



JEFFERSON COUNTY ENVIRONMENTAL SERVICES

CAHABA RIVER

WATER RECLAMATION FACILITY

CONSTRUCTED: 1970 | PERMITTED AVERAGE CAPACITY: 12 MGD | PEAK FLOW CAPACITY: 35 MGD
GRADE IV FACILITY



3900 Veona Daniels Road Birmingham, AL.
35244

Project(s) in Planning

- Weather proofing and specialty coatings to restore and maintain assets
- Add a side-stream UV system for low flows conditions to meet stringent *E. coli* regulatory limits and reduce energy usage
- Modify the flume to handle lower flow measurements and reduce algal growth and buildup
- Investigate seepage into discharge pipeline and repair/demolish old chlorine contact chamber

The Cahaba River WRF is a 12 MGD plant located in south Jefferson County that primarily serves the Hoover area. It is an activated sludge plant with a 5-stage biological nutrient removal (BNR) system. The WRF also has the ability to receive flow and/or send flow through the Al Seier pump station to the Valley Creek WRF.

- Personnel: 15 (8 Grade IV, 1 Grade III, 1 Grade II, clerk, maintenance crew and trainees)
- Plant is staffed 24 hrs per day, 365 days per year
- Regulatory compliance phosphorus limit from April-October is 0.2 mg/L
- Belt filter press used for dewatering of biosolids

History

- 1970: constructed as an activated sludge plant rated at 4 MGD.
- 1984: expanded to 12 MGD plant with a two-stage nitrifying activated sludge system
- 1993: added an influent pump station, headworks, holding basin, and chlorine building.
- 2005: upgraded with a five stage Bardenpho™ system and a chemical feed system for proposed reduced phosphorus limits, an ultraviolet (UV) system, and four holding basins
- 2017: improvements to clarifiers, influent pump station, headworks, and biological nutrient removal system to meet further reduced phosphorus limits and improve the ability to handle more flow during wet weather events

Director: David Denard | Deputy Director: Margaret Tanner | Plant Manager: Jeremy Creel

