The Birmingham Industrial Water Supply System represents an outstanding achievement in structural and hydraulic design. Begun almost fifty years ago, it has evolved into a system with a total capacity of 200 million gallons per day.

Three raw water sources comprise the System: the Inland System, the Sipsey System, and the Mulberry System. Each represents a fascinating period of development, utilizing the expertise of noted Alabama engineers and firms.

The Inland System began in 1936 as a W.P.A. project. Located northeast of the city in Blount County on the Blackburn Fork of the Little Warrior River, the project consists of an impoundment and approximately 34.5 miles of 60" diameter steel pipeline and a cast iron distribution system into the Birmingham area. The Inland System is considered to be the City's first reliable source of water for industry.

As Birmingham's industrial base grew during the post-war boom, the Inland System approached its capacity of 45 million gallons per day. In the mid-1950s, a "Committee of 100" was formed by the Birmingham Chamber of Commerce and given the task of investigating and initiating development of the next major source of raw water. By 1959 the Industrial Water Board of the City of Birmingham had been created to operate the Inland System and to develop what was to become the Sipsey System.

The source for the Sipsey System is just below Lewis Smith Dam in Cullman County. Designed by J.W. Goodwin Engineers, it began operation in 1961. Construction of the Sipsey Intake Station was performed by Sullivan, Long & Hagerty of Birmingham. The Intake initially housed four 1750 HP vertical turbine electric pumps. Two more units of similar size were added to bring the Sipsey System capacity to 70 MGD. The pipeline was constructed by Morrison Knudsen of Boise, Idaho and consists of some 37.5 miles of 60" diameter steel pipeline and a distribution system comprised of 42" and 48" cast iron mains. It also contains two 5 million gallon ground storage tanks used as balancing reservoirs and 10.5 million gallon steel standpipe tanks grouped in pairs along the length of the steel pipeline. These serve as surge relief tanks for the pipeline—a design which was unusual for its time. The Cane Creek Booster Pumping Station was later added in northern Jefferson County.

History repeated itself in the mid- to late-1970s as the combined Inland System and Sipsey System became insufficient to meet demands for both domestic and industrial water. At this time, design of the Mulberry System was initiated by Mr. A. P. Foley and conducted by Mr. Kenneth D. Byrd. Mr. Byrd had served earlier as project engineer during design of the Sipsey System. Completed in 1989, the Mulberry consists of the Kenneth D. Byrd Intake Pumping Station which now houses five 4000 HP vertical turbine pumps with a daily capacity of 85 million gallons. Construction of the Intake and 20 miles of 72" steel pipeline was completed by the Martin K. Eby Construction Company of Little Rock, Arkansas. Similar in design to the Sipsey, the Mulberry uses four 5 million gallon steel ground storage tanks as balancing reservoirs and three pairs of 75,000 gallon stand-pipe design surge tanks.

The 1990s have seen Birmingham's economy shift toward service and away from total reliance upon heavy industry. At the same time, domestic water demand has risen rapidly. The Industrial Water Board has been dissolved and the System is now operated by the Birmingham Water Works Board. It is safe to say that, because of the far-reaching planning of both these Boards, Birmingham is assured an adequate supply of domestic and industrial water well into the next century. A sparkling prospect, to be sure!