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Water Supply in Lafayette, Louisiana

Lafayette is a moderate-sized metropolitan area that gets its water almost entirely from underground sources associated with the Chicot Aquifer. Over the past fifty years or so the combined city/parish has approximately doubled in population whereas ground-water consumption has quadrupled. Concern about water supply has grown recently because of this increased local usage as well as other regional demand such as the so-called “merchant” power plants. Historical records show quite a bit of variability in both population and water usage, and, therefore, trends are hard to verify. It is known that ground-water levels have declined about 20 feet (6 m) over the past 50 years and that “capture zones” have increased in the Lafayette area. In spite of this, the Chicot Aquifer in the area is quite prolific and has a great saturated thickness. The aquifer appears capable of supplying the immediate and near-future demand for Lafayette as far as water quantity is concerned.

Water quality is a concern that also must be considered in reference to water supply. Lafayette has no known instances of contamination in its water supply. However, several surrounding communities have reported pollutants and there are numerous potential sources of contamination that exist on or near the land surface in the area. The municipal supply in Carencro and a private site in Broussard have reported TCE (trichloroethene) within the past few years. In addition, potential pollution problems could originate from a variety of sources in Lafayette Parish that include the following: nine “Superfund” sites, 37 solid-waste disposal sites, 60 cases under DEQ remediation, more than 350 non-hazardous waste pits, and about 200,000 people who might accidentally or intentionally introduce substances that could enter the subsurface. In summary, although there seems to be no problem in regard to supplying the needed quantity of water for Lafayette, it is necessary to remain diligent and aware in order to continue to serve the public with good quality water.