SAN JUAN-CHAMA PROJECT

NEW MEXICO WATER EDUCATION

The San Juan-Chama Project (Project) is a federal water project built in the 1960s to transport water from the San Juan River system in the Colorado River Basin to Heron Reservoir in the Rio Grande Basin, where it is conveyed to the Rio Grande via the Rio Chama. The Project is operated by the U.S. Department of the Interior's Bureau of Reclamation (Reclamation). The Rio Grande Compact states provide oversight to Project-related water accounting. Reclamation also coordinates with Project contractors (the entities that receive the water). The Project allows New Mexico to use water it is entitled to under the Upper Colorado River Compact. The Project's annual reliable supply ("firm yield" or annual allocation) has been 96,200 acre-feet per year for most of the Project's life. Since 2014, however, a full annual allocation has only been available in 3 out of 10 years (2017, 2019, and 2023).

The Project includes three diversion structures linked via tunnels to the Azotea Tunnel, which takes it through the Continental Divide to its outlet on Jicarilla Apache Nation land southwest of Chama, New Mexico. Water is diverted from the Rio Blanco, Little Navajo River, and Navajo River in southern Colorado. From the Azotea outlet, water flows down Willow Creek to be stored in Heron Reservoir (Fig. 1). It is released from Heron Reservoir at the request of contractors for their use downstream and at the request of the state engineer to make up for depletions to the flow of the Rio Grande, mostly from groundwater pumping.

From Heron, it flows into the Rio Chama and through El Vado Reservoir, the Wild and Scenic Reach of the Rio Chama, the Army Corps of Engineers' Abiquiu Reservoir, and the lower Rio Chama to the Rio Grande. Contractor allocations are shown in Table 1.

Table 1. San Juan-Chama water contracts (acre-feet).

City of Albuquerque	48,200
Middle Rio Grande Conservancy District	20,900
Jicarilla Apache Nation	6,500
City and County of Santa Fe	5,605
Cochiti Reservoir Recreation Pool	4,290
Taos Pueblo	2,215
Ohkay Owingeh	2,000
Los Alamos County	1,200
Aamodt Settlement	1,079
Pojoaque Valley Irrigation District	1,030
City of Española	1,000
City of Belen	500
Town of Bernalillo	400
Town of Taos	400
Village of Los Lunas	400
Town of Taos Settlement	366
Village of Red River	60
El Prado	40
Taos Ski Valley	15

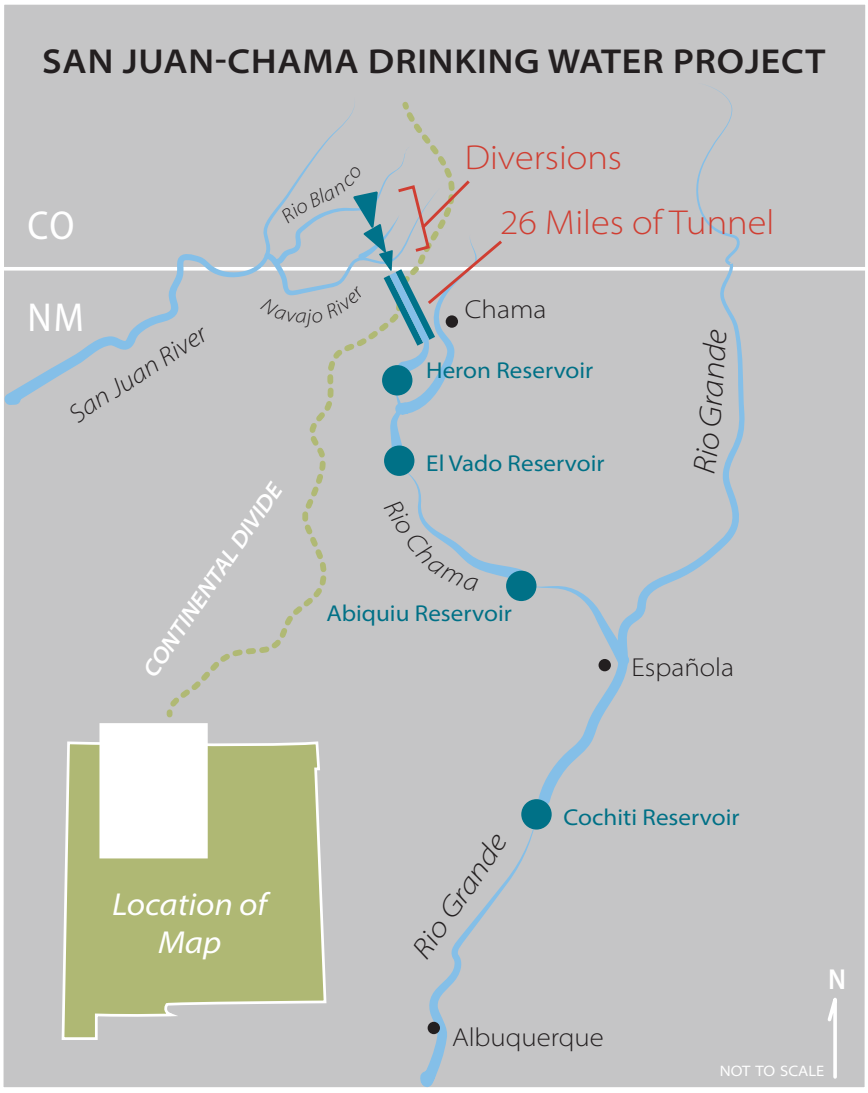

Figure 1. San Juan-Chama Project.

Heron Reservoir. *Photo by Matthew Zimmerer*

Historically, the City of Albuquerque, the largest Project contractor, relied solely on diminishing groundwater supplies. The direct use of Project water, through a diversion from the Rio Grande and an associated treatment plant completed in 2008, allows the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) to use the imported surface water when it is available and save its groundwater supply for times of drought, a practice called "conjunctive management" because it involves the joint use of surface water and groundwater to sustainably provide water to water users. As a result, groundwater levels in the Albuquerque area began to rise in 2008 (Fig. 2).

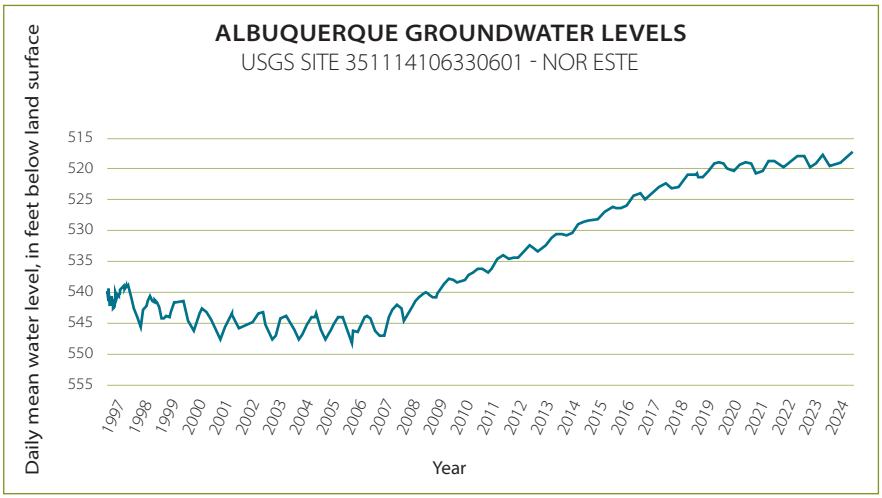

Figure 2. Albuquerque groundwater levels, 1997–2024.

Similarly, the City and County of Santa Fe conjunctively manage their San Juan-Chama water to preserve groundwater for drought supplies. Some of the smaller San Juan-Chama contractors have not yet developed infrastructure to use their supplies directly and instead lease their contracted supplies to others, such as Reclamation for management of endangered species, Audubon Southwest for Endangered Species Act support, construction contractors who withdraw water from the Rio Grande or irrigation canals, and others.

San Juan-Chama Project During Drought

Like all our surface water supplies, the Project is subject to shortages that can result from low flows in the tributaries to the San Juan River from which the water is diverted. The Colorado River Compact is a complex agreement, and the ways that shortages will be distributed within the basin are currently under multi-state negotiation. Climate change analyses indicate that drought periods are likely to be more severe in the future. Whatever future conditions may arise with New Mexico's allotment of San Juan-Chama water, reductions in water use are shared equally by contractors.

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