land use planning.

Website

http://home.u04.itscom.net/ono/

This website presents the national forest strategy in Canada. The website indicates that ecosystem-based management for forest using and that integrated land use planning should be introduced for accomplishing the ecosystem-based management. The website is useful to consider integrated land use planning from the perspective of forest use.


This article examines the Muskwa-Kechika management Area as the first legislated example of conservation ecosystems in action. The article analyzes the detailed states in M-KMA and mentions that M-KMA becomes an important case for considering ecosystem-based integrated land use planning in Canada.


This article explains what ecological integrity is and assesses the integrity in national parks. Although the article focuses on the management of ecological integrity in national parks, the concepts and management of ecological integrity is helpful to examine the ecosystem-based integrated land use planning.


This website shows us that environmental issues need to be supported by legislation. The website indicates the current Bush administration in the United States tends to ignore environmental protection for responding economic demands. Reviewing the website is helpful to consider the effects of policy and the needs of legislation.
A Case Study: Command and Control based Legally Land Use Administration for Conserving Ecosystems in Japan

Legislation

Shinrin-ho. (Forest Law in Japan)

This Act provides detailed definition what forest ecological functions are and protects forests for conserving the functions. The Act has taken over traditional conservation of nature in Japan.

Monograph


This book examines the forest administration and policy in Japan from nineteenth century to twentieth century. Because Japanese government transplanted German legal system of forest administration in nineteenth century, the book is helpful to analyze the differences between traditional forest administration methods and the transplanted methods.


This book examines Forest Law in Japan article by article. The examination from Article 25 to 67 is the examination of Hoanrin-seido (the legal system for conserving forest ecological functions in Japan). The book is useful to analyze the whole structure of Forest Law in Japan.


This book examines Forest Law in Japan article by article. The examination from Article 25 to 67 is the examination of Hoanrin-seido (the legal system for conserving forest ecological functions in Japan). The book is useful to analyze the whole structure of Forest Law in Japan.

This paper presents the basic information of the legal system in Japan which protects forest ecological functions. Forest Agency translates the legal system in Japan named *Hoanrin-seido* in Japanese to “protection forest system” in English. The paper states the concepts and structure of the legal systems, the size of the designated forests, and the characters of forest ecological functions. The paper is helpful to understand the basic components in the legal system.


This booklet overviews the role of forests and the legal structure of *Hoanrin-seido*. Forest Agency in Japan translates *Hoanrin-seido* as “protection forest system” and argues the important role of the legal system for conserving ecological functions in Japan. This booklet gives an outline of the legal system protecting ecological functions in Japan.


This book examines Forest Law in Japan article by article. The examination in the chapter four is the examination of *Hoanrin-seido* (the legal system for conserving forest ecological functions in Japan). Because Forest Law in Japan has been amended several times, the book is useful to examine the initial structure of the law.


This book examines Forest Law in Japan article by article. The examination from Article 25 to 67 is the examination of *Hoanrin-seido* (the legal system for conserving forest ecological functions in Japan). The book is useful to analyze the whole structure of Forest Law in Japan.

This book describes detailed implementing methods of Hoanrin-seido. This book is useful to examine the implementation of Hoanrin-seido. Since this book is a guideline of the implementation, there is no analysis about Hoanrin-seido. However, this book shows an detailed structure how Hoanrin is designated, lifted, administered. Although administrative methods tend to be complicated and unclear in the implementation level, this book makes the implementation methods very clear.

A Case Study: Ecosystem-based Integrated Land Use Planning in British Columbia

Legislation


This Act provides that integrated land use planning in Muskwa-Kechika area in British Columbia should conserve ecosystems. It can be said that the Act is an epoch-making Act for conserving ecosystems legally.

Monograph


This report recommends the land use strategy and the outline of integrated land use planning as British Columbia’s new concept and method of land use planning. The report recommends that provincial integrated land use planning will incorporate three levels: provincial, regional, and communal level. The report outlines the framework of planning, the concepts of provincial land use strategy, funding, and so on. The report is good for surveying the general view of integrated land use planning in BC.


This report explains the new procedure of integrated land use planning in British Columbia. The report
indicates that introducing clear principle and strategy for fulfilling the requirement of sustaining healthy environment improves the land use in BC. The report includes “A Land Use Charter” and “Land Use Goals” as a provincial commitment. The report describes the principle of land use, the objectives to accomplish in integrated land use planning, and the overall framework for comprehensive land use planning in BC. The report is good for reviewing the fundamental concepts of integrated land use planning in BC.

**British Columbia, the Commission on Resources and Environment. Planning for Sustainability: improving land use planning in British Columbia (British Columbia, 1994).**

This book describes the former land use planning in BC and a modified land use planning framework in detail. The book is useful to compare the structures and procedures of the former land use planning and the new integrated land use planning in BC.

**British Columbia, Commission on Resources and Environment, Provincial Land Use Strategy: A Sustainability Act for British Columbia (Canadian Cataloguing in Publication Data, 1994).**

This report recommends establishing a Sustainability Act for ensuring environmental sustainability in British Columbia. The report argues that the Sustainability Act is needed to protect the process of integrated land use planning from arbitrary administration and to ensure ecosystem conservation. Although the Act has not been established in BC yet, the concepts in the report is important for considering the ways of approaching integrated land use planning in BC.


This book explains the fundamental structure of integrated land use planning in British Columbia. British Columbia named their integrated land use planning “Land and Resource Management Planning (LRMP)”. The book describes the definition of LRMP, principles and process of the planning, the concept of sustainability, and so on. The book is helpful to understand the basic structure of integrated land use planning in BC.

This website introduces the overview of land use planning in British Columbia. The website presents the concepts, process, and characters of integrated land use planning in BC. The website is useful to understand basic outline of integrated land use planning in BC.


This website provides official documents related to Land/Resource Management Planning in BC. The website is helpful to get official information about integrated land use planning provided by the government of British Columbia.


This website shows us information related to the Muskwa-Kechika Management Area. The website provides maps and publications, concrete project in the area, background information, and so on. The website is useful to watch the trend of the area.


This website gives us information related to BC’s forest issues including a distribution map of forests, news, fact sheets, and so on. The website is useful to examine the real situation and the current issues of forests in BC.