

The U.S. Army Corps of Engineers
Control Tower Gate Chamber Maintenance Project at Cochiti Lake

Welcome to the Albuquerque District's web site for the Control Tower Gate Chamber Maintenance Project.



At over 270 feet tall, the concrete control tower pictured above stands before the massive earthen embankment of Cochiti Dam. Built in the 1970's by the U.S. Army Corps of Engineers, Cochiti Dam reduces the risk of flood damage to the middle Rio Grande valley including the state's largest population center, the City of Albuquerque. The control tower, a separate structure from the dam itself, houses in its base a compartment called the gate chamber, where the hydraulic machinery that operates outlet gates and the gates themselves, are located. The interior of the gate chamber measures approximately 22 by 38 feet and is contained within concrete walls generally about 12-feet thick.

Current Issues:

In late January, 2008, during routine drilling/grouting operations to reduce minor seepage inside the gate chamber, at approximately 45-feet below the lake's surface, the grouting contractor encountered water 18 inches into one of the walls. The contractor immediately reported and sealed off the grouting hole so it would not leak water. A preliminary examination of the condition of the gate chamber walls identified a localized portion where the concrete structure required additional investigation. We immediately began investigations to determine the nature and extent of any concrete problems and to begin to devise repair measures that will ensure the long-term reliability of the structure. We expect results from the current investigation by the end of this calendar year. Preliminary analysis of the problem indicates a potential for slow degradation of concrete in localized areas of the tower. This is not viewed as a short-term threat to the structural integrity of the control tower or its function in making water releases from the dam.

Cochiti Dam has a normal storage/release operation of maintaining a smaller recreation/fisheries pool of approximately 50,000 acre-feet (as seen in above photo) with a much larger space of almost 600,000 acre-feet reserved for floodwaters should they come. Unless inflows exceed downstream channel capacity, the normal operation sets release equal to inflow, to hold the reservoir steady at this level. During the initial investigation phase, we don't expect impacts on either dam operations or recreation at the lake. However, when the results come out at the end of the year, additional investigations or needed repairs may require temporary operational changes, possibly including the partial lowering of the reservoir level. Should there be a need for

such a “deviation” of operations, our process will include coordination with affected partners and the public and plenty of advanced notice before we begin. This deviation if needed is very unlikely to be during spring-runoff, due to the greatest potential for excess floodwaters coming from the spring snowmelt. In the worst case scenario of a leak occurring in the tower’s gate chamber at a rate exceeding the installed sump-pump capacity, backup controls and hydraulics for the hydraulically-operated gates have been installed in the top of the tower down to the gates to maintain their operability until the chamber is dewatered and the leak repaired.

We, at the Corps of Engineers, pride ourselves on maintaining robust Dam Safety and Public Information programs. As part of our continuing effort to keep the public informed on issues of importance, we will employ news articles, websites, and public meetings as needed to provide current information concerning the ongoing work at Cochiti Dam and our other projects. Accurate and timely information is critical to the effective resolution of many issues associated with Corps of Engineers’ projects. This web site has been established to provide the information that you need to stay informed and will be updated from time to time as more information becomes available. Let us know if you have any questions, and please share this site with others interested in this project.

E-mail responses/questions go directly to the desk of the [Chief, Public Affairs](#) for the Albuquerque District and the technical team.