City of Brighton



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Department of Utilities

Reference: Presentation of the Erger's Pond Augmentation Station Project

To: Mayor Kenneth J. Kreutzer and Members of City Council

Through: Philip Rodriguez, City Manager

Prepared By: Curtis Bauers, Director of Utilities

Date Prepared: February 20, 2018

PURPOSE

Staff presented the overall Ken Mitchell Water Reservoir Storage Complex Master Plan in February 2017. In October 2017, staff presented an overview of the 2018/2019 investments necessary to complete the Erger's Pond portion of the complex. At this time, staff plans to present the specifics of the Augmentation Station Project in Erger's Pond, which is out for Request For Proposals at this time.

Water has long been a limited resource in Colorado, and as the State's population and Brighton's population continue to grow, it becomes increasingly imperative to use our water supplies responsibly and thoughtfully, and this requires significant amounts of storage in order to outlast the fairly frequent and significant droughts that effect the Front Range.

There is substantial financial impact associated with the completion of the Erger's Pond cell of the Ken Mitchell Complex. These estimated costs have been included in the Enterprise Cash Flow Model and worked into the appropriate rate or connection fee calculations for the past several years. Further, these expenses should largely be viewed as 'insurance' that the already substantial investment in the storage complex is maintained and preserved for the long-term.

BACKGROUND

Gravel mining at the Ken Mitchell site began in the early 1990's and has gone through several iterations during that time.

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As the mining has neared completion, various additional projects/requirements have been necessary to bring it to operational status. The Ken Mitchell storage complex currently consists of about 1,800 AF in Erger's Pond, and 2,600 AF in Cell #3. Cell #2 has been backfilled and no water storage has been contemplated there since about 2006. Cell #1 is currently the only operational storage in the complex. It has a current active completed storage capacity of about 2,700AF. Our current augmentation requirements are about 5,500 AF annually, but much of that is met through wastewater return flows back to the river and does not require water releases from these storage buckets.

Significant amounts of money were invested in the acquisition of these storage vessels and significant additional money (in excess of \$10M) has been invested in the recent completion of Cell #1. Cell #3 and Erger's Pond will require similar additional investments to reach completion. A good rule of thumb for storage acquisition costs in the past decade is approximately \$4,000/AF, with additional completion costs ranging from \$2,000-\$5,000/AF depending on designed resiliency and various nuances of the storage vessels themselves and their locations along the river. So, for a storage complex like Ken Mitchell (7,100AF, or nearly 2.5 BILLION gallons) it would not be extreme to estimate a total investment of nearly \$50M in the complete infrastructure. And, at the current rough value for water acquisitions of \$20,000/AF, the completed facilities will hold over \$140M worth of water when full.

The presentation focuses on the specific improvement to Erger's Pond that is necessary to bring water in and out of it at measured rates. We refer to this as the Erger's Pond Augmentation Station. It consists generally of both a pumped and gravity diversion structure inlet from the South Platte River and a pump station outlet back to the River. Completion is anticipated for late spring 2019.

CRITERIA BY WHICH COUNCIL MUST CONSIDER THE ITEM

This item is presented for informational purposes only.

STAFF RECOMMENDATION

This item is presented for informational purposes only.

OPTIONS FOR COUNCIL CONSIDERATION

No action is required at this time.