

Updates

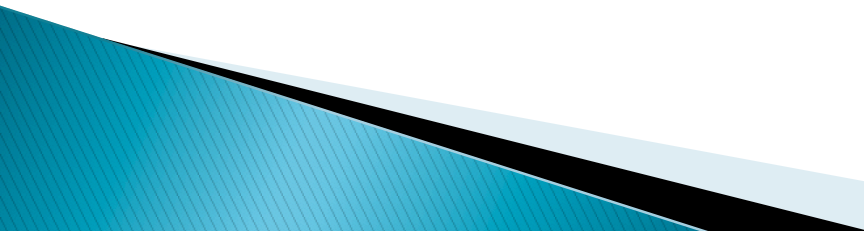
- ▶ Field trip
- ▶ L. Superior T-shirts:
number and sizes



- ▶ Discussion of seminar topics – selection needed
Bulletin Board
- ▶ John Jereczek of Minnesota Department of
Natural Resources speaks on coastal health,
culverts and other barriers to fish passage.
12 noon to 1:30 p.m. on Monday, October 5th

RC 3000

Outline

- ▶ Historical treaties
 - ▶ Introduction to some current air quality issues
 - In a sense – a treaty that did not happen yet
 - ▶ International Joint Commission
 - ▶ Lake Superior Regulation Plan 2012
- 



Saturday September 26, 2015, 07:48 EDT
Source: <http://waqi.info/>

Global Air pollution Data – in real time

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely to be affected.
Hazardous	301 to 500	Health alert: everyone may experience more serious health effects

Air Quality

- Air pollution is responsible for about 3.3 million premature deaths every year
- Based in Beijing: information from more than 8,000 government monitoring stations across 1,000 cities
- Colour-codes based on EPA Agency's Air Quality Index scale (green = good; maroon = hazardous)
- Refreshes every 15 minutes to relay the latest breathing conditions.

Example: Quebec City

Updated on Saturday 6:00

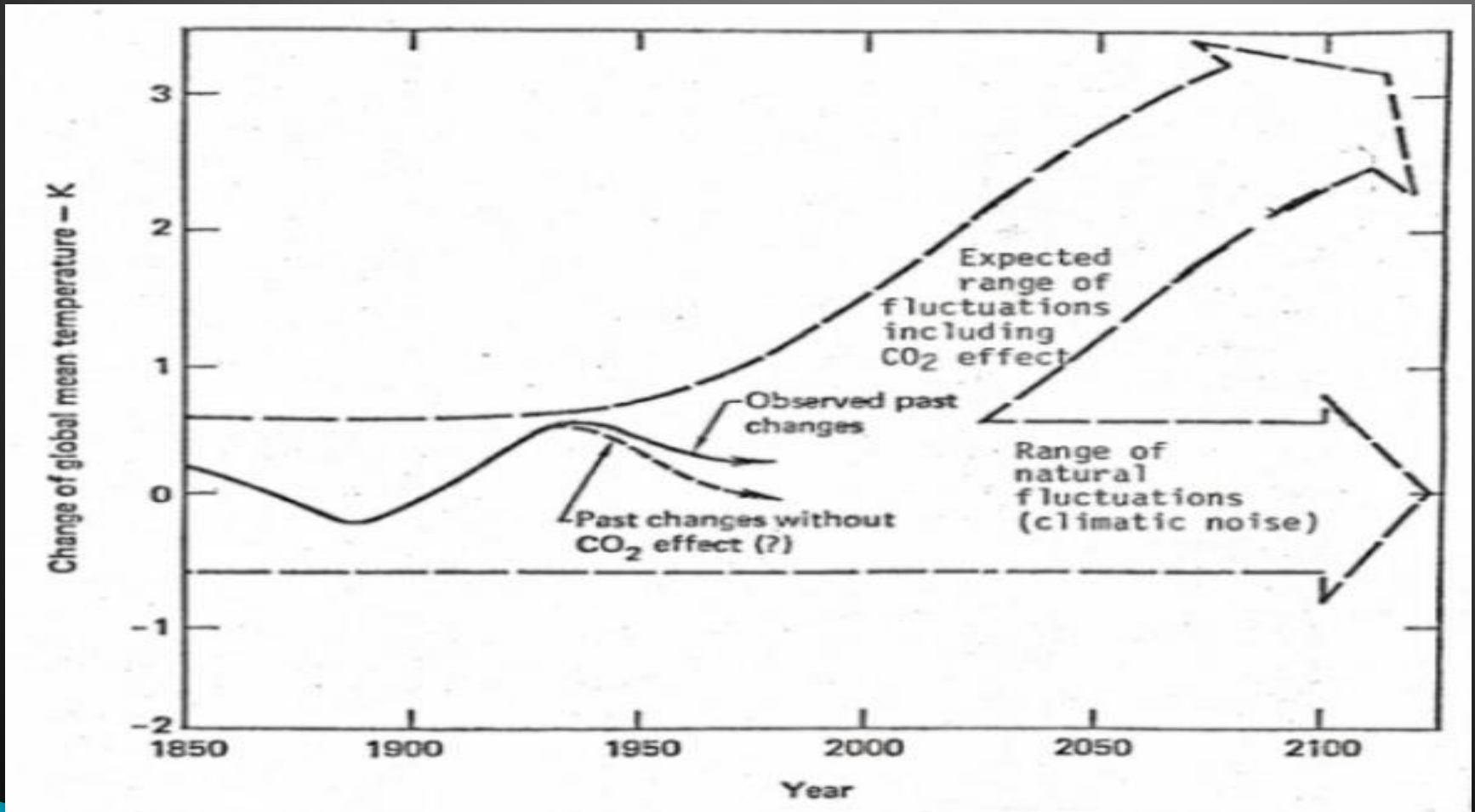
[Click here to view the full report](#)



- ▶ PM2.5 AQI Québec – secteur du Vieux-Limoilou, Quebec, Canada PM25 (fine particulate matter) Environnement au Québec. Values are converted to the US EPA AQI standard.
- ▶ O3 AQI Québec – O3 (ozone) Environnement au Québec.
- ▶ NO2 AQI Québec – (nitrogen dioxide) measured by Environnement au Québec. Values are converted to the US EPA AQI standard.

Anthropogenic Climate Change

Who knew what and when?



Graph from Exxon documents in 1981

- ▶ The graph depicts how Exxon scientists were projecting climate change/global warming with continued release of the greenhouse gas carbon dioxide (CO₂) into the atmosphere.
- ▶ **ExxonMobil executives** were informed by their own science division, that climate change impacts could be **“catastrophic” and potentially “irreversible”** unless there were major reductions in fossil fuel burning
- ▶ A corporate discussion on carbon dioxide and climate change was issued in 1982: Marked “not to be distributed externally,” it was “given wide circulation to Exxon management.” The company recognized that heading off global warming **“would require major reductions in fossil fuel combustion.”**

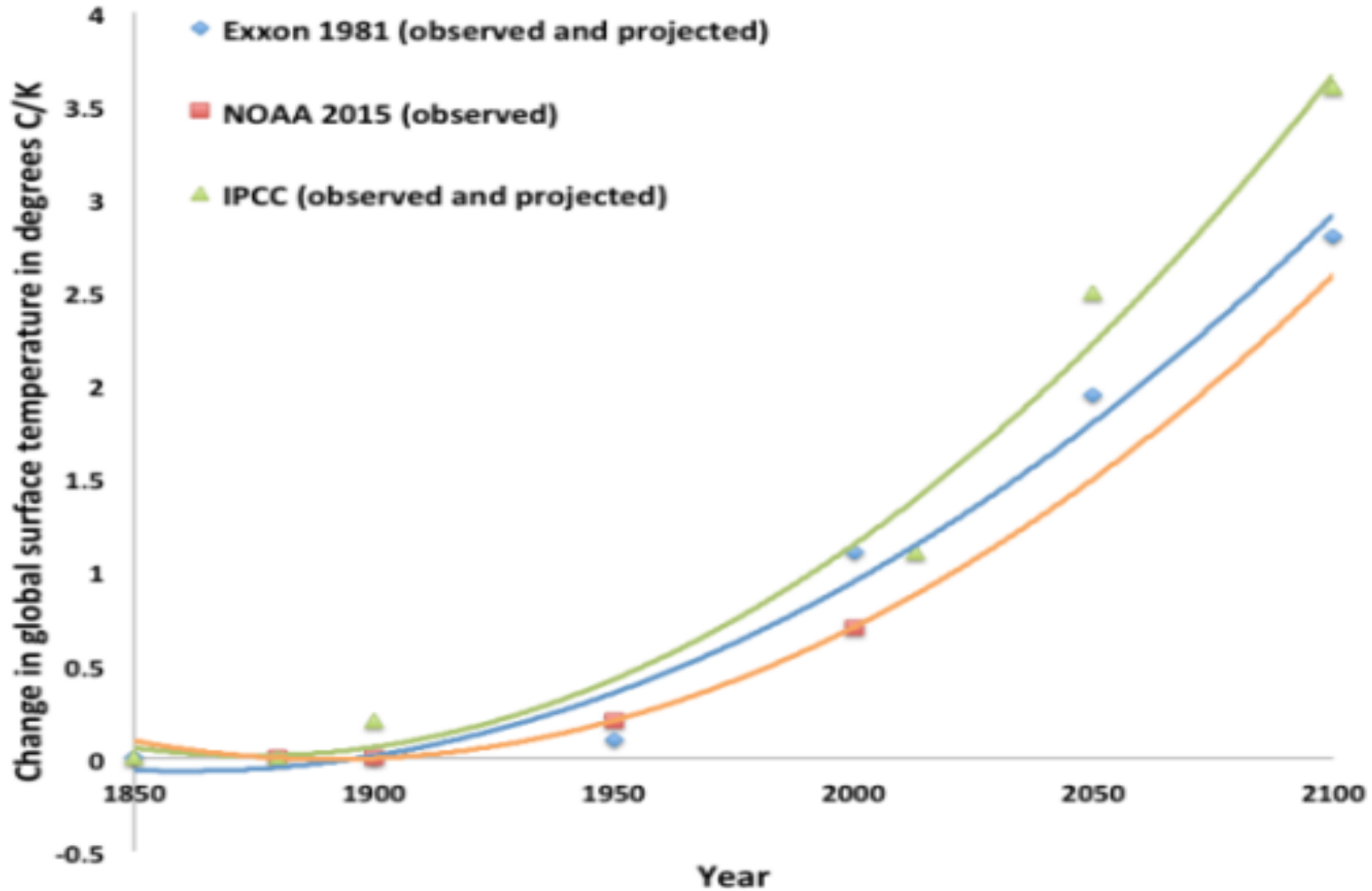
- ▶ Unless that happened, “***there are some potentially catastrophic events that must be considered,***” citing independent experts. “**Once the effects are measurable, they might not be reversible.**”
- ▶ **Staff scientist Roger Cohen repeated this** in a September 1982 memo and warned that publication might attract media attention because of the “connection between Exxon’s major business and the role of fossil fuels in contributing to the increase of atmospheric CO₂.” Nevertheless, he recommended publication.
- ▶ Our “**ethical responsibility** is to permit the publication of our research in the scientific literature. Indeed, to do otherwise would be a breach of Exxon’s public position and ethical credo on honesty and integrity.” (Cohen, 1982)

- ▶ ExxonMobil chief executives could have heeded that advice. They could have gone down in history as heroes who helped save the planet from the ravages of climate change.
- ▶ But this was not to be.



Global Warming: What Did We Know And When Did We Know It?

Comparing three representations of global warming through the end of the 21st century.



The Royal Proclamation of 1763 states that

...any Lands beyond the Heads or Sources of any of the Rivers which fall into the Atlantic Ocean from the West and North West, or upon any Lands whatever, which, not having been ceded to or purchased by Us as aforesaid, are reserved to the said Indians, or any of them.

And We do further declare it to be Our Royal Will and Pleasure present as aforesaid, to reserve under our Sovereignty, Protection, and Dominion, for the use of the said Indians, all the Lands and Territories not included within the Limits of Our said Three new Governments, or within the Limits of the Territory granted to the Hudson's Bay Company, as also all the Lands and Territories lying to the Westward of the Sources of the Rivers which fall into the Sea from the West and North West as aforesaid.

Historical Treaties that apply to Lake Superior Basin

Graham Saunders
Lakehead University

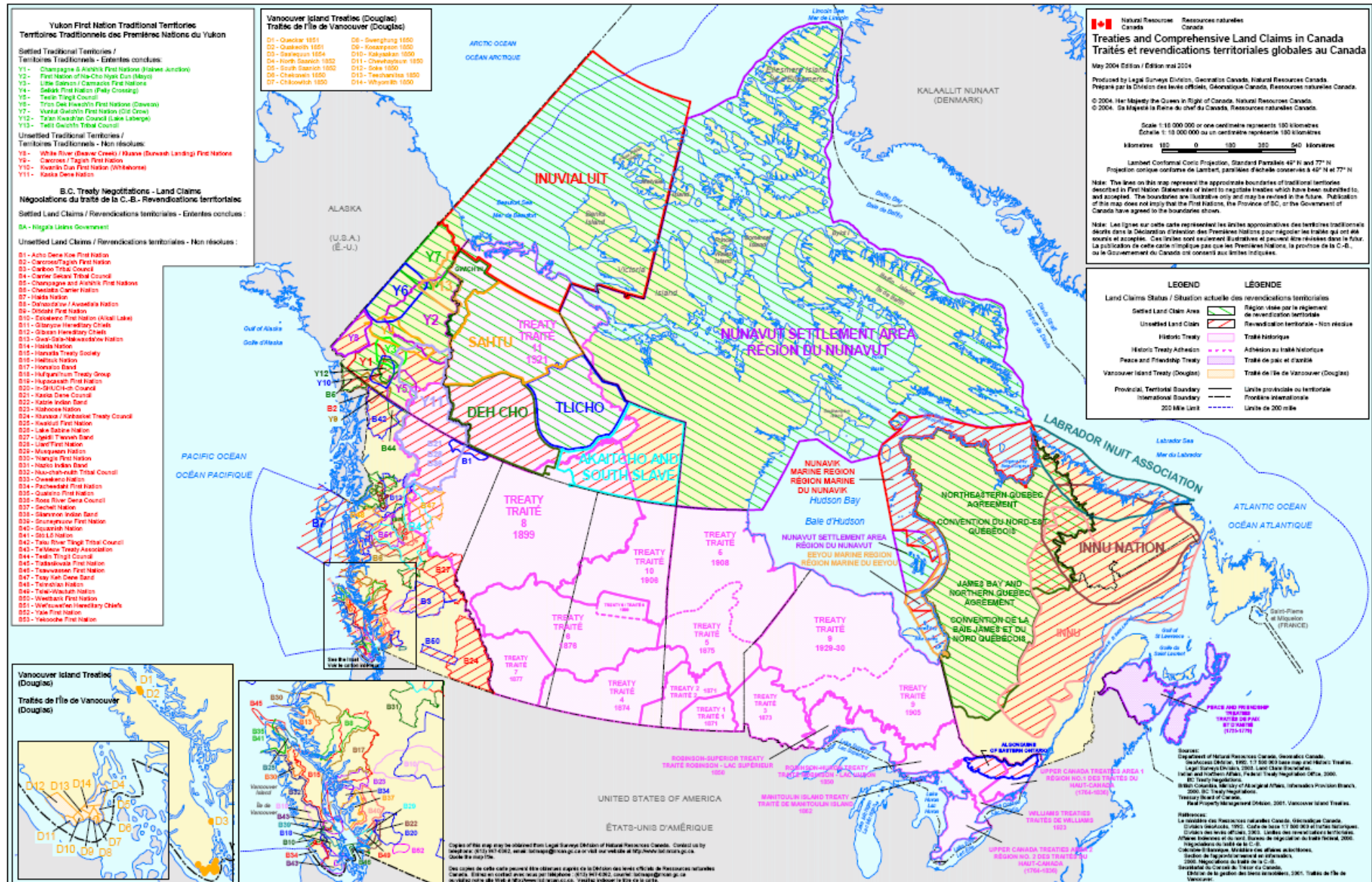
Treaties and Agreements

Ojibwa people in central Canada and next
to Lake Superior

In 1870, after Confederation, Canada acquired the Hudson's Bay Company territory: all land west and north of Lake Superior to the Arctic.

- Because of Confederation in 1867 control over “Indians” and their lands became the jurisdiction of the Federal Government.
- Grand Council Ojibwa Chiefs and Canada entered into Treaty 3 in 1873, by which reservations, and hunting and fishing rights, were authorized in traditional lands.
- These treaties are legal documents, hence the legal disputes on use of their traditional lands.

Historic treaties and modern day land claims



Robinson Superior Treaty

- ▶ Signed on September 7, 1850, at Sault Ste. Marie, Ontario between “Ojibwa Chiefs of the Northern Shore of Lake Superior from Pigeon River to Batchawana Bay, and The Crown, represented by a delegation headed by William Benjamin Robinson.
- ▶ The second Robinson Treaty for the Lake Huron region, commonly called Surrender of the Saugeen [now known as the Bruce Peninsula] was entered into agreement on October 13, 1854.

Terminology

- ▶ “Aboriginal people”: Constitution Act, 1982, s. 35: Indians [First Nations, status & non-status], Inuit & Metis
- ▶ “Indigenous peoples”: internationally accepted; *United Nations Declaration on the Rights of Indigenous Peoples*



1850

Robinson Superior

Treaty

Treaty 9 Area



Government

Bulletin & chat

Services

Land Claims



Aboriginal Rights

The Rez Connection

In Memorium
Regional Elders
Members Pages
Upcoming Events

For Sale
Business
Arts & Craft
Lots a links

Anishinabek Treaty Area's

Robinson Huron Treaty 1850
Chippewa Treaty 1923
Mississauga Treaty 1923

You Tell us
Pow Wow trail
Question of the week
Search this site
Contact Us
About this site

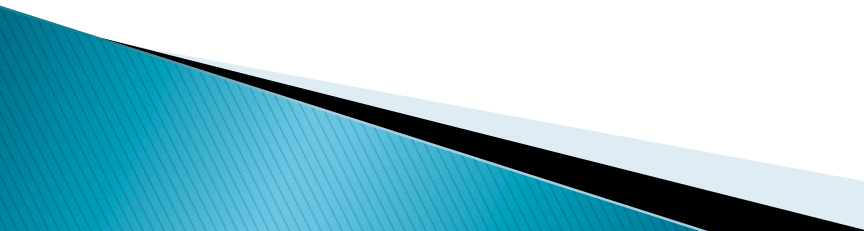
The Fort William Reserve (1853)

- ▶ The traditional territories occupied and used by the Chippewas at Fort William extend from Pigeon River to the south, north to the present Treaty 9 boundary and east to Nipigon.
- ▶ The Chief and Headmen who signed the Treaty agreed not to interfere with foreign settlers. In return, the Crown promised cash payments and trade goods, annuities beginning in 1851, complete freedom to continue to hunt and fish as before (except on private land) and a Reserve at Fort William.

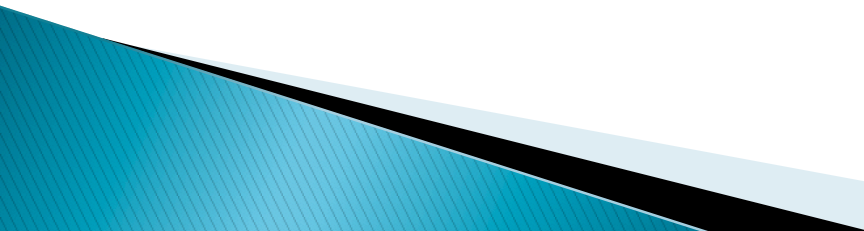
Boundary Waters Treaty (1909)

- ▶ Settle and prevent disputes re uses and apportionment of waters along the Canada/ United States boundary. The treaty prohibited the diversion of these waters
- ▶ Set general principles of boundary water resource development
- ▶ Called for an end to cross-boundary pollution. However, it has not imposed sanctions against polluters
- ▶ The treaty established the International Joint Commission (IJC).

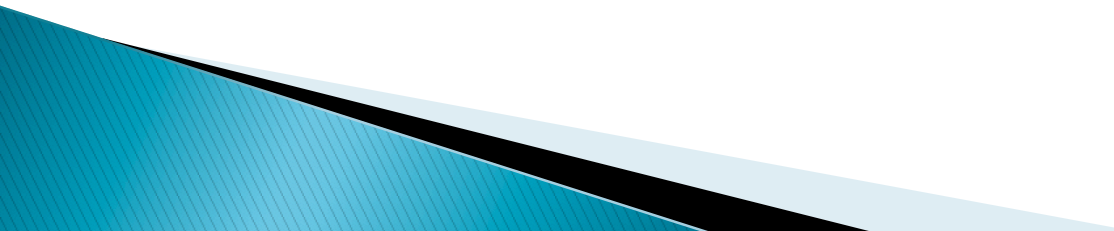
International Joint Commission

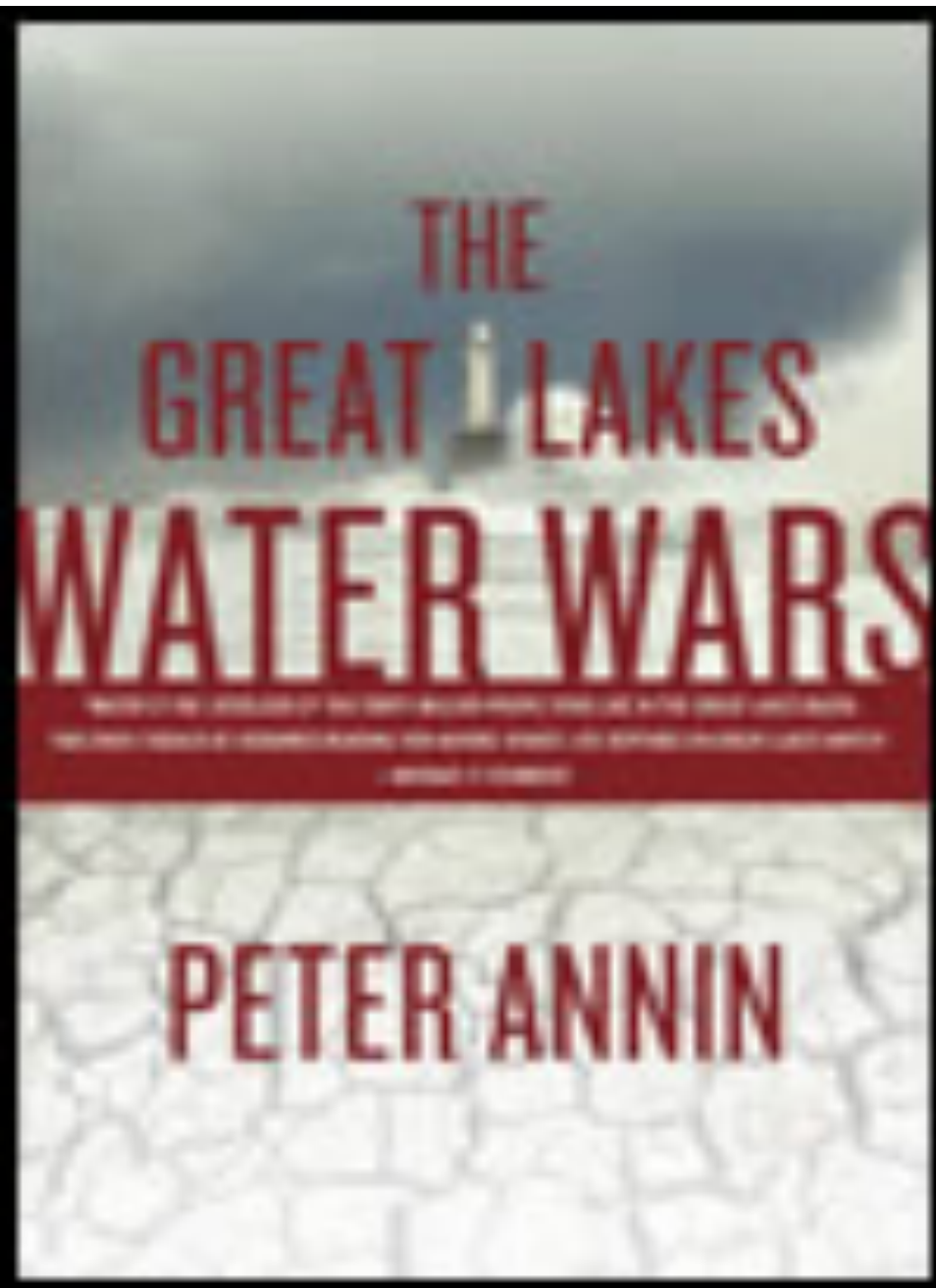
- ▶ Is the oldest of Canadian–American intergovernmental organizations
 - ▶ conservation and development of water resources (including hydroelectric power) along the international boundary
 - ▶ The IJC comprises 3 Canadian and 3 American commissioners with offices in Ottawa and Washington.
- 

A Brief History of the Chicago Diversion

- ▶ The Illinois–Michigan Canal was opened to shipping traffic in 1848
 - ▶ Chicago's sewage flushed into the slowly moving Chicago River and into Lake Michigan — the source of Chicago's drinking water
 - ▶ In 1885, 90,000 people died from cholera
 - ▶ Flow of the Chicago River was reversed – so that sewage from Chicago would flow to the Mississippi River. The canal was completed in 1900.
- 



- ▶ This diversion is included in the Boundary Waters Treaty of 1909
 - ▶ The flow is about 750 million litres of water per day
 - ▶ Nearly 7 million northeastern Illinois residents live outside the lake's drainage basin – more than half of the state's total population – fortunate enough to have access to lake water because of this diversion.
 - ▶ Discussion
- 



Locks and Hydroelectric Generation at Sault Ste. Marie







St. Clair River



Lake Superior Regulation Plan 2012

- ▶ Regulation of outflows from Lake Superior
 - ▶ A consequence drought from 1998 to 2010
 - ▶ New studies

 - ▶ Discussion
- 