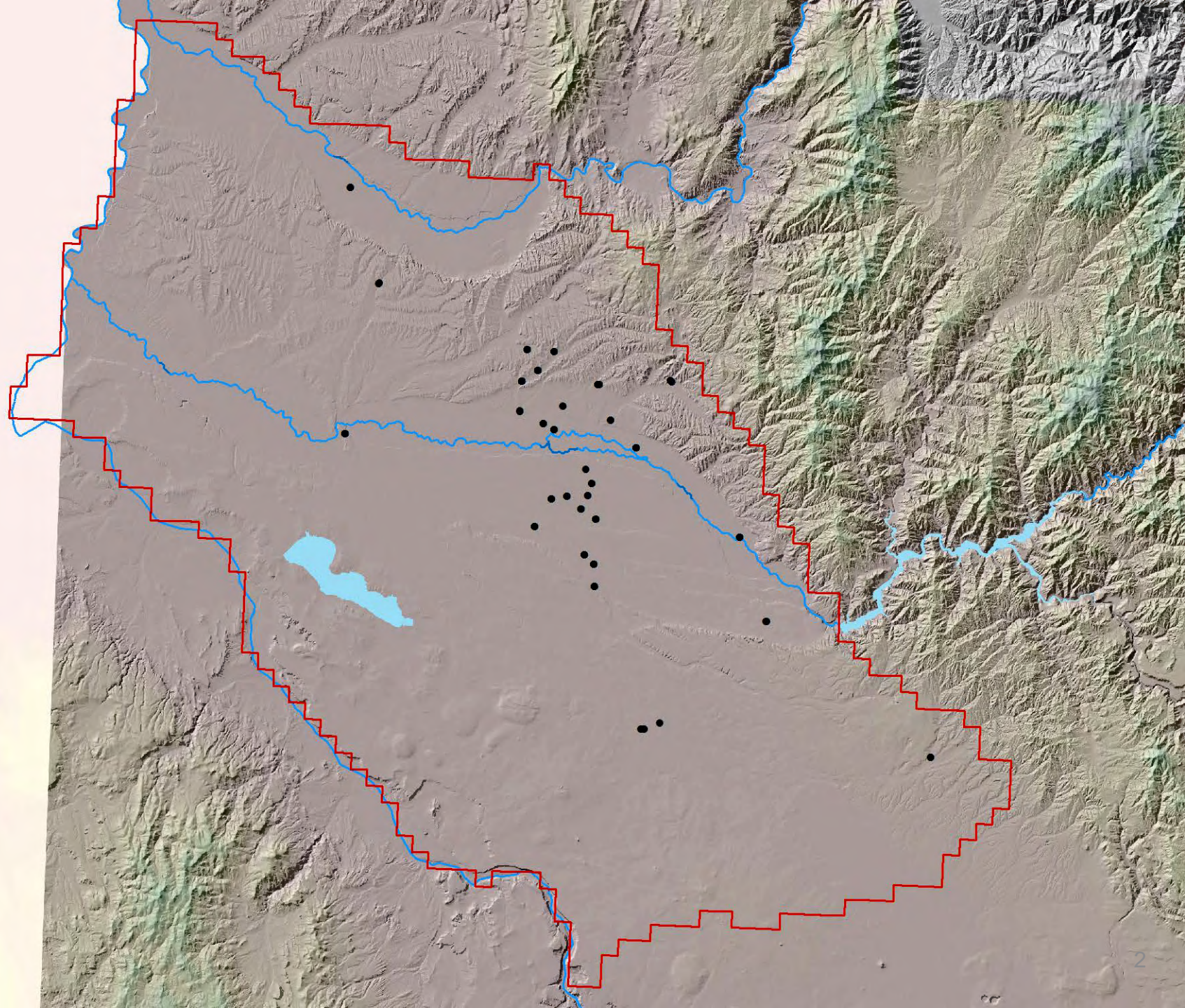


# Composite Multi-Level Wells: What can pairs of wells tell us about layering?

Stephen Hundt



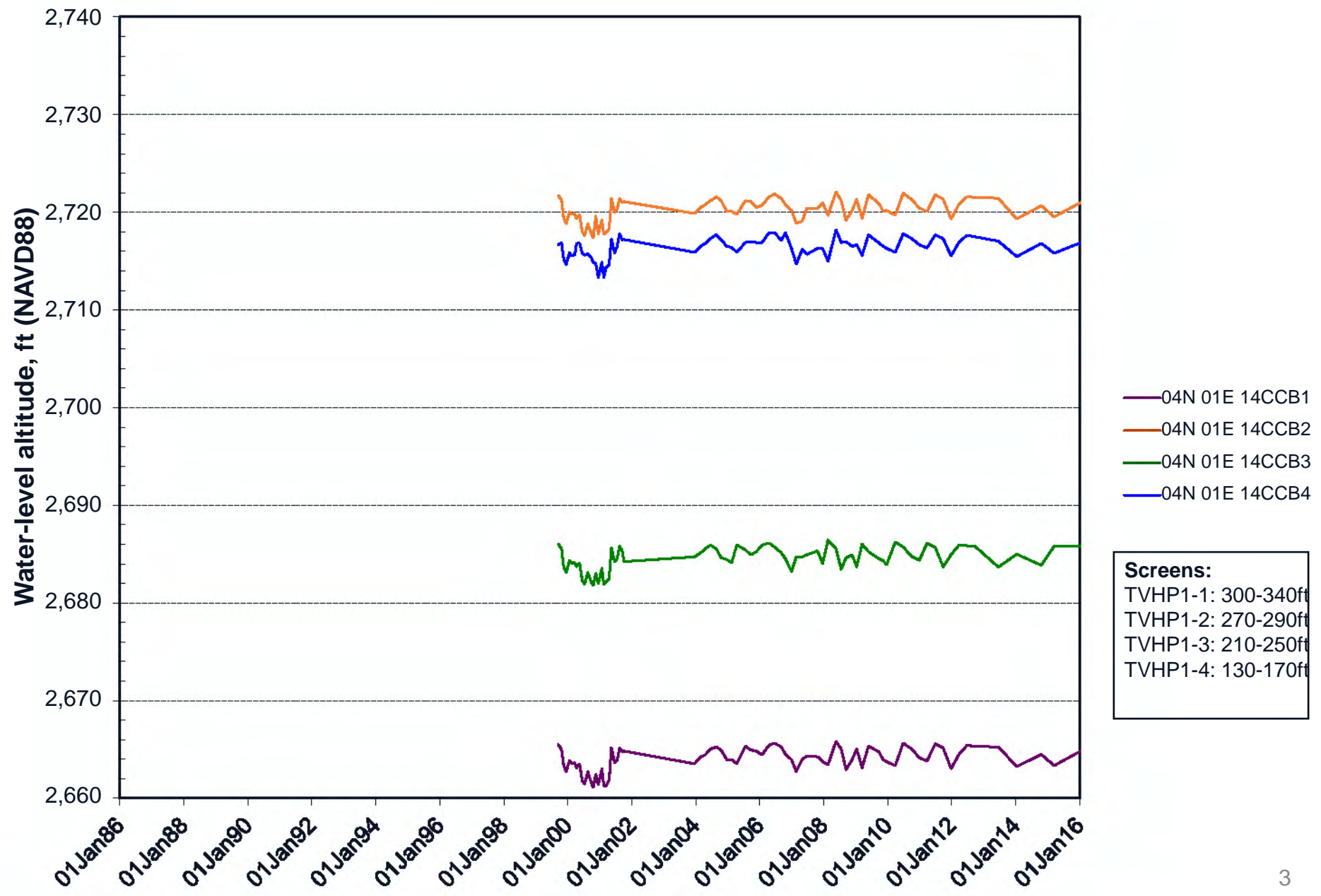
# Multilevel wells





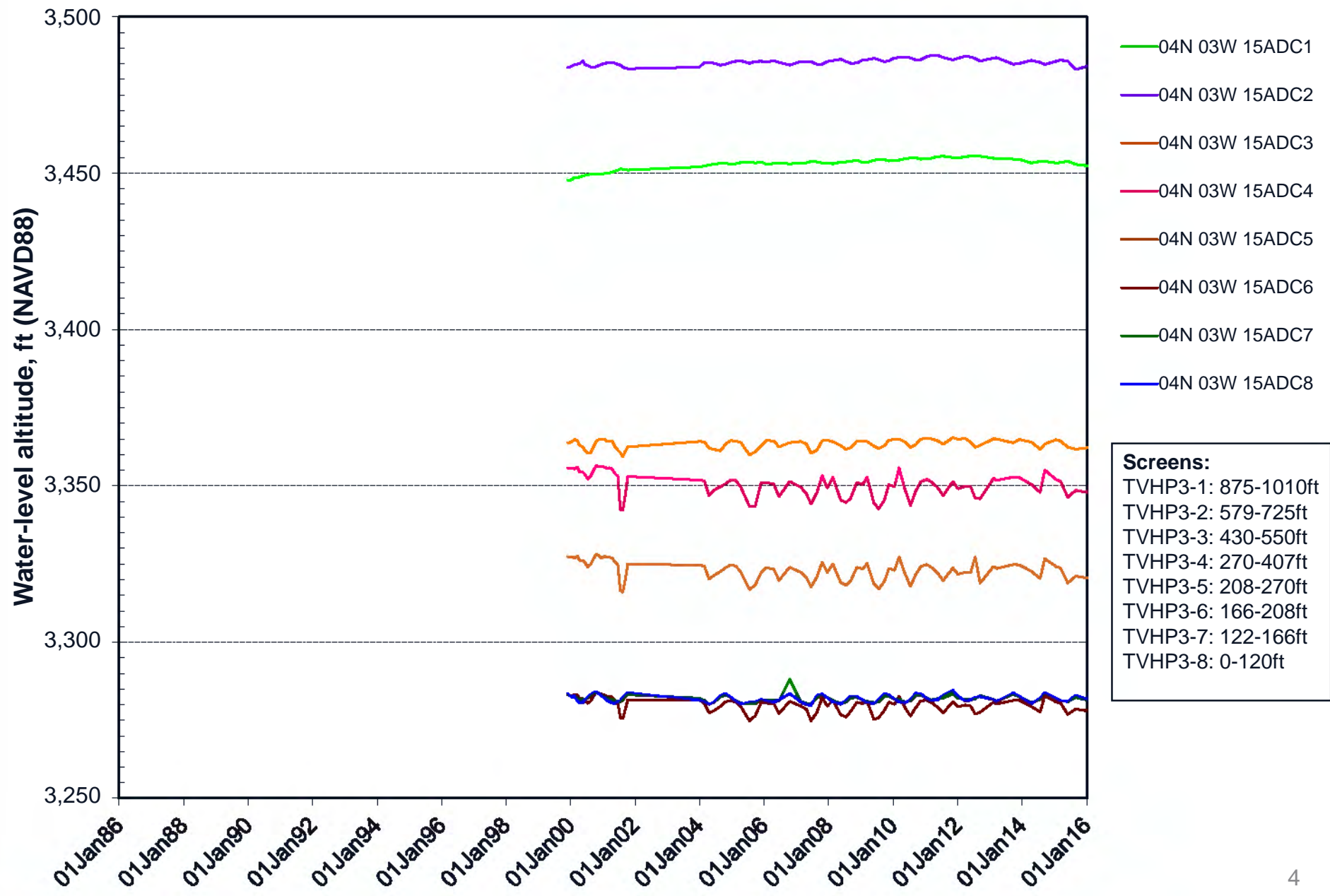
# Multilevel wells

## TVHP 1, zones 1-4 / 04N 01E 14CCB#



# Multilevel wells

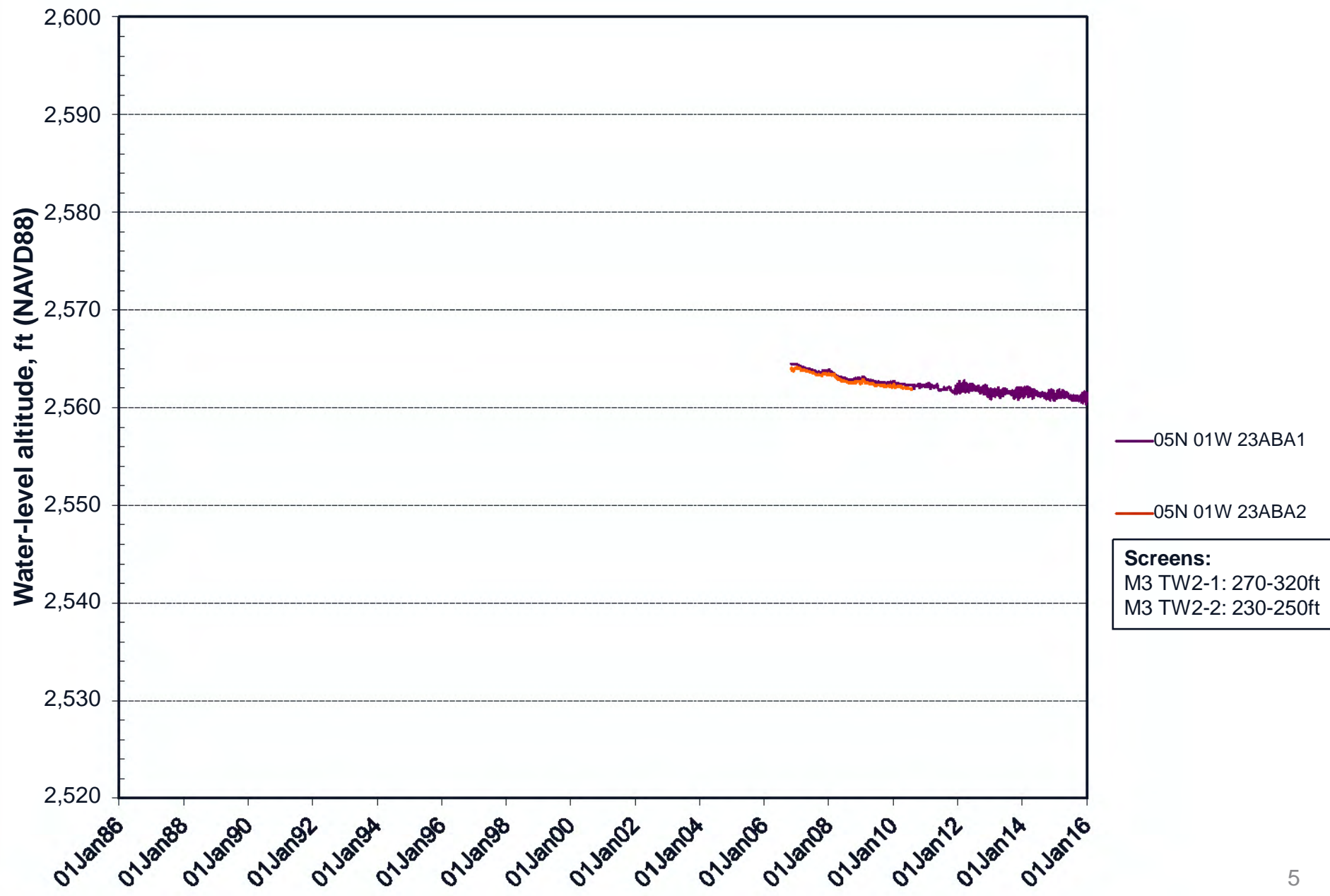
## TVHP3, zones 1-8 (Caldwell) / 04N 03W 15ADC#



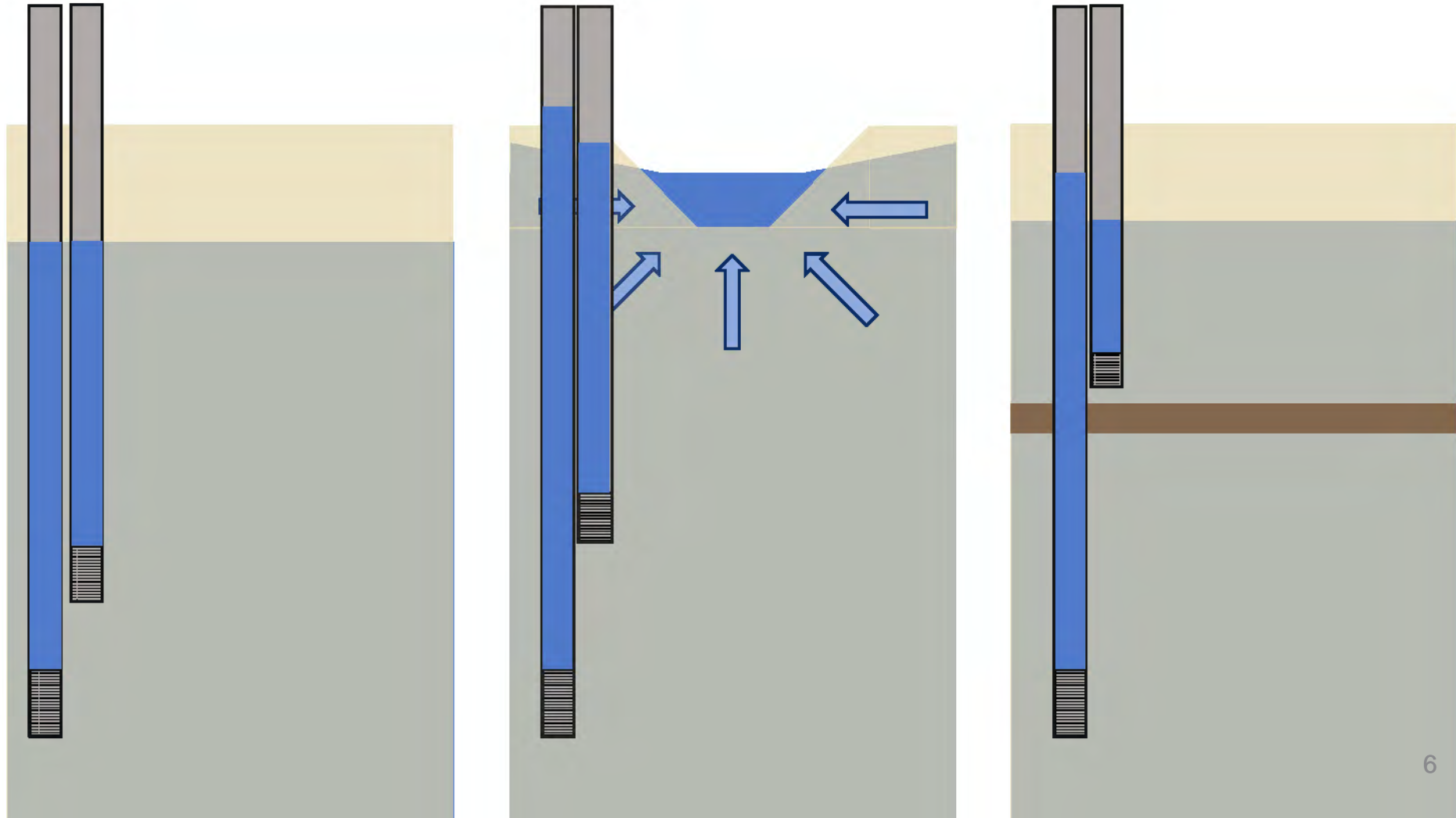


# Multilevel wells

## M3 TW2, zones 1-2 / 05N 01W 23ABA#

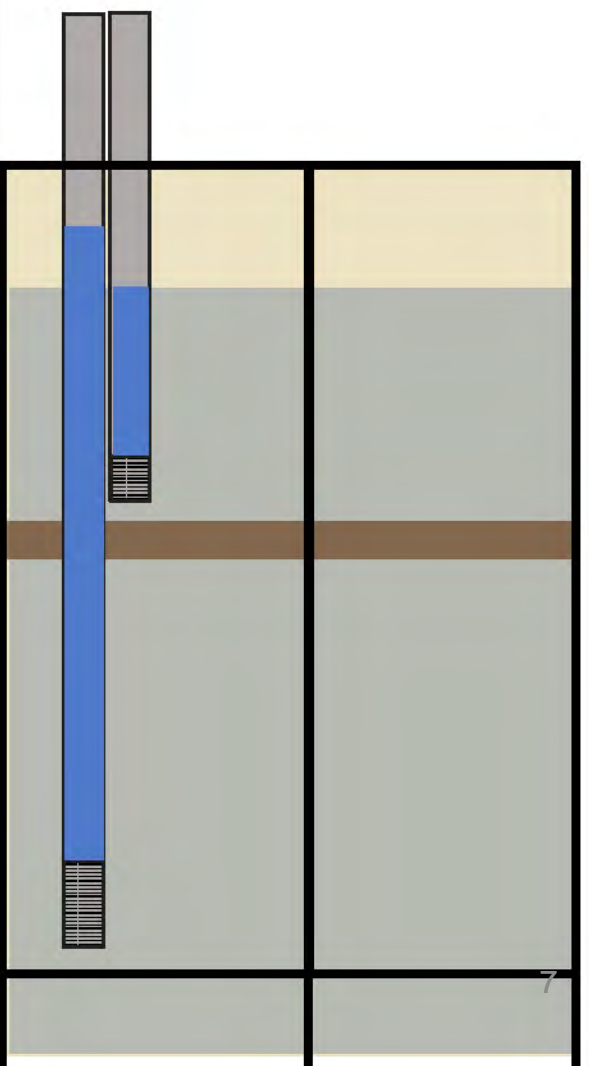


# Multilevel wells

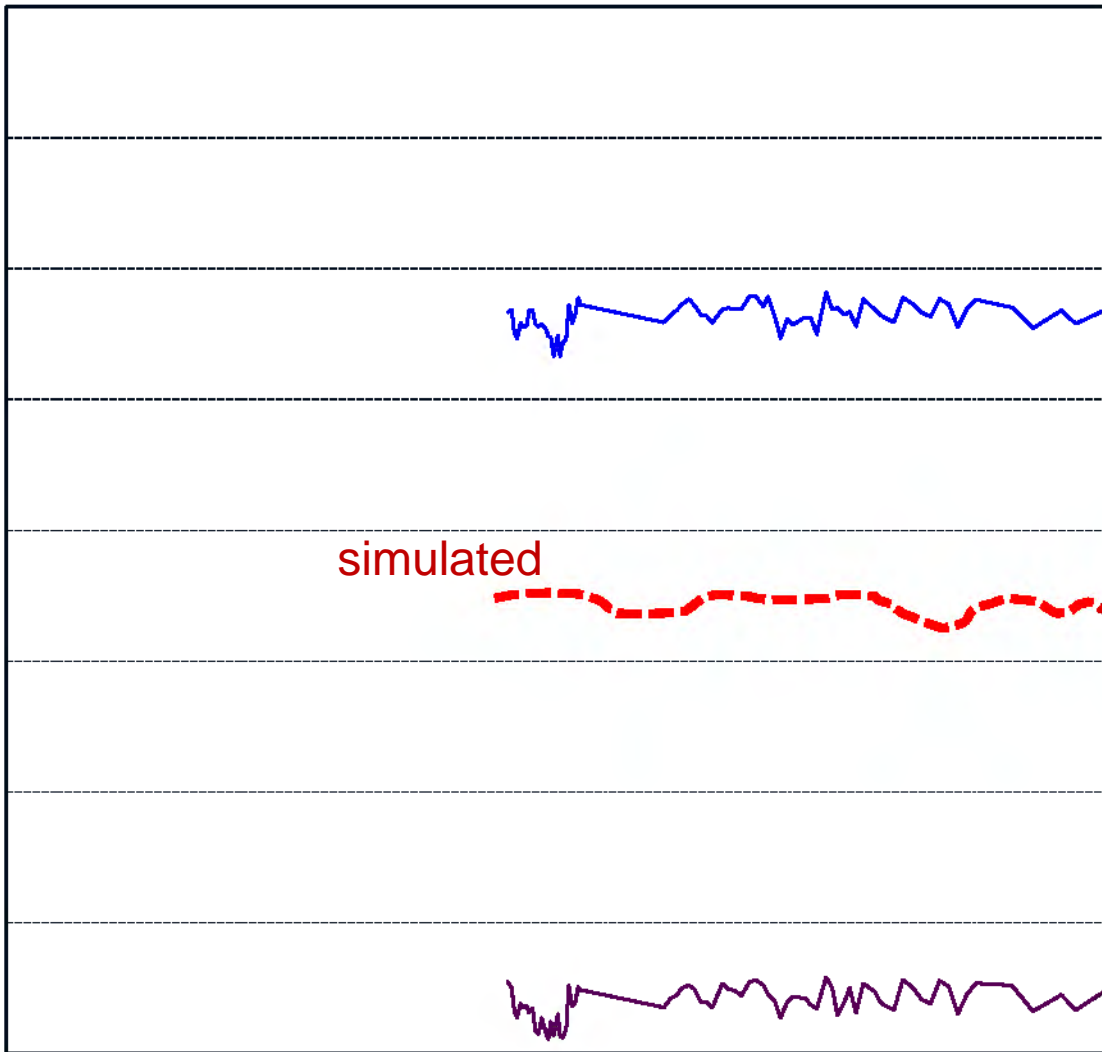




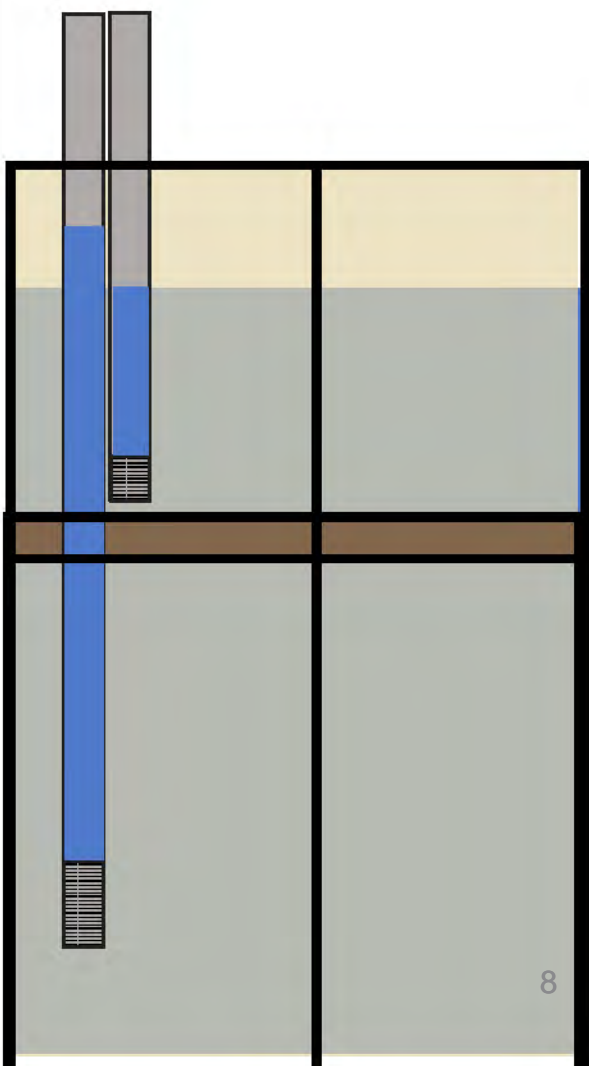
# Multilevel wells



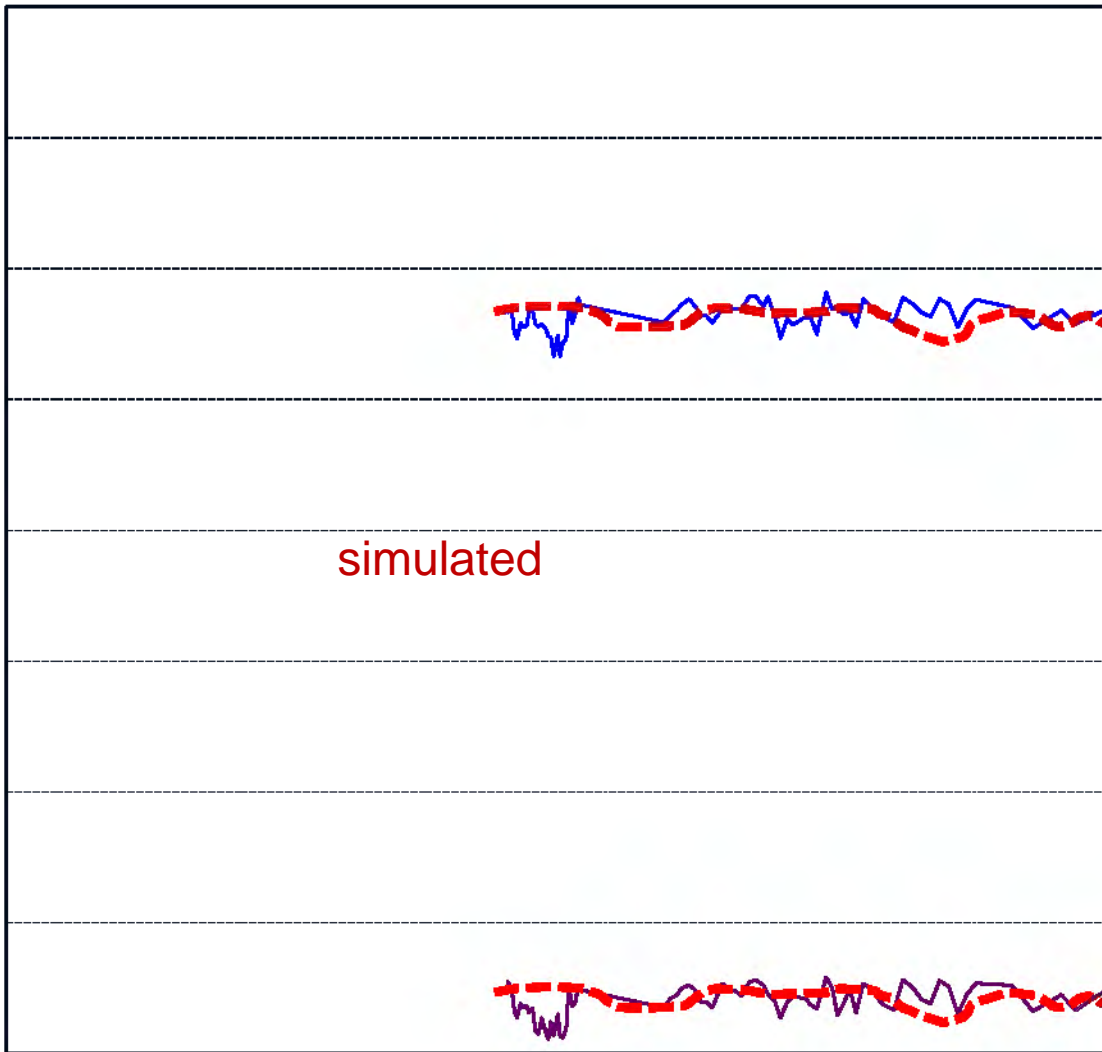
Water-level altitude, ft (NAVD88)



# Multilevel wells

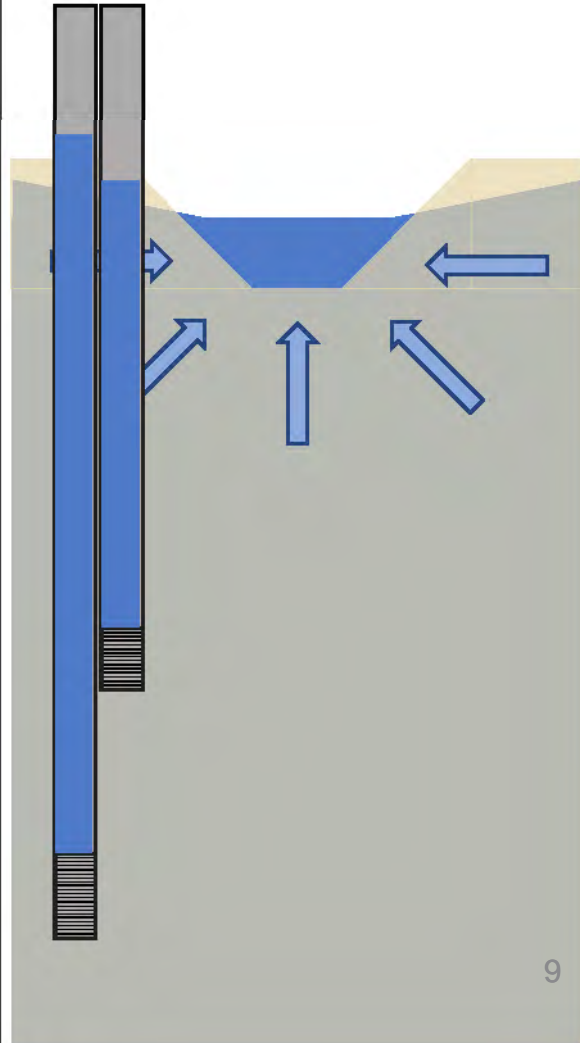


Water-level altitude, ft (NAVD88)



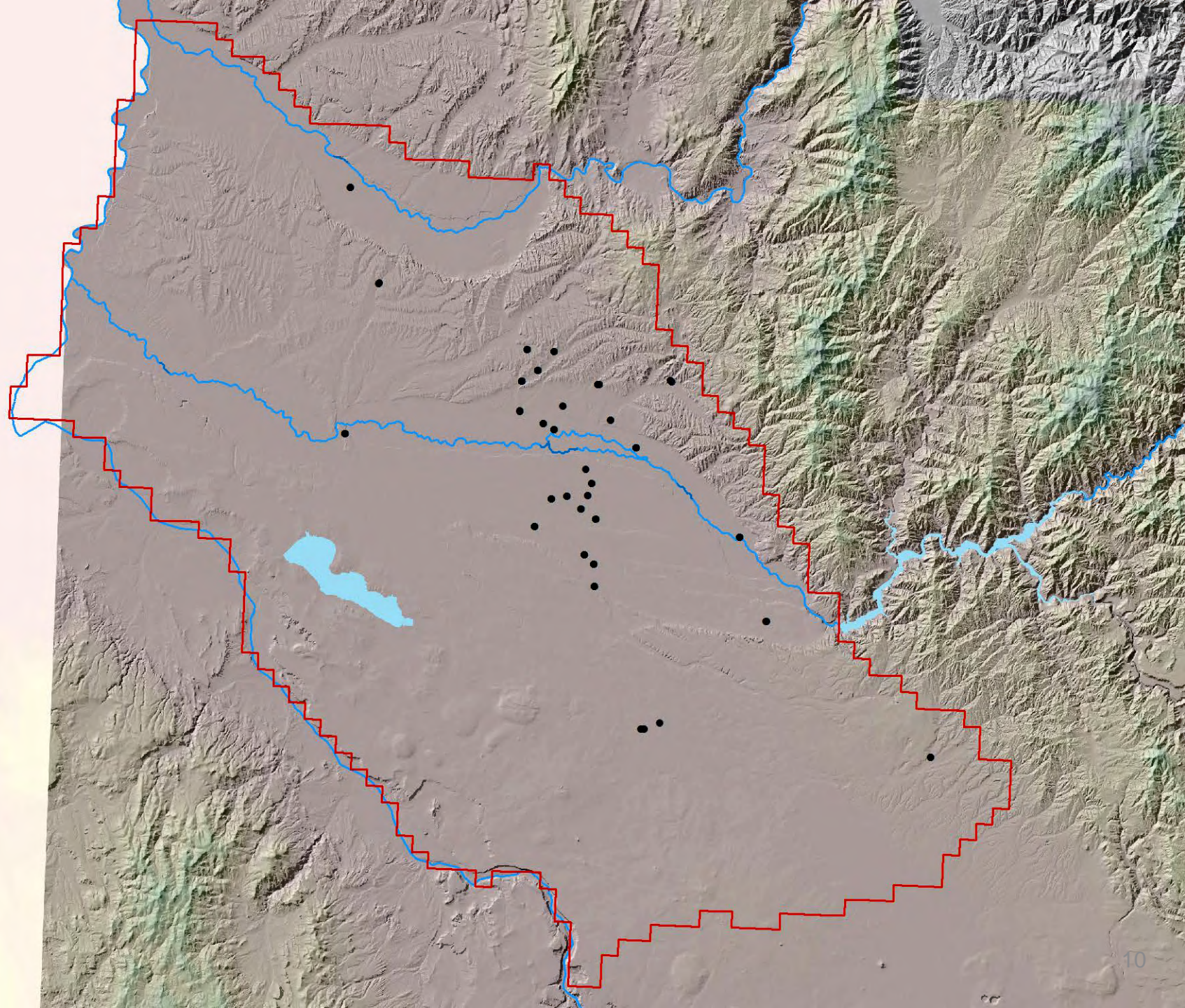


# Multilevel wells





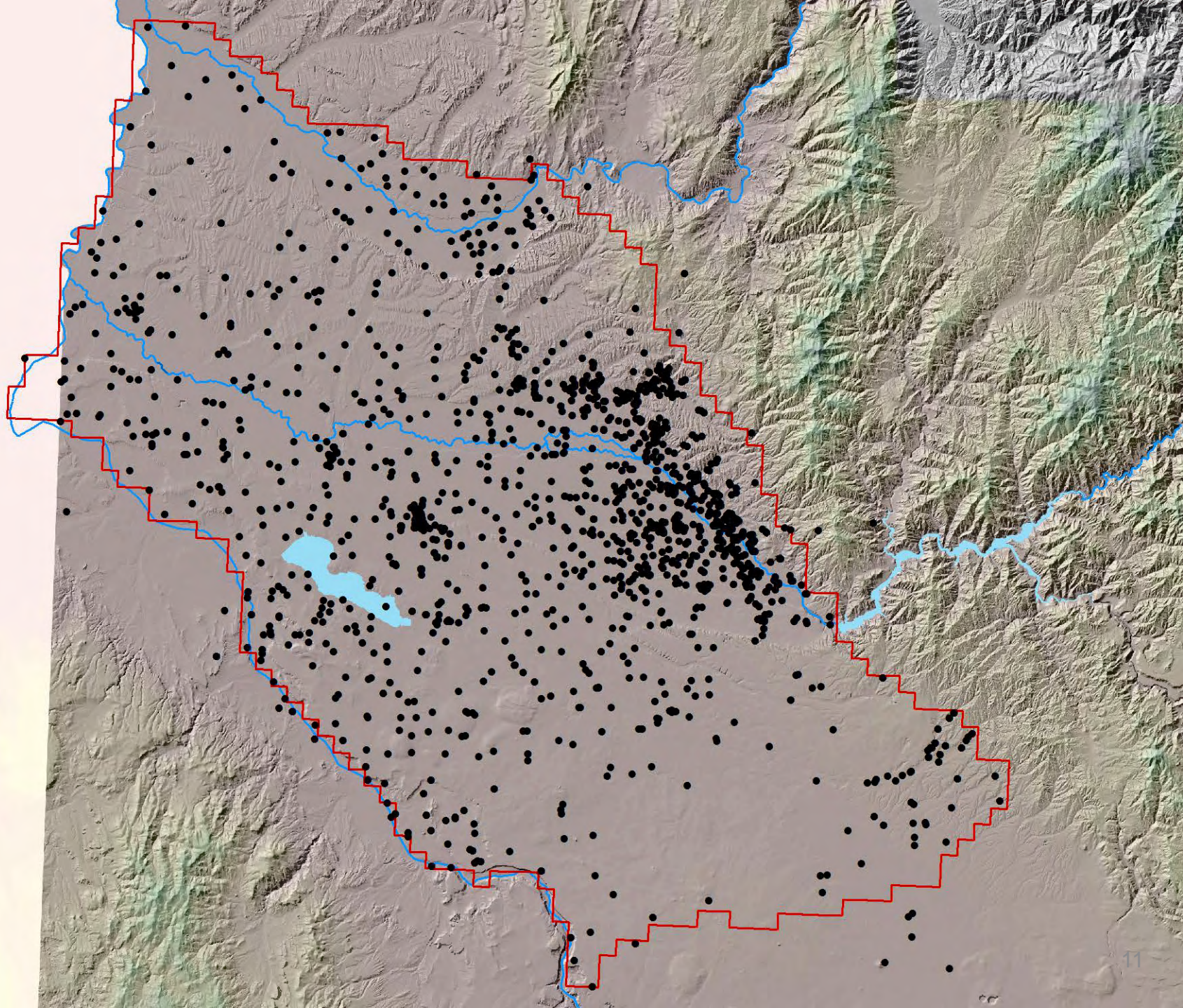
# Multilevel wells





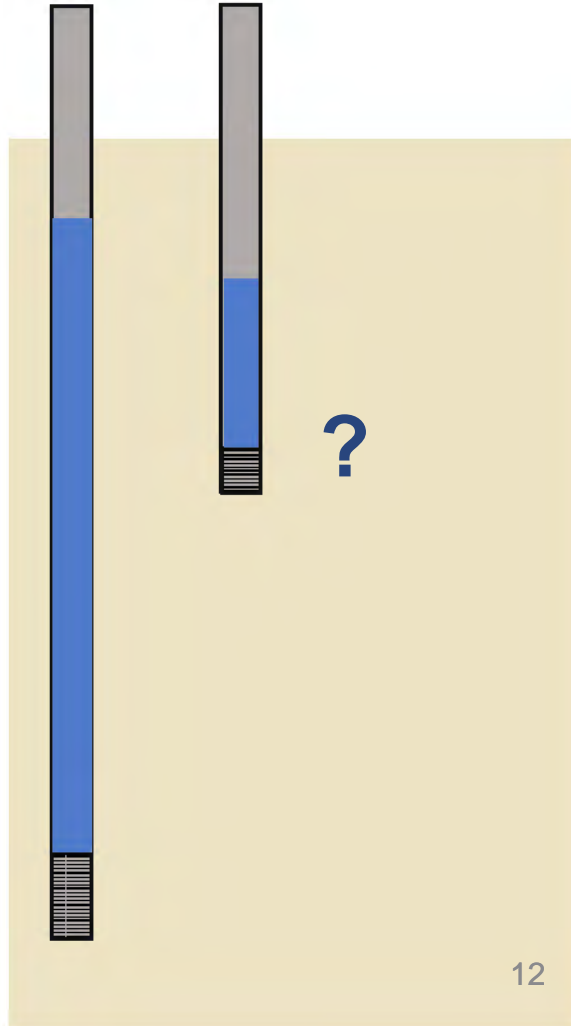
# Wells with Water Levels (most)

Suez wells not *yet* included

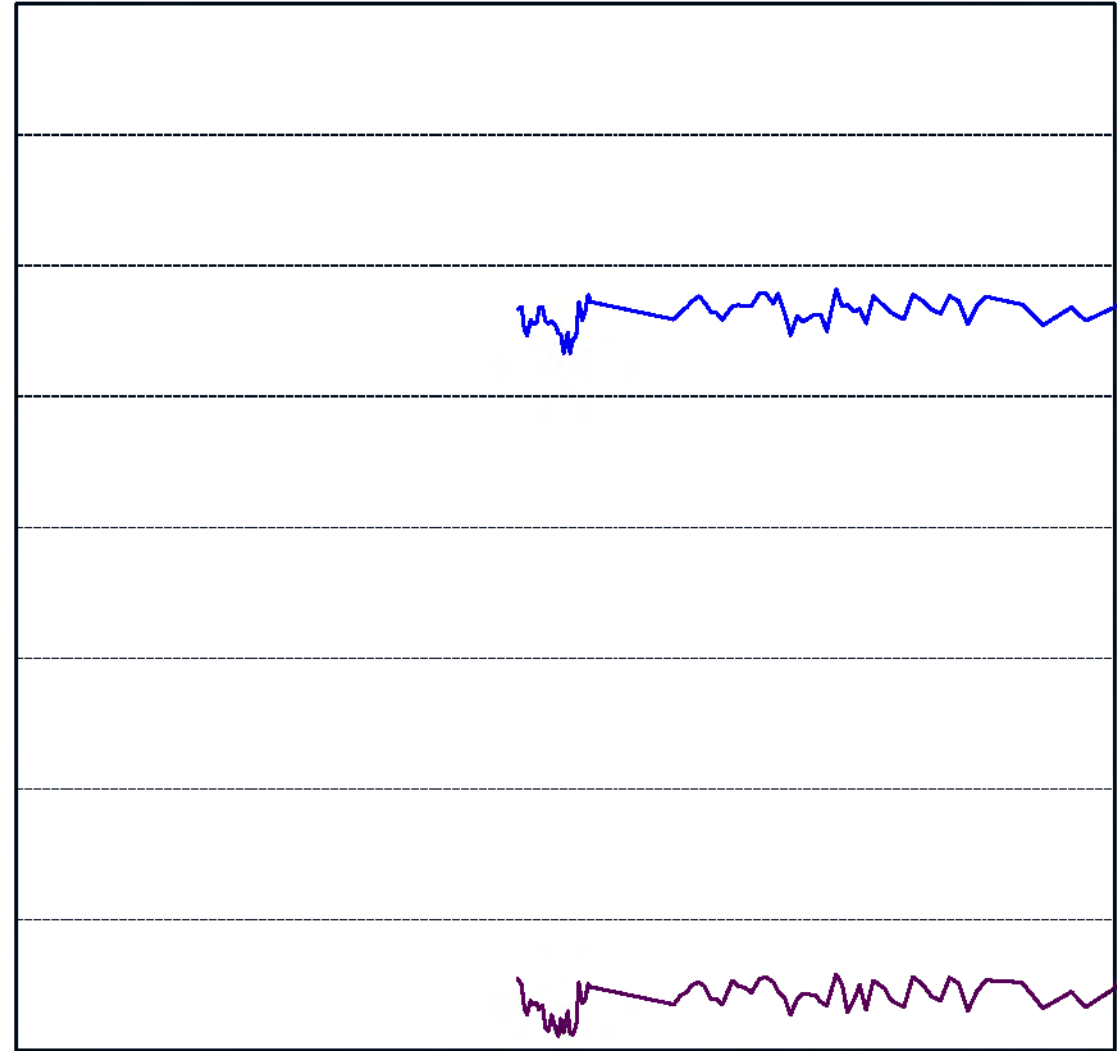




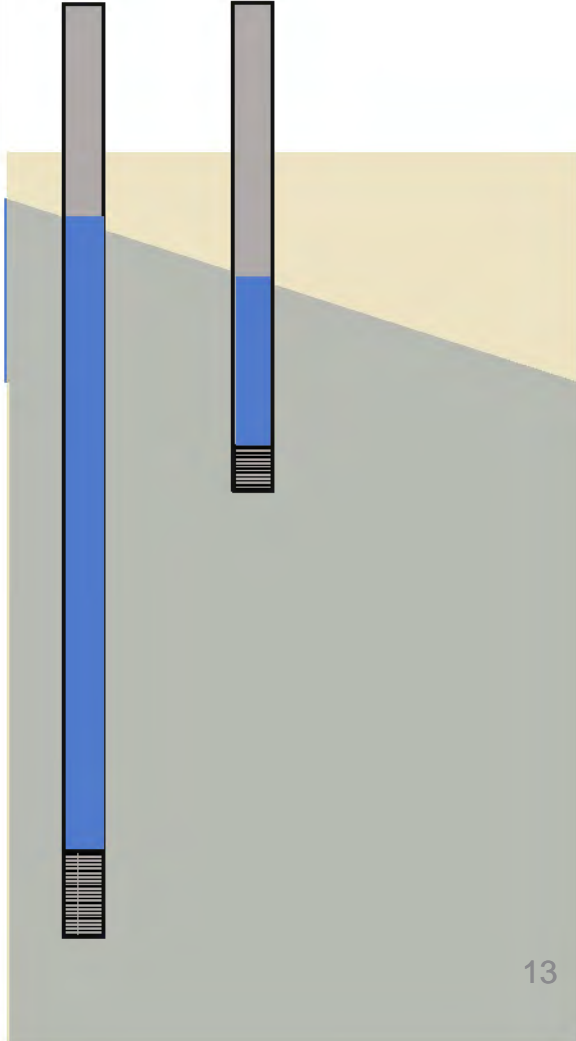
# Well Pairs



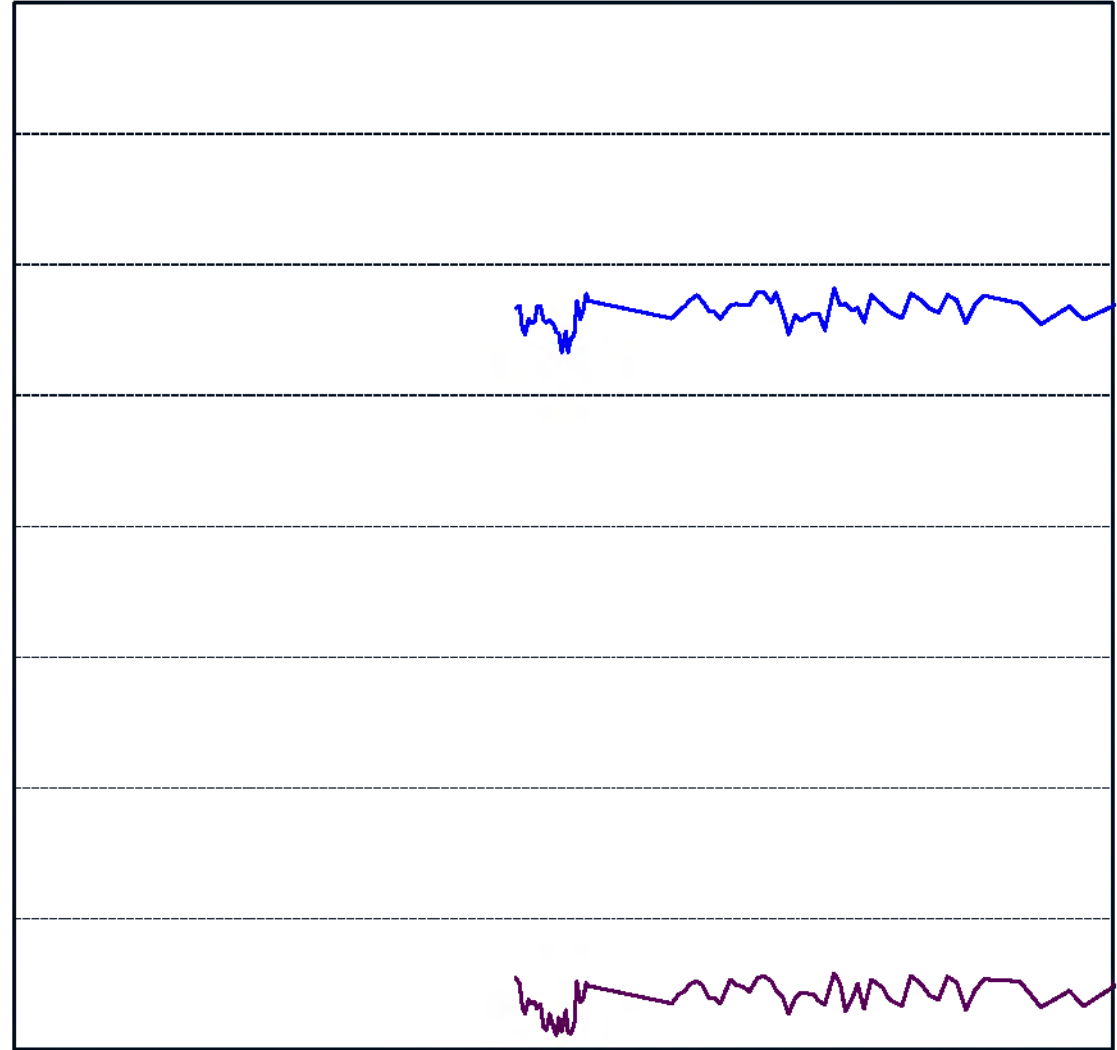
Water-level altitude, ft (NAVD88)



# Well Pairs

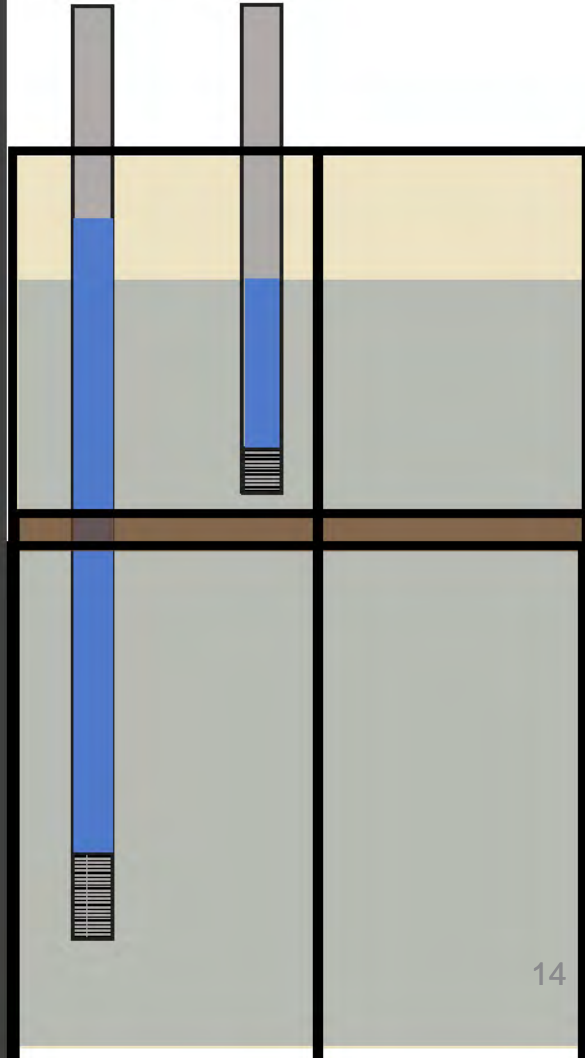


Water-level altitude, ft (NAVD88)

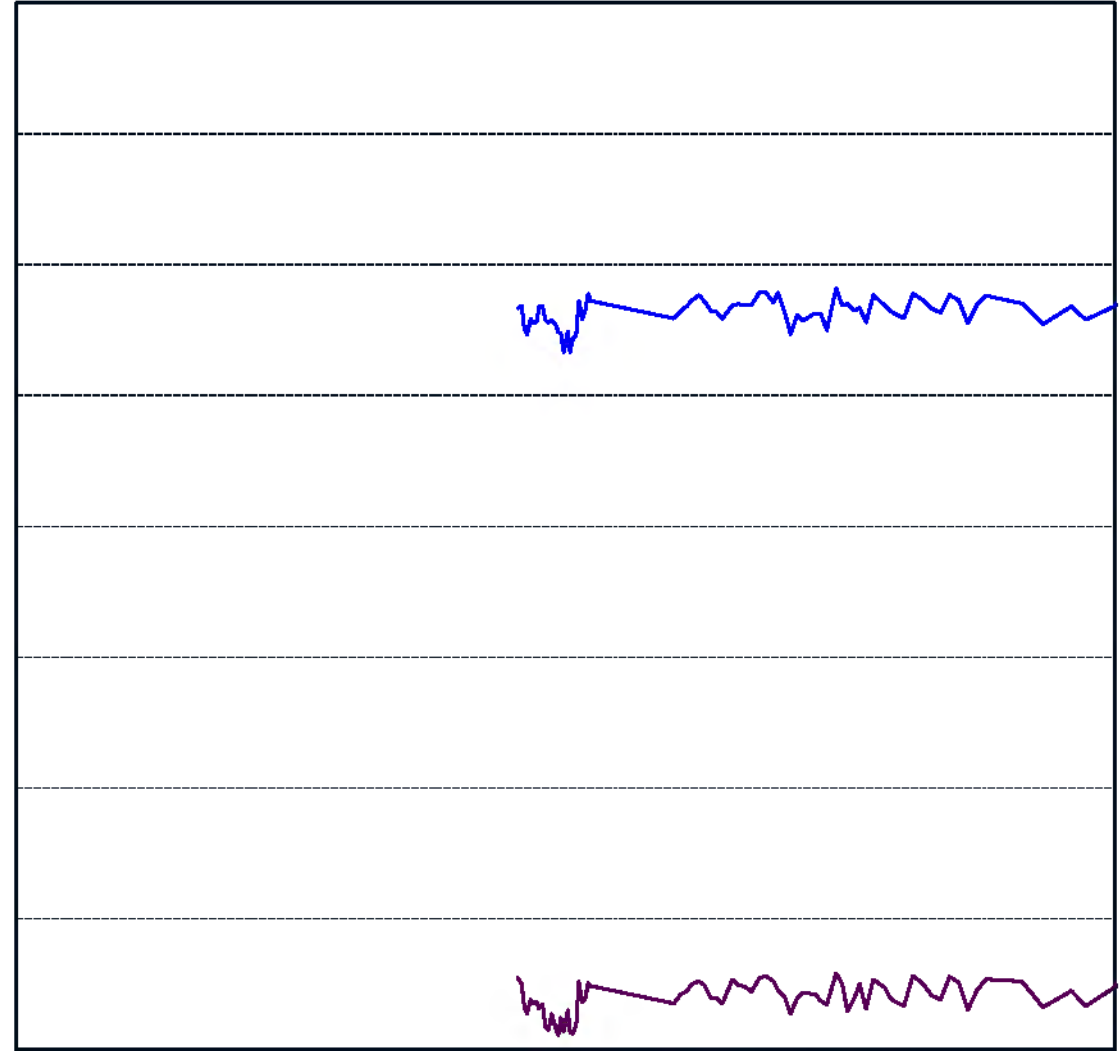




# Well Pairs

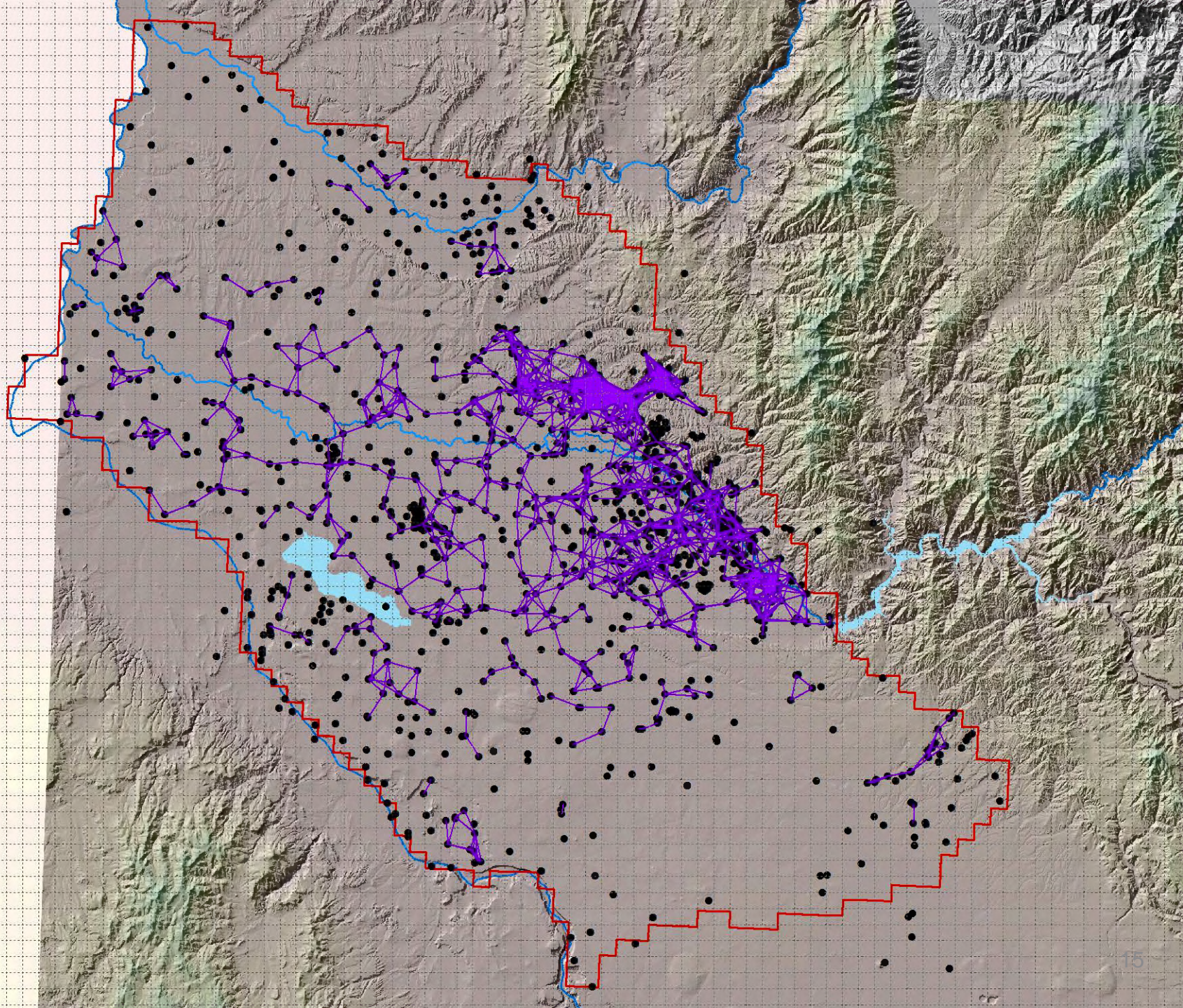


Water-level altitude, ft (NAVD88)



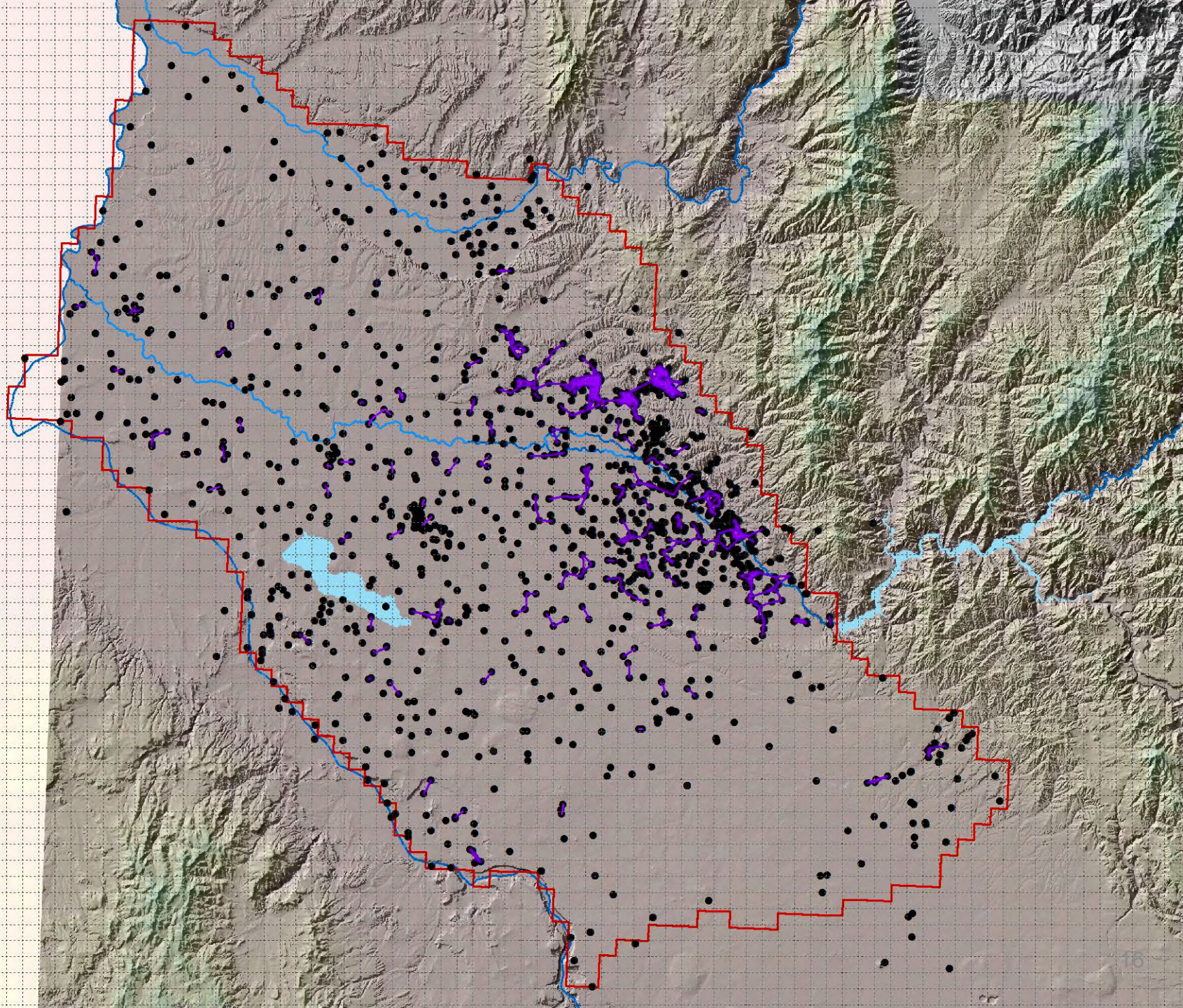


# Well Pairs



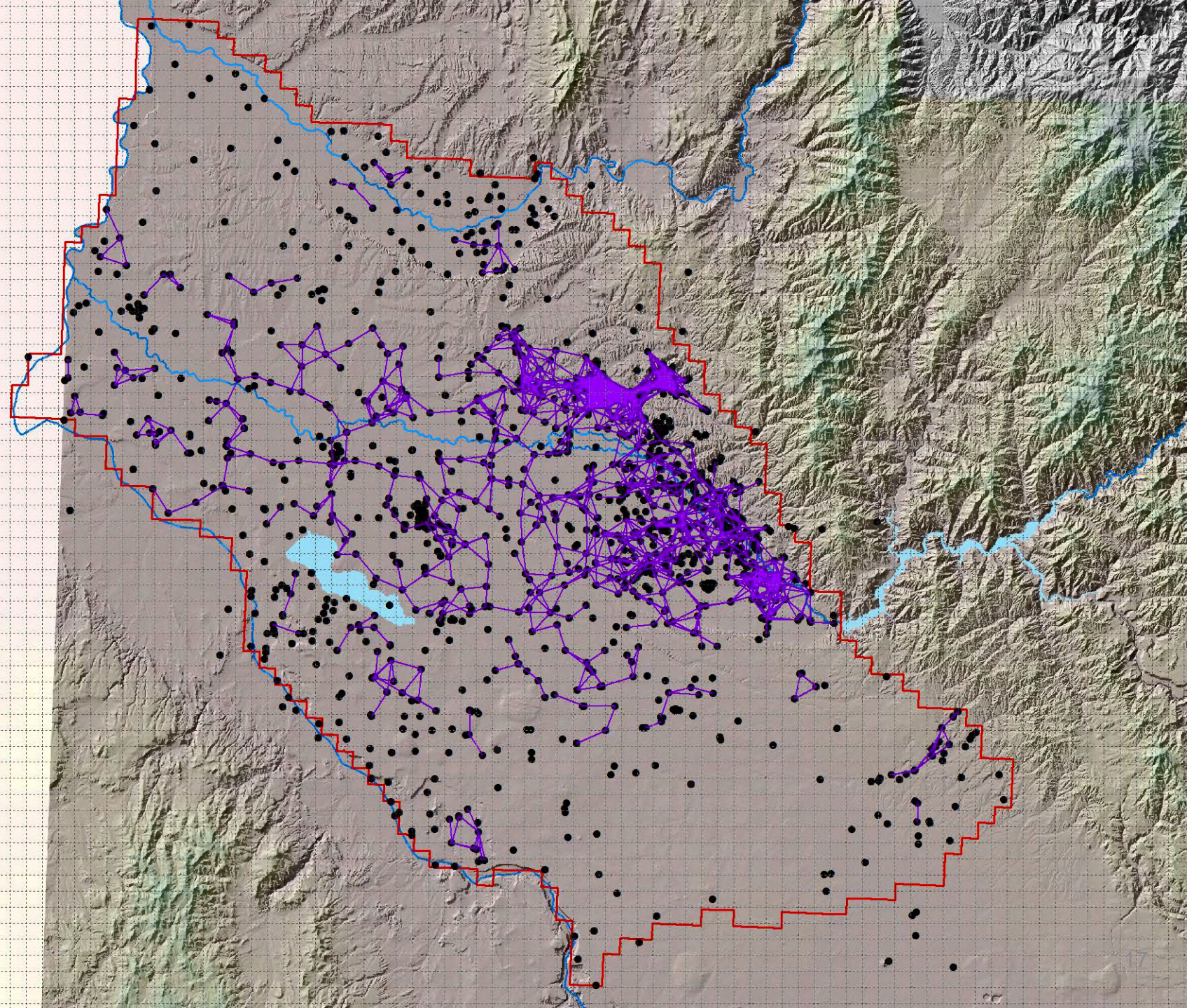


Well pairs  
within 1 mile



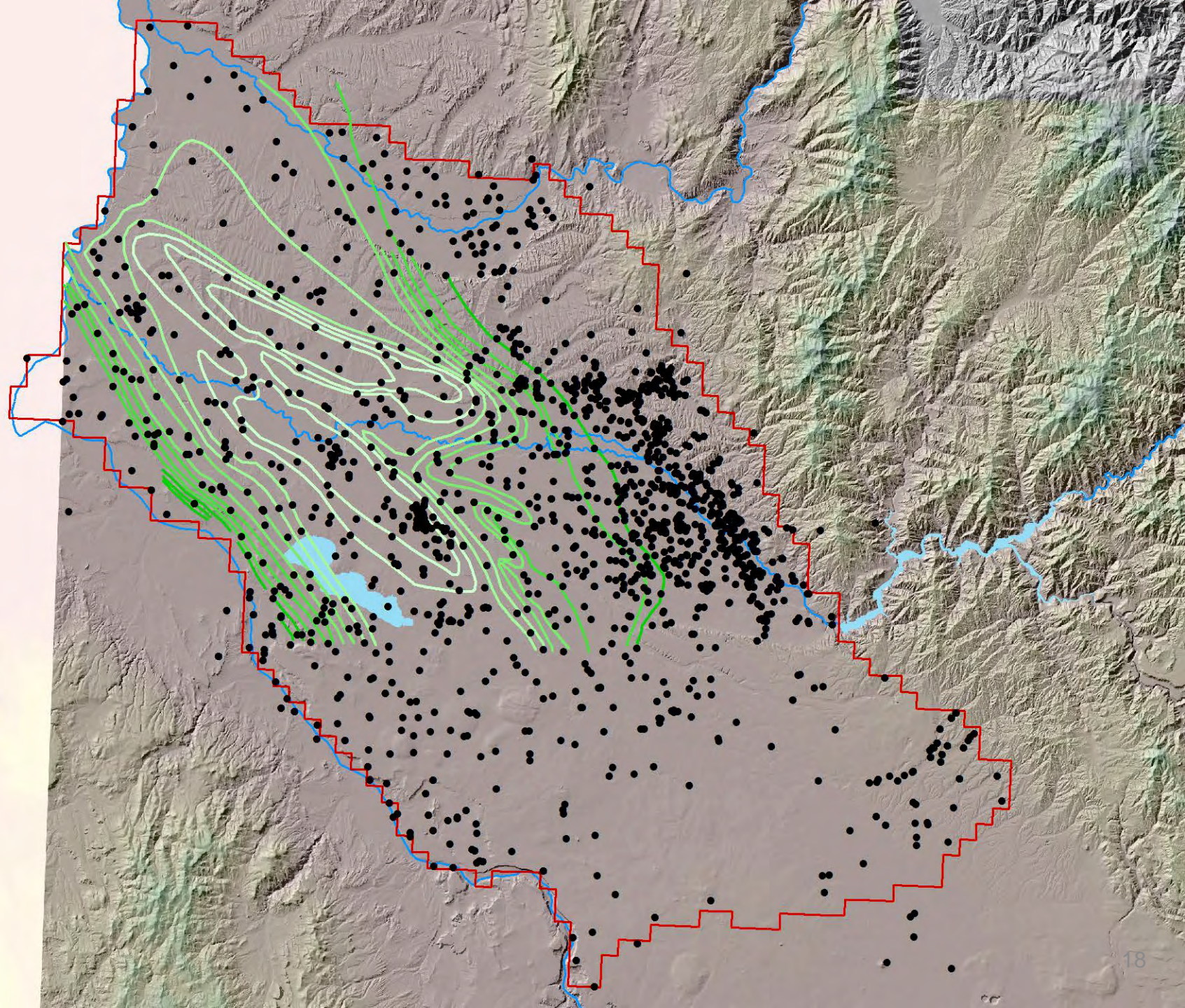


# Well pairs between 1 and 2 miles



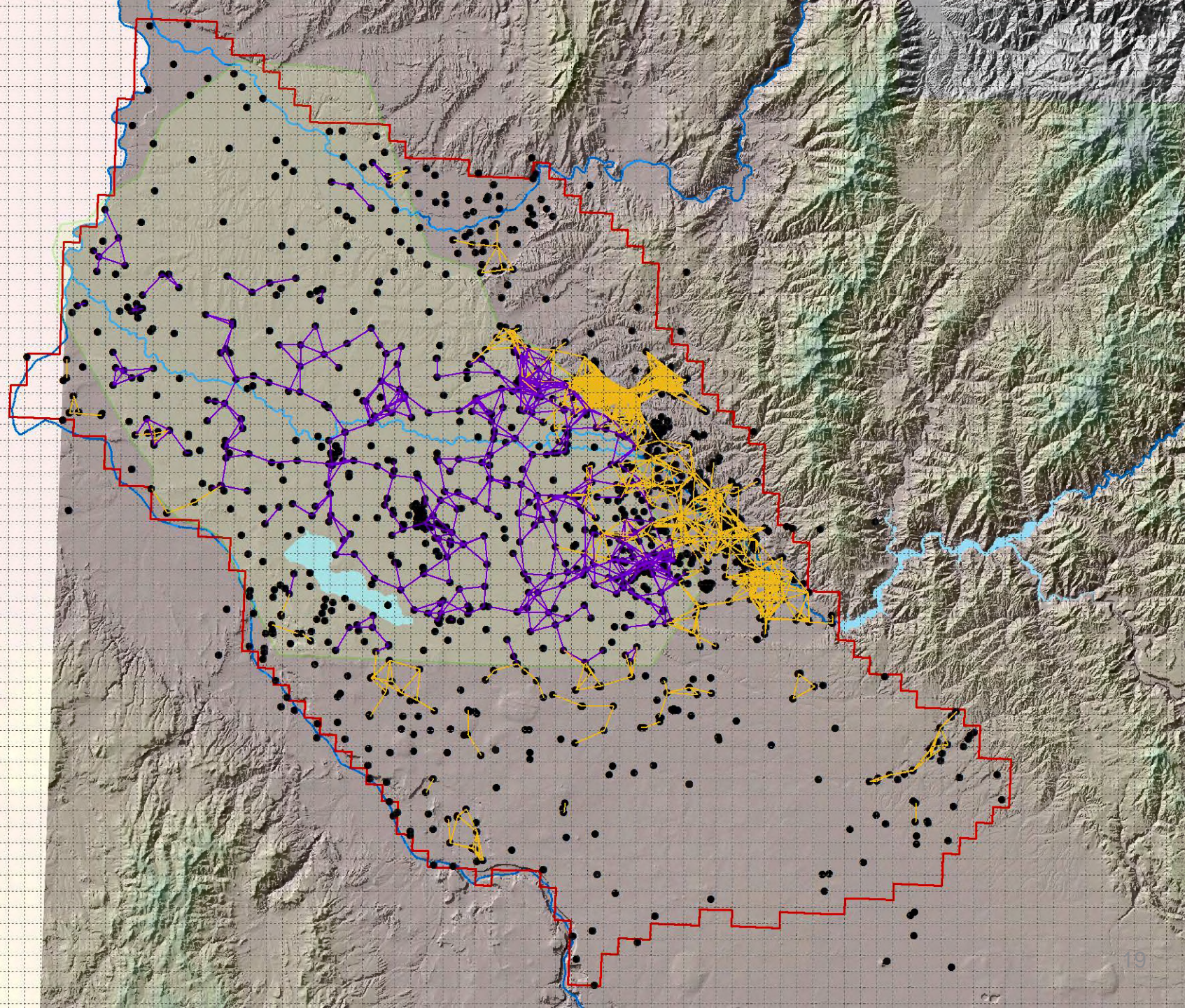


# Top of Mudstone Facies (Wood)



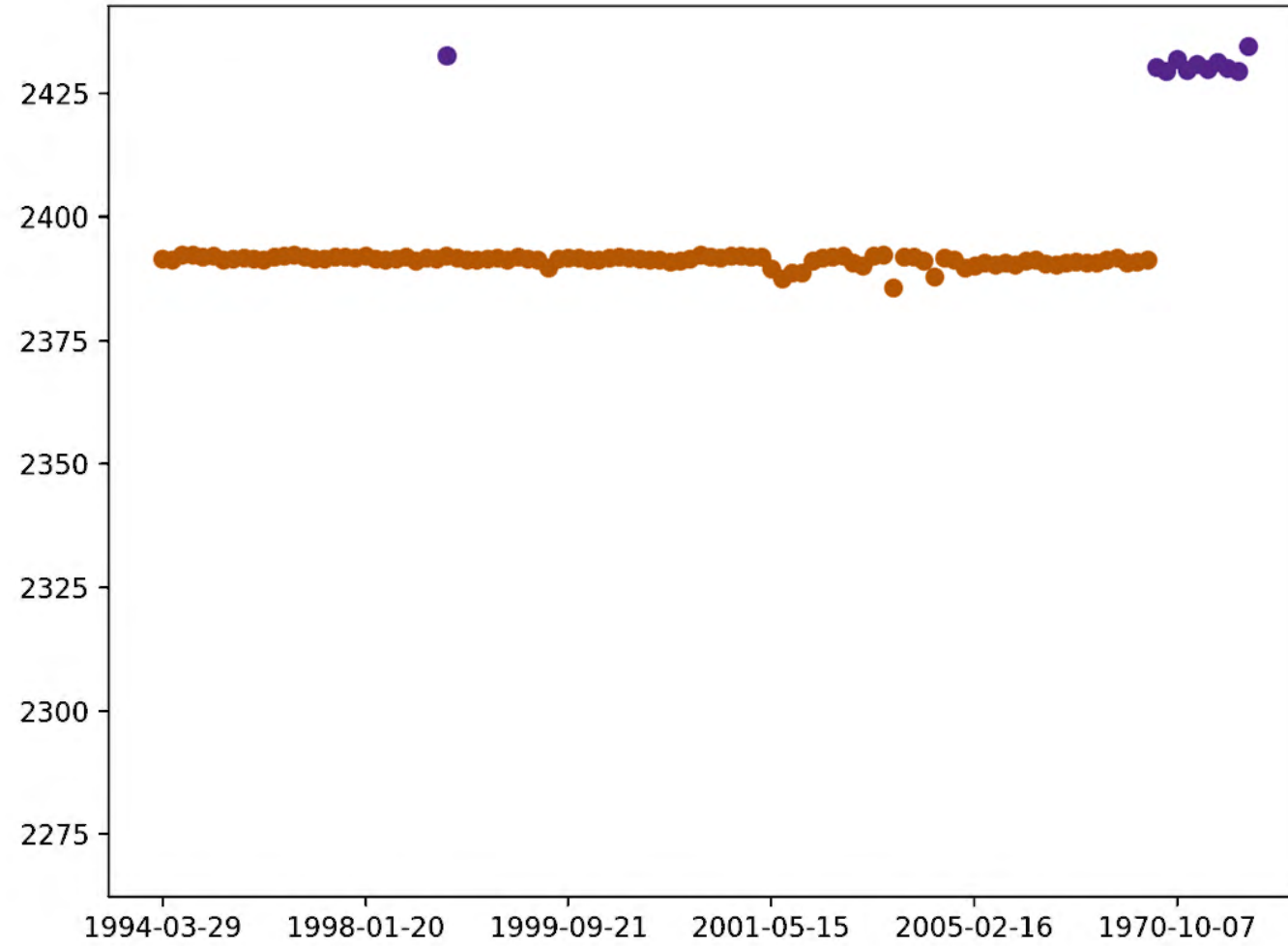


Well pairs  
relative to  
mudstone top



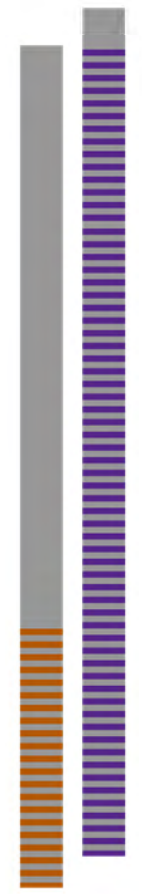
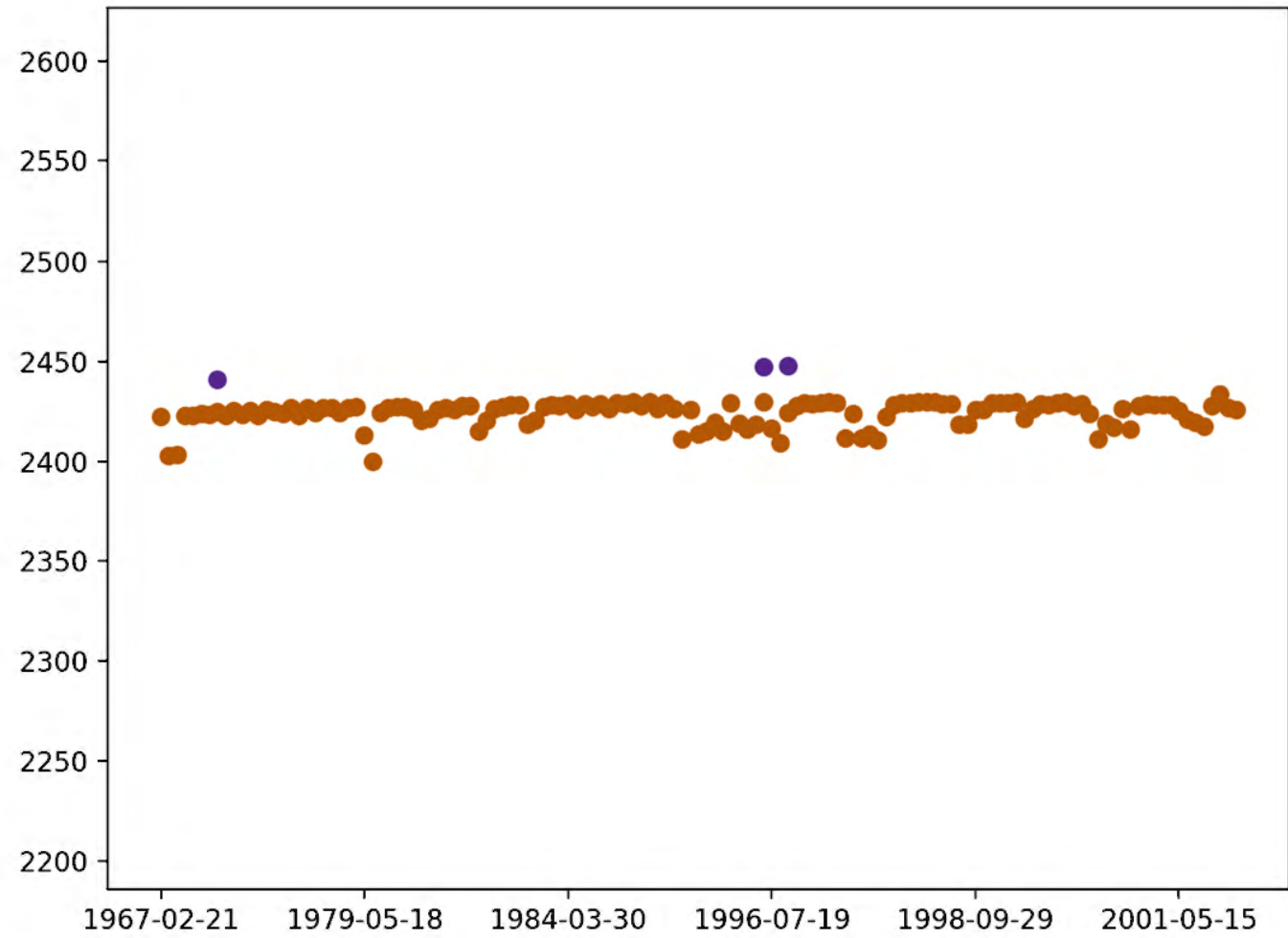


# Well pairs



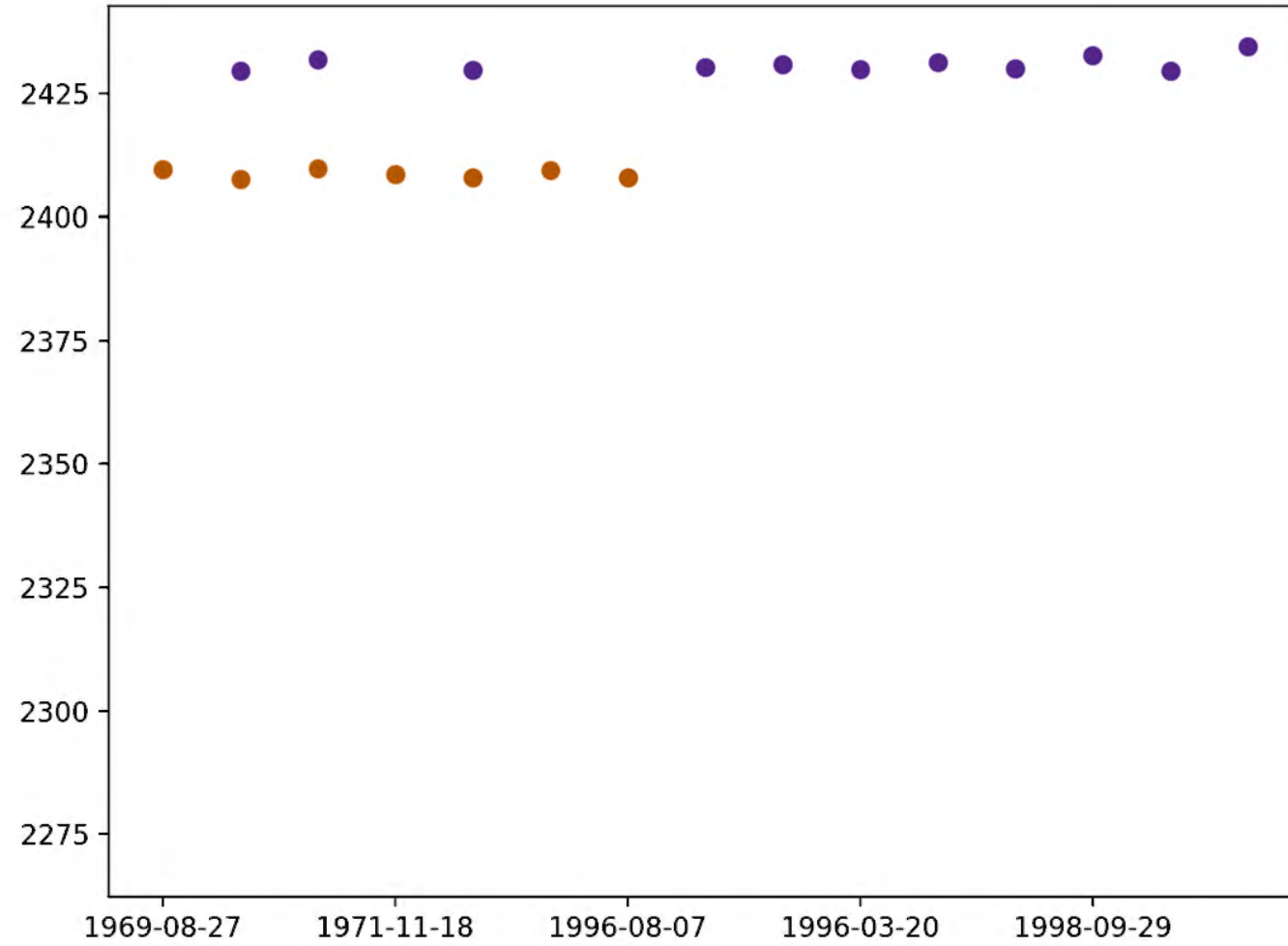


# Well pairs





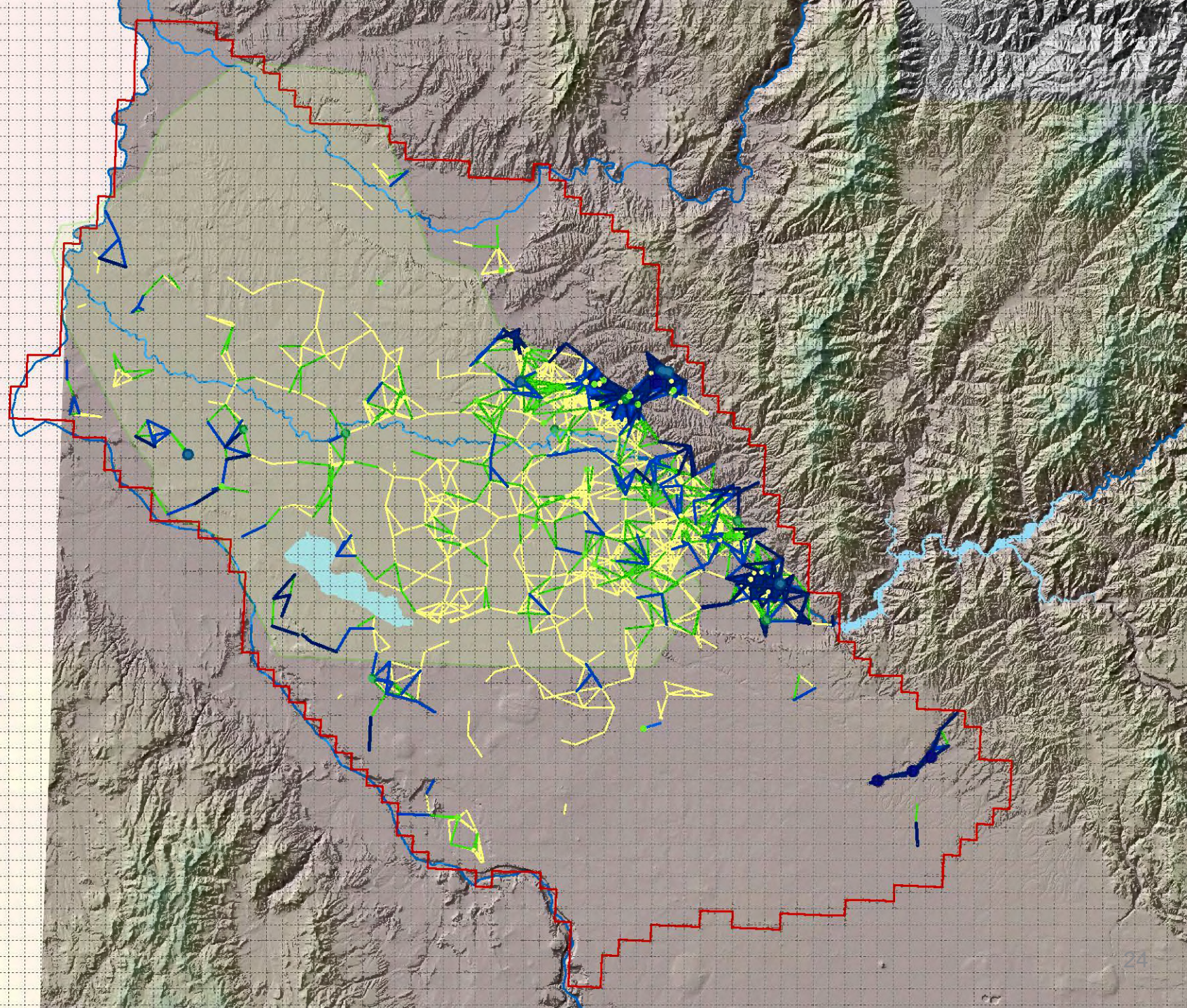
# Well pairs





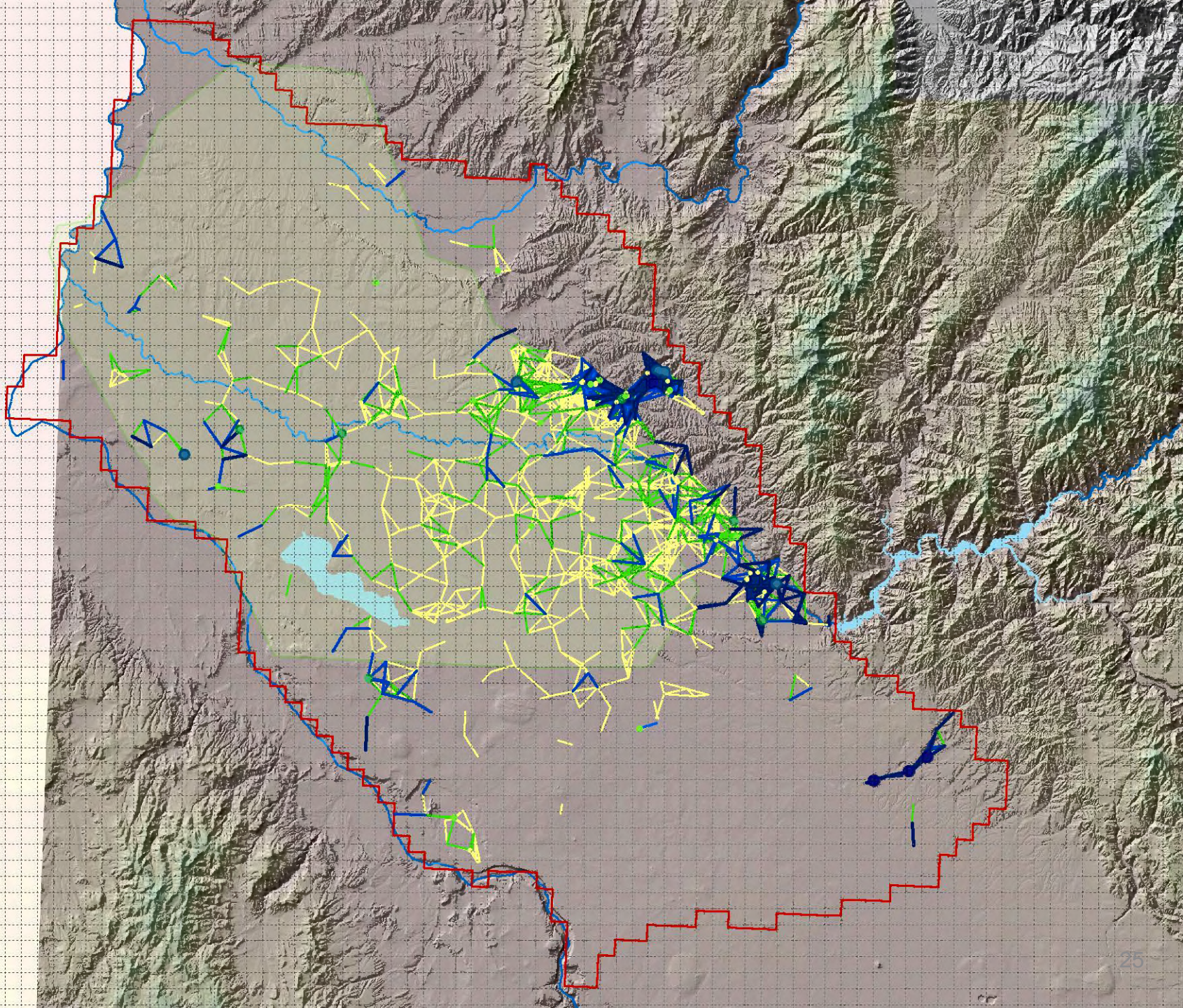
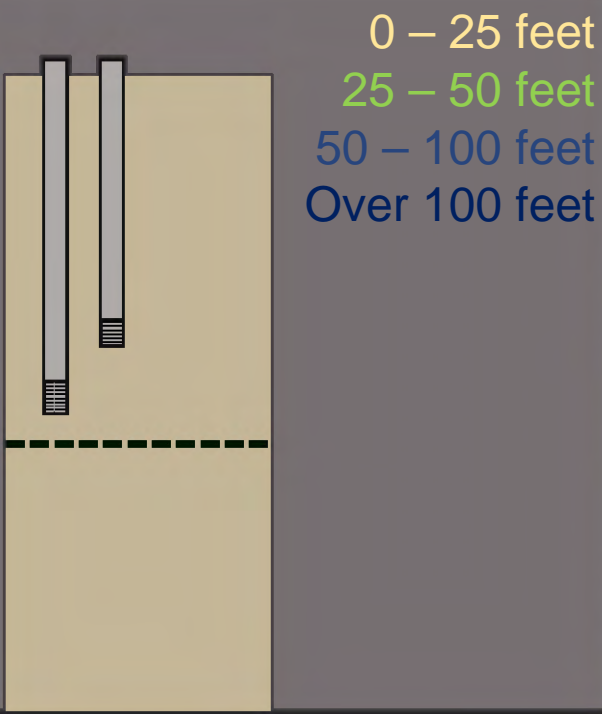
# Well pair head differences (75<sup>th</sup> percentile)

0 – 25 feet  
25 – 50 feet  
50 – 100 feet  
Over 100 feet





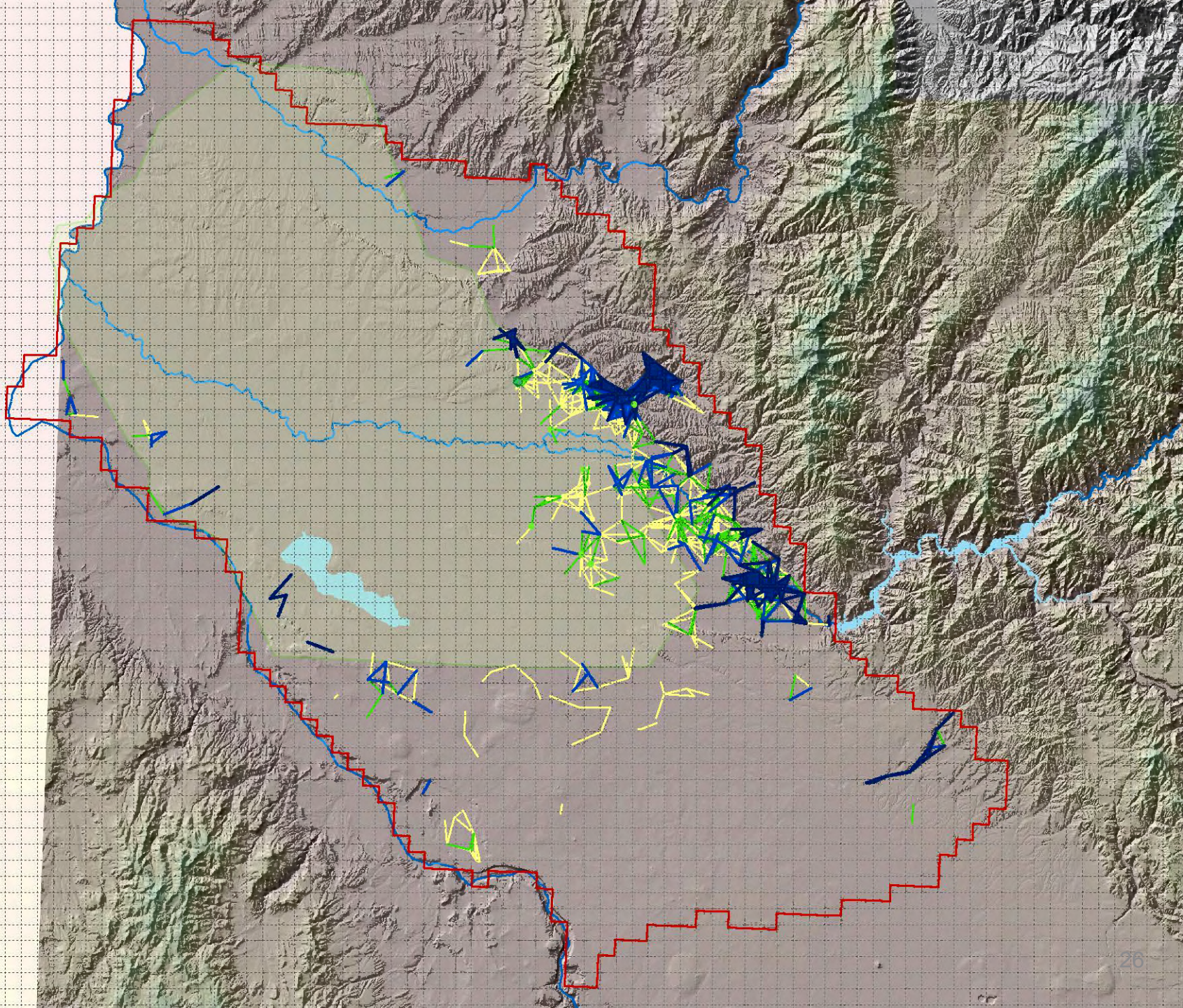
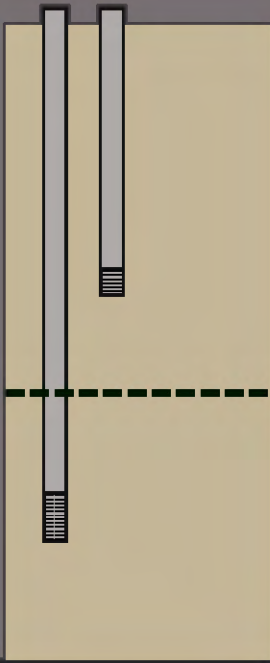
# Well pair head differences (75<sup>th</sup> percentile) Above Mudstone





# Well pair head differences (75<sup>th</sup> percentile) Straddling Mudstone

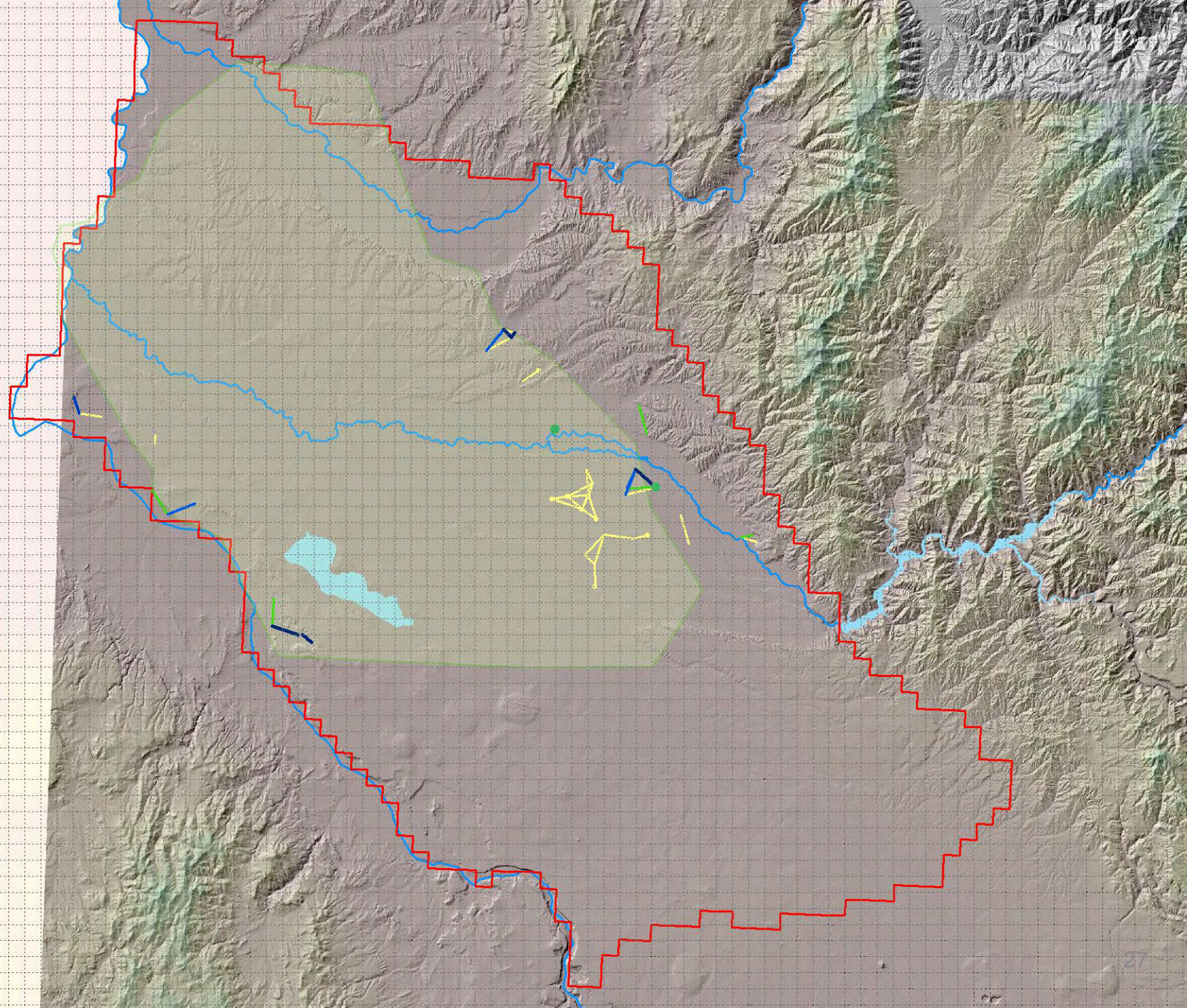
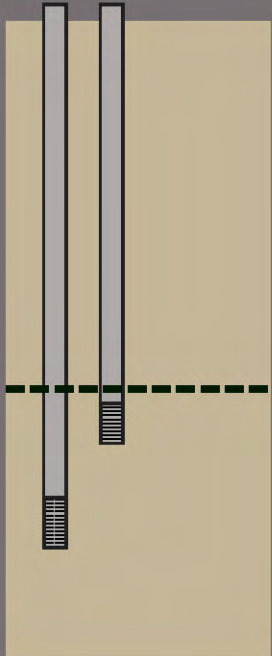
- 0 – 25 feet
- 25 – 50 feet
- 50 – 100 feet
- Over 100 feet





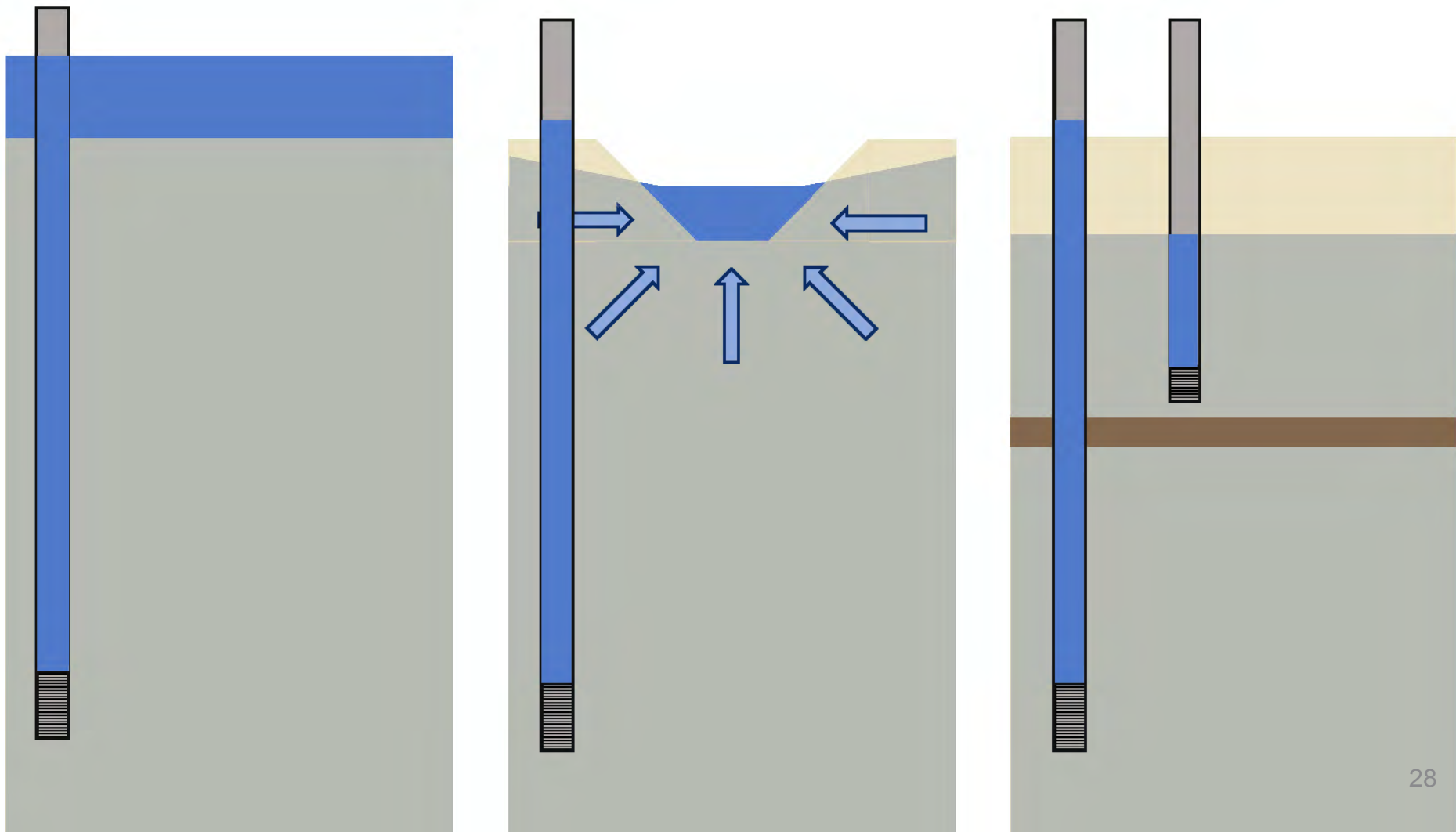
# Well pair head differences (75<sup>th</sup> percentile) Below Mudstone

0 – 25 feet  
25 – 50 feet  
50 – 100 feet  
Over 100 feet





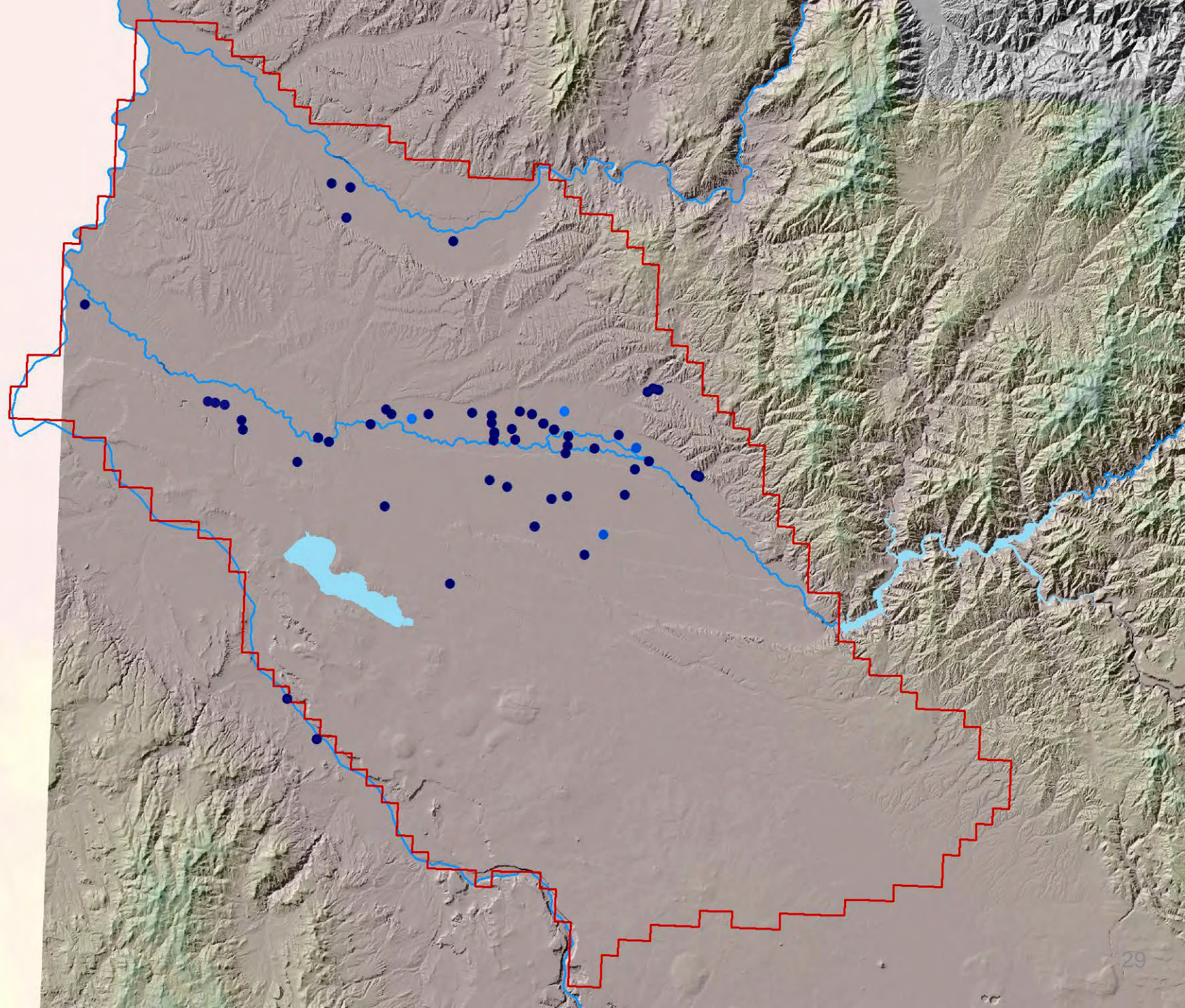
# Water levels above ground surface





# Artesian Wells

Wells with any DTW recorded as negative  
(above ground surface)





Thanks for listening!