

Cleanup of the Former Litton Site

Jeff Kuzemchak, Northrop Grumman
Chris Maxwell, Stantec Consulting

Site History

Timeline

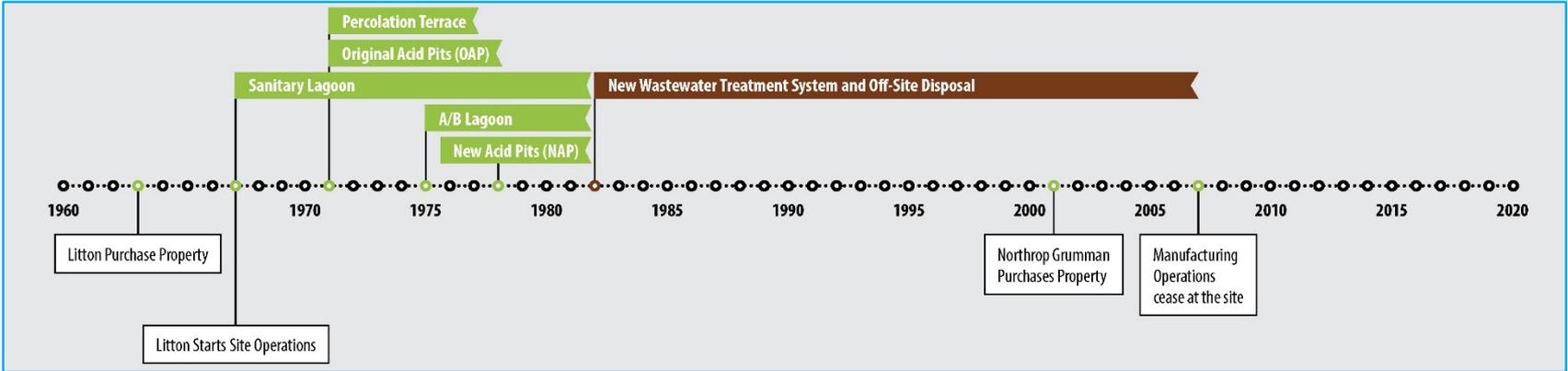
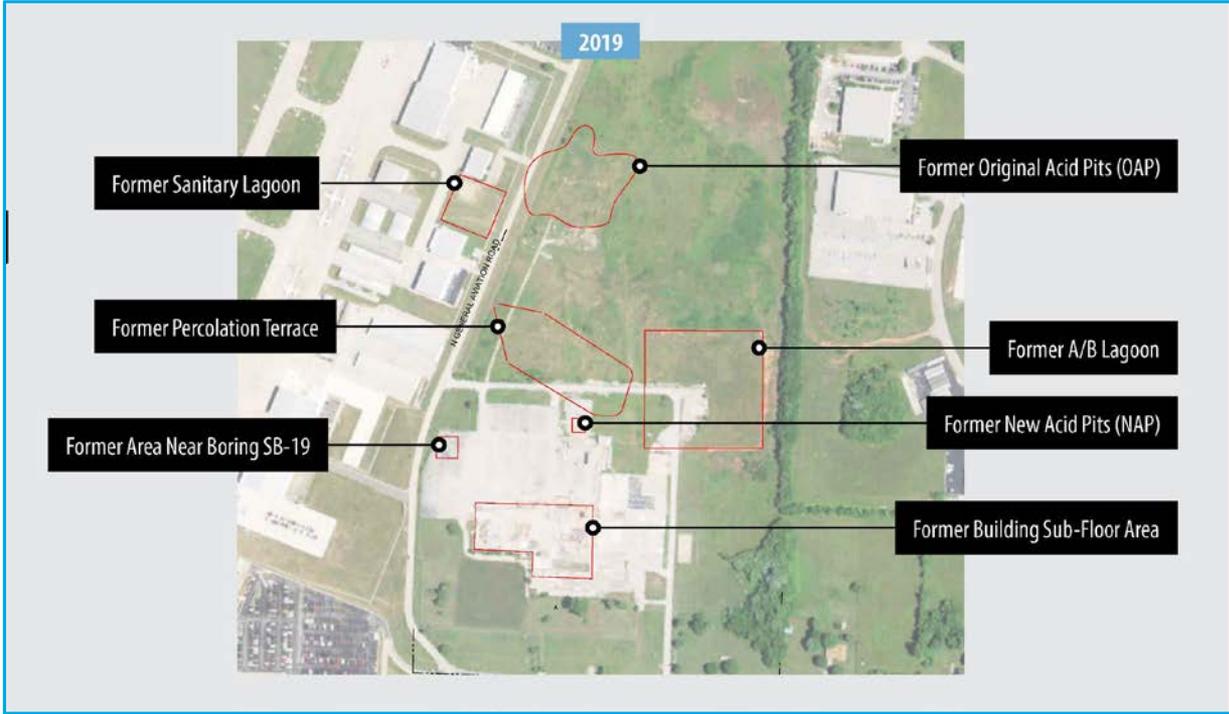
Investigation & Cleanup

Soil Vapor

Upcoming Activities

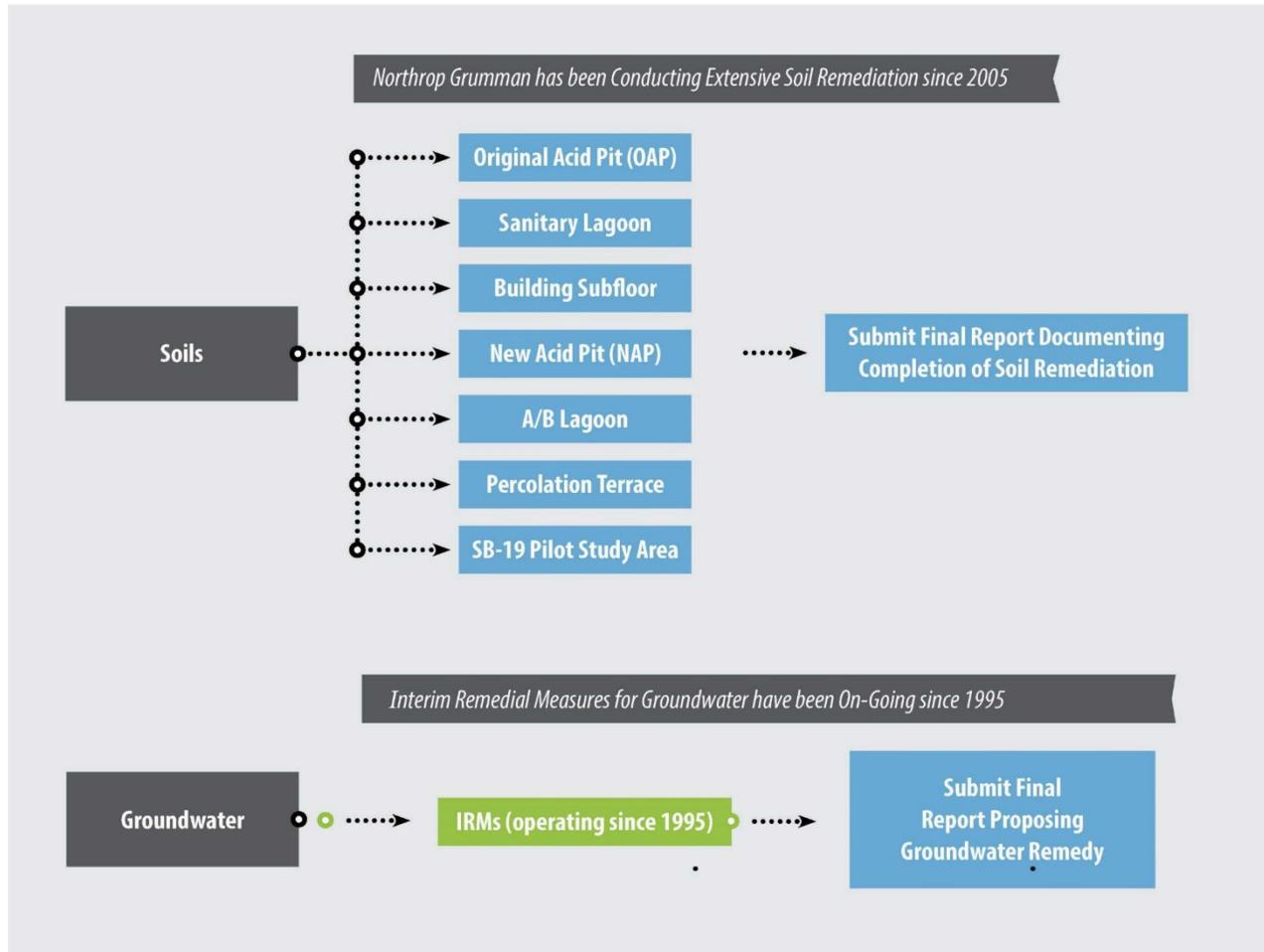
Presentation Topics

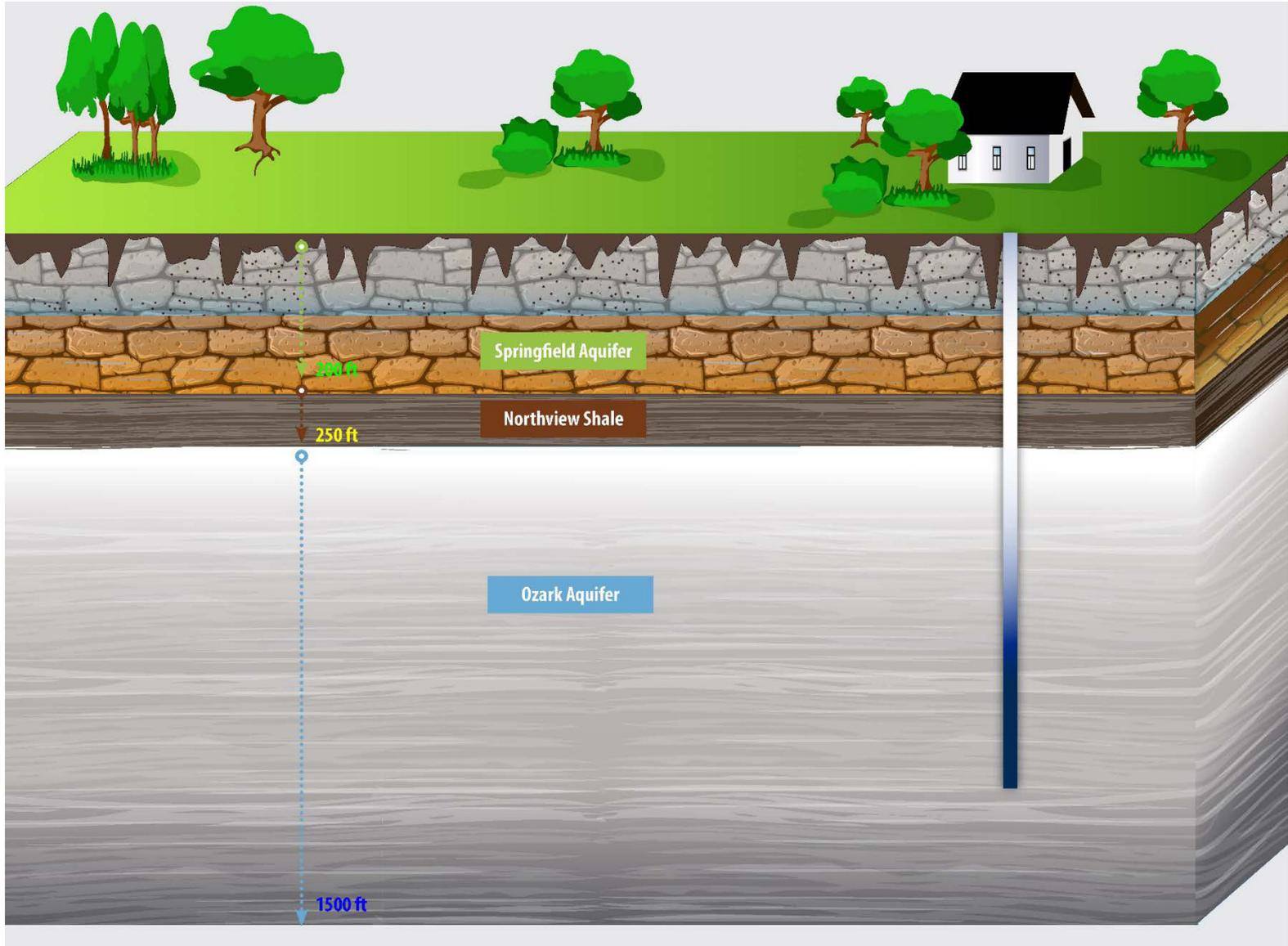
Site History



Project Timeline

The Site Strategy is to Complete Soil Remediation and Implement Interim Remedial Measures (IRMs) for Groundwater Concurrently with Developing a Final Groundwater Remedial Plan.





TCE Concentrations in Decline

TCE Concentrations in Groundwater Have Declined Because of Northrop Grumman Remediation



Concentrations of TCE in the Springfield Aquifer are reduced to near non-detect levels in response to ERH and EISB at the New Acid Pit (NAP).

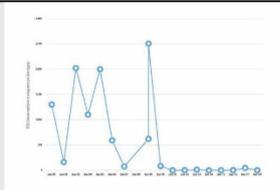


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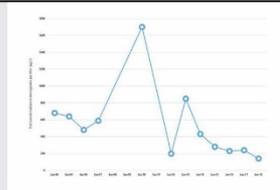


Concentrations of TCE in the Ozark Aquifer have been reduced by pumping and treating 100 million gallons of water at IW-1.

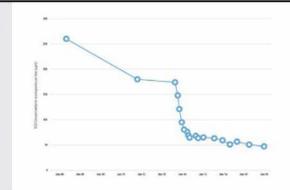
RW-9



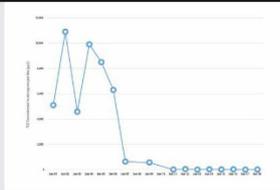
MW-111



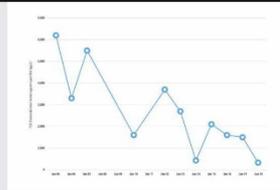
IW-01



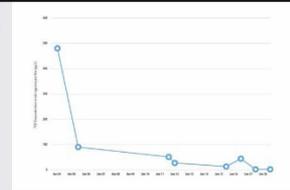
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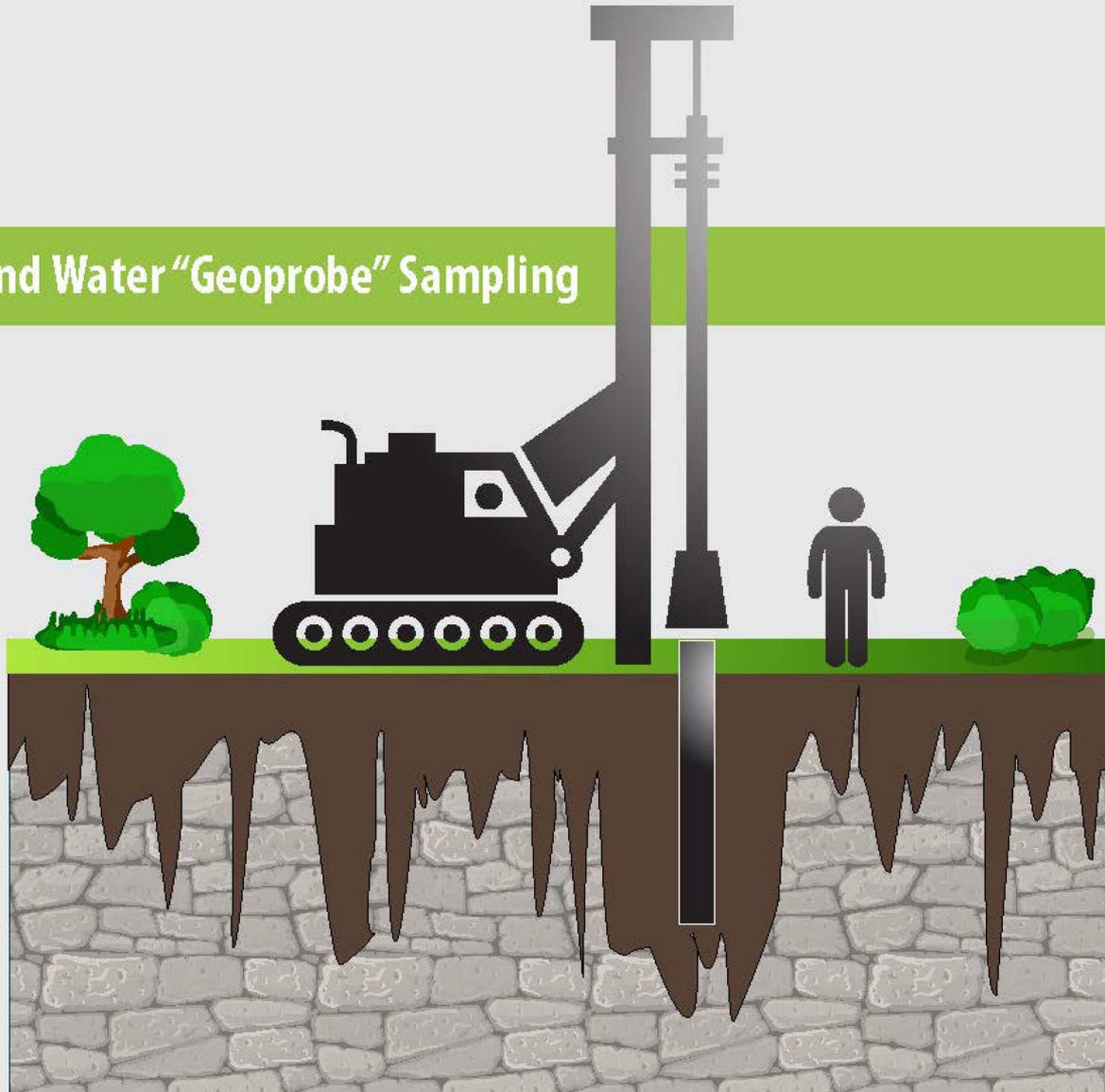
MW-124



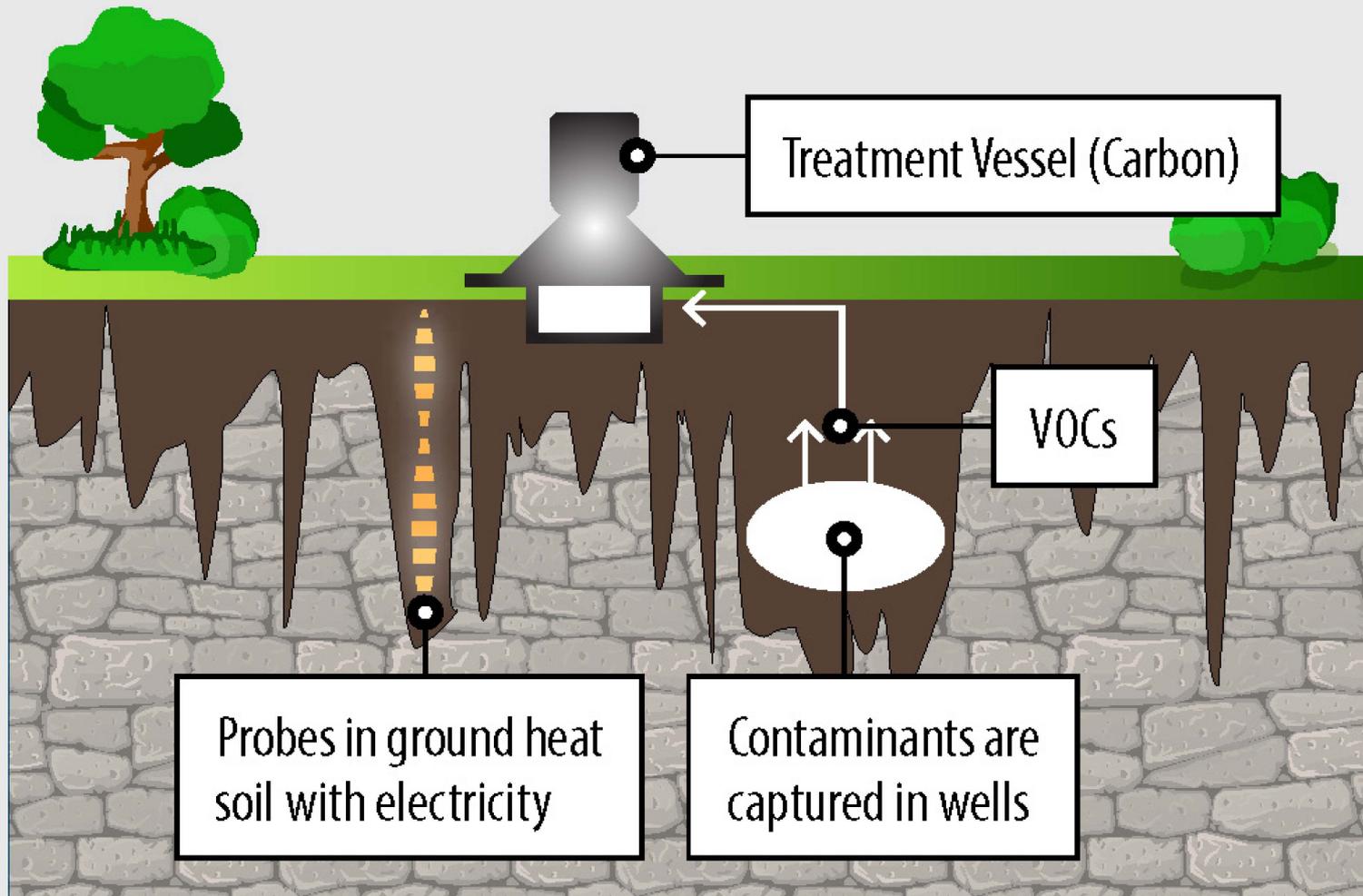
ADP-1



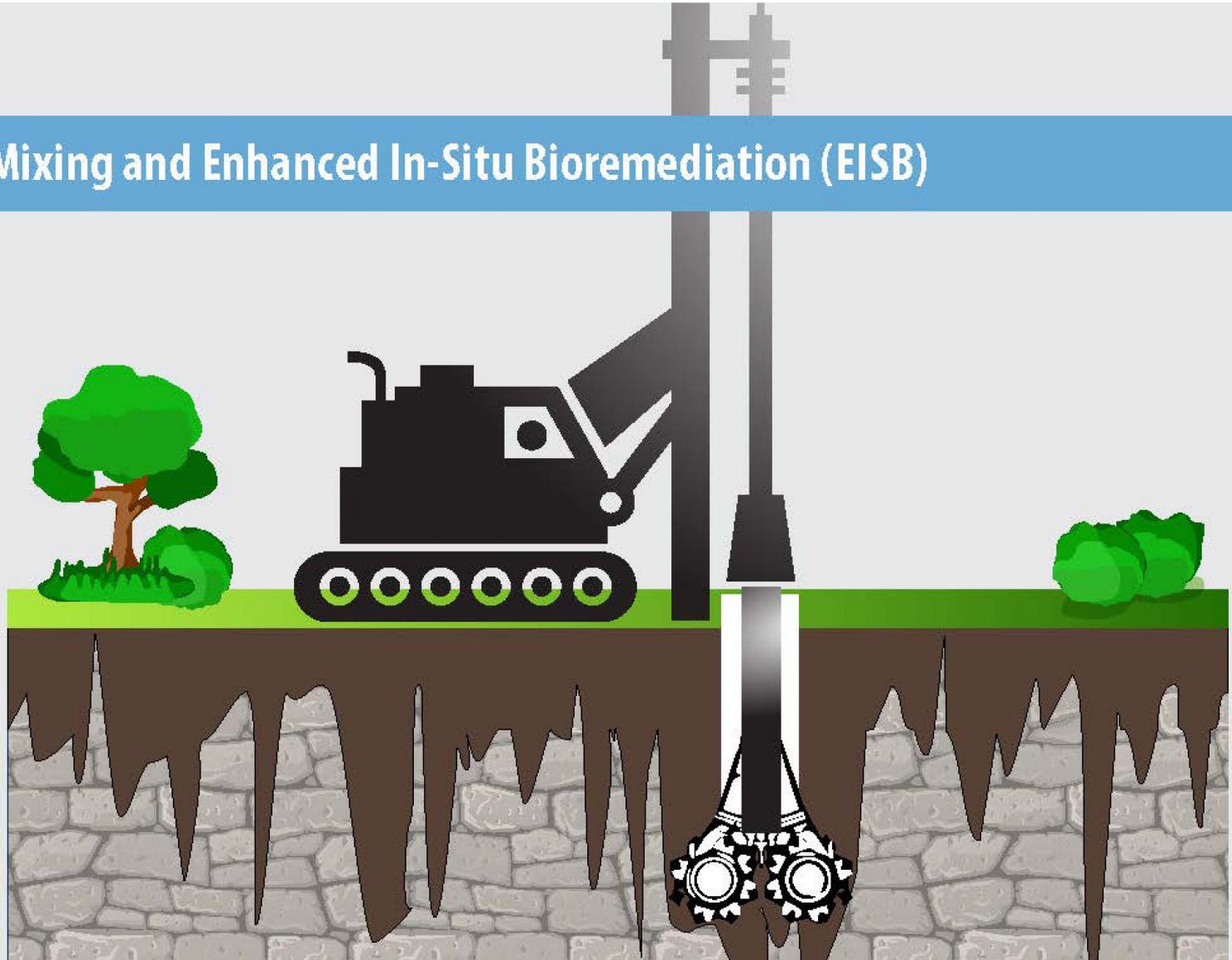
Soil and Water "Geoprobe" Sampling



Electrical Resistive Heating (ERH)



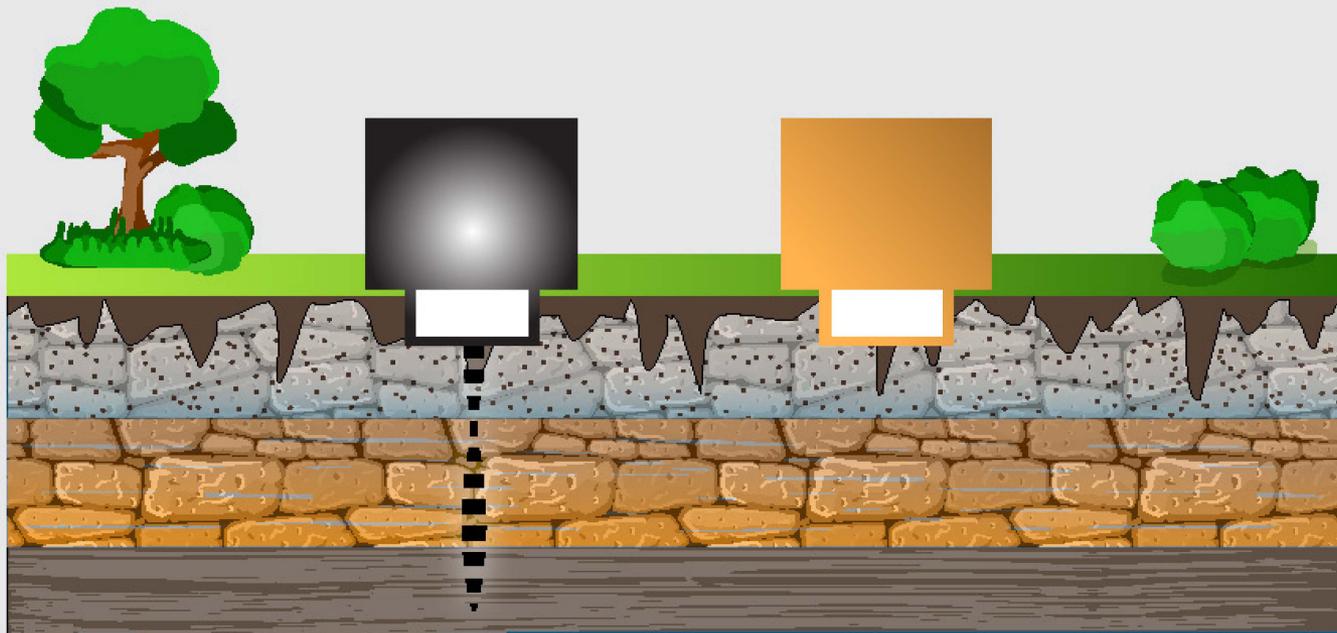
Soil Mixing and Enhanced In-Situ Bioremediation (EISB)



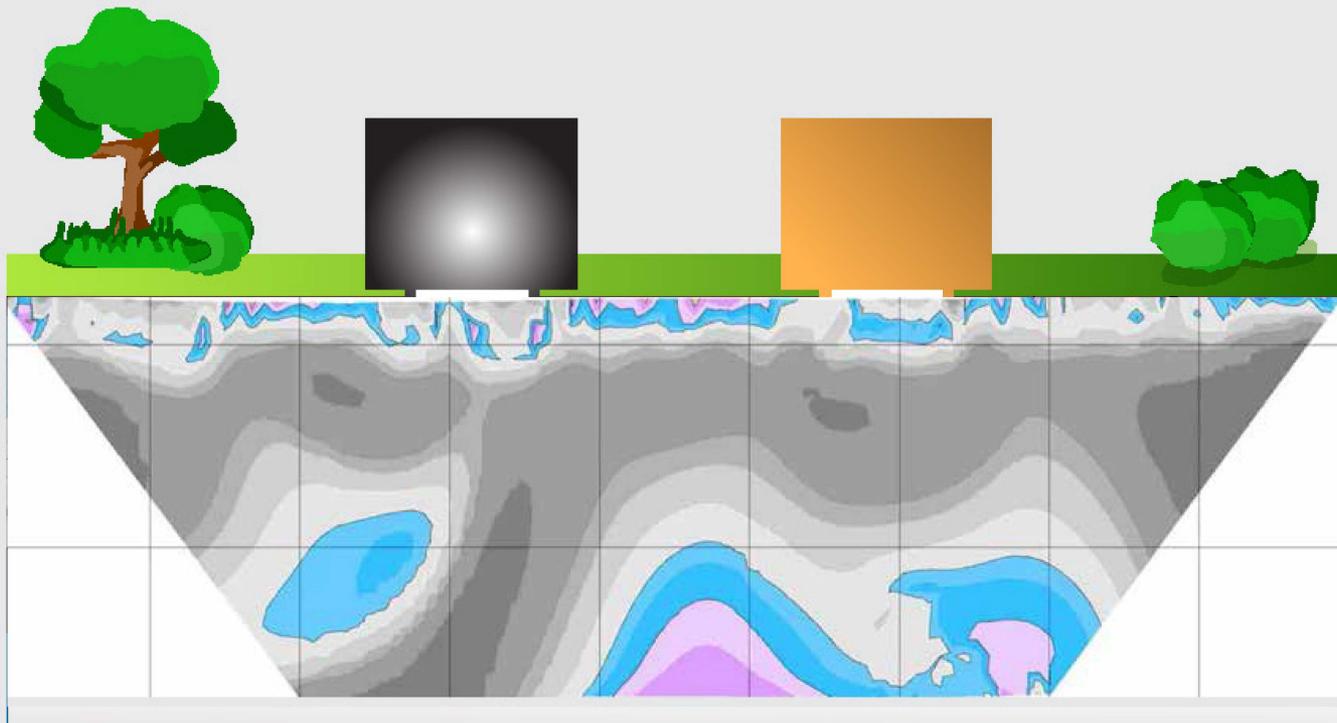
Excavation



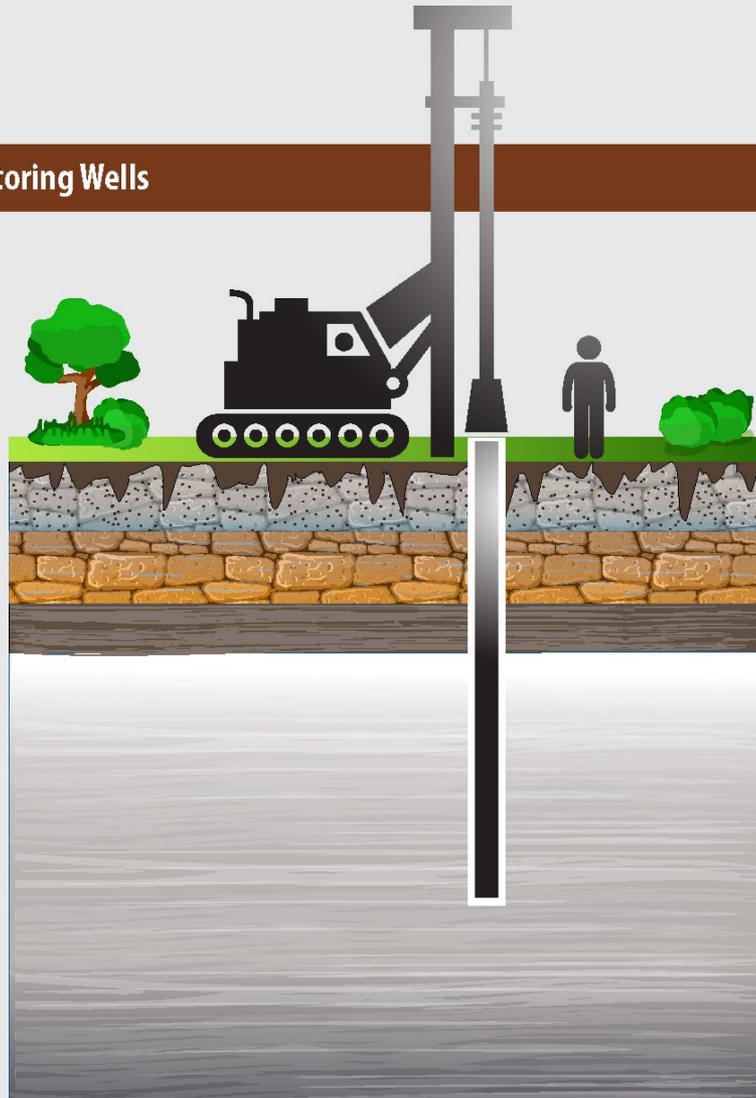
Geophysics



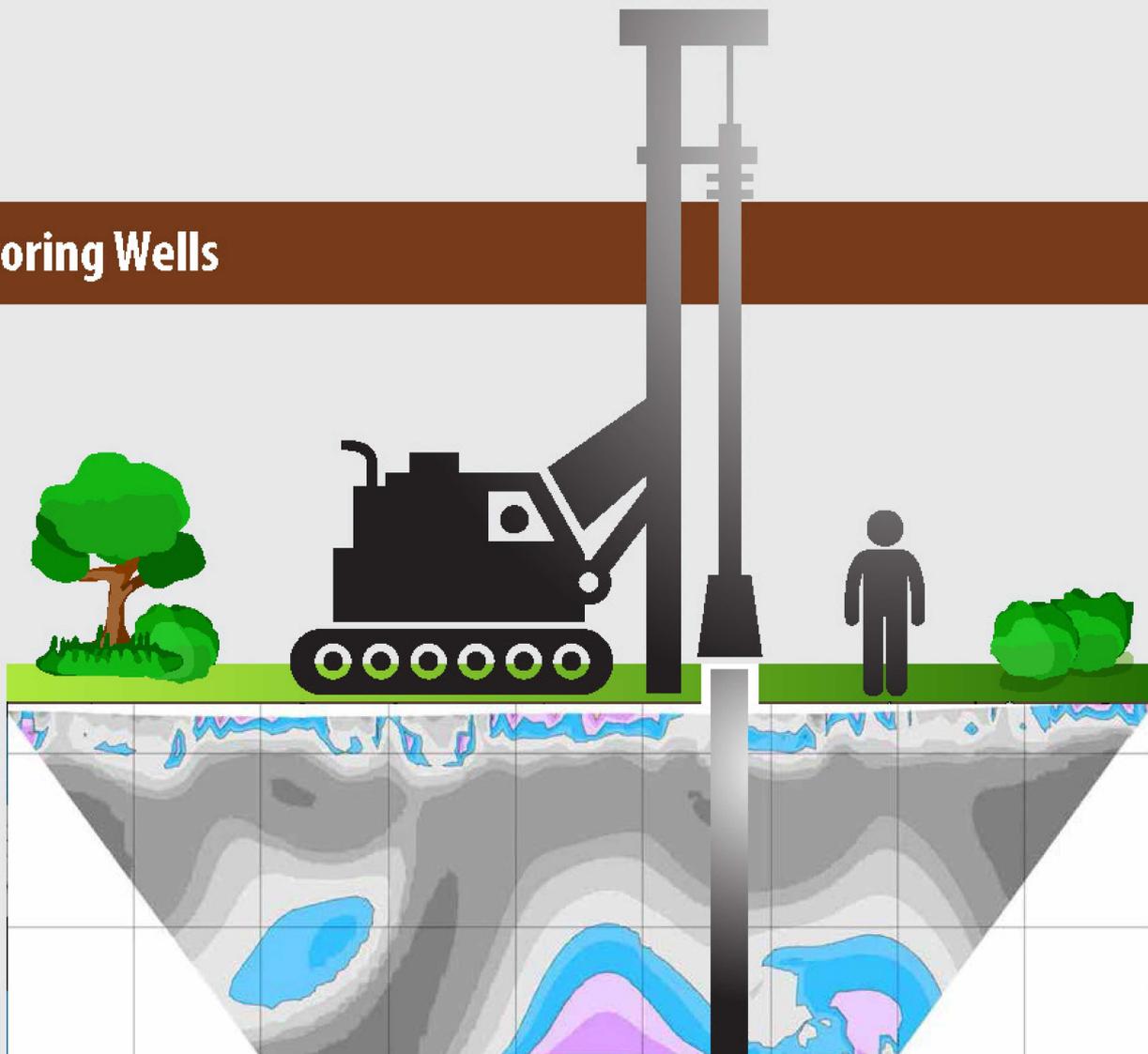
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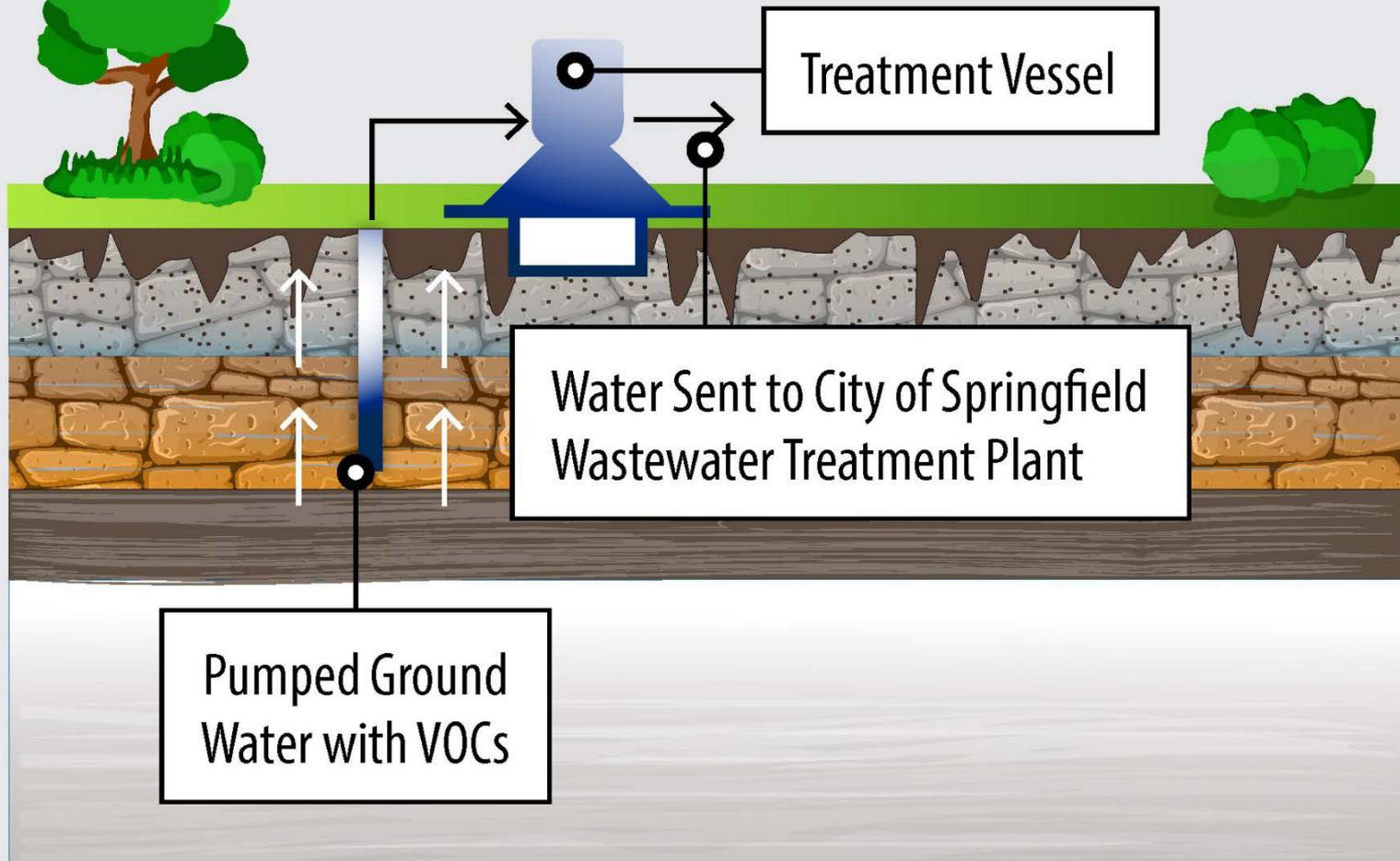
Monitoring Wells



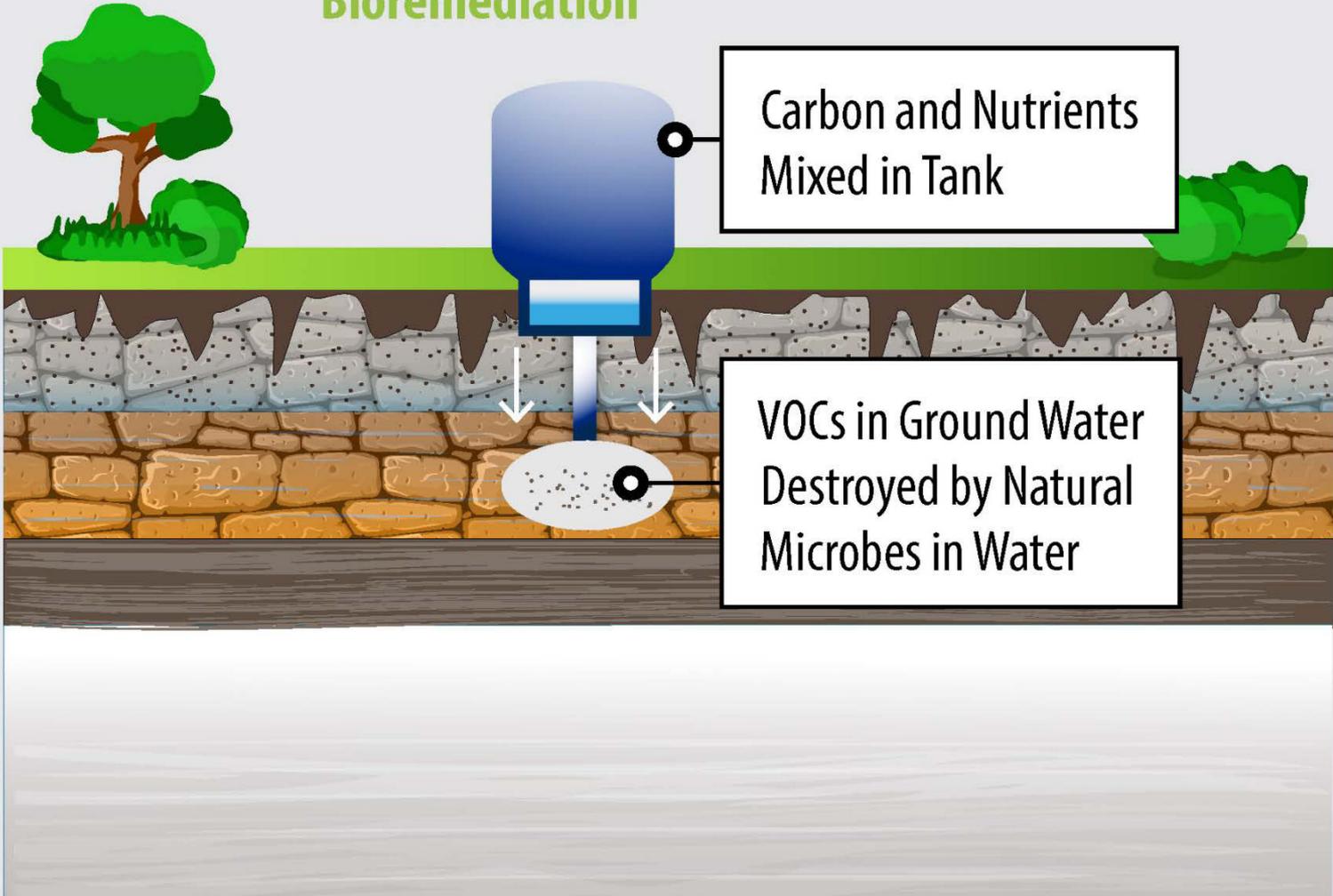
Monitoring Wells



Groundwater Pump and Treat



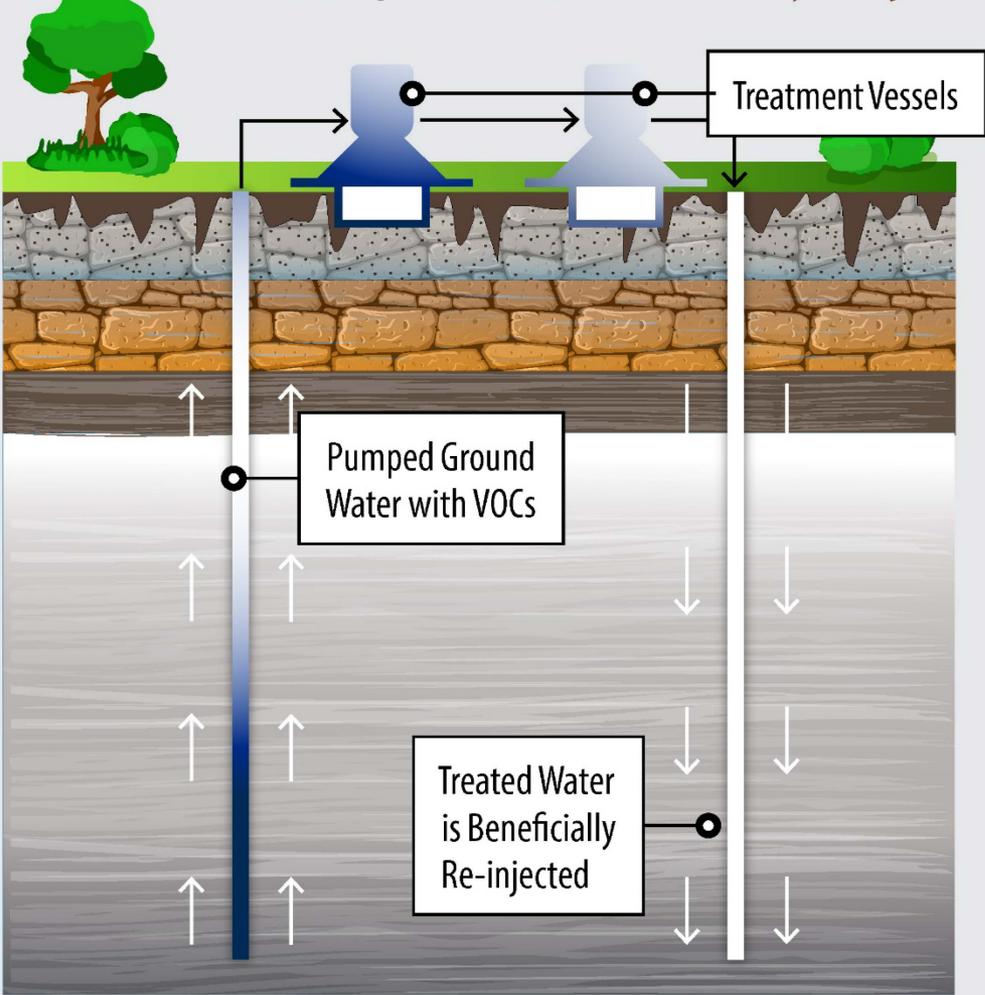
Bioremediation



Carbon and Nutrients
Mixed in Tank

VOCs in Ground Water
Destroyed by Natural
Microbes in Water

Groundwater Pumped, Treated, and Beneficially Re-injected



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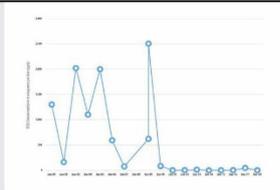


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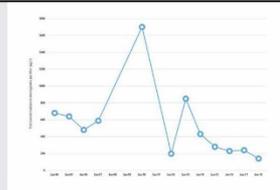


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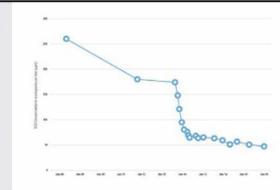
RW-9



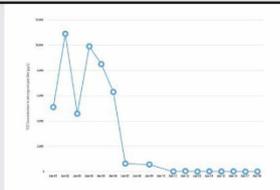
MW-111



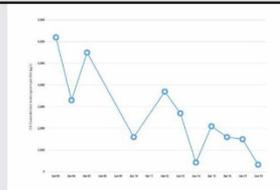
IW-01



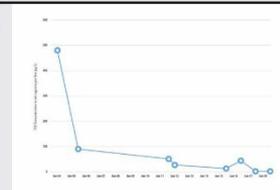
RW-10



MW-124



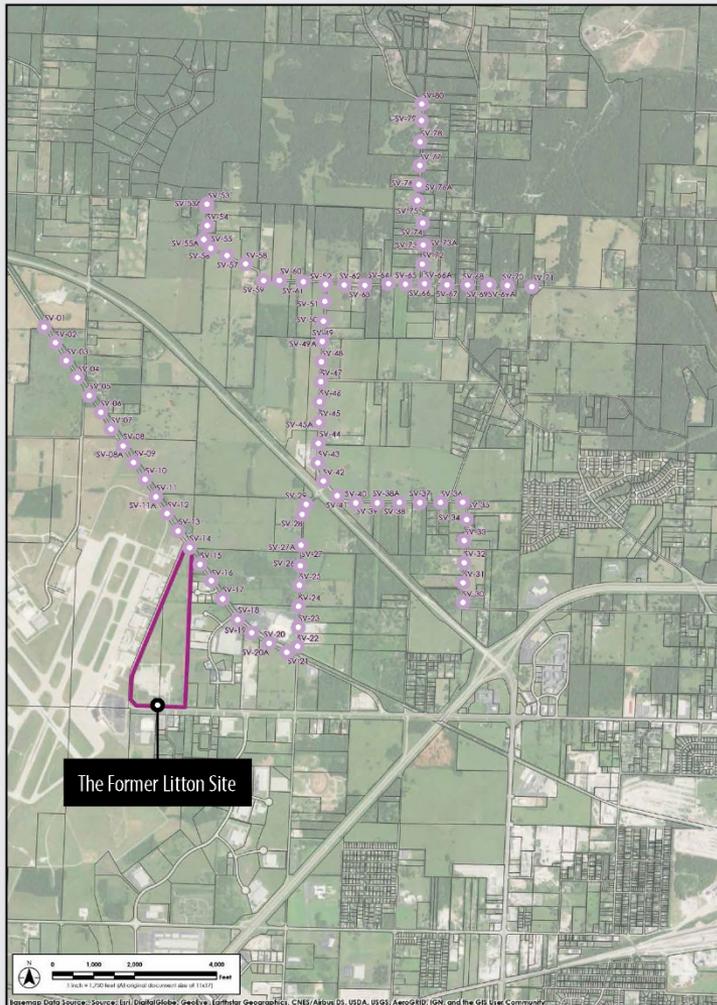
ADP-1



Soil Vapor Sampling



Soil Vapor Sampling



Each of the 77 purple dots shown on this map indicates one of the soil vapor sample locations completed by Northrop Grumman in 2018.

Very low levels of VOCs were detected below United States Environmental Protection Agency (USEPA) standards.

Upcoming Activities

Trenching to Install Water Conveyance Piping and Electrical Conduit



Sampling Soil Vapor

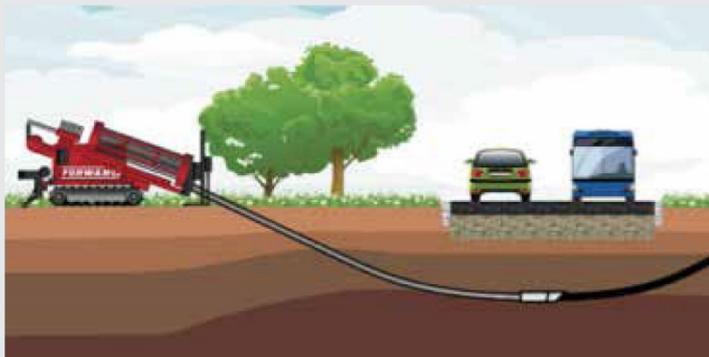


Installation of New Monitoring Wells



Connecting 10 Additional Wells on the Site and Airport to our Springfield Aquifer Pump and Treat System.

Horizontal Drilling Under Aviation Blvd to Install Piping



Connecting New Pumping Wells to the Groundwater Interim Remedial Measures



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