



40543 & 41603: Drawdown from current location = 3.81 ft  
Drawdown from proposed location = 8.10 ft  
Net drawdown = **4.3 ft**

Domestic 10-34-33: Drawdown from current location = 6.95 ft  
Drawdown from proposed location = 7.44 ft  
Net drawdown = **0.5 ft**

Domestic 14-34-33: Drawdown from current location = 3.53 ft  
Drawdown from proposed location = 6.41 ft  
Net drawdown = **2.9 ft**

Net drawdown exceeds the drawdown allowance of 4.0 ft for water right nos. 40543 & 41603. Critical well analysis is necessary on that well.

**Critical Well Evaluation:**

**40543 & 41603:**

Water Column = 389 ft

DP = 4.3 ft (Net drawdown from the proposal indicated above)

DE = 32.2 ft (Water level decline from 2022 through 2047 based upon GMD3 model)

DD = 43.8 ft (S = 0.169, T = 41,864 gpd/ft, Q = 715 gpm, tp = 86 days, efficiency = 70%)

DT = 80.3 ft

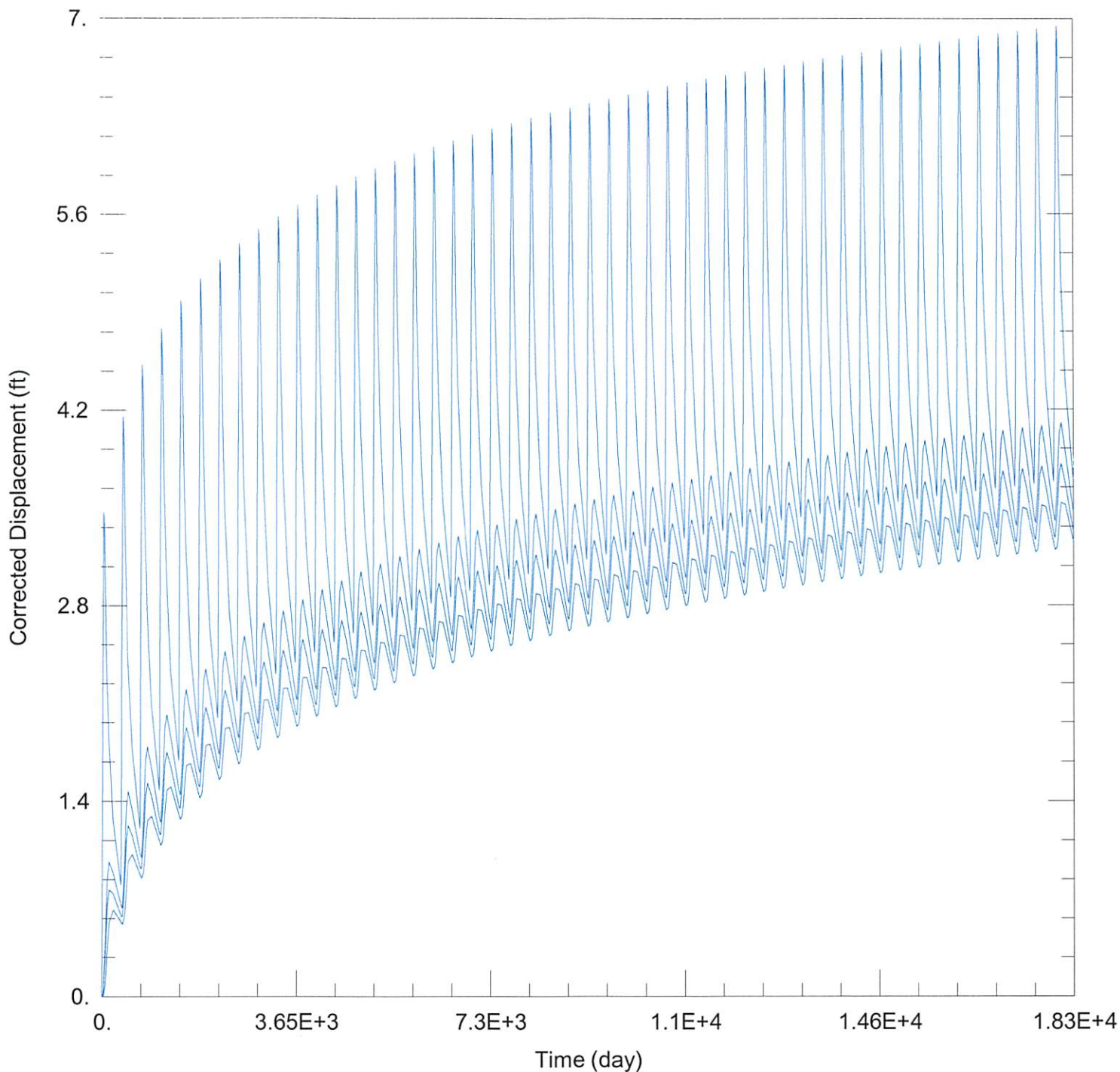
Economic Drawdown Constraint (EDC) =  $0.4 * 389 \text{ ft} = 155.6 \text{ ft}$

Physical Drawdown Constraint (PDC) =  $389 \text{ ft} - 60 \text{ ft} = 329 \text{ ft}$

Total drawdown of 80.3 ft is less than the EDC and PDC, so this well is **not critical**.

**Conclusion:**

The proposed move is in an area with more than 300 ft saturated thickness and aquifer properties that allow for some productive wells. This proposal will stack two large water rights onto a single well location, and if the well is operated at its fully authorized rate and quantity, it may produce an additional well-to-well drawdown effect exceeding 4 ft at the well to the south authorized under water right nos. 40543 & 41603. Critical well analysis showed that there is sufficient saturated thickness at this location, accounting for modeled aquifer conditions and well drawdown effects, that impairment due to this proposal is unlikely. Concerned neighbors should 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\43075\43075 Current.aqt  
 Date: 08/10/22 Time: 10:49:02

PROJECT INFORMATION

Company: GMD 3  
 Project: 43075  
 Location: Seward County

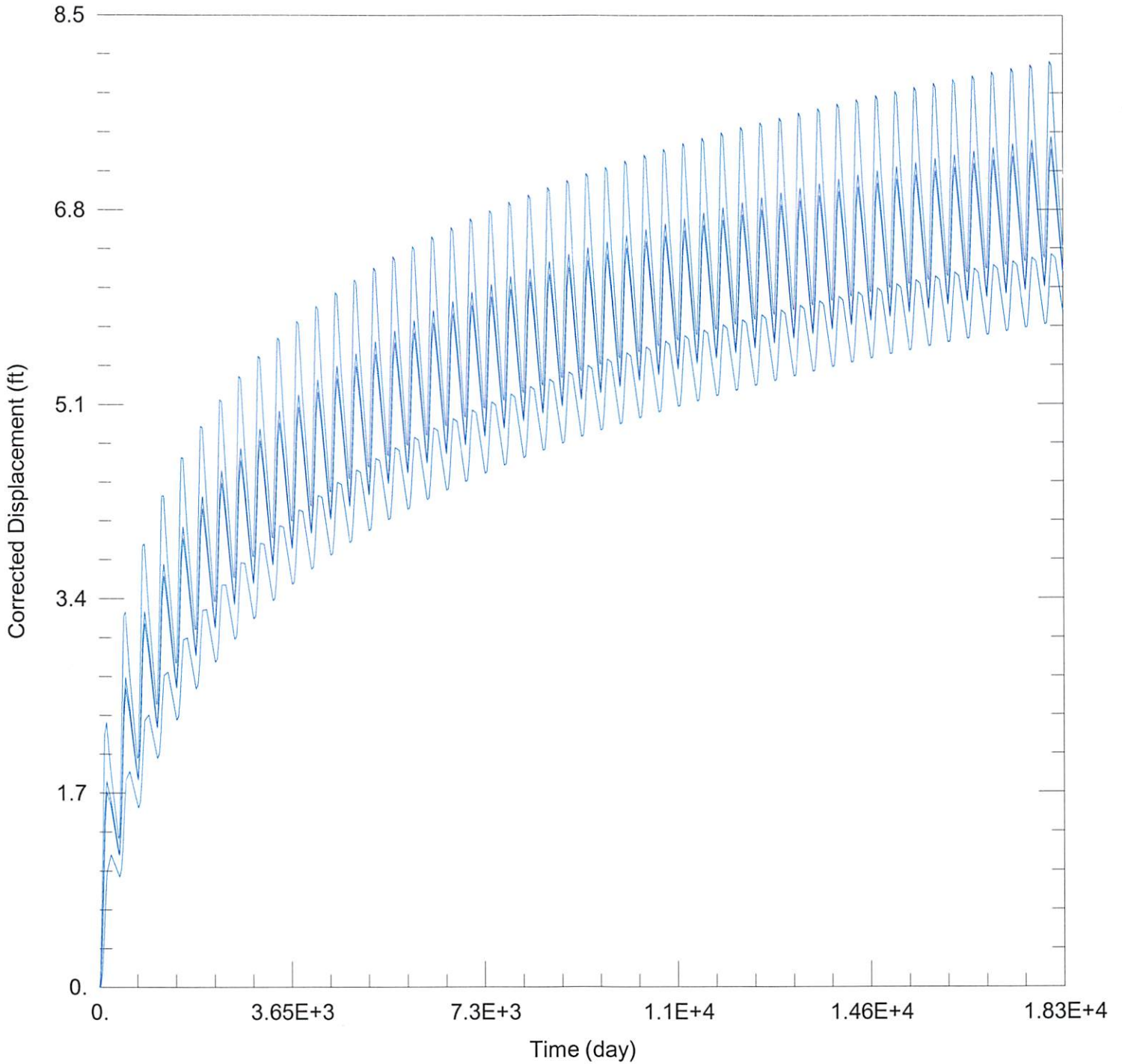
WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
<u>41926</u>	<u>-27751</u>	<u>78109</u>

Observation Wells

Well Name	X (ft)	Y (ft)
□	<u>-27751</u>	<u>78109</u>



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2022\_moves\43075\43075 Proposed.aqt  
 Date: 08/10/22 Time: 10:48:57

PROJECT INFORMATION

Company: GMD 3  
 Project: 43075  
 Location: Seward County

WELL DATA

Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
Proposed PD	-27687	78218	□	-27687	78218