

15954 & 21294: Drawdown from current location = 1.09 ft
Drawdown from proposed location = 1.71 ft
Net drawdown = **0.6 ft**

25144: Drawdown from current location = 1.25 ft
Drawdown from proposed location = 1.73 ft
Net drawdown = **0.5 ft**

18943: Drawdown from current location = 1.60 ft
Drawdown from proposed location = 3.81 ft
Net drawdown = **2.2 ft**

26293: Drawdown from current location = 1.44 ft
Drawdown from proposed location = 3.61 ft
Net drawdown = **2.2 ft**

14703: Drawdown from current location = 1.04 ft
Drawdown from proposed location = 2.00 ft
Net drawdown = **1.0 ft**

30725: Drawdown from current location = 1.07 ft
Drawdown from proposed location = 2.10 ft
Net drawdown = **1.0 ft**

Domestic 1: Drawdown from current location = 1.26 ft
Drawdown from proposed location = 2.81 ft
Net drawdown = **1.5 ft**

Domestic 2: Drawdown from current location = 1.09 ft
Drawdown from proposed location = 2.19 ft
Net drawdown = **1.1 ft**

Domestic 3: Drawdown from current location = 0.98 ft
Drawdown from proposed location = 1.84 ft
Net drawdown = **0.9 ft**

Domestic 4: Drawdown from current location = 1.13 ft
Drawdown from proposed location = 2.10 ft
Net drawdown = **1.0 ft**

Domestic 5: Drawdown from current location = 0.90 ft
Drawdown from proposed location = 1.66 ft
Net drawdown = **0.8 ft**

Net drawdown exceeds the drawdown allowance of 2.0 ft for water right numbers 18943 and 26293. Critical well analysis is necessary on those wells.

Critical Well Evaluation:

18943:

Water Column = 90 ft

DP = 2.2 ft (Net drawdown from the proposal indicated above)

DE = 33.6 ft (Water level decline from 2022 through 2047 based upon GMD3 model)

DD = 0 ft (Well has not been operated for more than 10 years)

DT = 35.8 ft

Economic Drawdown Constraint (EDC) = $0.4 * 90 \text{ ft} = 36.0 \text{ ft}$

Physical Drawdown Constraint (PDC) = $90 \text{ ft} - 60 \text{ ft} = 30 \text{ ft}$

Total drawdown of 35.8 ft is greater than the PDC, so this well is **critical**.

26293:

Water Column = 90 ft

DP = 2.2 ft (Net drawdown from the proposal indicated above)

DE = 33.0 ft (Water level decline from 2022 through 2047 based upon GMD3 model)

DD = 45.6 ft ($S = 0.09743$, $T = 35,783 \text{ gpd/ft}$, $Q = 630 \text{ gpm}$, $tp = 68.5 \text{ days}$, efficiency = 70%)

DT = 80.8 ft

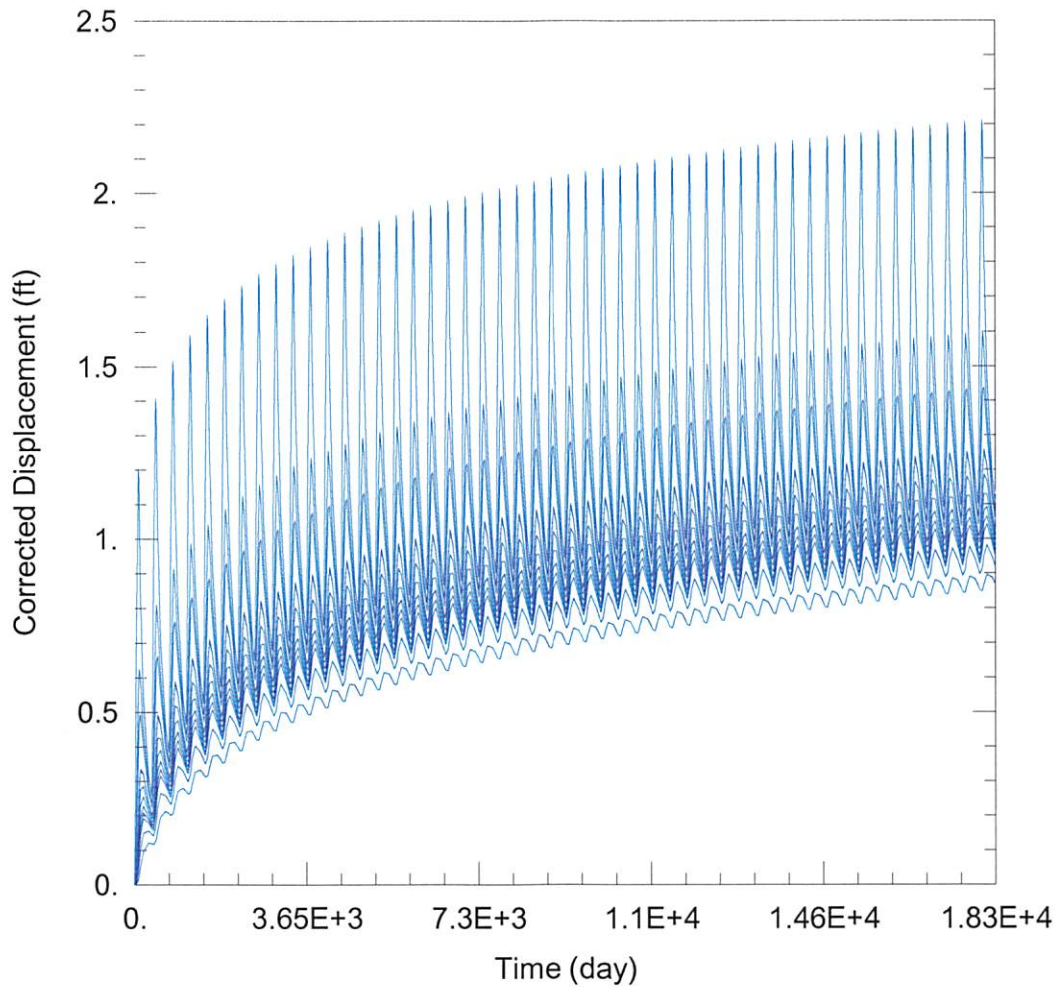
Economic Drawdown Constraint (EDC) = $0.4 * 90 \text{ ft} = 36.0 \text{ ft}$

Physical Drawdown Constraint (PDC) = $90 \text{ ft} - 60 \text{ ft} = 30 \text{ ft}$

Total drawdown of 80.8 ft is greater than the EDC and PDC, so this well is **critical**.

Conclusion:

The proposed move is within a declining area with less than 100 ft saturated thickness. If the proposed well were to pump its full authorized authority, most effects on nearby wells would be minimal, but effects on two nearby critical wells exceed the drawdown allowance of 2.0 ft. One of these wells has not been operated for several years, but the other one was recently redrilled and might notice some well-to-well interaction effects. Concerned neighbors can contact GMD3 at (620) 275-7147 or the Division of Water Resources at (620) 276-2901.



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2022_moves\21585\21585 Current.aqt

Date: 04/27/22

Time: 14:41:28

PROJECT INFORMATION

Company: GMD 3

Project: 21585

Location: Gray County

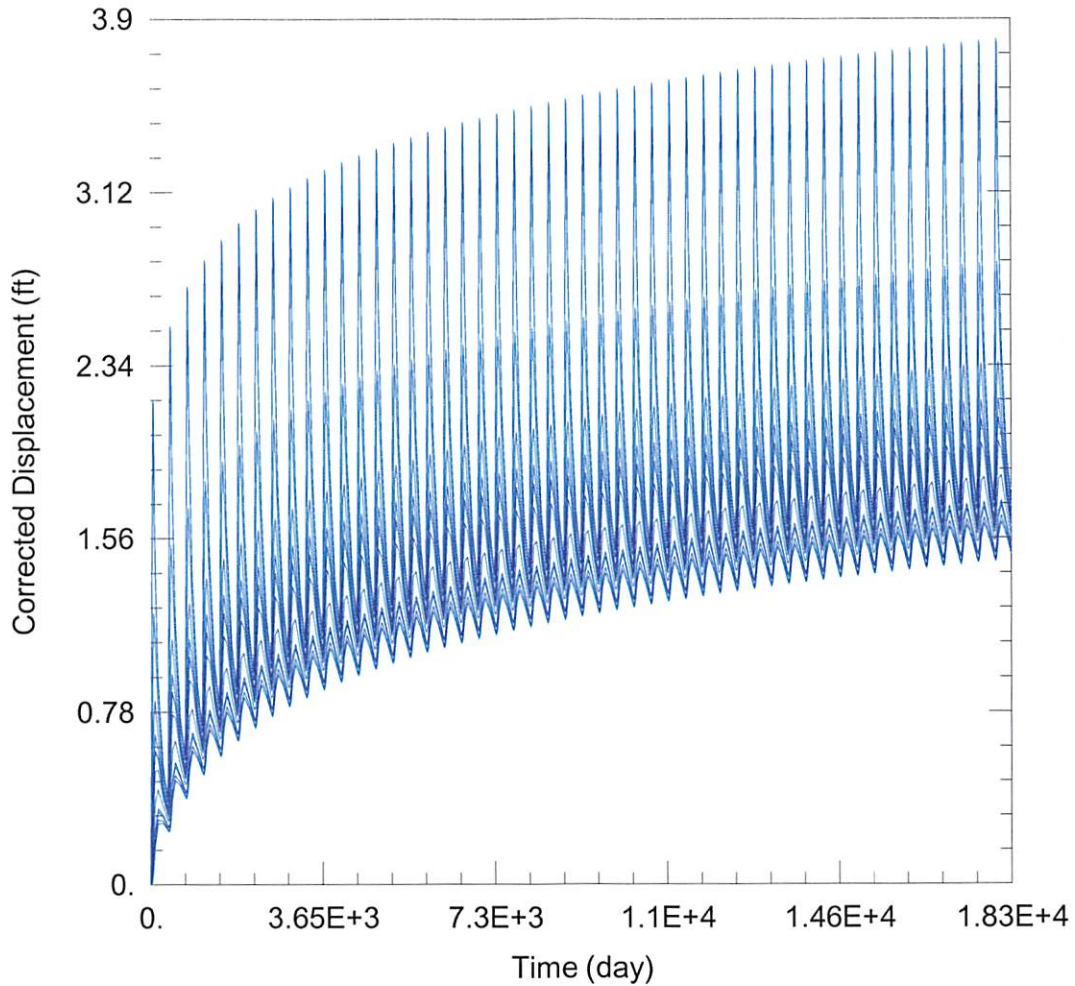
WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
21585	99286	291496

Observation Wells

Well Name	X (ft)	Y (ft)
□	99286	291496
□ 16467	98672	293038
□ 11725	99937	295563
□ 15954 & 21294	95242	289119
□ 25144	95521	292033
□ 18943	99267	288838
□ 26293	101522	289396
□ 14703	103407	288511
□ 30725	100461	286741
□ Domestic 1	100404	287882
□ Domestic 2	102932	288562
□ Domestic 3	103596	287901
□ Domestic 4	103591	290562
□ Domestic 5	100948	285242



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2022_moves\21585\21585 Proposed.aqt

Date: 04/27/22

Time: 14:41:22

PROJECT INFORMATION

Company: GMD 3

Project: 21585

Location: Gray County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
21585	100008	290294

Observation Wells

Well Name	X (ft)	Y (ft)
□	100008	290294
□ 16467	98672	293038
□ 11725	99937	295563
□ 15954 & 21294	95242	289119
□ 25144	95521	292033
□ 18943	99267	288838
□ 26293	101522	289396
□ 14703	103407	288511
□ 30725	100461	286741
□ Domestic 1	100404	287882
□ Domestic 2	102932	288562
□ Domestic 3	103596	287901
□ Domestic 4	103591	290562
□ Domestic 5	100948	285242