GBRA provides update on spill gate replacement project for Lake Wood and schedule for on-going repairs at other sites

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In March of 2016, during routine gate operations, one of the spill gates in the primary spillway of H5 Dam at Lake Wood experienced a structural failure rendering the gate inoperable. The failure effectively de-watered the lake and precludes the ability to generate hydroelectricity or provide recreational access.

Restoration of Lake Wood is pending on final design and cost of a hydraulically actuated crest replacement gate. GBRA hired consulting engineers to evaluate alternative gate systems for potential replacement of the existing bear trap gates at H-5 Dam and the other dams in the system. 11 selection criteria were established to compare the various spillway gate options. A critical aspect in the evaluation of the replacement gate system is to match as closely as possible the capacity and discharge characteristics of the existing system to avoid adverse upstream or downstream impacts during flood event discharges. Other key considerations for the evaluation include structural modifications to the existing dam to accommodate each alternative and operation and maintenance procedures. A hydraulic crest gate system was determined to be the most robust and operationally efficient. Installation of a new hydraulic crest gate system will require approximately 24 months for construction.

GBRA continues to work with the Guadalupe Valley Electric Cooperative (GVEC), as well as other stakeholders, to discuss and develop sustainable funding strategies to finance, construct, operate, and maintain operations of the Guadalupe Valley Hydroelectric System and associated lakes. Availability of funding has a direct impact on GBRA’s ability to move forward with construction and installation of the hydraulically actuated crest replacement gate; however, the replacement of the Lake Wood gate remains a priority. GBRA’s intent, with possible additional repairs and maintenance, is to allow for a more planned and scheduled replacement process for the entire system of 15 spill gates across all GBRA dams.

Last fall, GBRA began repair activities on the remaining spill gates to address critical components, which failed at Lake Wood, and were in need of immediate repair at the other dams in the system. Repairs initiated at Meadow Lake and Lake Placid due to their condition. Once completed, repairs at lakes McQueeny and Gonzales will begin. The dam at Lake Dunlap received substantial repairs in 2012 and is believed to be in good operational condition and is not included in these scheduled repairs.

Due to the nature of these repairs, a strict timetable of work expected for each spill gate is not practicable, but work is expected to take at least six months at each dam. Contractors are able to work on two dam sites at once, but only one spill gate at each site at a time. This repair sequence is to preserve GBRA’s ability to operate the remaining spill gates to pass elevated flows. Additionally, each lake must be lowered 18-24 inches for the duration of the repair activities. Please note weather conditions and other uncontrollable factors may increase the length of time needed to complete this effort.

Schedule Update Related to On-Going Repairs

Lake Placid

Currently the contractor’s schedule indicates repair work at TP-4 Dam will continue through May; however, during construction, GBRA identified additional repairs that will be conducted by GBRA crews after the contractor effort is completed. This will require an additional four weeks with a lowered water surface, therefore, the lake elevation is not anticipated to return to normal pool elevations until the end of June.

Meadow Lake
The contractor’s current schedule indicates repair work at Nolte Dam will continue through July. Similar to conditions at TP-4, GBRA has identified additional repairs that will be conducted by GBRA crews after the contractor effort is completed. This will require an additional six weeks with a lowered water surface, therefore, the lake elevation is not anticipated to return to normal pool elevations until early September.

**Lake McQueeney**

Based on the current progress, GBRA believes repairs at Lake McQueeney will begin as soon as the end of May. In order to assist affected property owners in planning for lowered lake levels, GBRA will begin lowering the lake on Tuesday, May 29, 2018. The lake level is expected to be down 18-24 inches for the duration of the repair activities, which is expected to take at least six months.

**Lake Gonzales**

The repairs at H-4 Dam are expected to start in July and continue through the end of the year. Similar to the other sites, the lake will be lowered 18-24 inches. GBRA will provide updates and a 30-day-notice once a definitive date is determined.

GBRA owns and operates the Guadalupe Valley Hydroelectric System (GVHS) which impounds the Guadalupe River in Guadalupe and Gonzales counties. The system was purchased by GBRA in 1963 and consists of six dams and associated hydroelectric generation stations that were put into service between 1928 and 1932 forming lakes Dunlap, McQueeney, Placid, Meadow, Gonzales and Wood. These small lakes have provided the area with recreation and local economic activity since the 1930s; however, the electricity generated and sold no longer provides the revenue needed to repair or maintain the existing system.

GBRA will continue to improve communications with stakeholders regarding updates related to the progress and schedule of spill gate repairs and eventual replacement.