

## Importance of Water Sustainability on UIUC Campus

Water is a major resource that may be undervalued in areas that appear to have abundance. In Illinois, clean water is normally available everywhere in the state whether it is from a public or private supply system. While more than 10 percent of the world's population that does not have any access to clean drinking water and two-thirds of the world's population living in water stressed regions as a result of consumption, growth, and climate change. Many of these water systems are changing because of human actions and areas where water may not be an issue are starting to show signs of quality and level loss. This is due to unsustainable practices and careless management of water supplies. Every reservoir and aquifer that humans draw from have limits that once past will start to deplete them and cause irreversible damages. This concern is starting to arise in Champaign-Urbana and other local communities that draw water from the Mahomet Aquifer.

The growing concern about the high demand the Mahomet aquifer needs to support and the continual growth in the surrounding areas is catching the attention of many regional leaders and scientists. Even though the Mahomet aquifer is estimated to be able to handle 400 million gallons per day this number is very misleading since the average use of the aquifer is 200 million gallons per day. It is misleading because that number is the total withdraws from the aquifer where as locally this value changes depending on many factors. Localized depletion can start happening in areas that begin to withdraw at a faster rate of local recharging. A prime example of this is the Champaign-Urbana's increasing demand for water as caused the artesian head to decline about 50 feet since 1950. It is being speculated that this decline will continue to happen as the University of Illinois at Urbana-Champaign continues to grow.

With that it is important that the University take this issue into consideration when moving forward in all of their actions. The condition and quality of the aquifer is in the hands of the university and how they decide to manage the water consumption on campus. There are many different goals the university can set that will help reduce the demand the campus uses and many different efforts that can be made to reuse different sources of water. These goals can be found in the facilities and services ICAP (Illinois Climate Action Plan) which will be updated in early 2020. These goals include and not limited to reduction of cooling tower water use, water audits, stormwater runoff pollution reduction, and pilot projects for water reuse.

These methods are only some ways the university can help. The first action is to acknowledge there is an issue and make the public aware. This will help the community as a whole come together to help reduce the campus water use. One of the biggest issue with water consumption is that citizens do not realize the severity of issues like this and will continue to waste and use commodities unconditionally because it does not cross their minds. Mahomet aquifer is not an unlimited source of water and we are the ones that need to protect it from ourselves.