



Frequently Asked Questions

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What is water reuse?

The WaterReuse Association defines water reuse as the beneficial use of reclaimed water for purposes that contribute to the water needs of the economy and/or environment of a community. Reclaimed water is used water that has been treated to be fit-for-purpose for reusing or recycling. This differs from home rainwater collection or greywater reuse, in that it is implemented at a community scale, building on our existing water conveyance and treatment infrastructure.

How can water be reused?

We've been reusing water in Santa Fe for more than 50 years to help sustainably meet our community's water needs. Until now, Santa Fe's reuse program has been focused mainly on landscape irrigation, providing community benefits at facilities like the Municipal Recreation Complex and the Marty Sanchez Links de Santa Fe golf course, among other users. Looking ahead, there are limited opportunities to expand irrigation and other non-potable reuse applications in Santa Fe. Today, many communities are purifying reclaimed water and using it to augment water in streams, lakes, and aquifers for potable supply. Communities in California, Arizona, Colorado, Texas, and even Washington and Virginia are using advanced water purification facilities to augment their potable water supplies. The Village of Cloudcroft, New Mexico is building a direct potable reuse system to help meet its drinking water needs.

Why is Santa Fe considering expanding water reuse?

We've accomplished a lot with conservation, reducing our water use even as we've added new customers, and increasing conservation will continue to be part of our water solutions. Santa Fe's 2008 Long-Range Water Supply Plan called for increasing reuse to help meet our needs and provide community benefits. The need for adding sustainable water supplies such as water reuse was demonstrated in the Bureau of Reclamation's 2015 Santa Fe Basin Study, which projected supply shortages as large as 9,300 acre-feet per year (AFY) by 2055 with the onset of climate change impacts on Santa Fe's supplies and demands. (An acre-foot is equal to about 326,000 gallons, or about the amount of water needed to cover a football field one foot deep.) The Basin Study examined several supply strategies and recommended additional water reuse as a priority for Santa Fe.

What alternatives were considered?

Seven different alternatives were evaluated for expanding water reuse in Santa Fe. These included expanding non-potable reuse to replace the use of potable water for irrigation at additional sites, exchanging reclaimed water for additional diversions of water from the Rio Grande using the existing Buckman Direct Diversion system, and several different ways of purifying the reclaimed water and augmenting water supplies. These included augmenting aquifer at the Buckman Well Field, augmenting Nichols Reservoir, pumping flow up to the upper Santa Fe River to provide "living river" benefits and augment local groundwater supplies, and pumping flow to the lower Santa Fe River near Siler Road to augment local groundwater supplies. The study also assessed purifying water at an advanced water purification facility, and then piping it directly to the Buckman Regional Water Treatment Facility for further treatment and distribution ("direct potable reuse").

What criteria were used to compare alternatives?

A rigorous engineering evaluation defined the infrastructure investments (treatment, pump stations, pipelines, and recovery wells) and the operational costs needed to implement each alternative. The alternatives were then evaluated and compared using five major criteria, including economic, social, environmental, technical, and risk considerations – each with several subcriteria to define how well each alternative meets the community's needs.



How does the highest-ranked alternative meet the community's needs?

The Rio Grande Return Flow Credits alternative was ranked highest, based on:

- Greatest water supply benefit through drought-resistant recycled water supplies
- Fully utilizes Santa Fe's SJCP water
- Lowest capital and long-term costs
- Requires no additional treatment
- Lowest energy and chemical usage (most sustainable)
- Leverages Santa Fe's existing investments and available capacity in the Buckman Direct diversion, conveyance, and treatment systems
- Maintains releases to Santa Fe River for downstream environmental and cultural uses
- Potential for sharing construction costs with U.S. Bureau of Reclamation through the Title XVI program



Will there be a Living River through town?

Absolutely! The City is fully committed to continuing to provide a Living River in Santa Fe. The Water Reuse Feasibility Study concluded that the use of recycled water isn't the best way to provide that flow, because of the infrastructure needed for treatment and pumping. However, we will continue to provide a Living River using bypass flows from the Canyon Reservoirs, just as we have been doing the past several years per the terms of City Ordinance on the Living River.



How much will it cost?

We already have the infrastructure to divert flows from the Rio Grande, using the Buckman Direct Diversion conveyance and treatment systems – and there is available capacity in this infrastructure we can take advantage of. No additional treatment facilities are expected to be necessary to implement the Rio Grande Return Flow Credits alternative. The cost to implement the system includes about \$17.8 million for a new pump station and pipeline. In comparison, if we were to purchase additional water rights on the Rio Grande, instead of implementing the reuse project, we would incur about \$71 million and cause regional impacts in the Rio Grande watershed.



Will water rates go up?

Until we know the potential level of cost-sharing available to Santa Fe, we won't know the full financial implications of this alternative. However, the City is committed to keeping water affordable and having those who use the most water pay their fair share of the costs.



Is water reuse safe?

Yes! Water reuse and the quality of our water supplies is strictly regulated in New Mexico by the New Mexico Environment Department, headquartered right here in Santa Fe. Advanced water treatment technologies and monitoring are used to continually demonstrate that public health and the environment are protected. In fact, water reuse has been safely practiced in Santa Fe for more than 50 years, and across the country in hundreds of systems just like ours.



How will this impact the Santa Fe River downstream of Santa Fe?

Flows will continue to be released to the lower Santa Fe River at the City's Water Reclamation Facility for downstream environmental and cultural uses. A summer target release rate of 2 million gallons per day (mgd) and winter target of at least 0.5 mgd was used to guide planning in the Water Reuse Feasibility Study.



Will water reuse take care of all our future water supply needs?

No. The expanded water reuse system will help provide about 2,300 AFY of additional water to Santa Fe. Under climate change projections, our shortages could be significantly higher than that. We'll need to continue to expand our conservation efforts and consider other water supply projects to mitigate the remaining gap. The City is updating its Long-Range Water Supply Plan to investigate how best to do that.



What happens next?

The Bureau of Reclamation supported the development of the Water Reuse Feasibility Study, and is reviewing the draft report now. Once the report is approved, Santa Fe will be eligible to pursue federal funding through the Bureau of Reclamation to help cost-share the implementation costs. Recently-passed federal legislation opens up additional opportunities for such funding. Design and construction of the necessary infrastructure will follow. The timeline for implementation is being developed in consultation with Bureau of Reclamation staff.