



City Council Report

Date: September 13, 2021
To: City Council
Through: Marc Heirshberg, Deputy City Manager
From: Jake West, Water Resources Department Director
Subject: Approval of Agreement to Share Costs Associated with Seeking to Obtain Approval for Operation of the Flood Control Space in Modified Roosevelt Dam Under a Temporary Deviation to the Water Control Plan ("Agreement"). (Citywide)

Purpose and Recommendation

This Agreement proposes to obtain approval from the United States Army Corps of Engineers and Department of Interior to authorize Salt River Project (SRP) to operate the flood control space in Modified Roosevelt Dam under a Temporary Deviation Plan. This Deviation to the Plan will allow SRP to extend the required evacuation period for water within the first Five (5) feet of the Flood Control Space from twenty (20) days to one hundred and twenty (120) days. The Plan will allow SRP to extend the required evacuation period once a year in a maximum of three (3) years over a five (5) year period. The Parties to this Agreement will share in the use of this water when it becomes available.

It is recommended that the City of Mesa Council approve the Agreement, which is attached hereto in its substantially final form as Exhibit "A".

Background

This year marks the 25th anniversary of the raising of Roosevelt Dam, a \$430 million water infrastructure project that raised the height of the dam by 77 feet which more than doubled the lake's capacity and provided additional water supplies, enough to provide water for around 850,000 households per year. The improvements made included additional space providing for safe operations during large flood events. The Modification Project was completed through a partnership that included the Bureau of Reclamation, the U.S. Army Corps of Engineers, the Maricopa County Flood Control District and the cities of Mesa, Chandler, Tempe, Phoenix, Scottsdale, and Glendale.

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The investment by the cities made it possible to store additional water for uses in their communities, while investments by the federal government and flood control district helped protect downstream communities from the flood-prone Salt River. The modified Theodore Roosevelt Dam allows SRP and partners to store more renewable surface water during the years with high precipitation and helps offset well pumping to preserve groundwater aquifers.

Discussion

The Modified Roosevelt Dam provides flood control space to mediate flooding to downstream communities. The current Water Control Plan developed by the Corps of Engineers require any water that enters the flood control space be evacuated within twenty (20) days. This Agreement will provide a cost sharing mechanism to seek a deviation from the Water Control Plan allowing water to remain for up to one hundred and twenty (120) days to allow for beneficial uses. The Parties entering into the Agreement will receive an allocation of this water based on their percentage of participation. The term of this temporary deviation is five (5) years, with the additional intent to study long-term opportunities for this use of the flood control space.

The temporary deviation plan would occupy the first five (5) feet of the Flood Control Space, providing for a total of 108,620 acre-feet water. Mesa's share of this volume would be 4.42%, or 4,800 acre-feet per fill. The plan allows for one fill per year or a maximum of three fills for a total of 14,400 acre-feet of water that can be used anywhere within Mesa's service area. The City of Mesa share of the Modified Theodore Roosevelt Dam is 15% or \$6.7 million of the cities portion of the capital investment. The ability to operate within the flood control space provides an additional return of investment.

Alternatives

The City of Mesa could decline to enter into the Agreement but then would forego the many benefits of this potential additional water supply.

Fiscal Impact

The estimated cost of seeking the Authorization of Temporary Deviation Plan as provided in the Agreement is around \$1.2 million, with a contingency of up to \$1.5 million. Mesa's share of these estimated costs is 4.42% or a total of \$53,539. The unit cost for this water is around \$11.15 per acre-foot in the first fill. If the space fills three (3) times the unit cost for the water works out to around \$3.71/ac-ft. Water on the open market is currently going for around \$500.00 an acre-foot.

Coordinated With

The City Attorney's Office has reviewed the Agreement as to form and as to the City's

authority to enter.