

ACP – EU Economic Partnership Agreements and WTO compatibility: The Way Forward.

ANNOTATED BIBLIOGRAPHY

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This web page consists of selected sources of information that are relevant to my LL.M. research major paper at the University of Calgary. The central focus of my research is to determine how the European Union (EU) and the African, Caribbean and Pacific (ACP) group of countries can structure their trade relationship in a manner that is consistent with World Trade Organization (WTO) rules.

The EU through one of its pillars, the European Community (EC), has for many decades maintained trading relations with the ACP group of countries. From 1975 until now there has been five major agreements between the EU and ACP group of countries to govern their trade relationship. These agreements provided for non-reciprocal trade preferences between the parties, which consequently made them incompatible with WTO rules. The EC sought for and obtained a waiver from the WTO in order to enable these non-reciprocal trade preferences to continue.

The Cotonou agreement provided for negotiations which would lead up to Regional Trade Agreements, compatible with WTO rules being entered into between the ACP group of countries and the EU. Consequently the ACP countries divided themselves into regional groupings to negotiate and sign these Regional Trade Agreements, named Economic Partnership Agreements

(EPA). Three of the regional group have signed EPAs (one group signed a comprehensive EPA while the other two signed interim EPAs) and some individual countries in the other regions have entered into interim EPAs in order to maintain their market access to the EU.

My research project seeks to examine the ACP-EU trade relationship through the various agreements to answer the question whether the EPAs currently being negotiated and entered into are compatible with WTO rules. And secondly to propose other WTO compatible regimes for the trade relationship between the EU and ACP group of countries.

Thus while my paper is largely doctrinal, I will also make use of the comparative and case study research methodologies.

Most of the resources contained in this annotated bibliography cover more than one section of my research paper so I will not arrange them according to the sections of my paper but according to the classification of bibliographic sources in the seventh edition of the Canadian Guide to Uniform Legal Citation.

Though this annotated bibliography is broadly divided into primary and secondary sources, however, annotation is provided in respect of only the secondary sources.

Part one contains primary sources - the international agreements – which are the focus of my research project.

Part two contains secondary materials relevant to my research and is further divided into monographs and articles.

Part three contains other materials such as papers, essays, reports and websites which are good sources for information relevant to my research project.

Please note that this annotated bibliography is a work in progress and therefore not comprehensive or exhaustive at this stage.

PRIMARY SOURCES

International Treaties and Agreements

EC, *ACP-EEC Convention of Lomé*, [1976] OJ, L 25/2.

EC, *Agreement amending the fourth ACP-ec convention of Lomé*, [1998] OJ, L 156/3.

EC, *Second ACP-EEC Convention signed at Lomé on 31 October 1979*, [1980] OJ, L 347/1.

EC, *Stepping Stone Economic Partnership Agreement between Côte d'Ivoire, of the one part, and the European Community and its Member States, of the other part*, [2009] OJ, L 59/3.

EC, *Third ACP-EEC Convention signed at Lomé on 8 December 1984*, [1986] OJ, L 86/3.

EC, *Treaty on European Union*, [1992] OJ, C 191/1.

Fourth ACP-EEC Convention, 15 December 1989, 29 ILM 809.

General Agreement on Tariffs and Trade, 30 October 1947, 58 UNTS 187, Can TS 1947 No27 (entered into force 1 January 1948) [GATT 1947].

Stepping Stone Economic Partnership Agreement, Ghana and the European Community, 10 November 2008, ACP 143, WTO 154.

SECONDARY SOURCES

MONOGRAPHS

Bilal, Sanoussi & Roman Grynberg, eds. *Navigating New Waters: A Reader on ACP-EU Trade Relations* (London: Commonwealth Secretariat, 2007).

Sanoussi Bilal has a background in economics, international trade and international relations. He holds a doctorate degree from the University of Birmingham, United Kingdom; bachelor's degree from the University of Geneva and master's degree from the Graduate Institute of International Studies, both in Switzerland. He is the programme coordinator on ACP-EU Economic and Trade Cooperation at the European Centre for Development Policy Management (ECDPM), Maastricht, the Netherlands. His expertise and publications are in the fields of trade policies and development, economic integration, political economy, regulation and trade-related areas. His current activities relate mainly to the trade policies and capacity development of the ACP group

of countries and the EU in the context of their regional integration process, the EPAs currently being negotiated and the multilateral (WTO) framework. He has written papers, books, articles, reports many of which I will use for my research paper. Roman Grynberg is the deputy director of the Economic Affairs Division, Commonwealth Secretariat, London. He holds a masters degree from Simon Fraser University and a doctorate degree from McGill University, both in Canada. The book, which is in two volumes, is a collection of articles on various issues regarding the ACP-EU trade relationship and negotiations towards WTO compatible EPAs. The book is an invaluable resource for my research because its focus is on highlighting the needs and priorities of developing countries with the aim of getting them addressed in the negotiations and eventually incorporated into the EPAs; and this is in line with the underlying purpose of my research project.

Frey-Wouters, Ellen. *The European Community and the Third World: the Lomé Convention and its impact* (New York: Praeger, 1980).

The author is a former professor at the City University of New York, United States of America. She has written books and articles on regional integration. The book provides an analysis of the relationship between the European community and the third world in the context of the Lomé conventions. It discusses the broad provisions of the conventions and their impact on the ACP group of countries. It also discusses the development needs of the ACP group of countries and attempts a suggestion at how these can be accommodated in future trade regimes. This book is useful for my research as it provides a background of the development needs of the ACP group of countries which helps me understanding how this shapes their trade negotiations and agreements.

Hodu, Yenkong Ngangjoh. *Trade Relations between the EU and Africa: Development, challenges and options beyond the Cotonou Agreement* (London: Routledge, 2009).

Dr. Yenkong Ngangjoh Hodu is a lecturer at the law school in Manchester University, United Kingdom. His research activities are centered on the law and economics of the World Trading System, especially its dispute settlement system and developing countries issues. This book is a very useful guide for my research because it does an analytical review of issues in the Cotonou Agreement. It gives an insight into what led to the agreement and the extent to which the parties have met their obligations therein. It appraises, criticises and evaluates the Cotonou agreement.

Holland, Martin. *The European Union and the Third World* (New York: Palgrave, 2002).

The author is a professor and director of the National Centre for Research on Europe in the University of Canterbury, New Zealand. He obtained his bachelors and doctorate degrees from the University of Exeter and his master's degree from the University of Kent, both in the United Kingdom. His area of research interest is the European Union and he has written papers, reports, articles, books and chapters in books about various aspects of the European Union. This book is an analysis of the European Union's development policy with the third world or developing countries. He examines the changes in the EU's policies with the regional groupings of Latin American, Asian and the Africa, Caribbean and Pacific group of countries. He discusses EU-ACP trade relations through the Lomé conventions and the Cotonou Partnership Agreement. He also discusses alternative trade and development policies such as the generalised system of preferences (GSP) and the Everything But Arms (EBA) initiative. This book is an invaluable resource as it touches on all aspects of my research.

Konstantinos, Adamantopoulos. *An Anatomy of the World Trade Organization* (London: Kluwer Law International, 1997).

The author is a practising lawyer and partner in charge of the Brussels office of Hammonds, one of the largest commercial law firms in the United Kingdom. His practice focuses on European Union law, with particular emphasis on International Trade law and the WTO/GATT. This book gives a historical perspective on the World Trade Organizations' development and discusses the challenges the organization has faced over the years. It also discusses key components of the World Trade Organization such as the General Agreement on Tariffs and Trade, The Trade Related Investment Measures and the General Agreement on Trade in Service. The book is a good source of general information on historical facts and details regarding the World Trade Organization and is very useful for my research or any research relating to the World trade Organization.

McQueen, M et al. *ACP-EU Trade and Aid Co-operation: Post Lomé IV* (London: Commonwealth Secretariat, 1998).

This book is a report prepared for the commonwealth secretariat. The articles in this book discuss several aspects of the EU-ACP trade relations under the Lomé conventions and what needs to be done to protect the interests of the ACP group of countries in a post-Lomé IV trade regime in the light of the issues surrounding compatibility with WTO rules. I will use this book with caution because it is an old text and not up-to-date with current developments in the ACP-EU trade relations.

Oliver, Morrissey. *Assessing Prospective Trade Policy: Methods Applied to EU-ACP Economic Partnership Agreements* (London: Routledge, 2010).

The author is a Professor in the University of Nottingham, United Kingdom. He holds a bachelors degree from Trinity College Dublin, Ireland; and master's and doctorate degrees from University of Bath, United Kingdom. He is currently. His primary research interest is in the economic effects of aid and in trade policy reform in Africa in the context of the EU- ACP trade policy and economic relationships. This book goes beyond the law to look at policy issues and the economic consideration in EU-ACP Economic Partnership Agreements. It gives my research, a broader horizon and also gives some interdisciplinary approach to my research paper. It is a concise text that deals with issues in an engaging and interesting manner. It is thus, useful for my research as it gives me a broader perspective than what a typical law text does.

Stevens, Christopher, Matthew McQueen & Jane Kennan. *After Lomé IV: A Strategy for ACP-EU Relations in the 21st Century* (London: Commonwealth Secretariat, 1999).

This book is a report by the authors on behalf of the Economic Affairs Division of the Commonwealth Secretariat as part of the Commonwealth Economic Paper Series. It reviews the factors that undermined the Lomé conventions and moves on from there to suggest alternative trade regimes which the EU and ACP group of countries can adopt to govern their trade relationship. This report was prepared with the aim of assisting ACP group of countries to develop a strategy for the negotiations of EPAs with the EC and to develop a policy and framework for their future trade relations. It is very useful to my research because it addresses the underlying purpose of my research.

***The Cotonou Agreement: a user's guide* (London: Commonwealth Secretariat Press, 2000).**

This book is published by the economic affairs division of the commonwealth secretariat. It uses a question and answer format to explain and simplify the provisions of the Cotonou agreement. Part 3.3 especially provides a good framework for my understanding on the provisions relating to negotiation of EPAs and possible alternative trade arrangements.

ARTICLES

Ajulo, Sunday Babalola. "Lomé Convention: A Review" (1986/1987) 13:4 *Journal of African Studies* (Winter) 142.

The author is a career civil servant who works for the federal government of Nigeria. He has worked in various units and departments and has written many papers, articles, books and chapters in books. The article gives a brief survey of the evolution of Lomé I, Lomé II and Lomé III. It discusses the nature, background and characteristics of the agreements, appraises their performances and examines the compatibility of Lomé I and II with the General Agreement on Tariffs and Trade. This article, particularly the

section on “Lomé Convention-GATT conformity” will be useful for section two of my research paper.

Bartels, Lorrard. “The Trade and Development Policy of the European Union” (2007) 18:4 EJIL 715.

The author is a lecturer in international law and a Fellow of Trinity Hall at the University of Cambridge. He earned his undergraduate degree from the University of New South Wales, Australia and doctorate degree from the European University Institute, Italy. His research areas are WTO law, EU law and EU external relations law and his current interests include regional trade agreements and the EU’s trade relations with developing countries. He has recently been advising African, Caribbean and Pacific countries on these issues. The article examines the historical and legal origin and basis of the EU’s trade relationship with developing countries, including the ACP group of countries. He briefly discusses the key provisions of the various agreements that have regulated this relationship and the economic partnership agreements and possible alternatives. This article is very useful for my research because it provides me with a background understanding the of EU-ACP trade relationship and it contributes resources to virtually all the parts of my research paper.

Drieghe, Lotte. “The European Union’s Trade Negotiations with the ACP: Entrapped by its own Rhetorical Strategy” (2008) 8:4 Romanian Journal of European Affairs 1.

The author is a research assistant at Ghent University Centre for EU Studies. Her specialization and research interest is in the area of European trade and development policy towards developing countries. This article discussed the rationale behind the European Union’s insistence on concluding the interim EPAs before 1st January 2008. It also briefly mentions possible arrangements which the EU and ACP group of countries could pursue as alternatives to EPAs. The article will be useful for sections three and four of my research paper.

Huber, Jurgen. “The Past, Present and Future ACP-EC Trade Regime and the WTO” (2000) 11:2 EJIL 427.

The author is a professor at the University of Innsbruck, Austria where he obtained his bachelor’s, master’s and doctorate degrees. He is also a member of the Legal Service of the Council of the European Union. The article discusses the trade provisions of the Lomé conventions *viz-a-viz* GATT and the trade regime under the Cotonou agreement. It also discusses the issues currently being negotiated during EPA negotiations and the issue of compatibility of the post-Lomé ACP-EU trade regime with WTO rules. This article will be useful for sections two and three of my paper.

Ochieng, Cosmas Milton Obote. “The EU-ACP Economic Partnership Agreements and the ‘Development Question’: Constraints and Opportunities posed by Article XXIV and Special and Differential Treatment provisions of the WTO” (2007) 10:2 J Int’l Econ L 363.

The author is a lecturer at the Lancaster University, United Kingdom. He holds a bachelors degree from Kenyatta University in Kenya, a master’s degree from Cambridge University and a doctorate from Oxford University, both in the United Kingdom. The article examines the positions of the ACP group of countries and the EU during the EPA negotiations and the interpretation of Article XXIV of GATT with regards to the EPA. It also examines other issues such as the Enabling Clause, Special and Differential Treatment for developing countries under the WTO rules and the Generalised System of Preferences.

Simmonds, Kenneth R. “The Fourth Lomé Convention” (1991) 28 Common Market Law Review 521.

The author is a professor of international law in the University of London (Queen Mary and Westfield College). In this article, he discusses the negotiation process of the fourth Lomé convention (Lomé IV) and gives an overview of the agreement. He also analyses the modifications, improvements and innovations of Lomé IV *viz-a-viz* Lomé III. The article has three annexes: Annex 1 is a list of ACP group of countries who are signatories to Lomé IV with asterisks indicating which countries were signatories to Lomé I, Lomé II and Lomé III respectively. Annex II is a classification of the ACP group of countries into: least-developed, land-locked and island ACP states and Annex III is the I of Lomé IV. This article is useful for section two of my research paper and the annexes will make a useful contribution to the annexes of my paper.

———. **“The Third Lomé Convention” (1985) 22 Common Market Law Review 389.**

In this article he discusses the negotiation process leading to the third Lomé convention and reviews the principal features of Lomé III in comparison to similar features in Lomé I and Lomé II. He briefly discusses some issues of concern to the ACP group of countries which were not resolved in Lomé III. This article, particularly section six on trade co-operation is useful for section two of my research paper where I intend to discuss the history and background of trade relations between the EU and ACP group of countries and the Lomé conventions. The article has three annexes: Annex 1 is a list of ACP group of countries who are signatories to Lomé III with asterisks indicating which countries were signatories to Lomé I and Lomé II. Annex II is a classification of the ACP group of countries into: least-developed, land-locked and island ACP states and Annex III is a breakdown of financial resources for Lomé III.

OTHER MATERIALS

Bilal, Sanoussi. “Concluding EPA negotiations: Legal and Institutional issues” (2007) European Centre for Development Policy Management (ECDPM) Policy Management Report 12 online:

<http://www.ecdpm.org/Web_ECDPM/Web/Content/Navigation.nsf/index2?readform&http://www.ecdpm.org/Web_ECDPM/Web/Content/Content.nsf/0/2565A63513C76B27C1257315003B508A?OpenDocument>.

The author has a background in economics, international trade and international relations. He holds a PhD from the University of Birmingham in the United Kingdom; bachelor’s degree from the University of Geneva and master’s degree from the Graduate Institute of International Studies, both in Switzerland. He is the programme coordinator on ACP-EU Economic and Trade Cooperation at the European Centre for Development Policy Management (ECDPM), Maastricht, the Netherlands. His expertise and publications are in the fields of trade policies and development, economic integration, political economy, regulation and trade-related areas. His current activities relate mainly to the trade policies and capacity development of the ACP group of countries and the EU in the context of their regional integration process, the EPAs currently being negotiated and the multilateral (WTO) framework. He has written papers, books, articles, reports many of which I will use for my research paper. In this report, he discusses/analyses/examines the negotiation process leading to the signing of EPAs and the possible outcomes if these EPAs are not concluded before the WTO waiver expires. He also briefly discusses possible alternative trading arrangements for the ACP group of countries and the legal and institutional implications of entering into rushed agreements. This paper is useful for sections 3 and 4 of my research paper.

——— **& Francesco Rampa. “Alternative (to) EPAs: Possible scenarios for the future ACP trade relations with the EU” (2006) European Centre for Development Policy Management (ECDPM) Policy Management Report 11. online: <www.ecdpm.org/pmr11>.**

Francesco Rampa holds a bachelors degree from Bocconi University, Italy and a master’s degree from Oxford University, United Kingdom. His has expertise in the field of trade policies and development and his current activities relate mainly to trade policies and capacity development of the ACP group of countries and the EU in the context of EPA and the multilateral WTO framework. Sanoussi Bilal is the programme coordinator and Francesco Rampa is a program associate on ACP-EU Economic and Trade Cooperation at the European Centre for Development Policy Management (ECDPM), Maastricht, the Netherlands. This study examines the Cotonou agreement and Article XXIV of GATT. It discusses and assesses various alternatives to EPAs which the EU and ACP group of countries can adopt to regulate their trade relations. This report will be useful for section four of my research paper.

Cumberland, Fiona. “The EU Strategy Towards the Developing World” online: e-International Relations <<http://www.e-ir.info/?p=3944>>.

This is an essay written by another student of international relations at Cardiff School of European Studies, United Kingdom as part of her course work. In her essay, she discusses the Lomé and Cotonou agreements generally. This essay will be useful for section two of my major paper.

Papadovassilakis, Alexander. “The EU Strategy Towards the Developing World” online: e-International Relations <<http://www.e-ir.info/?p=3944>>.

The author is a student of international relations at Cardiff School of European Studies, United Kingdom. The website is an online resource for students of international relations and he wrote this essay as part of his course work. The essay is a brief comparison between the Cotonou agreement and the Lomé conventions and brings out the similarities and differences between them. The essay will be useful for section two of my paper.

Patel, Mayur. “Economic Partnership Agreements between the EU and African Countries: Potential Development Implications for Ghana” June 2007 Realizing Rights, the Ethical Globalization Initiative, report (unpublished) <http://www.realizingrights.org/pdf/EPAs_between_the_EU_and_African_Countries_-_Development_Implications_for_Ghana.pdf>.

The author holds a bachelors degree in international relations from the London School of Economics and Political Science; master’s and doctorate degrees in international development from the University of Oxford, all in the United Kingdom. He has been involved in research on international institutions and economic affairs as a project associate with the Global Economic Governance programme at the University of Oxford and was a doctoral fellow with the World Trade Organisation in Geneva. In his report, he analyses the EPA between the EU and Ghana and concludes that an EPA would be detrimental to Ghana because reciprocal liberalization of market access will not increase the volume of Ghana’s exports and would negatively impact her domestic industries because easy access to cheaper foreign goods from Europe will cause a decline in the demand for domestic goods. He suggests two alternatives to EPAs for Ghana and discusses one of them. This report is particularly useful to my research because it analyses the EPA between the EU and Ghana, which is the subject of the case study in my research project.

Websites

Gateway to the European Union, online: <<http://europa.eu/>>. This is the official website of the European Union.

European Centre for Development Policy Management (ECDPM), online: <<http://www.ecdpm.org/>>. This is the website for ECDPM which is the Centre that has been facilitating ACP-EU cooperation since 1986.

<http://www.acp-eu-trade.org/>. This website is a joint initiative by ECDPM, ECORYS (a leading European research and consulting company) with the support of AIF and Department For International Development (DFID). It a dedicated website on the ACP-EU EPA negotiations and information about the EPAs can be found on this site.

The Secretariat of the African, Caribbean and Pacific Group of States online:

<http://www.acpsec.org/>.

Economic Partnership Agreement online: <http://www.epa.ecowas.int/>. This page can be accessed from the ECOWAS website and it contains information about the EPA negotiations that are of relevance to ECOWAS countries.

ASSESSING ENVIRONMENTAL DAMAGES: IF JUSTICE IS TO BE DONE

Annotated Bibliography

By Giorilyn Bruno

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The annotated bibliography is part of the research for my LL.M. thesis, which focuses on the necessity to assess non-pecuniary environmental damages and on the controversy that surrounds the method to be used.

Specifically, the current analysis is engaged to determine whether the existing methods, when used in a court of law, are able to achieve social and policy objectives such as compensation and deterrence.

The bibliography is divided into the following sections: Legislation, Jurisprudence, Secondary Material and Other Materials. The Secondary Material section is divided into two subsections, namely, Articles and Monographs. The Other Materials section is divided into two subsections, namely, Electronic Sources, and Papers Delivered at Seminars and Conferences. All the material is also divided into Domestic Sources and Foreign Sources.

* * *

Legislation

Environmental Protection and Enhancement Act, RSA 2000, c E-12.

Canadian Environmental Assessment Act, SC 1992, c 37.

Canadian Environmental Protection Act, 1999, SC 1999, c 33.

Jurisprudence

Domestic Sources

British Columbia v Canadian Forest Products Ltd., 2004 SCC 38, [2004] 2 SCR 74.

This case was brought by the Government of British Columbia due to a forest fire caused by Canfor in 1992 which destroyed about 1,500 hectares of public forest land in northern B.C., including trees located in certain environmentally sensitive areas that were protected from commercial logging. This decision is important because, even if no environmental losses were awarded to the Crown due to lack of evidence, the Supreme Court of Canada for the first time explicitly recognizes environmental damages as recoverable losses within the common law, and examines the supporting principles. However, the court fails to explicitly address some important issues raised by the parties, such as the method to be used to value non-economic environmental damages and whether citizens should have standing to sue for damages to the environment.

114957 Canada Ltee v Hudson (Town), 2001 SCC 40, [2001] 2 SCR 241.

Friends of the Oldman River Society v Canada (Minister of Transport), [1992] 1 SCR 3, 88 DLR (4th) 1.

R. v Hydro-Quebec, [1997] 3 SCR 213, 151 DLR (4th) 32.

Foreign Sources

Cassell & Co. Ltd. v Broome (1971), [1972] AC 1027 HL (Eng).

General Electric Company v United States Department of Commerce,
128 F 3d 767 (9th Cir 1997).

Heil v Rankin, [2000] EWCA Civ 187.

State of Ohio v United States Department of the Interior Asarco National,

58 USLW 2071 (US 14 July 1989).

Secondary Material

A) Articles

Domestic Sources

De Marco, Jerry V. "Law for Future Generations: the Theory of Intergenerational Equity in Canadian Environmental Law" (2004) 15 J Envtl L & Prac 1.

De Marco is a Canadian lawyer that represented two interveners in the *Canfor* case. He was also the first recipient of the City of Toronto's Green Toronto Award for environmental leadership. The article focuses on the theory of intergenerational equity, which is related to public trust and sustainable development concepts. The purpose of the article is to prove that, even though the phrase "intergenerational equity" is rarely used in Canadian environmental law, a significant and growing body of case law and legislation is implicitly concerned with the rights and interests of future generations. Among the several readings currently available on the same topic, the article is a persuasive source to cite when arguing that natural resources do not belong to any generation but should be administered and preserved in trust for all future generations.

De Marco, Jerry V., Marcia Valiante & Marie-Ann Bowden. "Opening the Door for Common Law Environmental Protection in Canada: the Decision in *British Columbia v. Canadian Forest Products Ltd.*" (2005) 15:2 J Envtl L & Prac 233.

Elgie, Stewart A.G. & Anastasia M. Lintner. "The Supreme Court's *Canfor* Decision: Losing the Battle but Winning the War for Environmental Damages" (2005) 38 UBC L Rev 223.

Elgie is an Associate Professor at the University of Ottawa, Faculty of Law, and Lintner is an Adjunct Professor at the University of Guelph, Department of Economics. The article reviews the Court's ruling in *Canfor*, and explains why the decision is significant to environmental protection and to securing damage compensation from an economic and ecological perspective. The article concludes that the practical utility of the *Canfor* decision depends on how courts will resolve the issue of public standing and the evidentiary requirements for economic valuation of harm. At times the authors' application of economic principles complicates the issue for a lay audience, but overall

they provide a clear and comprehensive summary of the existing methods to assess environmental damages analyzed by the Court.

Nieman, Meagan. "Seeing the Forest and the Trees: Contingent Valuation in Canadian Environmental Law" (2008) 71 Sask L Rev 117.

At the time she wrote this article, the author was an LLB candidate at the University of Saskatchewan. Nieman focuses on the general principles of "contingent valuation" as one method to assess environmental damages, and she involves some exploration into the controversy concerning the method that should be adopted by the courts. However, her primary purpose is to make contingent valuation comprehensible and accessible to the legal profession. Therefore, the advantages, disadvantages and an example of the practical application of this method are described in a clear and plain language. This paper is useful to understand how the contingent valuation method works and why its usage is highly controversial.

Olszynski, Martin Z.P.. "The Assessment of Environmental Damages Following the Supreme Court's Decision in *Canfor*" (2005) 15:3 J Env'tl L & Prac 257.

The article was written when Olszynski was an LLB candidate at the University of Saskatchewan. The author provides a brief analysis of the *Canfor* case and discusses the possible impacts of the decision on the common law; however, his main purpose is to examine the elements of a coherent theory and appropriate method that should be used for the assessment of damages. For this reason, he substantially focuses on the principles regarding damages for personal injury and damages for property loss. The author considers the difficulties of valuing environmental damages to be similar to the difficulties of valuing non-pecuniary personal injury losses; therefore, he finally concludes that the general principles of personal injury damages should be applied to environmental losses. This article is useful in order to understand the general importance of redressing the injury done to the environment and its concrete implications. Olszynski also provides helpful references, but the choice of using endnotes rather than footnotes is sometimes distracting because the reader is constantly forced to turn to the back of the work.

Watson Hamilton, Jonnette & Daniel Shea. "The Value of Equality in the Supreme Court of Canada: Ends, Means or Something Else?", (2010) 29 WRLSI 125.

Foreign Sources

Cross, Frank B.. "Natural Resource Damage Valuation" (1989) 42 Vand L Rev 269.

Halter, Faith & Joel T. Thomas. "Recovery of Damages by States for Fish and Wildlife Losses by Pollution" (1982) 10 Ecology 1.

Quah, Euston, Edward Choa & K.C. Tan. "Use of Damage Schedules in Environmental Valuation: the Case of Urban Singapore" (2006) 38:13 Applied Economics 1501.

Quah and Tan are Professors at the Nanyang Technological University, Division of Economics, Singapore. Choa works for the Ministry of Manpower in Singapore. In this paper, a damage schedule is developed based on the scales of relative importance translated from people's judgments about values of various environmental damages or losses. The survey undertaken by the authors is related to Singapore, and it is designed in exactly the same way as Rutheford's authoritative experiment. Unfortunately, the repetition is not only lacking of originality. It also lacks of any information as to how the data were collected, when the survey was conducted and whether rival explanations were considered. However, the brief preliminary literature review on the existing damage schedules is clear and includes a few authoritative references useful to further the research on related topics.

Rutheford, Murray B., Jack L. Knetsch & Thomas C. Brown "Assessing Environmental Losses: Judgments of Importance and Damage Schedules" (1998) 22 Harv Envtl L Rev 51.

At the time this article was written, Rutheford was a doctoral candidate at Yale University, Knetsch was a Professor of Economics at the Simon Fraser University, and Brown an Economist working for the U.S. Forest Service. The authors briefly review several environmental damage assessment methods in order to highlight their weaknesses. Subsequently the authors analyze the results of a survey in which respondents were asked to make choices between pairs of non-pecuniary environmental losses. The qualitative experiment undertaken is valid and reliable, and the results are used to develop a possible damage schedule. The conclusion that a damage schedule is the best method to assess environmental damages might be debatable; however, the research study is very well done and the article is definitely worth the reading.

Thompson, Dale B.. “Valuing the Environment: Court’s Struggles with Natural Resource Damages” (2002) 32 *Envtl L* 57.

The author is an Assistant Professor at the University of St. Thomas (MN) – Department of Ethics and Business Law. The article analyzes how courts in the U.S. have in practice handled the problem of calculating natural resource damages following the *Exxon Valdez* disaster in 1989. The analysis is conducted in light of the two principles identified by the leading case *Ohio*, i.e., damages should be calculated on the basis of restoration costs, and the contingent valuation method (CVM) should be used to calculate nonuse values. The author concludes that the U.S. courts have been more receptive and better prepared to evaluate evidence based on restoration costs than evidence based on valuation studies. The article is very clear with respect to the significant and practical difficulties encountered by the courts in using CVM studies for natural resource damages cases.

B) Monographs

Domestic Sources

Benidickson, Jamie. *Environmental Law*, 3d ed (Toronto: Irwin Law, 2008).

The author is a professor and teaches Environmental Law, Water Law, and Legal History at the Faculty of Law, University of Ottawa. The text gives a general overview of the evolution and current practice of environmental law and policy in Canada, rather than a comprehensive and detailed examination. However, after an issue has been discussed, reference for further readings are provided at the end of the chapter in order to assist readers to gain a more detailed knowledge. This book is useful as a succinct text of environmental law or at the preliminary stage of a research study.

Black's Law Dictionary, 9th ed (St. Paul, MN: West Publishing Co., 2009).

Bruce, Christopher J.. *Assessment of Personal Injury Damages*, 4th ed (Toronto: Butterworths, 2004);

The Author is a Professor at the University of Calgary, Department of Economics. He has

prepared or supervised the preparation of over five thousand economic reports concerning loss of earnings capacity, costs of care, and loss of dependency. He has also been accepted as an expert witness in over eighty actions before the courts of British Columbia, Saskatchewan, and Alberta. This book provides both general and statistical information about how the courts evaluate losses and how awards can be structured. It also includes a helpful discussion of expert witnesses. Given the recognized expertise of the author in the subject, an appropriate reference to this book is likely to add a positive support when arguing that the value of most non-pecuniary losses should be determined in advance.

Cooper-Stephenson, Ken. *Personal Injury Damages in Canada*, 2nd ed (Toronto: Carswell, 1996).

The author was born in Scotland, grew up and was educated in England. From 1966 to 1971 he taught at the Leicester University, Faculty of Law. In 1971 he moved to Saskatoon, Canada, and he is now a law professor at the University of Saskatchewan. The textbook provides a comprehensive overview of the law of damages and, particularly, analyzes the purpose of damage awards in addition to specific topics such as the loss of earning capacity and the cost of future care. The book might need to be updated with more recent law cases; however, it is still helpful in order to understand the broad issues and challenges that courts deal with when awarding damages.

Klar, Lewis N.. *Tort Law*, 3d ed (Toronto: Thomson Carswell, 2003).

Solomon, Robert M., R.W. Kostal & Mitchell McInnes. *Cases and Materials on the Law of Torts*, 6th ed (Toronto: Carswell, 2003).

Foreign Sources

Beccaria, Cesare. *On Crimes and Punishments* (Toronto: University of Toronto Press, 2008).

Beccaria (March 15, 1738 – November 28, 1794) was an Italian philosopher and politician best known for his treatise *On Crimes and Punishments* published in 1764. In his treatise Beccaria advanced the first arguments ever made against torture and the death penalty. According to the philosopher, the state does not have the power to torture and take lives, nor they are useful forms of punishment. He also suggested the reform of the

criminal law system, and developed a number of innovative and influential principles such as the deterrent function of punishment, the proportionality of punishment to the crime committed as well as the certainty and publicity of punishment. The book is very brief and written in a clear and animated style, based in particular upon a deep sense of humanity and of urgency at unjust suffering. Every law student should read the treatise because it represents the foundation of a democratic legal system.

Butt, Daniel *Democracy, the Courts and the Making of Public Policy* (New York: Oxford University Press, 2006).

Lunney, Mark & Ken Oliphant. *Tort Law: Text and Materials*, 4th ed (New York: Oxford University Press Inc., 2010)

Lunney is an Associate Professor at the Faculty of Law, University of New England, Australia. Oliphant is a Professor of Tort Law at the University of Bristol (UK) and the Director of the Institute for European Tort Law in Vienna. The textbook is designed for students attempting to understand the law of tort; therefore, each section begins with a clear overview of the law, followed by illustrative extracts from cases that are supported by the author's expert explanation and analysis. The authors mainly focus on English law cases; however there are also several references to Canadian and Australian case law decisions. The text is extremely clear, comprehensive, effective and updated. The book is highly recommended to understand the general common law tort principles, and useful with reference to the many suggestions for further readings and additional research.

Other Materials

Electronic Sources

Bentham, Jeremy. *An Introduction to the Principles of Morals and Legislation* (1780),
online: Library of Economics and Liberty <<http://www.econlib.org>>

"BP leak the world's worst accidental oil spill" *The Daily Telegraph* (3 August 2010),
online: The Telegraph Group <<http://www.telegraph.co.uk>>.

Papers Delivered at Seminars and Conferences

Dicks, Brian. "Ecological Damage Caused by Oil Spills: Economic Assessment and Compensation" (Paper delivered at the AMURE Seminar, *Institut Oceanographique*, Paris, 18-19 May 2006), [unpublished].

Markandya, Anyl. "Why We Should Value the Environment? And When?" (Paper delivered at the International Conference on Non-Market Valuation Methods for the Environment, Prague, 19 November 2007), [unpublished].

Annotated Bibliography

Treaty 7 and Instream Flow

Kevin M. de Carteret
Law 703
Dec 3 2010

This bibliography was prepared for Law 703 at the University of Calgary after one semester of study. Its aim is to develop a list of relevant secondary sources for a prospective thesis project. As such, primary sources such as legislation and jurisprudence have been omitted.

My research hopes to analyze the legality of Albertan water regulation in light of constitutional entrenchment of Treaty and Aboriginal rights, with emphasis on Treaty 7 and the South Saskatchewan River Basin. In order to do so, a thorough understanding of the context of Aboriginal Rights generally, and Treaty 7 specifically, is sought.

Bibliography

Secondary Materials: Monographs

Brans, Edward HP. *Liability for Damage to Public Natural Resources* (The Hague, Netherlands: Kluwer Law International, 2001).

This book deals with damage to public natural resources, as well as issues of standing and valuation of damages mostly in the European and American contexts. The work highlights various approaches to compensation for damage to public natural resources and biodiversity while recognizing the legal and scientific uncertainty inherent in the concept of environmental damage. It assists my research in situating the discussion of water scarcity and environmental degradation in southern Alberta within the broader international approach to similar problems.

Borrows, John L & Leonard I Rotman, *Aboriginal Legal Issues: Cases Materials & Commentary* 3d ed (Markham, Ont: LexisNexis Canada, 2007).

This is a recent reference for Canadian Aboriginal law. John Borrows is a leading scholar on Aboriginal law and Human Rights and Leonard Rotman is a leading scholar on Aboriginal law and Fiduciary obligations. The text provides a current synthesis of Aboriginal law in Canada and is targeted at practitioners, academics, and band and government employees alike.

Clipperton, GK et al. *Instream Flow Needs Determinations for the South Saskatchewan River Basin, Alberta Canada*. (Alberta: Alberta Sustainable Resource Development, 2003).

This work uses modeling techniques to determine the instream flow needs to ensure protection of the aquatic environment using four riverine components; fish habitat, water quality, riparian vegetation and channel maintenance. The purpose of the study was to aid in water planning within the South Saskatchewan River Basin (SSRB). It is important to my research as a basis for quantification of the effect of water management policies in the SSRB.

Henderson, James (Sa'ke'j) Youngblood, *Treaty Rights in the Constitution of Canada* (Toronto: Thomson Carswell, 2007)

This book discusses treaty rights, their constitutional recognition through s.35 of the Constitution Act, 1982 and their effect on Canadian federalism. James Sákéj Youngblood is a world renowned indigenous legal practitioner and scholar. He currently works with the Native Law Centre of Canada at the University of Saskatchewan. This work is useful to my research through its recognition that the rule of law cannot be respected without due regard for the constitutional status of treaties.

———, Marjorie L Benson & Isobel M Findlay, *Aboriginal Tenure in the Constitution of Canada* (Scarborough, Ont: Carswell, 2000).

This work aims at reconciling Canada's colonial and aboriginal legal inheritances through a legal-philosophical exploration of Aboriginal and Treaty rights in the Constitution of Canada. It analyzes judicial conceptions of the *sui generis* nature of aboriginal land tenure and aspires to legitimize Canadian democracy through the recognition of the role of Aboriginal peoples within the Canadian Federation. Its application to my research is in understanding the relationship between Treaty 7 and the reset of Canada.

Kysar, Douglas A. *Regulating From Nowhere* (New Haven: Yale University Press, 2010).

In this work, Kysar advocates for a reinterpretation and application of the precautionary principle and against the sole use of the cost-benefit analysis in environmental regulation. Kysar is a legal scholar at Yale Law School where he teaches torts, risk regulation and environmental law. This work will aid my research through its exploration of the limitations of the cost-benefit analysis.

Matsui, Kenichi. *Native Peoples and Water Rights: Irrigation, Dams, and the Law in Western Canada* (Montreal: McGill-Queen's University Press, 2009).

In this work, based in large part on his PhD dissertation, Matsui explores the historical bases of Aboriginal water law through analysis of the historical record. His detailing of the irrigation projects of the Siksika in Southern Alberta, as well as the lack of support offered by the federal government for their irrigation projects, will add important historical detail to my project.

Phare, Marrell-Ann S, *Denying the Source: The Crisis of First Nations Water Rights* (Victoria, BC: Rocky Mountain Books, 2009).

In this book, Phare argues that substantial Aboriginal water rights exist as a result of the treaties and that they must be recognized by contemporary society. Phare works on behalf of the Centre for Indigenous Environmental Resources and completed an LLM at the

University of Manitoba in 2004. This book will be useful to my research for its focus on the Piikani settlement with the Alberta and federal governments of 2002.

Saul, John Ralston. *A Fair Country* (Toronto: Penguin Group, 2008).

In this book, Saul argues that Canada must recognize its métis nature through acceptance of the influence of Aboriginal cultures and traditions on our inherited colonial legal institutions. Saul is one of Canada's most popular philosophers, and the text is written for a general audience. This text is useful to my research for its recognition of the importance of Aboriginal philosophy to Canadian identity.

Stone, Christopher D. *Should Trees Have Standing?* 3d ed (New York: Oxford University Press, 2010).

This is a revised edition of an essay first published in 1972 that posited the implications of recognizing the standing of natural objects to defend their interest before courts. Stone teaches property law and international environmental law at the University of Southern California faculty of law. Stone's thesis offers another point of view from which to analyze the problem of water scarcity in southern Alberta.

Treaty 7 Elders et al. *The True Spirit and Original Intent of Treaty 7* (Montreal: McGill-Queen's University Press, 1996).

This work presents the views of Treaty 7 elders on the meaning of Treaty 7. Through a reconstruction of oral history, the text compares Blackfoot understanding of the terms of Treaty 7 as a peace treaty to those recorded in its text. This understanding of Treaty 7 will be useful to my research as it will assist in interpreting the terms of Treaty 7 in the context of water.

Secondary Materials: Articles

Kwasniak, Arlene J. "Waste Not, Want Not: A Comparative Analysis and Critique of Legal Rights to Use and Re-Use Produced Water – Lessons for Alberta" (2007) 10 *Water Law Review* 357 at 361 to 363.

Arlene Kwasniak, a professor of law at the University of Calgary, specializes in water law in Alberta. This article introduces the history of statutory water regulation in Alberta and is a useful example of comparative law methodology. The article is useful as a starting point for further research on the history of water regulation in Alberta.

Laidlaw, David & Monique Passelac-Ross (8 July 2010) "Water Rights and Water Stewardship: What About Aboriginal Peoples?" online: ABlawg <<http://ablawg.ca/>

2010/07/08/water-rights-and-water-stewardship-what-about-aboriginal-peoples/#more-881>.

This article sets out introductory background to contextualize Aboriginal claims to water rights in southern Alberta. Laidlaw is an LLM candidate at the University of Calgary, while Passelac-Ross is a research associate at the Canadian Institute of Resources Law. This article provides an accessible introduction to Aboriginal water rights claims. It is useful to my research for its explanation of water rights claims in Alberta.

Passelac-Ross, Monique M & Christina M Smith. "Defining Aboriginal Rights to Water in Alberta: Do they Still "Exist"? How Extensive are They?" (2010) CIRL Occasional Paper #29.

At the time of writing this article, Monique Passelac-Ross was a research associate at the Canadian Institute of Resources Law, and Christina Smith was an LLM candidate at the University of Calgary. This article traces Aboriginal Rights to Water in Alberta, and determines that they likely still exist. It is an excellent starting point for investigating more specific rights, like those in my research pertaining to instream flow.

Smith, Brian J. "The Historical and Archaeological Evidence for the use of Fish as an Alternate Subsistence Resource among Northern Plains Bison Hunters" in Kerry Abel & Jean Friesen eds, *Aboriginal Resource Use in Canada: Historical and Legal Aspects* (Winnipeg: University of Manitoba Press, 1991) 35.

This article provides an account of the historical role of fish as a food source in the Blackfoot culture. At the time of writing this article, Smith was a candidate for a PhD in Anthropology at the University of Alberta. It concludes that fishing played an important role in sustaining Northern Plains Bison Hunters, and will play an important role in my research through exploring the implications of omission of fishing rights from the text of Treaty 7.

Wenig, Michael. "Looking Through Cloudy Waters - A Historical Analysis of the Legislative Declarations of Crown Water Rights in Alberta " (2010) CIRL Occasional Paper #27.

This article traces the development of the declaration of Crown water ownership from its first instance in the *Irrigation Act* of 1894 through to today's *Water Act*. Wenig is an adjunct professor at the University of Calgary faculty of law. This paper is useful to my research through its tracing of the various legislative incarnations responsible for water regulation in Alberta.

Secondary Materials: Other

Beisel, Vivienne G. *"Do not Take Them From Myself and My Children For Ever": Aboriginal Water Rights in Treaty 7 Territories and the Duty to Consult* (LLM Thesis, University of Saskatchewan, 2008) [unpublished].

In this Master's thesis, Beisel outlines Treaty 7 signatories' rights to water. At the time of writing the thesis, Beisel was a an LLM student at the University of Saskatchewan. The conclusions of the thesis are the starting points for my own research, which seeks to clarify what the rights outlined by Beisel look like, and how they can co-exist with Alberta's current water regulatory regime.

Nicole Colleen O'Byrne, *The Answer to the 'Natural resources Question': A Historical Analysis of the Natural Resources Transfer Agreements* (LLM Thesis, McGill University, 2005) [unpublished].

Nicole Colleen O'Byrne's thesis project traces the historical process of resource devolution in the prairie provinces. Using a historical methodology, O'Bryne relies on primary sources to build an understand of the NRTAs. This research will help to orientate the NRTAs in their proper historical context in my research through describing the purposes and motivations behind the devolution.

RESOLVING THE VOLTA RIVER BASIN TRANSBOUNDARY WATER CONFLICT IN WEST AFRICA USING THE BOUNDARY WATERS TREATY

ANNOTATED BIBLIOGRAPHY

Compiled by

Kwame Ampofo-Boateng

LL.M. Candidate, University of Calgary

This is an annotated bibliography for my thesis as an LL.M. candidate at the University of Calgary. It is a work in progress and should not be taken as exhaustive of the relevant literature.

The fundamental question of the research will be: can the Boundary Waters Treaty be adopted to resolve the transboundary water conflict in the Volta River Basin in West Africa?

The annotation is classified into four sections. However, only the first three sections contain annotations. Section one comprises of materials dealing with the background to the water conflict in the Volta River Basin. Section two consists of materials dealing with transboundary water scarcity and its attendant water conflicts. Section three covers materials related to the Boundary Waters Treaty. Section four provides links to online resources that offers important information for my thesis.

PRIMARY SOURCES

LEGISLATION

International Treaties and Conventions

*Treaty between the United States and Great Britain Relating to Boundary Waters
Between the United States and Canada, United States and United Kingdom, 11
January 1909 36 US Stat 2448.*

SECTION ONE: BACKGROUND INFORMATION ON THE VOLTA RIVER BASIN

SECONDARY MATERIAL

BOOKS

T Petr, “The Volta River Basin” in Bryan, Robert Davies & Keith F. Walker eds, *The Ecology of River Systems* (Dordrecht, The Netherlands: Dr W. Junk Publishers, 1986).

The editors of this book are Professors in the Department of Zoology, at the University of Cape Town, and the Department of Educational Administration, at the University of Saskatchewan respectively. The book provides good coverage of the ecology of the major river basins in the world. I find the chapter which covers the Volta river system useful to my research. While, the

chapter preoccupies itself with fisheries, its analysis of the hydrology and physical-chemistry of the Volta river system offers an excellent scientific basis for its water resources.

ARTICLES

Boubacar, Barry et al. “Volta River Basin, Comprehensive Assessment of Water Resources in Agriculture, Comparative Assessment of Water Resources and Management” (2005) online<:http://www.iwmi.cgiar.org/Assessment/files_new/Research_projects/River_Basin_Development_and_Management/VoltaRiverBasin_Boubacar.pdf>.

The five authors of this article are all affiliated with the International Water Management Institute as researchers. The article’s analysis covers, *inter alia*, climatic conditions, rainfall patterns, surface and groundwater resources, and human activities in the Volta River Basin. The article offers an historical perspective of water institutions and legislation in the Volta River Basin. It will be useful to my thesis for its analysis of the institutional and legal framework for water laws in the Volta River Basin.

Gao, Yongxuan & Amy Margolies. “Transboundary Water Governance in the Volta River Basin” (2009) online<:<http://wikis.uit.tufts.edu/confluence/display/aquapedia/Transboundary+Water+Governance+in+the+Volta+River+Basin>>.

The authors of this article, Yongxuan Gao, is a PhD student in the Department of Civil and Environmental Engineering, Tufts University, USA, while Amy Margolies is with the Fletcher School of International Relations at Tufts University, USA. The article offers the reasons behind the water scarcity, and its attendant water conflict in the Volta River Basin. It offers a detailed description of water-related activities of the six riparian nations sharing the Volta River Basin, and its impact on the water resources and environmental degradation. It also describes the Volta Basin Authority, a quasi-judicial body created by the six riparian countries in 2006, for water management, coordination of projects, and resolving conflicts in the Volta River Basin. It is useful to my thesis as it evaluates the legal regime in the Volta River Basin and the factors that contributed to the water conflict.

Lautze, Jonathan & Mark Giordano. “Transboundary Water Law in Africa: Development, Nature, and Geography” (2005) 45 Nat Resources J 1053.

Jonathan Lautze was a Masters in Arts, in Law and Diplomacy student at Tufts University, USA, at the time the article was written, while Mark Giordano was a Senior Researcher with the International Water Management Institute in Sri Lanka. This article examines the largest collection of water agreements in Africa. The agreements are categorized, to investigate the evolution and geography of transboundary water laws in Africa. It also relates the water laws in Africa to international transboundary water law. The article is relevant to my thesis as it provides information on current transboundary water laws in Africa.

Merrey, Douglas J. “African Models for Transnational River Basin Organizations in Africa: An Unexplored Dimension” (2009) 2 Water Alternatives 1.

The author is an independent water consultant based in Pretoria, South Africa. The article examines the impact of colonization’s artificially drawn boundaries on the multiplicity of shared river basins in Africa. It argues that an adoption of African institutional models will result in a higher degree of legitimacy and effectiveness for transnational river management in Africa. The article will be useful to my thesis for the identification of local legal institutions in the Volta River Basin that can facilitate the adoption of the Boundary Waters Treaty to solve the water conflict in the basin.

Okidi, CO. “The State and the Management of International Drainage Basins in Africa (1988) 28 Nat Resources J 645.

The author of this article is a Professor of Environmental Law, Director of the Centre for Advanced Studies in Environmental Law and Policy (CASELAP) and Research Professor at the Institute for Development Studies, University of Nairobi. The paper examines the macro-policy questions of the states’ involvement in the actual management and utilization of the water in river basins in Africa. The article is useful to my research as it examines concepts and issues relating to the utilization of river basins to promote socioeconomic goals at national and regional level in Africa.

Opoku-Ankomah, Y et al. “Hydro-Political Assessment of Water Governance from Top Down and Review of Literature on Local Level institutions and Practices in the Volta River Basin” (2006) International Water Management Institute, Working Paper 111.

The four authors of this article are all research scientists working in water-related projects in Ghana and Burkina Faso, West Africa. The article examines water governance in the Volta River Basin, regarding the development of a generic model for transforming local indigenous institutional principles into international transboundary river basin institutional agreements. However, the use of modeling in the article, may pose a comprehension problem for non-scientists. It is useful to my thesis as it provides historical developments, legal and institutional frameworks for governing the Ghana and Burkina Faso portions of the Volta River Basin.

Rodgers, Charles et al. “GLOWA Volta Project: A Framework for Water Resources Decision-Making and Scientific Capacity Building in a Transnational West African Basin” (2007) 21 Water Resources Management 295.

The four authors who wrote this article are all researchers affiliated with the GLOWA Project. The GLOWA Project was started by the Government of Germany in 2000 to study water demands and sustainable water use in the Volta River Basin. The article describes the water resources, and stakeholders within the Volta River Basin. It examines the mechanism for improved stakeholder participation in the challenging task of basin water resources management. It is useful to my research as it evaluates Volta River Basin’s, physical and human geography and water resources allocation.

SECTION TWO: WATER SCARCITY AND TRANSBOUNDARY WATER CONFLICTS.

BOOKS

Dinar, Ariel et al, *Bridges over Water: Understanding Transboundary Water Conflict, Negotiation and Cooperation* (Singapore: World Scientific Publishing Co Pte Ltd, 2007).

The four authors of this book are lead economists at the World Bank or professors at the John Hopkins, the University of California, Florida International University, the University of the Pacific McGeorge School of Law, and the University of Texas at Austin. The book places the study of transboundary water conflicts, negotiation, and cooperation in an interdisciplinary context. Case studies of transboundary river basins (Mekong, Ganges, Indus and Aral) and their aquifers are also examined. The main drawback of the book is the quantitative approaches to river basin modeling, and game theory used to examine water conflict, may not be understood by some readers. The article is useful to my thesis as it offers methods, deemed appropriate for the resolution of water conflicts.

Elhance, Arun P, *Hydro-Politics in the 3rd World: Conflict and Cooperation in International River Basins* (Washington DC: United States Institute of Peace, 1999).

The author of this book is the Director at the Programme on International Peace and Security, at the Social Research Council in New York. The book examines the hydro-politics of six of the world's largest river basins. Each basin's physical, economic, and political geography is examined in regard to the possibilities for acute conflict. It also evaluates attempts to develop bilateral and multilateral agreements for sharing water resources. The book is written in a language that is complex and might pose comprehension difficulties for some readers. However, this does not detract from its relevance in providing evidence for my thesis' support argument that transboundary water conflict is solvable through cooperation.

Varis, Olli, Cecilia Tortajada, & Asit K. Biswa eds, *Management of Transboundary Rivers and Lakes* (Mexico: Third World Centre for Water Management, 2008).

The editors of this book are a Senior Researcher, at the Water Resources Laboratory, Helsinki University of Technology, and a Researcher, and a President respectively at the Third World Centre for Water Management, Mexico. This book evaluates the magnitude of the transboundary water conflicts experienced in different parts of the world. It also assesses the difficulties and constraints encountered to resolve these conflicts. It examines current water conflict situations, both globally and to specific river basins. It reviews management alternatives which were successful and those which failed in dealing with water conflicts. The book is useful to my thesis as it critiques different management styles for dealing with transboundary water conflicts.

ARTICLES

Biswas, Asit K. “Management of International Waters: Opportunities and Constraints” (1999) 15 Int’l Journal of Water Resources Development 429.

The author is the founder and President of the International Journal of Water Resources Development, Mexico. The article evaluates the factors contributing to increased global water demands and its impact on international water bodies. The article argues that conflicts in the 21st century between riparian nations over international waters are likely to be higher than at present. It then argues for an effective management of international water bodies to prevent conflict. It is useful to my research as it assesses the factors that contribute to water scarcity and the role of effective management of international river basins to address water scarcity and its concomitant water conflict.

Edwards, Jeffrey, Benhua Yang & Rashid B. Al-Hmoud. “Water Availability and Economic Development: Signs of the Invisible Hand? An Empirical Look at the Falkenmark Index and Macroeconomic Development” (2005) 5 Nat Resources J 953.

Jeffrey Edwards is an Associate Professor of Economics at the North Carolina Agricultural and Technical State University, USA, Benhua Yang is a Professor of Economics at Stetson University, USA, and Rashid B. Al-Hmoud is an Associate Professor, at the Department of Economics and Geography, Texas Tech University, at Lubbock, Texas. This article is thought-provoking in its suggestions for dealing with water scarcity problems. These suggestions are based on an analysis that showed that countries with less available water resources outperformed countries with higher levels of water resources in terms of growth, per capita Gross Domestic Product, and investment. It asserts that the reason for this is because critically water-scarce countries moved from water intensive agriculture to less water intensive services and industry. This is useful to my thesis for its offer of suggestions that can be used for law reform to deal with water scarcity.

Gleditsch Nils Petter et al. “Conflicts over Shared Rivers: Resource Scarcity or Fuzzy Boundaries?” (2006) 25 Political Geography 361.

All the five authors of this article are Professors of law, sociology, political science, and geography in various universities in Norway, Canada, and the United Kingdom. The article introduces a new concept of dyads to explain water scarcity and water conflict. It explains that dyads with rivers flowing across the boundary give rise to resource scarcity-related conflict, while dyads where rivers form the boundary result in conflict because river boundaries are fluid and fuzzy. The article’s use of bivariate and multivariate analyses of water conflict might be difficult to understand for some inexperienced readers. The paper is useful to my research for its innovative analysis of water scarcity, and the factors contributing to water conflict.

Nicholson, Simon. “Water Scarcity, Conflict, and International Water Law: An Examination of the Regime Established by the UN Convention on International Watercourses” (2001) 5 NZ Env'tl L 91.

The author is currently an Assistant Professor at the School of International Service, at the American University, Washington DC. This article offers an explanation for the causes of water scarcity around the world, and how scarcity can culminate in conflict. The paper is useful to my research as it offers a cogent analysis of the different definitions of water scarcity, and it also assesses the legal responses to the resolution of water conflicts.

Schmeier, Susanne. “Governing International Watercourses - Perspectives from Different Disciplines: A Comprehensive Literature Review” (2010) online:< http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1658899>.

The author of this article is a graduate student at the Berlin Graduate School for Transnational Studies and the Hertie School of Governance. This paper reviews the existing literature on the governance of international watercourses. It traces the origins of hydropolitics that deals with conflict and cooperation in international watercourses. Additionally, it explains the emergence and the effectiveness of institutionalized mechanisms established for the governance of international watercourses. It also argues that the integrated theoretical approach that extends beyond disciplinary divides and case studies should be used to study governance in international watercourses. The article is relevant to my thesis for its presentation of current literature review and theories that can be used to deal with conflict relating to international watercourses such as the conflict in the Volta River Basin.

Wolf, Aaron T. “Shared Waters: Conflict and Cooperation” (2007) 32 Annual Review of Environmental Resources.

The author is a Professor of Geography, at the Oregon State University, USA. The article is a review that examines the nature of conflict and cooperation over transboundary water resources. It asserts that while potential for outright war between countries over water is low, cooperation is often not considered in disputes over transboundary water resources. It is useful to my research as it provides a conceptual basis for an understanding of cooperation and the costs of non-cooperation over water use as the basis of water conflict.

SECTION THREE: BACKGROUND INFORMATION FOR THE BOUNDARY WATERS TREATY.

BOOKS

Bloomfield, LM & Fitzgerald GF, *Boundary Waters Problems of Canada and the United States (The International Joint Commission 1912-1958)* (Toronto: The Carswell Company Ltd, 1958).

The book provides a factual account of the work of the International Joint Commission from its inception in 1909 to 1958. It examines the work of the International Joint Commission as a judicial and an investigative body. It is useful to my research as it covers negotiations prior to

the Boundary Waters Treaty (BWT), purposes of the treaty, and the work of the International Joint Commission in resolving water conflicts during its early years.

Chacko, Chirakaikaran Joseph, *The International Joint Commission between the United States of America and the Dominion of Canada* (New York: Columbia University Press, 1932).

The book is a comprehensive account of the origins and work of the International Joint Commission. It traces the nature of the boundary waters dispute and how it was necessary to create and empower the International Joint Commission to resolve them. It also evaluates the judicial, administrative and investigative powers of the International Joint Commission. It also discusses the procedures used by the International Joint Commission. It is useful to my thesis as it examines the referrals, procedures, and adjudication of conflicts using the reference jurisdiction.

SECONDARY MATERIAL: ARTICLES

Abrams, Robert H. “The Boundary Waters Treaty of 1909 as a Model for Interjurisdictional Water Governance” (2008) 54 Wayne L Rev 1635.

The author of this article is a Professor of Law, at the Florida A & M University, College of Law. The article traces the history and successes of the Boundary Waters Treaty. In particular, it evaluates the Boundary Waters Treaty’s governance structure that has reduced water-related conflict in its century of operation. It attributes the success of the Boundary Waters Treaty to the International Joint Commission. It discusses how the International Joint Commission has thrived, despite its potential for impasse due to its evenly divided voting authority. It argues that the International Joint Commission’s successes are built on a record of impeccable research and analysis and promotion of bi-national consensus. The article is relevant to my research as it explains the mechanics behind the success of the International Joint Commission.

Botts, Lee & Paul Muldoon. “Using the Boundary Waters Treaty for the 21st Century: Revitalizing the Great Lakes Governance Regime” (2008) 54 Wayne L Rev 1553.

The authors are the Founder of the Alliance for the Great Lakes, and an Environmental Lawyer respectively. The article examines the Boundary Waters Treaty and its expansion through the liberal application of Article IX and how it clarifies that there are limitations regarding what one country can do to another. It examines how each new reference to the International Joint Commission helps with the further development of the institutional framework of the Boundary Waters Treaty. The article is relevant to my research as it offers suggestions on the application of the reference jurisdiction of the International Joint Commission to resolve conflicts.

Heinmiller, B. Timothy. “The Boundary Waters Treaty and Canada-U.S. Relations in Abundance and Scarcity” (2008) 54 Wayne L Rev 1499.

The author of this article is an Assistant Professor in Political Science at Brock University. The article examines the Boundary Waters Treaty’s successful management of the Great Lakes and the Prairies water conflicts. The article is useful to my research as it articulates the creation and powers of the International Joint Commission under the Boundary Waters Treaty and its powers to resolve water conflicts.

Lemarquand, DG. “Preconditions to Cooperation in Canada-United States Boundary Waters” (1986) 26 Nat Resources J 221.

The author of this article was a Senior Advisor with Environment Canada at the time the article was written. The article examines the underlying conditions of Canada-United States boundary relations that causes bilateral differences and constrains the “will” to cooperate. The article then proceeds to evaluate the major precondition to cooperation between the United States and Canada in regard to boundary waters and concludes that it is “political will” of the two governments to cooperate to seek solutions to conflicts. The article is useful to my thesis as it emphasizes that the willingness of riparian nations to work together irrespective of obligations that limits freedom of sovereignty is *sine qua non* for enhancing cooperation.

Toope, Stephen J. & Jutta Brunneé. “Freshwater Regimes: The Mandate of the International Joint Commission” (1998) 15 Ariz J Int’l & Comp L 273.

The authors are the President and Vice-Chancellor, and a Professor, Faculty of Law, all at the University of British Columbia. The article examines the mandate of the International Joint Commission regarding its overseeing of boundary waters between the United States and Canada. It examines the International Joint Commission’s unique institutional design and extensive powers. It is useful to my research as it provides an analysis of the mandate and the framework of operation of the International Joint Commission.

SECTION FOUR: IMPORTANT ONLINE RESOURCES

GLOWA Volta Project was started in 2000 by the Government of Germany. It is aimed at sustainable water use under changing land use, rainfall pattern and reliability, and water demands in the Volta River Basin. The project examines the physical and socio-economic determinants of the hydrological cycle in the Volta River Basin. Based on this, analysis the project aims to establish a scientifically sound Decision Support System (DSS) for water resource management. The site also has academic publications that are important in describing the physical structure, climate, vegetation, water uses and water scarcity in the Volta River Basin. The website is useful to my project as it contains important information on human activities and water scarcity in the Volta River Basin <online: <http://www.glowa-volta.de/>>.

The African Transboundary Water Law website is based on research conducted by the International Water Management Institute (IWMI) under its challenge programme project known as "African Models of Transboundary Governance." The IWMI's work is one supported by a network of 60 governments, private foundations and international and regional organizations. The website offers useful information on the over 60 transboundary river basins which cover approximately 60 percent of the continent of Africa's total area. The website also contains links to important electronic sources relating to international water law in Africa and the rest of the world. The website is useful to my research as it contains information on water agreements in the Volta River Basin online:<<http://africanwaterlaw.org/>>.

The Third World Centre for Water Management, Mexico website covers its work as a knowledge-based, application oriented think tank, with activities in areas such as: the future of the world's waters; water governance; complexities of water management; state of the world's waters; integrated water resources management; integrated river basin management; and assessments of impacts of large dams. It also covers human rights to water, water management for urban areas, women and water management, public-private partnerships in the water sector, management of transboundary rivers, lakes and aquifers, experiences in water management in Latin America and the impacts of global water forums. The website is useful to my research as it publishes the International Journals of Water Resources and it offers abstract of articles at the site online:<<http://www.thirdworldcentre.org/epubli.html>>.

**Damming Lunar Water:
Current Restrictions in International Space Law**

Annotated Bibliography

Secondary Material: Monographs

Tronchetti, Fabio. *The Exploitation of Natural Resources of the Moon and Other Celestial Bodies: A Proposal for a Legal Regime* (Leiden: Martinus Nijhoff, 2009)

The work is a revised and enhanced version of the author's doctoral thesis, which he successfully defended at Leiden University in December 2008. The author begins with the explicit assumptions, each further detailed and argued: that the existing space law system is inadequate for dealing with the exploitation of extraterrestrial natural resources; that there is an urgent need to develop a legal regime to regulate exploitation of those resources; that lessons can be learned from the failures of the 1982 Law of the Sea Convention and the Moon Agreement; and, that a legal regime must be able to attract support not only of developed and developing states but of private companies. The author uses a comparative methodology to analyze the legal regimes regulating activities in outer space, on the high seas, in Antarctica and in the geostationary orbit to determine what elements of those regimes would be useful in developing a framework to govern the exploitation of extraterrestrial resources. Finally, and as promised in the title, he proposes a legal regime, complete with a draft of a proposed international agreement, which draws on elements of the 1994 Implementation Agreement of Part XI of the Law of the Sea Convention, the ITU Conventions and the WTO (in regard to dispute settlement mechanisms). It is an ambitious work that, having recently been released, has not yet resulted in critical analysis from other space law specialists. While many authors have suggested a regulatory regime is required, this appears to be the first attempt at an actual comprehensive draft. Unfortunately, and as the author acknowledges, the United States and some of the other major space powers have declared they are not interested in entering negotiations for a new space treaty. Consequently, the work may be for naught. However the concept of transplanting regulatory rules from other international commercial oriented treaties and agreements opens the door to consideration of those vehicles incorporating regulatory "sub-regimes" under their auspices rather than the creation of a new space law treaty itself.

Pop, Virgiliu. *Who Owns the Moon?: Extraterrestrial Aspects of Land and Mineral Resources Ownership* (np: Springer, 2009).

The author is a researcher at the Romanian Space Agency, a member of the International Institute of Space Law and is considered a world specialist in the area of space property rights. The work provides a comprehensive review of the sources of property law and property rights in outer space; considers the relationship between property and sovereignty in outer space; explains the concept of *res communis* as the *lex lata*; and, finally, explores the challenges to the status quo by adherents of the Common Heritage of Mankind principle and the adherents to the "frontier paradigm." Ultimately the author favours the latter approach as most beneficial to

human kind in contrast to the CHM egalitarian regime, which, he predicts, would inhibit development of the extraterrestrial realm.

Secondary Material: Articles

Blount, P.J. "Jurisdiction in Outer Space: Challenges of Private Individuals in Space" (2007) 33 J Space L 299.

The author outlines the "jurisdictional patchwork" that constitutes present day space law arguing it will be ineffective in the coming space boom. The focus is on space tourism and the author provides an excellent review of the law applicable to outer space, particularly criminal jurisdiction and State jurisdiction over its nationals. Ultimately the author proposes a space visa system so that there can be effective control, and protection of off earth humans.

Foust, Jeff. "Where first for space resources?" *The Space Review* (November 22, 2010), online: <<http://www.thespacereview.com/>>.

The author is the editor and publisher of *The Space Review* and the article is his report on a panel session of the Space Studies Institute's Space Manufacturing 14 Conference held in October 2010 in Sunnyvale, CA. The session was titled "Moon, Mars, Asteroids: Where to go first for Resources?". The debate was conducted from a resource perspective with most of the advocates arguing for either the Moon or near Earth objects as the priority, Mars going virtually unmentioned. According to participants the best initial resource for exploitation on the moon is water ice useful for support of human settlements there and, more importantly in its constituent elements as propellant. It was acknowledged more research needs to be done to develop lunar mining technology although one participant said he has been working with the Canadian Space Agency for the last four years on a strategic plan for mining the Moon which is at the point where mining is feasible. The article is useful for confirming on the scientific side that investigations and planning for resource extraction from celestial bodies, and particularly water, are in high gear.

Gable, Mathew William. "Take Me To Your Lawyer: The Inadequacies of the Current Regime of Space Law and its Effect on Space Commercialization" (2008) 33 *Ann of Air & Sp L* 257.

The article was originally written by the author in partial fulfillment of the requirements for the award of LL.B. degree from Nottingham Trent University. He, then, can be pardoned for some of the errors littered throughout the piece. Less so, the editors of the journal in which it was published. The author does an analysis of the current space law regime but, in the process, misquotes articles of the Outer Space Treaty and cites it for definitions it does not contain. He further misquotes the Vienna Convention on the Law of Treaties. He makes unsupported conclusory statements. Ultimately he proposes that to overcome the hurdles that restrict exploitation of space resources, a regime allowing for the appropriation of extraterrestrial bodies, governed by a Federation akin to the International Seabed Authority, should be negotiated and agreed to by States. The article was valuable only for the provision of references to other scholarly writings.

Hobe, Stephan. "Adequacy of the Current Legal and Regulatory Framework Relating to the Extraction and Appropriation of Natural Resources of the Moon" (Paper delivered at the International and Interdisciplinary Workshop on Policy and Law Relating to Outer Space Resources: Examples of the Moon, Mars, and Other Celestial Bodies, Institute of Air and Space Law, Session 4, McGill University, Montreal June 28-30, 2006), online: <<http://www.mcgill.ca/iasl/publications/proceedings/>>.

The author is the Director of the Institute of Air and Space Law, University of Cologne and prolific writer in the field. The paper assesses the current legal situation regarding all kinds of property rights in outer space and on celestial bodies. After reviewing the Outer Space Treaty and the Moon Agreement he states that economic exploitation of outer space is restricted by the non-appropriation provisions and by the lack of clarity regarding the requirements that resource exploitation be done for the benefit of mankind. He concludes, then, that the creation of a legal regime (as envisioned by the Moon Treaty) for extraction, appropriation and sharing of resources is long overdue or, alternatively, that the UN adopt a resolution providing for a framework for economic uses of outer space by giving authoritative interpretations of various articles in the Outer Space Treaty. From the limited research I have now conducted, his recommendations are disappointing. It seems more than evident that a vacuum exists and a clarifying and more particularized regime is required. But, as is pointed out by Prof. Gabrynowicz in her comments on the paper, proposing the UN General Assembly adopt a resolution fails to take into account the geopolitical landscape and could result in a complete unraveling of the legal regime regarding outer space, including loss of treasured provisions such as the ban on nuclear weapons and weapons of mass destruction and limits on military activity.

Lee, Ricky J. "Commentary Paper on the Discussion Paper Titled *The Acceptability of the Moon Agreement on the Road Ahead* by Dr. Frans von der Dunk" (Paper delivered at the International and Interdisciplinary Workshop on Policy and Law Relating to Outer Space Resources: Examples of the Moon, Mars, and Other Celestial Bodies, Institute of Air and Space Law, McGill University, Montreal June 28-30, 2006).

The author, an Australian law professor, reviews the subject of territorial sovereignty and private property rights and examines whether the OST and the Moon Agreement are applicable to private entities. He then examines the legal provisions in the treaties relating to commercial activities. Finally, he takes issue with the proposal to amend the Moon Agreement suggested by Dr. von der Dunk and, instead, suggests the Moon Agreement be abandoned and amendments made to the OST.

Lewis, John S. & Christopher F. Lewis. "A Proposed International Legal Regime For The Era Of Private Commercial Utilization Of Space" (2005) 37 *Geo Wash Int'l L Rev* 745.

John Lewis is a professor of Planetary Science and Co-director, Space Engineering Research Centre, University of Arizona. He has a PhD in Chemistry and Cosmochemistry from the University of California, San Diego. Christopher Lewis is a J.D. student at J. Reuben Clark Law School, Brigham Young University. It is not known, but would be expected the two are related. Unlike many articles in the subject area this opens with a detailed enumeration of the resources that can be found on the Moon, near earth asteroids, Martian moons Phobos and Deimos and the

Giant Planets and, further, explains why they would be of value. This is an excellent example of an inter-disciplinary approach. The authors then summarize the existing space law regime concluding, as does almost everyone, that private enterprise is not likely to invest in undertakings to exploit extraterrestrial resources in the face of the confusion and instability in international space law. The authors note that the United Nations has effectively dropped the ball and failed to create a responsive regime in a timely manner, which leads them to conclude it may not be the best entity to effect meaningful international law on the subject of space resources utilization or other commercial space activities. Instead they suggest space-faring nations enter bilateral or multilateral treaties to create a system for staking claims, managing property rights and furthering common interests. Key components would be a registry, a dispute resolution mechanism and implementation of supporting domestic legislation. The authors suggest that the success of a well-balanced treaty along those lines would encourage other nations to join resulting in a new and workable body of international legal principles. It is a compelling suggestion and one that avoids the pitfalls of abandoning, or re-opening for amendment, the existing treaties.

Martinez, Peter & Justine White. "The Adequacy of the Current Legal and Regulatory Framework Regarding Commercial Activities in Outer Space – A Developing Country Perspective" (Paper delivered at the International and Interdisciplinary Workshop on Policy and Law Relating to Outer Space Resources: Examples of the Moon, Mars, and Other Celestial Bodies, Institute of Air and Space Law, Session 4, McGill University, Montreal June 28-30, 2006), online: <<http://www.mcgill.ca/iasl/publications/proceedings/>>.

The article does not give any background on the individual authors other than to indicate they are from NRF and WITS, South Africa, which (thank Google) are the National Research Foundation and the University of the Witwatersrand in Johannesburg. They were asked to comment on the paper presented by Professor Stephan Hobe at the referenced conference. They offer a developing country perspective on the development of legal rules necessary to regulate the commercial utilization of outer space resources by private actors (having accepted the need for same and the gap in the existing space law regime). They note there is a reduced appetite for the creation of new treaties, with States preferring resolutions and bilateral agreements. They point to the usual need for clarification of terms used in existing treaties, and for development of national legal frameworks for space activities. They encourage building capacity in developing or space-aspirational countries to utilize space technology and develop indigenous programs citing India, China and Brazil as excellent examples. They call for the development of an international framework for benefit sharing (not profit-sharing) so that developing countries have access to space technology (while acknowledging that significant benefit sharing has already occurred). They discourage development of an international regime based on the model of the Law of the Sea and the International Seabed Authority as that model would discourage investment and innovation due to its restrictive benefit sharing provisions and instead recommend the approach similar to that used by the ITU. The article is interesting insofar as it provides, at least summarily, a developing country perspective that belies the concept that developing countries would seek to profit from space activities without any commitment to participate.

Pop, Virgiliu. "Appropriation in outer space: the relationship between land ownership and sovereignty on the celestial bodies" (2000) 16 Space Pol'y 275.

This is an earlier work by the author of *Who Owns the Moon?*, discussed previously in this annotated bibliography. It appears the author was doing post-graduate work at the University of Glasgow when he wrote this article. Here he proposes to answer the question whether sovereignty and property, as State-powers over land and private powers over land are independent or interlinked concepts. Specifically he looks at whether the non-appropriation principle in the Outer Space Treaty also results in a prohibition of the appropriation of celestial bodies and resources in place (and not resources removed) on the plane of private property rights. He reviews the interpretations of legal commentators and concludes that regardless of whether the OST prohibits private appropriations, landed property rights cannot in any event exist outside the sphere of sovereignty or sovereign rights. He argues private property depends on state endorsement (or ultimately requires it) and that that state endorsement is a form of national appropriation. He then asks whether there is a way to legitimate landed property rights on celestial bodies. He reasons that extraterrestrial lands have the character of public lands, and, since the OST qualifies astronauts as "envoys of mankind", the Moon and other celestial bodies are internationally appropriated. He concludes that the owner of celestial bodies is humankind, which exercises sovereign rights on celestial bodies by means of the United Nations. The international community, presently represented by the United Nations, holds outer space and celestial bodies in trust for the benefit of humankind. It is worth noting the author does not cite this article in his later work, although he devotes a chapter there to the Relationship Between Property and Sovereignty in Outer Space. There, however, he concludes an assumption of sovereignty by the United Nations would be unlawful as it would transcend its powers assigned by the UN Charter and transform it into a world government. Still, the suggestion is compelling.

Reif, Susanne U. "Shaping a legal framework for the commercial use of outer space: recommendation and conclusions from Project 2001" (2002) 18 Space Pol'y 157.

The author hails from the Institute of Air and Space Law at the University of Cologne, Germany. The article summarizes the main recommendations and conclusions from Project 2001- Legal Framework for the Commercial Use of Outer Space, a joint research project initiated by the Institute and the German Aerospace Centre in 1997. Six expert Working Groups (WG's) were created to examine the subject areas of Launch and Associated Services, Remote Sensing, Telecommunication, Space Stations, Privatisation (*sic*) and National Space Legislation. More than 100 experts were involved and each group was managed by two coordinators (the author being a co-coordinator of the Privatisation WG). International workshops were held and ultimately reports and recommendations were presented and discussed at an international colloquium in May 2001 in Cologne. The colloquium also featured a panel on International Law Making and Harmonisation of National Laws that apparently proved quite controversial. This article, being a short summary of the recommendations, was useful for some of its citations, but mostly for alerting me to the Project itself and the value it is expected that the Working Papers will bring to my research efforts.

von der Dunk, Dr. Frans G. "Back in Business? The Moon Agreement, Private Actors and Possible Commercial Exploitation of the Moon and Its Natural Resources" (Paper delivered

at the International and Interdisciplinary Workshop on Policy and Law Relating to Outer Space Resources: Examples of the Moon, Mars, and Other Celestial Bodies, Institute of Air and Space Law, Session 5, McGill University, Montreal June 28-30, 2006), online: <<http://www.mcgill.ca/iasl/publications/proceedings/>>, adapted version “The Moon Agreement and the Prospect of Commercial Exploitation of Lunar Resources” (2007) 32 Ann of Air & Sp L 91.

The author is a leading publicist in the area of space law. He is the Director of Space Law Research at the International Institute of Air and Space Law, Leiden University and General Editor of *Studies in Space Law*. This particular article outlines the lack of clarity (arising from both the Moon Agreement and the OST) regarding the legal status of the Moon; rights and duties relating to potential exploitation of lunar resources; and, the role of private entities in any exploitive activities. He proposes amendments to the Moon Treaty to cure the unacceptable uncertainties that presently exist.

——— “As Space Law Comes to Nebraska, Space Comes Down to Earth” (2008-2009) 87 Neb L Rev 498.

In 2008 this renowned publicist took a position as a Professor of Space Law at the University of Nebraska, which had established an LL.M. Program in Space and Telecommunications Law. The article is the inaugural lecture Dr. von der Dunk gave at a conference on formalism and informalism in space law that was being hosted at the University. It is an entertaining and enlightening read. His main point is that there is a paradigm-change occurring that has fundamental consequences for the way in which space law will be taught and researched. He outlines how historically space law was an exotic branch of general public international law, concerned only with State parties and military and scientific issues. Since then the Cold War thaw and change in the geo-political climate, the rise of Third World issues calling for focus on the practical benefits space could bring to mankind, and technical advances, particularly in satellite communications and the launch sector, resulted in private actors and third world countries entering the scene. He summarizes the paradigm shift as “the development of new applications with a “down to earth” practical orientation – that is distinct from the politico-military or scientific orientation hitherto ruling the human space endeavor – in turn involving a shift in the categories of participants.” As a result, he suggests that space law should no longer be viewed as an isolated set of international space treaties and other instruments with some domestic implementation activity. Instead, it should be taught from a broader perspective which would include interactions with a number of other disciplines and regimes including the World Trade Organization, the European Union, UNIDROIT (International Institute for the Unification of Private Law), UNCITRAL (United Nations Commission on International Trade Law) and so on. In his view “for space law to “follow” space activities and also come down to earth its study, research and education programs should *ideally* encompass the relevant elements of regimes such as telecommunications law, economic and trade law, tax law, intellectual property rights law, for Europe, certainly European Community law, financing and securities related law, criminal law, human rights law and so on...”. He proposes, effectively, a form of interdisciplinary approach which, in conjunction with the work of Fabio Tronchetti (reviewed in this annotation), inspires revisions which may be made to my major paper proposal as my own education proceeds.

Annotated Bibliography – In progress

Annotated Bibliography Assignment – Law 703 – Fall 2010

Matthew Ducharme

I. Introduction

The following fourteen sources are from the bibliography of my proposed research statement, for the paper (also in progress): “Doctrinal Analysis of the Law of Compensation, for Expropriation of an Easement for a Federally Regulated Pipeline, as Practiced by the Pipeline Arbitration Committee.”

II. Annotations

A. Secondary Materials – Books

George Swan Challies, *The Law of Expropriation*, 2nd ed (Montreal: Wilson and Lafleur, 1963).

Summary – Between 1960 and 1980 both the federal government and provincial government reformed the Canadian law of expropriation by consolidating, in large part, the power to expropriate within a single expropriation act per jurisdiction. The text is the leading doctrinal text that predates this reform. **Authority / background** – Challies was the leading Canadian scholar on the pre-reform law of expropriation. Writing for the profession, his point of view seems to be objective as to the state of the law, rather than critical. **Audience and evaluation** – The text is targeted towards practice. It is the best doctrinal review of the common law that applied to expropriation before reform and remains an excellent source of the common law on the interpretation of statutes authorizing expropriation.

John A Coates and Stephen F Waqué, *The New Law of Expropriation* (Scarborough: Carswell, 1990).

Summary – This is the leading text on the law of expropriation in Canada. It is an annotated loose-leaf of federal and provincial acts authorizing expropriation. It serves as a reference for both statute and case law on expropriation. **Authority / background** – The authors are the head of an expropriation practice group at a national firm (BLG) and a retired practitioner from that firm. **Audience and evaluation** – The intended audience is composed practitioners who need a reference for the law and some historical context. The text is useful for quickly acquiring the current law. Judicial decisions have not been

issued on all areas of the law that are unclear. This text does not attempt to fill in those gaps. For existing doctrine it is clear, but, per its orientation and format, does not contain as much discussion of doctrine as either Challies text (above) or as much critical analysis as Todd's text (below).

Sean Coyle and Karen Morrow, *The Philosophical Foundations of Environmental Law: Property, Rights and Nature* (Oxford and Portland, Oregon: Hart Publishing, 2004).

Summary – Coyle and Morrow examine three conceptions of environmental law: as being divided between public law and private law; as a contest between an intrinsic valuation of nature, and a merely instrumental one (i.e. it only has value if it is useful to humans); and, as a distinct doctrine that already recognizes intrinsic value. Taking a theoretical and interdisciplinary approach, this is done to argue that the law ascribes and intrinsic value to nature. **Authority / background** – Sean Coyle is a professor of jurisprudence at the University of Exeter School of Law and Karen Morrow is a professor specializing in environmental and energy law at the Swansea University School of Law. This text on syllabi for various courses relating to environmental law in Canada.

Audience and evaluation – The text is for an academic audience in law or philosophy. It is linear, dense, comprehensive and clear, and provides a detailed description of the development of the common law and legal philosophy regarding (part of) humanity's relationship to the environment.

Michael Power, *Halsbury's Laws of Canada – Access to Information and Privacy* (Toronto: Butterworths, 2006).

Summary – The text is a doctrinal legal encyclopaedia volume on the law of privacy and access to information in Canada, from both a public and private perspective. The central purpose or theme of the book is to describe the law as it is. **Authority / background** – Power is a former Gowlings partner who now operates his own law and consulting practice specializing in privacy and information security. *Halsbury's* is one of two leading Canadian legal encyclopaedias. **Audience and evaluation** – The book is an essential reference on the law of both privacy and access to information. It is the single best source of doctrine on access to information in Canada (up to 2006). This area of law is necessary for my research because the majority of the primary material, that is the unappealed decisions and reasons of the Pipeline Arbitration Committee, is, as a matter of Natural Resources Canada policy, not published but only available by an access to information request.

Law Reform Commission of British Columbia, *Report on Limitations 1970 (project no. 6), Pt. 1: Abolition of Prescription* (Victoria: Law Reform Commission of British Columbia, 1970).

Summary – The report is one of several authored by provincial law reform commissions in Canada in the 1960s and 1970s calling for reform of the law of expropriation. Its theme is rationalization of the law for the sake of simplicity, fairness, and consistency. It is written from a critical legal perspective. **Authority / background** – The report is not the earliest one calling for reform, but it is one of the most oft-cited in the case law. It is referenced by the Law Reform Commission of Canada as the key early report. **Audience and evaluation** – The intended audience includes practicing lawyers, legal academics and policy makers. The BC report succinctly sets out the difficulty with the law as it stood (lack of coherence) and the most important recommendations for reform, many of which were adopted not only provincially but also federally.

Law Reform Commission of Canada, *Expropriation* (Ottawa: Information Canada, 1975).

Summary – This is the federal report calling for reform of the law of expropriation in Canada. It notes that the power to expropriate existed in a large number of acts and special acts, and that these varied significantly in the compensation, if any, provided and in the quality of procedure afforded to the person whose property interests were at stake. It called for the consolidation of the federal power to expropriate within a single act, and for that act to provide for both compensation and procedural fairness. **Authority / background** – This is the most authoritative text on the intended direction of federal reform, being largely adopted by federal law makers. The federal report served as the policy basis for amendment of federal powers of expropriation, and a significant (but incomplete) consolidation of that power in the federal *Expropriation Act*, RSC 1985 c E-21. **Audience and evaluation** – The intended audience includes practicing lawyers, legal academics and policy makers. The report is clear and provides pithy policy points. It appears to be written to obtain a result (i.e. law reform), and as a result may be less even-handed than it could be.

David Phillip Jones and Anne S de Villars, *Principles of Administrative Law*, 5th ed (Toronto: Carswell, 2009).

Summary – This a leading Canadian textbook on administrative law, and the most recent. It surveys administrative law in Canada, including, of particular interest to me, judicial review. An understanding of judicial review is important to my research to understand both: the means by which PAC decisions may be appealed; and, the means and merits of appealing a denial, if any, of my access to information request. **Authority / background** – Jones and de Villars are practitioners and Q.C.s. In its fifth edition from a well reputed legal publisher, this doctrinal text is well-established as a reference for the profession. **Audience and evaluation** – Practitioners are the audience for this text. Of the three administrative law texts I have reviewed so far, this is the most clearly organized, written and current, to such a degree that I have not listed the others in my bibliography.

Thomas O Miesner and William L Leffler, *Oil and Gas Pipelines in Nontechnical Language* (Tulsa: PennWell, 2006).

Summary – The text describes the history, purpose, construction, operation and maintenance of natural gas and oil pipelines for an audience that is not trained as engineers. **Authority / background** – PennWell is a well-reputed publisher of both technical textbooks and guides, as well as a “nontechnical” series of texts, which describes technical components of the energy industry (e.g. pipelines, refining, petroleum geology, wind power, electrical transmission, etc.). Miesner was president of Conoco Pipeline Company and now works as an industry consultant. Leffler is a retired executive of Royal Dutch Shell. **Audience and evaluation** – The intended audience is a non-engineer who has an interest in, or need to know about, hydrocarbon pipelines. The text is well-organized and its topics well-chosen but it is not as well written as others in the series that relate to the oil and gas industry (e.g. Norman J. Hyne, *Nontechnical Guide to Petroleum Geology, Exploration, and Production* 2nd ed (Tulsa: PennWell, 2001)). While not a legal text, reviewing it was necessary to gain a basic understanding of the interference with the use of land caused by the construction of the pipeline, and the relatively small impairment of use typically caused by its operation and maintenance.

Ruth Sullivan, *Sullivan on the Construction of Statutes*, 5th ed (Toronto: Butterworths, 2008).

Summary – This is the leading Canadian text on statutory interpretation. Its theme is that while the modern rule is the guiding light for statutory interpretation in Canada, under it there remain a large number of principles of statutory interpretation that have force depending on context. **Authority / background** – This text and its earlier editions (listing Driedger as an author) are routinely cited with approval by all levels of court in Canada. **Audience and evaluation** – The primary audience is the legal profession. The text also serves as a reference for any academic dissection of legislative meaning. In its fifth edition, this text is the single best reference on statutory interpretation. This text is necessary to my research in light of the history of a pipeline company’s power to expropriate. (Some, but not all, language regarding “taking land” was transferred from the *Railway Act*, which once applied to pipeline companies, to the *National Energy Board Act*, which now governs takings by pipelines. This history raises several questions about a pipeline company’s power to “take” land in subsection 73(b) of the *NEBA*, compared to “take, without the consent of the owner,” which was the language used in the *RA*. This subsection has received little judicial treatment. An analysis of it based on principles of statutory interpretation may be called for.)

Eric CE Todd, *The Law of Expropriation and Compensation and Canada*, 2nd ed (Toronto: Carswell, 1992).

Summary – This is the leading text for the period immediately following reform of the law of expropriation, and the most recent written by an academic. Like Challies’ text, it surveys the doctrine of the law of expropriation across Canadian jurisdictions. In addition, it takes a critical approach to doctrine and includes some comparative and principled analysis. **Authority / background** – Todd was a legal academic, last at the University of Victoria. After publishing other work on expropriation, he published this, his largest work. **Audience and evaluation** – The intended audience is the legal profession. The book contains not only the core doctrine, but also cases from lower-courts that contain principles not adopted by higher courts, but which could be used to make law reform arguments. As a doctrinal text, it may be less authoritative for its time than Challies’ text but provides a valuable update to it. From a practitioner’s view, it may be superseded by Coates and Waqué.

B. Secondary Materials – Articles

Terry Calvani, “Eminent Domain and the Environment,” (1971) 56:4 Cornell L Rev 651.

Summary – This article argues for statutory reform of the power of expropriation (eminent domain) in order to provide greater protection for the environment. **Authority / background** – This article appears to have been written while Calvani was a law student at Cornell, where he served as editor its law review journal. He has taught at Cornell and Harvard and is currently a partner at Freshfields. **Audience and evaluation** – The article is targeted towards an academic audience. The article is brief. It does not fully argue on what basis a balance between the environment and infrastructure should be struck, but does canvas prescriptions for giving greater weight to the environment, and is the only paper found to date to do so with reference to pipelines.

Ronald Dworkin, “Hard Cases” (1975) 88:6 Harv L Rev 1057.

Summary – For my purposes, this article provides a frame by which to evaluate whether a departure from established doctrine on valuation of expropriated interests in property is persuasive. Dworkin proposes that rather than use discretion to decide cases in which there is no existing doctrine or for which doctrine is considered inadequate, the better approach is to canvas what doctrine fits and then adopt or create the doctrine best justified either in principle or policy. **Authority / background** – Dworkin is a leading American constitutional scholar and legal philosopher. He is a professor of law and philosophy at University College London, having previously held academic posts at Oxford, Yale and New York University. **Audience and evaluation** – The primary audience appears to be legal academics, particularly those who study law and philosophy. The article is adapted from a lecture, and this is reflected in its style. It is easy to follow, yet contains pointed and cogent critique of positivism. For this purpose, it is considered a

key work and is oft-cited. Compared to much other legal theory, it is written in plain, making it easy to access its high-quality of content.

Leslie Pickering Francis, "Eminent Domain Compensation in Western States: A Critique of the Fair Market Value Model" (1984) 1984:3 Utah Law Review 429.

Summary – While comparative analysis between countries is not part of my methodology, the United States has a longer history of expropriation valuation in the contest of pipelines, and so may be a fruitful place to look for argument on valuation. Despite its history, it has produced only a small number of articles on expropriation (eminent domain) and pipelines (about 50 articles, most of which are not relevant to my research). This one surveys market valuation in expropriations of land for pipelines in the Western States. It critiques the fair market value approach, arguing for a higher level of compensation for landowners. **Authority / background** – Francis is the chair of the philosophy department at the University of Utah and is cross-appointed to Utah's college of law. Of the articles on eminent domain and pipelines, hers is one of the more often cited, though not among the most cited. **Audience and evaluation** – The paper is clear and provides a good survey of the problem of compensation in the Western states as of 1984 (there is no more recent survey article), as well as arguments for granting more than fair market value in compensation.

Lars Olthafer, "Recent Developments in Surface Rights Law - Pipeline Right-of-Way Compensation - Annual Payments and Injurious Affection - Federal and Alberta Developments"(2005-2006) 43 Alta L Rev 89.

Summary – This article reviews the application of expropriation law principles to disputes over valuation of surface rights, easements and injurious affection for pipelines regulated provincially in Alberta and for federally regulated pipelines. It is the most recent summary of arguments advanced by landowners regarding valuation and the most recent on judicial review of Pipeline Arbitration Committee decisions. **Authority / background** – The author was a partner at one national firm (FMC) and is currently a partner in the energy and environmental practice group at another (Blakes). **Audience and evaluation** – Based on a review of the case-law, the author has been industry counsel in cases in which the law has been most fully argued. The article is published in an industry-specific edition of an academic journal. In its doctrinal review, its audience is primarily those in practice. In its critical commentary on the law, it provides pragmatic commentary on that doctrine.

/MDD

CAN DECISIONS BE MADE IN THE PUBLIC INTEREST IF THE PUBLIC IS NOT CONSULTED?

A Critical Analysis of the Public Interest Mandate in the Context of Mineral Rights Disposition in Alberta

Annotated Bibliography

Compiled by Ooldouz Sotoudehnia

LL.M. Candidate, University of Calgary

This annotated bibliography is part of my LL.M. major research paper. The objective of my research is to assess and offer suggestions for reform concerning the current opportunities for public participation in the developmental process of natural resources in Alberta. My research will focus on the stage when mineral rights are disposed of by the Crown. It is the only stage where no practical or legal mechanisms are in place allowing for the public to participate or be consulted prior to the disposition of these rights.

This study will attempt to determine if in order for the public interest to be adequately considered by the Energy Resources Conservation Board at the later stages of the development process, a requirement of public participation, consultation or input at the mineral rights disposition stage must exist. I intend to assess the effectiveness of public participation opportunities of the current developmental process. Furthermore, I will attempt to determine if it would be a more meaningful or effective process if public interest considerations were undertaken at the one stage in the developmental continuum where it is absent. In order to do so, I will construct a theoretical framework and criteria in order to assess the current participatory process in Alberta and compare it to jurisdictions that make public interest considerations at the mineral rights disposition stage. Using the comparative law method, I hope to identify the possible advantages or pitfalls of allowing for public participation at the mineral rights disposition stage as other jurisdictions have done. I intend to also determine if these jurisdictions have seen a similar dramatic increase in appeals before decision makers and courts by compiling data of cases where standing was at issue before compared decision makers and courts.

All the relevant materials in this bibliography can be divided into two sections: monographs and articles.

SECTION I SECONDARY MATERIALS: MONOGRAPHS

Croley, Steven P. *Regulation and Public Interests: the Possibility of Good Regulatory Government* (New Jersey: Princeton University Press, 2008).

This book focuses on the public choice theory of regulation in order to defend regulatory government. He argues that it is possible for regulatory governments to advance general public interests despite its many critics. Using interdisciplinary concepts from both political sciences and law, the author presents case studies in order to support his thesis. Sections of this book have been very helpful as they provide clear, organized and concise information on general concepts concerning the public choice theory. The author introduces the concept by clearly identifying the main scholarly perspectives on the theory. This book has been useful insofar as it has clarified the public choice theory. It will be used in my research for my assessment of the public interest. The author is a professor of law at the University of Michigan Law School and has published many articles on the public choice theory and regulatory law.

Dibadj, Reza R. *Rescuing Regulation* (Albany: State University of New York Press, 2006).

This book deals with the ongoing debate of regulation versus deregulation. The author canvasses both the advantages and disadvantages of regulation but more specifically, he attempts to build a case for regulation addressing the shortcomings of the 'economic' critique. A number of chapters and sections of this book are helpful to my research as they tackle the realities of regulation utilizing an interdisciplinary approach of both law and economics. In an attempt to curtail the criticisms concerning the law and economics paradigm as an excuse for inefficient public policy, the author attempts to illustrate that law and economics can address social inequalities and abusive market behaviour. Although the book does not delve into a detailed analysis in the context of natural resources law, it has proven to be helpful in clarifying some key economic principles that were crucial for a proper understanding of the public choice theory. The author is an associate professor of law at the University of San Francisco.

Feintuck, Mike. *'The Public Interest' in Regulation* (New York: Oxford University Press Inc, 2004).

The author undertakes an interdisciplinary approach in order to argue for the use, and usefulness of the concept of the public interest. He suggests that a developed concept of the public interest, one linked explicitly to citizenship expectations, may serve as a higher order of principle, offering a legitimate means for determining priorities between competing claims in the context of regulation. He provides his readers with an analytical framework introducing the various concepts. He later uses case studies of regulatory practices from the UK and the USA to put forth recommendations to perfect the public interest at its full potential. He suggests that the public interest should not be used as an empty vessel or a cover for ignorance, rather that it can be utilized to serve fundamental democratic values. Certain parts of this book have been very helpful in my preliminary research. It has clarified key concepts underlying the difficulties the public interest poses in the regulatory context. The author holds a LL.B. and a PhD (Sheffield) and currently teaches at the University of Hull.

SECTION II SECONDARY MATERIAL: ARTICLES

Arnstein, Sherry R. “A Ladder of Citizen Participation” (July 1969) 35:4 JAIP at 216-224.

This article examines citizen involvement in planning processes in the US, stating that for meaningful participation to occur, it must be effective. According to the author, the most desirable form of public participation is one that allows for a certain degree of power sharing. She creates a spectrum of effectiveness in the form of a “ladder”. At the bottom of the spectrum, she places participation which serves as a means to placate the participant therapeutically (where although an opportunity to participate exists, the participants input do not affect the decision making process but merely allows the participants to voice their concerns). At the top end of the spectrum are opportunities that allow for citizen control (where public participants voice their concerns and affect the decision making process). This article, although first published in 1969 has been reprinted more than 80 times and translated into many languages. It also is often referred to when the effectiveness of public participation is discussed. The framework the author has created is useful for my research when I will be assessing the effectiveness of the participatory process. It will also be used when I will create my theoretical framework and criteria for my assessment of the current process.

Barton, Barry. “Underlying Concepts and Theoretical Issues in Public Participation in Resource development” in Zillman, Donald, Alastair Lucas, & George (Rock) Pring, eds, *Human Rights in Resource Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (New York: Oxford University Press Inc, 2002) 77.

The author examines the importance of public participation and provides his readers with both the advantages and disadvantages of the topic. He explores the theoretical and conceptual questions about the way that public participation fits into different views of law, politics, the state, and society. This chapter presents an overview of the relevant authors and theories that will be used in my research, most importantly, for evaluation of “effective” participation. For example, he presents the elements for effective participation as: (i) education, (ii) access to information, (iii) a voice in decision-making, (iv) the transparency of the decisional process, (v) post-project analysis and monitoring, (vi) enforcement, (vii) recourse to independent tribunals for redress (see p 79 and 99-120). This will help my analysis that will focus on effective participation in my research. The author is a law professor at the University of Waikato. Much of his work has been in the areas of energy, natural resources, regulatory and environmental law has demonstrated his expertise in these areas.

———. “Theoretical Context of Regulation” in Barton, Barry, Alastair Lucas, Lila Barrera-Hernandez, & Anita Rønne, eds, *Regulating Energy and Natural Resources* (Oxford: Oxford University Press, 2006) 11.

This introductory chapter to the book presents a review of literature on the theoretical context of regulation. The author analyses the changes in the way energy and natural resources are regulated, and makes connections with theoretical perspectives on regulation as a major part of the modern legal system. This chapter will be used as a guide through the theories in order to form a theoretical framework on the public interest and public participation that will be applied in my research. It has also been useful in my preliminary research as it clarified the basic theoretical principles relating to the context of energy and natural resources regulation.

Fluker, Shaun. “The Jurisdiction of Alberta’s Energy and Utilities Board to Consider Broad Socio-Ecological Concerns Associated with Energy Projects” (2004) 42 Alta L Rev 1085.

In this article, the author proposes that s. 3 of the *Energy Resources Conservation Act*, RSA 2000, c E-10 s 3 (consideration of the public interest section) requires the Alberta Energy Utilities Board (as it was then) to consider broad social, economic and environmental implications of energy exploration activities in Alberta. The author challenges the Board’s reluctance to consider these implications broadly in light of the fact that the Alberta Court of Appeal has yet to assess their narrow view of s. 3. This article draws from his LL.M. thesis (see Shaun Fluker, *The Alberta Energy and Utilities Board: Ecological Integrity and the Law* (LLM Thesis, University of Calgary, 2003) [unpublished]) and has been very helpful in my preliminary research concerning the interpretation of the public interest mandate imposed on the Energy Resources Conservation Board. It will be used in areas of my research dealing with the public interest test and standing before the Energy Resources Conservation Board. Professor Fluker is a professor at the Faculty of Law at the University of Calgary.

Hierlmeier, Jodie L. “Roadmap for Reforming “The Public Interest” for the ERCB and NRCB”, online: (2008) Environmental Law Centre (Alta) <http://pekisko.ca/docs/D_080225_ELC_public_interest.pdf>.

By providing the reader with an overview of the Energy Resources Conservation Board and the National Energy Resources Conservation Board, the author introduces the issues and challenges surrounding the nebular interpretation of the “public interest” entrusted to these respective boards’ decision making processes. This article suggests the necessity for law-reform of the “public interest” test as it is currently interpreted by the Energy Resources Conservation Board. It is a useful piece of scholarship that introduces the key challenges boards in Alberta have faced when interpreting the public interest. It is short, organized and outlines broader theoretical concepts that the public interest debate has conjured. Staff Counsel for the Environmental Law Center, the author holds a BSc in Zoology from the University of Alberta and a LL.B. from Dalhousie University. She has worked at the Environmental Law Centre in Edmonton since 2005 and her current focus areas include oil and gas development, contaminated land issues and climate change.

———. “The Public Interest: Can it Provide Guidance for the ERCB and NRCB?” (August 2008) 18:1 JELP 279 at 292.

This article provides a detailed analysis of the term public interest in order to determine if the term provides sufficient guidance for the Energy Resources Conservation Board (ERCB) and the Natural Resources Conservation Board (NRCB) in their decision making process. This article has been useful in my research as it sets out the many ideas that have been expressed about the public interest by undertaking a literature review of academic theories. It is well organized and highly relevant to my thesis question. It has also been helpful as it reviews court decisions, other tribunals, statutory definitions from ERCB and the NRCB decisions. Points that are made in this article will help guide my research concerning other jurisdictions considering the public interest at earlier stages of the developmental process.

Kennett, Steven A. & Michael M. Wenig. "Alberta's Oil and Gas Boom Fuels Land-Use Conflicts – But Should the EUB be Taking the Heat?" (2005) 91 Resources 1.

This article illustrates the difficulties encountered by the EUB (as it was then) in applying and interpreting the "public interest" test. The authors suggest that the public increasingly relies on the EUB to resolve conflicts concerning land-use resulting from oil and gas development. They suggest the EUB cannot resolve these conflicts because of 3 main reasons; the lack of policy and planning guidance on key issues the influence of mineral rights disposition on subsequent decision making, and the difficulties of managing cumulative effects. Although the tone of this article is highly critical of the current regulatory process and the broader land-use issues, it is highly informative of the challenges the EUB faces. This article is relevant to my research as it focuses public interest questions to stages of the developmental process targeted in my study. It is very short and easy to read. This article, like many of the online articles I have encountered in the course of this project, have provided much needed clarification of the natural resource development process in Alberta. At the time of this publication, both authors were research associates at Canadian Institute of Resources Law at the University of Calgary, Faculty of Law.

Macias, Rebeca. "Public Participation in Water Conservation and Revitalization: The Case of the Das Velhas River Basin, Brazil" (LL.M. Thesis, University of Calgary, 2010) [unpublished].

This thesis deals with public participation in environmental decision making. The author evaluates public participation on the conservation and revitalization of the Das Velhas River Basin in Brazil. She creates a theoretical framework based on democratic theories in order to assess public participation and to put forth recommendations on increasing the quality of the participatory process. This piece will be useful for my research when I will construct the theoretical framework and criteria I will use to assess the participatory process in Alberta.

Reitz, John C. "How to do Comparative Law" (1998) 46 Am J Comp L 617.

The author provides his readers with a list of the qualities good comparative legal scholarship must demonstrate. This scholarly article will be used in my research as a means of achieving a sound comparative legal framework for when the comparative method will be applied. The piece is clear and easy to read. It provides additional insight on avoiding the common mistake of merely describing legal histories of compared jurisdictions by creating units of comparison that will allow for thorough and thorough comparison and analysis. Some elements of the article are not relevant to my research (as the need to learn the language and immerse myself within the culture in order to provide a sound comparison) but the overall criteria provided will undoubtedly assist my application of this methodology.

Vlavianos, Nickie. "Public Participation and the Disposition of Oil and Gas Rights in Alberta" (July 2007) 17:3 JELP 205.

The focus of this article is at the well and facility licensing stage. The author reviews grounds for public participation based in administrative and human rights law, including principles intended to prevent abuses of discretion by statutory delegates, and those that ensure procedural fairness in governmental decision making. Possible application of the *Canadian Charter of Rights and Freedoms* and *Alberta's Bill of Rights* within this context is also examined. This article is helpful to my research as it relates to the stages of development my research will focus on. It also raises the question of public participation at the stages relevant to my research. The author is an assistant professor at the University of Calgary research and has published many articles in the area.

———. "Key Shortcomings in Alberta's Regulatory Framework for Oil Sands Development" online: (2007) CIRL Resources 100
<<http://dspace.ucalgary.ca/bitstream/1880/47996/1/Resources100.pdf>>.

The author raises three key shortcomings in the legislative and regulatory framework in the context of oil sands development in Alberta. First, she suggests that decision making in Alberta is proceeding without adequate guidance due to a lack of comprehensive plans for oil sands development as well as land use. Second, that overlapping mandates of decision-makers and a lack of jurisdictional clarity results in a lack of transparency at certain points within the development process. Third, that public participation is entirely absent at key decision-making points. This article has been helpful as it contextualized the regulatory issues at the stage of the developmental process my research aims to examine.

———. "The Issues and Challenges with Public Participation in Energy and Natural Resources Development in Alberta" online: (2010) CIRL Resources 108
<<http://dspace.ucalgary.ca/bitstream/1880/47996/1/Resources108.pdf>>.

In this article, the author outlines the key themes that were discussed at the Round Table discussion the Canadian Institute of Resources Law held on April 16, 2010 at the University of Calgary. It highlights the main issues and challenges the 20 participants in attendance had communicated. All of the participants had experience with public participation issues in the natural resources development context. Highlighted were the challenges and issues at the policy and planning stages of energy and natural resources development in Alberta, Crown mineral & surface rights disposition, and project approval stages. This article is helpful as it is one of the most recent publications in the area of my study and illustrates the current issues of concern to the participants present at the Round Table discussion.

**A PROPOSED LEGAL FRAMEWORK FOR THIRD PARTY ACCESS TO
CO₂ TRANSPORTATION AND SEQUESTRATION FACILITIES IN ALBERTA**

ANNOTATED BIBLIOGRAPHY

Compiled by Rick Nilson - December 3, 2010

Alberta has a very carbon-intensive economy and generates significant green house gas (GHG) emissions. The Alberta government is counting on carbon capture and storage (CCS) to reduce GHG emissions and has implemented or proposed many measures to facilitate this. One aspect of the legal framework that is missing is the ability of third parties to gain access to the CO₂ transportation and sequestration components of CCS. Without this access, CO₂ that would otherwise be available to capture will be stranded and the provincial CCS targets will not be met.

The natural gas industry in Alberta had a similar problem in the early days of its development. Natural gas gathering and transportation facilities evolved from public ownership to privately owned, but publicly regulated pipelines. Lessons can be learned from this example and applied to the gathering and transportation of CO₂. Natural gas storage is akin to CO₂ sequestration and lessons learned from that activity can be applied to allow third party access to CO₂ sequestration facilities developed by others, in order to maximize the amount of CCS.

Part 1 of this paper will examine the business case for CCS. A review of the economic literature related to *economies of scale* will support the need for third party access to facilities being developed by others, to reduce the overall costs of CCS. Part 2 will be an analysis of existing legislation and regulations governing GHG emissions by large industrial emitters. This will provide the basis for recommendations that will be made for legislative and regulatory modifications. Part 3 will review the literature which identifies the legal problems associated with CCS. The Government of Alberta has responded with *Bill 24, Carbon Capture and Storage Statutes Amendment Act*. There will be an analysis of the proposed legislation to see if it

adequately addresses the problems identified in the literature, and in particular whether third party access to CCS facilities has been addressed. Part 4 will be a review of the legal theory associated with utilities regulation which allows potential market participants access to established infrastructure at a reasonable price. A review of the literature will help identify a regulatory model that can be applied to CO₂ transportation and sequestration in Alberta. Part 5 will consider the historical evolution of the natural gas legal framework in Alberta. An examination of the policy concerns and the legislative and regulatory response as the industry matured will be illuminating for the development of a CCS regulatory framework. Part 6 will make recommendations to further modify legislation to allow third party access to CO₂ transportation and sequestration facilities, being developed by others in Alberta.

LEGISLATION AND REGULATIONS

Alberta Gas Trunk Line Company Act, 1954, SA 1954, c 37.

This is historical legislation that created the Alberta Gas Trunk Line Company (AGTL) as a provincial Crown corporation. The Act set out the purposes of AGTL to develop, own and operate natural gas gathering and transportation pipelines to provide access to markets for natural gas producers. AGTL evolved into NOVA, an Alberta Corporation, and has subsequently been acquired by TransCanada Pipelines Ltd., a privately owned, but publicly regulated company. The AGTL model is one that should be considered for the gathering, processing and transportation of CO₂.

Bill 24, *Carbon Capture and Storage Statutes Amendment Act*, 3rd Sess, 27th Leg, Alberta, 2010.

***Carbon Capture and Storage Funding Act*, SA 2009, c C-2.5.**

***Climate Change and Emissions Management Act*, SA 2003, c C-16.7.**

***Gas Utilities Act*, RSA 2000, c G-5.**

Oil and Gas Conservation Act, RSA 2000, c O-6.

Public Utilities Act, RSA 2000, c P-45.

Specified Gas Emitters Regulation, Alta Reg 139/2007.

JURISPRUDENCE

Alberta Gas Trunk Line Co v Amoco Canada Petroleum Co et al, [1980] 3 WWR 1 (ABCA).

Alberta Gas Trunk Line Co (AGTL) was the provincially owned natural gas gathering and transportation company. This case provides some historical context for a cost of service model for determining "just and reasonable" natural gas transportation tariffs. It also provides judicial consideration of the stated purposes of the *Alberta Gas Trunk Line Company Act* to act as a common carrier of natural gas in the province.

Westcoast Energy Inc v Canada (National Energy Board), (1998) 156 DLR (4th) 456 (SCC).

This is a leading case in pipeline regulatory law dealing with provincial/federal jurisdiction. It establishes that if a natural gas gathering system or processing plant is an integral part of a pipeline network that transcends provincial boundaries it is subject to federal jurisdiction. Many of the natural gas gathering and transportation pipelines in Alberta are now federally regulated. To the extent that integrated CO₂ gathering, transportation and sequestration facilities are outside of Alberta, the entire network could be subject to federal regulatory authority.

SECONDARY MATERIAL: MONOGRAPHS

Lesser, Jonathan A & Leonardo R Giacchino, *Fundamentals of Energy Regulation* (Vienna, Virginia: Public Utilities Reports, 2007).

Lesser and Giacchino hold PhDs in Economics from the University of Washington and Duke University respectively. This book provides an overview of Energy Regulation from an economist's perspective and sets out important principles for establishing a regulatory regime that will be applicable to third party access to CO₂ gathering, processing, transportation and sequestration facilities.

SECONDARY MATERIAL: ARTICLES

Bankes, Nigel, "Dealing with Credits For Carbon Capture and Storage Projects Within Carbon Trading Systems: Alberta's Specified Gas Emission Regulations" (2009) [unpublished].

Nigel Bankes is a professor in the Faculty of Law, University of Calgary and is the current holder of the Chair of Natural Resources Law and has written extensively in the area of carbon capture and storage. This report was prepared for ICO₂N, an industry network of large industrial GHG emitters. Professor Bankes offers various models to address the gap in the current CCS regulatory framework related to credit for avoided GHG emissions. One of those models, "the utility model," will be explored in more detail in this paper.

Bankes, Nigel, "Developing a Legal Regime for Carbon Capture and Storage in Canada: Some Reflections based upon a survey of natural gas storage regimes" (2009) [unpublished, archived at The Institute of Sustainable Energy, Environment and Economy (ISEEE) at the University of Calgary].

This paper builds on an earlier work by Professor Bankes, entitled *Natural Gas Storage Regimes in Canada: A Survey* (2009) and seeks to identify what can be learned from natural gas storage legal frameworks in Canada and applied to CCS. This paper provides a good basis for developing a regulatory framework for CO₂ sequestration in Alberta.

Bankes, Nigel, "Legal Issues Associated with the Adoption of Commercial Scale CCS Projects" (2009), online: Pembina Institute <<http://pubs.pembina.org/reports/ccs-discuss-legal.pdf>>.

This paper was prepared by Professor Bankes in connection with a forum on Carbon Capture and Storage organized jointly by the Pembina Institute and ISEEE in November 2008. Professor Bankes considers the property issues and the regulatory issues associated with CCS. Some of Professor Bankes' suggestions were adopted in *Bill 24*.

Perrin, Robert M, "Declaratory Relief under Alberta Oil and Gas Legislation" (1980) 18 Alta L Rev 26.

At the time of this article Mr. Perrin was a senior solicitor for the Hudson's Bay Oil and Gas Company in Calgary, Alberta. Although this article is 30 years old, it is often cited and

provides a very good overview of the remedies available under the *Oil and Gas Conservation Act* and the *Gas Utilities Act* for declarations that a gas pipeline is a "common carrier" or that a gas processing plant is a "common processor." These remedies are still applicable today and may also be available to GHG emitters for the transportation, processing and sequestration of CO₂.

Schultz, Nikol J, "Light-Handed Regulation" (1999) 37 *Alta L Rev* 387.

At the time of this article Mr. Schultz was the Vice President, Markets and Transportation Policy and General Counsel of the Canadian Association of Petroleum Producers. This article provides an alternative view to the traditional utility rate making process. "Light-Handed Regulation" provides for agreements reached between owners of gas transportation networks and potential shippers on that network. Once an agreement has been reached, it requires less oversight by regulators. This may be an appropriate model for the developing CCS industry in Alberta as there will be large, but relatively few, industrial participants.

OTHER MATERIAL

Alberta Carbon Capture and Storage Development Council, "Accelerating Carbon Capture and Storage Implementation in Alberta" (March 2009), online: Alberta Energy <http://www.energy.alberta.ca/Org/pdfs/CCS_Implementation.pdf>.

The CCS Development Council was appointed by the Minister of Energy of Alberta to "provide recommendations to accelerate the development of CCS in Alberta" (at 16). This is the final report of the Council. This report provides a good review of the technology and economics of CCS and identifies the advantages that Alberta has to pursue CCS. The report makes several recommendations about the long-term liability of CO₂ sequestration, many of which have been adopted as part of *Bill 24*.

Alberta Energy, "Carbon Capture and Storage projects and information" online: Alberta Energy <<http://www.energy.alberta.ca/Initiatives/2382.asp>>.

Alberta Energy, "Energy's History in Alberta", online: Alberta Energy <http://www.energy.alberta.ca/About_Us/1133.asp>.

Alberta Energy and Utilities Board (EUB), *Decision 2005-027 – Application by Celtic Exploration Ltd. for Common Carrier and Common Processor Orders for the Otter Field* (April, 2007), online: EUB <<http://www.ercb.ca/docs/Documents/decisions/2005/2005-027.pdf>>.

This is a decision by the Energy and Utilities Board (EUB) granting an application by Celtic Exploration Ltd. that Tempest Energy Corp. (Tempest) be declared a "common carrier" and "common processor" of natural gas from the Otter Field near Banff, Alberta. It provides a good description of the rationale for a "common carrier" and a "common processor" order and provides some insight into how such an order may be applied to CO₂ gathering, processing, transportation and sequestration facilities.

Alberta Environment, *Alberta's 2008 Climate Change Strategy: Responsibility/Leadership/Action*, (January 2008), online: Alberta Environment <<http://environment.gov.ab.ca/info/library/7894.pdf> at 24>.

This provincial government document sets the basis for Alberta's strategy in response to climate change. CCS is one tool that the government is heavily relying on to reduce GHG emissions. This document provides the context for government action including significant subsidization of four CCS demonstration projects. Recommendations in this paper need to be tested against the goals outlined in government policy.

Bankes, Nigel, "Alberta makes significant progress in establishing a legal and regulatory regime to accommodate carbon capture and storage (CCS) projects" (November 2010), online: ABlawg, The University of Calgary Faculty of Law Blog on Developments in Alberta Law <<http://ablawg.ca/author/nbankes>>.

Professor Bankes comments on *Bill 24, Carbon Capture and Storage Statutes Amendment Act*. *Bill 24* proposes to amend various pieces of Alberta legislation including the *Energy Resources Conservation Act*, the *Mines and Minerals Act*, the *Oil and Gas Conservation Act*, and the *Surface Rights Act*. Professor Bankes assesses *Bill 24* as a "first step" in addressing some of the legal concerns that he and others have raised with respect to CO₂ sequestration. However, as he points out, "there is nothing here to deal with problems of third party access" to CCS facilities.

Attracting Foreign Direct Investments in Nigeria's Oil and Gas Sector through a Principal Anti-Expropriation Legislation

ANNOTATED BIBLIOGRAPHY

Compiled by Oluwatoyin Akinnola

LL.M. Candidate, University of Calgary.

2010

This web page contains selected sources of information, relevant to my LL.M. research major paper at the University of Calgary (U of C). My research seeks to critique anti-expropriation laws in Nigeria and to examine their adequacy in the promotion of investments in the oil and gas sector.

The page is categorized into two--primary and secondary sources; however, annotation is provided in respect of only the secondary sources. The annotated secondary sources are further classified into three parts. All the part, with the exception of part three, contain one or more areas on textbooks and articles.

Part one consist of materials, which provide background information on the meaning, theories and principles of international investment laws. Part two has literature which provide general background information about the oil and gas industry, particularly as it relates to Nigeria. Part three is devoted to general literature on energy investment and expropriation while part four contains useful links with relevant information on regulatory and policy issues on oil and gas in Nigeria.

LEGISLATION

Statutes

Nigerian Investment Promotion Act, LFN. 2004, c. N117.

Petroleum Act, LFN. 2004, c.P10.

Constitutional statute

Constitution of the Federal Republic of Nigeria, LFN. 2004, c.C32.

INTERNATIONAL MATERIALS

General Agreement on Tariffs and Trade 1947, 55 U.N.T.S. 87.

International Convention on the Recognition and Enforcement of Foreign Arbitral Awards, 10 June 1958, 330 U.N.T.S. 38 (entered into force on 7 June 1959).

International Convention on the Settlement of Investment Disputes between States and Nationals of Other States, March 18 1965, 575 U.N.T.S. (entered into force on October 14, 1966).

SECONDARY MATERIALS

PART ONE: GENERAL OVERVIEW OF INTERNATIONAL INVESTMENTS LAW

TEXTBOOKS

Ekwueme, Ekhrushev. *Protection of Foreign Investments in Context: Nigeria's Investment Laws, Treaties and Protection Agreements* (Portland, USA: Book News Inc, 1998).

The author, a Visiting Researcher with the Graduate Program of Harvard Law School obtained his Ph.D from the University of Hamburg, Germany. He is a Partner in the law firm of Olaniwun Ajayi. The book examines Nigerian principal investments law in the context of international law and practice. It explains how current treaties and petroleum agreements protect foreign investments and how those laws are administered, and critically analyzes the process of regulating foreign investment by means of a multilateral agreement on investment from the perspective of a developing country, recommending reforms to such agreements that better balance the needs of capital-exporting and -importing countries. The article will be useful for my Chapter I where I intend to provide the chronology of anti-expropriation law in Nigeria.

Lowenfeld, Andreas. *International Economic Law* (New York: Oxford University Press, 2002).

The author is a Herbert and Rose Rubin Professor of International Law at the New York University School of Law. He obtained the Bachelor of Arts degree from Harvard College in 1951 and in 1955, he obtained his LL.B (now J.D) from Harvard Law School, United States of America (USA).

The book provides a compendium of the principles of international investment laws. It x-rays the provisions of some international conventions that promote global trade and investments. I will find Chapter 13 and Chapter 15 that are respectively titled "The Responsibility of Host States to Foreign Investors: Customary International Law" and "Evolving Standards of International Law on International Investment" to be useful guides on how Nigeria can attract oil and gas investors.

ARTICLES

Ekundayo, R.O. “The Political Economy of Private Investment in Nigeria” (2008) 10 The Journal of Modern African Studies 37.

Professor Ekundayo, a senior lecturer in the Department of Economics, Obafemi Awolowo University, Nigeria examines the traditional and basic economic philosophy of private investment. He notes in the introductory part of the article that the economy of every nation has certain economic philosophies that are unique to it. He identified those economic philosophies that are unique to Nigeria. These identified philosophies will no doubt be useful in suggesting factors that could promote investments in the Nigerian oil and gas industry.

Ekwueme, Ekhrushev. “Nigeria’s Principal Investment Laws in the Context of International Law and Practice” (2005), 49:2 J Afr L 177.

The article critically examines the provisions of these Nigerian laws on investments alongside the jurisprudence of the *International Convention on the Settlement of Investment Disputes between States and Nationals of Other States* (ICSID Convention). It also poses and resolves specific constitutional and administrative law questions pertaining to the treatment of foreign direct investment (FDI) in Nigeria. Finally, it assesses inflows of FDI into Nigeria and considers some of the impediments to foreign investment in the country.

Judin, Michael *et al*, “International Investment”(2007) 41:2 Int’l Law 415.

The authors jointly examine the factors affecting international investment in six countries—Peru, Brazil, Venezuela, Pakistan, South Africa and Spain. They identify the similarities and the differences of the investment climate in all of these countries. The article will be relevant to Chapter 1 of my paper where I intend to provide a general overview of international investment laws. This article, unlike Ekwueme’s “Nigeria’s Principal Investment Laws in the Context of International Law and Practice” which is peculiar to Nigeria, has a global perspective.

Ross, Michael, “The Political Economy of the Resource Curse” (1999) 51:2 World Politics 297.

Professor Ross, an Assistant Professor of Political Science at the University of Michigan earned his B.A in 1984 from the University of California, USA. He obtained both his M.A. and Ph.D in Politics in 1992 and 1996 respectively from Princeton University, USA. The author described the reasons accounting for the poorness of most countries in spite of their huge mineral resources. He proffers solutions that may be employed by such countries to overcome such syndrome. Some of the solutions include the development of long term investment strategy in the manufacturing sectors and the training of indigenous manpower. This will be useful for Chapter 4 of my paper where I will be investigating the causes of the slow growth of the Nigerian economy in spite of its over five decades of petroleum production.

PART TWO: GENERAL OVERVIEW OF THE NIGERIAN OIL AND GAS INDUSTRY

TEXTBOOKS

Akinrele, Adedolapo. *Nigeria Oil and Gas Law* (London: Oil, Gas & Energy Law Intelligence, 2005).

Adedolapo received his LL.B from Clifton College, in 1985 and he earned his LL.M from the Graduate University College, London, United Kingdom (UK). He was admitted to the Nigerian bar in 1987. This book thorough analysis of the Nigerian oil and gas sector, although its emphasis is on oil and not gas, it gives an insight into issues such as investment in the gas subsector, a historical perspective on gas development and some information on fiscal issues in the gas subsector. It is also one of the most cited Nigerian books when research is done regarding issues related to Nigerian oil and gas sector and in my view, my research would not be complete without a review of this text which is the Nigerian oil and gas law practitioners' manual. In comparison to other texts I have read that do an analysis of the Nigerian oil and gas sector; I think it is the most thorough and reliable particularly when you consider that it was endorsed by world renowned energy experts like the late Professor W. Walde of the Centre for Energy, Petroleum and Mineral Law and Policy, Dundee, UK.

Omorogbe, Yinka. *Oil and Gas Law in Nigeria* (Lagos: Malthouse Law Books, 2000).

Professor Omorogbe is the Company Secretary of the Nigerian National Petroleum Corporation. Prior to this appointment, she was the Dean of the University of Ibadan Law School, Nigeria. This book summarizes the whole gamut of the structure of Nigerian oil and gas industry, the applicable contractual and legal framework. This book, unlike the Akinrele's *Nigeria Oil and Gas Law* is old and is limited to the pre 2000 laws and policies.

Williams, Howard & Charles Meyer. *Manual of Oil and Gas Terms*, 12th ed. by Patrick Martins & Bruce Kramer (New York: Mathew Bender Inc., 2003).

The editors are both Professor of Laws with many years of teaching in Petroleum and Natural Resources Law. The book is a collection of meaning of words and phrases that are frequently used in oil and gas matters. This will book will be useful in defining oil and gas terms throughout the research paper.

ARTICLES

Gbenga Biobaku & Co. “Investing in Nigeria’s Oil and Gas Industry” (2008), online GBC Law < http://www.gbc-law.com/investing_in_Nigeria_OandG%20Industry.pdf>.

The article gives a general overview of the structure of the Nigerian oil and gas industry. It identifies the various category of interest that a person can obtain with regard to mineral resources in Nigeria. It also identifies the various regulatory bodies and their functions.

PART 3: ENERGY INVESTMENT, EXPROPRIATION AND INTERNATIONAL INVESTMENT LAW

TEXTBOOKS

Ajayi, Koyinsola. *Legal Aspects of Finance in Emerging Markets* (London: LexisNexis Butterworths, 2005).

The author is a Senior Advocate of Nigeria (an equivalent of Queen’s Counsel in England). He obtained his Ph.D. from Selwyn College, University of Cambridge, his LL.M from Harvard Law School and his LL.B from University of Ife, Nigeria. He is the managing partner of Olaniwun Ajayi, a leading commercial law firm in Nigeria. In the book, Dr Ajayi provides a detailed legal and contractual framework on how financier can successfully finance transactions in Nigeria.

American Petroleum Institute, *A Primer of Oil and Gas Production* (Dallas: American Petroleum Institute, 1976).

This book offers an elementary understanding of the day-to-day workings of the oil and gas fields. It is written in simple and non-technical language.

Frome, Robert. *Energy Financing: SEC, Tax & Business Approaches for Oil & Gas Drilling & Synthetic Fuels* (New York: Law & Business Inc, 1980).

Robert L. Frome obtained a Bachelor of Science degree from the New York in 1958, LL.B from Harvard Law School in 1961 and LL.M in New York University Law School in 1962. He is a founding partner of the law firm of Olshan Grundman Frome Rosenzweig & Wolosky LLP and is also an instructor at the Brooklyn Law School, USA. The books explains in detail the various aspect of oil and gas drilling transactions as well as how an operators can successfully finance

them with minimal risk. However, the focus of the book is strictly on USA, therefore its application to Nigeria must be done with caution.

Lowe, John. *Oil and Gas Law in a Nutshell*, 5th ed (United States of America: Thomson Reuters, 2009).

The author is a graduate of Harvard Law School and a member of the bars of Texas, Oklahoma, and Ohio in USA. He is a Professor of Energy Law at Southern Methodist University. He is also an honorary lecturer and principal researcher at Centre for Energy, Mineral Law and Policy, University of Dundee. He is also a Senior Fellow of the Faculty of Law of the University Melbourne. Professor Lowe is currently an International Legal Advisor for Iraq oil issues in the Commercial Law Development Program of the United States Department of Commerce.

The book summarizes the legal regime of international and domestic oil and gas production. In spite of its international outlook, the shortcomings of this book lie in the fact that it also focuses only on the domestic laws of the USA, thus limiting its usefulness to my paper. However, its will be helpful in explaining the oil and gas industry generally.

Smith, Ernest E. *et al.*, *International Petroleum Transactions*, 2nd ed (Denver: Rocky Mountain Mineral Law Foundation, 2000).

All the five authors of this book are law Professors in various universities across USA. The book provides an up to date comparative analysis of the different domestic and international laws governing petroleum activities across the world. Chapter 12 of the book, which, deals with Canadian regulation of transboundary natural gas transaction will be useful to my research work.

ARTICLES

Ehrman, Brad. “Introduction to Exploration and Production Operations” (Lecture delivered at the Oil and Gas Short Course organized by Rocky Mountain Mineral Law Foundation at Westminster, Colorado, 19-23 October, 2009), [unpublished].

The author holds a B.Sc in Petroleum Engineering with distinction from the University of Alberta, Edmonton and an MBA from Rice University. He is currently the Engineering Manager for Dorchester Minerals L.P, a Dallas-based oil and gas partnership. The author offers a detail background of petroleum exploration and production operations. This article, unlike the Baker Ron’s *A Primer of Oil Well Drilling* focused on the entire oil and gas operations and not just drilling.

Hansen, Peter & Kelly Mathews. “Fifteen for the Borrower and its Counsel” (2006) 2006:3 Mineral Law Series 10-1.

Peter Hansen, a partner in the Denver office of Holme Roberts & Owen LLP obtained both his J.D. and his M.B.A from the University of Denver, USA in 1995. He also obtained his B.A from the University of Colorado in 1990. Mr. Kelly Matthews is also a partner in Holme Roberts & Owen LLP. He bagged his B.A in Economics and J.D. from Stanford University and University of Colorado respectively. The paper summarizes in succinct terms the salient legal issues that are usually encounter by borrower in a loan transaction.

Malecek, Steven. “A Legal Framework for Gas Development: How Can Host Governments Strike a Balance between Investment and Competition?”, online: (2001) 8 CEMPLP Annual Review, <<http://www.dundee.ac.uk/cepmlp/car/html/car5arti8.htm>>.

This article deals with policy issues on domestic gas supply particularly as it relates to supply for power generation. The article has also got quite a bit of useful information and analysis on objectives for gas development. It also suggests that apart from other reasons particularly commercial ones, non-convertibility of local currency for repatriation of profits when selling gas into the domestic market is a key reason for the underdevelopment of domestic gas markets in less developed countries. This key reason amongst others mentioned in the article applies to the Nigerian domestic gas sector. This article is really a useful piece in building a good argument on why the state of the Nigerian electric power is where it is and also helps in making forward looking policies in improving the sector.

Munoz, Jeffrey. “Exotic and Alternative Financing Structures—Where is the Market Going” (2006) 2006:3 Mineral Law Series 12-1.

The author is an attorney with the law firm of Vinson & Elkons, LLP., Houston, Texas, USA. The book offers an overview of various financing techniques and their potential uses to oil and gas financing. It explains the risks and associated mitigating factors in oil and gas financing, the required documentation and their relevance. This article will be useful in identifying the most appropriate financing technique for Nigeria oil and gas industry.

Weber, Tony. “Business Overview of Financing Transaction” (2006) 2006:3 Mineral Law Series 9-1.

Mr. Weber received his bachelor degree in Finance in 1984 from Texas A & M University. He joined the Natural Gas Partners as Principal and Director of Corporate Finance. The paper explains in brief terms the dominant substance in financing transactions. However, its shortcoming lies in the fact that it does not examine the legal aspect of these financing transactions.

Zlotky, Jeffrey. “Equity Financings--Selected Issues in Structuring and Negotiating Private Equity Investment in Oil and Gas Companies” (2006) 2006:3 Mineral Law Series 11-1.

Jeffrey Zlotky is a partner in the law firm of Thompson & Knight LLP, Dallas, Texas, USA. He obtained his JD at the University of Texas School of Law in 1985 and his B.A at Princeton University, US in 1982. The paper addresses the issues that investors and issuers encounter when they are structuring and negotiating investments in the oil and gas industry. It highlights the legal and tax requirements underlying private equity financing for oil and gas transactions, and provides some specific drafting suggestions.

PART FOUR: USEFUL LINKS

The Department of Petroleum Resources, online: <<http://www.dprnigeria.com/>> is the website of the Nigerian Department of Petroleum Resources (DPR). The DPR is for the time being, and until a department of gas is established for gas regulation, Nigerian oil and gas regulator and its site has got useful information on Nigerian oil and gas and issues relating to licensing and permits. Although there might be a bit of challenge with the site because it is not updated regularly.

The US Energy Information Agency, online: <http://www.eia.doe.gov/oil_gas/natural_gas/info_glance/naturalgas.html> is the website of the Energy Information Agency of the US Department of Energy which also publishes historical statistics of all forms for most countries in the world including Nigeria and is a veritable source of information in this regard.

The Presidency, online: <<http://www.nigeriafirst.org/>> is the website of the media arm of the presidency, which states its objectives, makes commentaries and issues media releases on contemporary issues. The site is particularly useful because of its search icon which makes it possible to navigate the site to any area of interest by just inserting key search criteria. The site also contains some literature on gas pricing, domestic gas supply obligations regulations and the Nigerian gas infrastructure blueprint which are the core areas of my research project.

The International Centre for Nigerian law, online: <<http://www.nigeria-law.org/LFNMainPage.htm>> for more information on Nigerian oil and gas laws.

For a detailed and up to date collection of the meaning of words and phrases that are used in oil and gas matters. See online: Schlumberger Oilfield Glossary (2009) <<http://www.glossary.oilfield.slb.com/default.cfm>>.