




MEMORANDUM

TO: Mayor and Council

FROM: Kimberly A. McNeeley, CPRP, Acting Director
Austin Parks and Recreation Department 

DATE: January 11, 2018

SUBJECT: Council Resolution No. 20171207-059, Review the Costs, Benefits and Types of Remote Testing Technology for Swimming Pools

In December 2017, Austin City Council directed the City Manager to determine the types of remote testing technologies available for use in maintaining proper chemical levels in the Parks and Recreation Department (PAR) aquatic systems, as well as the associated costs and benefits of procuring such technologies. Staff was asked to return to Council with an analysis for potential implementation and budget adjustments. Currently, the PAR Aquatics Division has an automated chemical feeding system at all aquatic facilities, as required by local health codes. The systems currently in place do not have the technology to:

- Remotely monitor chemical reads;
- Remotely receive alerts regarding system failures;
- Make any types of remote adjustment to the chemical feeding system.

Therefore, monitoring or adjusting the chemical feeding system requires a technician to be physically present at a given pool site in order to adjust pool chemicals. It has been determined that remote monitoring and testing technologies will provide continuous and timely chemical readings and the ability to adjust chemicals without requiring a technician at the pool. However, the addition of this technology is an additional expense that cannot be supported by the current Aquatics Division budget. It is also important to note the Aquatics Division budget already exceeds its annual allocation and the addition of a new technology, prior to addressing the annual overage, may be considered fiscally irresponsibility.

Swimming is a popular activity during the hot summer months in Austin, resulting in increased bather load. Increased bather loads in swimming pools result in an increase of contaminants and the increased likelihood of the growth of pathogenic microorganisms. Additionally, an increase in contaminants can result in odor, discoloration, and algae growth. Moreover, contamination by pathogenic microorganisms can cause infections and irritation for bathers in the pool. A loss of pool water, due to leaks found in the mechanical system or pool shell, can lead to a loss of properly treated water. Increased bather load and loss of properly treated water will result in chemical levels dropping rapidly, dependent on the severity of these two considerations.

PAR has performed extensive research on the types of remote testing technologies on the market. Research included communicating with vendors and manufactures, as well as other municipalities and pool maintenance companies that are currently using these types of technologies. These remote monitoring and testing technologies are able to monitor and control chemistry over the internet, while reducing vehicle trips and lost time for the maintenance team.

PAR has identified three different types of remote testing equipment, each with unique features, but all offer the same overall functions with similar pricing. The price estimates included in this document represent the system that best met the needs of the Aquatics Division in the performance of its obligations. An investment in this technology will provide the following benefits:

- Remotely control and adjust chlorine and other chemicals;

- Reduce pool closure times and improved customer service;
- Remotely ensure bather comfort and water cleanliness;
- Remotely verify sanitization activity of chlorine;
- Reduce damage to pipes and pool equipment;
- Increase staffing efficiencies.

After conducting the necessary research, and after having conferred with other agencies that operate similar facilities, it has been determined that the most effective and useful system available for PARD purposes would require a one-time investment of \$300,000 (capital equipment and installation services) for approximately 51 aquatic sites (to include splash pads), as well as an annual fee of \$9,000 (system-wide) for data usage.

At this time, PARD has been unable to identify excess funding to cover the cost of installation and operation for FY18. The Parks and Recreation Department Aquatics Division has historically exceeded its operating budget by \$400,000 annually since 2014. Currently, the Department estimates the Aquatics Division will incur similar overages in FY18. These overages have been and will be covered by an internal transfer of funds from other areas within the Department. Therefore, other areas of the Department will have difficulty meeting obligations and expectations with regards to services, such as increasing youth program after school or summer camp opportunities, increasing playground maintenance, and promoting recycling programs or trail maintenance.

Should PARD proceed with the procurement of this technology, a one-time appropriation to increase the budget amount by \$309,000 for the FY18 operating budget and \$9,000 annually would be needed. If you have any questions, please contact my office at (512) 974-6722.

Cc: Elaine Hart, Interim City Manager
Sara L. Hensley, CPRP, Interim Assistant City Manager
Greg Canally, Acting Chief Financial Officer
Ed Van Eenoo, Deputy Chief Financial Officer