

EJCCWRF Benefit Highlight: Innovating to Minimize Impacts



The Jackson County Utility Authority (JCUA) needs to upgrade our water reclamation / wastewater treatment system. In response, JCUA is partnering with a team of engineers and other experts to plan the design of a new East Jackson County Consolidated Water Reclamation Facility, or EJCCWRF. The new facility will provide for the expanded treatment capacity necessary to effectively manage growth in our community and meet our future wastewater needs, and include a series of technological advances and innovative elements that will provide critical benefits.

This information sheet highlights two important innovations included in the facility design: zero discharge of wastewater and production of biosolids. Both of these improve our ability to protect the environment while benefitting the community.

What is Zero Discharge?

The EJCCWRF is being designed to achieve the goal of zero discharge. This means that the water generated through the treatment process will not be discharged to a local waterbody, but will instead be pumped directly to local industry for reuse. This will minimize discharge of pollutants to local rivers AND reduce the amount of water pulled from the river for industrial needs.

Reducing the volume of water drawn from local waterways provides broad ecological benefits all year, but is especially important during drought seasons when water levels are lower. The EJCCWRF will be designed to meet both industrial standards (for reuse) and standards for discharge to local streams (environmental permits) -- this will provide flexibility for water reuse. The generation of water for industrial reuse has the potential to generate an ongoing source of revenue, which could offset some portion of treatment and operation costs.



Learn More about the Project

The design and construction of the new facility – officially called the East Jackson County Consolidated Water Reclamation Facility, or EJCCWRF – is in the early stages. Visit the project website to learn more about the benefits and participate in the planning of our future wastewater needs.

What are Biosolids?

When wastewater is treated, the water is separated from the solid materials, and then those solids are treated to produce a nutrient-rich organic material referred to as biosolids. As long as proper records are kept to ensure safety, the biosolids can be used as fertilizer and soil amendment. Biosolids generated at existing JCUA facilities are transported to the West Jackson County Regional Land Treatment Facility, where they are unloaded onto storage pads before being used at the land application site. That site is used to grow Bermuda grass, which is harvested as hay and then sold as feed for livestock.

To improve on this process, the EJCCWRF will produce a special kind of biosolids called Class A biosolids, which is a completely non-hazardous product that can be safely used by farmers or home gardeners. Because Class A biosolids are safe, there is no need for extensive record keeping, and, like the water generated for industry through the zero discharge plans, the material could be a potential revenue source, further offsetting operational costs.



Did You Know?

The United States Environmental Protection Agency estimates that approximately 4.75 million dry metric tons of biosolids were produced in the US in 2019 at approximately 2,200 facilities. While JCUA produces only a fraction of that volume, switching to the production of Class A biosolids will allow for beneficial reuse of the material and minimize impacts from operations.