

MEMORANDUM

To: HTGCD Board Members, JWGMZ Stakeholders, JWGMZ Technical Team
From: Robin Rather
Date: July 15, 2019
Re: Facilitator's Report: Jacob's Well Spring Flow Stakeholder Task Force--
 Final Recommendations

Executive Summary

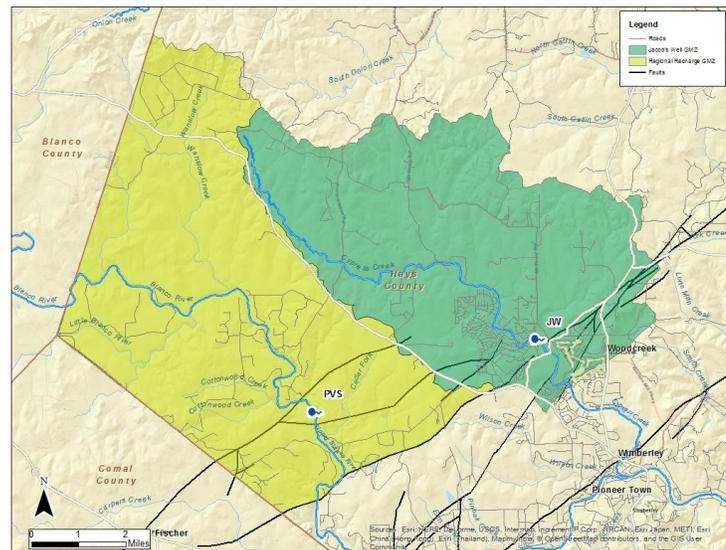
Thirty-five volunteer members of the Hays Trinity Groundwater Conservation District (HTGCD) "Spring Flow" Task Force were asked to review technical and scientific data and to identify best practices to ensure perennial spring flow at Jacob's Well and Cypress Creek. The Task Force came to 100% consensus on all but one of seven recommendations, and that one recommendation had all but two members in consensus. This memo contains a summary of the Task Force's work.

The first three recommendations are the most immediate and the most impactful in the short term:

1. We recommend the immediate establishment of one groundwater management zone shown in dark green in the map at right (the Jacob's Well Groundwater Management Zone, or JWGMZ). We also ask that the establishment of second zone be considered shown in yellow below (Regional Recharge Zone).

For more detailed maps and technical specifics please refer to the Technical Report written by the JWGMZ Technical team (forthcoming.)

2. Using Jacob's Well Spring as a trigger for permitted



pumping curtailments. Curtailments will be based on actual pumping, not permitted pumping. We recommend the following curtailments during times of diminishing spring flows:

- 6 cfs = 10%
- 5 cfs = 20%
- 3 cfs = 30%
- 2 cfs = 40%

Note: cfs = cubic feet per second

3. In the JWGMZ we recommend issuing no new permits in the Middle Trinity. Drilling is permissible in the Lower Trinity. It is also permissible to use adequate alternative water sources. Alternative water sources will be defined more specifically by the HTGCD prior to the rulemaking process.
 - 4-7 We also recommend certain changes to HTGCD and Hays County practices, a series of technical research projects and a community-wide education and outreach campaign.
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Objective

The objective of this stakeholder task force was to evaluate scientific data provided by the technical team and propose best practices for a groundwater management zone designed to maintain perennial spring flows for Jacob's Well and Cypress Creek.

Stakeholder Roster and Meeting Frequency

Stakeholders were selected and invited by HTGCD Chair Linda K. Rogers in August, 2018. A copy of the invitation is available upon request.

The group was highly diverse including eight landowners/business leaders/developers, two investor-owned or community-owned water utility executives, six neighborhood and community leaders, four government officials, five environment advocates, two academic groundwater experts and eight other advisors with education/science/policy expertise.

The task force met once monthly from October 2018 through January 2019 and twice monthly from January 2019 through June 2019, for a total of more than fifteen meetings.

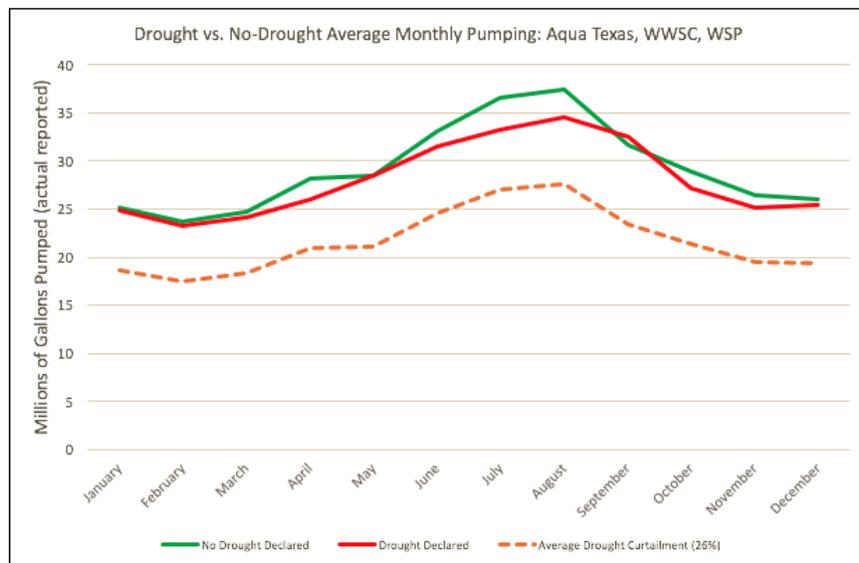
The meetings were professionally facilitated and lasted an average of 2 hours each for a total of over 30 hours of analysis and discussion. In total, this effort included over 1,000 person-hours of work representing approximately \$157,500 in volunteer in-kind “consulting” value.

Scientific and Technical Foundation

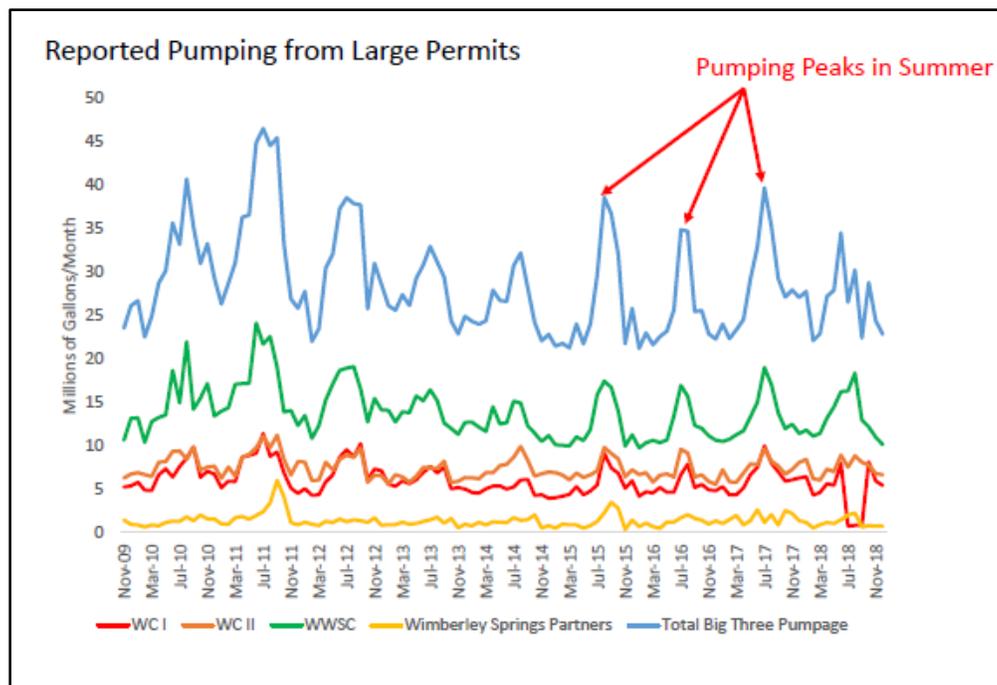
Attached in the Appendix is a link to all the scientific and technical data provided by the parallel groundwater management zone technical committee that the Task Force evaluated and discussed. We relied extensively on a briefing delivered during our November 2017 meeting, on a summary prepared by the technical team regarding groundwater management zone Texas state policy provided during our February meeting, and by a briefing provided in early March regarding triggers and curtailments.

Of all the documents provided, the following two charts became something of a “north star” during the discussions. They clearly show that, despite existing drought management programs at the HTGCD and at the water suppliers, spring flow during drought months is not being protected sufficiently. Water usage goes up at precisely the worst possible time -- and the most critical time to protect spring flow. This data underscores the need to take new measures and make them count.

Evaluation of HTGCD Mandatory Drought Curtailments



Pumping Trends: 2009-2018



Note: Both charts above are sourced: JWGMZ Technical Team/ HTGCD

Upfront Stakeholder Perspectives Research

Confidential, one-on-one phone interviews were conducted with each stakeholder. Three important findings were evident:

1. This group has an unusually strong potential to come to consensus based on shared values, desired outcomes and degree of confidence in each other.
2. However, the relationships and bonds between the members need to be strengthened in order for the group to execute at the level it is capable of. Members will need to focus equally on the relational aspect of this work as on the technical and strategic side for this process to reach its best-case goals.
3. All but one member agreed that Wimberley's water quantity is changing at an alarming rate. Concern about quantity is an average of eight on a one-to-ten scale when ten is the highest concern.

The full findings from the upfront research interviews are available upon request.

Values and Guiding Principles

Using the upfront research input as a starting point, the first task the group completed was to come to consensus on three guiding principles against which the final recommendations would be held accountable:

1. *Delivering practical solutions that achieve measurable results while developing trust and respect by really listening to all members.*
2. *Agreeing that Jacob's Well and Cypress Creek flowing permanently is of central importance to all in Wimberley Valley and is a core ideal of this effort.*
3. *The economic health of the Wimberley Valley and our property values depend on clean, healthy water and aquifers. Sustainability of our water sources is essential and our goal is to protect the health of those systems.*

Recommendation 1: Establishment of GMZ(s)

100% Consensus

One Groundwater Management Zone (GMZ) for Jacob's Well local recharge zone as presented by the Technical Advisory Team.

All but two members reached consensus on a recommended second GMZ "Regional Recharge" Area. Technical and scientific data indicates a need for two GMZs to maximize protection, but two members of the group remained unwilling to support.

Recommendation 2: Curtailments for Historic/Existing Permits

100% Consensus

Using Jacob's Well as a new additional trigger and using actual pumping levels as opposed to permitted pumping levels, we recommend the following curtailments during times of drought:

6 cfs = 10%

5 cfs = 20%

3 cfs = 30%

2 cfs = 40%

Recommendation 3: Conditional Permits for New Players

100% Consensus

The group defined “new permits” as ones requested by parties who do not hold a permit now, and those who hold a permit now but who request one that is not the same as the one they currently hold (i.e. in another location.)

In the JWGMZ, we recommend issuing no new permits in the Middle Trinity. Drilling is permissible in the Lower Trinity. It is also permissible to use adequate alternative water sources.

Note that “Adequate Alternative Water Sources” was left undefined with the understanding that another of the group’s recommendations is a research study covering Aquifer Recovery and Storage, or ASR. (See recommendation 6 below.)

Recommendation 4: Changes to HTGCD Practices and Plans

100% Consensus

- Reporting monthly instead of quarterly
- Metrics should focus on Actual Pumping, not Permitted Pumping
- Jacob’s Well to be added as a drought trigger

Recommendation 5: Changes to Hays County Practices and Plans

100% Consensus

- Need to adopt Conservation Development Tools and Strategies
- Need to adopt Incentives for Rainwater Capture and Water Conservation

Recommendation 6: Need for Additional Research and Studies

100% Consensus

- Down Dip Analysis
- Aquifer Storage and Recovery (ASR)
- New Infrastructure Feasibility
- Best Practices for Voluntary Measures for Exempted Wells

The implementation task force will define a scope for these research projects and identify budget and sources of funding.

Recommendation 7: Community Education and Outreach Campaign

100% Consensus

Every task force member sees the critical need to educate Wimberley Valley residents on the need for water conservation and spring flow protection.

The implementation task force will define a scope for this campaign, cultivate key partners, identify budget and sources of funding.

Next Steps

- District Board Discussion and Guidance
- Rulemaking/ Legal Preparation
- Stakeholder Task Force Re-organizes into Four Focused Implementation Teams:
 - A. Research Studies
 - B. Community Education / Outreach
 - C. Conservation Development
 - D. GMZ implementation and monitoring

Acknowledgements

The stakeholders would like to thank:

- *Jeff Watson, former HTGCD hydrologist, for his ongoing support and encouragement and Linda K. Rogers HTGCD President for forming the group.*
- *All the members of the technical committee for their patience and depth of expertise.*
- *Brad Campbell of Camp Young Judea, Scott Way of 7A Ranch, Hays County Commissioner Lon Shell, the Wimberley Community Center and the Jacob's Well Community Education Center for allowing the group to hold its meetings at their beautiful venues.*
- *All the citizen volunteers and voters of Hays County who have worked for decades to protect Jacob's Well and Cypress Creek – may they continue to enjoy its beauty, environmental importance and economic bounty for many generations to come.*

For more information about this summary and the stakeholder process that produced it, please contact facilitator robin@collectivestrength.com For technical questions, please contact technical committee lead mgary@edwardsaquifer.org.

Appendix: Members of the Task Force

Land Owners, Real Estate and Business

<i>Brent Pulley`</i>	<i>Wimberley Chamber</i>
<i>Brad Campbell</i>	<i>Camp Young Judea</i>
<i>Jim Schultz</i>	<i>Landowner</i>
<i>Scott Way</i>	<i>Landowner</i>
<i>Jeff Etheredge</i>	<i>Wimberley Springs Partners</i>
<i>Ross Hinton</i>	<i>Landowner</i>
<i>Reg Stephey</i>	<i>Eagle Rock</i>
<i>Joe Day</i>	<i>Consultant</i>

Water Supply Companies

<i>Brent Reeh</i>	<i>Aqua Texas</i>
<i>Garret Allen</i>	<i>Wimberley Water Supply</i>

Neighborhood/Community Leaders

<i>Peggy Lafong</i>	<i>Woodcreek POA</i>
<i>Ed Pope</i>	<i>Burnet Ranches</i>
<i>Will Conley</i>	<i>Mt. Crest</i>
<i>Louis Parks</i>	<i>CARD</i>

Environmental Leaders

<i>Vanessa Puig-Williams</i>	<i>TESPA</i>
<i>David Baker</i>	<i>WVWA</i>
<i>Ashley Waymouth</i>	<i>WVWA</i>
<i>Susan Neeny</i>	<i>Friends of Blue Hole</i>
<i>Charlie Flatten</i>	<i>Hill Country Alliance</i>

Government Representatives

<i>Lon Shell</i>	<i>Hays County Commissioner</i>
<i>Alexandra Thompson</i>	<i>Hays County Natural Resources</i>
<i>Alison Davis</i>	<i>City of Wimberley Councilmember</i>
<i>Christine Byrne</i>	<i>City of Wimberley Councilmember</i>
<i>Lauren Willis</i>	<i>Greater Blanco River Authority</i>
<i>Lori Olsen</i>	<i>Wimberley Independent School District</i>
<i>Brenton Louis</i>	<i>Manager City of Woodcreek</i>

Academic Groundwater Experts

Nick Dornack Tx State Meadows Center
Robert Mace, PhD, PG Tx State Meadows Center

Technical Committee Experts (see separate JWGMZ Technical Report)

Marcus Gary, PhD, PG Edwards Aquifer Authority
Brian Hunt, PG Barton Springs Edwards Aquifer Conservation District
Brian Smith, PhD, PG Barton Springs Edwards Aquifer Conservation District
Doug Wierman, PG Fellow – Meadows Center
Jeff Watson, PG Hydrologist, Hays Trinity Groundwater Conservation District

Advisors

Linda K. Rogers HTGCD President
Doug Norman MS Community Planning/PhD Candidate/
 GMZ white paper
Jay Taylor Hays County Parks Staff
Quincy Kennedy Former Hays County Parks Staff
Robin Rather Collective Strength, Facilitator

Core Science and Technical Documents (forthcoming in an online archive and available upon request in hardcopy or email.)