



# IN HOT WATER: THE GREAT LAKES COMPACT

RCMUN XIII  
FEBRUARY 3, 2024



# Table of Contents

---

<b>Table of Contents</b> .....	1
<b>RCMUN Notices</b> .....	2
Committee Content Warning.....	2
<b>Rules of Procedure</b> .....	3
Article I: General Rules.....	3
Article II: Voting Procedure.....	3
Article III: Agenda.....	3
Article IV: Meetings.....	4
Article V: Conduct of Business.....	4
Letter from the Chair.....	5
<b>Historical Background</b> .....	7
Example: The Aral sea.....	7
Former Water Agreements.....	8
Disputes Between the States and Provinces.....	10
Prior actions (prior 2016).....	11
<b>Dividing It Up</b> .....	12
The Watershed.....	12
Dividing Water Usage.....	13
Water can be scarce for many reasons:.....	16
Diversion of Water.....	16
Diversions to South Western States.....	17
Waukesha/Straddling Counties.....	19
Questions to consider:.....	19
<b>Positions</b> .....	21

# RCMUN Notices

---

## **Committee Content Warning**

While RCMUN values the discussion and awareness of most topics and a delegate's obligation to accurately represent their assigned role, all participants who engage in any bigoted, racist, sexist, homophobic, ableist, fatphobic, xenophobic, or other such comments or sentiments will be subject to appropriate disciplinary action at the discretion of RCMUN's Secretariat. Additionally, in all things, RCMUN pledges its Secretariat and staff to maintain approachability and inclusivity; if any participant has any questions, comments, or concerns they are encouraged to contact RCMUN's Secretariat or, in the case of delegates, its staff. If you have questions or concerns regarding this, please reach out to your committee's senior staff before conference weekend.

Red Cedar University Model United Nations (RCMUN) is committed to fostering a safe and secure environment for all delegates, staff, and advisors. In this, RCMUN operates with a zero-tolerance policy concerning any and all instances of harassment and discrimination. Further, RCMUN is committed to promoting the mental health of its participants and requires all participants to act with compassion, grace, and understanding. RCMUN encourages participants to step out of their committee room and/or speak with a trusted individual if they are feeling overwhelmed or are otherwise uncomfortable.



All participants should be aware that RCMUN's Secretariat and staff are designated mandatory reporters with MSU's Office of Institutional Equity while operating within their roles before and during the conference.

### **RCMUN Statement on Mental Health**

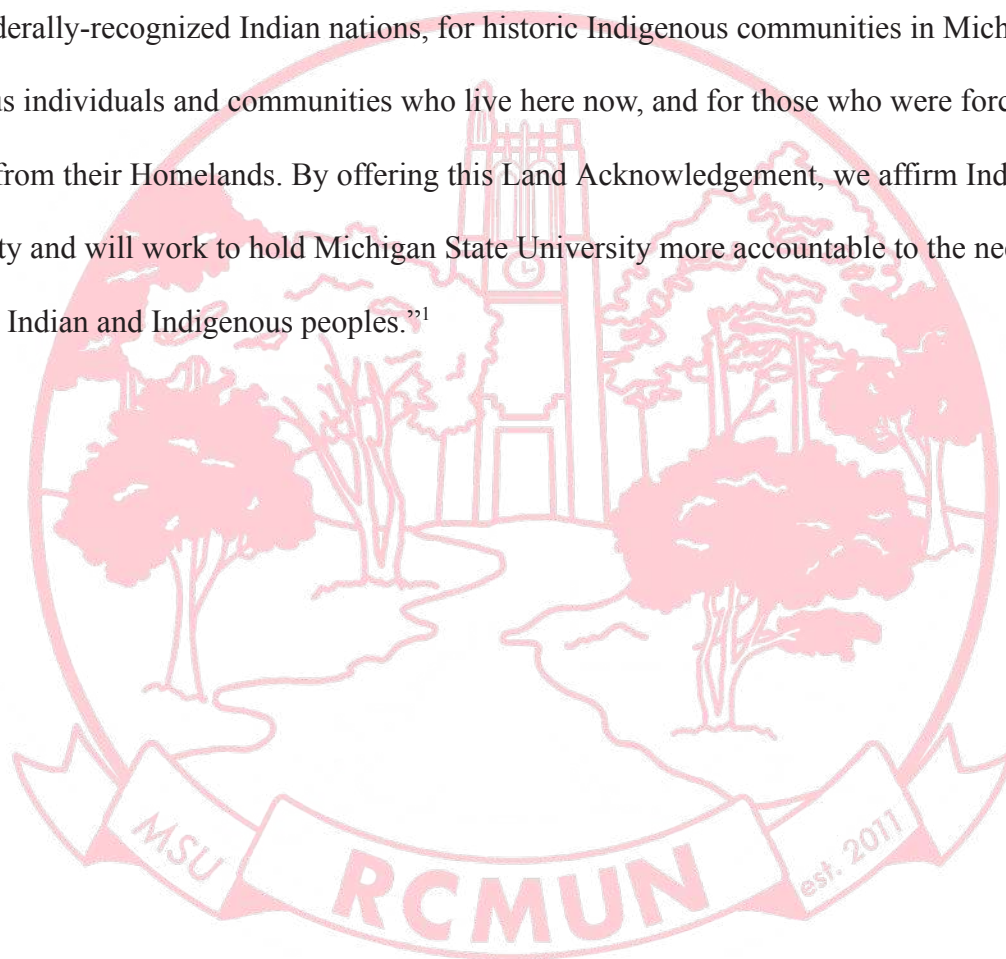
*Red Cedar Model United Nations* is committed to fostering a safe and secure environment for all delegates, staff, and advisors. In this, RCMUN operates with a zero tolerance policy with regard to any and all instances of harassment and discrimination. Further, RCMUN is committed to promoting the mental health of its participants and requires all participants to act with compassion, grace, and understanding. RCMUN encourages participants to step out of their committee room and/or speak with a trusted individual if they are feeling overwhelmed or are otherwise uncomfortable.

Moreover, RCMUN recognizes that some of its committees may include references to or discussions of sensitive topics. While RCMU values the discussion and awareness of these topics and a delegate's obligation to accurately represent their assigned role, all participants who engage in any bigoted, racist, sexist, homophobic, ableist, or other such comments or sentiments will be subject to appropriate disciplinary action at the discretion of RCMUN's Secretariat. Additionally, in all things, RCMUN pledges its Secretariat and staff to maintain approachability and inclusivity; if any participant has any questions, comments, or concerns they are encouraged to contact RCMUN's Secretariat or, in the case of delegates, its staff.

All participants should be aware that RCMUN's Secretariat and staff are designated mandatory reporters with MSU's Office of Institutional Equity while operating within their roles before and during the conference.

## **MSU Provisional Land Acknowledgement**

“We collectively acknowledge that Michigan State University occupies the ancestral, traditional, and contemporary Lands of the Anishinaabeg – Three Fires Confederacy of Ojibwe, Odawa, and Potawatomi peoples. In particular, the University resides on Land ceded in the 1819 Treaty of Saginaw. We recognize, support, and advocate for the sovereignty of Michigan’s twelve federally-recognized Indian nations, for historic Indigenous communities in Michigan, for Indigenous individuals and communities who live here now, and for those who were forcibly removed from their Homelands. By offering this Land Acknowledgement, we affirm Indigenous sovereignty and will work to hold Michigan State University more accountable to the needs of American Indian and Indigenous peoples.”<sup>1</sup>



---

<sup>1</sup> “Land Acknowledgement,” American Indian and Indigenous Studies, accessed December 5, 2021, <https://aiis.msu.edu/land/>.

# Rules of Procedure

---

## **Article I: General Rules**

1. Delegates are expected to adhere to all regular RCMUN rules and standards of decorum.
2. In the event of a dispute over the Rule of Procedure, either those of RCMUN generally or the Great Lakes Compact, the RCMUN Secretary-General will be the ultimate authority of appeal.

## **Article II: Voting Procedure**

1. Votes may be entered as Yeas, Nays, or Abstentions.
2. Votes on non-substantive proposals or procedural matters will be passed by the affirmative vote of a simple majority of delegates. Abstentions are allowed on non-substantive proposals, but not procedural matters.
3. Votes on substantive matters will be passed by the affirmative vote of a simple majority of delegates.
4. In all cases, a simple majority constitutes a 50% plus one vote of the Yea and Nay votes.

## **Article III: Agenda**

1. Items for debate may be pulled from the background guide but do not need to be limited to what is mentioned. However, it is highly recommended that the subject of debate is relevant to the background guide.

2. Any committee member may make a motion to restrict debate to one topic. If this motion passes, debate shall be limited to the topic specified until such time as another motion is made to either change the topic under consideration or return to general debate.

#### **Article IV: Meetings**

1. All of the Great Lakes Compact meetings shall be attended by all specified members of the committee, unless otherwise authorized by the RCMUN Secretariat.
2. Quorum for discussion and voting will always be 50% plus one committee member, unless otherwise authorized by the Secretariat of RCMUN or at the Chair's discretion.
3. Unless otherwise indicated by the Secretariat or Great Lakes Compact, all meetings of the committee will be held in the specified Great Lakes Compact room as designated by RCMUN.

#### **Article V: Conduct of Business**

This committee will be run like a smaller, faster-paced GA with no crisis elements. So the delegates can understand the breadth of this issue, there will be no primary speaker's list nor any topics to specifically choose from. The delegates should draft and propose solutions regarding all the topics given. The committee will instead start with a secondary speaker's list and the debate will move forward from there.

Please note that the committee is placed in **2016**.

## Letter from the Chair

Hello Delegates!

My name is Elliot Cayabyab and I am your chair for the Great Lakes Compact Committee. I am a sophomore majoring in International Relations and Comparative Cultures and Politics with minors in French and Asian-Pacific American Studies. This is my second year in MSUMUN. Last year I was an assistant chair in the Asian Labor Rights' Crisis in 2030. I also compete in the collegiate Model UN circuit with MSU's International Relations Organisation.

Hey everyone, my name is Jai Patel and I am your Assistant Chair for the Great Lakes Compact Committee for the 2023-2024 school year. I am a freshman majoring in Political Theory and Constitutional Democracy with minors: Law, Justice, and Public Policy; Leadership of Organizations. This is my first year in MSUMUN and Model UN in general so I'm learning as I go. I can't wait to be working with everyone here.

Hi, my name is Jacob Herzig and I am staffing the Great Lakes Compact Committee. I am a sophomore at James Madison College, studying International Relations with a minor in German and European studies. This is my second year of MSUMUN. Last year I was a staffer on the SpaceX Committee. I also competed in collegiate MUN for the past two years.

We cannot wait to see what you all will do with the topic at hand. The entire dias live in Michigan and assuming that you're from around here as well, we can't wait to see the debate. If you've read this far, please email us what [great Lake you are](#) when sending us your position papers. ;) With that being said, some of your positions or aspects thereof are made up but everyone is just as important. Please email us at [specialized1@msumun.org](mailto:specialized1@msumun.org) if you need any questions about research, your character, the topic, or MSUMUN.



Happily,

Elliot-Marie Balmonte Cayabyab

Jacob Stephen Herzig

Jai Dharmesh Patel

The In Hot Water: The Great Lakes Compact Dias

specialized1@msumun.org



## Historical Background

### Example: The Aral sea

The Great Lakes are great modern examples of how important conservation is to culture in economics. However, they are not the first lakes to become discussions of usage and conversion. A significant example that is almost dried up now is the Aral Sea.



The Aral Sea lied between Kazakhstan and Uzbekistan.

Originally the Aral Sea covered 26,300 miles<sup>2</sup> in water and was once considered the world's fourth-largest body of inland water. As the sea resided in an arid climate, the body of water relied on river inflow which combatted the water loss through evaporation.

However, in the 1950s, Soviet Russia sought to irrigate the deserts in what is now Uzbekistan, Kazakhstan, and Turkmenistan. To do that, they diverted from the Amu Darya and Syr Darya rivers which ran water into the Aral Sea. The Soviets used hydro-infrastructure to maximize crop production. The desert turned from a barren area to a vibrant farmland and marketplace for cotton and rice but at the cost of the sea shrinking.

Since the 1960s, the Aral Sea has lost 90% of its surface area and 96% of its former volume. The Aral Sea split into three parts: the Greater Sea, the Western Lake, and the Lesser Sea. Because of the reduction of water in the Aral Sea, the salt and mineral content of the body of water “rose dramatically”<sup>2</sup> making the water unfit for drinking and the natural fauna of the sea

<sup>2</sup> The Editors of Encyclopaedia Britannica, “Aral Sea | Description, History, Demise, & Facts,” in *Encyclopædia Britannica*, 2019, <https://www.britannica.com/place/Aral-Sea>.

died off. The fishing industry in the sea is ruined. People that lived on the shoreline moved out. The climate around the area changed: winters were colder and summers were hotter. The evaporated sea caused dust storms to be composed of salt, fertilizer, and pesticides. The health of the populace that was once near the shoreline declined.<sup>3</sup>

### **Former Water Agreements**

Throughout the 20th century, Canada and the United States created documents to outline each other's presence in and around the Great Lakes as well as what they do to maintain them. The Boundary Waters Treaty of 1909 outlined the rights of both countries in the shared waters. It allowed both countries to enter into future agreements on how the waters should be used and their right to argue against anything that would affect their respective waters. The treaty established restrictions on diversions of the Niagara, St. Mary, and Milk Rivers. The International Joint Commission (ICJ) was created and given powers to advise the two countries on steps to ensure that the Great Lakes are in the best shape.<sup>4</sup>

#### Formal Water Agreements Timeline:

---

<sup>3</sup> Ibid.

<sup>4</sup> International Joint Commission, "Boundary Waters Treaty of 1909 | International Joint Commission," International Joint Commission, 2018, <https://www.ijc.org/en/boundary-waters-treaty-1909>.

<b>1909</b>	<b>Boundary Waters Treaty</b>
<b>1972</b>	<b>Great Lakes Water Quality Agreement</b>
<b>1985</b>	<b>The Great Lakes Charter</b>
<b>2001</b>	<b>The Great Lakes Charter Annex</b>
<b>2004</b>	<b>Draft of the Compact</b>
<b>2005</b>	<b>Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement</b>
<b>2007</b>	<b>Great Lakes Compact was signed</b>

The IJC made a final report on the Great Lakes' water quality in 1918. In the report, the following concerns were reported concerning amounts of B. Coli throughout the Great Lakes and their tributaries. In 1972, the United States and Canada passed the Great Lakes Water Quality Agreement (GLWQA). The agreement defines the areas of concern in the Great Lakes and what the countries need to regulate. The GLWQA made objectives to regulate oil, product coloring, debris from human activity, and fertilizer.<sup>5</sup> The agreement made it easier for the countries to fix the issues together.

The 1985 Great Lakes Charter is one of the first steps for the Great Lake states and provinces to work with each other rather than their federal governments. It created a water management group and research program to conserve the levels and flows.<sup>6</sup> The Great Lakes states and provinces were added to the previously stated document in the 2001 Great Lakes

<sup>5</sup> REG 05 US EPA, "What Is GLWQA?," US EPA, March 2, 2015, <https://www.epa.gov/glwqa/what-glwqa>.

<sup>6</sup> The Council of Great Lakes Governors, "The Great Lakes Charter Principles for the Management of Great Lakes Water Resources," 1985, <https://www.internationalwaterlaw.org/documents/regionaldocs/Local-GW-Agreements/1985-GL-Charter.pdf>.



Charter Annex. In this additional document: the leaders outline their commitments, develop how they gather information, make the information that they receive public, and create new sets of agreements between the states and provinces.<sup>7</sup>

In 2004, the draft of the Great Lakes Compact outlined the restrictions on diversions, what criteria they need to meet, and the restrictions to the in-basin withdrawals.<sup>8</sup> The next year, the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement was created to pair with the compact. It acted as “an updated version of the nonbinding Great Lakes Charter.”<sup>9</sup> The document adds in the “straddling communities” section, ensuring each countries’ sovereignty, and more in-depth restrictions on diversions. All the Great Lakes states finally signed in 2007.

### **Disputes Between the States and Provinces**

Although there have been many agreements and resolutions made prior to the Great Lakes Compact, there have been many disagreements between all of the actors. The Canadian provinces criticized the states because of how the US focuses on industries and agriculture as most of the Canadian opposition were from environmentalists and nationalists.<sup>10</sup> In the United States, the states all have different ideas of each others’ responsibilities and for themselves: Michigan where anti-diversions however refused any restrictions to their own water usage, New York focuses on hydropower, Minnesota is more environmentally progressive, and Indiana which is the least environmentalist.

---

<sup>7</sup> The Council of Great Lakes Governors, “THE GREAT LAKES CHARTER ANNEX a SUPPLEMENTARY AGREEMENT to the GREAT LAKES CHARTER,” 2001,  
<https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/WRD/Water-Use/Great-Lakes-Charter-Annex-2001.pdf>.

<sup>8</sup> Peter Annin, *The Great Lakes Water Wars* (Island Press, 2009).

<sup>9</sup> Ibid.

<sup>10</sup> Peter Annin, *The Great Lakes Water Wars* (Washington, Dc: Island Press, 2018).

Between the states, there was contention on how much each state took out from the Great Lakes and what cities were allowed to divert water from the Basin. One issue was how the compact should treat Chicago diversions. Pennsylvania and Ontario suggested that the Chicago diversion should be covered under the Compact with the exception that if Illinois ever wants to increase their diversions, they'd have to apply for approval. Illinois argued against this, citing how the US Supreme Court ruled for the diversion in 1929 and refused to sign any agreement that changed their regulations. In an ultimatum, the other states backed down.<sup>11</sup>

However, the disagreements didn't stop at the border. Canada had many problems with how the US dealt with the Great Lakes. Although the Annex 2001 was looked on positively in the US, many Canadians saw it as a "unilateral US water grab" and that it was used to let the US "drain the Great Lakes."<sup>12</sup> To contrast much of the states hesitation to put restrictions on diversions, Canada banned diversions provincially and federally. The mistrust in the US got so bad that many Canadians questioned why should Canada sign an agreement that would ban nothing, not improve the lakes, and Canadian waters would become "a tradable commodity."<sup>13</sup>

### **Prior actions (prior 2016)**

In 2009, the Great Lakes Commission des Grands Lacs passed "The Water Energy-Nexus". The 2009 resolution goal is to make water generated electricity be the main source of power in the region to combat climate change. It merges together the region's water planning and energy planning by allowing for new protocols and management models. The resolution outlines that the

---

<sup>11</sup> Peter Annin, *The Great Lakes Water Wars* (Washington, Dc: Island Press, 2018).

<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

US Department of Energy, Environment Canada, Natural Resources Canada, and Fisheries and Oceans Canada will work with each other when looking at energy and water policies.<sup>14</sup>

In 2010, the Great Lakes Compact Council detailed the conservation and efficiency goals and objectives, and created interim procedures. The interim procedures provided an outline for the application for diversions that fulfill the requirements for the “Straddling Communities/Countries” and “Intra-Basin Transfer” exceptions.<sup>15</sup>

In 2014, the Great Lakes Commission des Grands Lacs reinforced the federal protections from importation and trade of invasive species in the Great Lakes region. This enables the region to be able to combat the Great Lakes with immediate responses and inhibit the spread of invasive species in the water.<sup>16</sup> In 2015, the commission made and added to the list of “injurious” species from Title 18 of the Lacey Act.<sup>17</sup>

Also in 2014, the commission addressed pollution in Lake Erie and the Toledo water crisis. The 2014 resolution affirms that drinking water has to be to the World Health Organisation guidelines and makes loan plans for the City of Toledo. It also touches up on reports and follows the suggestions of the ICJ regarding Lake Erie. It reaffirms that it is both the US and Canada’s responsibility on this issue.<sup>18</sup>

---

<sup>14</sup> The Great Lakes Commission des Grand Lacs, “Policy Resolutions,” Great Lakes Commission, 2009, <https://www.glc.org/work/advocacy/resolutions/>.

<sup>15</sup> Great Lakes Compact Council. “Archived Materials- the Great Lakes-St. Lawrence River Compact Council.” [www.glscompactcouncil.org](http://www.glscompactcouncil.org), 2010. <https://www.glscompactcouncil.org/historical-information/archived-materials/>.

<sup>16</sup> The Great Lakes Commission des Grand Lacs, “Policy Resolutions,” Great Lakes Commission, 2014, <https://www.glc.org/work/advocacy/resolutions/>.

<sup>17</sup> The Great Lakes Commission des Grand Lacs, “Policy Resolutions,” Great Lakes Commission, 2015, <https://www.glc.org/work/advocacy/resolutions/>.

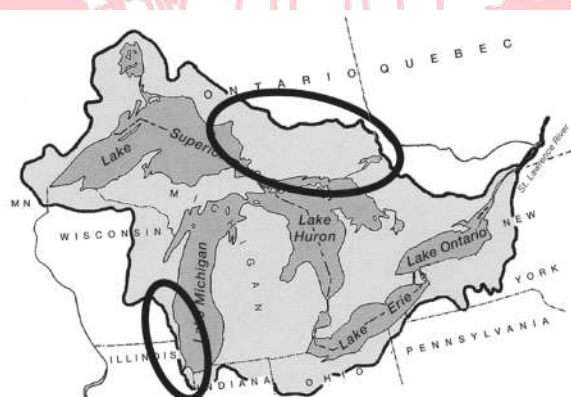
<sup>18</sup> The Great Lakes Commission des Grand Lacs, “Policy Resolutions,” Great Lakes Commission, 2014, <https://www.glc.org/work/advocacy/resolutions/>.

## Dividing It Up

---

### The Watershed

Many states and provinces share parts of the great lakes. The names of the five lakes that join together to form the Great Lakes are: Lake Michigan, Lake Superior, Lake Huron, Lake Erie, and Lake Ontario. The Great Lakes Compact is made up of several states and two Canadian provinces: Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, Wisconsin, Ontario, Quebec. Each state and province is represented by a governor and their alternative Department of Natural Resources (DNR) who has different ways on how to address situations.

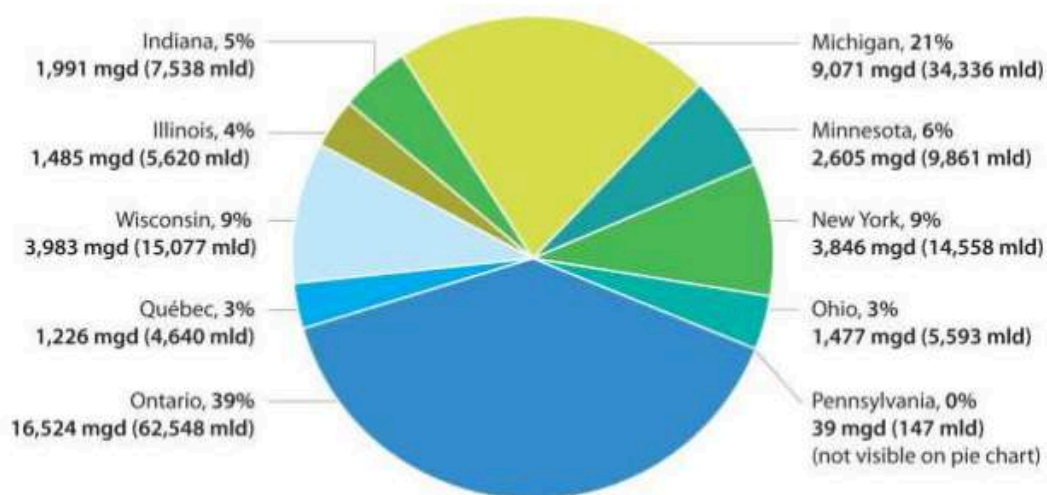


The basin's boundaries vary the distance away. Illinois only has a small portion of land that can be taken from Lake Michigan. Chicago is not included in Illinois and many states don't like the idea of the city getting a diversion. In contrast, Ontario has areas spanning thousands of miles that can use the water from the Great Lakes around them. Some governors argue on how much of their state has in the Great Lakes basin. Looking at the basin boundaries, the areas that were prescribed use the regulated amount of water they're allowed to use already.



## Dividing Water Usage

Each state and province withdraws different amounts of water for their respective primary reasons. Public water supply means water withdrawn by public or private water suppliers that provide water to at least 25 people or have a minimum of 15 connections. Public-supply water is delivered to users for domestic, commercial, and industrial purposes. Thermoelectric power is the process of generating electricity with steam-driven turbine generators. In a steam-generating cycle heat is used to boil water in a large pressure vessel to produce high-pressure steam. Industrial is the economic activity concerned with the processing of raw materials and manufacture of goods in factories. Hydroelectric power production is the production of a renewable source of energy that generates power by using a dam or diversion structure to alter the natural flow of a river or other body of water. Hydroelectric power production provides flood control, irrigation support, and clean drinking water. Below is a list of every state/province in the GLC and their primary reason on why they choose to withdraw water (mgd = millions gallons per day):



19

<sup>19</sup> The Great Lakes Council, "Annual Report of the Great Lakes Regional Water Use Database Representing 2016 Water Use Data 1 Annual Report of the Great Lakes Regional Water Use Database Representing 2016 Water Use Data 2," 2017, <https://waterusedata.glc.org/pdf/2016-Water-Use-Report-Final.pdf>.

Within Illinois lies the city of Chicago. From their victory over Missouri in the early 1900s, Chicago began taking measures to expand the geographic breadth of its diversion. During the next several years, city officials expanded the Illinois diversion. Between 1907-1910 on Chicago's North Side, the city dug a canal known as the North Shore Channel, and in 1911, started another canal in the South Side. In 1900, the flow started at 4,167 cubic feet per second (2,680 mgd) and by 1922, it had grown to 8,500 cubic feet per second (5,494 mgd).



With the use of tens of millions of gallons per day from the Great Lakes, water scarcity is sure to be an issue. Water scarcity refers to the lack of resources that can be accessed to sufficiently meet water demand. Water scarcity falls in two main types: Physical and Economic. Physical water scarcity is the type of water shortage that occurs when the demand of the population exceeds the water resources that are available in the region. Physical scarcity typically emerges in dry, arid areas around the world. Economic scarcity on the other hand, arises when there's enough potable water for the region but is unavailable due to insufficient investment in water infrastructure. Communities that lack the structures and systems to supply

and distribute water equitably are particularly vulnerable to fluctuations in weather that lead to floods and drought conditions.<sup>20</sup>

**Water can be scarce for many reasons:**

**Agriculture** - Consumes more water than any other source, accounting for 72% of all water withdrawals

**Insufficient Infrastructure** - Regions that don't have the proper systems in place to access and distribute clean water can quickly run into scarcity challenges

**Climate Change** - Changing weather and global water patterns are leading to shortages and drought conditions in some areas and floods in others

**High Water Demand** - Global demand is expected to reach 40% by 2030

**Disproportionate distribution** - Water inequality continues to grow – where imbalances are intensified by rapid urbanization

**Groundwater depletion** - Sustained groundwater pumping can lead to long-term declines of water in several regions, which can cause deterioration of water quality and a reduction of water in streams and lakes

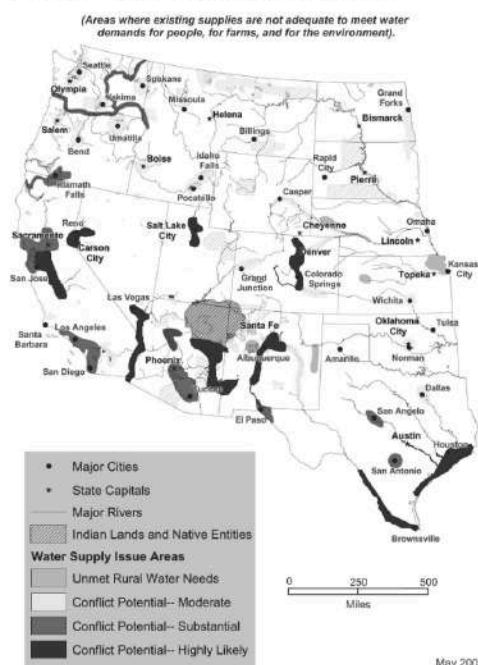
<sup>20</sup> UN Global Compact, “Detailed Definitions – Understanding Key Water Stewardship Terms,” CEO Water Mandate, accessed December 30, 2023, <https://ceowatermandate.org/terminology/detailed-definitions/>.

## Diversion of Water

Currently, there are plenty of states that are continuing to run out of water: Colorado, California, Nevada, New Mexico, Utah, Arizona, Montana, North Dakota, South Dakota, Idaho, California, Oregon, Washington. Reasons can vary but the most common reason why they are running out of water is because of shifted traditional precipitation patterns, regions becoming drier, and the reduction of their already scarce water supplies.

To make the most of the Great Lakes, utilizing the undervalued resources found in other bodies of water is a must. That leads to Aquifers, which are bodies of porous rocks or sediments saturated with groundwater. There are three aquifers that affect the states that hold a part of the Great Lakes and the Southern States: Ogalla, Mahomet, and Saginaw. The Ogallala Aquifer is one of the world's largest aquifers, and is in portions of South Dakota, Nebraska, Wyoming, Colorado, Kansas, Oklahoma, and Texas. The Mahomet Aquifer is the primary source of drinking water for more than 500,000 people in 14 Illinois counties. The Mahomet Aquifer provides an estimated 220 million gallons of water per day to communities, industry, agriculture, and rural wells in Illinois.<sup>21</sup> The Saginaw Aquifer is the primary source of municipal water, including in Clinton, Ingham, and Eaton counties, encompassing the Lansing-East Lansing Metropolitan Area. Only about .03% of the aquifer is used for drinking, while the rest is for domestic and industrial use.<sup>22</sup>

### Potential Water Supply Crises by 2025



<sup>21</sup> Town of Normal City Council, "Why Is the Aquifer Important? | Normal, IL - Official Website," [www.normalil.gov](http://www.normalil.gov), accessed December 30, 2023, <https://www.normalil.gov/1343/Why-is-the-Aquifer-Important>.

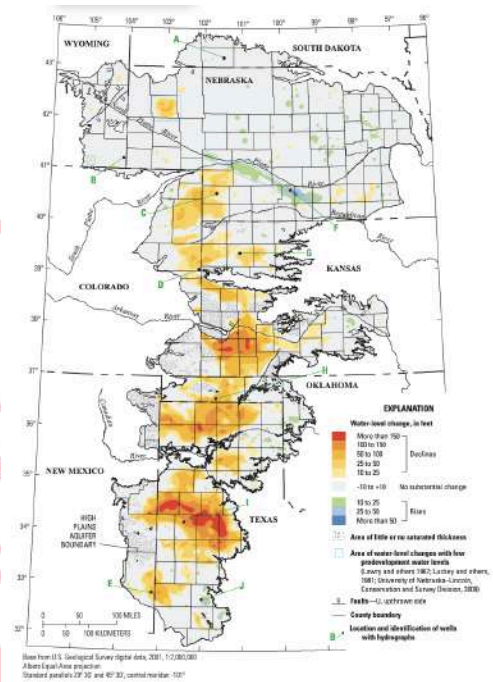
<sup>22</sup> Brian McKenna, "Deep, Dark and Wonderous, the Saginaw Aquifer," City Pulse, 2001, <https://lansingcitypulse.com/archives/011017/health/index.html>.



Utilizing all the resources Earth has to offer is crucial for efficiently making sure all states are not suffering from water scarcity.

### Diversions to South Western States

In 1982, *Sporhase v. Nebraska* put all the Great Lakes governors and Premiers on their toes. The Supreme court ruled in favor of Sporhase who had brought up a concern that Nebraska cannot ban him from irrigating his farm that resides in both Nebraska and Colorado by only using a well that he made on the Nebraska side. For this ruling: “[t]he justices said...infringing on interstate commerce crossed a constitutional line.”<sup>23</sup>



Although the trial was based away from the Great Lakes region, the apparent issue of diversions of water to places outside of the basin grew bigger. As shown in “Potential Water Supply Crises by 2025”, there is an increasing number of water insecurities estimated in the next few years. In the South West region, there is a high estimate of water insecurity where the Ogallala Aquifer should be.

The Ogallala Aquifer might be one of the biggest aquifers, it’s also drying up quickly. The region has seen a depletion in the water supply rather than a rise. Some people blame the depleted water supply on the periodic droughts the region has. Others have blamed farming irrigation that accounted for 90% of the aquifer’s withdrawals.<sup>24</sup>

<sup>23</sup> Peter Annin, *The Great Lakes Water Wars* (Washington, Dc: Island Press, 2018) 75.

<sup>24</sup> V.L. McGuire, “USGS Scientific Investigations Report 2011–5089: Water-Level Changes in the High Plains Aquifer, Predevelopment to 2009, 2007–08, and 2008–09, and Change in Water in Storage, Predevelopment to 2009,” pubs.usgs.gov, 2011, <https://pubs.usgs.gov/sir/2011/5089/>.

Droughts and water insecurity in this region bring up ideas like the North American Water and Power Alliance (NAWAPA). NAWAPA was a project proposed in the 1960s to divert water from the Yukon River to water insecure regions in North America. The idea not only distributed water but also used hydroelectric plants to produce electricity and run water through



Lake Superior and wash out the pollutants. The project was seen in two different lights: something amazing and potentially able to save the regions or a monstrous concept. For Canadians, the NAWAPA project was seen as the US trying to appropriate a Canadian resource. Others point out if anyone has the right to change North America's ecosystems because regions in the US need water.<sup>25</sup>

### **Waukesha/Straddling Counties**

Earlier this year (2016), a city in Illinois, Waukesha, applied for a diversion of water from Lake Michigan. This is the second time that Waukesha has applied for a water diversion; the first time the city applied for a water diversion was in 2010 because of the amount of radium contaminating the city's wells.<sup>26</sup>

During the 2010 Waukesha mayor election, candidate and future mayor Jeff Scrima stated that they (Waukesha) didn't want to become "Milwaukee's water pawn", that Waukesha would have to start paying for Milwaukee's financial problems and they'd lose their identity and independence as a city.<sup>27</sup>

<sup>25</sup> Encyclopedia, "North American Water and Power Alliance | Encyclopedia.com," www.encyclopedia.com, accessed November 23, 2023, <https://www.encyclopedia.com/environment/encyclopedias-almanacs-transcripts-and-maps/north-american-water-and-power-alliance>.

<sup>26</sup> Wisconsin DNR, "City of Waukesha Diversion | Wisconsin DNR," dnr.wisconsin.gov, 2023, <https://dnr.wisconsin.gov/topic/wateruse/waukesha.html>.

<sup>27</sup> Peter Annin, *The Great Lakes Water Wars* (Washington, Dc: Island Press, 2018). pg 276.

In 2012, the city recorded a record concentration of radium in its water supply. The city previously protected itself from other cities nearby wanting diversions from them but now needs the water. Under the Straddling Counties Act, Waukesha could get a diversion if the committee approves of it. Under the requirements of the straddling communities exception, Waukesha would need to return that amount of water back to Lake Michigan but the region does not want contaminated water coming back to the Great Lakes.

**Questions to consider:**

- Are the basin boundaries currently equitable?
  - If not, what can the leaders do about it?
- What international agreements or treaties need to be made or altered to facilitate the division of the Great Lakes between the U.S. and Canada?
- How can the division of the Great Lakes account for potential natural disasters such as droughts, floods, or contamination events?
  - What contingency plans need to be in place?
- Should the compact states and provinces accept the Waukesha application and what conditions would need to be established for the city?
  - How would accepting this application be seen to other parties?
- As droughts in the South West and California get worse, what can those states do?
  - Would it be reasonable to ask for a diversion from the Great Lakes and what conditions would the Great Lakes states require from them?

## References

---

- American Indian and Indigenous Studies. "Land Acknowledgement." Accessed December 5, 2021. <https://aiis.msu.edu/land/>.
- Annin, Peter. *The Great Lakes Water Wars*. Washington, DC: Island Press, 2018. Pg 276.
- Brian McKenna. "Deep, Dark and Wonderous, the Saginaw Aquifer." *City Pulse*, 2001. <https://lansingcitypulse.com/archives/011017/health/index.html>.
- Council of Great Lakes Governors. "THE GREAT LAKES CHARTER ANNEX a SUPPLEMENTARY AGREEMENT to the GREAT LAKES CHARTER," 2001. <https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/WRD/Water-Use/Great-Lakes-Charter-Annex-2001.pdf>.
- Council of Great Lakes Governors. "The Great Lakes Charter Principles for the Management of Great Lakes Water Resources," 1985. <https://www.internationalwaterlaw.org/documents/regionaldocs/Local-GW-Agreements/1985-GL-Charter.pdf>.
- Encyclopedia. "North American Water and Power Alliance | Encyclopedia.com." Accessed November 23, 2023. <https://www.encyclopedia.com/environment/encyclopedias-almanacs-transcripts-and-maps/north-american-water-and-power-alliance>.



Great Lakes Commission des Grand Lacs. "Policy Resolutions," 2009.

<https://www.glc.org/work/advocacy/resolutions/>.

Great Lakes Commission des Grand Lacs. "Policy Resolutions," 2014.

<https://www.glc.org/work/advocacy/resolutions/>.

Great Lakes Commission des Grand Lacs. "Policy Resolutions," 2015.

<https://www.glc.org/work/advocacy/resolutions/>.

International Joint Commission. "Boundary Waters Treaty of 1909." Accessed 2018.

<https://www.ijc.org/en/boundary-waters-treaty-1909>.

McGuire, V.L. "USGS Scientific Investigations Report 2011–5089: Water-Level Changes in the High Plains Aquifer, Predevelopment to 2009, 2007–08, and 2008–09, and Change in Water in Storage, Predevelopment to 2009." 2011. <https://pubs.usgs.gov/sir/2011/5089/>.

Normal City Council. "Why Is the Aquifer Important? | Normal, IL - Official Website." Accessed December 30, 2023. <https://www.normalil.gov/1343/Why-is-the-Aquifer-Important>.

REG 05 US EPA. "What Is GLWQA?" US EPA, March 2, 2015.

<https://www.epa.gov/glwqa/what-glwqa>.

The Editors of Encyclopaedia Britannica. "Aral Sea | Description, History, Demise, & Facts," in *Encyclopaedia Britannica*, 2019. <https://www.britannica.com/place/Aral-Sea>.

The Great Lakes Council. "Annual Report of the Great Lakes Regional Water Use Database Representing 2016 Water Use Data 1 Annual Report of the Great Lakes Regional

Water Use Database Representing 2016 Water Use Data 2," 2017.

<https://waterusedata.glc.org/pdf/2016-Water-Use-Report-Final.pdf>.

UN Global Compact. "Detailed Definitions – Understanding Key Water Stewardship Terms." Accessed December 30, 2023.

<https://ceowatermandate.org/terminology/detailed-definitions/>.



## Positions

---

### Illinois Governor

**Bruce Rauner** is the 42nd governor of Illinois and a founder of the GTCR, an investment company. He is in favor of privatization of water systems where private companies can buy large water systems easier. Rauner rejected \$8 million dollars of funding from Michigan to help counter the Asian Carp issue in the Great Lakes. He rejected the proposal because the plans were not finalized but the Michigan Governor would not stop. However, Rauner is willing to talk about solutions for invasive species. Rauner does support Waukesha's diversion application based on the severity of the city's problem.

### Indiana DNR

**Cameron Clark** was appointed by Indiana Governor Mike Pence to serve as the director of the Indiana DNR and Historic Preservation review board in 2013. A lawyer from Indianapolis who received an economics degree from Vanderbilt and a law degree from Indiana University where he specialized in zoning laws. He is an avid supporter of conservation having created 39 new nature preserves encompassing 6,700 acres of land/water, including the JD Marshal Nature Preserve Indiana's first underwater nature preserve. He strongly supports increasing recreation areas within state parks in partnership with private industry. Cameron is dedicated to fighting invasive species such

as preventing the spread of asian carp and creating a grant to fund the removal of invasive aquatic plants.

### Michigan Governor

**Rick Snyder** was elected as governor in 2011. He is a strong supporter of public-private partnerships to address environmental issues. He wants to establish a committee of environmental justice in Michigan as well as crowdsource solutions to invasive species to increase public engagement with funding from state and federal governments, including a state-funded program to increase biodiversity. He recognizes how eutrophication caused the overproduction of algae in Lake Erie. He supports expanding the Sault Ste. Marie “Soo” Locks with a hydroelectric plant and dredging the Saint Mary River to increase profits. He wants to have a full transition from coal power by 2025 with natural gas and green energy. He supports the expansion of fracking and the creation of facilities for manufacturing components necessary for renewable energy. He appointed a BP lobbyist head of Michigan's Department of Environmental Quality (MDEQ) and wishes to create a strategic petroleum reserve in Michigan to take advantage of market prices.

### Minnesota DNR

**Tom Landweht** was appointed head of the Minnesota DNR by Governor Mark Dayton in 2011. His career began in the 1980s as a research biologist and wildlife and wetland program manager. He supports finding a balance between economics and sustainability by supporting the sustainable use of natural resources including water resources such as



an initiative to refill aquifers. Landweht detailed in his plans that he wants to expand protection of groundwater appropriation, wetlands conservation, invasive species management, and preventing solid waste, and pollution violations. In his published strategies for the DNR, he has made it a clear goal to educate the public on why conservation is crucial and why they should follow the regulations.

### New York DEC

**Basil Seggos** was appointed DEC commissioner by New York Governor Andrew Cuomo in 2015. He earned his law degree from Pace School of Law University, where he received the Environmental Law Award. He clerked for the President's Council on Environmental Quality and was an Associate at the Natural Resources Defense Council. Prior to his hiring, he was the VP of a cleantech private equity company. He was hired to be the Deputy Secretary for the Environment where he advised the governor and legislature on environmental issues, Historic preservation, and legislature. Currently in conjunction with being commissioner of the DEC he is a Captain in the US Army Reserve, Judge Advocate General's Corps, a member of the American College of Environmental Lawyers, and a visiting fellow at the National Security Institute in Washington, D.C.

### Ohio DNR

**Jim Zehringer** is the Director of the Ohio Department of Natural Resources and the Ohio Department of Agriculture. He served in the Ohio House of Representatives from

2007-2011. A former owner of Meiring Poultry and Fish farm, Zehringer has made a career out of agriculture. As Ohio DNR, Zehringer oversaw many accomplishments for the department, including completing the new dam at Buckeye Lake two years early and \$43M under budget, starting the purchase of almost 60,000 acres of wilderness called AEP's Recreation land millions of dollars invested in state parks starting with the \$88.5M of capital improvements announced in 2014. One of the significant areas of concern during Zehringer was the issue of harmful algae blooms (HABs) in Lake Erie. He collaborated with other state agencies to address and mitigate the causes of these harmful algae blooms. Zehringer supports measures to reduce nutrient runoff by promoting responsible land use policies to improve the water quality in Lake Erie. Zehringer is involved in the Great Lakes Restoration Initiative, which provides funding for projects focused on ecosystem restoration affecting the Great Lakes.

### Ontario Premier

**Kathleen Wynne** is the first openly gay premier in Canada. In 2013 her cabinet re-introduced the Great Lakes Protection Act to encourage the Great Lakes states and provinces to improve water quality. Influenced by her province and Environmental Defence, Wynne is against accepting the Waukesha's application for diversion. Right after becoming premier, Wynne got herself involved with a scandal where she denied going to gas plant meetings or canceling the plants. Recently Wynne revealed Ontario's new climate change plan for a phase-in cap-and-trade plan which raises gas prices. She has recently openly talked about overhauling the water-taking permits as they are

“outdated.” Wynne suggests that they review the differences between taking water for agricultural/industrial use and using bottled water.

### Quebec Premier

**Philippe Couillard** formerly served as Quebec’s Minister of Health. He implemented policies aimed at addressing water quality issues and promoting responsible water management practices. He emphasized the need for collaborative efforts among provinces and territories to safeguard the Great Lakes, recognizing their ecological significance and the importance of cross-border cooperation. Couillard's policies emphasize creating a net positive environmental impact. Additionally, he supported initiatives to promote public awareness and engagement in preserving these vital water resources. Couillard's approach reflected a balance between economic development and environmental stewardship, striving to ensure that future generations inherit a healthy and sustainable Great Lakes ecosystem. He is willing to condemn companies that are not ecologically friendly like Shale Gas who were known to drill multiple wells in a small span of a few hundred miles.

### Pennsylvania Governor

**Tom Wolf** served as the 47th governor of Pennsylvania. He previously served as the chairman and CEO of his business, The Wolf Organization, and later a secretary as the Pennsylvania Department of Revenue from April 2007 to November 2008. Wolf, a democrat, took oath in office as Governor on January 20, 2015. Shortly after being sworn into office, Wolf signed two executive orders banning gifts to state employees and

requiring a bidding process for outside legal contracts. Wolf also restored a ban on hydraulic fracturing in state parks and placed a moratorium on the death penalty in Pennsylvania. The most significant executive action in his first days in office was his move to fully expand Medicaid under the Affordable Care Act. Six months into his tenure, in July 2015, the websites OnTheIssues and InsideGov named Wolf the most liberal incumbent governor in the nation, based on a rating of public statements and press releases among other measures; Wolf rejected this assessment, arguing that his policies were directed by practicality rather than ideology. Wolf prioritized addressing water quality issues, particularly in the watersheds.

### Wisconsin DNR

**Cathy Stepp** was born in Kenosha, Wisconsin and only has a high school diploma. She operated a construction business with her husband before being elected to the State Senate in 2003, where she co-chaired the Natural Resource Board which oversees the DNR. In 2011 Governor Scott Walker picked her to lead the DNR. Under her leadership the DNR took on a focus of emphasizing business and economics first, shown by her support of increasing fracking and mining. She rolled back oversight, monitoring, and regulations over all industries and conservation efforts, which saw increases in pollution and decreases in water quality around the state. She is an ardent denier of climate change and oversaw the reduction of the scientific staff and Bureau of Science Services in her time as secretary of the DNR. She pushed to privatize the permit system for agriculture and lakeside construction where the companies in question would handle due diligence,



with final say being held by the DNR. The governor at the time gutted the budget of the DNR which she supported.

### Texas Governor

**Greg Abbot** was elected to be a state judge where his partisan politics were evident. He made it his mission while judge to quash any litigation which he saw as frivolous which often led to unpopular decisions. He upheld the constitutionality of the Edwards Aquifer Act and Austin's water pollution control ordinance. In 2001 he was elected to States Attorneys General where he filed 19 lawsuits against the EPA fighting things such as the regulation of carbon emissions and businesses release of information regarding tier II chemical inventory reports under the The Emergency Planning and Community Right-to-Know Act of 1986. Abbot denies that climate change is caused by greenhouse gasses. He partnered with the US chamber of Commerce to find legal ways to dismantle climate regulation. He is credited with helping foster a pro-business environment with Texas being ranked number one by *Chief Executive* magazine and being awarded a shovel award in development for 11 years in a row. This in turn has happened at the expense of the environment with a ban on local governments from preventing fracking unless it interferes with emergency services or causes noise or light problems close to homes. He also instituted a 5-year statute of limitations on local governments suing companies for air and water pollution , and capped damages at 2 million dollars, saying that it was the states duty to go after polluters not cities. He is a fervent advocate of states rights and has gone so far as to campaign for amendments to the constitution which would hobble the federal government.

## California Governor

**Edmund Gerald Brown Jr.** is the California Governor. His father Edmund Gerald Brown Sr. created the infrastructure that many blame for causing the current drought before putting undue strain on the aquifers and water waste. He strengthened environmental protections, promoted renewable energy, and was the first governor to advocate for the use of solar panels. In 1976 he signed into law The California Coastal Act which limited development along the 1,100-mile shoreline and guaranteed public access to the beach. Since then he has sparred openly with the board he commissioned and has made them more amenable to coastal development through his appointments. After losing his bid for reelection he became the chair of the California Democratic Party, mayor of Oakland, and States Attorney General, until he was elected to a third term as governor in 2010. He passed regulations putting greater restrictions on fracking however environmentalists say it fell short because of his support for increasing fracking where it is allowed. He signed into law a bill that will help transition the grid to more sustainable energy and reduce carbon emissions in the state by 40% by 2030. He has traveled the world and met with leaders such as Pope Francis and spoke at the Paris Climate Conference making him a world-renowned environmentalist. His state is in the midst of one of the worst droughts it's ever faced.

## Director of Environment and Climate Change Canada

**Maria Falardeau** was born in Quebec City, Quebec. She graduated from the University of British Columbia with a Ph.D. in environmental ecology. She began her work as a field researcher where she focused on wetlands, invasive species, and aquatic environments.

She rose to become the head of the regional department of the Environment and Climate Change Canada. In her role as head of the regional office, her time has been defined by her projects to coordinate measures to eradicate and limit the spread of invasive species, preventing overdevelopment of the lake shore while balancing the need for economic growth. She has also sought to restore the wetlands and rivers that feed into the river or share the watershed. Through her efforts to increase Biodiversity Canada's Great Lakes region has seen a steady increase in grey wolf, moose, and wolverine, populations, as well as expanded funding for projects to make fish spawning easier and stock lakes. She is currently working on a project to reintroduce the paddlefish which was last sighted in 1917.

### Waukesha Mayor

**Shawn N Reilly** has been the mayor of Waukesha since 2014. He succeeded Jeff Schrima, who was vehemently against Waukesha applying for a diversion. However, in the previous years, Reilly has seen the need for clean water in his city. He works against misinformation about Waukesha's issues like the city being able to treat water from their radium contaminated wells. Unlike his predecessor, Reilly is willing to work with Milwaukee for water. Other than being mayor, Reilly has experience as an attorney focusing on municipal law and corporate work. He graduated from the University of Wisconsin-Madison with a BS in Political Science with a Environmental Studies certificate and a concentration in energy policy.

## Arizona Governor

**Doug Ducey** is the 23rd governor of Arizona. Ducey was CEO of the ice cream parlor chain Cold Stone Creamery from 1995-2007 and was Arizona state treasurer from 2011-2015. Originally from Ohio, Ducey moved to Arizona to attend Arizona State University and earned a Bachelor of Science degree in finance. In 2010 Ducey was elected state treasurer of Arizona, replacing Dean Martin. As Arizona's chief banker and investment officer, Ducey oversaw more than \$12 billion in state assets and was an investment manager for local governments. Ducey's focus and responsibilities were primarily related to Arizona but was open to speaking to other governors and state leaders.

## Nevada Governor

**Brian Sandoval** is the 29th Governor of Nevada, an academic administrator, and former federal judge. In 2015, Sandoval was named one of the top water users in Reno. He is against a federal regulation on water that would infringe on states' authority after the US federal government passed the Water Resources Reform and Development. Sandoval is concerned that 97% of Nevada is experiencing droughts. As one of the Governors in the Western Governors Association, Sandoval believes that the Great Lakes would be useful for the maintenance of Western states. He is against the 2015 Waters of the US (WOTUS) rule in the Clean Water Act.



### Colorado Governor

**John Hickenlooper** has been the governor since 2011. He has a career as petroleum geologist and is a strong supporter of the oil and gas industries and hydraulic fracking. Hickenlooper believes fracking is beneficial with minimal environmental harm. Despite fracking diminishing the amount of water in the Ogallala Aquifer, Hickenlooper believes that trying to preserve water is important. At the same time, he is for diverting the water from the Great Lakes and would like to see it happen. Hickenlooper is already planning to expand the Colorado River diversion which would go to the Gross reservoir.

### New Mexico Governor

**Susana Martinez** is the first woman and first Hispanic governor of New Mexico. Although most of New Mexico gets their water from a community water system, Martinez supports mining companies that contaminate the New Mexico Water supply. The governor is in support of industries but has now been focusing on how to improve water quality in her state. Martinez has been trying to fight the decreasing water levels in her state despite the many basins. The New Mexico government and their advisory team sees help as necessary from other states regardless where they are to temporarily help while they implement solutions.

### Utah Governor

**Gary Herbert** is the governor of the “second driest state” in the US. In 2013, Governor Herbert relied on Utah’s Water Strategy Advisory team to help with the water scarcity in Utah. One of the ways the team saw Utah improving their water problem was taking

diversions, whether they were from the Ogalla aquifer or the Great Lakes. However, diversions of water is only one step to improve Utah's help. Herbert encourages citizens to conserve water and is looking for alternatives to relying on other states. In 2015, Herbert acknowledged a 4 year drought in Utah and signed an executive order for the state's government to take conservation measures to show Utah citizens that they can do the same.

### Wyoming Governor

**Matt Mead** is a Wyoming attorney, businessman, and politician who served as the 32nd governor of Wyoming. Mead vetoed legislation intended to prevent the state from permanently confiscating an individual's property through civil forfeiture until after a felony conviction had been attained. Mead prioritized water conservation efforts to ensure sustainable water use. Mead is considering in his statewide water strategy to implement two main main-stem dams on the Green river and a trans-basin diversion. He declared that "water is our most valuable resource," and while his initiatives include large-scale conservation, like upgrading irrigation systems statewide, he suggests that dam construction is on his agenda.

### Commissioner of the US Bureau of Reclamation -

**Estevan Lopez** is the former Director of the Interstate Stream Commission, overseeing water management in New Mexico and negotiations with other states over interstate

water matters. In 2012, there was news that the Bureau of Reclamation would divert water from the Missouri River to Denver because of the projection of the depleting water in the Colorado River Basin. He knows how to work with water issues but is willing to divert or send water to regions that are experiencing droughts and water scarcity.

### Chair of the IJC

**Jean-Francois Cantin** is the co-chair of the IJC on the Canadian's side. He is the head of the Hydrology and Ecohydraulic Section of the Meteorological Service of Canada. He was nominated by the Canadian federal government. He has a lot of say in the regulations of the Great Lakes as the IJC is there to guide the premiers and the governors to taking every possible step to improve the water quality of the lakes. In Canada he is in charge of looking over data collected of surface water and how it flows in the Great Lakes. Like most other Canadians, he is more for stricter water policies but are willing to listen to other solutions.

### Saskatchewan premier

**Brad Wall** is the Premier of Saskatchewan and one of the most popular premiers in Canada. Wall is known for his focus on business and entrepreneurship. Saskatchewan is known for its resource-based economy which Wall helped build. Reports say that parts of Saskatchewan are experiencing water shortages. Wall is a strong supporter of pipelines, though his main focus is transporting fossil fuels. Wall is looking to solve these issues by

looking at the Great Lakes. On top of environmental pressures, indigenous tribes have been reporting on not being able to receive fresh tap water.

### Michigan Representative

**Dan Benishek** expressed a commitment to protecting the Great Lakes and supported the Great Lakes Compact, a regional agreement aimed at preventing water diversions from the Great Lakes. He advocated for responsible water policies that balanced the economic interests of the region with the need for conservation and sustainable water management. Benishek's stance highlighted the importance of preserving the Great Lakes' ecological integrity while recognizing the vital role these water bodies play in the economic vitality of the surrounding communities.

### EPA Region Head 5

**Susan Hedman** served on the Wisconsin Radioactive Waste Review Board as the Public Information Officer where she prepared and implemented a public information program for state agencies responsible for the disposal of radioactive waste. She then worked for the National Wildlife Federation Great Lakes Center Ann Arbor, Michigan University of Michigan Law School as a Staff Attorney/Clinical Assistant Professor where she represented people in filing lawsuits relating to the Clean Air Act and Clean Water Act. She served as environmental counsel and senior assistant attorney general in the Illinois Attorney General's office. In 2010 President Obama picked her to lead the EPA District 5 which covers Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, and the 35 federally-recognized tribal governments in the area. She currently in this role Chairs the

Great Lakes Restoration Initiative Regional Working Group, which is a multi-agency effort to restore and protect the Great Lakes, Co-Chairs the Bi-National Great Lakes Executive Committee, and has been the Commissioner of the Ohio River Valley Water Sanitation Commission since 2014. In 2015 she funded \$1.8 million in Great Lakes Restoration Initiative Shoreline Cities grants to fund green infrastructure projects in cities across the Great Lakes Basin.

### **National Wildlife Federation, Great Lakes Regional Executive Director -**

**Rebecca Meuninck** is the Regional Executive Director of the Great Lakes Regional Center for the NWF. Meuninck has worked on environmental issues for more than 16 years. She has a PhD from MSU where she researched about the environmental impacts of fair trade. Meuninck has lived in Michigan her entire life and lived near an inland lake. She is a co-chair of the Healing Our Waters coalition that prioritizes how federal policy affects the Great Lakes. Her main focus on issues are Great Lakes restoration, management reform, chemical policy reform, and lead poisoning in waters.

### **Deputy Under Secretary for Operations of NOAA -**

**Benjamin Friedman** has been part of the NOAA since 2010. Friedman used to be the Deputy General Counsel and formerly the chief of the NOAA office of General Counsel's Enforcement Section. He's also part of the Department of Commerce. Friedman oversees employment, litigation, and labor. The NOAA is in charge of monitoring oceanic and atmospheric conditions and managing marine animals. His former work as the General Counsel allowed him to connect with environmental agencies in the US and the UN. The



NOAA helps advise committees on what would be and wouldn't be beneficial to the environment.

### **Director U.S. Fish and Wildlife Service Agency -**

**Dan Ashe** graduated from the University of Washington with a graduate degree in Marine Affairs. At the creation of the compact, Ashe's predecessor advised against counting bottled water as a diversion of water. Ashe's position with the USFWS is to help conserve marine flora and fauna. He is concerned about endangered species, invasive species, and working with farmers on how to preserve the integrity of the waters. Ashe can issue permits. These permits are only necessary if these activities can't be done because of certain laws and treaties.

### **Council of Canadians -**

**Sara Ehrhardt** is a senior technical officer of the Global Water Partnership where she advocates for water security. She is a water campaigner of the Council of Canadians and one of the many dissenting voices when the Great Lakes Compact was first being written. She is critical on how the US states handle water crises and how the Great Lake states in the US still prioritize economics and businesses over the water quality of the lakes. She finds that the US states want to take water from Canada and drain the Great Lakes dry. Ehrhardt is influential in the Canadian House of Commons. She is against water diversions, water privatization, and bulk water export. Moreover, the Council of

Canadians is part of the Eau Secours. She wanted Canada to condemn the annex of 2001 and assert its jurisdiction on the Great Lakes.

### President of the Great Lakes Industries -

**Kathryn A. Buckner** is the president of the Council of Great Lakes Industries. This council supported and had members of various companies that used Great Lakes water like Nestlé Waters NAC. Buckner is one of the biggest opponents to the strictness of the Great Lakes Compact. She and the CGLI played an influential role during the making of the compact as they did not believe that bottled waters counted as diversions of water. She formerly was the special advisor for the Great Lakes Observing System and has a background of law. She's known for her focus and strong-willed personality when coming to decisions. Buckner believes that the region has enough water to focus more on industry.

