

Lecture NOTES

A Brief History of the Chicago Diversion

The Chicago diversion is the largest and best known out-of-basin diversion of the Great Lakes.

In 1848, the Illinois-Michigan Canal was opened to shipping traffic. This resulted in the diversion of 240 million liters per day (mld) or 64.6 million gallons per day (mgd) of water from Lake Michigan at Chicago through the Chicago and Illinois Rivers to the Mississippi River. At that time Chicago's sewage flushed into the slowly moving, almost stagnant Chicago River and thence into Lake Michigan — the source of Chicago's drinking water. In 1885, 90,000 people died in Chicago from cholera as a result of this situation; this was over 10% of the city's population.

Because of this disaster, the Drainage and Water Supply Commission and the Sanitary District of Chicago were formed. The commission built a new channel and control structures to reverse the flow of the Chicago and Calumet Rivers so that sewage from Chicago would flow through the Illinois River to the Mississippi. The canal was completed in 1900. During the 1920's, the Chicago diversion was as high as 24,000 mld (6,463 mgd). In 1967, the U.S. Supreme Court limited the diversion to 7,600 mld (2,068 mgd), the level it is supposed to be at today.

The Chicago diversion has three components. The first component, 62 percent of the diversion, provides the water supply for the 5.7 million residents of northeast Illinois. The second component is a direct diversion from Lake Michigan into the Illinois River and Canal system for safe navigation and to increase flow in order to improve water quality in the Chicago area. The third component, 20 percent of the allowed diversion, is storm water runoff that would have flowed into the Chicago River and from there into Lake Michigan, but which now flows the opposite direction into the Mississippi watershed.

The level of flows at this diversion has always been a controversial topic because it is the largest diversion out of the Great Lakes Basin and always threatens to increase. The current allocation of 7,600 mld (2,068 mgd) averaged over a forty-year period was established by a U.S. Supreme Court decree issued in 1967 and amended in 1980.

In 1995, a dispute arose between Michigan and Illinois because approximately 740 mld (200 mgd) more water was being diverted from Lake Michigan through the Chicago diversion than allowed by the court decree. Illinois argued that a "paper change rather than a physical change" in the diversion had occurred. The state said new, more accurate velocity flow meters were being used to measure the diversion and that canal locks maintained by the U.S. Army Corps of Engineers were leaking. Michigan argued that Illinois "can't pretend that one number is another."

The federal government and the eight Great Lakes states took this dispute to mediation. Illinois and Michigan requested that the Army Corps of Engineers be granted authority under the Water Resources Development Act to proceed with necessary repairs to eliminate leakage through the locks.

In October 1996, the concerned parties came to an agreement in which Illinois agreed to reduce the out take of water from Lake Michigan to the amount set in the 1967 and 1980 court decree. In return the eight Great Lakes states agreed not to take legal action over the withdrawal violations that had already occurred.

Today, nearly 7 million northeastern Illinois residents live outside the lake's drainage basin – more than half of the state's total population – yet are fortunate enough to have access to lake water because of this diversion.

And so the continuing good fortune of Chicago suburbs attracts attention from Wisconsin developers and officials.