

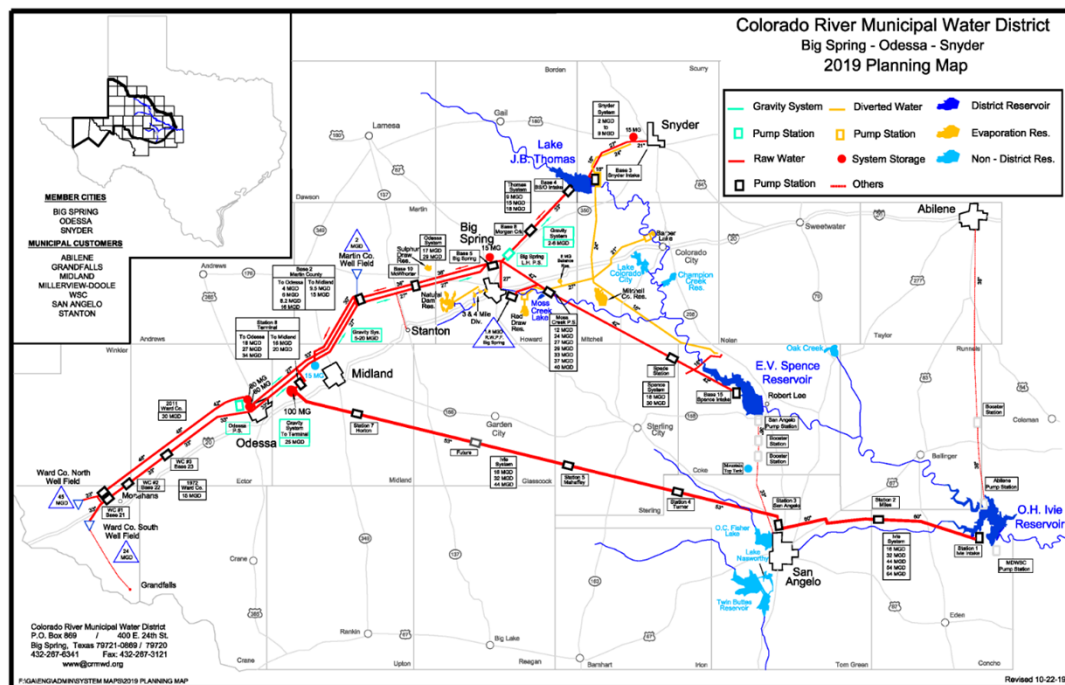
The Concho River Water Project (CRWP): A Discussion



The City of San Angelo has submitted a permit application to the Texas Commission on Environmental Quality (TCEQ) requesting that wastewater (aka sewage) from their water treatment plant be discharged, after being highly treated, into the main stem of the Concho River east of San Angelo to take advantage of what they call an “environmental buffer.” This process would theoretically improve the water’s quality as it flows downstream, at which point the City would remove the same volume they introduced, treat it further, and then reintroduce it into the City’s main water supply. This process, known as Indirect Potable Reuse, has been used by a few Texas cities in different ways but is generally considered innovative and therefore its impacts uncertain. The permit was sought for several reasons but primarily to ensure the economic growth of the San Angelo area. Proponents say it is a vital source of future water and population growth, as well as a more responsible use of existing resources. Critics say the Concho River is too fragile to be subjected to unproven science experiments that may impact people, plants, and animals in unforeseen negative—and maybe permanent—ways.



Three Water Sources for the San Angelo Area



Surface Water (lakes, streams, rivers, etc.)

OH Ivie Reservoir
Twin Buttes Reservoir
Lake Nasworthy
OC Fisher Reservoir
EV Spence Reservoir

Ground Water (aquifers, etc.)

Hickory Aquifer
West Texas Water Partnership (Ft. Stockton)

Reuse (treating wastewater and reusing)

Proposed: Concho River Water Project (CRWP)

Usage:

Annual Daily Demand: 12.5 million gallons | Summer Peak: 24 million gallons | Winter Daily Usage: 10 million gallons

Types and Adoption of “Reuse”

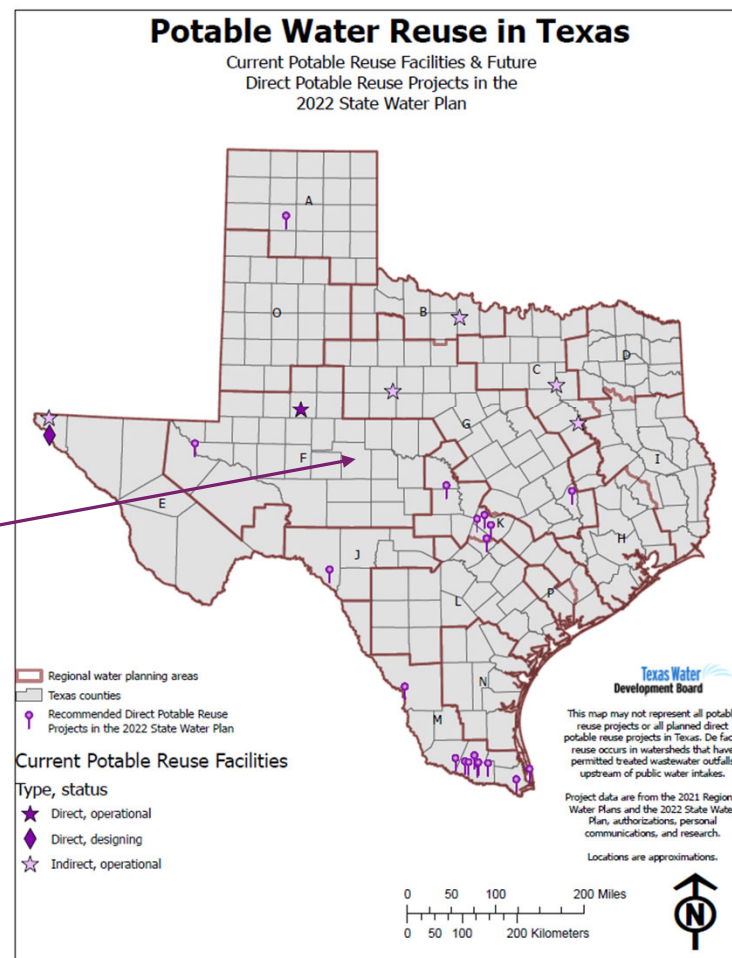
Direct Potable Reuse (DPR)

- The process of treating wastewater using advanced purification methods to a level safe for drinking water and then directly adding it to the water supply without passing through an environmental buffer like a river or aquifer.
- AKA “toilet to tap”

Indirect Potable Reuse (IPR)

- A water recycling process where highly treated municipal wastewater is introduced into an environmental buffer, such as a groundwater aquifer or a surface water reservoir, before being withdrawn and treated again to meet drinking water quality standards.

The CRWP falls into this category



What Are the Current Uses for San Angelo's Wastewater?



Tom Green County Water Control and Improvement District #1

Local farmers in Wall, Veribest, and Mereta irrigate cotton, grain sorghum, corn and wheat using 56 miles of irrigation canals that transport (1) effluent from the City's wastewater treatment plant, or (2) surface water from Twin Buttes Reservoir.

Typically, water from Twin Buttes only flows during periods of sufficient rainfall. The CRWP, if adopted, would divert the City's effluent into the Concho River, thus forcing farmers to seek additional water volume or sources elsewhere, likely increasing costs.



*Water outlet from Twin Buttes to the canal system
(Photo Credit: Concho Valley Home Page)*



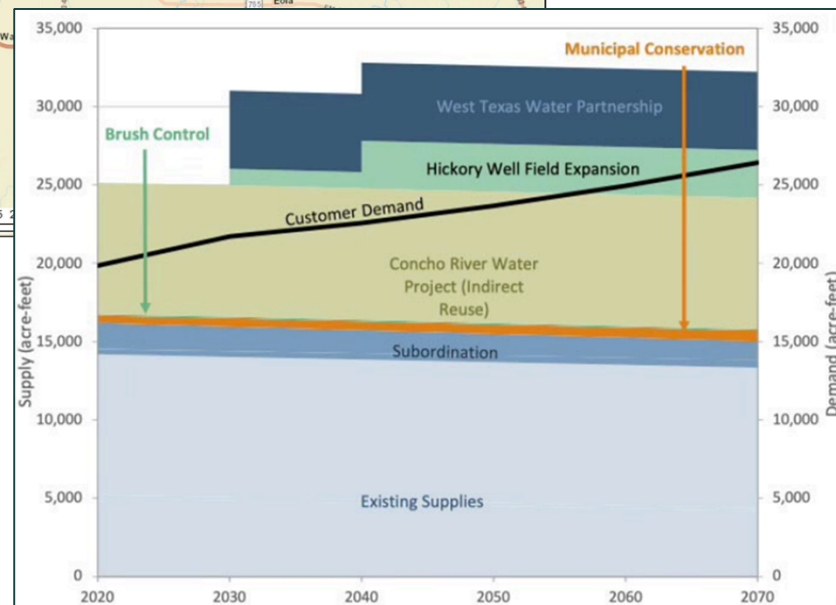
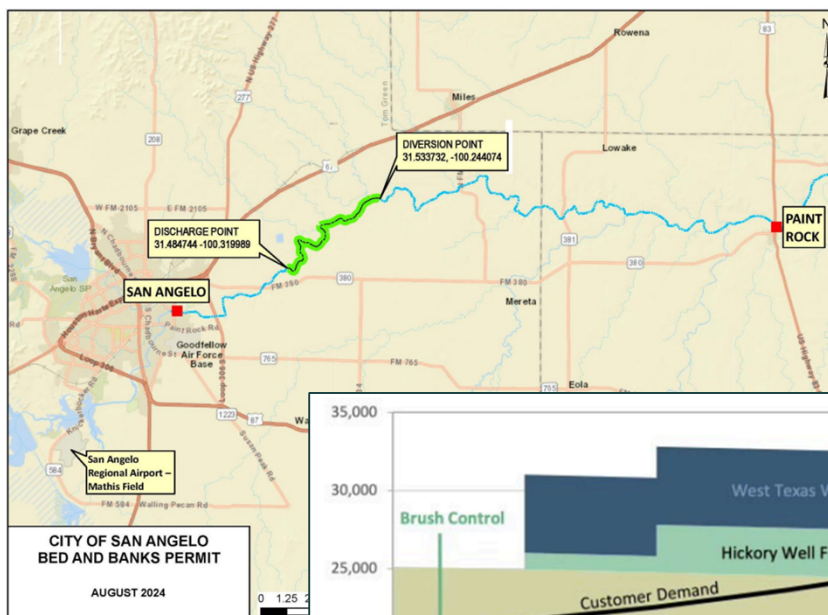
Concho River Water Project (CRWP) Overview

Per the City of San Angelo:

“The project involves releasing highly treated water to federal and state standards from the City's wastewater treatment plant into the Concho River. After it has flowed down that "natural pipeline," the water will be recouped farther downstream. From there, it will be piped to the water treatment plant, where it will be treated to drinking standards.”

Indirect Potable Reuse (IPR):

Highly treated wastewater will be released into the main stem of the Concho River east of San Angelo, will be pumped out after an 8-mile river journey, treated further to a higher standard, then introduced into the city's water supply.



What Are Possible Justifications for Pursing this Project?



1: Economic Growth

- More outside business investment
- More job opportunities
- Improved living standards
- Higher home prices/equity
- More school funding/better outcomes
- More retail food & entertainment options

2: Improved Water Quality

- Parts of the current system are 100 yrs old
- Advances in tech not yet integrated
- Quality could be managed by mixing reuse, surface, and ground sources
- Repair/replacement would minimize risk of future raw sewage leaks

3: Optimization of Water Sources & Risk

- Multiple Sources Reduces Drought Risk
- Combination of Surface, Ground, and Reuse provides max options for crises
- Projected output runs parallel with population growth (more people, more water treated and reused)

4: Environmental Stewardship

- If technology exists to safely treat and reuse water, do we have an obligation to people, plants, and animals to optimize every drop (versus depleting groundwater and surface water)?
- The key word is “safely”

What Are Some Other Perspectives Regarding these Justifications?



1: Economic Growth

Growth is important, but so is conservation and environmental stewardship. Is this a balanced approach that considers both objectives?

2: Improved Water Quality

Updates to the plant are needed regardless of the CRWP that would provide similar improvements. Does the CRWP make it easier to secure that funding?

3: Optimization of Water Sources & Risk

Drought does pose a risk, but are there other surface or groundwater sources we could tap instead, like through the West Texas Water Partnership?

4: Environmental Stewardship

How proven is the technology to clean the wastewater? What if we're wrong and after we reintroduce it, the water has a significant impact on the Concho's ecosystem, changing it forever? Is it worth the risk? On the other hand, more clean water (through reuse) would be a great outcome.

Where Are We At in the Approval Process?



City Council Approval: GRANTED

On September 18, 2018, the City Council unanimously agreed to pursue state permits that will ensure the water is treated to adequately high standards before its release into the river.

Discharge Permit: GRANTED

TCEQ granted Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0010641003 authorizing 13,443 acre-feet of treated municipal wastewater per year. The City has ONLY applied to agricultural irrigation (canals east of town) and has NOT discharged to a watercourse.

Bed & Banks Permit: PENDING

The City's application package was over 400 pages and outlined their perspectives on need, risks, parameters (water quality improvement methods and testing, etc.), and many other aspects of the plan. TCEQ will approve the Permit on/after September 9, 2025, unless either a Public Meeting and/or Contested Case Hearing is granted, which would delay approval. Once approved, the City would have State approval to implement the project.

Funding: NOT SECURED

If the Bed & Banks permit is granted by TCEQ, several studies will still need to be completed to support the project. Solicitations would likely be issued swiftly to get these started. Funding is likely to be primarily sourced through low-interest loans from the Texas Water Development Board. Initial estimates of \$120M have now grown to around \$230M, so funding will likely be a challenge.

How Can I Impact This Process?



City Council Approval:
GRANTED

Proposal of an Ordinance or Resolution: A petition signed by 25% of the number voting at the last regular municipal mayoral election may be presented to the City Council requesting adoption of a proposition that prohibits further development of the project

Political
Process

Discharge Permit:
GRANTED

Bed & Banks Permit:
PENDING

Public Meeting Request: A public meeting will be held by TCEQ if there is “a significant degree of public interest in the application.” However, a public meeting is intended “for the taking of public comment and is not a contested case hearing”, thus has a low chance of impacting the process.

Political
Process

The submission deadline for either of these is September 9, 2025!

Funding:
NOT SECURED

Contested Case Hearing: A hearing might be held by TCEQ if an application is submitted that describes, among other things, (1) how you would be “affected by the application in a way not common to the general public”; and (2) shows the location and distance of your property relative to the proposed activity. Taken together, these imply that land ownership and direct impact must be demonstrated.

Technical
Process

What is the Conservancy's Preferred Way Ahead?



Here is an outline of our thought process:

- 1 – The Concho River is the most important natural feature of the Concho Valley and should be protected. We can't be the generation that allows this 1,000+-year-old waterway to be permanently degraded or destroyed.
- 2 – San Angelo is the primary user and will continue to grow, and that produces economic benefit for everyone affected. Finding ways to balance growth and conservation should be our top goal.
- 3 – Among the Big 3 sources of water (surface, ground, and reuse), the Surface and Ground programs are robust but likely won't be enough for the future. Reuse is the most controversial because the science seems less developed and thus the process more risky. BUT—if the process was proven to produce water at least as clean as what's currently in the Concho, isn't that worth exploring? More clean water benefits the people, plants, and animals along that stretch of the river, and it's more responsible to reuse water where possible (again, as long as health standards are met).
- 4 – Independent Studies and Monitoring: To increase confidence in the process and remove any perceived conflicts of interest, having independent organizations complete the studies and subsequent compliance testing would be a great addition to the City's permit application.
- 5 – In terms of seeking relief through TCEQ on the Bed & Banks permit, we encourage everyone to submit both public comments and contested case hearing requests (if eligible). More voices and perspectives always lead to better outcomes. However, our experience is that TCEQ rarely, if ever, reverses course based solely on political inputs or pressure. If a landowner had valid technical reasons (i.e., could show imminent and/or irreparable harm), they may slow the permit approval until the City finds a way to mediate that impact. But our view is that in the end, TCEQ will grant the City this permit.
- 6 – Thus, to provide voters with the most current, in-depth information as well as a pathway to express their support or disapproval, we prefer submission of a proposition (through signature petition) to City Council that would prohibit further development of the project. We express no opinion in favor or against the proposal but feel that because initial Council approval was granted 7 years ago, current voters have the right to be informed and to affect their local leaders on the issue.



Our Mission:

To cherish and preserve the Concho River and the people, plants, and animals that call it home.



Sources:

<https://www.crmwd.org/sources/combined-surface-water/>

<https://tomgreenwcid1.org/index.php>

<https://www.sanangelo.gov/570/Concho-River-Water-Project>

<https://www.tceq.texas.gov/downloads/permitting/water-rights/pending/notice/city-of-san-angelo-13741-notice.pdf>

<https://www.twdb.texas.gov/innovativewater/reuse/index.asp>



Contact Information

Registered Address:

5900 Balcones Dr, Ste 100 Austin, TX 78731

Local Address:

21052 Private Road 1745 Paint Rock, TX 76904

🌐 conchoriverconservancy.org

@ info@conchoriverconservancy.org

☎ 325-262-7772

📷 [concho_river_conservancy](#)

🎵 [@conchoriverconservancy](#)

✂ [@conchoriver](#)

f facebook.com/profile.php?id=61570502203513