



Issue Paper

GREAT LAKES WATER RESOURCES COMPACT

The Great Lakes Water Resources Compact is intended to be a uniform regulatory approach for all Great Lakes states to use when regulating water use within the Great Lakes basin. All Great Lakes states must adopt statutory language to ratify the Compact, then Congress must pass legislation authorizing the Compact to be implemented by the states. No state can make any substantive changes to Compact without the approval of all other Great Lakes states, but states have some flexibility under the Compact and can adopt additional language clarifying how the Compact would be implemented.

Although the Compact was initiated as a response to the potential for major out-of-basin diversions, it is much more than that. It would require the establishment of a significant regulatory framework for in-basin water users – industries, municipalities, utilities, farmers – and would prohibit the diversion of Great Lakes water to Wisconsin communities that are within a few miles of Lake Michigan, even though communities in Illinois would not face the same prohibition.

Background

Wisconsin statutes and administrative rules currently reflect compliance with the Great Lakes Charter of 1985. Section 281.35, Wis. Stats., and NR 142, Wis. Adm. Code, establish a regulatory framework for water use throughout the state that is conceptually similar to the Compact. However, current state law does not contain any ban on diversions. Diversions are subject to the federal Water Resources Development Act of 1986. WRDA is vague and allows any single Great Lakes state governor to veto a diversion in another state.

Annex 2001 to the Great Lakes Charter of 1985, signed by Wisconsin and the other Great Lakes states, prohibits any Great Lakes state from allowing a new or increased withdrawal of surface or ground water from within the Great Lakes basin, except for withdrawals that have a de minimis impact, or withdrawals that meet a number of conditions, such as no significant adverse impacts. Annex 2001 required the Great Lakes states to develop implementation procedures.

The Great Lakes Water Resources Compact is the implementation framework developed by the states.

The Great Lakes System

Consideration of the Compact can only be fairly made with an understanding of the size of the Great Lakes resource and the use that is currently being made of this resource in Wisconsin. According to the Council of Great Lakes Governors, the Great Lakes contain 5.9 quadrillion gallons of water (5,900,000,000,000,000 gallons). Lake Superior has a volume of about 3.2 quadrillion gallons. Lakes Michigan and Huron, which are treated as a single hydrologic unit under the Compact, have a volume of over 2.2 quadrillion gallons.

According to the U.S. Army Corps of Engineers, a one inch change in water level for all Great Lakes amounts to over a 1.6 trillion gallon change in water volume. For Lake Superior, a one-inch change equals about 550 billion gallons of water. For Lakes Michigan and Huron, a one-inch change equals about 790 billion gallons of water. The Great Lakes can have seasonal fluctuations of about one foot and long-term fluctuations of several feet. Natural lake volume variations can involve tens of trillions of gallons of water.

The Great Lakes system is truly an immense resource.

Wisconsin Water Use

The DNR (in an information sheet distributed to the Legislative Council Committee on the Great Lakes Water Resources Compact) and Legislative Council staff (in Staff Memo No. 8 to the Compact Study Committee) estimate total withdrawals from the basin at about 3.5-3.6 billion gallons per day. These estimates appear to not include some groundwater withdrawals for which data is not available. It is important to note that these figures do not include water that is returned to the basin after use, just the water that is taken out.

About 2.9 billion gallons per day of Wisconsin water use is for once-through cooling, primarily at power plants. The U.S. Geological Survey estimates a 1% consumptive use rate for once-through cooling (99% of the water is returned to the source). This would result in an estimate of about 29 million gallons of water loss per day. Utility industry experts indicate that this appears to be in the right ballpark. Applying a 15% consumptive use factor to all other water use (85% returned) results in about another 105 million gallons of water loss per day, for a total water loss of approximately 134 million gallons per day from within the Great Lakes basin. However, as noted above, the information that is available is incomplete, so the actual daily consumptive use might be higher.

Even if actual consumptive use is twice as high as our estimate, it really doesn't change the picture much. That is because what seems like a huge amount of

water in the abstract – 134 millions of gallons per day; 268 million gallons if you double our estimate – is a tiny fraction in the context of the Great Lakes system. For example, the Chicago diversion results in a water loss of 2 billion gallons per day. Two Canadian diversions into Lake Superior total over 3.4 billion gallons per day. Natural inflows to Lake Superior are estimated to be almost 47 billion gallons per day and natural inflows to Lakes Michigan/Huron are estimated to be over 72 billion gallons per day. These numbers, in turn, look tiny in comparison to the natural system fluctuations mentioned previously.

Law of Compacts

Legally, a compact can be viewed as a contract among a group of states. This is why individual states cannot make substantive changes without the approval of all other participating states – every state must be signing the same contract. A compact takes legal precedence over state law, much like federal law takes precedence. One important difference between a compact and federal law is that, depending on how the compact is worded, it can be more difficult to change a compact than to change federal law. For example, once ratified, Congress and all of the participating states would need to agree to any change to the Great Lakes Water Resources Compact.

This makes the ratification process particularly important. States must understand the full implementation consequences of ratification because, from a practical standpoint, it will be very difficult to make changes after the fact. If at some point in the future a state decides it made a mistake and wants to pull out of the Compact, it will need the approval of a majority of other state participants to do so.

It is important to keep in mind two other legal aspects of compacts. First, Congress can, and often does, make changes when approving interstate compacts. In the case of the Great Lakes Water Resources Compact, any Congressional changes would need to be approved by each participating state.

Second, an interstate compact cannot bind Congress. Even if all states agree to a compact and Congress approves it, it does not prevent Congress from enacting a law that overrides the compact. For example, if the Great Lakes Water Resources Compact is put in place, Congress could still take a separate action to approve a large-scale water diversion out of the basin or out of the state.

Compact Framework

The Compact applies to withdrawals, consumptive uses, and diversions of surface and ground water in the Great Lakes basin. A state inventory of water use is required, along with registration and reporting by water users.

The state is required to establish a water conservation and efficiency program for existing water users. This program can be mandatory or voluntary. The state must also promote environmentally sound and economically feasible water conservation measures.

A new regulatory program must be established for any new or increased withdrawals or consumptive uses that exceed a state-specified threshold (a state can set any threshold that it wants, but the default value in the Compact is 100,000 gallons per day). Any proposed withdrawal or consumptive use that exceeds the state-specified threshold must meet several criteria included in the Compact's decision-making standard. In all cases, DNR is the decision-maker. For large projects with a consumptive use greater than 5 million gallons per day, other Great Lakes states are required to review DNR's decision. Language is included that specifies how the baseline is to be calculated from which an increased withdrawal or consumptive use is measured.

The regulatory program that would apply to new or increased withdrawals and consumptive uses is called the decision-making standard and requires that:

- All water be returned to the source watershed, less an allowance for consumptive use;
- The withdrawal or consumptive use be implemented so as to result in no significant individual or cumulative adverse impacts in the Great Lakes basin;
- The project include environmentally sound and economically feasible water conservation measures;
- Water quality laws be complied with; and
- The proposed use be reasonable, considering water use efficiency for the proposed project; water use efficiency for the existing facility; a balance between economic, social, and environmental concerns; the supply potential of the source; and the probable degree and duration of any adverse impacts.

Diversions – taking water out of the basin – are banned, with limited exceptions.

Issues

Wisconsin's pulp and paper industry is dependent on water resources and generally supports protecting the Great Lakes from large-scale, long-distance diversions. However, very little of the Great Lakes Water Resources Compact actually deals with diversions. Most of the Compact deals with the regulation of existing in-basin water users, which is why we have concerns about some provisions in the Compact. Issues of potential concern to the paper industry relate primarily to the decision-making standard and regulatory thresholds, and to a lesser extent with conservation requirements, and the calculation of regulatory baselines.

The decision-making standard is vague and potentially very onerous. Of particular concern is the impacts analysis. Taken at face value, it appears to require an applicant to prove that a proposed project would have no significant adverse impact on any aspect of the ecosystem anywhere in the Great Lakes basin. This could be an impossible task that would be open to legal challenge – not because there would be significant impacts, there likely wouldn't be, but because the scope of the required analysis would be so massive as to be practically impossible. This provision needs to be clarified in a way that provides a reasonable impacts analysis procedure, while maintaining the plain language of the Compact. This will be a daunting task.

A key to how the Compact could impact industry in Wisconsin is the level at which the state chooses to set the threshold at which the decision-making standard applies. If the state uses the 100,000 gallon per day withdrawal default in the Compact, virtually any increase in water use will force a company to run the decision-standard gauntlet. This could mean, for example, that the addition of a new paper machine could be subject to this vague and rigorous test. This could be a significant disincentive for companies to expand production capacity in the Great Lakes basin. Current law sets the regulatory threshold at two million gallons per day of consumptive use (water loss).

The paper industry is a large water-using industry. We have made great strides in reducing the amount of water per ton of paper produced. Nationally, water use dropped by 50% between 1975 and 2002, and further reductions have been made recently. What we fear are mandatory conservation requirements that fail to consider site-specific variations and that could end up penalizing those that have already taken aggressive conservation steps. The Compact should specify a voluntary conservation program, with sharing of information, and periodic evaluation.

These are some of the larger issues that the paper industry has with the Compact. However, there are smaller issues that are too numerous to mention.

Conclusion

We strongly urge the Legislature, the Governor, and the DNR to take the time necessary to find a consensus on how to proceed with ratification of the Compact. We are committed to finding workable solutions, if possible, to our concerns. However, there must be a clear understanding of all implementation issues before the state moves forward with ratification of the Compact.

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