

January 30, 2026

Arizona Department of Environmental Quality
Groundwater Protection
1110 West Washington Street, #160
Phoenix, Arizona 85007

Attention: Bret Esslin

Subject: Annual Groundwater Model Update
Arizona Underground Injection Control (UIC) Permit No. P-515167

Dear Mr. Esslin:

Florence Copper LLC (Florence Copper) is submitting this report in accordance with Part II, Section J of Arizona Underground Injection Control (UIC) Permit No. P-515167, dated January 16, 2026, for the Florence Copper Project. The information in Attachment 1 satisfies the requirements listed in Section J of the UIC Permit for the annual update.

I have reviewed the submitted data in this report and confirmed that the data in this report to be accurate and complete.. Please call (520) 374-3984 should you have any questions concerning this report.

Sincerely,
Florence Copper LLC



John Mays
General Manager

Enclosures:

Attachment 1 - January 2026 Annual Update to the Florence Copper Groundwater Model

ATTACHMENT 1

**January 2026 Annual Update to the
Florence Copper Groundwater Model**

TECHNICAL MEMORANDUMJanuary 30, 2026
File No. 214722-000

TO: Florence Copper LLC
John Mays, General Manager

FROM: Haley & Aldrich, Inc.
Laura Menken, R.G., Project Manager
Caroline J. Hiott, Staff Hydrogeologist
Becca Dozier, Hydrogeologist
Mark Nicholls, R.G., Principal, Hydrogeologist



SUBJECT: January 2026 Update to the Florence Copper Groundwater Model

At the request of Florence Copper LLC (Florence Copper), Haley & Aldrich, Inc. (Haley & Aldrich) has prepared a groundwater model update in accordance with Underground Injection Control (UIC) Permit P-515167 Part II.J. This Technical Memorandum describes the model updates, including:

- Incorporating porosity and hydraulic conductivity values developed from the neutron-density logging and formation testing conducted in 2025.
 - Porosity was updated near Well 136139 based on neutron-density log results from that well.
 - Hydraulic conductivity was updated near Wells 138149 and 140151 and MW-68-LBF based on aquifer testing completed at those wells.
- Extending the model simulation with new stress periods from June 2020 through the end of 2024.
- Updating off-site pumping well data obtained from the Arizona Department of Water Resources (ADWR) in the model domain for the new stress periods.

Once the model was updated, Haley & Aldrich evaluated the effects of the porosity and hydraulic conductivity updates on groundwater flow and model performance metrics, including water volume mass balance, groundwater elevations, and groundwater velocities at selected comparison points. The model updates and results are summarized below. This model update is limited to an evaluation of model performance relative to the newly available data incorporated in the model. This evaluation did not include simulation of in-situ copper recovery (ISCR) wellfield operations, or fate and transport simulations. Figure 1 shows the location of the on-site wells that were used to develop the new porosity and hydraulic conductivity values.

Model Description

The original groundwater flow model was developed as part of a hydrogeologic study supporting the UIC Permit and Aquifer Protection Permit (APP) applications. The model was calibrated to water level data from 1984 through 2010 and was used by the U.S. Environmental Protection Agency (USEPA) to assess hypothetical discharge impacts on the planned ISCR operations.

The model has been updated repeatedly to support the APP and UIC permit applications and to evaluate planned ISCR operations. Model updates included conversion to MODFLOW-USG, developing parent and refined grids, calibrating the parent grid model to long-term water level data from 2010 through 2019, and calibrating the refined grid model to hydraulic response and solute transport behavior observed during Production Test Facility (PTF) operations. The most recent use of the model before this update was in April 2025 to simulate attenuation of copper concentrations in groundwater originating in the PTF wellfield under ambient groundwater flow conditions as part of the PTF rinsing demonstration.

MODEL LAYER SUMMARY

The model has the same 10 layers as the 2012, 2019, and 2021 models. Layers 1 and 2 representing the Upper Basin Fill Unit (UBFU), layer 3 representing the Middle Fine-Grained Unit, layers 4 and 5 representing the Lower Basin Fill Unit (LBFU), and layers 6 through 10 representing the Bedrock Oxide Unit. The layer top and bottom elevations were interpolated onto the parent grid in the Geographic Information System (GIS) by overlaying the parent grid on the original grid in the 2019 model. The elevation for each cell in the parent grid was calculated as area-weighted average of the elevations of all overlapping cells from the original grid. The refined grid cells use the same layer elevations from the parent grid cell.

On-site pumping was assumed to be inactive for the model scenarios. Haley & Aldrich ran the following scenarios to evaluate the effects of the updates:

- **Scenario 1 - Prior model:** Based on the 2024 model, with stress periods extended through the end of 2024. On-site pumping was inactive. No new off-site wells were added, and no porosity or hydraulic conductivity zones were updated.
- **Scenario 2 - Updated pumping:** Based on the prior model, with updated off-site pumping wells added.
- **Scenario 3 - Updated pumping, porosity and hydraulic conductivity:** Based on the “with new off-site pumping wells” scenario, with updated porosity and hydraulic conductivity zones added. The porosity update was based on geophysical testing at Well 136139. The hydraulic conductivity updates were based on formation testing at Wells 138149, 140151, and MW-68-LBF.

Details of model inputs and updates are provided below.

Model Updates

HYDRAULIC CONDUCTIVITY

The hydraulic conductivity values applied in this model update were derived from aquifer testing conducted at wells in the Florence Copper ISCR wellfield during 2025. Aquifer testing was conducted on June 2 and 3, 2025 within the partial Resource Block 054 and consisted of one pumping well and three observation wells. The pumping well is an ISCR well screened in the oxide zone (Well No. 138149), and the three observation wells are screened in each of the water-bearing units, including the Oxide Zone (Well No. 140151), LBFU (MW-68-LBF), and UBFU (M69-UBF). The wells selected for the aquifer test are shown on Figure 1.

The newly developed hydraulic conductivity values were applied within an approximately 500-foot by 500-foot area around the screened intervals of the formation testing wells. This area corresponds to the size of the production blocks used in the ISCR wellfield. Haley & Aldrich applied the updated porosity values within an approximately 500-foot by 500-foot area around Well 136139.

Formation testing yielded estimated horizontal hydraulic conductivity values of:

- 0.71 feet per day for Well 138149,
- 0.65 feet per day for MW-68-LBF, and
- 0.65 to 0.69 feet per day for Well 140151.

An average value of 0.67 feet per day was used for Well 140151 in the model. Formation testing also provided estimated anisotropy (horizontal to vertical hydraulic conductivity) values of 1 for Wells 138149 and 140151, and 0.001 for MW-68-LBF.

Haley & Aldrich added the formation testing wells to the model using well construction details obtained from Florence Copper. Haley & Aldrich applied the estimated horizontal hydraulic conductivity and anisotropy values to the model layers intersected by each well screen, as follows:

- MW-68-LBF screen: Layer 6, 630 to 640 feet below ground surface (bgs)
- Well 140151 screen: Layers 6 through 10, 537 to 957 feet bgs
- Well 138149 screen: Layers 7 through 10, 525 to 1,065 feet bgs

The updated hydraulic conductivity areas for Wells 138149 and 140151 overlap in layers 7 through 10. An averaged horizontal hydraulic conductivity of 0.69 feet per day was used in the overlap area.

POROSITY

A neutron-density log was run at Well 136139 in 2025 as required by the UIC Permit. The permit requires that one neutron-density log be run in each resource block to determine porosity values for the purpose of updating the groundwater flow model. Haley & Aldrich added Well 136139 to the model domain and calculated average layer porosity from neutron and density porosity measurements from the neutron-density log. The calculated porosity values were applied to a 500-foot by 500-foot area around Well 136139 in model layers 4 through 10. The updated porosity values range from 5.3 percent to 10.1 percent. The porosity values are summarized below.

Neutron-Density Log Derived Porosity Values

Model Layer	Previous Porosity Value (Scenario 1)	Updated Porosity Value (Scenario 3)
4	20	10.15
5	20	5.89
6	8	5.30
7	8	5.06
8	8	5.46
9	5	6.94
10	5	5.31

MODEL CONFIGURATION

Model configuration details are provided below.

General Head Boundaries

The general head boundary (GHB) head value for each GHB cell was set to be the GHB head value for the last stress period in the most recent version of the updated model, while the GHB conductance remained the same.

Recharge

The recharge distribution was set to be the same as the recharge distribution for the last stress period in the most recent version of the 2024 model.

Initial Heads

The initial heads were applied based on site data.

Pumping Wells

PTF wells, BIA-10B, and PW-2 were inactive (not pumping) during the model simulations. Wells in the surrounding area were assumed active at the 2023 pumping rates for the duration of the model simulations.

Existing off-site pumping wells were active and updated with 2020 through 2024 pumping rates for the duration of the model simulations. Off-site pumping wells 55-236148, 55-238209, 55-604492, 55-236351, and 55-237591 were also added to the model simulation. The new off-site pumping wells were updated to reflect pumping through 2024.

Stress Periods

For this series of model runs, Haley & Aldrich used the existing Stress Period 54 and added new Stress Periods (55 through 64) to simulate groundwater conditions from June 2020 through the end of 2024. Stress Periods 38 through 60 span one month each (28, 29, 30, or 31 days) with four time steps, representing a 23-month time span from February 2019 through December 2020. Stress Periods 61 through 64 each span a period of 1 year (365.25 days) with eight time steps, representing a total four-year period from 2021 to 2024.

Groundwater conditions throughout all stress periods are assumed to be representative of ambient groundwater conditions while pumping is inactive at the PTF wellfield and other on-site wells (R-01 through R-09, I-01 through I-04, BIA-10B, and PW-2). Surrounding area wells remained active with pumping rates from the previous model and new off-site wells were added with pumping rates through 2024. The model was run with adaptive time stepping turned on.

Other Parameters and Solver Settings

All other transport parameters and solver settings were kept consistent with the previous model versions.

Model Scenarios

The 2024 updated model served as the base model for incorporating the new stress periods, updated offsite wells, and localized porosity and hydraulic conductivity updates described above. These changes were examined using three model scenarios and results are discussed below.

SCENARIO 1 (PRIOR MODEL)

In Scenario 1, the model was run with the 2024 model as the base model for this update, with on-site well pumping turned off, and new stress periods added (through end of 2024). No new off-site pumping wells were added, and porosity and hydraulic conductivity zones were not updated.

Figures 2a through 2j show groundwater contours (blue lines) for model layers 1 through 10 at the end of 2024. Figures 5a through 5j show velocity contours (green lines) and velocity vectors (green arrow) for model layers 1 through 10 at the end of 2024. All figures show model simulation results at the last stress period and time step, which represents the end of 2024. The model simulation shows that groundwater at the Florence Copper site generally flows northwest, and groundwater elevations in layer 1 range from approximately 1,251 to 1,254 feet above mean sea level (amsl).

SCENARIO 2 (UPDATED PUMPING)

In Scenario 2, the model was run with the 2024 model as the base model for this update, with on-site well pumping turned off, new stress periods added (through end of 2024), and new off-site pumping wells added. Porosity and hydraulic conductivity zones were not updated.

Figures 3a through 3j show groundwater contours (blue lines) for model layers 1 through 10 at the end of 2024. Figures 6a through 6j show velocity contours (green lines) and velocity vectors (green arrow) for model layers 1 through 10 at the end of 2024. All figures show model simulation results at the last stress period and time step, which represents the end of 2024. The model simulation shows that groundwater at the Florence Copper site generally flows northwest, and groundwater elevations in layer 1 range from approximately 1,251 to 1,254 feet amsl.

SCENARIO 3 (UPDATED PUMPING, POROSITY AND HYDRAULIC CONDUCTIVITY)

In Scenario 3, the model was run with the 2024 model as the base model for this update, with on-site well pumping turned off, and new stress periods added (through end of 2024), new off-site wells were added, and porosity and hydraulic conductivity zones were updated.

Figures 4a through 4j show groundwater contours (blue lines) for model layers 1 through 10 at the end of 2024. Figures 7a through 7j show velocity contours (green lines) and velocity vectors (green arrow) for model layers 1 through 10 at the end of 2024. All figures show model simulation results at the last stress period and time step, which represents the end of 2024. The model simulation shows that groundwater at the Florence Copper site generally flows northwest, and groundwater elevations in layer 1 range from approximately 1,251 to 1,254 feet amsl.

Findings

The new off-site pumping wells and updated localized porosity and hydraulic conductivity changes (Scenarios 2 and 3) did not result in notable changes in groundwater flow direction, groundwater elevations, or flow velocities and direction compared to the prior model scenario (Scenario 1).

Key model metrics which reflect model performance under each of the model scenarios are water volume mass balance, groundwater elevations, and groundwater velocities. Table 1 summarizes the comparison in mass balance of the model update. Comparison points applied for all three model scenarios, denoted by green dots on Figures 2 through 7, were used to compare model performance under each model scenario. Differences in cumulative inflow and outflow are small across the scenarios and are related to the updated off-site pumping wells. The localized porosity and hydraulic conductivity updates did not materially affect the mass balance. In all three scenarios, the percent difference between cumulative inflow and outflow is negligible.

The simulated groundwater elevation differences across the six comparison points are summarized below.

Simulated Groundwater Elevations in Layer 1 at Comparison Points

Comparison Point	Scenario 1 (Prior Model)	Scenario 2 (Updated Pumping)	Difference Between Scenarios 1 and 2	Scenario 3 Updated pumping Porosity and Conductivity	Difference Between Scenarios 1 and 3
Point Number	(feet amsl)	(feet amsl)	(feet)	(feet amsl)	(feet)
1	1251.84	1251.67	0.17	1251.66	0.18
2	1252	1251.83	0.17	1251.83	0.17
3	1252.19	1252.03	0.16	1252.03	0.16
4	1251.94	1251.77	0.17	1251.77	0.17
5	1252.11	1251.94	0.17	1251.94	0.17
6	1252.33	1252.16	0.17	1252.16	0.17

The biggest difference in groundwater elevation amongst the three model scenarios is 1.07 feet. This difference occurs between the Scenarios 1 and 3. Overall, groundwater elevation is less than the range of seasonal variation and is not significantly affected by the addition of new off-site pumping wells or by the localized changes in porosity and hydraulic conductivity.

The simulated velocity differences across the six comparison points are summarized below.

Simulated Groundwater Velocities in Layer 6 at Comparison Points

Comparison Point	Scenario 1 (Prior Model)	Scenario 2 (Updated Pumping)	Difference Between Scenarios 1 and 2	Scenario 3 Updated Pumping Porosity and Conductivity	Difference Between Scenarios 1 and 3
Point Number	(feet/day)	(feet/day)	(feet/day)	(feet/day)	(feet/day)
1	0.0659	0.0686	-0.0027	0.0663	-0.0004
2	0.0483	0.0504	-0.0021	0.0367	0.0116
3	0.0411	0.0428	-0.0017	0.0329	0.0082
4	0.0551	0.0582	-0.0031	0.0875	-0.0324
5	0.059	0.0616	-0.0026	0.0926	-0.0336
6	0.0741	0.0785	-0.0044	0.118	-0.0439

The changes in simulated groundwater velocity is within the range of velocities simulated in the prior model and does not represent a significant change in model performance or the predicted flow field. Overall, groundwater velocity is not considerably affected by the addition of new off-site pumping wells or by the localized changes in porosity and hydraulic conductivity.

Summary

Haley & Aldrich updated the existing Florence Copper groundwater model to incorporate newly developed hydrologic data and to test the resulting effects on model function. Elements of the update

included incorporation of porosity and hydraulic conductivity values developed from the neutron-density logging and formation testing conducted in 2025, and extension of the model simulation with new stress periods from June 2020 through the end of 2024. Our team also updated off-site pumping data for all registered pumping wells located within the model domain. This dataset also included one new registered pumping well (within the model domain) that has been installed since the previous model update.

This evaluation is limited to consideration of model performance metrics to understand how model performance is affected following incorporation of the newly developed data. The evaluation was performed relative to the background ambient groundwater flow field rather than ISCR operations to develop a model baseline exclusive of ISCR operations. Three model scenarios were run to evaluate the effects of the model updates on performance. The scenarios were:

- Scenario 1 (Prior Model)
- Scenario 2 (Updated Pumping)
- Scenario 3 (Updated Pumping, Porosity and Hydraulic Conductivity)

Model scenarios 2 and 3 were run to examine the differences in key model performance metrics resulting from the model updates. The metrics used for comparison are water volume mass balance, groundwater elevations, and groundwater velocities at six selected comparison points. The porosity and hydraulic conductivity updates did not have a material effect on the mass balance. In all three scenarios, the percent difference between cumulative inflow and outflow is negligible. Minor changes in groundwater elevation and flow velocity occurred at the six comparison points. The groundwater elevation changes are within the range of seasonal variability, and the velocity changes are negligible. Based on these comparisons, the performance of the updated Florence Copper model is consistent with past model performance, and the updated model is a suitable tool to support future groundwater simulations to assess site and local groundwater conditions.

Please contact Mark Nicholls at 602.819.0913 with any questions you may have regarding this memo.

Attachments:

Table 1 – Model Update Mass Balance Comparison

Figure 1 – Groundwater Model Update Well Locations

Figure 2 – Groundwater Elevation Contours from the “Prior Model” Scenario

Figure 3 – Groundwater Elevation Contours from the “With New Offsite Pumping Wells” Scenario

Figure 4 – Groundwater Elevation Contours from the “With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones” Scenario

Figure 5 – Groundwater Velocity Contours and Vectors from the “Prior Model” Scenario

Figure 6 – Groundwater Velocity Contours and Vectors from the “With New Offsite Pumping Wells” Scenario

Figure 7 – Groundwater Velocity Contours and Vectors from the “With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones” Scenario

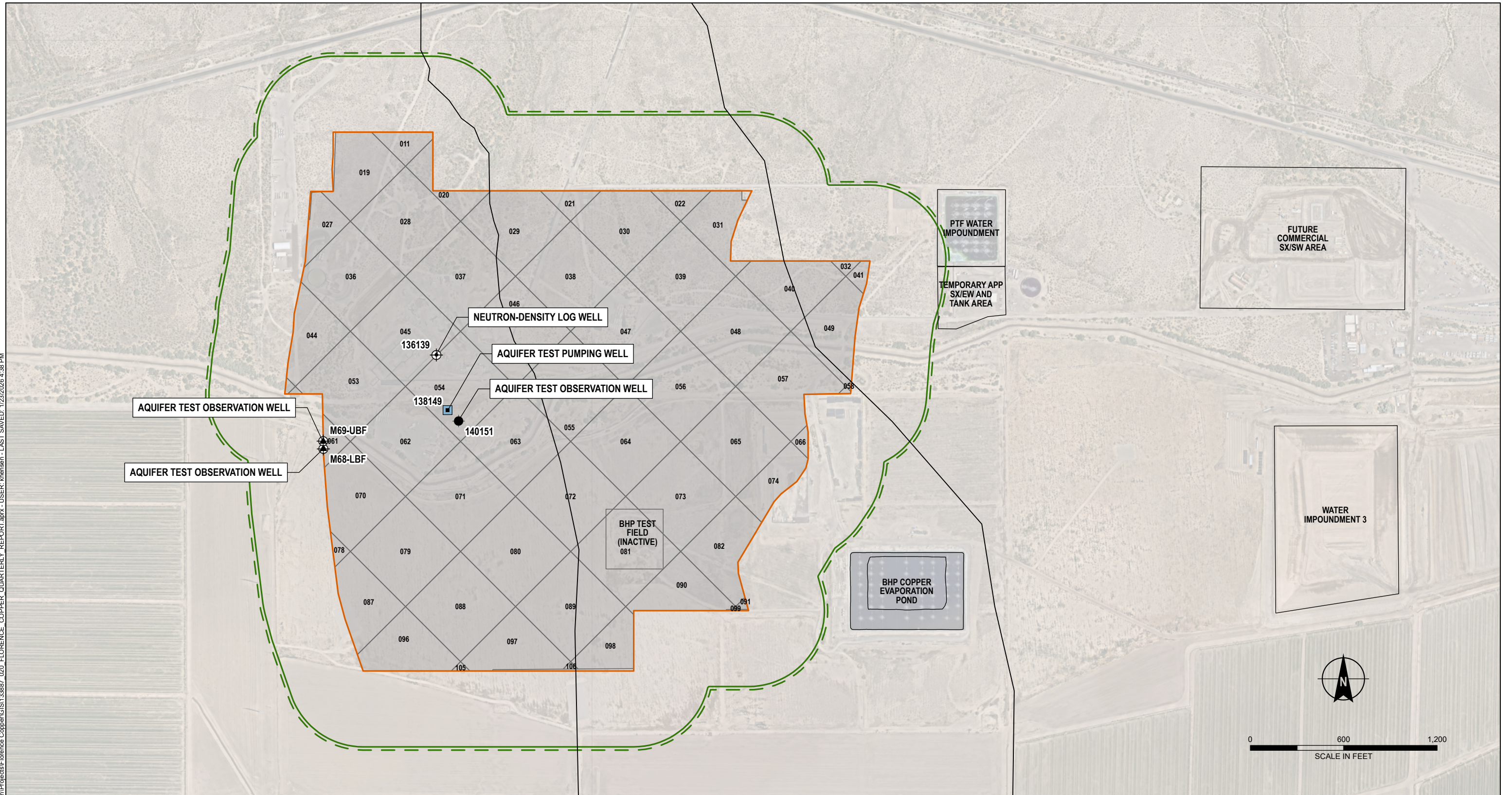
TABLE

TABLE 1
MODEL UPDATE MASS BALANCE COMPARISON
 FLORENCE COPPER LLC
 FLORENCE, ARIZONA

Metric	Model Layer	Scenario 1 Prior Model	Scenario 2 With New Offsite Pumping Wells	Scenario 3 With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity Zones
Mass Balance: Cumulative Water IN (gallons)	Total	42,668,067,960.2	42,549,283,511.8	42,549,274,880.5
Mass Balance: Cumulative Water OUT (gallons)	Total	42,668,110,379.0	42,549,313,416.3	42,549,304,860.7
Mass Balance: IN - OUT Difference (gallons)	Total	-42,419	-29,904	-29,980
Mass Balance: Percent Discrepancy	Total	-0.0001%	-0.0001%	-0.0001%

FIGURES

GIS FILE PATH: \\haleyaldrich\share\phx_common\Projects\Florence Copper\GIS\33887_020_FLORENCE COPPER QUARTERLY REPORT.aprx - USER: khansen - LAST SAVED: 1/23/2026 4:38 PM



LEGEND

- | | | | |
|---|-------------------|---|---|
|  | HYDRAULIC CONTROL |  | FAULT LINE |
|  | OBSERVATION WELL |  | PROPOSED AQUIFER EXEMPTION BOUNDARY |
|  | INJECTION WELL |  | AQUIFER EXEMPTION BOUNDARY |
|  | USDW WELL |  | IN-SITU COPPER RECOVERY (ISCR) WELL FIELD |

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. UIC PERMIT: No. P-515167 (LTF 112590P)
3. POROSITY DATA FROM WELL 136139
4. FORMATION TESTING: WELL 138149, WELL 140151, M68-LBF, AND M69-UBF
5. AERIAL IMAGERY SOURCE: NEARMP, 28 MAY 2024



FLORENCE COPPER

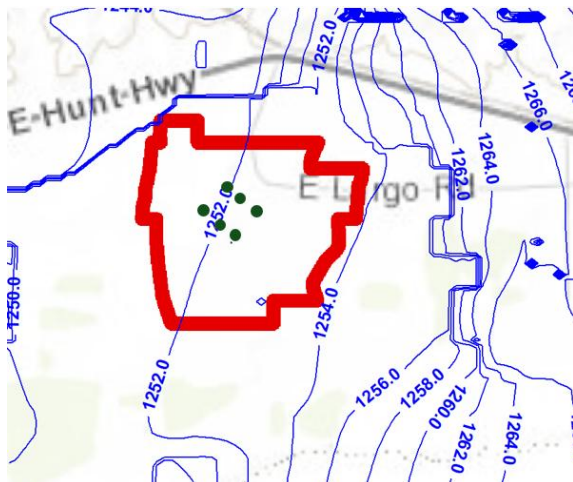
GROUNDWATER MODEL UPDATE WELL LOCATIONS



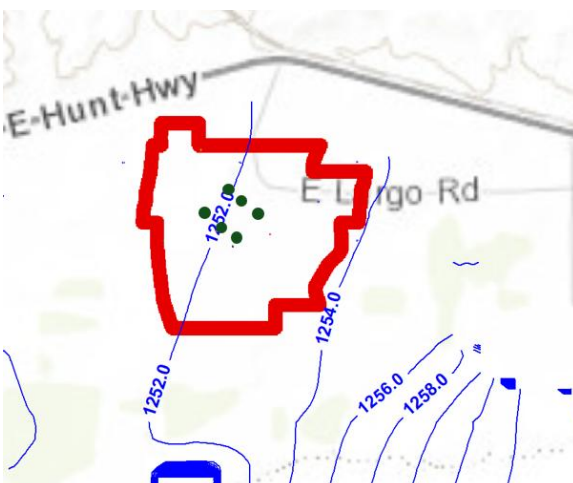
JANUARY 2026

FIGURE 1

Prior Model

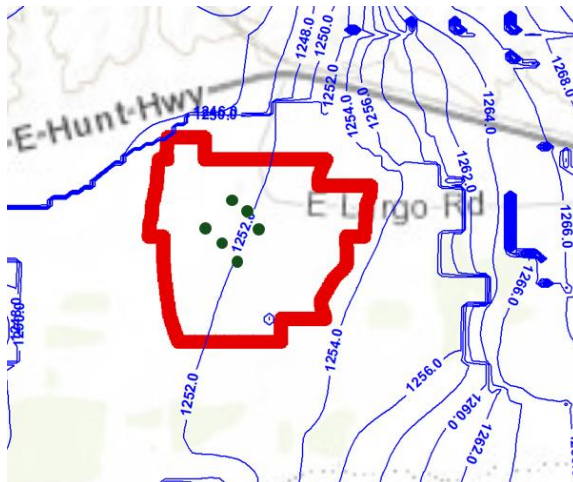


2a) Groundwater elevation contours (layer 1)

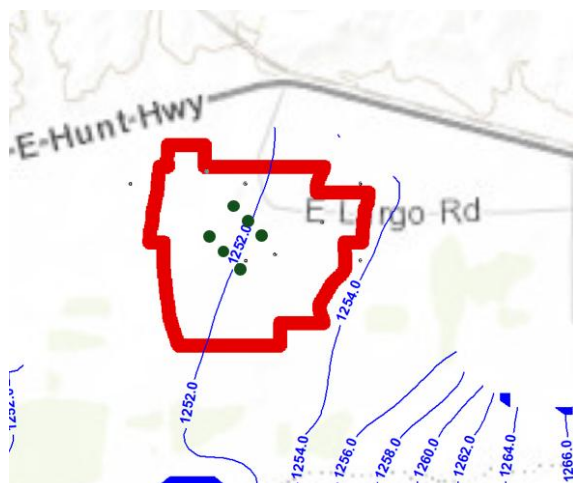


2b) Groundwater elevation contours (layer 2)

With New Offsite Pumping Wells

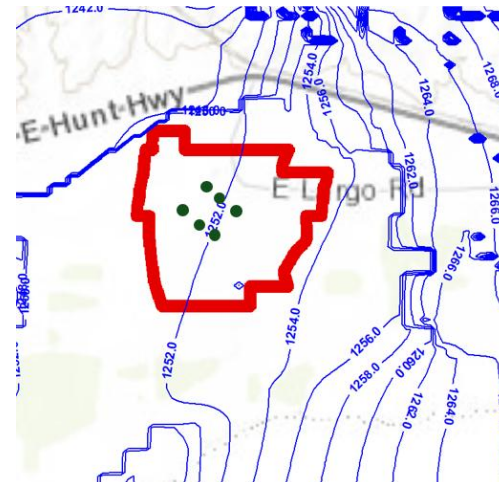


3a) Groundwater elevation contours (layer 1)

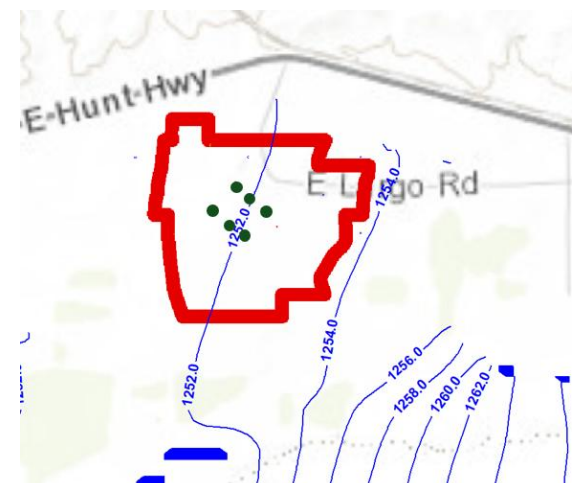


3b) Groundwater elevation contours (layer 2)

With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones

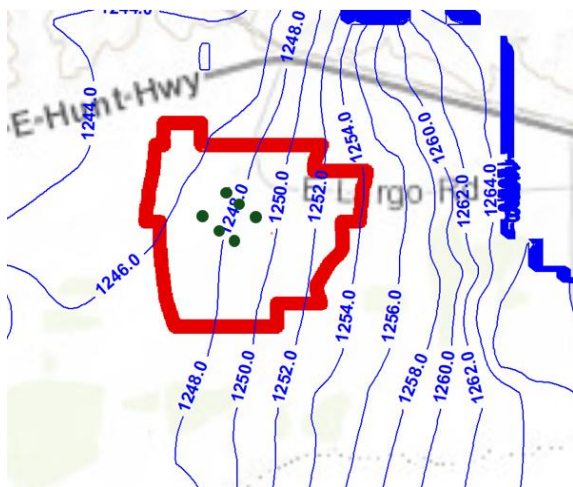


4a) Groundwater elevation contours (layer 1)

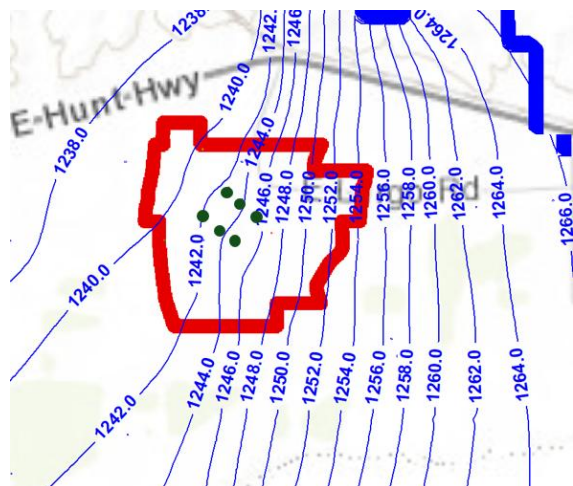


4b) Groundwater elevation contours (layer 2)

Prior Model

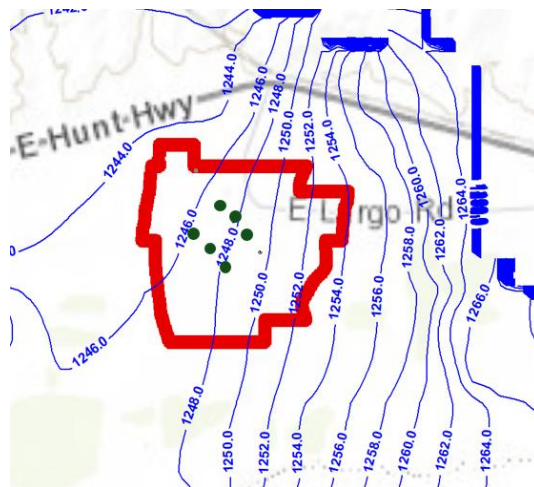


2c) Groundwater elevation contours (layer 3)

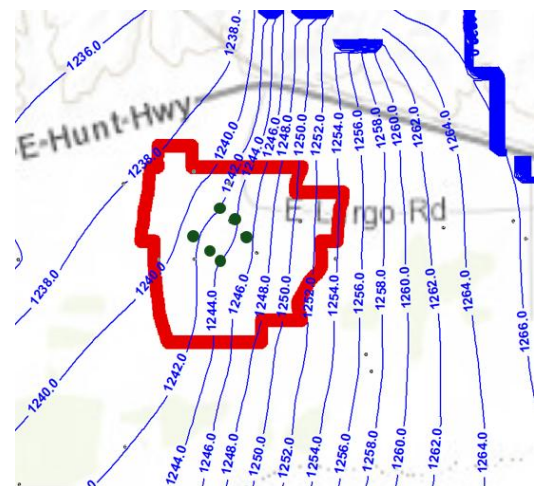


2d) Groundwater elevation contours (layer 4)

With New Offsite Pumping Wells

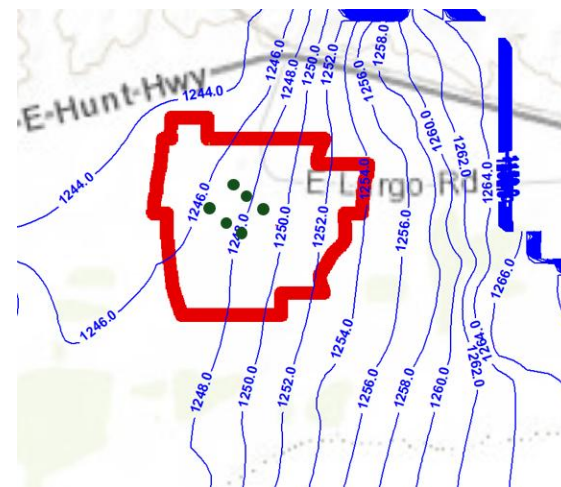


3c) Groundwater elevation contours (layer 3)

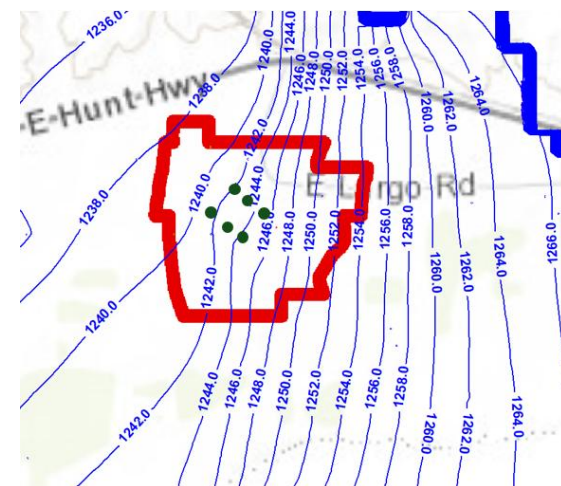


3d) Groundwater elevation contours (layer 4)

With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones

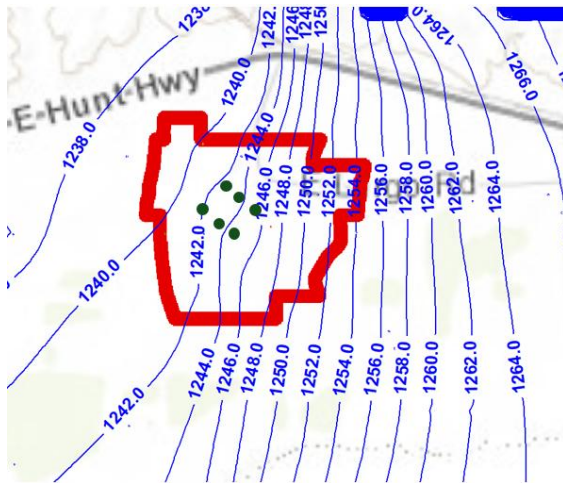


4c) Groundwater elevation contours (layer 3)



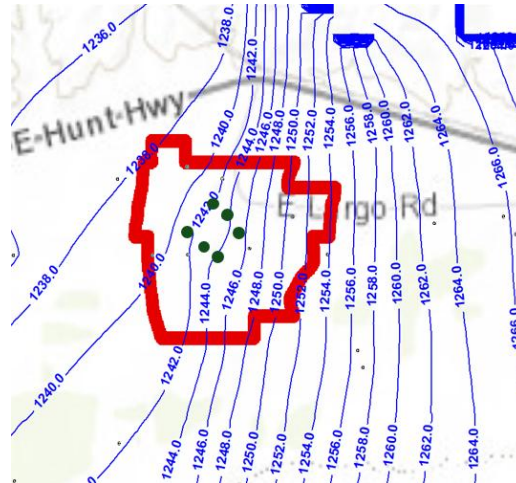
4d) Groundwater elevation contours (layer 4)

Prior Model



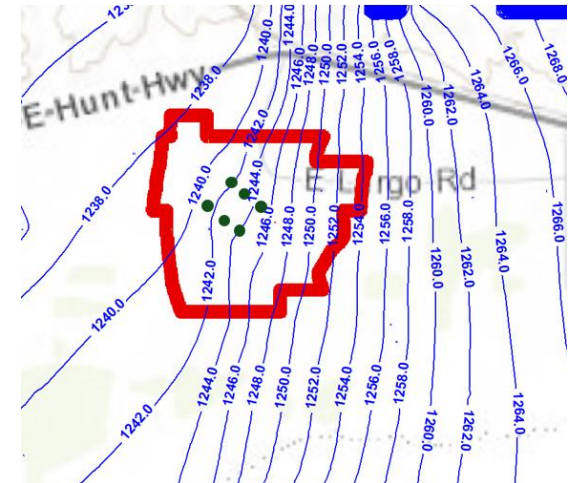
2e) Groundwater elevation contours (layer 5)

With New Offsite Pumping Wells

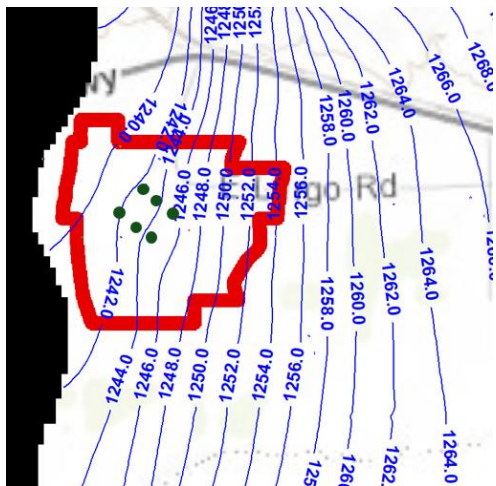


3e) Groundwater elevation contours (layer 5)

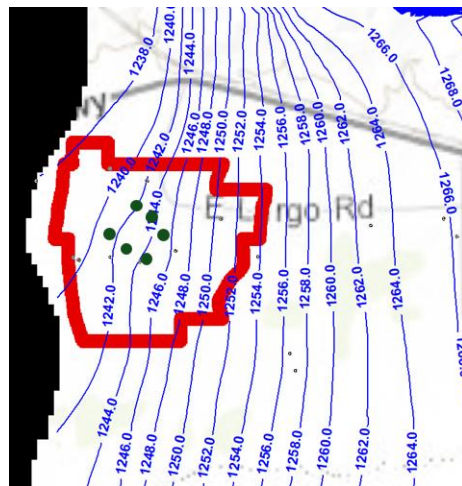
With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones



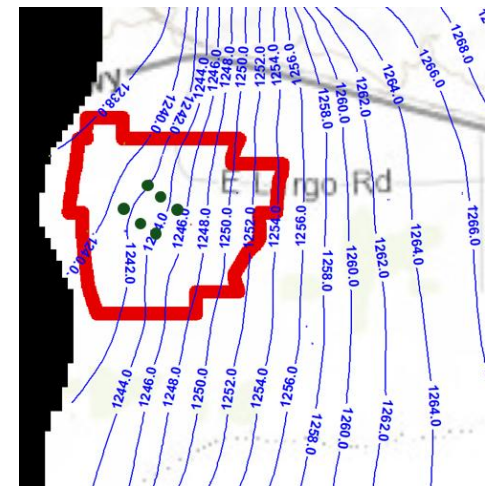
4e) Groundwater elevation contours (layer 5)



2f) Groundwater elevation contours (layer 6)

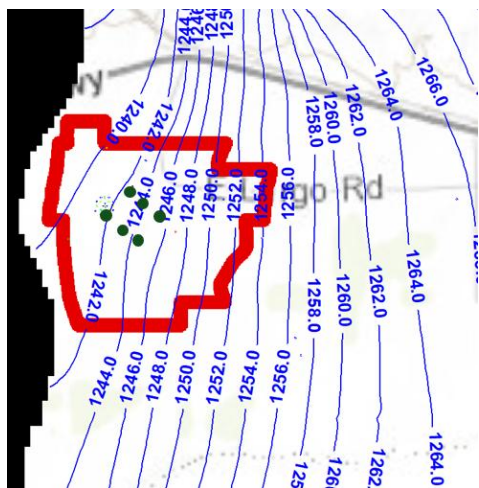


3f) Groundwater elevation contours (layer 6)



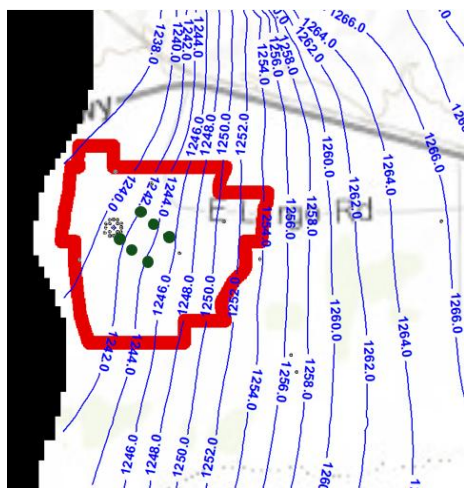
4f) Groundwater elevation contours (layer 6)

Prior Model



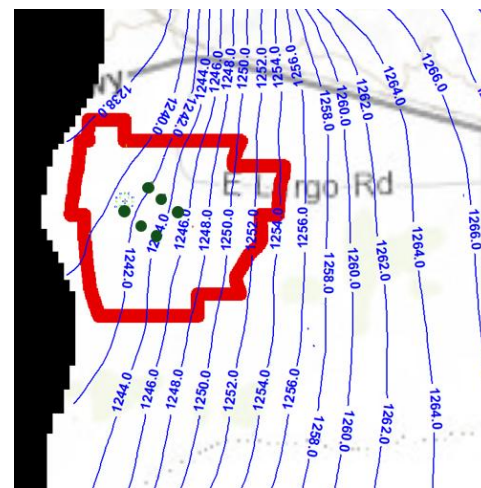
2g) Groundwater elevation contours (layer 7)

With New Offsite Pumping Wells

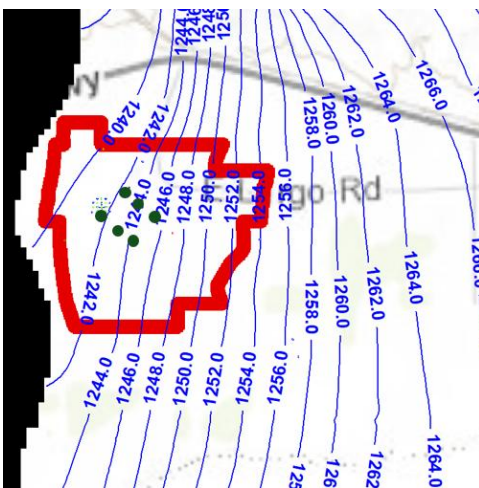


3g) Groundwater elevation contours (layer 7)

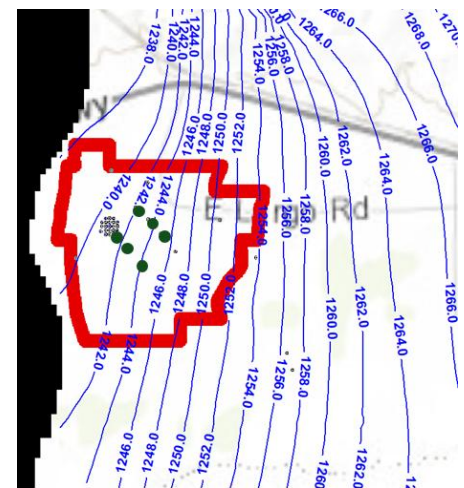
With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones



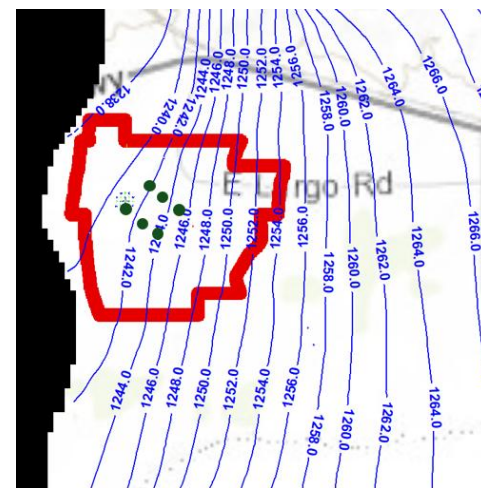
4g) Groundwater elevation contours (layer 7)



2h) Groundwater elevation contours (layer 8)



3h) Groundwater elevation contours (layer 8)

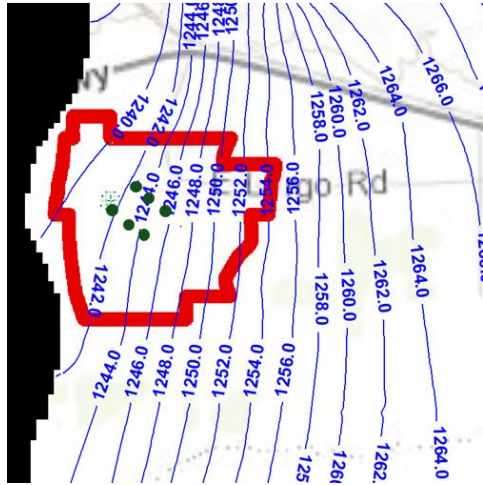


4h) Groundwater elevation contours (layer 8)

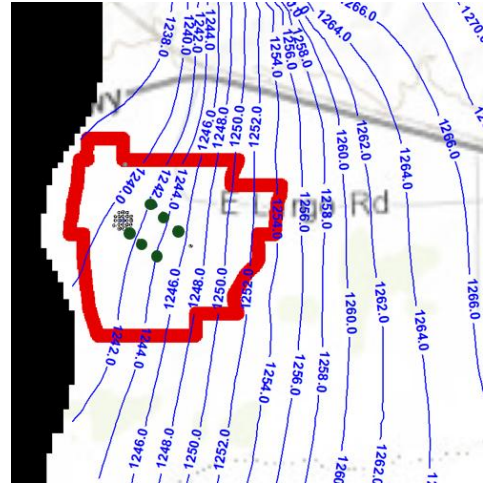
Prior Model

With New Offsite Pumping Wells

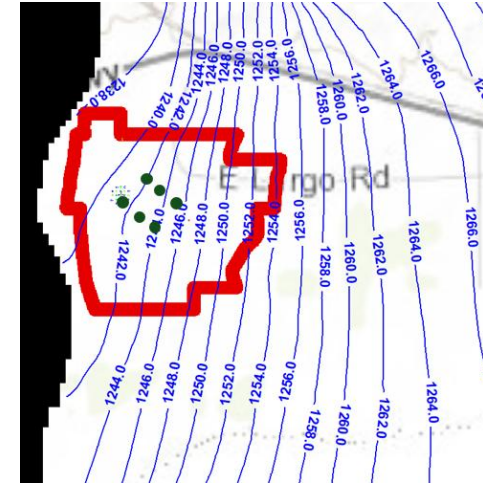
With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones



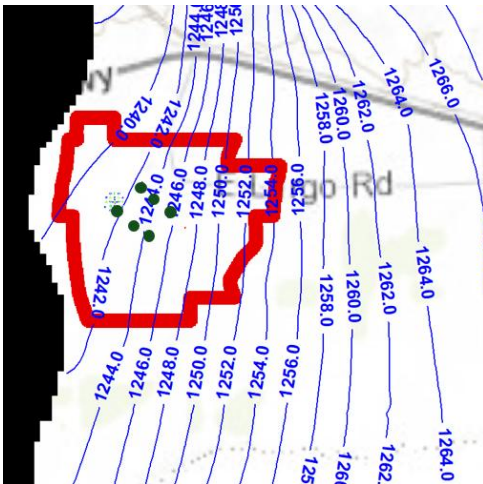
2i) Groundwater elevation contours (layer 9)



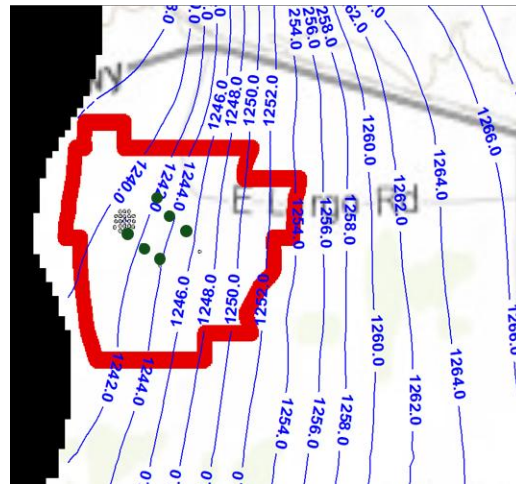
3i) Groundwater elevation contours (layer 9)



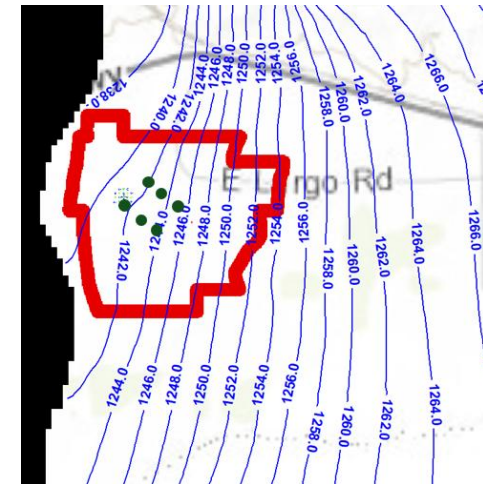
4i) Groundwater elevation contours (layer 9)



2j) Groundwater elevation contours (layer 10)



3j) Groundwater elevation contours (layer 10)



4j) Groundwater elevation contours (layer 10)

Notes:

Figures shown are for the last stress period and time step, representing the end of 2024.

Blue lines are groundwater head (ft) contours.

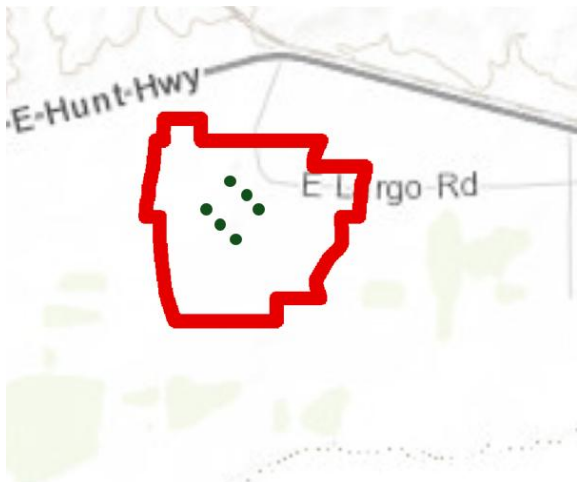
Head contours: 2 ft interval; min: 1150 ft, max: 1300 ft.

Green dots are approximate location of comparison points within the model. See groundwater head values at those model locations in Table 1.

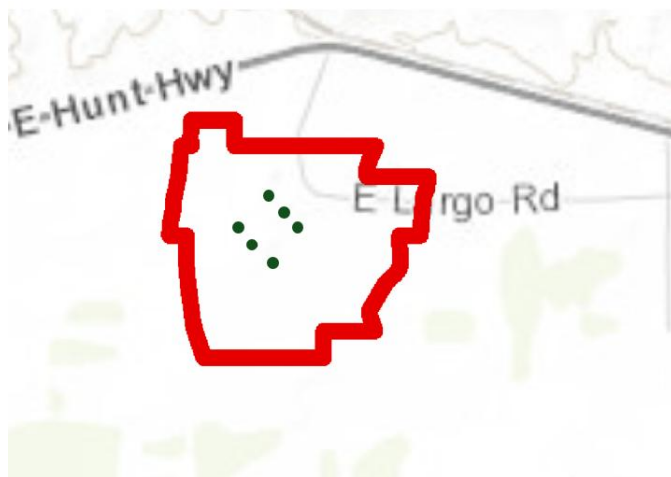
Prior Model

With New Offsite Pumping Wells

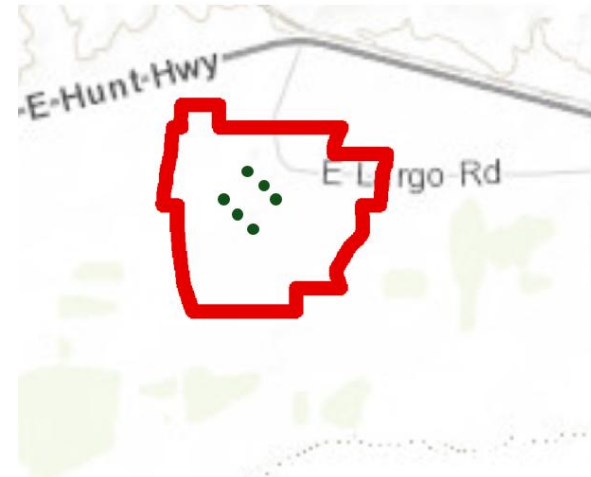
With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones



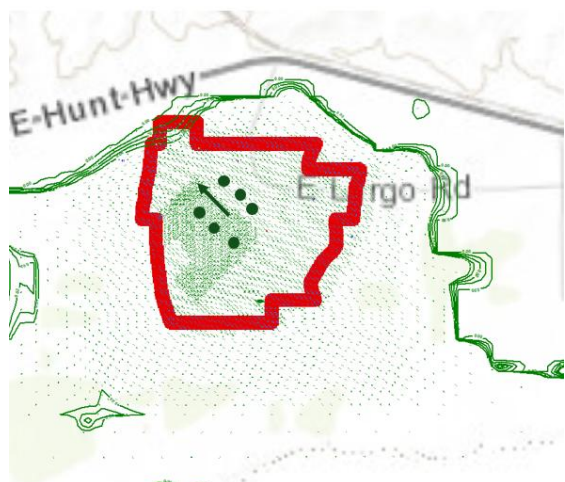
5a) Groundwater velocity contours and vectors (layer 1)



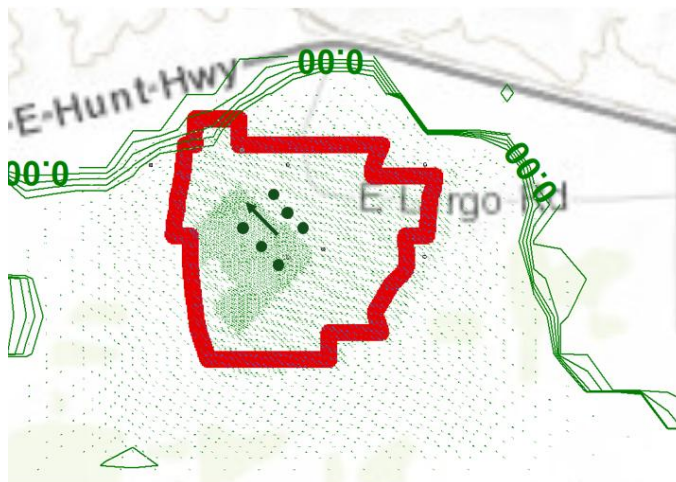
6a) Groundwater velocity contours and vectors (layer 1)



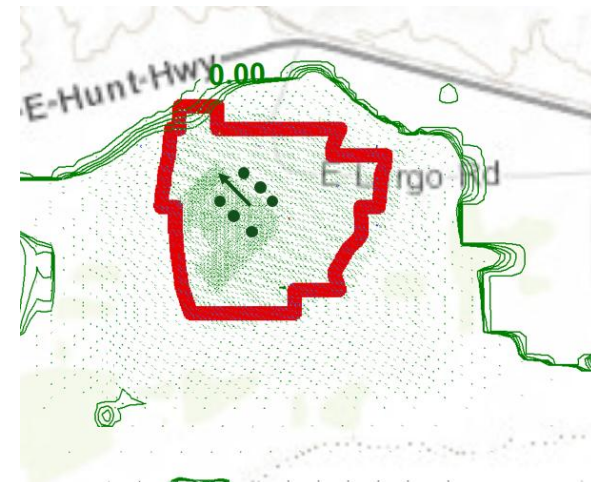
7a) Groundwater velocity contours and vectors (layer 1)



5b) Groundwater velocity contours and vectors (layer 2)



6b) Groundwater velocity contours and vectors (layer 2)

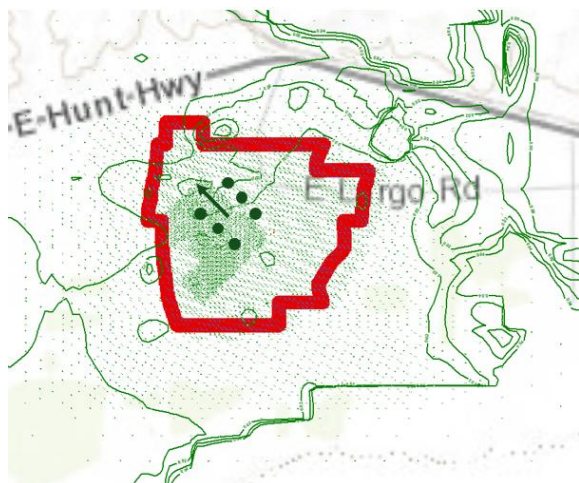


7b) Groundwater velocity contours and vectors (layer 2)

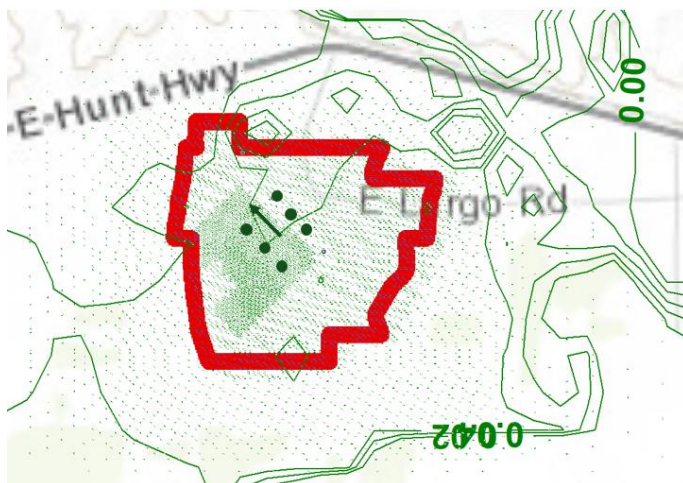
Prior Model

With New Offsite Pumping Wells

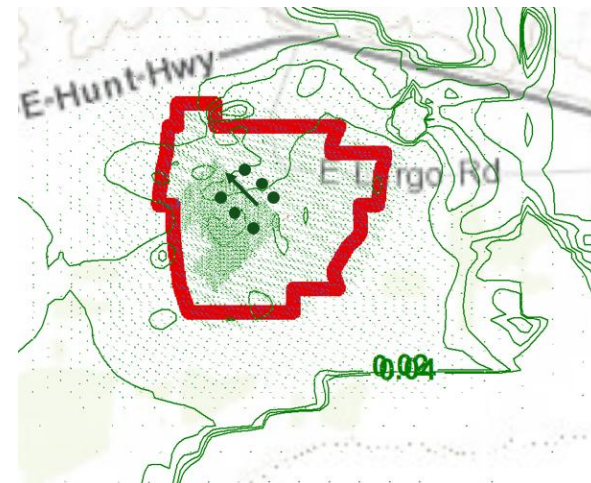
With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones



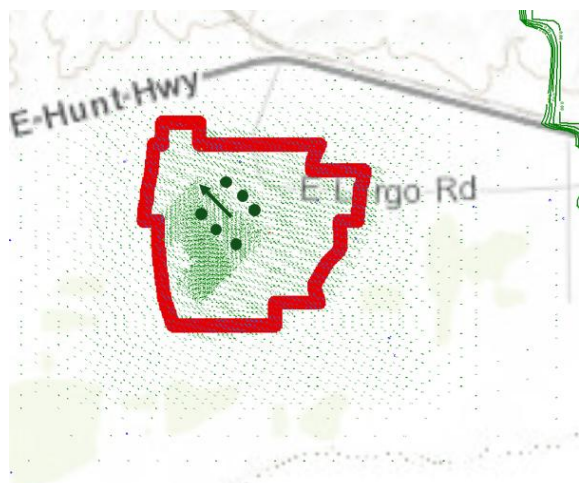
5c) Groundwater velocity contours and vectors (layer 3)



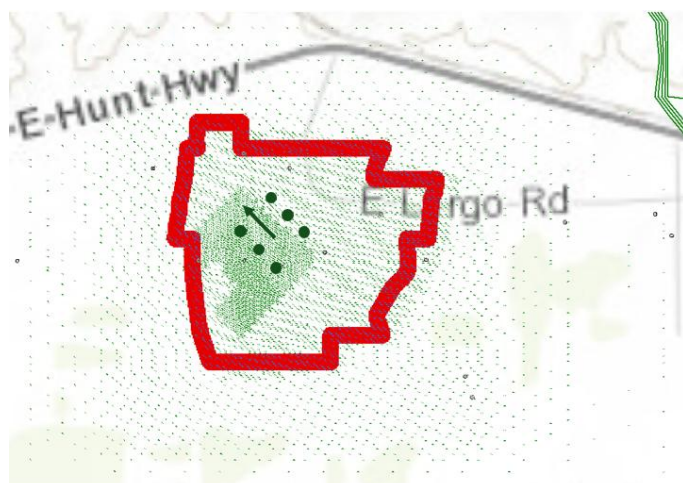
6c) Groundwater velocity contours and vectors (layer 3)



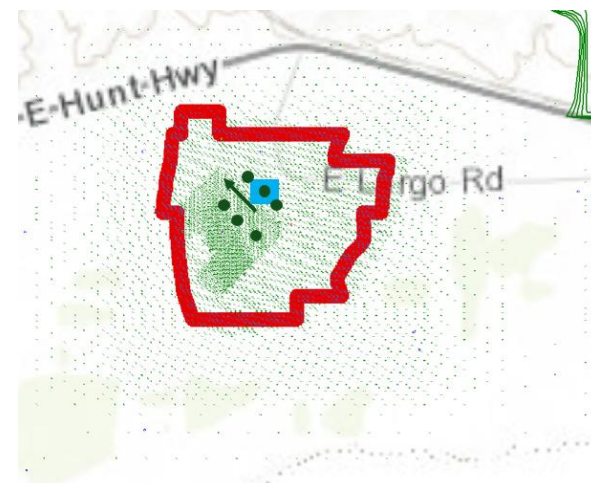
7c) Groundwater velocity contours and vectors (layer 3)



5d) Groundwater velocity contours and vectors (layer 4)



6d) Groundwater velocity contours and vectors (layer 4)

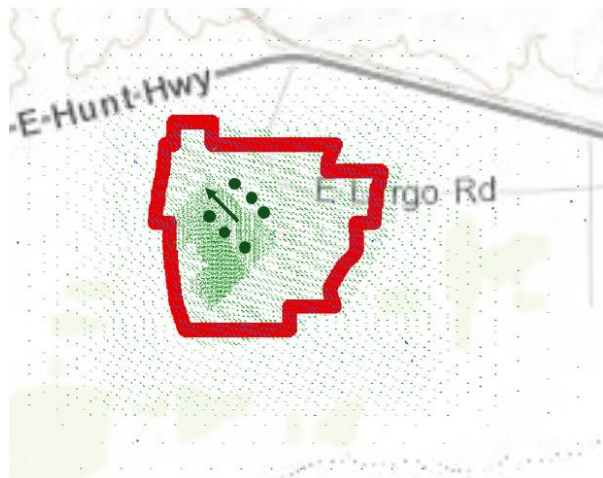


7d) Groundwater velocity contours and vectors (layer 4)

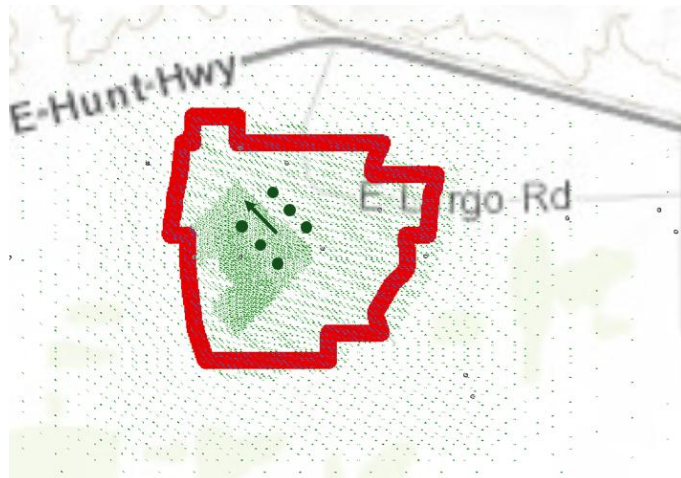
Prior Model

With New Offsite Pumping Wells

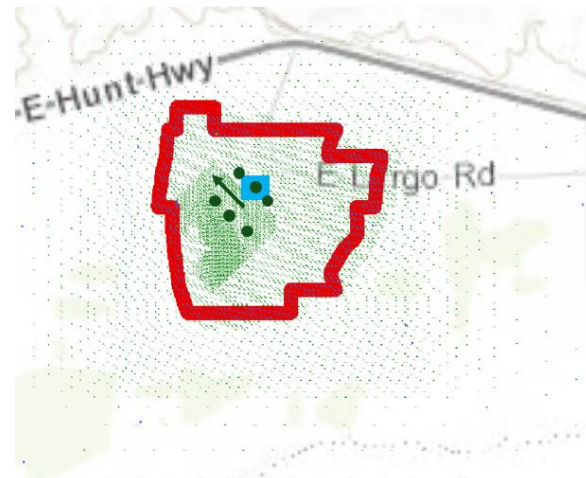
With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones



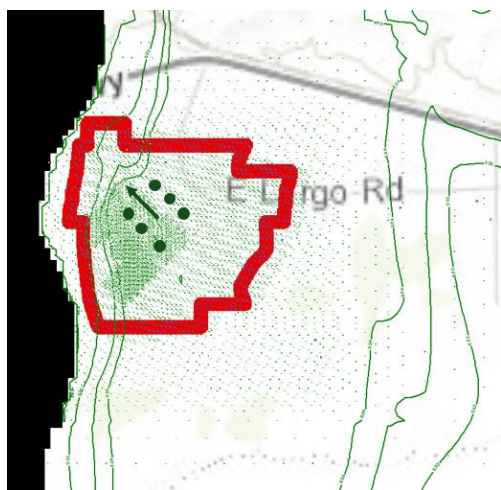
5e) Groundwater velocity contours and vectors (layer 5)



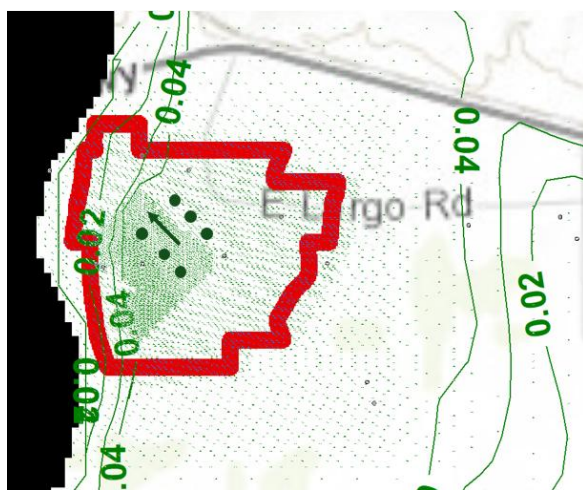
6e) Groundwater velocity contours and vectors (layer 5)



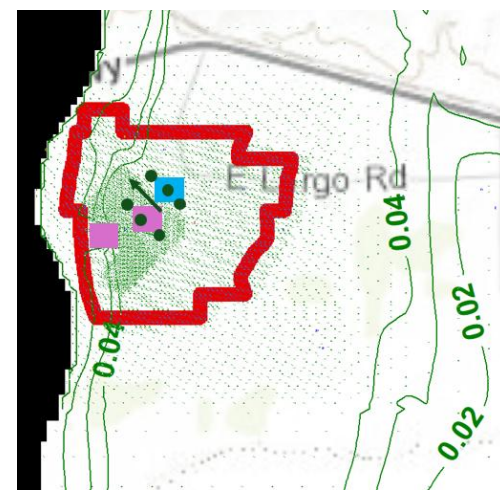
7e) Groundwater velocity contours and vectors (layer 5)



5f) Groundwater velocity contours and vectors (layer 6)



6f) Groundwater velocity contours and vectors (layer 6)

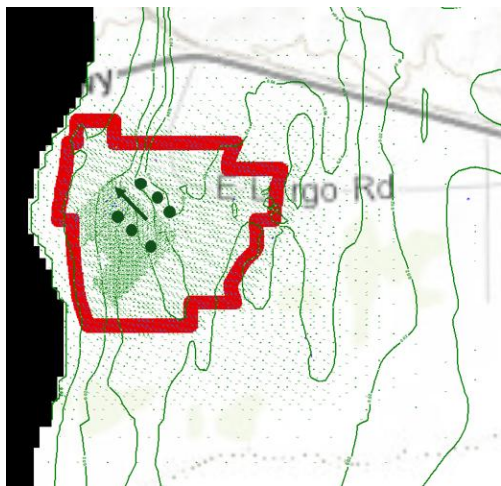


7f) Groundwater velocity contours and vectors (layer 6)

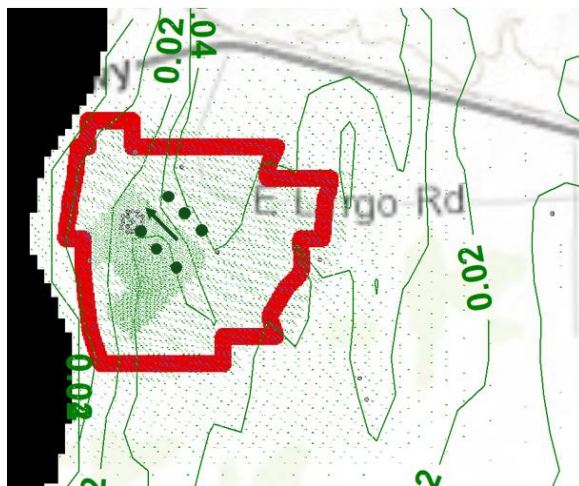
Prior Model

With New Offsite Pumping Wells

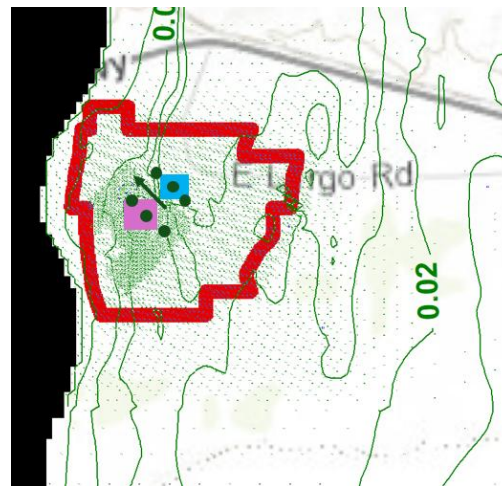
With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones



5g) Groundwater velocity contours and vectors (layer 7)



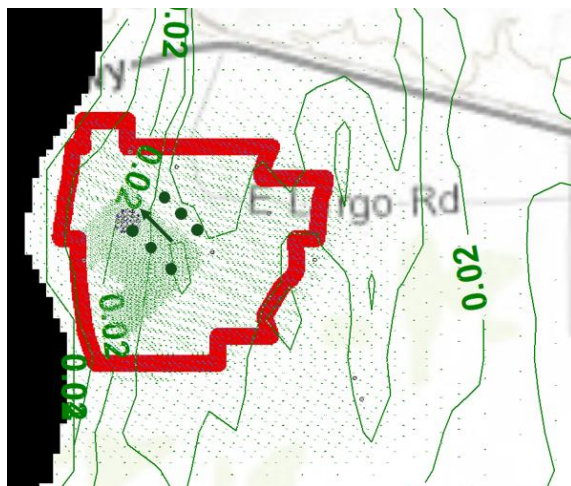
6g) Groundwater velocity contours and vectors (layer 7)



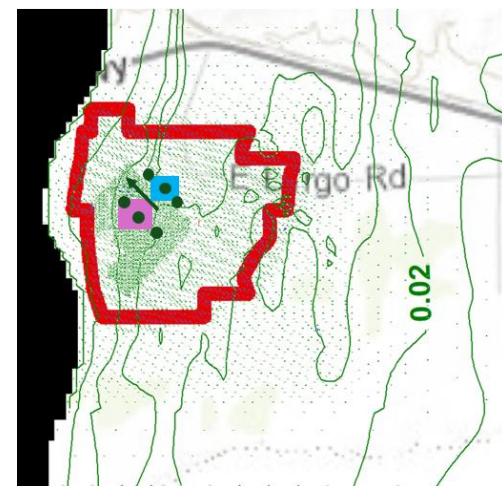
7g) Groundwater velocity contours and vectors (layer 7)



5h) Groundwater velocity contours and vectors (layer 8)



6h) Groundwater velocity contours and vectors (layer 8)

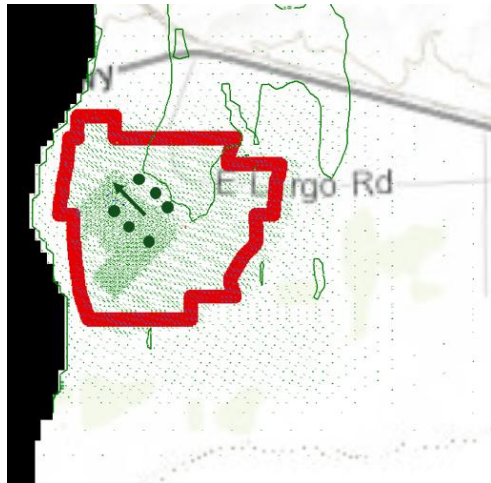


7h) Groundwater velocity contours and vectors (layer 8)

Prior Model

With New Offsite Pumping Wells

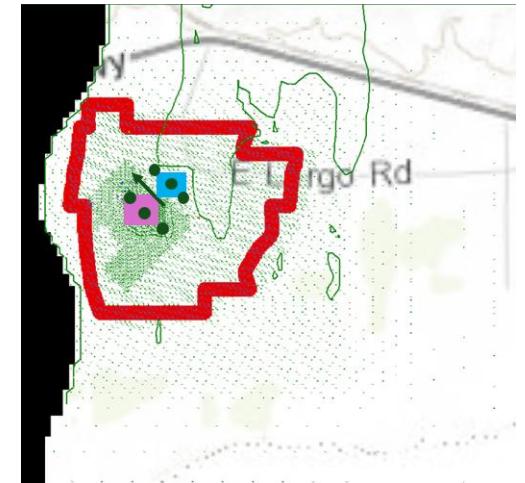
With New Offsite Pumping Wells and Updated Porosity and Hydraulic Conductivity (K) Zones



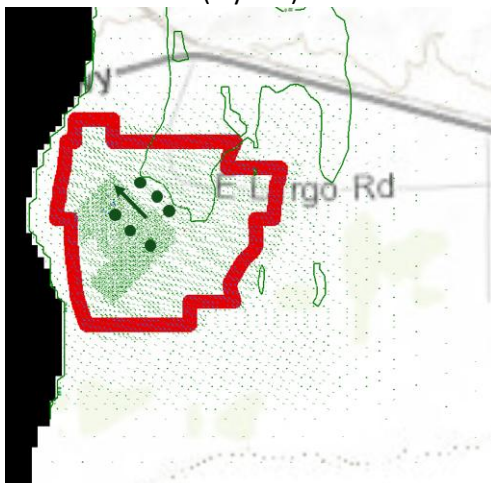
5i) Groundwater velocity contours and vectors (layer 9)



6i) Groundwater velocity contours and vectors (layer 9)



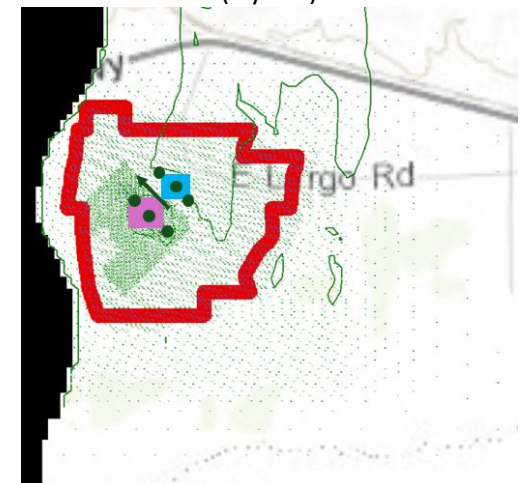
7i) Groundwater velocity contours and vectors (layer 9)



5j) Groundwater velocity contours and vectors (layer 10)



6j) Groundwater velocity contours and vectors (layer 10)



7j) Groundwater velocity contours and vectors (layer 10)

Notes:

Figures shown are for the last stress period and time step, representing the end of 2024.

Small green symbols are arrows showing direction of groundwater velocity (velocity vectors). Higher concentrations of velocity vectors are due to finer grid size.

Big green arrow is general direction of groundwater velocity.

Green lines are groundwater velocity contours.

Velocity contours: 0.01 ft/day interval; min: 0.001 ft/day, max: 0.05 ft/day.

Layer one is mostly dry, so there are no velocity symbols in layer one figures.

Green dots are approximate location of comparison points within the model. See groundwater velocity values at those model locations in Table 1.

The light blue box represents the approximate area of the porosity update.

The pink box represents the approximate area of the hydraulic conductivity update.