



Barton Springs Travis County

Compilation and layout by Robin Gary, Watershed Association, July 2022

Water Source: Edwards Aquifer

Description



Google Earth imagery of Barton Springs pool.

Barton Springs Pool near downtown Austin measures three acres in size and is fed from a collection of karst springs from the Edwards Aquifer. The Barton Springs are made up of Parthenia (Main) Spring in Barton Springs Pool, Eliza, Old Mill (Sunken Garden), and Upper Barton. With an average temperature of 68-70 degrees, these springs make the pool ideal for year-round swimming.

The Edwards Aquifer of Central Texas is subdivided into three segments—the Northern, Barton Springs, and San Antonio segments. Water from Barton, Williamson, Slaughter, Bear, and Onion Creeks as well as the Blanco River enters the groundwater system through faults and fractures in the creek beds which recharges or replenishes the Barton Springs Segment of the Edwards Aquifer.

Challenges

While the City of Austin does not rely on the Edwards Aquifer for its water supply (drinking water comes from the Colorado River), much of the recharge zone is within the city limits. Urbanization increases impervious cover which reduces recharge and increases stormflow and the potential for contaminants to enter the groundwater system. The well-developed flow paths allow groundwater to travel up to 7 miles a day through the Edwards Aquifer. There are approximately 1,300 operational wells with just over 100 permit holders (larger water users). Wells and spring flow are directly impacted by Central Texas' frequent droughts. Average spring flow at Barton Springs is about 65 cfs, but has reached as low as 13 cfs. Two endangered salamanders are found only in the Barton Springs segment of the Edwards Aquifer and its contributing zone.



A whirlpool created as water enters Antioch Cave in Onion Creek (circa 1995). Photo by Barton Springs Edwards Aquifer Conservation District

Protection

The City of Austin, Barton Springs Edwards Aquifer Conservation District, and several regional non-profit and environmental groups have created ordinances and policies aimed at limiting impervious cover, requiring advanced stormwater and wastewater controls, protecting spring flow, and limiting development over the recharge zone. Habitat Conservation Plans protect the two endangered salamanders from the effects of groundwater pumping and swimming operations in Barton Springs pool. Additionally, the City of Austin established the Water Quality Protection Lands program to purchase land and establish conservation easements in the Barton Springs contributing and recharge zones; to date, over 34,194 acres (17,640 acres or 28% of the recharge zone and 15,911 acres or 9.4% of the contributing zone) have been permanently protected through this program.



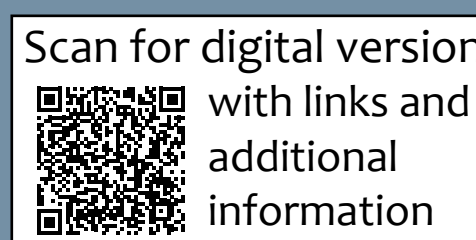
Volunteers gather native plant seeds on the Water Quality Protection Lands. Photo by the Watershed Association

Access and More Information



Swimmers enjoying Barton Springs Pool. Photo by City of Austin Parks and Recreation Department

Day and season pass sales for Barton Springs pool are recommended to be done online through the ATXswims app, but they can be purchased onsite at a kiosk. Entry fees are charged during the guarded swim, except for 9 pm - 10 pm. Zilker Park hike and bike trails are open year-round. Volunteer and guided hiking opportunities on the Water Quality Protection Lands are available through the Austin Water, Wildlands Conservation Division.



Art4Water is a program of the Watershed Association, a 501(c)(3) non-profit



John Maber, Sacred Springs Kite Exhibition

Photo courtesy of the Barton Springs Edwards Aquifer Conservation District