

The Columbia River Treaty and Local Interests: A Shared Responsibility

Appendix B: Case Study Notes:

THE COLUMBIA RIVER TREATY AND LOCAL INTERESTS: A SHARED RESPONSIBILITY	
APPENDIX B: CASE STUDY NOTES:	1
CASE STUDY 1: PACIFIC SALMON TREATY (1985)	1
CASE STUDY 2: GREAT LAKES WATER QUALITY AGREEMENT 2012 (GLWQA)	4
CASE STUDY 3: GREAT LAKES LEVELS ORDERS	8
CASE STUDY 4: SOURIS RIVER AGREEMENT	12
CASE STUDY 5: COLORADO RIVER COMPACT/GLEN CANYON DAM ADAPTIVE MANAGEMENT PROGRAM (GCDAMP)	14
CASE STUDY 6: ST. MARY AND MILK RIVERS	17
CASE STUDY 7: MURRAY DARLING RIVER	20

Case Study 1: Pacific Salmon Treaty (1985)

What?

- A cooperative agreement between Canada and the US, ratified in 1985, re-authorized in 1999.¹
- “The Pacific Salmon Treaty established the Pacific Salmon Commission,² a bilateral body that recommends to the U.S. and Canada the ocean salmon fishing levels in Southeast Alaska and British Columbia. The United States and Canada adopted a new set of fishing regimes for chinook, coho, chum and transboundary rivers on December 23, 2008 through an exchange of diplomatic notes.”³
- “In many respects the PST serves as a framework convention. The terms of the treaty establish the principles and some of the framework leaving the details to be fleshed out in the Annexes.”⁴

Where – What geographic scope and jurisdiction:

- Agreement covers the north Pacific area of Canada and the USA from Alaska and the Yukon to B.C., Washington State, Oregon and Idaho.

Why – Purpose of the Treaty

- Research and enhance Pacific salmon stocks
- Conserving and allocating salmon
- Reduced Canadian and Alaskan harvest of salmon and added tribal representation to the international decision-making body as well as government fish managers.
- Provisions dealing with trans-boundary stocks of salmon

¹ *Treaty Between the Government of Canada and the Government of the United States of America Concerning Pacific Salmon*, amended as of May 16, 2014, Can.-U.S., January 28, 1985, available at <http://www.psc.org/publications/pacific-salmon-treaty/> (accessed January 28, 2017).

² Pacific Salmon Commission, *About the Commission*, <http://www.psc.org/about-us/> (accessed January 17, 2017).

³ Richard Kyle Paisley, Matthew J. McKinney and Molly Smith Stenovec, *A Sacred Responsibility*, Universities Consortium on Columbia River Governance, p. 131.

⁴ Richard Kyle Paisley, Matthew J. McKinney and Molly Smith Stenovec, *A Sacred Responsibility*, Universities Consortium on Columbia River Governance, p. 131.

⁴ See Richard Kyle Paisley, Matthew J. McKinney and Molly Smith Stenovec, *A Sacred Responsibility*, Universities Consortium on Columbia River Governance, p. 158 Appendix 6.9.

- “prevent over-fishing and provide for optimum production,” and “ensure that both countries receive benefits equal to the production of salmon originating in their waters.”⁵

Who - was Involved:

- Countries - United States of America and Canada;
- Provinces/U.S. States - Canada: British Columbia, Yukon; U.S: Washington State, Oregon, Idaho, Alaska;
- Tribal governments on the U.S. side;
- Aboriginal fishery representatives;
- Local governments – no significant indication of involvement;
- Local interests – commercial and sport fishing representatives. “The interests also varied between different fisheries. Those who fished for Chinook on both sides of the border had different interests from the seiners who fished sockeye or coho, on both sides of the border. And the seiners differed from the gillnetters.”⁶

How - Mechanisms were used to incorporate local interests:

To create the agreement:

- “Direct negotiations amongst the industry stakeholders [on the Canadian side: the federal and provincial governments, the representatives of the commercial fishery, the aboriginal fishery and the sports fishery] was attempted, and in 1997 frustration in Prince Rupert amongst fishers at failure to get an interim agreement with the U.S. led to the blockading of an Alaskan state ferry in Prince Rupert Harbor”.⁷ “In fact, negotiating sessions would involve a delegation of thirty to fifty people. This made compromise almost impossible.”⁸ Special envoys from Canada and the U.S. decided, upon review, that the stakeholder negotiation process “could not work and [] the governments had to resolve the issues themselves”.⁹
- Canadian Negotiating team was reduced in size from thirty or fifty people to three with technical advisers, fisheries scientists and managers, who worked very closely with the relevant federal ministers, excluding many parties and stakeholders that had been traditionally part of the process. The Canadian negotiators held ‘technical discussions’ in informal setting with various levels of the U.S. side beginning in 1999. Also a strong second track of diplomatic process began.¹⁰
- There was less and less involvement of local interests as the process evolved to a reporting relationship. This resulted in resentment from the First Nations in particular

To implement the agreement:

- Pacific Salmon Commission is a sixteen-person body with four Commissioners and four alternates each from the US and Canada, representing interests of federal, state and tribal governments as well as commercial fishing interests.
- Canada and the US each have one vote on the commission, meaning the diverse stakeholders present must collaborate with their respective country’s delegates to present a common stance.
- The Commissioners are aided by the efforts of panels and committees.¹¹ Five regional panels give recommendations to the Commission. Each panel is composed of six representatives and alternates from each country. Membership reflects a range of governmental and fishing interests.

⁵ See Government of Canada Department of Fisheries and Oceans, Pacific Salmon Treaty, <http://www.pac.dfo-mpo.gc.ca/fm-gp/species-especes/salmon-saumon/pol/pst-tsp/index-eng.html> (accessed January 17, 2017).

⁶ Donald McRae, *The Negotiation of the 1999 Pacific Salmon Agreement*, 27 Can.-U.S. L.J. 267 (2001), pp. 267, 270, available at: <http://scholarlycommons.law.case.edu/cuslj/vol27/iss/45>.

⁷ Donald McRae, *The Negotiation of the 1999 Pacific Salmon Agreement*, 27 Can.-U.S. L.J. 267 (2001), pp. 267, 268.

⁸ Donald McRae, *The Negotiation of the 1999 Pacific Salmon Agreement*, 27 Can.-U.S. L.J. 267 (2001), pp. 267, 269.

⁹ Donald McRae, *The Negotiation of the 1999 Pacific Salmon Agreement*, 27 Can.-U.S. L.J. 267 (2001), pp. 267, 269.

¹⁰ Donald McRae, *The Negotiation of the 1999 Pacific Salmon Agreement*, 27 Can.-U.S. L.J. 267 (2001), pp.268-278.

¹¹ See Richard Kyle Paisley, Matthew J. McKinney and Molly Smith Stenovec, *A Sacred Responsibility*, Universities Consortium on Columbia River Governance, p. 7, 8, 27, 54, 56, 60, 61, 64, 131, Appendix 6.9.

- “Canada’s representatives on the PSC include First Nations, commercial and recreational fishing interests, the environmental sector, and the Province of British Columbia, as well as Fisheries and Oceans Canada. Pursuant to the Pacific Salmon Treaty agreement, the PSC is responsible for reviewing the fishing chapters of the Treaty and, where appropriate, making recommendations to the governments of Canada and the U.S. for their amendment”.¹²

Lessons for Local Governments/Interests related to the CRT:

- More diverse interests were initially represented in the negotiation but after the process proved to be too cumbersome the Canadian delegation was significantly reduced to 3 members from the government assisted by technical advisors.
- Strong Second track diplomatic process emerged.
- Informal structure of negotiations resulted in substantive results.
- Implementation body has a unique structure where each State party has one vote; therefore the interests represented in each delegation must collaborate within their delegation.

¹² Richard Kyle Paisley and Alex Grzybowski, “Discussion Piece on the Columbia and Possible Alternative Governance Models” (2013).

Case Study 2: Great Lakes Water Quality Agreement 2012 (GLWQA)

What?¹

- Binational Agreement between the governments of Canada and the United States of America.
- Initial Agreement between Canada and the United States in 1972.² Subsequently followed by a series of agreements between the two countries culminating in the Great Lakes Water Quality Agreement of 2012.³
- Executive Agreements in U.S. law under the executive authority of the Boundary Waters Treaty. Has the same force of a treaty under international law.⁴

Where – What geographic scope and jurisdiction:

- The Great Lakes and St. Lawrence River.
- International between Canada and the United States of America.

Why – Purpose of the Treaty

- “To Restore and maintain the chemical, physical, and biological integrity of the Water of the Great Lakes.”⁵

Who - was Involved:

- Countries – Canada and the United States of America;
- Provinces/U.S. States – Can.: Ontario, Quebec; U.S.: Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, New York;
- First Nations, Tribes and Métis;
- Local governments – local municipalities, Great Lakes, Association of Municipalities of Ontario⁶ and St. Lawrence Cities Initiative;⁷
- Local Interests – environmental non-governmental organizations, agricultural and business interests, watershed groups.

How - Mechanisms were Used to Incorporate local interests:

To negotiate the agreement:

- The IJC conducted extensive public consultations (totaling 4,133 participants⁸) in partnership with local governments across the basin including through the Great Lakes and St. Lawrence Cities

¹ Nigel Banks and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, For the Program on Water Issues, Munk School of Global Affairs at the University of Toronto, (2014), p.49-54, 103-111, <http://powi.ca/wp-content/uploads/2014/10/Protocols-for-Adaptive-Water-Governance-Final-October-14-2014.pdf>, (accessed February 1, 2017).

² Great Lakes Water Quality Agreement, Article XII, U.S.- - Canada, Apr. 15, 1972, 23.1 U.S.T. 301. http://www.ijc.org/en/_Air_Quality_Agreement, (accessed February 5, 2017).

³ Great Lakes Water Quality Agreement, Can.-U.S., September 7, 2012. <http://ijc.org/files/tinymce/uploaded/GLWQA%202012.pdf>, (accessed February 2, 2017).

⁴ Nigel Banks and Barbara Cosens, *The Future of the Columbia River Treaty*, a presentation sponsored by the Program on Water Issues of the Munk School of Global Affairs at the University of Toronto, (2012), <http://powi.ca/wp-content/uploads/2012/12/The-Future-of-the-Columbia-River-Treaty-2012.pdf>, (accessed February 2, 2017).

⁵ Great Lakes Water Quality Agreement, Can.-U.S., September 7, 2012, Article 2, <http://ijc.org/files/tinymce/uploaded/GLWQA%202012.pdf>, (accessed February 2, 2017).

⁶ The [Association of Municipalities of Ontario](#), supports and enhances strong and effective municipal government in Ontario with 444 municipalities.

⁷ The [Great Lakes and St. Lawrence Cities Initiative](#). Founded in 2003, it is a binational coalition of over 127 U.S. and Canadian mayors and local officials working to advance the protection and restoration of the Great Lakes and St. Lawrence River, with an integrated environmental, economic and social agenda. Participating in a number of Great Lakes basin-wide organizations.

- Initiative⁹ and created a 22 member advisory committee of key U.S. and Canadian leaders from various local government and non-governmental interests¹⁰ during the review process of the Great Lakes Water Quality Agreement (five regional meetings across the basin and online channels) leading up to the 2012 renegotiation.
- The IJC provided advice to the governments of Canada and the U.S. during their review of the Great Lakes Water Quality Agreement in 2006, which encouraged local participation and planning and greater public information, education and consultation.¹¹ The IJC also provided a synthesis of public comments.¹²
 - A year long process (2006-2007) took place to review the Great Lakes Water Quality Agreement. The reviewers divided into 9 review working groups (over 350 Canadians and Americans comprised of representatives from federal, state, provincial and local governments; individuals from Tribes and Aboriginal groups; non-government organizations; industry; academia; and the interested public), represented a broad cross-section of the community of the Great Lakes region, via the Binational Executive Committee and under the guiding principles of openness, transparency and inclusiveness. A binational review committee was formed to lead and coordinate the review and prepare the draft report.¹³
 - o Finding that the Agreement should recognize the critical role and essential participation of other orders of government and the role to the public in successfully implementing an agreement and the importance of accessible information for decision making amongst other orders of government, non-government organizations and the public.¹⁴

To implement the agreement¹⁵:

⁸ *Synthesis of Public Comment on the Forthcoming Review by the Federal Governments of Canada and the United States of the Great Lakes Water Quality Agreement*, January 2006, International Joint Commission, Canada and United States, Great Lakes Water Quality Agreement, p. 3, <http://www.ijc.org/php/publications/pdf/ID1588.pdf>, (accessed February 2, 2017).

⁹ *Synthesis of Public Comment on the Forthcoming Review by the Federal Governments of Canada and the United States of the Great Lakes Water Quality Agreement*, January 2006, International Joint Commission, Canada and United States, Great Lakes Water Quality Agreement, p. 1, <http://www.ijc.org/php/publications/pdf/ID1588.pdf>, (accessed February 2, 2017).

¹⁰ *Synthesis of Public Comment on the Forthcoming Review by the Federal Governments of Canada and the United States of the Great Lakes Water Quality Agreement*, January 2006, International Joint Commission, Canada and United States, Great Lakes Water Quality Agreement, p. 2, <http://www.ijc.org/php/publications/pdf/ID1588.pdf>, (accessed February 2, 2017).

¹¹ *Advice to Governments on their Review of the Great Lakes Water Quality Agreement, A Special Report to the Governments of Canada and the United States*, August 2006, International Joint Commission, Canada and United States, Great Lakes Water Quality Agreement, <http://www.ijc.org/php/publications/pdf/ID1603.pdf>, (accessed February 3, 2017).

¹² *Synthesis of Public Comment on the Forthcoming Review by the Federal Governments of Canada and the United States of the Great Lakes Water Quality Agreement*, January 2006, International Joint Commission, Canada and United States, Great Lakes Water Quality Agreement, <http://www.ijc.org/php/publications/pdf/ID1588.pdf>, (accessed February 2, 2017).

¹³ Agreement Review Committee, *Report to the Great Lakes Binational Executive Committee: Volume 1*, September 2007, p.7-8, http://publications.gc.ca/collections/collection_2012/ec/En164-21-1-2007-eng.pdf, (accessed February 2, 2017).

¹⁴ Agreement Review Committee, *Report to the Great Lakes Binational Executive Committee: Volume 1*, September 2007, p.22, http://publications.gc.ca/collections/collection_2012/ec/En164-21-1-2007-eng.pdf, (accessed February 2, 2017).

¹⁵ The Preamble to the GLWQA of 2012 states: “RECOGNIZING that, while the Parties are responsible for decision-making under this Agreement, the involvement and participation of State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed management agencies, local public agencies, and the Public are essential to achieve the objectives of this Agreement.” Article 4 on implementation calls on the Parties to work “in cooperation and consultation with State and Provincial Governments, Tribal Governments, First Nations, Métis, Municipal Governments, watershed

- IJC – The two Bodies, created by the IJC under the Great Lakes Water Quality Agreement, report and advise the IJC which in turn advises the parties under the scope of its role and pursuant to the Boundary Waters Treaty of 1909.¹⁶ The boards provide independent review of data and implementation and consultation with the public and serve an advisory function to the parties, and investigate matters referred to the by the parties.¹⁷ Membership on the two advisory boards is divided between the Canada and the U.S.
 - o Great Lakes Science Advisory board¹⁸ - Seeks cooperation and coordination with subnational levels of government – this board has some involvement from environmental non-governmental organizations as part of the American representation of the Science Priority Committee.
 - o Great Lakes Water Quality Board¹⁹ - Convenes at least quarterly and tries to facilitate public education and participation- has membership representing both federal governments, provincial and state governments, First Nations, Métis and tribes, municipal governments²⁰, environmental non-governmental organizations, watershed groups, business interests and agriculture.
- Great Lakes Binational Executive Committee – chaired by the heads of Environment Canada and the U.S. EPA; must meet twice per year²¹ and oversee bilateral activities under the Agreement, including remedial action plans for shared areas and lake management plans. The Committee advises and makes recommendations to the parties as well as providing a forum for each party to notify the other of planned works. The Committee’s role is to help coordinate, implement, review and report on programs, practices and measures undertaken to achieve the purpose of the GLWQA. Using a nested governance approach, the Committee has membership representing senior officials from federal, state and provincial agencies with responsibility for water quality related matters, First Nations, Métis and Tribes, municipal governments,²² environmental non-governmental organizations, watershed groups, business interests and agriculture. The Province of Quebec, the Great Lakes Commission, Great Lakes Fishery Commission, International Joint Commission and non-governmental organizations that have been granted observer statues are allowed to be represented at Binational Executive Committee meetings.²³
- Article 5 of the GLWQA of 2012 sets out that The Great Lakes Public Forum is to be held every 3 years, allowing comments on the state of the lakes and on science priorities and actions. Additionally a Great Lakes Summit is to be held at the same time for coordination among the

management agencies, other local public agencies, and the Public, shall develop and implement programs and other measures.” *Great Lakes Water Quality Protocol 2012*, International Joint Commission, http://www.ijc.org/en/_/Great_Lakes_Water_Quality, (accessed February 3, 2017).

¹⁶ Independent review of data and implementation and consultation with the public, advising to the Parties, and investigating any subject referred to them by the Parties. Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, p.106.

¹⁷ Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, p.106.

¹⁸ International Joint Commission, Great Lakes Science Advisory Board, http://ijc.org/en/_sab/Great_Lakes_Science_Advisory_Board, (accessed February 3, 2017).

¹⁹ International Joint Commission, Great Lakes Water Quality Board, http://ijc.org/en/_wqb/Great_Lakes_Water_Quality_Board, (accessed February 1, 2017).

²⁰ Also includes participation by The Great Lakes and St. Lawrence Cities Initiative.

²¹ “The required scheduling of meetings of the Binational Executive Committee and of a public forum assures that both transboundary and public communication will take place on a regular basis and not merely in response to a problem. This builds not only communication and knowledge, but relationships.” Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, p.54.

²² Also includes participation by The Great Lakes and St. Lawrence Cities Initiative and the Association of Municipalities of Ontario.

²³ *Great Lakes Executive Committee to the Great Lakes Water Quality Agreement Terms of Reference*, April 23, 2013, Canada-United States Collaboration for Great Lakes Water Quality, <https://binational.net/wp-content/uploads/2014/10/20130423-glec-tor-en.pdf>, (accessed February 4, 2017).

- Parties, the IJC and other binational entities. Article 5 also sets out requirements for sharing data related to the Great Lakes water quality.
- Article 3 requires public reporting by the Parties.

Lessons for Local Governments/Interests related to the CRT:

- A good example of nested governance being applied to a standing binational water management board.
- Example of separate science/technical body.
- Extensive Public Consultation and Comment prior to 2012 agreement, lead by binational review committee with broad membership from local interests.

Copied From “Protocols for Adaptive Water Governance”:

“The GLWQA of 2012 appears to contain substantial authority for flexibility and coordination with all levels of governance with avenues for both input and implementation by domestic and subnational entities. Yet it accomplishes this through using relatively soft language with considerable agreement to cooperate, coordinate, and share information, but with specific goals left to be developed and an absence of mandatory compliance. GLWQA of 2012 is in its initial years of implementation, thus it remains to be seen if this approach works. The Parties have established a binational website available at http://binational.net/home_e.html which now has available their first report on priorities for science and action for 2014-2016.³⁸¹ Concerns about progress in improving water quality sounded between the 1987 amendments and the GLWQA of 2012, raise a cautionary note in considering the tradeoff between flexibility and clear goals.”²⁴

²⁴ Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, For the Program on Water Issues, Munk School of Global Affairs at the University of Toronto, (2014), p. 52. <http://powi.ca/wp-content/uploads/2014/10/Protocols-for-Adaptive-Water-Governance-Final-October-14-2014.pdf>, (accessed February 1, 2017).

Case Study 3: Great Lakes Levels Orders

What?

- Although the levels orders are not themselves international agreements they operate through the IJC and the Boundary Waters Treaty between Canada and the U.S.
- The IJC, through Orders of Approval (under Articles III, IV and VIII of the Boundary Waters Treaty) will typically establish a range of lake levels within which control structures, capable of changing the levels on boundary/transboundary waters, will operate.¹ Levels orders are subject to review by the IJC.²
- The first IJC's Order of Approval for Lake Superior was issued in 1914. In 2015 the International Lake Superior Board of Control fully implemented the [Lake Superior Regulation Plan 2012](#).
- The first IJC's Order of Approval for Lake Ontario-St. Lawrence was issued in 1952. Most recently the IJC approved a new water management plan as of [December 2016](#), Plan 2014.³

Where – What geographic scope and jurisdiction⁴:

- Great Lakes-St. Lawrence River⁵ - structures are located:
 - o on the St. Mary's River controlling out-flows from Lake Superior affecting Lake Michigan and Huron levels,⁶ and
 - o on the upper St. Lawrence River which affects both the St. Lawrence and Lake Ontario.⁷
- International Boundary/Transboundary Waters between Canada and the U.S.

Why – Purpose of the Levels Orders

- To regulate lake levels on boundary/transboundary Great Lakes-St. Lawrence River.

Who - was Involved:

¹ Nigel Banks and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), For the Program on Water Issues, Munk School of Global Affairs at the University of Toronto, (2014), p. 45, <http://powi.ca/wp-content/uploads/2014/10/Protocols-for-Adaptive-Water-Governance-Final-October-14-2014.pdf>, (accessed February 1, 2017).

² “In the ordinary course of things it is fairly clear from the text of the Boundary Waters Treaty that the IJC has the authority to make decisions in relation to levels matters at least in the case of the first application. It does not need the concurrence of the contracting parties to make a decision under Articles III, IV and VIII provided that it is not seeking to subvert the order of precedence established by Article VIII”. Nigel Banks and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), p. 102.

³ *Regulation Plan 2014 for the Lake Ontario and the St. Lawrence River Compendium Document*, (December 2016), International Joint Commission (IJC), http://www.ijc.org/files/tiny/mce/uploaded/Plan2014_CompndiumReport_1.pdf, (accessed February 3, 2017).

⁴ *Great Lakes, Protecting Shared Resources*, International Joint Commission (IJC), http://www.ijc.org/en/Great_Lakes_Basin, (accessed February 3, 2017).

⁵ The International Great Lakes-St. Lawrence River Adaptive Management Team, *Building Collaboration Across the Great Lakes – St. Lawrence River System, An Adaptive Management Plan for Addressing Extreme Water Levels*, May 30, 2013, p. 3, International Joint Commission, http://ijc.org/files/tiny/mce/uploaded/documents/reportsAndPublications/FinalReport_Adaptive%20Management%20Plan_20130530.pdf, (accessed February 4, 2017).

⁶ Nigel Banks and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), p. 47.

⁷ Nigel Banks and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), p. 47.

- Countries: Canada and U.S.
- Provinces/U.S. States : Can.: Ontario, Quebec; U.S.: Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin.
- Local governments – involved on the Lake Superior Binational Public Interest Advisory Group, [Great Lakes – St. Lawrence River Water Resource Regional Body](#)⁸
- First Nations, Métis and Tribes - interests are now being taken much more seriously by the IJC - there has been suggestion of including them on a Board of Control.⁹
- Local interests – include: wildlife and fishing groups, environmental non-governmental groups, recreational boating, commercial shipping, various citizen groups¹⁰, hydropower interests.
- “Lots of different interests are impacted by the levels decisions. The IJC has taken great efforts to involve the public and all interests in the process of developing regulation plans.”¹¹

How - Mechanisms Were Used to Incorporate local interests:

To negotiate the agreements:

- Lake Superior –
 - o [International Upper Great Lakes Study Board](#)¹² established in 2007 by the IJC; the ten person binational International Upper Great Lakes Study Board conducted a five year study “to provide the Commission with the information it needs to evaluate options for regulating levels and flows in the Upper Great Lakes system in order to benefit affected interests and the system as a whole in a manner that conforms to the requirements of the Treaty, and the Board shall be guided by this mandate in pursuing its studies.”¹³ The Study Board was comprised of science and policy experts. A key function of the Study Board was to evaluate and develop possible new regulation plans for Lake Superior, narrowing a list of over a hundred options to eventually select the Lake Superior Regulation Plan, 2012.¹⁴ The IJC held extensive opportunities for public comment on the Study Board’s work, including 13 public hearings on the final Study Board report, also inviting public comment on the report via public hearing, teleconference, regular mail, telephone, e-mail and a web-based comment form.¹⁵
 - Binational Public Interest Advisory Group was appointed to help the International Great Lakes Study Board by providing advice and assisting the “Board in developing and implementing its extensive public information and

⁸ Created by the governors and premiers of the Great Lakes.

⁹ Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, p. 49.

¹⁰ Such as Great Lakes United, [The Great Lakes Coalition](#), [Wisconsin Great Lakes Coalition](#) and [Stratégies Saint-Laurent](#).

¹¹ Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, p. 49.

¹² International Upper Great Lakes Study Board, *Lake Superior Regulation: Addressing Uncertainty in Upper Great Lakes Water Levels*, (March 2012), International Upper Great Lakes Study, p. 67, 180, International Joint Commission, http://www.ijc.org/files/publications/Lake_Superior_Regulation_Full_Report.pdf, (accessed February 5, 2017).

¹³ *International Upper Great Lakes Study, Mandate*, International Joint Commission, <http://www.iugls.org/Mandate>, (accessed February 3, 2017).

¹⁴ International Upper Great Lakes Study Board, *Lake Superior Regulation: Addressing Uncertainty in Upper Great Lakes Water Levels*, (March 2012), International Upper Great Lakes Study, p. 67, 180, International Joint Commission, http://www.ijc.org/files/publications/Lake_Superior_Regulation_Full_Report.pdf, (accessed February 5, 2017).

¹⁵ *International Joint Commission’s Advice to Governments on the Recommendations of the International Upper Great Lakes Study: A Report to the Governments of Canada and the United States*, (April 15, 2013), International Joint Commission, <http://ijc.org/iuglsreport/wp-content/uploads/2013/04/IUGLS-IJC-Report-Feb-12-2013-15-April-20132.pdf>, (accessed February 5, 2017).

engagement activities.”¹⁶ The Public Interest Advisory Group was comprised of [20 members](#) appointed by the IJC from diverse interests throughout the upper Great Lakes, and helped to engage and inform the public, holding more than 60 public meetings.¹⁷

- Lake Ontario – St. Lawrence
 - o In December 2000 the IJC created the International Lake Ontario – St. Lawrence River Study Board¹⁸ to conduct a five year study assisted by a [Public Interest Advisory Group](#)¹⁹ which included members from local power authority, recreational boating interests, First Nations/Tribes, environmental/conservation non-governmental organizations, local governments and commercial shipping interests. The IJC put forward its preferred plan, the 2007 plan, based on the Study Board’s suggestions, but it was withdrawn due to widespread opposition. A working group appointed by the governments of Canada, the U.S., Ontario, Quebec and New York State, put forward what was known as [Plan 2014](#) (after 14 years of scientific study and public engagement)²⁰ based on the work that had already been completed. The IJC held hearings and technical sessions, the plan received strong opposition from south shore communities and widespread support from other communities along the river, leading the IJC and the independent Public Interest Advisory Group from the International Lake Ontario – St. Lawrence River Study to come to the conclusion that “no plan could satisfy all interests”²¹

To implement the agreements²²:

¹⁶ Nigel Bankes and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), p. 93.

¹⁷ *International Joint Commission’s Advice to Governments on the Recommendations of the International Upper Great Lakes Study: A Report to the Governments of Canada and the United States*, (April 15, 2013), International Joint Commission, p. 3.

¹⁸ *International Lake Ontario – St. Lawrence River Study*, International Joint Commission, <http://www.losl.org/about/about-e.html>, (accessed February 5, 2017).

¹⁹ “The International Joint Commission (IJC) decided prior to the initiation of this Study to have the public represented at the “table” right from the start. The Public Interest Advisory Group (PIAG) had a separate mandate from the IJC, allowing it to act independently. We were an internal “peer review” group for the Study... Another facet of our mandate was to ensure effective communication between the public, which we represented, and the Study and its technical work groups. We provided input to Study decisions and communication and education to the public. We were there at the table for all Study Board discussions. The PIAG assisted the decision process, ensuring that the public input was considered and that the process remained transparent... We have to realize that the Study cannot satisfy the needs of all of the interests all of the time. This is indeed the case as the PIAG as a group does not favor any one candidate plan over another. Communications cannot be an ad hoc procedure. The IJC must commit funds to ensure proper communications of the Board of Control by means of dedicated communication person(s) and budget to allow publication of meetings and other important communications, using techniques developed by PIAG during this Study and other valid methods of ensuring two-way communication”. *Lake Ontario – St. Lawrence River Plan 2014: Protecting against extreme water levels, restoring wetlands and preparing for climate change*, p. 16, International Joint Commission, http://www.ijc.org/files/tiny/mce/uploaded/LOSLR/IJC_LOSR_EN_Web.pdf, (accessed February 5, 2017).

²⁰ *Lake Ontario – St. Lawrence River Plan 2014: Protecting against extreme water levels, restoring wetlands and preparing for climate change*, p. iii, International Joint Commission, http://www.ijc.org/files/tiny/mce/uploaded/LOSLR/IJC_LOSR_EN_Web.pdf (accessed February 5, 2017).

²¹ Nigel Bankes and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), p.98.

²² Both the Lake Superior Order of Approval and the lake Ontario-St. Lawrence Order of Approval create a Board of Control and that the order will be supplemented by a regulation plan or a set of rule curves. Allowing for a degree of adaptability and flexibility. “It is perhaps best to think of the Order of Approval as establishing a set of criteria for the operation of the control structures and the plan of regulation as the

- The Lake Superior Board of Control
 - o Based in part on the recommendations of the Upper Great Lakes Study Board's suggestions the IJC created the [International Great Lakes – St. Lawrence River Adaptive Management Task Team](#) in 2012 which led to the creation of the Great Lakes-St. Lawrence River Adaptive Management Committee. Although the Adaptive management Committee's Canadian members comprise only Federal and Provincial governmental officials, its emphasis on adaptive management could facilitate more comprehensive information management and outreach pursuant to the initiatives laid out by the Upper Great Lakes Study Board.²³
 - o The Duties of the Lake Superior Board of Control include notifying the public and stakeholders of changes of the Lake Superior outflow.²⁴ The Lake Superior Board of Control must report to the IJC semi-annually.
- The Lake Ontario – St. Lawrence River Board
 - o After extensive review, including 6 public hearings, one teleconference, and 5 technical hearings from June to August 2013, the IJC adopted Plan 2014 in [December 2016](#). Responsible for implementing Plan 2014, including adaptive management plans, promoting outreach and engagement with the public and industry, and will meet at least twice a year and (and regular meetings with the public) report at least semi-annually to the IJC.²⁵
 - o The [membership](#) of the International Lake Ontario – St. Lawrence River Board's Canadian delegation includes members of federal and provincial governments as well as power authorities, seaway management corporations and [Stratégies Saint-Laurent](#).

Lessons for Local Governments/Interests related to the CRT:

The Great Lakes levels orders are an example of bargaining for optimal arrangements within the framework of a Treaty as revisions and any associated plan of operations are required to respect treaty priorities, but can incorporate new interests so long as they do not have a significant impact on treaty protected interests.²⁶

scheme by which the Board of Control and the facility operators give effect to those criteria in the actual operation of the structure". Nigel Banks and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), p. 47.

²³ Nigel Banks and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), p. 94-95.

²⁴ *International Joint Commission in the Matter of the Regulation of Lake Superior and the St. Marys River (Dockets 6 and 8) Supplementary Order of Approval 2014*, International Joint Commission, <http://ijc.org/files/dockets/Docket%206/Docket%206-8%20Supplementary%20Order%20of%20Approval%202014-07-17.pdf>, (accessed February 5, 2017).

²⁵ *Regulation Plan 2014 for the Lake Ontario and the St. Lawrence River Compendium Document*, (December 2016), International Joint Commission, http://www.ijc.org/files/tiny_mce/uploaded/Plan2014_CompndiumReport_1.pdf, (accessed February 3, 2017), p.1-4.

²⁶ Nigel Banks and Barbara Cosens, [Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty](#), p. 48-49.

Case Study 4: Souris River Agreement

What?

- Authority under the Boundary Waters Treaty
- “In its report of October 1940 to the governments, the IJC recommended Interim Measures for cross-border sharing of the waters of the Souris River. The governments approved the Interim Measures in 1941. In a further report to governments in 1958, the IJC recommended changes to the 1940 measures”.¹ The Measures were again revised in 1992 and 2000.
- 1989 Treaty Agreement Between Canada and the U.S. for Water Supply and Flood Control in the Souris River Basin.²

Where – What geographic scope and jurisdiction:

“The Souris River originates in the Province of Saskatchewan, passes through the State of North Dakota, and then crosses into the Province of Manitoba before joining the Assiniboine River. Its total length is approximately 435 miles. The river valley is flat and shallow and its semi-arid prairie has been extensively cultivated. Major reservoirs have been constructed in both the U.S. and Canadian portions of the basin, including Boundary, Rafferty and Alameda Reservoirs in Saskatchewan, and Lake Darling in North Dakota. The basin also includes a number of wildlife refuges and small impoundments along the U.S. portion of the river.”³

- International between Canada and the U.S.

Why – Purpose:

- Apportionment of Water resources and flood control of the Souris River Basin between Canada and the U.S.

Who - was Involved:

- Countries – Canada, U.S.
- Provinces/U.S. States – Can. Sask (designated entity), U.S. – North Dakota
- Local governments/Local Interests – Municipality of Souris-Glenwood, Municipality of Two Borders, Watershed group, Ward County, North McHenry County

How - Mechanisms Were Used to Incorporate local interests:

To negotiate the agreement:

- Some public consultation was carried out prior to reconstituting the board in 2006 and 2008 amendment to the treaty.⁴

To Implement the agreement:

- IJC –

¹ International Joint Commission, Souris River, http://ijc.org/en/_isrb, (accessed February 5, 2017).

² Agreement Between the Government of Canada and the Government of the United States of America for Water Supply and Flood Control in the Souris River Basin, E100475 – CTS 1986 No. 36, <http://www.treaty-accord.gc.ca/text-texte.aspx?id=100475> (accessed February 5, 2017).

³ International Joint Commission, Souris River, http://ijc.org/en/_isrb, (accessed February 5, 2017).

⁴ Transboundary Watersheds, First Report to the Governments of Canada and the United States under the Reference of November 19, 1998 with respect to international watershed boards, December 2000. http://www.iatp.org/files/Transboundary_Watersheds.htm (accessed February 6, 2017).

- International Souris River Board (2006 reconstituted):⁵ “The International Souris River Board monitors the apportionment of waters of the Souris River at its two international boundary crossings consistent with 1989 Canada-United States Agreement for Water Supply and Flood Control in the Souris River Basin. The Board also helps implement and review the Joint Water Quality Monitoring Program pursuant to this agreement. In addition, the Board keeps the IJC informed of water use and water-related development activities in the basin”.⁶ The board assists the IJC regarding the prevention and resolution of disputes relating to the transboundary waters of the Souris River basin.⁷
 - o [Members](#) of the board include representatives of local government (Municipality of Souris-Glenwood, Municipality of Two Borders), academia, Upper Souris Watershed Association.⁸

Lessons for Local Governments/Interests related to the CRT:

Small scale – involves local municipal government – essential authority of International Souris River Board is to monitor and report to the IJC and resolve disputes. Limited capacity.

⁵ International Joint Commission, Souris River, http://ijc.org/en/_isrb (accessed February 5, 2017).

⁶ International Joint Commission, Souris River, International Souris River Board, http://www.ijc.org/en/_Souris_River_Basin (accessed February 5, 2017).

⁷ International Joint Commission, Souris River, http://ijc.org/en/_isrb, (accessed February 5, 2017).

⁸ Upper Souris Watershed Association, http://www.uppoursiswatershed.ca/watershed_info.php (accessed February 5, 2017).

Case Study 5: Colorado River Compact/Glen Canyon Dam Adaptive Management Program (GCDAMP)

What?¹

- The Colorado River Compact of 1922² – forms the cornerstone of the “Law of the River”. Negotiated by the seven Colorado River Basin States and the federal government, and apportions water between the upper and lower basin States. This forms a central piece to the backdrop of the GCDAMP.
- Treaty of February 3, 1944 between the United States and Mexico for the Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande, allocates and governs water on the Colorado between the U.S. and Mexico and provides an international backdrop to the GCDAMP.
- *Grand Canyon Protection Act*³ of 1992 (Public Law 102-575)⁴
- **Glen Canyon Dam Adaptive Management Program** (GCDAMP), created pursuant to the *Grand Canyon Protection Act of 1992* and the 1989 Environmental Impact Statement (EIS) recommendation. Although this is not an example of an international treaty it does occur on a river basin governed in some respects by the international treaty between the U.S. and Mexico. The existing law of the Colorado River is complex but allows considerable discretion to the U.S. Bureau of Reclamation.

Where – What geographic scope and jurisdiction:

- In Arizona south of the Utah border on the Colorado River downstream of Lake Powell and upstream of the Grand Canyon.
- Not strictly International in scope the Glen Canyon Dam occurs on an international watercourse, the Colorado River.

Why – Purpose:

- “provides for long-term research and monitoring of downstream resources. The scientific information obtained under the Adaptive Management Program is used as the basis for recommendations for dam operations and management actions.”⁵

Who - was Involved:

- Countries: U.S., Mexico⁶
- U.S. States – under the Colorado River Compact of 1922 - upper basin: Colorado, Utah, Wyoming, New Mexico, Arizona; lower basin: California, Arizona, Nevada.
- Glen Canyon Dam – operated by the U.S. Bureau of Reclamation⁷

¹ *Glen Canyon Dam Adaptive Management Program*, U.S. Department of the Interior, Bureau of Reclamation, Upper Colorado Region, <https://www.usbr.gov/uc/rm/amp/>, (accessed February 5, 2017).

² *The Colorado River Compact, 1922*, U.S. Department of the Interior, Bureau of Reclamation, Lower Colorado Region, <https://www.usbr.gov/lc/region/g1000/pdffiles/crcompct.pdf>, (accessed February 6, 2017).

³ *Reclamation Projects Authorization and Adjustment Act of 1992, Title XVIII – Grand Canyon Protection Section 1901*. Short Title, *Grand Canyon Protection Act of 1992*, U. S. Department of the Interior, Bureau of Reclamation, Upper Colorado Region, <https://www.usbr.gov/uc/legal/gcpa1992.html>, (accessed February 5, 2017).

⁴ *H.R.429 – Reclamation Projects Authorization and Adjustment Act of 1992, Public Law No: 102-575*, Congress.gov, Legislation, <https://www.congress.gov/bill/102nd-congress/house-bill/429>, (accessed February 5, 2017).

⁵ Richard Kyle Paisley, Matthew J. McKinney and Molly Smith Stenovec, *A Sacred Responsibility*, Universities Consortium on Columbia River Governance, (2015), p. 172, (accessed February 3, 2017).

⁶ *The Treaty of February 3, 1944*, International Boundary & Water Commission, United States and Mexico, United States Section, http://www.ibwc.gov/Treaties_Minutes/treaties.html, (accessed February 5, 2017).

⁷ *Glen Canyon Dam*, U.S. Department of the Interior, Bureau of Reclamation, Upper Colorado Region, <https://www.usbr.gov/uc/rm/crsp/gc/>, (accessed February 5, 2017).

- Local governments/Local Interests

How - Mechanisms Were Used to Incorporate local interests:

To negotiate the agreement:

- The EIS conducted under the *Grand Canyon Protection Act of 1992* required public comment and called for the establishment of the GCDAMP “including an entity for consultation with basin interests – the Adaptive Management Working Group (AMWG)”⁸.

To Implement the agreement:

- The GCGAMP “provides for long-term research and monitoring of downstream resources. The scientific information obtained under the Adaptive Management Program is used as the basis for recommendations for dam operations and management actions.”⁹
- The AMWG is required to be broadly representative and its actions open to the public. It was established to provide advice and recommendations to the Secretary of the interior on program framework, goals, actions, and monitoring, facilitate stakeholder input, and advise on impacts on cultural resources.
- Membership¹⁰ in the AMWG includes Native American Tribes located in the affected area, representatives of the basin States, environmental organizations, relevant State and Federal agencies, and recreation and power interests.

Lessons for Local Governments/Interests related to the CRT:

- AMWG is an advisory body employing adaptive management techniques that includes representation of both sovereign and major interests.
- The Bureau of Reclamation and the U.S. Department of the Interior have clear authority but domestic law of the sovereigns is used to allow input, not only of sovereigns but of major interests.¹¹

Copied From *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*:

“Glen Canyon Dam Adaptive Management Program (GCDAMP)

The GCDAMP is an experimental program in the United States to alter release from a federal dam and measure results for sediment transport and deposition downstream. It provides an example of the use of adaptive management to experiment with river flows in the face of uncertainty regarding ecological outcomes. It illustrates the following key lessons: that large-scale adaptive management can be implemented through an institutional design that provides clear authority to the operating entity while using the domestic law of the respective countries to assure input by sovereigns and major interests; and that large-scale adaptive management is probably appropriate only in situations where a clear objective for experimentation and the nature of the experiment are agreed upon through an initial political process. In addition, it provides a model for formation of an advisory body that includes both sovereign and major

⁸ *Glen Canyon Dam: Adaptive Management Program, Adaptive Management Working Group*, U.S. Department of the Interior, Bureau of Reclamation, Upper Colorado Region, <http://www.gcdamp.gov/aboutamp/member.html>, (accessed February 3, 2017). Cited in Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, For the Program on Water Issues, Munk School of Global Affairs at the University of Toronto, (2014), p.67, <http://powi.ca/wp-content/uploads/2014/10/Protocols-for-Adaptive-Water-Governance-Final-October-14-2014.pdf>, (accessed February 1, 2017).

⁹ Richard Kyle Paisley, Matthew J. McKinney and Molly Smith Stenovec, *A Sacred Responsibility*, Universities Consortium on Columbia River Governance, (2015), p. 172, (accessed February 3, 2017).

¹⁰ *Glen Canyon Adaptive Management Program, Adaptive Management Working Group Membership*, U.S. Department of the Interior, Bureau of Reclamation, Upper Colorado Region, https://www.usbr.gov/uc/rm/amp/amwg/amwg_members.html (accessed February 4, 2017).

¹¹ Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, p.68.

interest representation. One example of an area in which the Columbia River Basin might utilize this approach is with respect to the re-introduction of salmon above Grand Coulee”.¹²

¹² Nigel Bankes and Barbara Cosens, [*Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*](#), p.ix.

Case Study 6: St. Mary and Milk Rivers

What?

- The Boundary Waters Treaty between Canada and the U.S. Article VI affects the basic apportionment between the United States and Canada of the St. Mary and the Milk rivers. This has been supplemented by a 1921 Order of the Commission and implemented further by the Procedures Manual of water engineers of the two countries called the Accredited Officers.

Where – What geographic scope and jurisdiction:

- The Milk and St. Mary rivers are shared between the U.S. and Canada, between the state of Montana and the provinces of Alberta and Saskatchewan.¹ Both rivers flow through arid areas that have high demand for water diversions.

Why – Purpose:

- Apportionment of the Milk and St. Mary rivers.

Who - was Involved:

- Countries – Canada and the U.S.
- Provinces/U.S. States – Can.: Alberta, Saskatchewan; U.S.: Montana.
- Local governments/Local Interests – [Montana-Alberta Water Management Initiative \(WMI\)](#)², local government³, local groups.⁴
- First Nations, Métis and Tribes – significant Tribal and First Nations interests in these shared resources⁵

How - Mechanisms Were Used to Incorporate local interests:

To negotiate the agreement:

- Public processes/hearings have been held regarding the initial 1921 order and subsequent disputes before the IJC.⁶

¹ Nigel Bankes and Barbara Cosens, *Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*, For the Program on Water Issues, Munk School of Global Affairs at the University of Toronto, (2014), p.42-44, <http://powi.ca/wp-content/uploads/2014/10/Protocols-for-Adaptive-Water-Governance-Final-October-14-2014.pdf>, (accessed February 1, 2017).

² “Cooperative consideration of water apportionment refinements offers opportunities for mutually advantageous outcomes for the involved jurisdictions and a means for addressing challenges. Specifically, the Water Management Initiative (WMI), established by Alberta and Montana in 2009, holds promise for each jurisdiction to better share waters under the framework provided by the BWT. The WMI is a joint initiative of local water users and government officials. The WMI provides a useful vehicle for the cooperation necessary to achieve mutual benefits, bringing the state and province to the forefront; the treaty and order provide a framework for federal and IJC involvement in issues that cannot be resolved at the more local level”. *Policy Brief: Apportionment of the St. Mary and Milk Rivers*, Program on Water Governance, Institute for Resources, Environment, and Sustainability, The University of British Columbia, p. 2, <http://watergovernance.ca/wp-content/uploads/2012/06/wwb.stmary.milkriver.pdf>, (accessed February 6, 2017).

³ (ie) city of Havre.

⁴ For example, the Milk River Basin Water Management Committee, Milk River International Alliance, Water Users Association of the Lower Milk River, *See International Joint Commission, Milk River Basin Water Management Committee, Submission to the International Joint Commission with respect to the Apportionment of the St. Mary and Milk Rivers*, http://ijc.org/rel/pdf/45_stmary-milk_letter.pdf, (accessed February 6, 2017). And R. Halliday & G. Faveri, *The St. Mary and Milk Rivers: The 1921 Order Revisited*, 32 CANADIAN WATER RESOURCES JOURNAL/REVUE CANADIENNE DES RESSOURCES HYDRIQUES 75, (2007), <http://www.tandfonline.com/doi/pdf/10.4296/cwrj3201075>, (accessed February 6, 2017).

⁵ *See U.S. v. Winters*, 207 US 564 (1908).

- In 2003 the governor of Montana requested the IJC conduct a review of the 1921 Order. The IJC formed a St. Mary / Milk Rivers Administrative Measures Task Force which produced a final report in 2006, which included discussions with local water users and all meetings of the task force were open to the public and advertised through local media and scheduled public outreach sessions.⁷
- The IJC requested that Alberta and Montana engage in high level, cross-border discussions regarding the management of shared water, causing the two governments to create the Water Management Initiative (WMI). The WMI explores mutually beneficial solutions for the optimal use of these shared waters. This Initiative included local water users and interests that will be directly impacted by the initiative.

To Implement the Agreement:

- Decision-making has tended to rest with the IJC, federal parties, Accredited Officers and provincial and state governments.
- Practice has established the use of more informal means of management of optimizing agreements and *ad hoc* arrangements (on the Eastern tributaries) that modify what would be the outcome based on a strict adherence to the 1921 Order.
- The WMI seems to be a promising indication of local interest involvement, although its effects largely remain to be seen.
- “Level⁸ four is likely to involve some of the same people as level three but may also involve actual users of the water (e.g. irrigation districts and municipalities) and indeed these are precisely the people one would expect to have the knowledge basis and experience to imagine different win-win futures. This is surely what we should aim for.”⁹

Lessons for Local Governments/Interests related to the CRT:

Smaller in scale of the water resources as well as the interests of the Columbia River, exploratory discussions to enhance flexibilities within the 1921 Order and change the terms of the Order have represented more of a “bottom-up” rather than a federal-driven “top-down” approach to finding solutions,

⁶ See R. Halliday & G. Favari, *The St. Mary and Milk Rivers: The 1921 Order Revisited*, 32 CANADIAN WATER RESOURCES JOURNAL/REVUE CANADIENNE DES RESSOURCES HYDRIQUES 75, (2007), <http://www.tandfonline.com/doi/pdf/10.4296/cwrj3201075>, (accessed February 6, 2017).

⁷ “Outreach sessions were attended by the Co-Chairs, and in some instances, by some of the Task Force membership. Outreach sessions included: Blackfeet Tribal Council in Cut Bank, Montana on September 26, 2005; Milk River Joint Board of Control in Malta, Montana on November 15, 2005; St. Mary and Milk River Water Users in Milk River, Alberta on November 16, 2005; and, members of the Assiniboine-Gros Ventre Tribal Council in Billings, Montana on March 3, 2006. No sessions were held in Saskatchewan since the work of the Task Force focused more directly on the St. Mary River and Milk River, rather than the Eastern Tributaries. In all instances, interest by the attendees has been keen and the efforts of the Task Force have been well-received. *International St. Mary - Milk Rivers Administrative Measures Task Force: Report to the International Joint Commission*, April 2006, International Joint Commission, p. 9, <http://ijc.org/rel/pdf/SMMRAM.pdf>, (accessed February 6, 2017).

⁸ “I see these norms in the form of a hierarchy which looks something like this: 1. Article VI of the BWT, 2. The 1921 Order, 3. The administrative measures needed to implement the 1921 order (e.g. how we go about doing natural flow calculations), and 4. Optimizing agreements such as the Letter of Intent and similar (but less formal) arrangements on the Eastern Tributaries that create win-win solutions and which, in effect, modify (at least pro tem) the outcome that would otherwise arise from the strict application of the 1921 Order.” Nigel Bankes, *Comments on the International St. Mary Milk Rivers Administrative Measures Task Force, Report to the International Joint Commission*, April 2006, p. 2, http://www.law.ucalgary.ca/files/law/comments_on_the_international_st_mary_milk_admin_measures_report.pdf, (accessed February 6, 2017).

⁹ Nigel Bankes, *Comments on the International St. Mary Milk Rivers Administrative Measures Task Force, Report to the International Joint Commission*, April 2006, p. 9.

placing responsibility on the governments of Alberta and Montana who have included representatives of those most affected within their respective teams.¹⁰

¹⁰ Nigel Bankes and Barbara Cosens, [*Protocols for Adaptive Water Governance: The Future of the Columbia River Treaty*](#), p.44.

Case Study 7: Murray Darling River

What?

- 1914 the Murray Waters Agreement comprised a package of water-sharing rules, provision for jointly-funded water development infrastructure (dams, locks and weirs), and cost-sharing rules.
- In 1988 the Murray-Darling Basin Commission (MDBC) was formed under a new Murray-Darling Basin Agreement and took over the transboundary water management role plus took on a new responsibility for coordinating integrated catchment management across the whole Basin.
- 2007 federal *Water Act* – Murray Darling Agreement

Where – What geographic scope and jurisdiction:

- **The Murray-Darling is a significant river basin in Australia. It flows through South-Eastern Australia into the sea. Although it is not international the sovereignty of Australian states means that the water-sharing situation is not dissimilar to an international basin.**
- Most of the Murray-Darling Basin is semi-arid and some 86% of the area contributes no runoff.¹
- Federal style, three-tier system of popularly elected government.²
 - o The national (federal) government deals mainly with external and matters of national significance.
 - o Under the 1901 Constitution the state governments have sovereign powers over land and water and deal with law and order, health, education, transport and so forth.³
 - o Local government in this system is responsible for water and drainage services, local roads, local amenities and the like.⁴

Why – Purpose:

- **Original 1914:** water sharing, joint works, and cost sharing.
- Murray Darling Agreement⁵ - "promote and co-ordinate effective planning and management for the equitable, efficient and sustainable use of the water and other natural resources of the Murray–Darling Basin, including by implementing arrangements agreed between the Contracting Governments to give effect to the Basin Plan, the Water Act and state water entitlements."

Who - was Involved:

- Federal Government of Australia - Commonwealth
- States: New South Wales, Victoria, Queensland

¹ Brian Haisman, Murray-Darling River Basin Case Study Australia, Background Paper, December 2004, World Bank, p.ii, http://siteresources.worldbank.org/INTSAREGTOPWATRES/Resources/Australia_MurrayDarlingFINAL.pdf, (accessed February 5, 2017).

² Brian Haisman, Murray-Darling River Basin Case Study Australia, Background Paper, December 2004, World Bank, p.i, http://siteresources.worldbank.org/INTSAREGTOPWATRES/Resources/Australia_MurrayDarlingFINAL.pdf, (accessed February 5, 2017).

³ Brian Haisman, Murray-Darling River Basin Case Study Australia, Background Paper, December 2004, World Bank, p.i, http://siteresources.worldbank.org/INTSAREGTOPWATRES/Resources/Australia_MurrayDarlingFINAL.pdf, (accessed February 5, 2017).

⁴ Brian Haisman, Murray-Darling River Basin Case Study Australia, Background Paper, December 2004, World Bank, p.i, http://siteresources.worldbank.org/INTSAREGTOPWATRES/Resources/Australia_MurrayDarlingFINAL.pdf, (accessed February 5, 2017).

⁵ *Water Act 2007*, C2014C00194, Schedule 1 Murray-Darling Agreement, https://www.legislation.gov.au/Details/C2014C00194/Html/Text#_Toc390870752, (accessed February 6, 2017).

- Local governments/Local Interests⁶ – Many municipal and local governments
- Local Interests – farming, irrigation,
- Aboriginal groups – Common

How - Mechanisms Were Used to Incorporate local interests:⁷

To negotiate the agreement:⁸

- Drought fueled desire to collaborate.
- “Irrigator groups⁹ were skeptical about the Australian government takeover of MDB management powers. Danny O’Brian, CEO of the National Irrigators Council, said the Council did not support a full federal takeover because there was no evidence that shifting management from one group of politicians and bureaucrats to another would improve the operation of the system.”¹⁰
- Due to the adverse socioeconomic effects on farming communities and the lack of demonstrated environmental benefits of the Murray-Darling Basin Plan, Irrigators organized themselves across the Basin in strong protests against the first draft.¹¹ These protests prompted the Australian government to undertake further socioeconomic and environmental studies and a comprehensive program of community consultation, which led to many revisions in the final version of the plan.”¹²
- Environmental and scientific groups – “supported Australian government intervention to provide specific water entitlements and allocations for the environment and to restrain further allocations for irrigation and other extractive uses.”¹³ To press their case for increased environmental allocations these Environmental groups formed alliances with independent experts, such as the Wentworth Group of Concerned Scientists, generally relying on media, lobbying, and submissions to advance their views.¹⁴

⁶ Karen Hutchinson, a key advocate for basin residents during the development of the basin plan, Murray-Darling Basin Authority, Murray Darling Community Committee, <http://www.mdba.gov.au/about-us/governance/basin-community-committee>, (accessed February 5, 2017).

⁷ Andrew Ross and Daniel Connell, “The evolution and performance of river basin management in the Murray-Darling Basin,” 21 *ECOLOGY AND SOCIETY* (2016), www.ecologyandsociety.org/vol21/iss3/art29/ES-2016-8664.pdf, (accessed February 6, 2017).

⁸ John Scanlon, “A hundred years of negotiations with no end in sight: Where is the Murray Darling Basin Initiative leading us?” keynote Address, Environment Institute of Australia and New Zealand Conference, Adelaide, Australia (2006), http://www.myong.net.au/water/policies/Scanlon_060731.pdf, (accessed February 6, 2017)

⁹ “Urban water use in the MDB is a relatively small proportion of the total. The largest cities in the MDB states are on the coast and outside the MDB catchment areas.” Andrew Ross and Daniel Connell, “The evolution and performance of river basin management in the Murray-Darling Basin,” 21 *ECOLOGY AND SOCIETY* (2016), www.ecologyandsociety.org/vol21/iss3/art29/ES-2016-8664.pdf, (accessed February 6, 2017).

¹⁰ Andrew Ross and Daniel Connell, “The evolution and performance of river basin management in the Murray-Darling Basin,” 21 *ECOLOGY AND SOCIETY* (2016), www.ecologyandsociety.org/vol21/iss3/art29/ES-2016-8664.pdf, (accessed February 6, 2017).

¹¹ Andrew Ross and Daniel Connell, “The evolution and performance of river basin management in the Murray-Darling Basin,” 21 *ECOLOGY AND SOCIETY* (2016), www.ecologyandsociety.org/vol21/iss3/art29/ES-2016-8664.pdf, (accessed February 6, 2017).

¹² Andrew Ross and Daniel Connell, “The evolution and performance of river basin management in the Murray-Darling Basin,” 21 *ECOLOGY AND SOCIETY* (2016), www.ecologyandsociety.org/vol21/iss3/art29/ES-2016-8664.pdf, (accessed February 6, 2017).

¹³ Andrew Ross and Daniel Connell, “The evolution and performance of river basin management in the Murray-Darling Basin,” 21 *ECOLOGY AND SOCIETY* (2016), www.ecologyandsociety.org/vol21/iss3/art29/ES-2016-8664.pdf, (accessed February 6, 2017).

¹⁴ Andrew Ross and Daniel Connell, “The evolution and performance of river basin management in the Murray-Darling Basin,” 21 *ECOLOGY AND SOCIETY* (2016), www.ecologyandsociety.org/vol21/iss3/art29/ES-2016-8664.pdf, (accessed February 6, 2017).

To implement the agreement:¹⁵

- Basin wide management - Murray-Darling Basin Plan 2012¹⁶ - Now the Murray-Darling Basin Authority¹⁷ *federal Water Act 2007(amended in 2008)* – reports to the Australian Government Minister for Agriculture.
 - o MDBA – Prepare Basin Plan – measure and monitor water quantity and quality – conduct research – develop measures for equitable and sustainable use – data exchange – educate public
 - Chair chief exec – 4 full time members – consisting of government, academics, agricultural professionals, water irrigation CEO (rural).
 - o Ministerial Council – ministers from states and commonwealth chair – “Ministerial Council has policy and decision-making roles for matters such as state water shares, and the funding and delivery of natural resource management programs, as set out in the Murray–Darling Basin Agreement. The Authority is required to prepare an annual corporate plan for approval by the Ministerial Council in relation to these matters:
 - to consider and determine outcomes and objectives on major policy issues of common interest on the management of water and other natural resources of the Murray–Darling Basin
 - to determine matters specified in the Murray–Darling Basin Agreement
 - to approve the annual corporate plan, budget and asset management plan prepared by the Authority
 - agree to amendments to the Murray–Darling Basin Agreement.”¹⁸
 - o Basin Official Committee – This committee facilitates communication and cooperation between between commonwealth and the various states:
 - “to advise the Authority on engaging the Basin states in preparing the Basin Plan and proposed amendments of the Basin Plan
 - to advise the Ministerial Council in relation to outcomes and objectives on major policy issues on the management of water and other natural resources of the Basin
 - exercise responsibility for high level decision making regarding river operations, including setting objectives and outcomes to be achieved by the authority in River Murray operations.”¹⁹
 - o Basin Community Committee²⁰ – 12 members from aboriginal, community irrigation and farming:
 - The Basin Community Committee (BCC) was established under Section 202 of the Water Act 2007 with the purpose of providing a community perspective for the Authority and the Ministerial Council on a wide range of water resource, environmental, cultural and socioeconomic matters.²¹

¹⁵ Murray-Darling Basin Authority, How Local Communities influence Basin Plan implementation, <http://www.mdba.gov.au/sites/default/files/pubs/Summary%20-%20How%20local%20communities%20influenced%20Basin%20Plan%20implementation.pdf>, (accessed February 6, 2017).

¹⁶ Government of Victoria, <http://www.depi.vic.gov.au/water/rural-water-and-irrigation/murray-darling-basin/murray-darling-basin-plan>, (accessed February 4, 2017).

¹⁷ Murray-Darling Basin Authority, <http://www.mdba.gov.au/about-us>, (accessed February 6, 2017).

¹⁸ Murray-Darling Basin Authority, Ministerial Council, <http://www.mdba.gov.au/about-us/governance/ministerial-council>, (accessed February 10, 2017).

¹⁹ Murray-Darling Basin Authority, Officials Committee, <http://www.mdba.gov.au/about-us/governance/basin-officials-committee> (accessed February 10, 2017).

²⁰ Murray-Darling Basin Authority, Murray Darling Community Committee, <http://www.mdba.gov.au/about-us/governance/basin-community-committee>, (accessed February 5, 2017).

²¹ Murray-Darling Basin Authority, Murray Darling Community Committee, <http://www.mdba.gov.au/about-us/governance/basin-community-committee>, (accessed February 5, 2017).

- Members for the BCC are selected on the basis of their interest and/or expertise “in community, water use, environmental water management, Indigenous or local government matters.”²²
- The members of the BCC also function as key local contacts for the Authority, reporting on “emerging community concerns and issues around [Basin Plan implementation](#), as well as provide information to Basin communities on our programs. The BCC also engages with other advisory communities established by the Authority with regard to the Basin Plan and its implementation.”²³
- According to the Terms of Reference, “the role of the Committee is to advise on:
 - community matters relating to the Basin water resources
 - matters referred to the BCC by the Authority.”²⁴
- The BCC is required to form irrigation, environmental water and Indigenous water subcommittees to assist in its advisory role. “The BCC operates these committees to better inform any advice to the Authority and Ministerial Council.”²⁵
- Advisory Committee on Social, Economic and Environmental Sciences.
 - The role of this committee is to “provide strategic advice on science and knowledge to underpin the implementation of an adaptive Basin Plan.”²⁶
 - The committee consists of “6 members with diverse backgrounds - economics, hydrology, ecology and resilience, water governance and law, sociology and sustainable systems.”²⁷
 - The Committee “[t]akes advice from other high level advisory committees such as the community committee.”²⁸
- Basin Implementation Committee.
 - Is a high level forum allowing governments to “monitor, review and make decisions about implementing the Agreement, including ways of working with communities and a forum to consult with states and Commonwealth Environmental Water Office.”²⁹ One official from each Basin state Dept of Agr and water, CEWO and the MDBA who chairs the committee.³⁰
- Northern Basin Advisory Committee – special social economic and cultural issues.³¹
- Partnership and engagement website listing stakeholders and partners.³²

²² Murray-Darling Basin Authority, Murray Darling Community Committee, <http://www.mdba.gov.au/about-us/governance/basin-community-committee>, (accessed February 5, 2017).

²³ Murray-Darling Basin Authority, Murray Darling Community Committee, <http://www.mdba.gov.au/about-us/governance/basin-community-committee>, (accessed February 5, 2017).

²⁴ Murray-Darling Basin Authority, Murray Darling Community Committee, <http://www.mdba.gov.au/about-us/governance/basin-community-committee>, (accessed February 5, 2017).

²⁵ Murray-Darling Basin Authority, Murray Darling Community Committee, <http://www.mdba.gov.au/about-us/governance/basin-community-committee>, (accessed February 5, 2017).

²⁶ Murray-Darling Basin Authority, Social, Economic and Environmental Sciences, <http://www.mdba.gov.au/about-us/governance/advisory-committee-social-economic-environmental-sciences> (accessed February 10, 2017).

²⁷ Murray-Darling Basin Authority, Social, Economic and Environmental Sciences, <http://www.mdba.gov.au/about-us/governance/advisory-committee-social-economic-environmental-sciences> (accessed February 10, 2017).

²⁸ Murray-Darling Basin Authority, Social, Economic and Environmental Sciences, <http://www.mdba.gov.au/about-us/governance/advisory-committee-social-economic-environmental-sciences> (accessed February 10, 2017).

²⁹ Murray-Darling Basin Authority, Basin Implementation Committee, <http://www.mdba.gov.au/about-us/governance/basin-plan-implementation-committee>, (accessed February 10, 2017).

³⁰ Murray-Darling Basin Authority, Basin Implementation Committee, <http://www.mdba.gov.au/about-us/governance/basin-plan-implementation-committee>, (accessed February 10, 2017).

³¹ Murray-Darling Basin Authority, Northern Basin Advisory Committee, <http://www.mdba.gov.au/about-us/governance/northern-basin-advisory-committee>, (accessed February 10, 2017).

- “To stay connected with people living and working in the Basin to gain the full range of perspectives.
- To increase people’s understanding of the Basin Plan issues and the Basin Plan implementation process.
- To create opportunities for people to provide their local knowledge to inform our work.
- To increase people’s confidence in our planning and engagement processes by following our engagement principles.
- To thoroughly consider, acknowledge and value people’s contributions.”³³

Lessons for Local Governments/Interests related to the CRT:

- Not International although the Australian Federal system with strong state government autonomy has some similarities to an international arrangement. Smaller in volume and population as well. Became very decentralized but now has recentralized towards a more Basin wide management approach.
- “In this case, the river basin organization (RBO) includes several components: a political or policy-making body, an executive, an administrative body, and a stakeholder consultative body.”³⁴
- Community Board is Advisory.
- Science and executive bodies are separate.
- More centralized than the CRT – Commonwealth reassumed jurisdiction and coordination of state parties.

³² Murray-Darling Basin Authority, Murray Darling Partnerships and engagement, <http://www.mdba.gov.au/about-us/partnerships-engagement>, (accessed February 5, 2017).

³³ Murray-Darling Basin Authority, Murray Darling Partnerships and engagement, <http://www.mdba.gov.au/about-us/partnerships-engagement>, (accessed February 5, 2017).

³⁴ Andrew Ross and Daniel Connell, “The evolution and performance of river basin management in the Murray-Darling Basin,” 21 *ECOLOGY AND SOCIETY* (2016), www.ecologyandsociety.org/vol21/iss3/art29/ES-2016-8664.pdf, (accessed February 6, 2017).