

San Juan-Chama Return Flow Project Environmental Assessment



— BUREAU OF —
RECLAMATION

Fact Sheet

Background: The Bureau of Reclamation (Reclamation) Albuquerque Area Office, is preparing an Environmental Assessment on the City of Santa Fe's (City) and Santa Fe County's (County) proposed San Juan-Chama Return Flow Project (Project). The City's water supply consists of a combination of native surface water from the Santa Fe River, groundwater, and 5,230 acre-feet per year (AFY) of imported San Juan-Chama Project (SJCP) surface water. The County's water supply consists of surface water from the Rio Grande and 375 AFY of imported SJCP surface water. The SJCP is a Reclamation inter-basin water transfer project that supplies water from the greater Colorado River basin to the Rio Grande basin where it is diverted by the City and County at the Buckman Direct Diversion (BDD) and treated at the Buckman Water Treatment Plant for drinking water. An overview of the SJCP and BDD can be found at: <https://bddproject.org/history/san-juan-chama-project>.

Long-term projections of the City and County's water supply indicate that additional water supplies may be needed to meet demand by as early as the 2030s, with consistent shortages of up to 9,000 AFY by the 2050s. One of the strategies to meet the projected shortfall is to fully consume SJCP water, 2,200 AFY of which is currently unconsumed and discharged to the Santa Fe River.

The City's Paseo Real Water Reclamation Facility (PRWRF) wastewater treatment plant produces reclaimed water at a quality suitable for non-potable water reuse, such as watering parks, and for discharging into the Santa Fe River. From 2011 to 2019, an average of 4,594 AFY of reclaimed water was discharged to the Santa Fe River, of which 2,121 AFY was unconsumed SJCP water. The City and County receive no return flow credit to the Rio Grande from these discharges, and as such, are unable to redivert the unconsumed SJCP water to allow for the full consumption of their SJCP yearly allotment. The purpose of the proposed action is to provide the means for the City and County to fully consume SJCP water by returning unconsumed SJCP water to the Rio Grande through a pipeline and rediverting SJCP water at the BDD.

Proposed Action: The City and County are proposing to construct and operate the San Juan-Chama Return Flow Project to convey reclaimed SJCP water from the PRWRF via a pipeline to discharge directly into the Rio Grande downstream of the BDD intake (Figure 1). The Santa Fe Reuse Feasibility Study (2017) found that a return flow pipeline for unconsumed SJCP water to the Rio Grande is the most effective way to maximize the value of effluent and supplement the City's and County's water supply.

To the extent possible, the pipeline and associated facilities would be constructed within the existing utility corridor that passes through lands managed by the Bureau of Land Management, US Forest Service, State of New Mexico, City of Santa Fe, and private ownership. Facilities that would be built as part of the proposed action include:

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Fact Sheet, continued

- Approximately 18 miles of up to 24-inch-diameter pipeline for reclaimed water;
- A new pump station with up to 15 million gallons per day capacity located at the City’s PRWRF;
- A pressure to gravity transition structure located at the high point in the pipeline near the intersection of Caja del Rio Road and the road to the existing BDD Water Treatment Plant; and
- A discharge facility on the eastern bank of the Rio Grande approximately 350 feet downstream of the existing BDD intake diversion structure.

Additionally, the City and County are assessing the feasibility of including a hydroelectric turbine within the pipeline to generate renewable energy for the water system. Operation of the pipeline would provide the flexibility to increase the amount of SJCP water that can be diverted/re-diverted at the BDD to maximize its beneficial consumption and investment in SJCP water, in accordance with applicable federal and state law. The Project would allow delivery

of over 2,200 AFY to augment the City and County water supply upon construction completion and up to 8,500 AFY by 2055. This represents over 20 percent of current City and County demand and about 40 percent of the projected 2055 demand, thereby reducing reliance on native surface water and groundwater sources.

The proposed action would not involve or affect native Rio Grande flows, and no improvements to the BDD intake structure are required. In addition, there would be no changes to the existing BDD right-of-way and easements, or at the BDD Water Treatment Plant. Unused treated wastewater effluent from non-SJCP water sources would continue to be discharged from the PRWRF into the Santa Fe River.

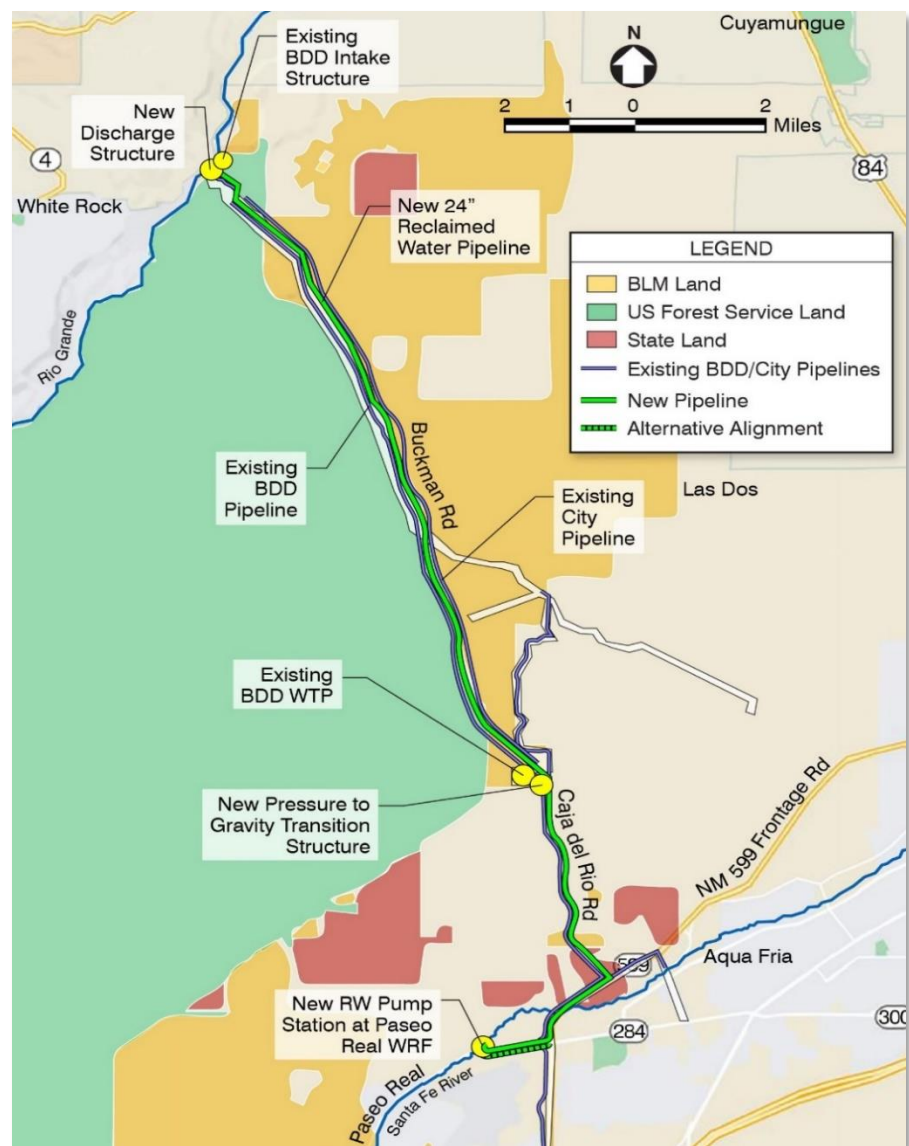


Figure 1: Proposed Pipeline and Facilities