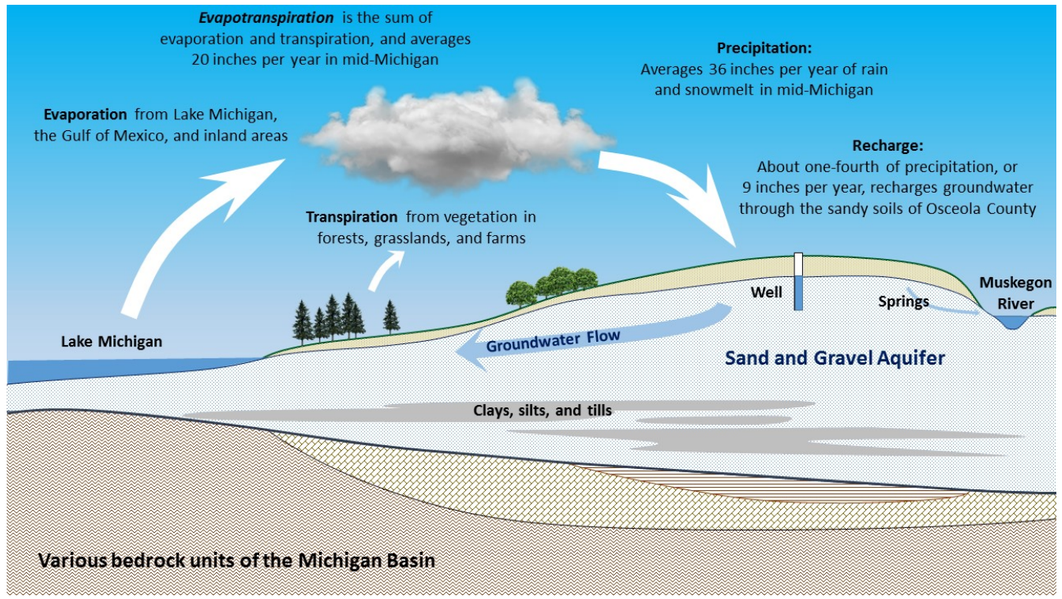
ORIGIN OF MICHIGAN'S SPRINGS

When the glaciers receded from Michigan, they left behind not only the Great Lakes, but massive quantities of gravel, sand, silt and clay that form the rolling hills of northern Michigan. In Osceola County, where Ice Mountain's Evart Springs source is located, these glacial deposits range between 400 to nearly 1,200 feet thick (United States Geologic Survey [USGS], HA 730-J). Water filling the voids between grains of sand and gravel creates prolific groundwater aquifers that supply water for many Michigan cities, farms, businesses, and homes. Groundwater has been called the "sixth Great Lake" as the volume of groundwater stored in Michigan's glacial aquifers (approximately 1.1 trillion gallons) is roughly the same as the volume of water contained in Lake Michigan (USGS WRI Report 00-4008, 2000). Groundwater is continually renewed by precipitation.

Figure 1: West Michigan's Water Cycle



In Osceola County, an average of 36 inches of precipitation each year equates to about 360 billion gallons of water. County-wide, about 90 billion gallons infiltrate the sandy soils to recharge the regional groundwater supply (Michigan Department of Environment, Great Lakes, and Energy [EGLE]). Groundwater flows slowly at the rate of a few feet each day, emerging at springs, lakes, streams, and rivers.

MICHIGAN WATER WITHDRAWALS

To protect both public health and the environment, the State of Michigan governs the withdrawal of water in the State. The permitting standards for bottled water are as rigorous as the standards for municipal water supplies. The State specifies which materials and equipment are used in the construction and operation of a water supply, and certifies site contractors and system operators. State approval for use of the source follows only after an on-site inspection and thorough review of testing data. Water quality must meet or exceed standards set by the US Food and Drug Administration (U.S. FDA), the State of Michigan, and the U.S. Environmental Protection Agency (U.S. EPA).

EVART SPRINGS

Ice Mountain's Evart Springs source consists of two wells owned by the City of Evart. The wells are located in the city's Twin Creek wellfield and are permitted through the State of Michigan to withdraw water at a maximum rate of 500 gallons per a minute (GPM) from Well 13, and 300 GPM from Well 7.

In 2023, Ice Mountain purchased spring water from the City of Evart at an average of 132 gallons per a minute, or nearly one-sixth of the permitted withdrawal rate.

Springs just west of the wellfield flow from the sand and gravel aquifer into Twin Creek, a tributary of the Muskegon River. To meet U.S. FDA requirements for spring water, it has been demonstrated that both wells draw water from the same aquifer from which the springs flow; that well water quality is the same as the water flowing from the springs; and that the springs continue to flow. Our business depends on it.

ENVIRONMENTAL MONITORING

Professionally trained, independent scientists contracted by Ice Mountain monitor water levels in streams, ponds, wetlands, and the aquifer. The flow of Twin Creek is measured at multiple locations both upstream and downstream of the Twin Creek wellfield. The Muskegon River has been continuously monitored in Evart, less than one mile from Evart Springs, by the USGS since 1930.

In keeping with Michigan Water Use regulations, the City of Evart monitors the withdrawal rates form the wells continuously, and annually reports withdrawal volumes to the State. The environmental monitoring program begun in 2004 documents that the Ice Mountain withdrawal has not adversely affected natural resources, local water users, or the environment. The monitoring data are provided to stakeholders.

The aquatic habitat of Twin Creek is also monitored by independent scientists. Twin Creek is designated by the Michigan Department of Natural Resources as a coldwater trout stream, characterized by stable flows, stable temperatures, and a stable channel, which are typical of spring-fed streams. Wetlands adjacent to Twin Creek have been mapped and are routinely monitored. The water withdrawal has not affected the functional ecology of the wetlands or the aquatic communities.

This scientific data is available to the public through the United States Geologic Survey website (https://dashboard.waterdata.usgs.gov/app/nwd/en/?region=lower48&aoi=default) and shared by Ice Mountain with local officials and stakeholders.

RECENT MONITORING RESULTS

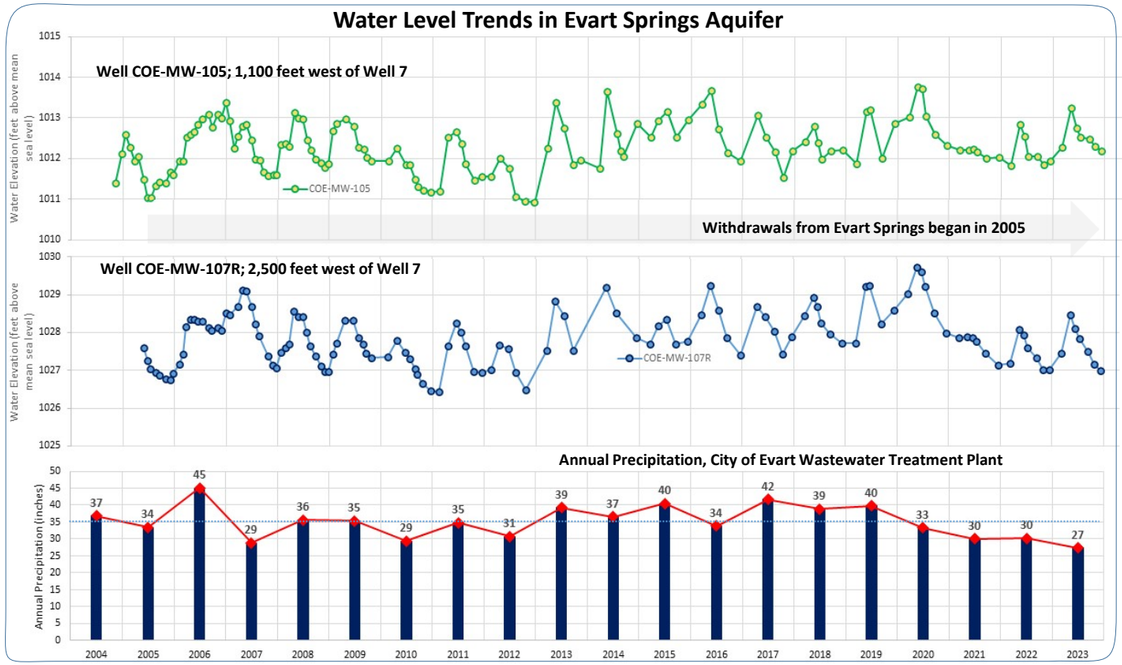
Groundwater levels in aquifers fluctuate several feet over the course of a year. This variation is a function of geology, as well as the amount, intensity, and timing of precipitation. Since Ice Mountain began purchasing water from the City of Evart in 2005, water levels have not measurably declined in the aquifer, but instead remain within historic ranges.

Independent scientists and Ice Mountain Natural Resource Managers monitor groundwater levels for unexpected changes. Figure 2 depicts water elevations in two monitoring wells near at Evart's Twin Creek wellfield.

FUTURE MONITORING

Ice Mountain is committed to sustainable management and stewardship of natural resources. Aquifer groundwater levels, stream and lake surface levels, stream flows, and the ecological health of wetland and fish communities will continue to be monitored for the duration of Ice Mountain's operations in Evart.

Figure 2: Groundwater Monitoring Data and Annual Precipitation (2004-2023)



Average annual precipitation, 1990-2020: 35 inches (NOAA)

Aquifer water levels naturally range 1 to 2 feet from year to year, and as much as 3 feet over the entire 20-year record. Since Ice Mountain began purchasing water from Evart in 2005, water levels have not measurably declined, and have remained within historic ranges.

SUMMARY

Ice Mountain manages water sources sustainably through proactive monitoring and responsible use. Water withdrawals by Ice Mountain at the Evart Springs are overseen by independent scientists and City personnel, and these data have been shared with stakeholders. Water withdrawals from the Evart Springs have not resulted in adverse effects to groundwater, surface water, wetlands, and other natural features in the area.

Questions about Evart Springs or the monitoring program may be directed to:

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Monitoring Summary

2023

EVART SPRINGS, CITY OF EVART, MICHIGAN

ICE MOUNTAIN BRAND