



State of New Mexico  
County of Torrance  
**RESOLUTION NO. 2021- 31**

AUTHORIZING AND APPROVING SUBMISSION OF A COMPLETED APPLICATION  
FOR FINANCIAL ASSISTANCE AND PROJECT APPROVAL TO THE  
NEW MEXICO FINANCE AUTHORITY

**WHEREAS**, Torrance County (the "Governmental Unit") is a duly organized county created and formed pursuant to Section 4-30-1 NMSA 1978 and is a qualified entity under the New Mexico Finance Authority Act, Sections 6-21-1 through 6-21-31, NMSA 1978 ("Act"); and

**WHEREAS**, the New Mexico Finance Authority ("Finance Authority") is authorized pursuant to the Act, particularly Section 6-21-6.4 of the Act, to make grants from the local government planning fund (the "Fund") to qualified entities; to evaluate and estimate the costs of implementing the most feasible alternatives for meeting water and wastewater public project needs or to develop water conservation plans, long-term master plans or economic development plans; and

**WHEREAS**, pursuant to the Act the Finance Authority has developed an application procedure whereby the Governing Body may submit an application ("Application") to the Finance Authority for planning grant financial assistance from the Fund; and

**WHEREAS**, the Torrance County Board of County Commissioners of the Governmental Unit (the "Governing Body") desires to submit an Application for financial assistance from the Fund for a Planning Document, as defined in the Rules Governing the Local Government Planning Fund currently in effect and as specifically identified below, for the benefit of the Governmental Unit; and

**WHEREAS**, the Governing Body intends to submit the Planning Document to develop the Mescalero Dam Mitigation Engineering Plan ("Project") for the benefit of the Governmental Unit and its citizens; and

**WHEREAS**, the application prescribed by the Finance Authority to finance the Planning Document [in whole/in part] with financial assistance from the Fund has been completed, submitted to, and reviewed by the Governing Body, and this Resolution approving submission of the completed Application to the Finance Authority for its consideration and review is required as part of the Application.

NOW THEREFORE, BE IT RESOLVED BY THE GOVERNING BODY: Section 1. That all lawful actions previously taken by the Governing Body and the Governmental Unit and their respective officers and employees in connection with the Application and the Project are hereby ratified, approved and confirmed.

Section 2. That the completed Application submitted to the Governing Body is hereby approved and confirmed.

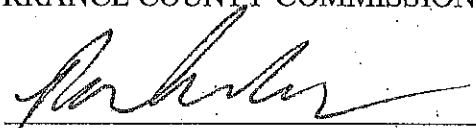
Section 3. That the officers and employees of the Governmental Unit are hereby directed and requested to submit the completed Application to the Finance Authority, and are further authorized to take such other action as may be requested by the Finance Authority in connection with the Application and to proceed with arrangements for financing the Project.

Section 4. All acts and resolutions in conflict with this Resolution are hereby rescinded, annulled and repealed.

Section 5. This Resolution shall take effect immediately upon its adoption.

PASSED APPROVED AND ADOPTED this 28th day of July, 2021.

TORRANCE COUNTY COMMISSION

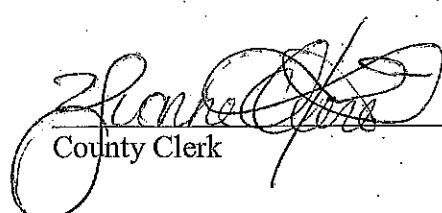
By   
Ryan Schwebach, Chair, District 2

By \_\_\_\_\_  
Kevin McCall, District 1

By   
LeRoy Candelaria, District 3



ATTEST:

  
County Clerk



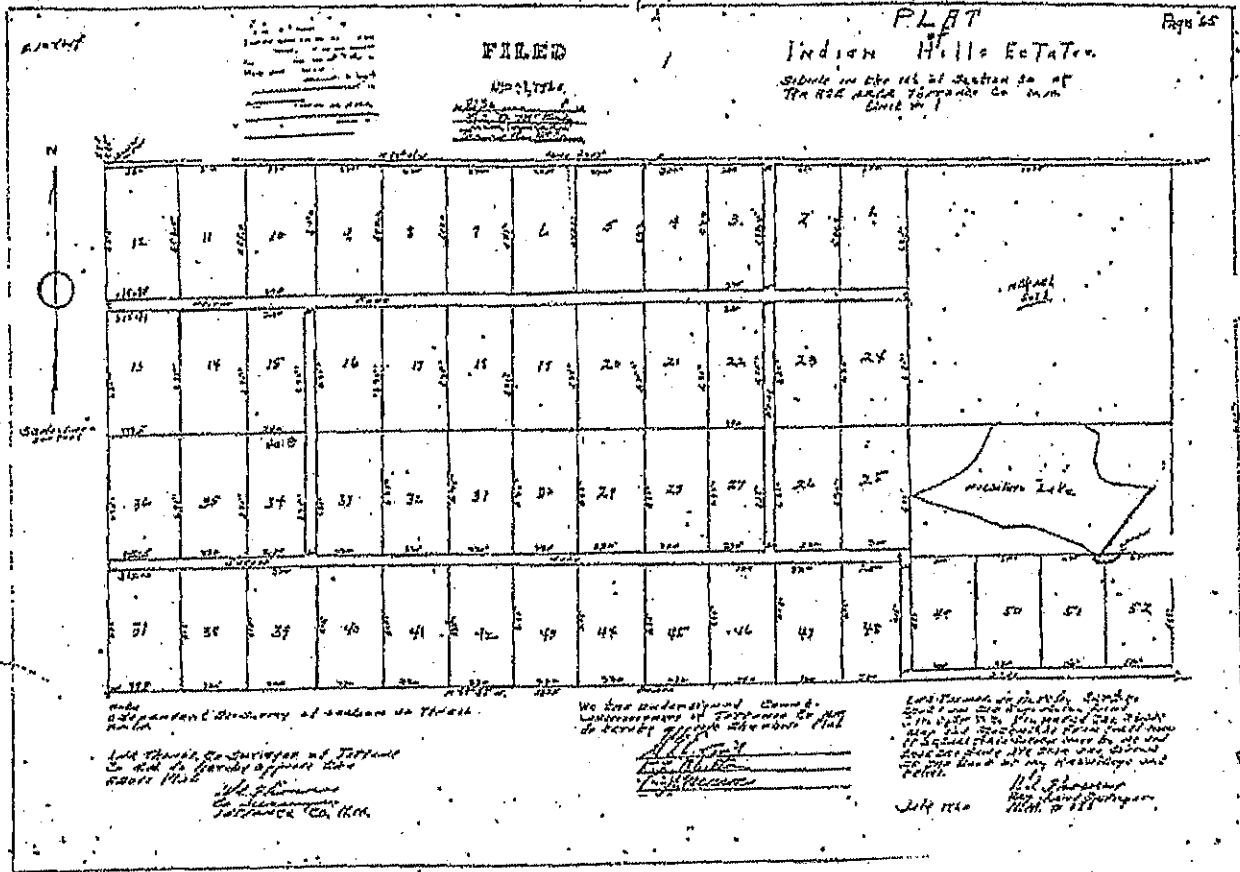


Figure 2. Location of Mescalero "Reservoir" within Indian Hills subdivision.

## Buster Keaton Dam Design

Keaton built the Mescalero Dam on top of a smaller dam created for livestock watering. Keaton specified the maximum height above the foundation: 20 feet, maximum length: 553 feet, maximum width at base: 107 feet, and maximum width at crest: 12 feet. The total capacity when full: 76.26 acre feet (see figure 3). The dam was built for recreation storage only.

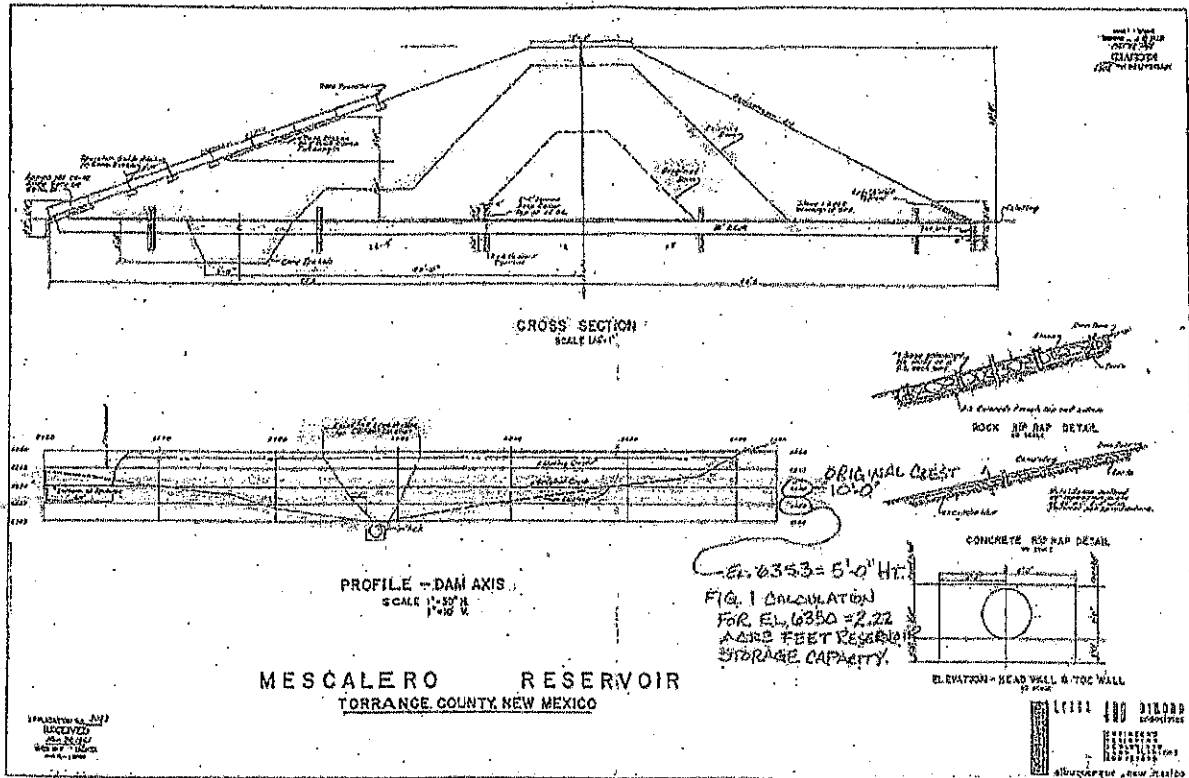


Figure 3: Plan of dam submitted by Buster Keaton to OSE in 1961.

## Need for the Project

The OSE Dam Safety Bureau inspected the dam on February 8, 2012, February 29, 2016, and January 14, 2021. In the latest inspection report, the OSE identified three main concerns that Torrance County must correct:

1. The dam is in poor condition due to the plugged condition of the outlet works conduit, questionable spillway capacity, a severe lack of overall maintenance, and uncertainties with critical analysis parameters due to the lack of a design report on file with the OSE.
2. The hazard potential classification for the dam was reevaluated and has been elevated to "high" based on the locations of houses determined to be within the dam failure flood plain downstream of the dam.
3. As required by the OSE's letter dated November 5, 1975 and given that there is no evidence of water rights in 1975, the dam is not permitted to impound water. This shows that Torrance County may be in violation of the *Rules and Regulations Governing the Appropriation and Use of Surface Waters of New Mexico*. To resolve, Torrance County must acquire water rights, and the County has initiated this process.

## Mitigation Options

Two mitigation options have been identified:

1. Restore and maintain
2. Breach the dam to remove from OSE jurisdiction

Torrance County chooses to breach the dam because Mescalero Dam has never retained water since its construction and fixing and maintaining the dam would be an undue expense. Breaching the dam would also restore the natural watershed. A breach would also prevent a catastrophic break in the event the dam should retain water. Rodents and root encroachment has damaged the dam, so in the unlikely event sufficient water was to collect behind the dam, a break could occur that could flood houses downstream. In addition, breaching the dam could pose a potential liability to homes built after the dam's construction downstream of the dam. An OSE Dam Safety Engineer identified multiple homes located downstream of the dam that could be at least partially flooded if the breach is not properly constructed (see Figure 4).



Figure 4. Some houses located downstream of the dam could potentially be flooded in the event of a severe storm. The black arrow shows the dam location. The white arrow shows one of several houses potentially at risk in the event of a severe storm.

As a precautionary measure, the County intends to utilize the “below grade storage” barrow as a percolation and evaporative ponding area. The ponding area will provide a safety measure in the event of a severe storm water event.

## Scope of the Planning Document

The OSE's *Rules and Regulations Governing Dam Design, Construction and Dam Safety* that incorporates NMAC 19.25.12.19, states Torrance County, as the dam owner, must receive approval from the state engineer to complete a breach. Per the rules, approval is gained by submitting a plan prepared by a professional engineer licensed in the state of New Mexico. To meet State criteria, the plan shall evaluate the potential effects of the dam removal or breach on life, property, and the environment downstream. Torrance County intends to contract with a professional engineer licensed in New Mexico to complete a planning document to include all applicable studies as specified in NMAC 19.25.12.19. Torrance County requests funding of \$50,000 from the Local Government Planning Fund to hire an engineering firm to produce the plan required to breach the dam.

One engineering firm submitted a proposal estimating the cost of the plan in the amount of \$62,968.20 plus New Mexico gross receipts tax (GRT). The estimated time the study would take is approximately 12-14 weeks to complete with a lead time of 2-4 weeks once authorized to begin. The proposal identified specific tasks needed to complete the plan. An OSE Safety Engineer concurred that these tasks are essential within the plan.

**Task A:** Conduct a site survey to include a topographic survey of the dam embankment, spillway, and reservoir, as well as the area downstream of the dam to Lexco Road, including the waste transfer station to ensure this area is protected from a 100-year storm event once the dam is removed. Estimated Task Cost: \$10,211 plus GRT.

**Task B:** Estimate the 100-year flow rate reaching the dam site by developing a hydrologic model of the watershed. Estimated Task Cost: \$9,191.00 plus GRT.

**Task C:** Use the hydrologic modeling results from Task B and develop a hydraulic model of the drainage-way downstream of the existing dam site to determine the impacts from removal of the dam. The downstream end point for the model will be based on the extent of existing development. Estimated Task Cost: \$10,277 plus GRT.

**Task D:** Develop construction plans and specifications to remove the dam and regrade the site. The site grading will preserve the existing localized retention area upstream of the current dam embankment. A plan for new culvert crossing of Lexco Road downstream of the current dam site will also be provided. Estimated Task Cost: \$24,869 plus GRT.

**Task E:** Complete the necessary permit application to obtain OSE approval to remove the dam. Estimated Task Cost: \$4,565 plus GRT.

**Task F:** Support the County by responding to questions or requests for information regarding the dam modification plans. Conduct up to two site visits during construction. Prepare record drawings based on as-built survey information. Estimated Task Cost: \$3,855 plus GRT.

As stated before, the total estimated project to prepare the planning document equals \$62,968 plus GRT. Torrance County plans to cover costs over \$50,000 and secure water rights with County funds. Once the planning document is completed, Torrance County intends to pay costs for the dam modifications as approved by the OSE.