

Evaluation of proposed move for Water Right No. 50918

Proposed: Create a new water right no. 50918, stacked onto a well currently authorized under water right nos. 39633 & 45130.



Wells within 1 mile: 27042, 9422, 9422 & 16507, 48506, GY 3 & 8946 & 10316, 12149, 26453, 12400, and 14 domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 122 ft, based upon the GMD3 model. For saturated thickness between 100 ft and 125 ft, the drawdown allowance is 2.5 ft.

50 year Theis Analysis: The following values were used to run the analysis:

$S = 0.179$, $T = 4615 \text{ ft}^2/\text{day}$, $tp_{\text{current}} = 24 \text{ days}$, $Q_{\text{current}} = 35 \text{ gpm}$, $tp_{\text{proposed}} = 58 \text{ days}$, $Q_{\text{proposed}} = 35 \text{ gpm}$

Theis drawdowns were calculated as follows:

27042: Drawdown from current location = 0.03 ft
Drawdown from proposed location = 0.07 ft
Net drawdown = **0.0 ft**

9422: Drawdown from current location = 0.03 ft
Drawdown from proposed location = 0.08 ft
Net drawdown = **0.0 ft**

9422 & 16507:	Drawdown from current location = 0.05 ft Drawdown from proposed location = 0.12 ft Net drawdown = 0.1 ft
48506:	Drawdown from current location = 0.03 ft Drawdown from proposed location = 0.07 ft Net drawdown = 0.0 ft
GY 3 & 8946 & 10316:	Drawdown from current location = 0.05 ft Drawdown from proposed location = 0.12 ft Net drawdown = 0.1 ft
12149:	Drawdown from current location = 0.03 ft Drawdown from proposed location = 0.08 ft Net drawdown = 0.0 ft
26453:	Drawdown from current location = 0.48 ft Drawdown from proposed location = 0.62 ft Net drawdown = 0.1 ft
12400:	Drawdown from current location = 0.05 ft Drawdown from proposed location = 0.13 ft Net drawdown = 0.1 ft
Domestic 1:	Drawdown from current location = 0.03 ft Drawdown from proposed location = 0.07 ft Net drawdown = 0.0 ft
Domestic 2:	Drawdown from current location = 0.03 ft Drawdown from proposed location = 0.07 ft Net drawdown = 0.0 ft
Domestic 3:	Drawdown from current location = 0.03 ft Drawdown from proposed location = 0.07 ft Net drawdown = 0.0 ft

Domestic 4:	Drawdown from current location = 0.03 ft Drawdown from proposed location = 0.07 ft Net drawdown = 0.0 ft
Domestic 5:	Drawdown from current location = 0.03 ft Drawdown from proposed location = 0.07 ft Net drawdown = 0.0 ft
Domestic 6:	Drawdown from current location = 0.21 ft Drawdown from proposed location = 0.35 ft Net drawdown = 0.1 ft
Domestic 7:	Drawdown from current location = 0.25 ft Drawdown from proposed location = 0.40 ft Net drawdown = 0.1 ft
Domestic 8:	Drawdown from current location = 0.05 ft Drawdown from proposed location = 0.11 ft Net drawdown = 0.1 ft
Domestic 9:	Drawdown from current location = 0.06 ft Drawdown from proposed location = 0.14 ft Net drawdown = 0.1 ft
Domestic 10:	Drawdown from current location = 0.09 ft Drawdown from proposed location = 0.19 ft Net drawdown = 0.1 ft
Domestic 11:	Drawdown from current location = 0.10 ft Drawdown from proposed location = 0.21 ft Net drawdown = 0.1 ft
Domestic 12:	Drawdown from current location = 0.18 ft Drawdown from proposed location = 0.32 ft Net drawdown = 0.1 ft

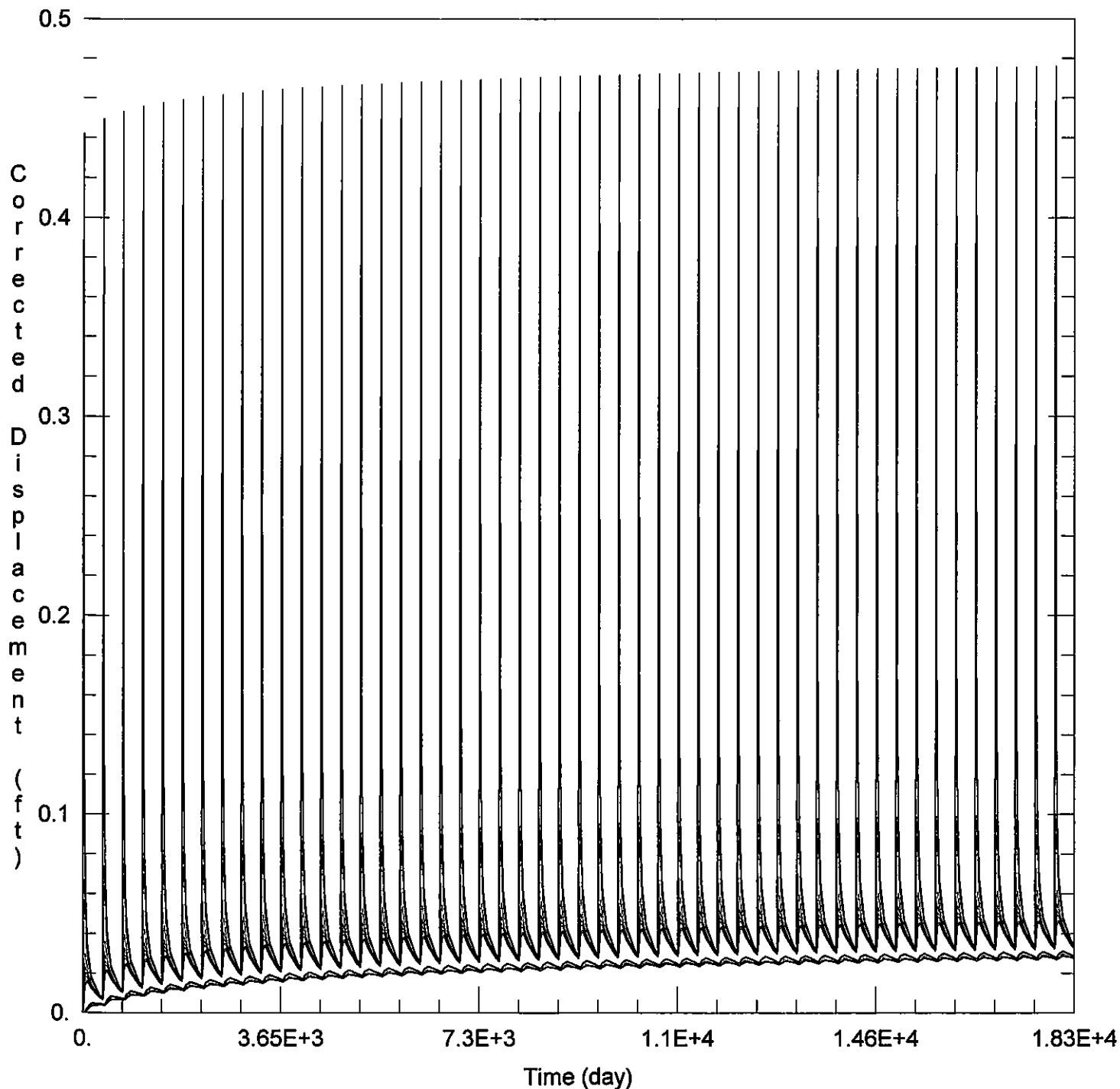
Domestic 13: Drawdown from current location = 0.05 ft
 Drawdown from proposed location = 0.11 ft
 Net drawdown = **0.1 ft**

Domestic 14: Drawdown from current location = 0.15 ft
 Drawdown from proposed location = 0.29 ft
 Net drawdown = **0.1 ft**

Net drawdown does not exceed the drawdown allowance of 2.5 ft for any well within 1 mile of the proposed location. Therefore, critical well analysis is not necessary.

Conclusion:

The proposed move is likely to create minimal effects on neighboring wells and appears unlikely to cause impairment. Any 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\2023 New Appropriations\50918\50918 Current.aqt

Date: 10/19/23

Time: 16:54:44

PROJECT INFORMATION

Company: GMD 3

Project: 50918

Location: Gray County

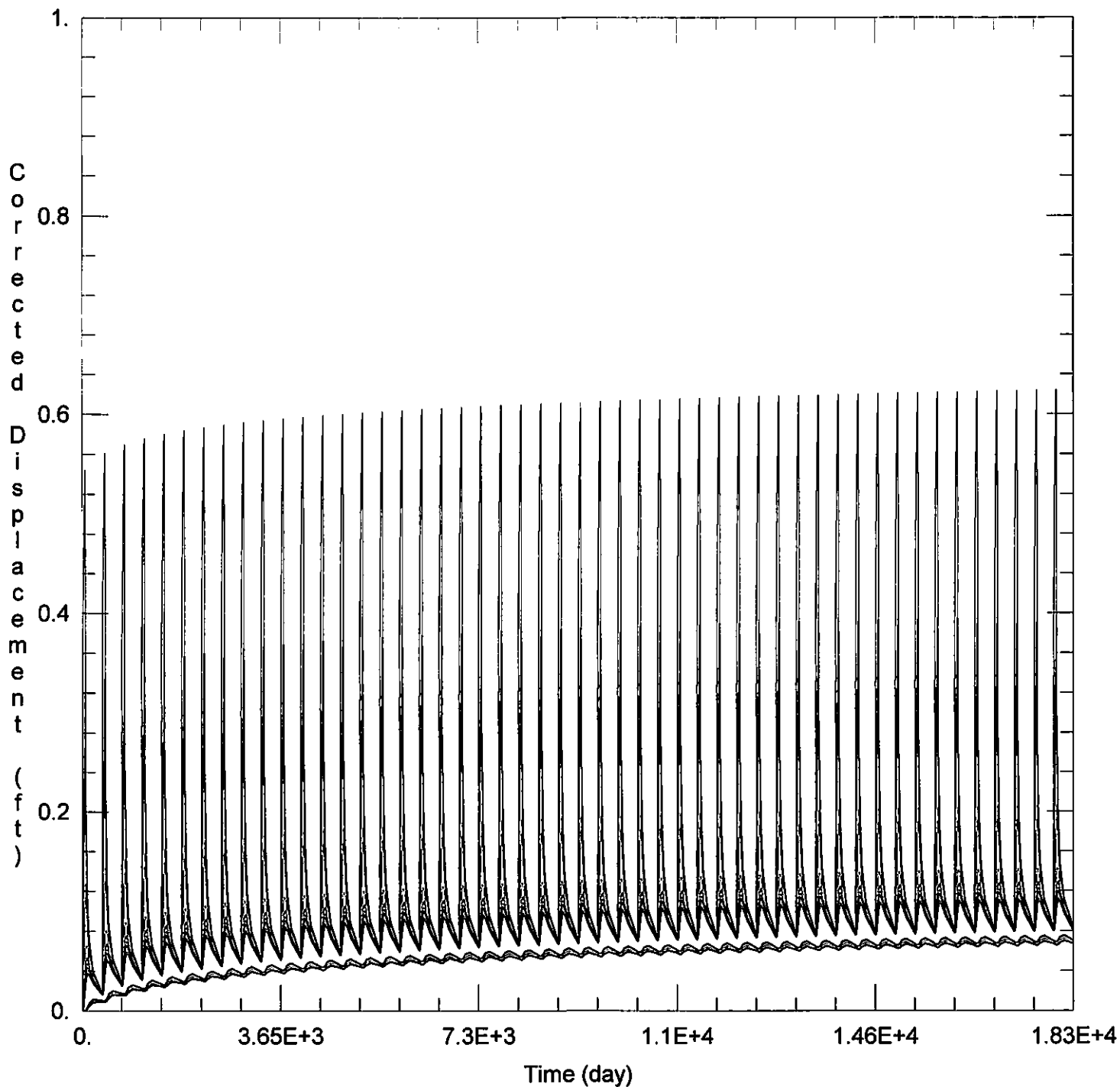
WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
50918	52983	244024

Observation Wells

Well Name	X (ft)	Y (ft)
□	52983	244024
□ 27042	48573	245575



WELL TEST ANALYSIS

Data Set: C:\Users\trevora\Documents\2023 New Appropriations\50918\50918 Proposed.aqt

Date: 10/19/23

Time: 16:54:30

PROJECT INFORMATION

Company: GMD 3

Project: 50918

Location: Gray County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
50918	52983	244024

Observation Wells

Well Name	X (ft)	Y (ft)
□	52983	244024
□ 27042	18573	245575