



**Hays Trinity Groundwater Conservation District
Strategic Water Vision 2021
Virtual Stakeholder Working Group Round 1
Held via Zoom
Nov. 9, 2020, 5:30 p.m. – 7:30 p.m.**

Attendees

Name	Organization
*Commissioner Walt Smith	Hays County, Precinct 4
*Commissioner Lon Shell	Hays County, Precinct 3
Eugenie Schieve	Office of Rep. Erin Zwiener
Becca Mlenar	Driftwood Recovery
Chip Schwamb	Skyline Estates WSC
Danny Ross	Camp Young Judea
Garrett Allen	Wimberley WSC
Jennifer Riechers	West Travis County PUA
JJ Rivera	Radiance WSC
Kurt Holman	Lauren Concrete
Kyle Dannhaus	Dripping Springs WSC
Max Cleaver	Hays CISD
Paul Kennedy	Stay N Play Ranch
Roger Moore	Cottonwood Creek RV Park
Scott Way	Seven A Ranch Resort
Terry Shaw	Radiance WSC
Kent Killough	Vista Brewing
Cliff Finley	Radiance WSC

***Elected Officials Present: 2**

Total Attendees: 18

Staff, Board Members and Consultant Team

Name	Title	Organization
Charlie Flatten	General Manager	Hays Trinity Groundwater Conservation District
Keaton Hoelscher	Staff	Hays Trinity Groundwater Conservation District
Philip Webster	Staff	Hays Trinity Groundwater Conservation District
Holly Fults	Board Member	Hays Trinity Groundwater Conservation District
John Worrall	Board Member	Hays Trinity Groundwater Conservation District
Mitzi Ellison	Public Involvement Lead	Nancy Ledbetter & Associates, Inc.
Lauren Canales	Public Involvement Support	Nancy Ledbetter & Associates, Inc.
Dr. David Harkins, PH. D, P.E.	Engineer	Carollo Engineers, Inc.
Tony Smith, P.E.	Engineer	Carollo Engineers, Inc.



Introductions and Background:

Holly Fults, Board Member for the Hays Trinity Groundwater Conservation District (HTGCD; the District), welcomed and thanked the group for their participation in the first stakeholder working group session. She provided a quick introduction and background of the Strategic Water Visions 2021 effort along with virtual meeting housekeeping items such as how to provide feedback through the Zoom meeting chat function, and to make sure microphones stay muted through the presentation. She offered brief introductions of the lead consultants on the call, which included Tony Smith, P.E. and David Harkins, P.E., technical experts with Carollo Engineers, and Mitzi Ellison, lead public involvement manager with Nancy Ledbetter & Associates. From there, the consultant team commenced with the presentation portion of the meeting.

Presentation

Mr. Smith's material summarized available technical information to inform stakeholder deliberations and discussion. Starting with a characterization of the recent history of groundwater use, he provided historical data on reported non-exempt groundwater pumping in the context of monthly and annual use by category in relation to exempt and permitted (but not yet used) amounts. Noting uncertainties in the characterization of use as well as source availability, this material was also contrasted to modeled estimates developed by the State, noting the significance of the relative increases in the reporting of dry wells to the District over the 2009 – 2015 period for which there are records available. Information from regional water planning efforts was then shared, with particular attention given to the characterization of projections of future water demand and its derivation, availability of existing supplies, projections of need over the 2020 – 2070 planning horizon, and the general characterization of the various categories of water management strategies currently contemplated by various water providers in the region. Noting that it is important for decision makers to understand both the extent of knowledge and available information, as well as where knowledge/information may be lacking, Mr. Smith concluded with a summary of identified knowledge gaps and areas with a potential need for improved information.

A copy of the technical analysis PowerPoint slides will be available on the HTGCD website: <http://haysgroundwater.com/>, and click on "Strategic Water Vision 2021" on the left hand side.

Mitzi Ellison presented on the background and purpose of the stakeholder outreach process and additionally provided an overview of the online survey results. She disclosed that the survey was sent to stakeholders in October and was live for feedback between Oct. 14 – 26, 2020. The purpose of the survey was to start the conversation and will supplement discussions and feedback held at the two rounds of stakeholder working groups.

A copy of the PowerPoint slides with survey analysis are available on the HTGCD website: <http://haysgroundwater.com/>, and click on "Strategic Water Vision 2021" on the left hand side.

Mitzi concluded her presentation reiterating the purpose of the meeting and how the Q&A discussion will take place. From there, project staff began to read comments posed in the Zoom chat box for further discussion.

Prior to the discussion portion of the meeting, Dr. Harkins (Carollo) noted that groundwater conservation districts (GCDs) across the state have different authorities and different taxing abilities.



Some GCDs have the ability to ensure people pay for groundwater, but the HTGCD does not have that ability. The underlying legislative mandate for the District does not presently allow for charging for water or the regulatory services provided by the District. These facts were identified as important to note during this discussion when considering data, the survey results, and future efforts of the District.

Open Discussion/Q&A

Question: Will copies of the presentation be available?

Response: Yes, copies of the presentation and meeting notes will be provided on the District website

Comment: Thank you for that presentation. It was incredibly informative!

At this time, there were no questions in the chat box, so Mitzi Ellison provided a few questions to the group to prompt further discussion from the group. The first question was:

- What are your thoughts on conservation?

There were no responses to this question from the group. From there a few questions were then posted in the chat box and read for the group. Responses and follow ups to each question will be outlined below as well.

Question: Would the use of artificial sports surfaces count as a conservation measure? When we irrigate it's for a good purpose, if there were incentives for artificial turf it's a good way to conserve potable water. A lot of resources go into irrigation.

Response (David Harkins): That is a way to conserve water, the project team is uncertain on incentives the city or county has.

Clarification from participant who asked the question: It's less expensive to install natural grass, but long-term less expensive in water use cost for AstroTurf.

Response (Tony Smith): Incentivizing conservation is a good strategy. There are various management practices that can be explored (i.e. artificial turf, reuse, indirect reuse for irrigation). These could be part of cost effective, near-term conservation solutions.

Question: Can we square the water management strategies on Mr. Smith's Slide 15 (Projected Need in HTGCD Area 2020-2070) to the projected needs on Slide 14 (Water Demand)?

Response (Tony Smith): Yes, this is done through the regional planning process, which is a rigorous process the District participates over a repeating 5-year period. Each need is squared with strategies identified to meet the needs for a given entity. The process includes engaging with water providers and capturing plans for their systems and representing those plans in the regional and State planning process. The two regional plans in this area (Hays County is split into two Regions, K & L) have – within the last month – been finalized and submitted to the State for review and approval. The information presented herein relevant to the District/Hays County has been aggregated to provide a snapshot of what those plans are saying about our area of



interest. Engagement in that process is necessary to ensure the planning is representative and appropriate.

Clarification from participant who asked the question: It didn't seem that the amount accounted for, there were enough water management strategies other than aquifer storage and new water source that would account for anything relative to our needs in the out years. If we talk about changing to sports courts and rainwater storage, those seem just like tiny pieces to overall conservation strategies.

Response (Tony Smith): Mr. Smith reviewed the material presented on Slide 16 (Recommended Water management Strategy Types) in more depth. He noted that specific individual strategies alone may not reach the overall goal. These depictions of strategies show a suite of strategies is needed. Water providers can help provide specifics on how best to address their individual projected needs.

Clarification from participant who asked the question: The response still does not provide a promising picture on future resources and how we are going to conserve it, and requested additional clarification on the slide regarding water use. Hays is a fast-growing county, and if residential use is not going to increase relative to how it has increased the last 10 years.

Response (Tony Smith): Mr. Smith went over the water use slide and explained individual estimates of exempt use, and how residential use is also captured in the reported municipal groundwater use within the various individual water providers. When reconciling that Hays County is fast growing, it is important to note that the presented groundwater use herein does not reflect additional use of other supplies, particularly surface water.

Clarification from participant who asked the question: This still represents the growth in the total use of wells that are permitted. It looks like it's been driven by new, permitted wells. How many domestic wells are in this picture – looks like the same wells producing the same amount.

Response (Tony Smith): There are about 100 new exempt wells on average annually added. There is some uncertainty in the estimated amount of exempt pumpage. The District may have more data available on that. Mr. Smith reviewed the slide to differentiate between business and permitted and described the reported usage vs. allocated amount per permit and how that was displayed.

Clarification from participant who asked the question: Noted that was a key element to the slide. And asked, what is the breakdown in the permitted red bar between residential and business?

Response (Tony): The District has that detailed information on permitting. While that level of detail is not presented here, since this is the start of the conversation and we have a second round of meetings, we have the opportunity to provide details like that to inform your discussions.

Mitzi Ellison noted that contact information will be presented later, and comments can be made after this meeting as well.



Question: How important is smoothing out the seasonal peaks? Is irrigation the single biggest water use?

Response (Tony): Ag irrigation or residential irrigation, which is a big component, the extent of the relative effectiveness of conservation depends on the relative extent of their past use. Water use restrictions - especially during drought – implemented as part of Water Conservation Planning efforts have been effectively implemented across the state. It can be a useful tool for managing water supply.

Clarification from participant who asked the question: Conservation was not a big chunk of the Slide 16 (Recommended Water Management Strategy Types) about water use.

Response (Tony): Mr. Smith reviewed the strategies identified in the regional planning process. Conservation is important and should be on the forefront, as it is a relatively cost effective, implementable solution; however, it cannot be the entire solution given the significance of the growth in water demand currently projected for this area. Hence, water providers are contemplating a suite of solutions to meet projected future water demands.

Charlie Flatten (Response): There are two different types of irrigation in the District, one is residential and the other is irrigated agriculture. Almost every GCD in the state can manage and permit irrigated agriculture, but this District does not.

David Harkins (Response): When talking about irrigation, it is typically about irrigation for watering lawns. This is about irrigation for agricultural purposes, but for this District that water use category cannot presently be regulated. Most districts across the state can charge for agricultural use, such as growing crops. That is a big point to understand in this discussion.

Charlie Flatten (Response): At least one utility company in our district is good at restructuring rates based on use and the District is taking a close look into their practices for ideas.

Question: What is the cost of aquifer storage? HTGWCD has transducer in our well showing significant reduction in water levels since installed 10/2018. The idea of having aquifer storage, would that be in the aquifer or storage system above ground? We have seen a large draw down of our well in the last two years. Over last nine months, we are at the lowest level now since we started.

Response (Tony): The strategies recommended in the regional planning process generally contemplate capturing surface water supply from the Guadalupe-Blanco River Authority (GBRA) and injecting that surface water down into the aquifer for storage and recovery at a later point, but that doesn't mean the ASR project would necessarily be located in the area, as that water may instead be pumped to our area. Those costs are approximated in the hundreds of millions of dollars.

Question (Charlie Flatten): What is Aquifer Storage and Recovery (ASR) water costing San Antonio or El Paso residents?

Response (David): The project team does not have current information on that; however, the two cities use different processes for costing. For example, in El Paso, initial water going into the aquifer is regulated at a different price. It's hard to price it out for the different processes. San



Antonio had originally estimated \$.03 per 1000 gallons but the actual cost is likely much more than that.

When you look at Texas, El Paso and Kerrville were first to take surface water, treat it to drinking water standards, and reinject into the ground for subsequent use during peak times. The sediments underlying the ground in the aquifer, and the geochemistry on combining water and moving it in and out, must be considered with ASR. This may be a viable option with the Trinity aquifer, but would require site specific study.

Question: One of the things I don't see discussed is what is needed to keep instream flows. These are vital for economic needs, and are reliant on recreational activities by streams and rivers. What levels do the aquifers need to be at to maintain that.

Response (Tony) – If we are talking recharge, the modeling efforts going on now may result in refined modeling that can be key to better identifying flows necessary to maintain aquifer levels. When it comes to development of existing supply and projected water availability for needs, the State has a process that they went through 10 years ago for establishing standards for instream flows, and those standards have been adopted for river basins and bay systems through a majority of the state. Those standards are incorporated in the official models of water availability used to characterize water for potential use in the recommended water management strategies, to ensure those standards are maintained. They attempt to represent the required preservation of those instream flow standards.

Clarification from participant who asked the question– mentioned that we should ensure streams and rivers flow, there won't be the same need to live here.

Response (Tony) – At the local level, the Bratwurst modeling effort presently underway may better inform on the specifics of the aquifer itself.

Response (David) – Trinity can be used for ASR, but does not mean that in our area, that's the case. There are significant limitations in areas of the state and there are models that demonstrate that.

Question: Question for Kyle Dannhaus @ Dripping Springs WSC, they are studying ASR locally--can he share anything about costs, feasibility?

Response in chat (Kyle Dannhaus): We have some numbers, but they are specific to our system, but one well was around \$1,000,000 per well.

Response (David): That number isn't surprising. Well within the range seen across the state.

Currently, there were no questions in the chat box, so Mitzi Ellison asked further questions to generate discussion and feedback:

- What can the District do to better serve Permittees?
- We'd like to know your priorities – whether that be minimizing cost, maximizing supplies?
- What sort of best management practices are worthwhile?
- How can the district better regulate water supplies both near- and long-term?



No other comments were received at this time. Mitzi described next steps in the process and upcoming stakeholder group meeting on December 1, 2020 and how to reach out for more feedback.

One comment was received after the conclusion of the meeting, and is stated below:

Comment: A local school district is harvesting HVAC condensate and rainwater to flush toilets and urinals...good idea, more valuable than watering landscape.