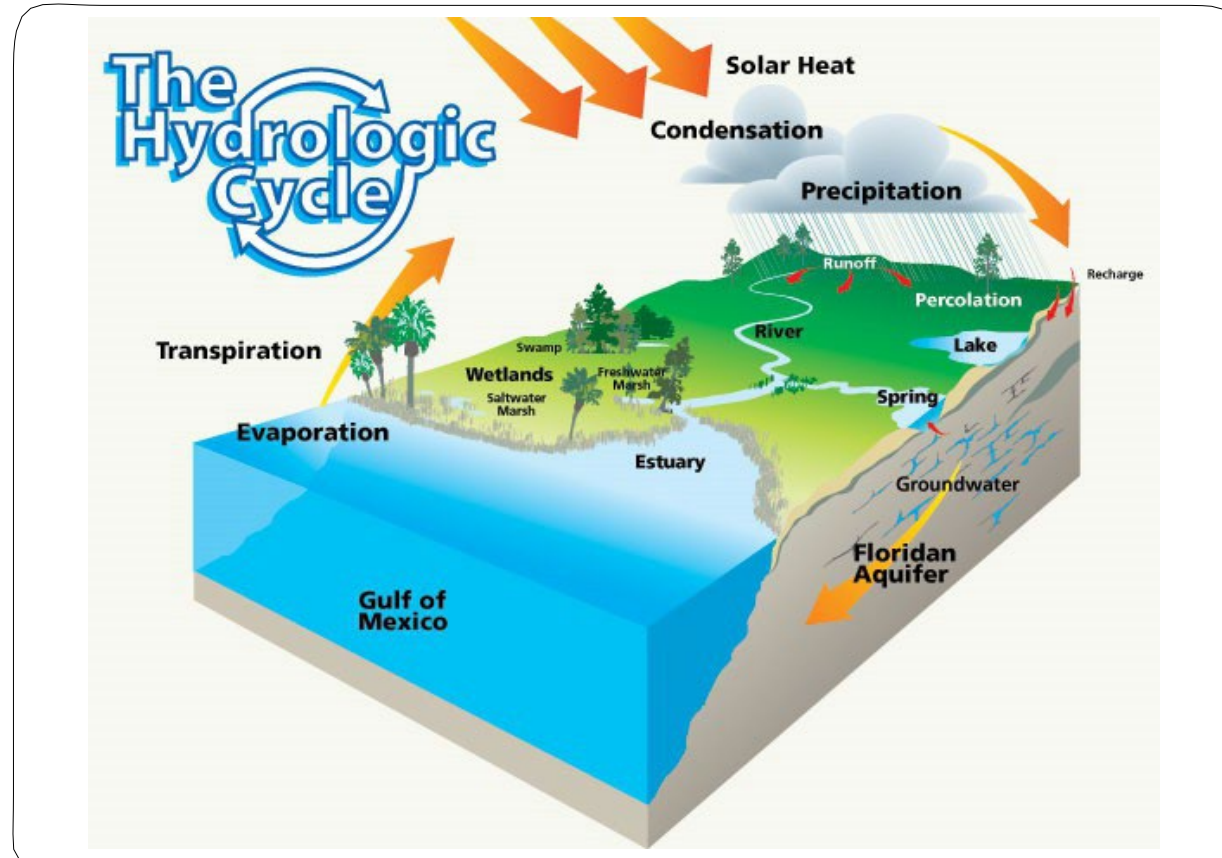


# FLORIDA GROUNDWATER

Millions of years ago when Florida was submerged beneath the ocean, the remains of marine organisms accumulated and were subsequently lithified into thick limestone beds. When sea levels fell Florida emerged from the ocean, and the limestone became exposed and underwent weathering and erosion yielding a complex network of caves and conduits. Today this porous limestone is saturated with freshwater and makes up the Floridan Aquifer System (FAS), which stretches continuously across Florida as well as parts of other bordering states to the north. It covers approximately 100,000 square miles and, in some locations, can be as thick as 3,000 feet (United States Geologic Survey [USGS] DS 926). The FAS receives recharge from precipitation.

Figure 1: Florida's Hydrologic Cycle (Southwest Florida Water Management District, 2018)



The Madison area receives an average of 52.8 inches of precipitation a year (National Oceanic and Atmospheric Administration [NOAA] 30-YR Climate Normals). Across the Madison Blue Spring springshed, this equates to about 84.5 billion gallons that recharges the aquifer.

# FLORIDA WATER WITHDRAWALS

To protect both public health and the environment, the State of Florida 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 can be used in the construction and operation of a water supply and certifies system operators. State approval for use of the source follows only after an on-site inspection. Water quality must meet or exceed standards set by the US Food and Drug Administration (U.S. FDA) and the State of Florida.

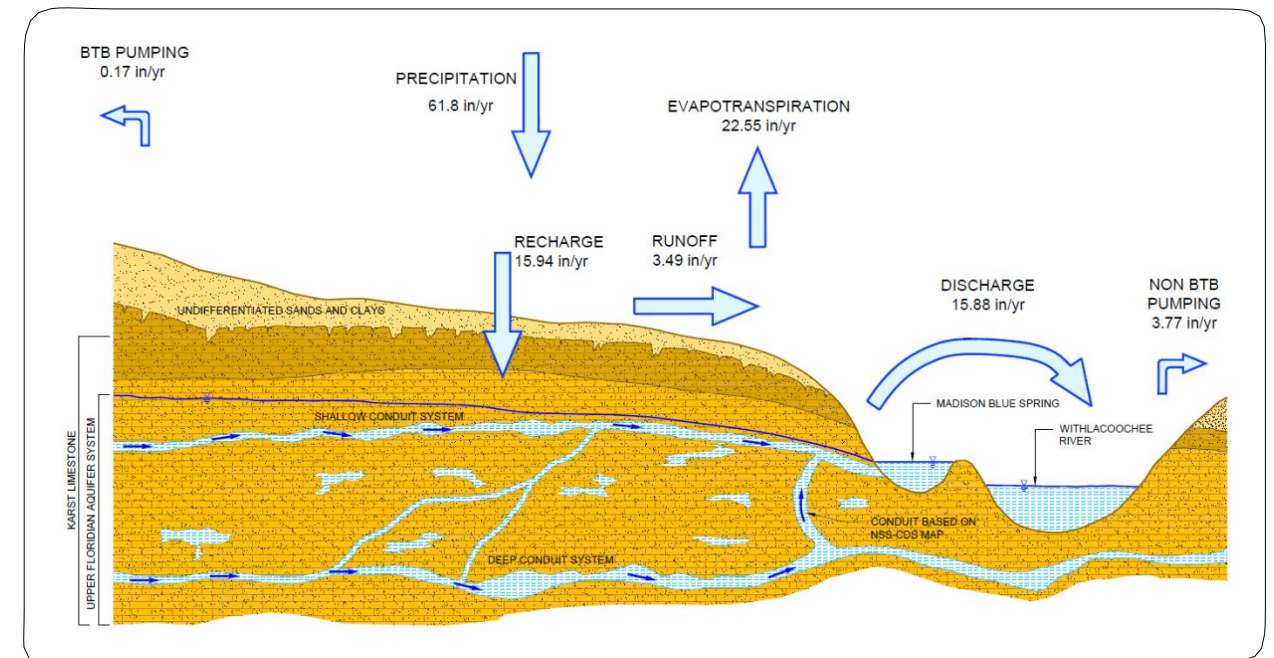
# MADISON BLUE SPRING

BlueTriton Brands' (BTB) Madison Blue Spring source consists of three wells that are upgradient of the main spring vent. BTB is permitted through the Suwannee River Water Management District (SRWMD) to withdraw groundwater at a maximum rate of 1,120 gallons per minute.

In 2023, BTB withdrew an average of 518 gallons per minute from the Madison Blue Spring source, equal to approximately 46% of the permitted rate or 0.17 inches per year (in/yr).

The main spring vent and its associated spring pool flow directly into the Withlacoochee River. To meet the U.S. FDA requirements for spring water, it has been demonstrated that the wells draw water from the same aquifer from which the spring flows; the wells' water quality is the same as the water flowing from the springs; and that the spring continues to flow.

Figure 2: 2023 Madison Blue Spring Water Cycle & Cross Section



# ENVIRONMENTAL MONITORING

Professionally trained, independent scientists contracted by BTB monitor water levels in the aquifer through a network of observation wells. The flow of the Withlacoochee River is measured at multiple points by the USGS, both upstream and downstream of the Madison Blue Spring source. This scientific data is available to the public through the USGS website.

<https://dashboard.waterdata.usgs.gov/app/nwd/en/?region=lower48&aoi=default>

The ecological environment of the Madison Blue Spring pool and the Withlacoochee River upstream and downstream of the spring run are also monitored by independent scientists. The water withdrawal has shown no evidence of adversely affecting the ecology of the spring pool or the Withlacoochee River.

In keeping with SRWMD Water Use regulations, BTB continuously monitors the withdrawal rate from the Madison Blue Spring source, and annually reports withdrawal volumes to the SRWMD.

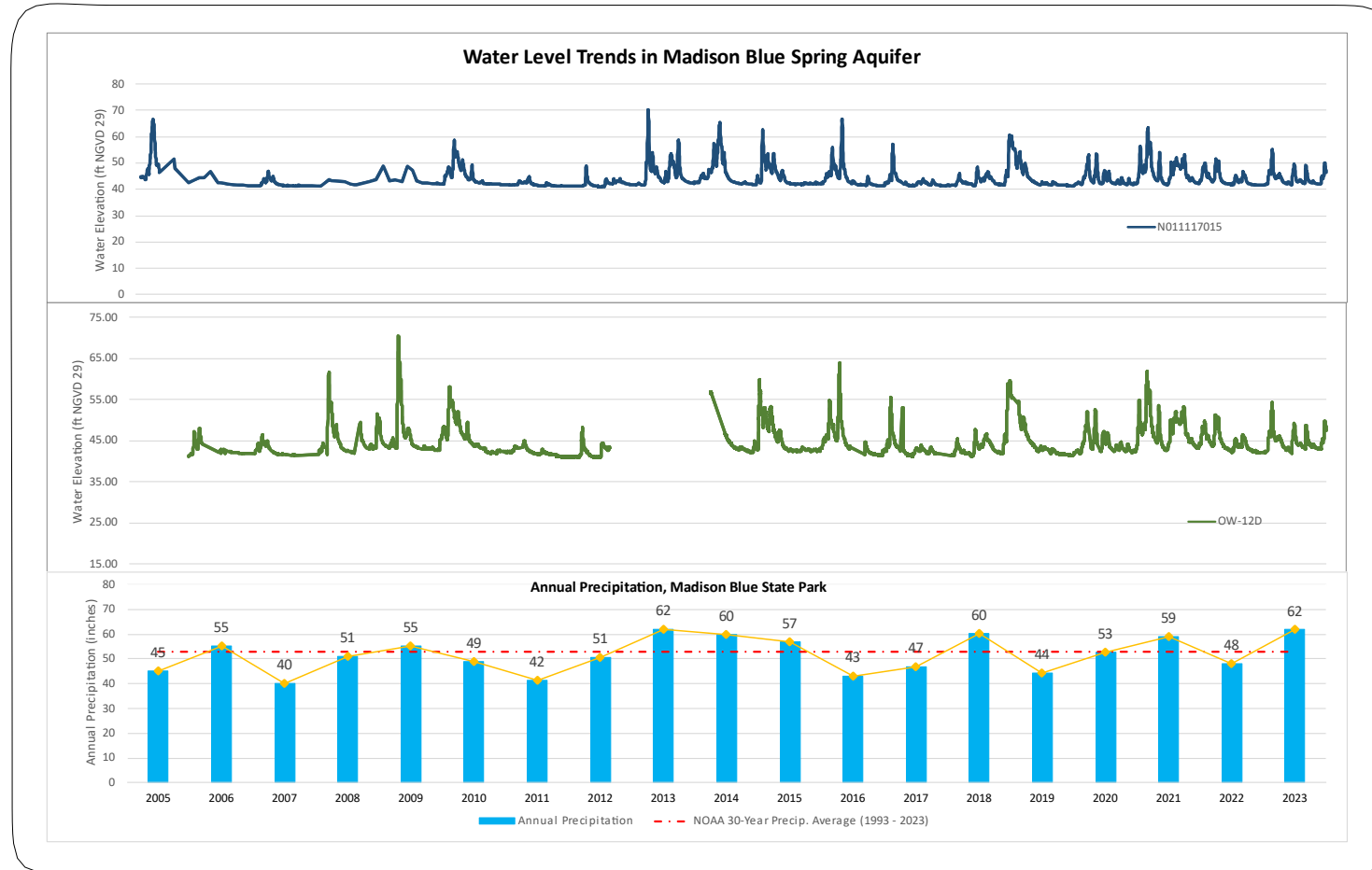
# RECENT MONITORING RESULTS

Groundwater levels in aquifers fluctuate several feet over the course of a year. This variation is a function of geology, as well as precipitation. Since BTB began bottling water from the Madison Blue Spring source in 2005, water levels have not measurably declined in the spring aquifer, but instead remain within historic ranges. Independent scientists and BTB's Resource Managers regularly monitor groundwater levels.

# FUTURE MONITORING

BTB is committed to sustainable management and stewardship of natural resources. Aquifer groundwater levels, stream surface levels, and stream flows will continue to be monitored for the duration of BTB's operations in Madison County.

Figure 3: Groundwater Monitoring Data and Annual Precipitation (2005-2023)



Aquifer water levels naturally range 5 to 10 feet from year to year, and as much as 30 feet over the entire 19-year record. Since BTB began bottling water in 2005, water levels in the Floridan Aquifer System have remained relatively stable.

# SUMMARY

BTB manages our sources sustainably through proactive monitoring and responsible use. Water withdrawals by BTB at Madison Blue Spring in Madison County are overseen by independent scientists, and these data are shared with stakeholders. Water withdrawals from Madison Blue Spring have not resulted in adverse effects to groundwater, surface water, wetlands, and other natural features in the area.

# Monitoring Summary



2024

MADISON BLUE SPRING, LEE, FLORIDA

