



City of Wolfforth

Water Supply Report

Presented by:

Randy Criswell, City Manager

August 15, 2021

Revised DCP earlier this year

- Changed rationale for trigger points
 - Previously based on storage
 - Now based on production capacity
 - Intent was to be very conservative and protective
- In retrospect
 - Changing Stage 3 was confusing
 - Probably should have added a Stage 5

Drought Contingency Plan

- Suffering in a historic drought
- Drought Contingency Plan required by State Law
- Prohibiting irrigation was a sound decision but not popular
- Implementation was a success
 - Water use has dropped

Purpose for implementation of DCP

- Raise awareness
- Achieve conservation
- Preserve and protect water as a resource
- Prioritize and regulate water use
- Unintended consequences
 - Fear
 - Distrust
 - Criticism

Irrigation restrictions

Positive Results:

Water usage dropped

Residents accepted the restrictions

A valuable natural resource is conserved

Public Interest is high

What has been done?

- Master Water Plan completed in August 2020
- Water Supply Plan completed in September 2021
- Findings
 - Rapid growth will be experienced
 - Major water system improvements will be needed
 - Additional supply
 - Additional storage
 - Additional treatment capacity

Recommendation of both studies

- Increase Wolfforth's water supply
 - How?
 - More wells
 - Obtain unused CRMWA allocation from other cities
 - Purchase water from another water system
 - Pursue any available option

Our response?

- Vigorously pursuing adding more wells
- CRMWA is not a viable option
- Doubled the size of the treatment plant
- Updated the DCP
 - **Conservation IS Supply**



Well acquisition efforts

Conversion factors and definitions

gpm – gallons per minute

gpd – gallons per day

mgd – million gallons per day

connection – service connection

One mgd is about 700 gpm

Assume 3 persons per connection

Local Wells

- Wells 19, 20, and 21
- Total maximum capacity 425 gpm
 - 612,000 gpd
 - Total of 708 connections
 - At 3 persons/connection, these wells will serve 2,125 persons

Wells 19,20,21

- Challenges
 - Wells must receive special approval from TCEQ
 - Wells 19 and 21 require RR crossing
- Expectations
 - TCEQ is in final approval stages
 - RR Crossing Permits are very close
- Well 20 is ready for use when TCEQ approval is received
- Wells 19 and 21 will require connecting pipelines
 - Will be completed upon receipt of RR Permit

Harvest Subdivision

- 2500+/- total lots at full buildout
- Several years for full buildout
- 75 +/- homes expected by end of 2022
- 500-600 total homes by end of 2023
 - Water need for 600 homes – 360 gpm
- 450-500 homes annually

Harvest Subdivision

- Betenbough agreed from early on to provide wells
- Four wells, total capacity 250 gpm
- Betenbough will install connecting pipelines
- Project will begin by end of August
- 30 days expected for construction

Harvest Subdivision

- Total capacity 250 gpm
- 360,000 gpd
- Will supply 417 connections (1250 persons)
- Work will begin by end of August
- Complete by end of September

Overlook Subdivision

- City and Developers have formal agreement (November 2021)
 - Wells will be dedicated to Wolfforth
 - Developer will install collection lines
- Total Capacity 900 gpm
 - 1.3 mgd (1500 connections)
- Buildout expectations
 - 30 homes by end of 2022
 - 75-100 homes each year thereafter

Overlook Well status

- TCEQ Exception packages will be submitted within 45-90 days
- Collection lines soon begin design phase engineering
- Construction could occur within 12 months
- TCEQ approval will run concurrently with design/construction

Wolfforth Land Company Wells

- Windsor/Iron Horse Subdivisions
 - Estimated total capacity 425 gpm
 - 612,000 gpd
 - 708 service connections
 - 1,770 persons
- Approximately 300 additional lots
 - Timeline has not been defined

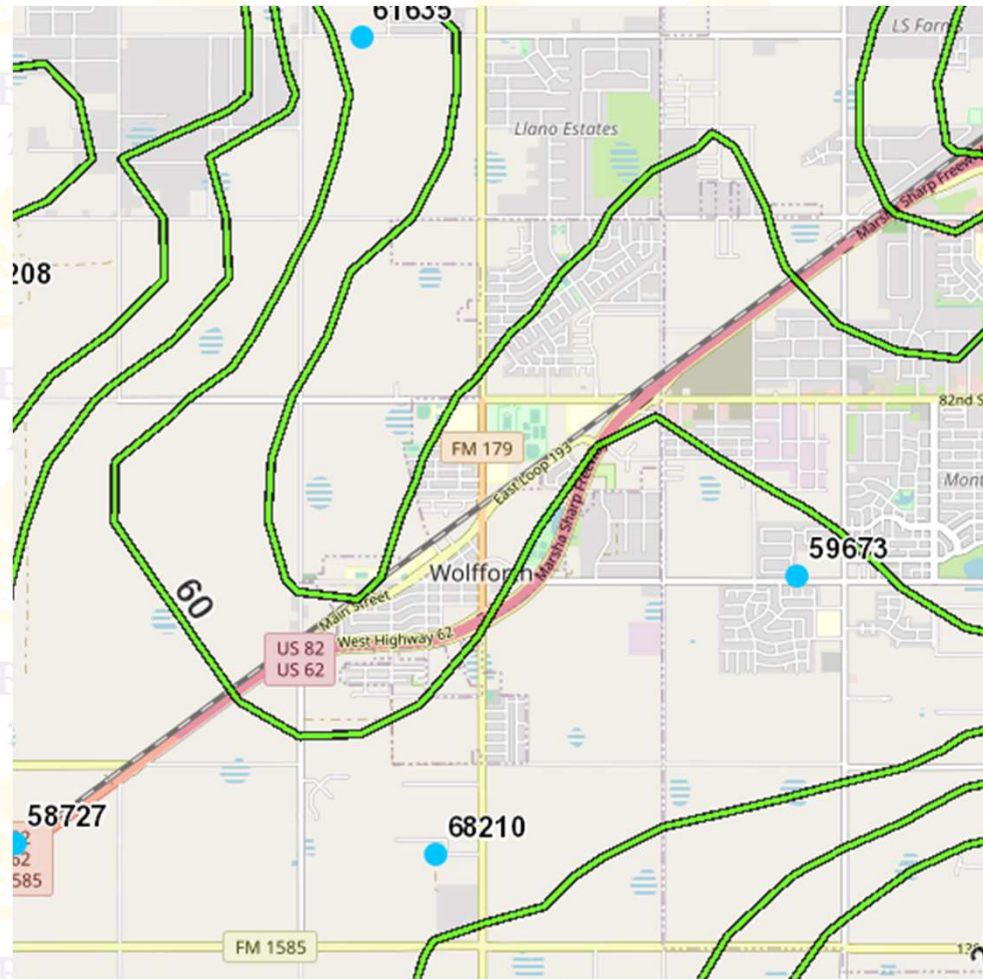
Wolfforth Land Company Wells

- Status of acquiring these wells
 - Developer has stated intent
 - No agreements have been successfully negotiated

Local City-owned wells

- Study recommended adding local wells
- Staff and engineer analyzing possible sites
 - HPWD maps indicate possibility of 60' saturated thickness or more
- Must follow HPWD rules

HPWD Map



Local City-owned wells

- Advantages
 - Will install on property owned by the City
 - Eliminates third party
 - Will be drilled to TCEQ PWS Standards
 - Eliminates need for TCEQ Exception process
 - Approval process is quicker
- Disadvantages
 - PWS standards are high
 - Cost of well will be substantial

Summary

Well Acquisition Detail

Designation	Additional Capacity	Daily flow	Additional Connections Served	Timeframe
Local Wells 19/20/21	425 gpm	612,000	708	Within weeks
Harvest Wells	250 gpm	360,000	417	180 days
Overlook Wells	900 gpm	1,296,000	1500	12 months
Windsor/Iron Horse	425 gpm	612,000	708	Unknown
Additional Local Wells	600 gpm est	864,000	1000	12-24 months
Totals	2600 gpm +/-	3,744,000	4333	



Anything else?

We will never stop pursuing
alternative and additional
water supply sources.



**We anticipate an important
announcement within the next
30 days.**



Questions?