

SAWS/Vista Ridge Pipeline Project: Facts and Figures

History:

San Antonio Water Systems (SAWS) enjoys a position of national leadership as a progressive water utility due to its commitment to conservation and innovative sourcing. Despite considerable population growth in its service area SAWS has maintained overall usage rates level by instituting world-class conservation measures.

In anticipation of future need due to population growth, SAWS is pioneering new supply projects such as reuse, aquifer storage and recovery (ASR), and desalination. In addition to innovative water supply solutions, SAWS has accepted proposals for a large water supply source to import including the Vista Ridge Pipeline Project.

In February 2014, SAWS rejected all proposed water importation projects in favor of a local brackish desalination project. However, by the end 2014, the San Antonio City Council reversed course on importation and approved a Vista Ridge contract based on a deal struck by SAWS, an investment group named BlueWater L.P., and the Spanish conglomerate Abengoa.¹

Details:

The Vista Ridge Pipeline Project is a 30-year public private project (PPP) between SAWS and the Vista Ridge Consortium. The Consortium is made up of a permitted water lease holding company called [BlueWater Systems L.P.](#), and the utility infrastructure firm, [Abengoa Water](#).

Although the Managed Available Groundwater (MAG) for the Carrizo-Wilcox Aquifer is restricted to 36,492 acre-feet in 2050⁴, this project will import 50,000 acre-feet of permitted water per year from the Post Oak Savannah GCD in Burleson County 142 miles to San Antonio's north side as early as 2020.

Pursuant to the "Take or Pay" contract, SAWS must take delivery of up to 50,000 acre-feet per year of delivered water, whether it needs the water or not. The Vista Ridge Consortium (Abengoa and BlueWater) has agreed to assume the delivery risk, including regulatory, technical and financial risks at a fixed price for the duration of the project; and by contract, SAWS will pay for only what Vista Ridge can deliver.

At the terminus of the 30-year operational phase, SAWS will assume ownership and control of Abengoa's supply infrastructure and the right to re-negotiate existing water leases as needed.

The Numbers:

- **50,000 acre-feet/year:** (16,292,550,000 gallons per year) delivery // about **20%** of SA's 237,395 acre-feet: (SAWS 2014 current usage¹)// enough water for 162,000 new families²
- **23,294 acre-feet/year:** TWDB pumping volume limit (MAG) in the 2020 decade⁴
- **0 acre-feet:** SAWS has no current or near future use for this large volume of water until 2060 and only if in drought of record
- **0 acre-feet:** SAWS has no third party utilities interested in purchasing any of this water on a short term contract
- **\$3.4 Billion:** estimated project cost⁷

- **\$2,177 / acre-feet:** 2020 estimated Vista Ridge water cost³ [Fixed cost, \$1,852 - \$1,959; O&M cost, \$175; and Electrical Pumping costs \$173 (last two in 2014 dollars, escalating with inflation)]
- **16%:** projected rate increase **1.8% / year:** San Antonio growth rate (20,000 people/yr)([34,000/yr -SAWS-](#))
- **142 mile:** Vista Ridge pipeline from Burleson County to San Antonio's north side¹
- **34,880 gallons per minute:** theoretical capacity (when pipe is new). At 100% operational efficiency that would deliver about 56,000 ac-ft/yr.⁷

Players:

There are a number of participants in the Vista Ridge project:

- The Carrizo and Simsboro Aquifer units
 - Sand/sandstone aquifers with very slow recharge rates that will not keep up with permitted extraction rates according to TWDB metrics
 - MAG limited to [23,249 acre-feet/year in 2020](#)
- [BlueWater Systems L.P](#) (water lease owner and 70,000 acre-feet/year permit holder)
- [Post Oak Savannah GCD](#) (Burleson County) issues permits for production and exportation
- [Abengoa Water](#) USA (will own and maintain infrastructure from Burleson County to Bexar County)
- Central Texas Regional WSC created by Abengoa to give power of eminent domain for pipeline
- [Vista Ridge Consortium](#) (BlueWater + Abengoa Water USA)
- [San Antonio Water Systems](#) (SAWS) serves approximately 1.6 million people.
- The Edwards Aquifer
 - A fast recharge limestone aquifer underneath San Antonio's prime growth area
 - Is very susceptible to sewage spill and automotive pollution
 - Provides 77% of the City of San Antonio's 2014 water use

Potential long-term regional effects:

- Acceleration of heritage ranchland fragmentation
- The production of ever larger volumes of waste-water that threaten the Edwards Aquifer with pollutants
- Creation of a general attitude of water abundance and waste in a conservation oriented city
- Accelerated Carrizo-Wilcox Aquifer depletion by landscape irrigation wells
- Unintended and incompatible land use changes along pipeline route

Alternatives to Vista Ridge: (\$2,700 / acre-feet: 2050 estimated Vista Ridge water cost⁵):

- The Edwards Aquifer: 294,530 acre feet/year @ \$331-\$531/acre-foot
- SAWS Recycled Water (Purple Pipe): 125,000 acre feet expandable capacity @ \$319/ac-ft
- Aquifer Storage and Recovery (ASR): 200,000 acre-feet expandable capacity @ \$510/ ac-ft
- Brackish Groundwater Desalination: 30,505 acre-foot/year by 2026 expandable @ \$1,138/ ac-ft
- Water Conservation: 16,500 acre feet/year at 2020 expandable @ ~ \$400/ ac-ft and declining
- Lost-Water Sources And Non-Revenue Recovery: 36,305 acre-feet of water/year⁸
- Proposed GBRA Mid-Basin Project: 50,000 ac-ft/year from within basin @ \$1,891/acre-foot
- Local Bexar County Carrizo-Wilcox Groundwater: 21,000 ac-ft/year by 2026⁸ @ \$590/acre-foot
- Rainwater Harvesting: Expandable capacity

Resources:

¹SAWS Water Management Plan Semiannual Report July - December 2014 http://www.saws.org/Your_Water/WaterResources/2012_WMP/docs/WaterMgmtSemiannualReport_July-December%202014_final.pdf

²SAWS Water Resource Projects webpage: http://www.saws.org/your_water/waterresources/projects/vistaridge/

³SAWS Board Briefing: Vista Ridge Contract http://www.saws.org/your_water/waterresources/projects/vistaridge/docs/20140922_SAWSBoardBriefing_VistaRidgeContract.pdf

⁴TWDB Groundwater Management Area 12 - Modeled Available Groundwater http://www.twdb.texas.gov/groundwater/management_areas/dfc_mag/GMA_12_MAG.pdf

⁵Texas Tribune *San Antonio a Step Closer to Controversial Pipeline* by Neena Satija Sept. 30, 2014

<http://www.texastribune.org/2014/09/30/san-antonio-one-step-closer-controversial-pipeline/>

⁶Circle of Blue *San Antonio Pipeline Continues Texas Water Rush* By Brett Walton 29 OCTOBER 2014

<http://www.circleofblue.org/waternews/2014/world/san-antonio-pipeline/>

⁷*Vista Ridge Regional Supply Project Water Transmission And Purchase Agreement*

http://www.saws.org/your_water/waterresources/projects/vistaridge/docs/20141015_SAWS_VistaRidge_WaterTransmissionAndPurchaseAgreement.pdf

⁸Cities of San Antonio and Fair Oaks Ranch Water Policy Analyses: <http://www.expressnews.com/file/124/1/1241-September%2022%20Water%20Policy%20Study%20Update.pdf>

July 2015 SAWS Vista Ridge FAQs http://www.saws.org/your_water/waterresources/projects/vistaridge/FAQ.cfm

SAWS 2014 report: http://www.saws.org/Your_Water/WaterResources/2012_WMP/docs/201401-201406_SAWS_WM_SemiannualReport.pdf

Sierra Club Alamo Group Vista Ridge Pipeline: Information Clearinghouse <http://www.sierraclub.org/texas/alamo/vista>

Abengoa http://www.abengoa.com/web/en/noticias_y_publicaciones/noticias/historico/2014/10_octubre/abg_20141030.html

SAWS' rationale for rejecting the Vista Ridge deal before it accepted a better deal: <http://therivardreport.com/conversation-saws-abandons-pipes-redirects-focus-to-desalination-plant/>