



## City of Buda Water Conservation Efforts

**BUDA, TX — May 20, 2016** — With the summer months fast approaching, the City of Buda is continuing its year round commitment to water conservation. While Central Texas has certainly seen some wet weather recently, the need to conserve must remain a top priority.

Back in 2012 the city was authorized to use and sell Type I and Type II reclaimed water from the City of Buda Wastewater Treatment Facility. The recycled water is used to irrigate landscaped areas around Buda, like the Main Street Median. It's also sold at the city wastewater treatment plant to contractors for use in construction related activities.

### Type I Reclaimed Water Uses

- Commercial Irrigation
- Public Parks, School Yards , or Athletic Fields
- Maintenance of Impoundments or Natural Water Bodies

### Type II Reclaimed Water Uses

- Golf Course & Cemetery Irrigation
- Landscaped Areas Surrounding Commercial or Industrial Complexes
- Land Restricted from Public Access
- Soil Compaction and Dust Control
- Cooling Tower Makeup Water

Water recycling continues to be a major component in managing the City's water resources. Meanwhile, there are other water saving possibilities on the horizon.

One innovative water supply option the City is investigating is "Direct Potable Reuse" (DPR). DPR is the practice of taking high quality treated effluent and processing it into potable water using advanced water treatment technology. Membrane technology (similar to what is used for conventional forms of reverse osmosis treatment) combined with ultra-violet sterilization has advanced to the point where the processing of a variety of previously unused water sources into clean, safe drinking water is possible. And since the source water for DPR is

derived from treated effluent, the volume of water produced from a DPR project remains largely unaffected during times of drought, unlike groundwater supply which could be reduced by up to 50% depending on the severity of drought. This would bolster the City's ability to absorb the impacts of extended dry periods by providing a stable supply.

The decision to pursue DPR as a future supply source requires careful consideration to ensure it would be a good fit for our community. Buda City Council commissioned an initial DPR feasibility study which was completed in 2015. The initial feasibility indicates that a Buda DPR project is feasible from both a technical and regulatory standpoint. Preliminary analysis indicates that Buda could potentially generate enough effluent in the future to sustain a two million gallon per day DPR plant. The feasibility report also indicated that required treatment for the DPR facility would be similar to the technology already successfully in use at a DPR facility in Big Spring, Texas.

Obtaining permits for a DPR project requires in-depth cooperation and coordination with the Texas Commission on Environmental Quality (TCEQ). The TCEQ recognizes that DPR will play an increasing role in meeting the State's future water needs, but is resolute in only permitting projects that will provide a safe water supply while ensuring public health and safety.

Based on the promising results of the feasibility study, Buda City Council approved funding for a one year effluent characterization study. The purpose of this TCEQ required study is to examine the constituents of the City's effluent over a year long period to ultimately determine what form of treatment will be required for a successful project. The City's consultant has submitted a sampling plan to the TCEQ for review, and once approved, the effluent characterization study will begin (anticipated start in July 2016). Data provided by the study will be used by City Leaders to determine if further consideration of DPR is warranted.

Another water supply option in the future is Aquifer Storage and Recovery (ASR). On May 3, 2016, the City Council approved plans to move forward with a feasibility study on (ASR). ASR is the practice of storing water in a suitable aquifer and retrieving it for later use. The technology can be used to meet peak water demands during high use summer months, or for long term storage to provide a reserve supply during extended drought periods.

San Antonio , El Paso, and Kerrville currently use ASR technology and it has proven to be successful in those cities.

The City of Buda is also making a number of improvements to its water distribution system. The improvements have two main components, which include the construction of Well No. 5 at the Garlic Creek Pump Station, and continued progress on interim water improvements.

You can read more about those projects here:  
<http://www.ci.buda.tx.us/DocumentCenter/View/4127>



**Well No. 5 Pump Testing**

In the meantime, Stage 1 Water Restrictions remain in effect. Irrigation is restricted to the hours between midnight and 10 a.m., and 7 p.m. to midnight on the customer’s designated day. Odd numbered residential addresses may water on Wednesday and/or Saturday, while even numbered residential addresses may water on Thursday and/or Sunday. Commercial and multi-family addresses may water on Tuesday and/or Friday.

For a more detailed description of Stage 1 Water restrictions, we’ve included additional information here:  
<http://ci.buda.tx.us/DocumentCenter/View/4128>

Water Specialist Brian Lillibridge is pleased that the city is thinking ahead.

“For a community of its size, Buda is exploring some exciting and ambitious water supply options,” said Lillibridge. The willingness to consider options like DPR and ASR is a testament to our City Council’s and City Manager’s commitment to explore innovative ways to meet the community’s water needs. It also demonstrates their understanding of the necessity to incorporating drought resiliency in future supply planning.”

With Buda growing at a rapid pace, efforts to identify viable water conservation options will remain a top priority for the city. Through water recycling, future water saving initiatives, and the public’s cooperation, Buda will remain successful in its water conservation efforts.

## Helpful Links — Billing/Irrigation use

Meters and Billing: [ci.buda.tx.us/documentcenter/view/2716](http://ci.buda.tx.us/documentcenter/view/2716)

How much water does my irrigation system use?  
<http://www.ci.buda.tx.us/DocumentCenter/View/4126>

Irrigation Running in the Rain:  
<http://www.ci.buda.tx.us/DocumentCenter/View/4125>

Contact Info: David Marino, Public Information Officer:  
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