

Environmental Justice 2020

Cochiti Dam Breach

In the first week of March 2020, central New Mexico began to experience unprecedented rainfall. After 22 days of rain, the sewer system in Albuquerque became overwhelmed and raw sewage began flowing through the streets. Concerned about this potential biological hazard, on March 20, 2020, the Albuquerque Environmental Health Department issued a “shelter in place” order for all city residents, to continue until further notice.

As the rains continued, reservoirs along the Rio Grande reached maximum capacity. One of these reservoirs is Cochiti Lake, approximately 50 miles north of Albuquerque, and now filled to capacity at 710,000 acre-feet. Cochiti Lake was created by Cochiti Dam, an earthen fill dam completed in 1973. Historians recently discovered that when the dam was under construction, it was filled not only with dirt and rock, but with tons of unconsolidated municipal waste from Albuquerque and Santa Fe. Sediments at the bottom of Cochiti Lake are also known to contain radioactive materials released from Los Alamos National Laboratory. When all these findings came to light in the summer of 2018, the U.S. Army Corps of Engineers, which built and operates the dam, sought funding from Congress to assess the structural integrity of the dam. Congress denied this funding request.

With the rains unrelenting, in the early morning of March 26, 2020, cracks were discovered around the spillway at the base of Cochiti Dam. Shortly after 12 noon on March 26, water began to burst through the base of the dam as the cracks continued to expand. At 2:38 pm, water began gushing out of the base of the dam and beginning to flood the spillway and overtop the banks of the Rio Grande below. At 3:27 pm, the entire dam begins to crumble and engineers fear that a 50-foot wall of water may sweep down the Middle Rio Grande Valley and reach Albuquerque within eight hours.

Mission: Due to the “shelter in place” order, students will work remotely in one of three teams, considering the values of **fair treatment** and **meaningful involvement** while pursuing the following objectives—

- **Readiness:** Identify all the communities potentially impacted by the dam breach and consider all the ways that people may be impacted. Find the plans that should apply to this incident; e.g., NRF, NM Emergency Operations Plan, tribal, city, and county plans. Summarize key elements of the plans and relay findings to Response team.
- **Response:** Compile and rank a list of priorities to respond to the dam breach over the next 24 hours. Identify agencies and organizations that should participate or must receive notice. Consider needs for evacuation, shelter, food, medical care, protection of property and the environment. Share response plans with Recovery team.

- **Recovery:** Imagine the best outcome for all the people of the Middle Rio Grande Valley following the dam breach. What can be done now to help rebuild quickly and emerge with stronger and more resilient communities? What resources can each level of government provide to assist with that purposeful recovery?

Output: Each team will prepare and present a five-minute PowerPoint briefing. The first brief will begin 60 minutes from when you hear "GO." In your presentation, identify your team name and mission assignment. Include slides with a single image or word or phrase; e.g., "NMED" or "Red Cross." Use any written or electronic resources available to you, but do NOT contact any live persons outside of our class roster.

Questions?

GO!