

Evaluation of proposed move for Water Right No. 50788

Proposed: Create a new appropriation for water right no. 50788 at the location indicated by the red dot on the map below. This water right is allowable under the 15 acre-ft exemption rule. It will be authorized 15 AF at a rate of 99 gpm, for the purpose of irrigating the cemetery.



Wells within 1 mile: 45332 and ten domestic wells, numbered on the above map.

The saturated thickness at the proposed well location is estimated to be 311 ft, based upon the GMD3 model. For saturated thickness greater than 200 ft, the drawdown allowance is 4.0 ft.

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

$S = 0.1242$, $T = 10,647 \text{ ft}^2/\text{day}$, $t_{p\text{proposed}} = 34 \text{ days}$, $Q_{\text{proposed}} = 99 \text{ gpm}$

Theis drawdowns were calculated as follows:

45332:	Net drawdown = 0.3 ft
Domestic 1:	Net drawdown = 0.2 ft
Domestic 2:	Net drawdown = 0.7 ft
Domestic 3:	Net drawdown = 0.1 ft
Domestic 4:	Net drawdown = 0.7 ft
Domestic 5:	Net drawdown = 0.1 ft
Domestic 6:	Net drawdown = 0.1 ft

Domestic 7: Net drawdown = 0.1 ft

Domestic 8: Net drawdown = 0.1 ft

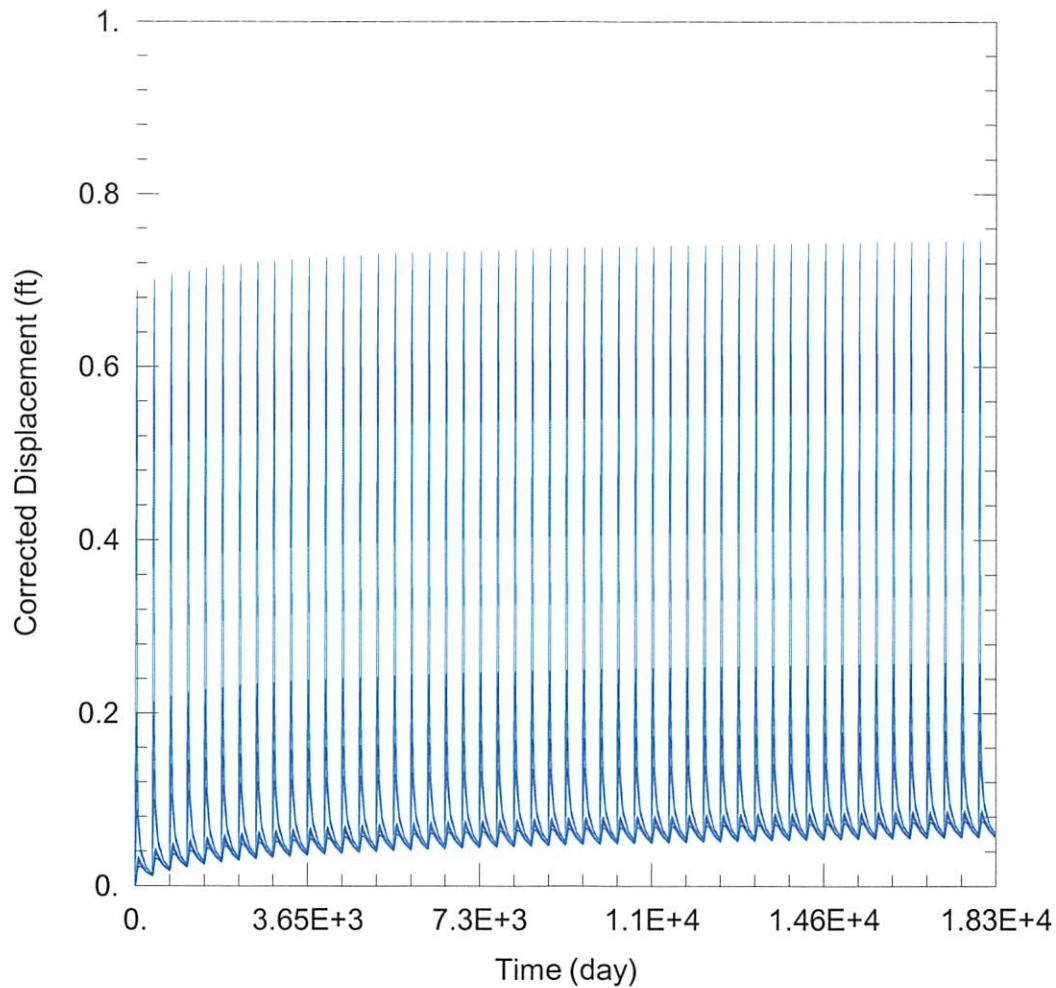
Domestic 9: Net drawdown = 0.1 ft

Domestic 10: Net drawdown = 0.1 ft

Net drawdown does not exceed the drawdown allowance of 4.0 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\2022_moves\50788\50788.aqt

Date: 06/24/22

Time: 16:46:23

PROJECT INFORMATION

Company: GMD 3

Project: 50788

Location: Seward County

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
Proposed PD	-14621	75358

Observation Wells

Well Name	X (ft)	Y (ft)
□	-14621	75358
□ 45332	-15945	75012
□ Domestic 1	-12868	74525
□ Domestic 2	-14303	75357
□ Domestic 3	-10009	75503
□ Domestic 4	-14462	75523
□ Domestic 5	-15433	71230
□ Domestic 6	-17737	72246
□ Domestic 7	-17080	75539
□ Domestic 8	-17079	70919
□ Domestic 9	-16421	70911
□ Domestic 10	-15431	70238

SOLUTION