

Stormwater Treatment

Cascade Park is the highly anticipated, multi-use urban park currently under construction southeast of downtown Tallahassee. Blueprint 2000 is the agency leading the park construction. Funding for the project comes from a voter-approved one-cent sales tax along with a series of grants and public-private partnerships.

One of Cascade Park's many features, in addition to being a recreational area, is it doubles as a stormwater retention and treatment facility. Once complete, the park will help alleviate local flooding problems by retaining stormwater runoff during peak flow and discharging it in a controlled manner to be channeled out of the city.

In addition to mitigating flood problems during storm events, the inclusion of an alum injection system will treat nearly 75% of the annual runoff that drains from the 860-acre, highly developed downtown watershed which flows through Cascade Park. As water passes through the park's two ponds, it will mix with a proportional amount of alum. This chemical binds to sediments and other contaminants in the water causing them to sink. Treated water then exits the park through underground box culverts before entering a series of wetlands and streams, finally flowing into Lake Munson. With reduction targets of 30% for total nitrogen, 75% for fecal coli form, and 80% for total coli form, the alum treatment system will help stabilize aquatic oxygen levels, reduce turbidity, and remove other hazardous contaminants before returning storm water runoff to downstream sections of the St. Augustine Branch and beyond. The treated water will meet or exceed requirements of the Clean Water Act and is in compliance with National Stormwater Best Management Practices protocols.

The inclusion of the alum injection system would not have been possible without Blueprint's partnership with the United States Environmental Protection Agency and the Florida Department of Environmental Protection. Their contribution of \$421,919 and Blueprint's match of \$565,000 are funding the installation and initial operation and monitoring of the alum system. This investment is no small amount, but the water quality enhancements will be significant. After the initial period, the alum system will be monitored, operated and maintained by the City of Tallahassee who also maintains an alum system on Lake Ella. The quality of a substantial portion of Tallahassee's urban storm water runoff will drastically improve, yielding many positive benefits for the area's environment.