

2014 Containment Evaluation

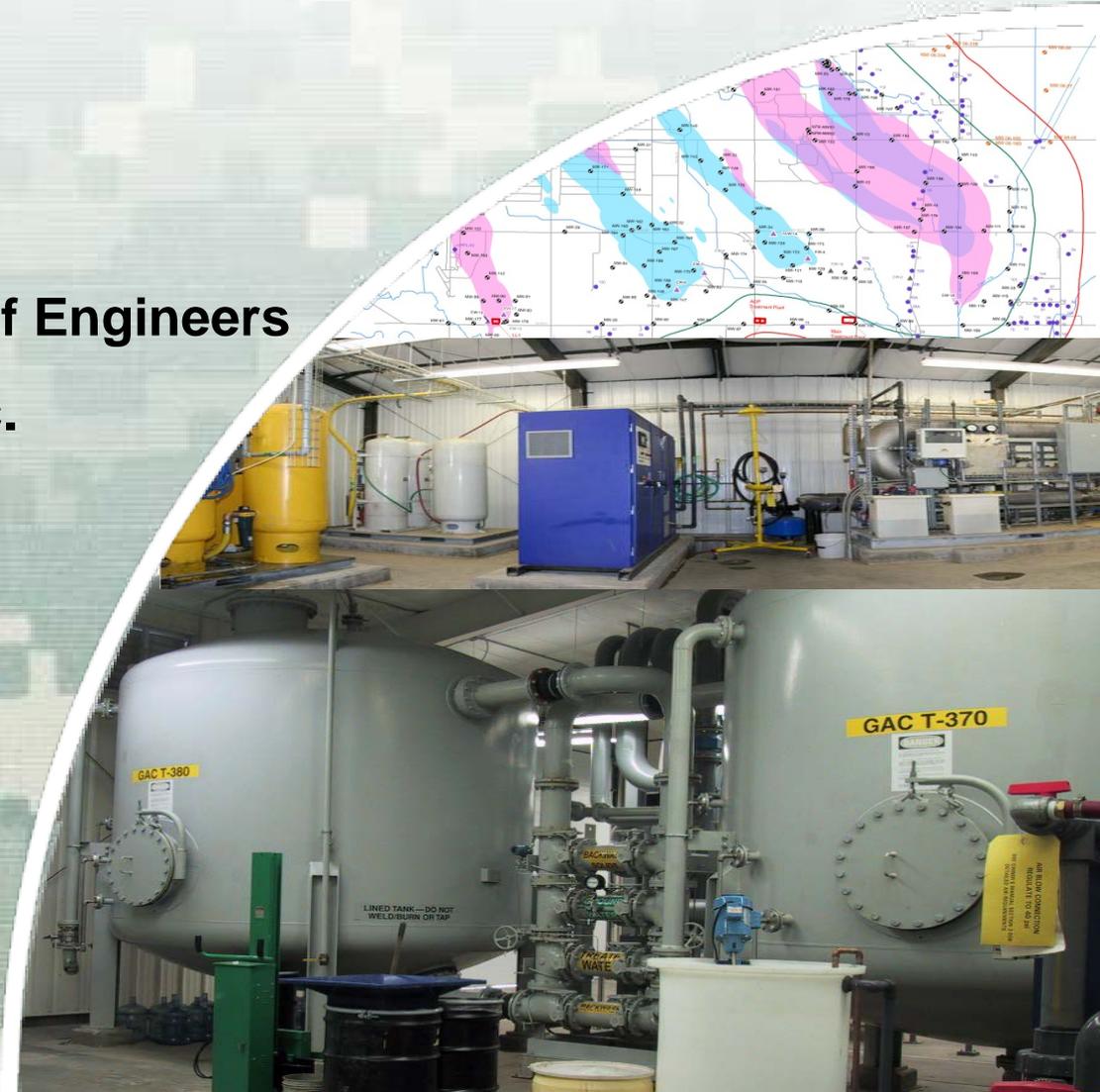
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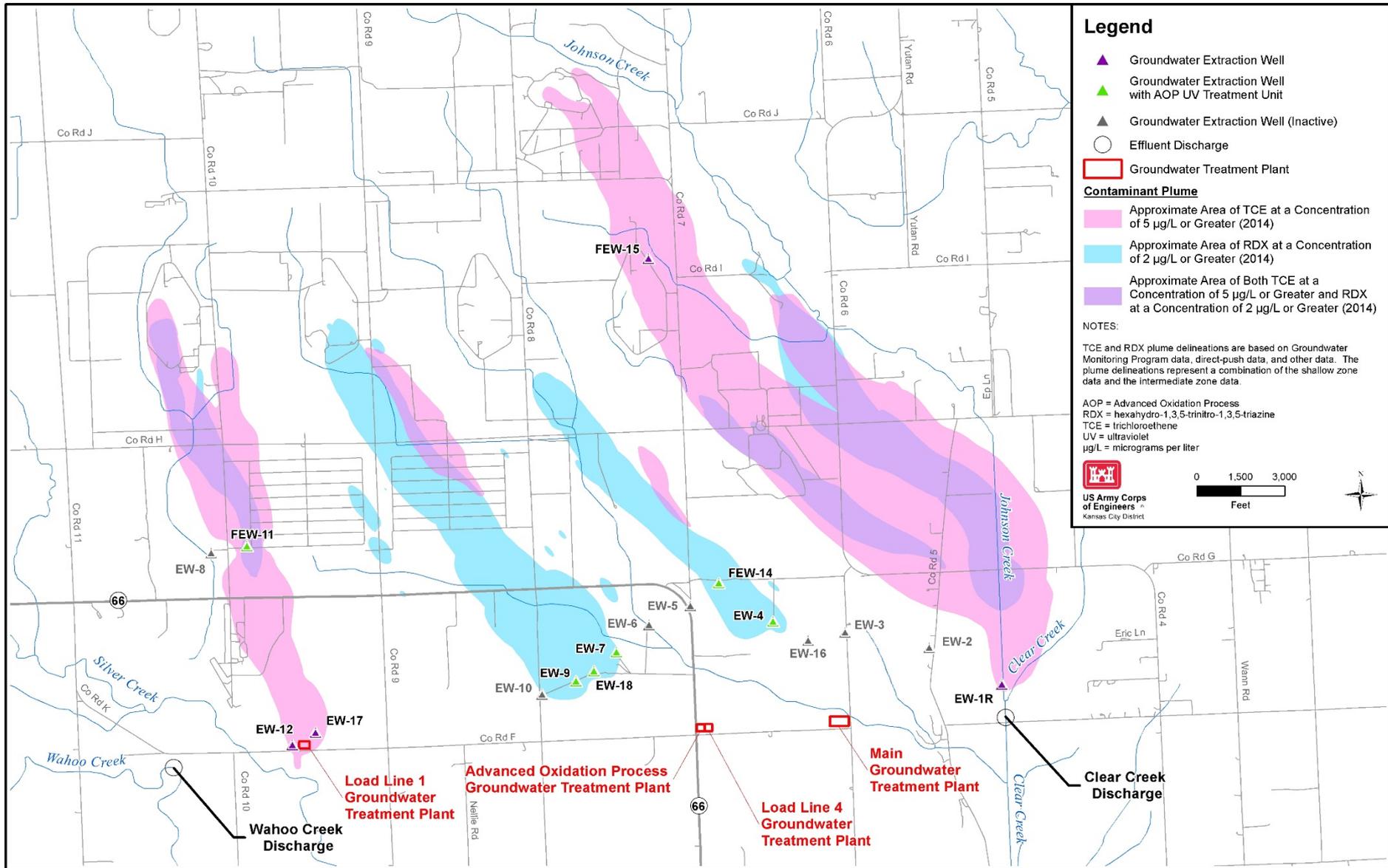


The Containment Evaluation

- U.S. Army Corps of Engineers evaluates containment annually at the former Nebraska Ordnance Plant site.
- Determines whether the hydraulic containment system is capturing the Operable Unit 2 Record of Decision contaminants of concern in groundwater that are above the Final Target Groundwater Cleanup Goals.



Hydraulic Containment System



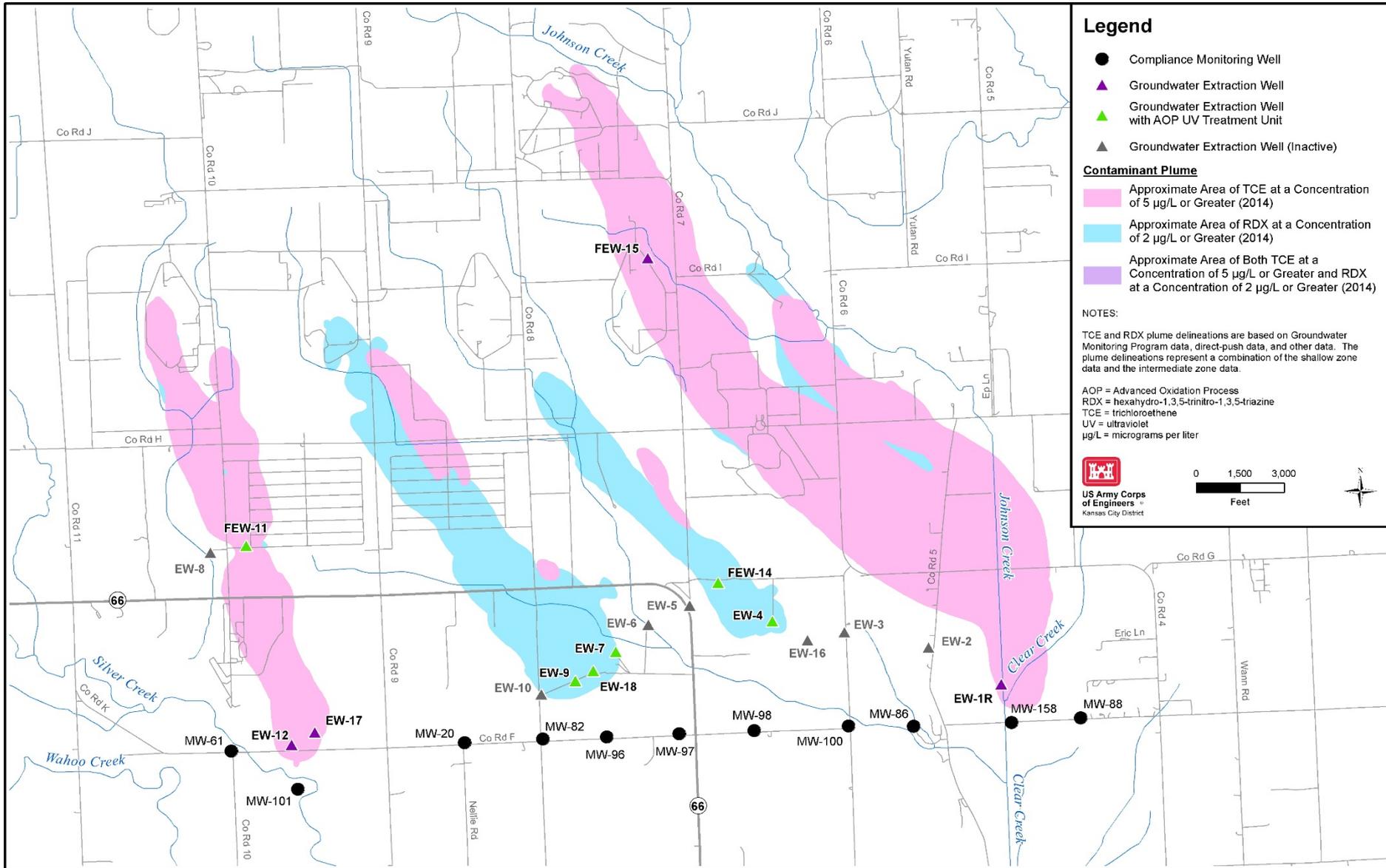
Evaluating Containment

PRIMARY TOOL

- Containment is determined from **chemical data** collected from compliance monitoring wells that are downgradient of the plumes.
- If contaminants of concern are **not detected above the Final Target Groundwater Cleanup Goals** in the compliance monitoring wells, then containment is met.



Compliance Monitoring Wells



Evaluating Containment

SECONDARY TOOL

- **Perimeter wells** are located at the perimeter of the contaminant plumes and are monitored on a semi-annual basis.
- **Groundwater transport modeling** is performed to evaluate general performance or effectiveness of the hydraulic containment system.

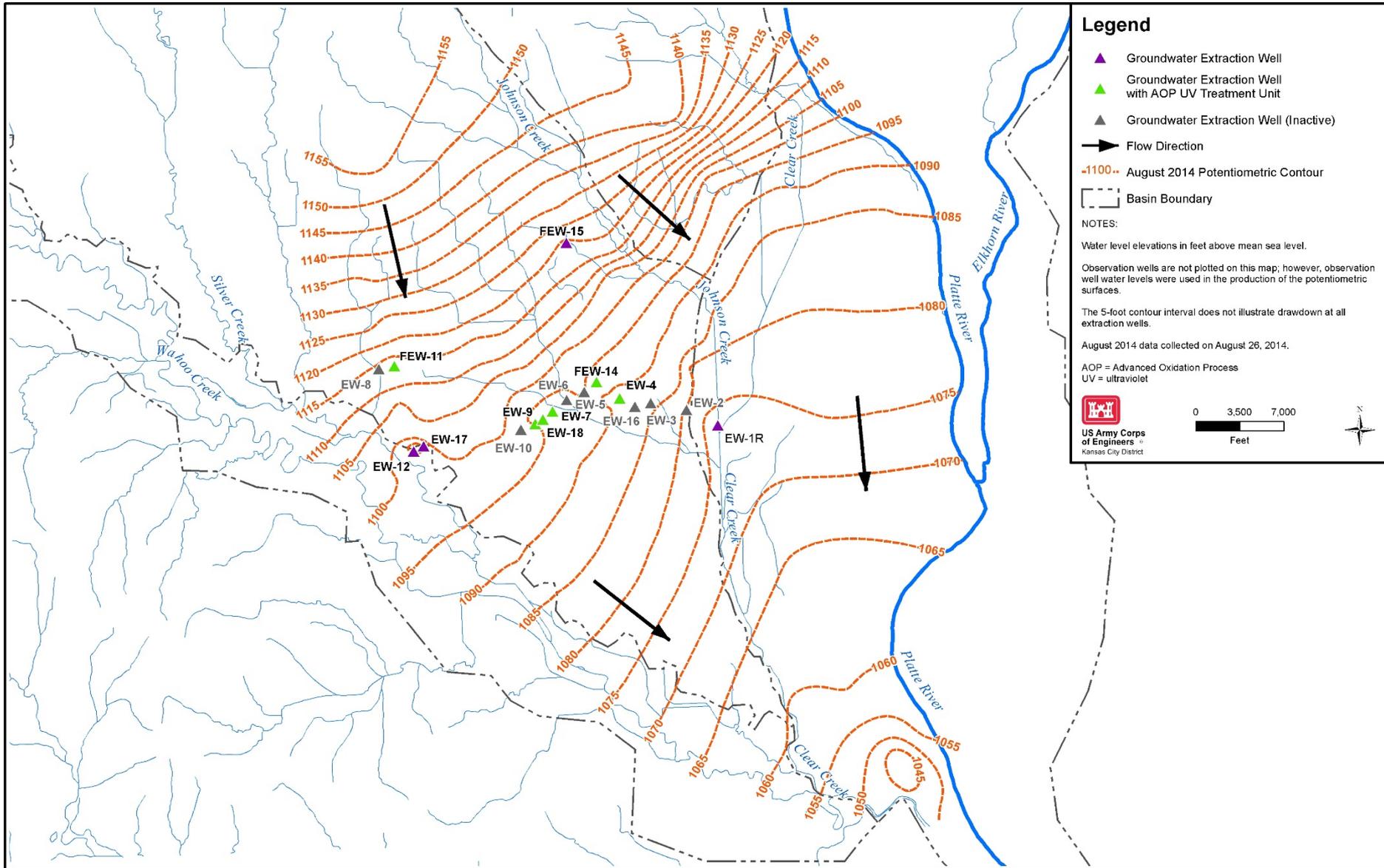


Evaluating 2014 Containment

- Information collected and evaluated:
 - [Water Levels](#) - 358 monitoring wells twice a year
 - [Groundwater Samples](#) - 33 compliance wells and 57 perimeter wells
 - [Drinking Water Samples](#) - 79 water supply wells
 - [Pumping Rates](#) - Extraction Wells, Metropolitan Utilities District, Lincoln Water System, the Village of Mead, the City of Ashland, and the University of Nebraska-Lincoln Agricultural and Research Development Center.



2014 Groundwater Flow

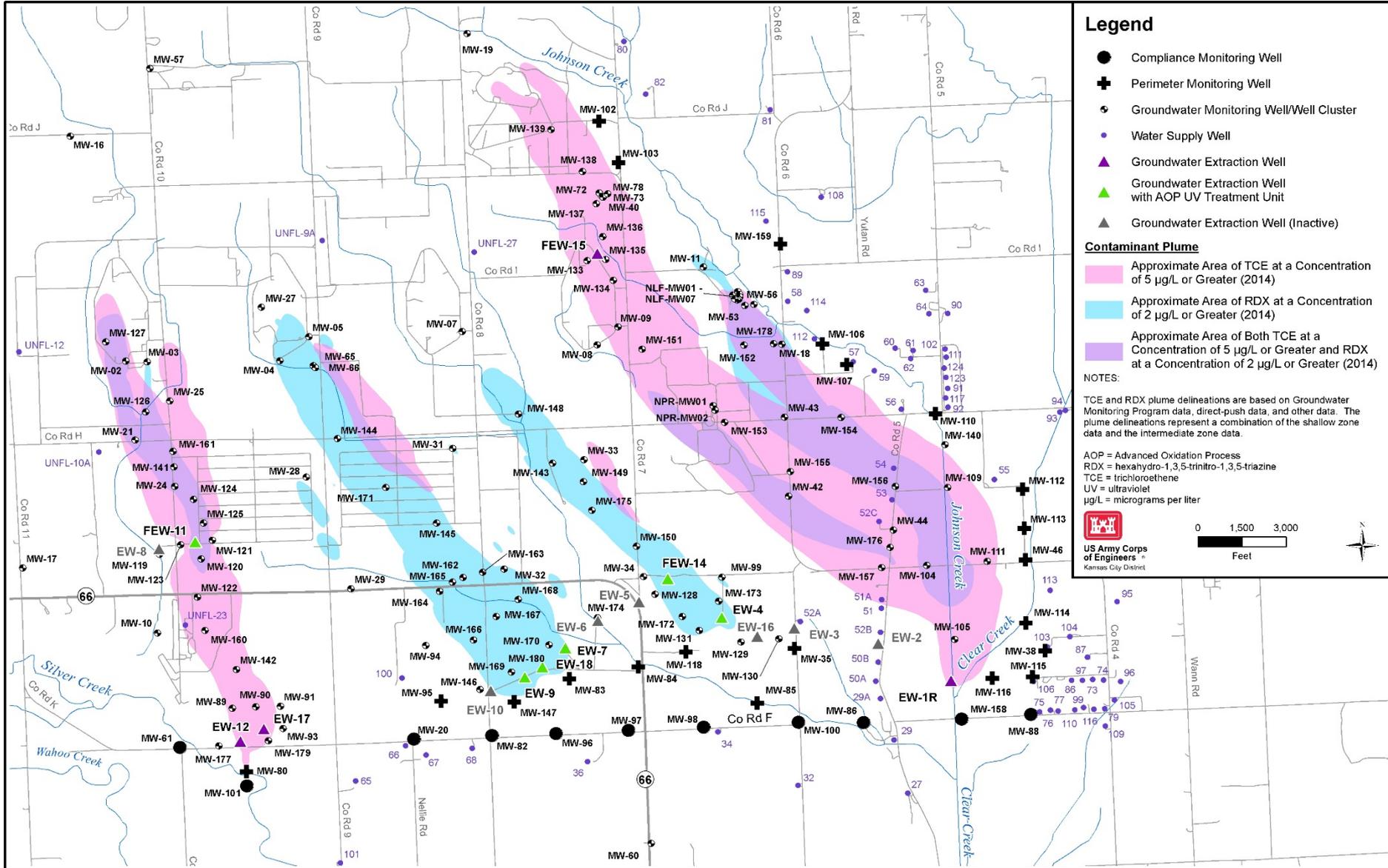


Groundwater Monitoring

- Groundwater data will continue to be collected during the annual Groundwater Monitoring Program from:
 - Water Supply Wells
 - Select Monitoring Wells
 - Compliance Monitoring Wells
 - Perimeter Monitoring Wells



Well Network



2014 Containment Evaluation Conclusions

- Containment has been achieved for 2014.
- No contaminants of concern were detected in any of the compliance wells and the perimeter wells above the Final Target Groundwater Cleanup Goals in 2014.

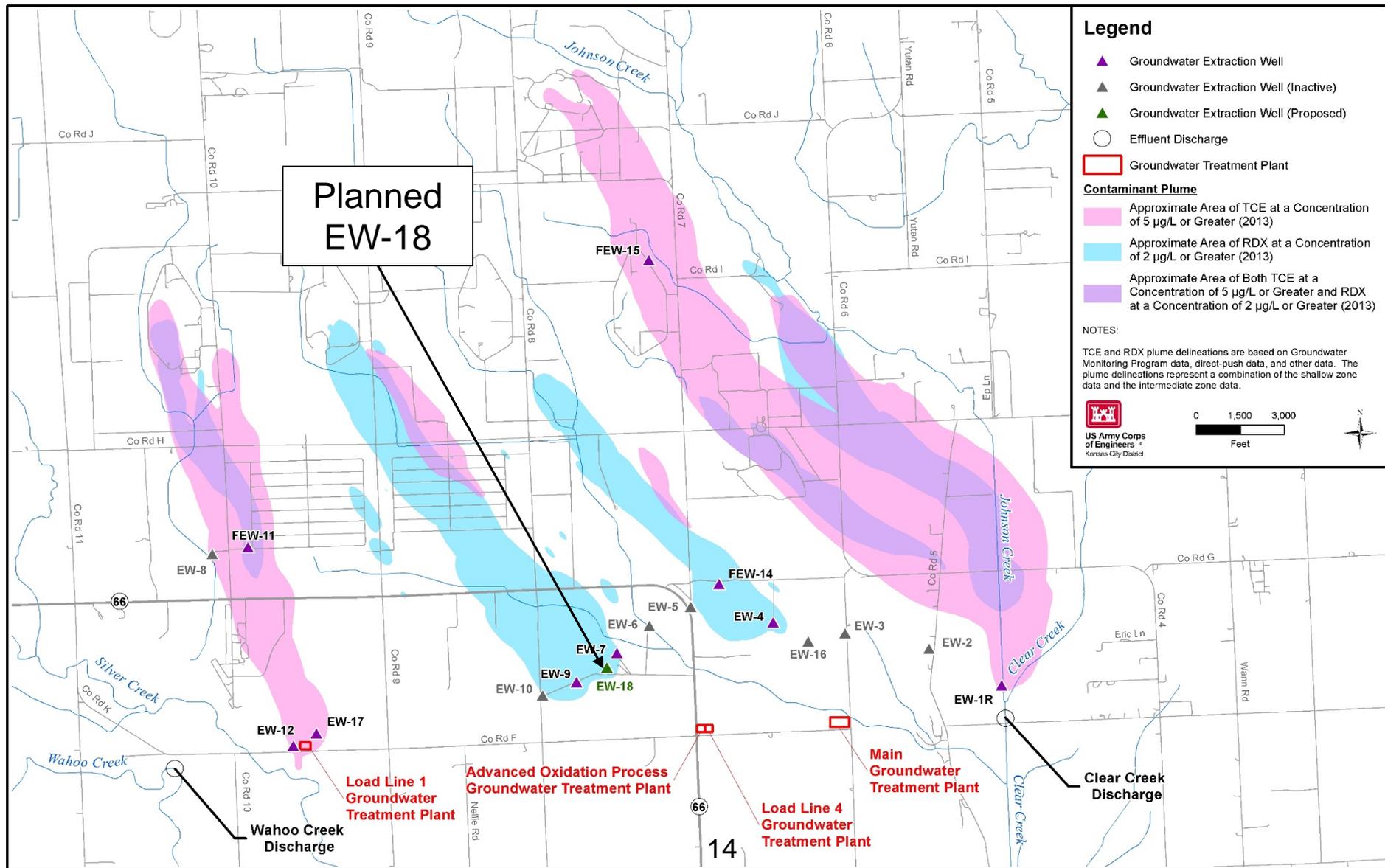


Updates

- A new extraction well (EW-18) will be installed in the Load Line 2 plume to provide additional containment. The final location was based on the results of a geophysical survey and test hole.
- An individual ultraviolet treatment system will be installed at the new EW-18 pump house.



Planned EW-18 Location



Questions

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and our Posterity, do ordain
and establish this Con

