

High Resolution Site Characterization at Petroleum Underground Storage Tank Release Sites Applicability, Benefits, and Costs

Battelle Bioremediation Symposia

Austin, TX

May 10, 2023

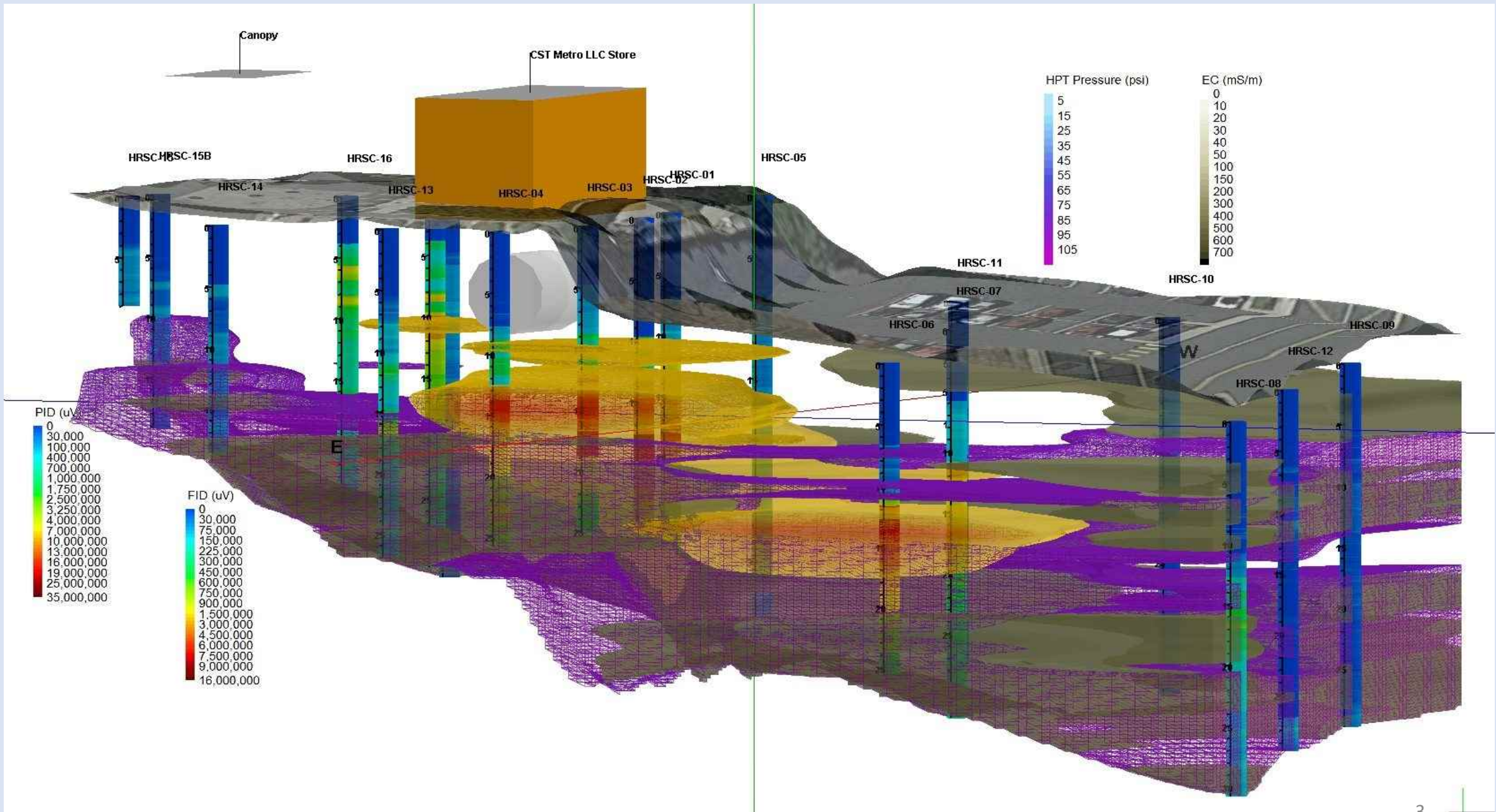
Tom Schruben, EPA OUST



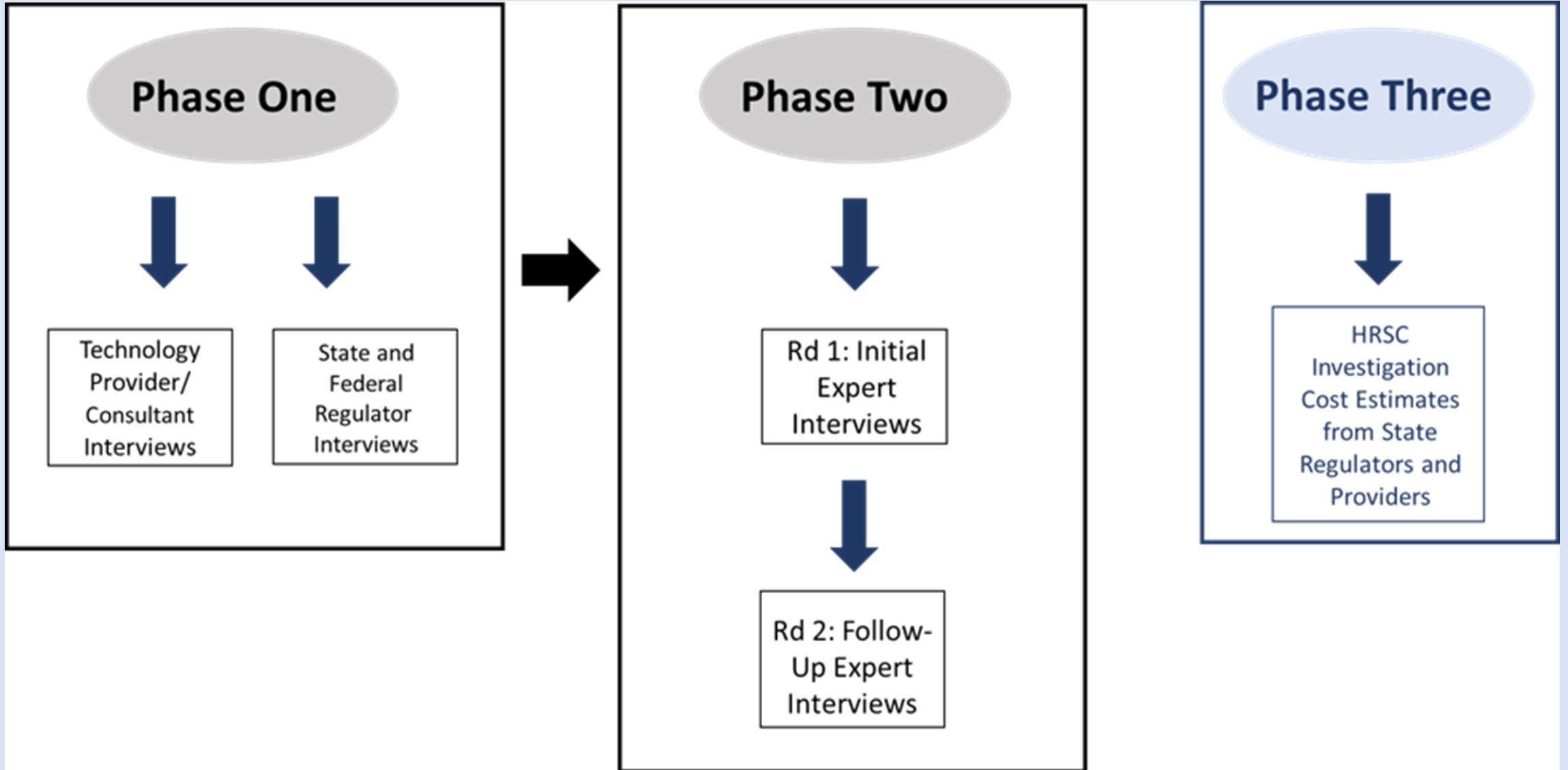
Goals

Questions we wanted to answer for petroleum UST release sites:

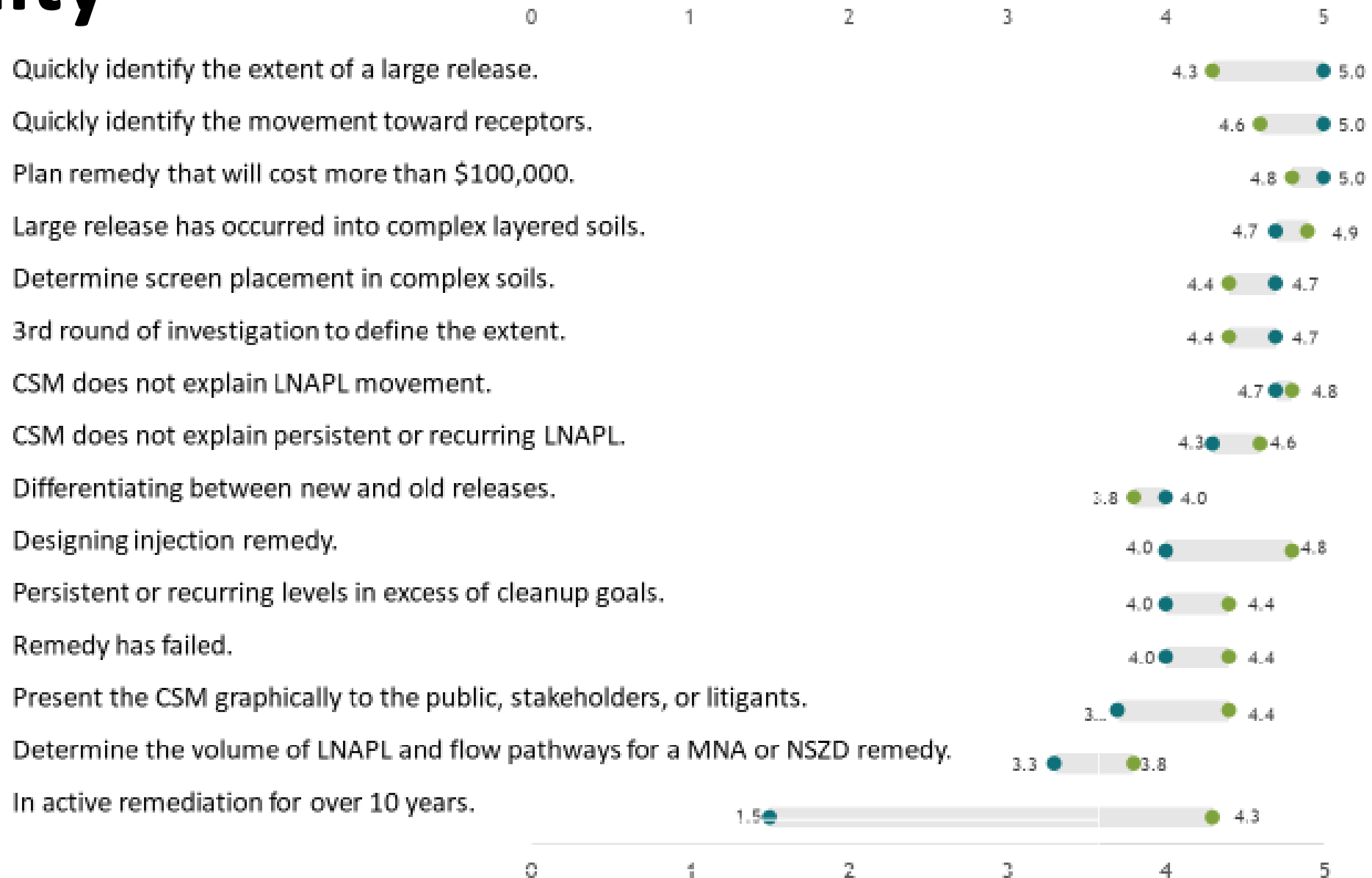
- In what situations could HRSC help?
- When does it save time and money?
- What are the barriers to wider use?



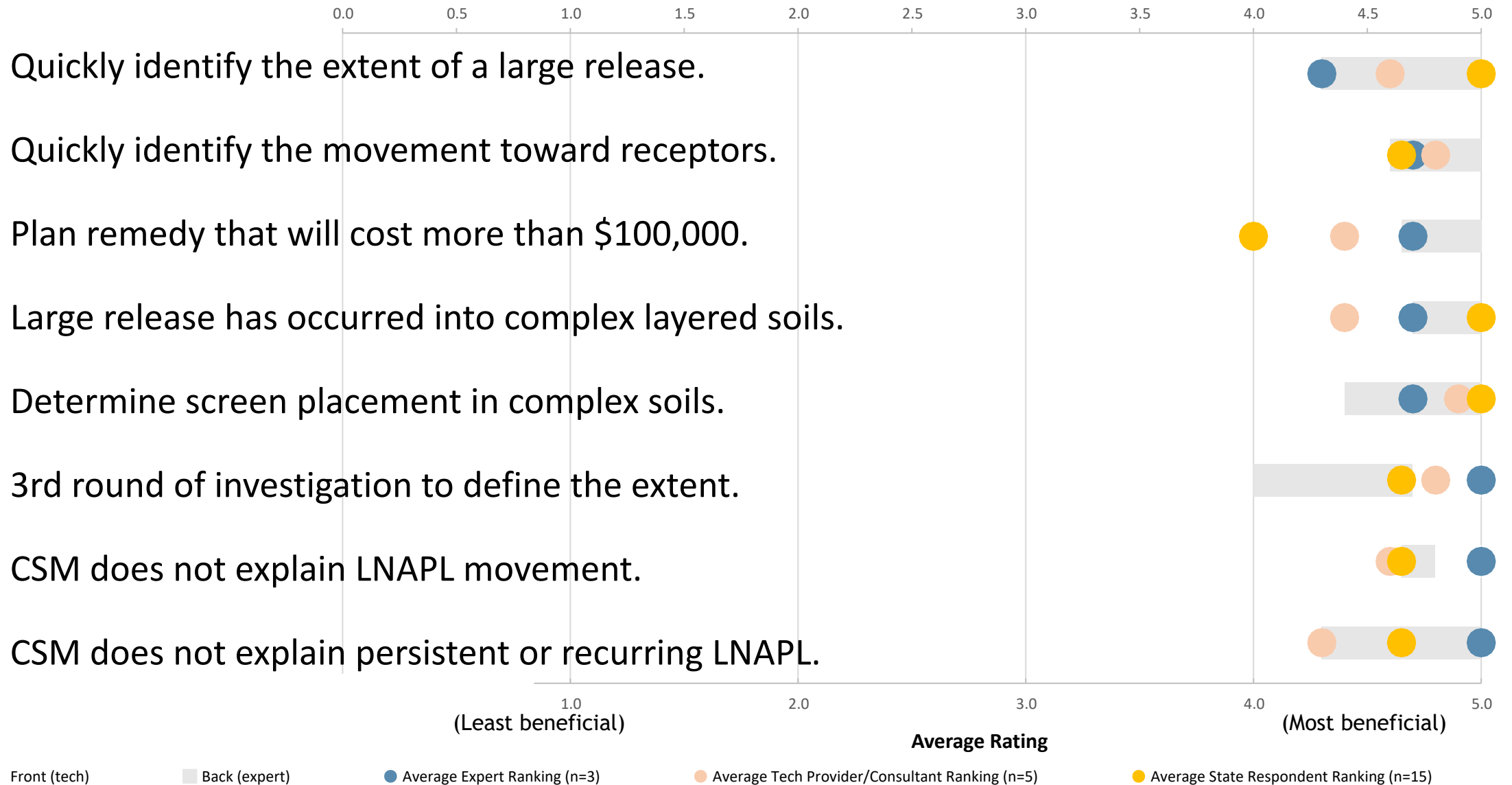
Methods



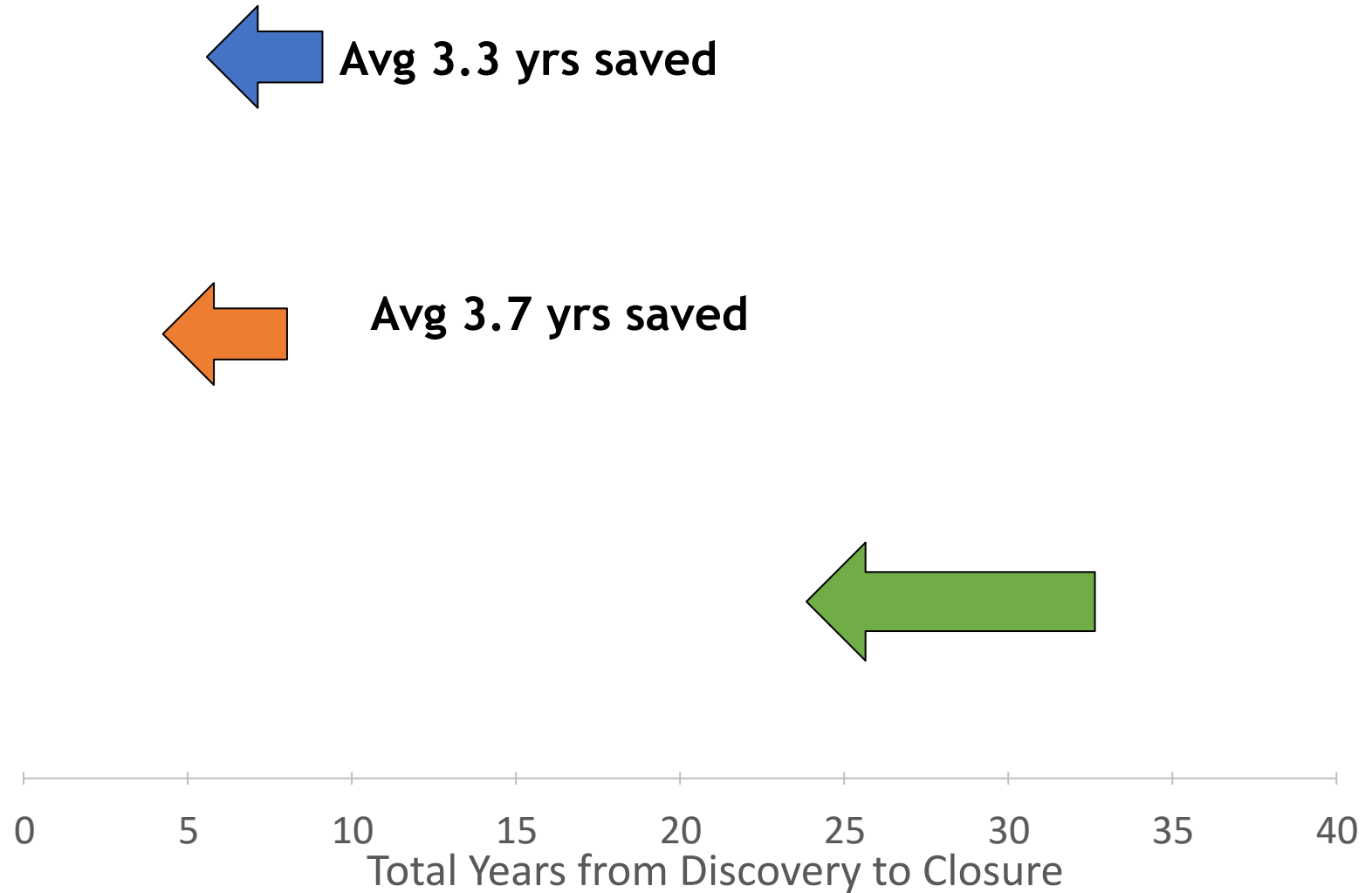
Utility



Consensus on Utility



HRSC Saves Time



HRSC Saves \$

Scenario 1:
"Typical" Release

Avg. -8.7%

Scenario 2:
Catastrophic Release

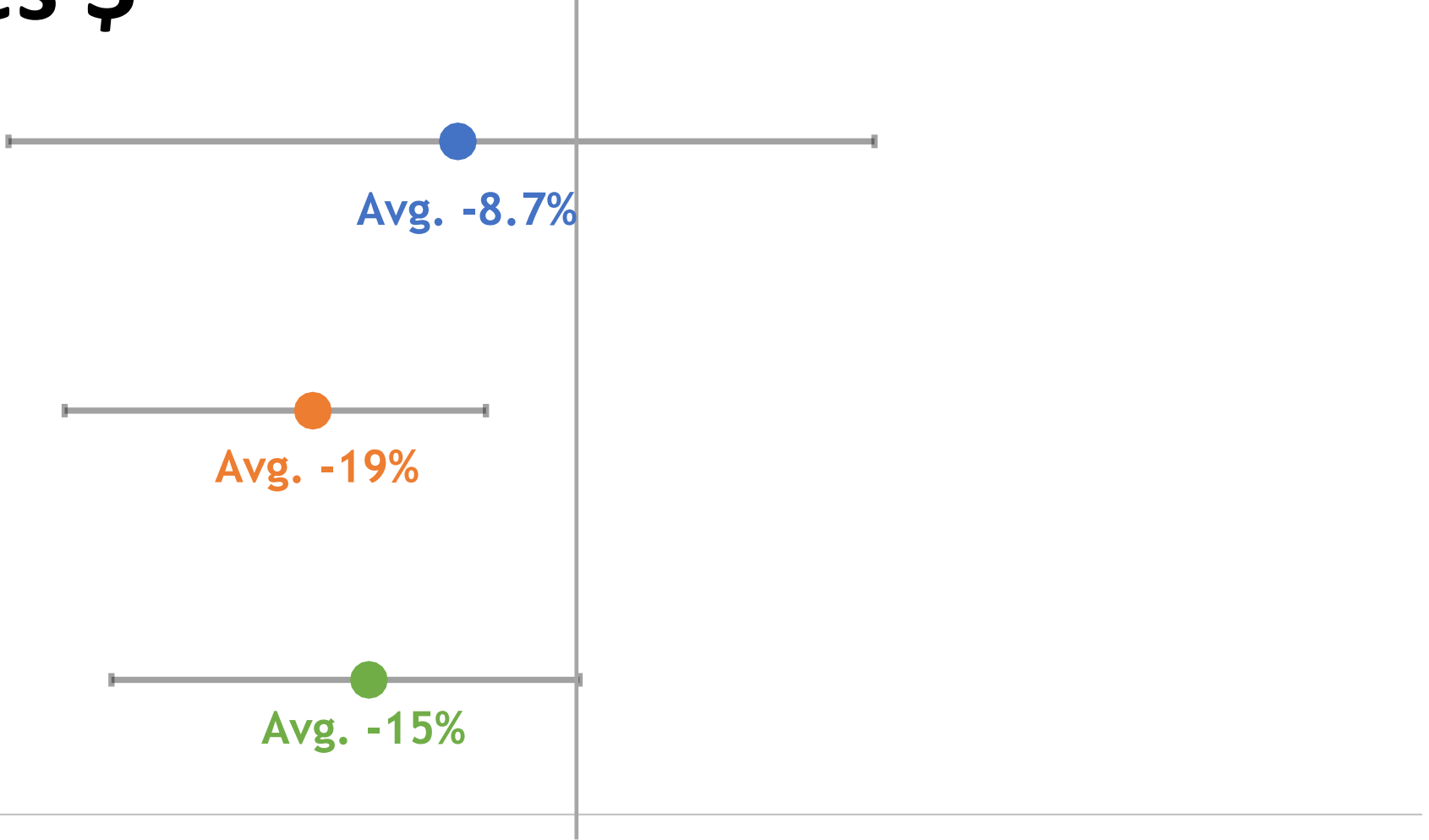
Avg. -19%

Scenario 3:
Stuck in Remediation

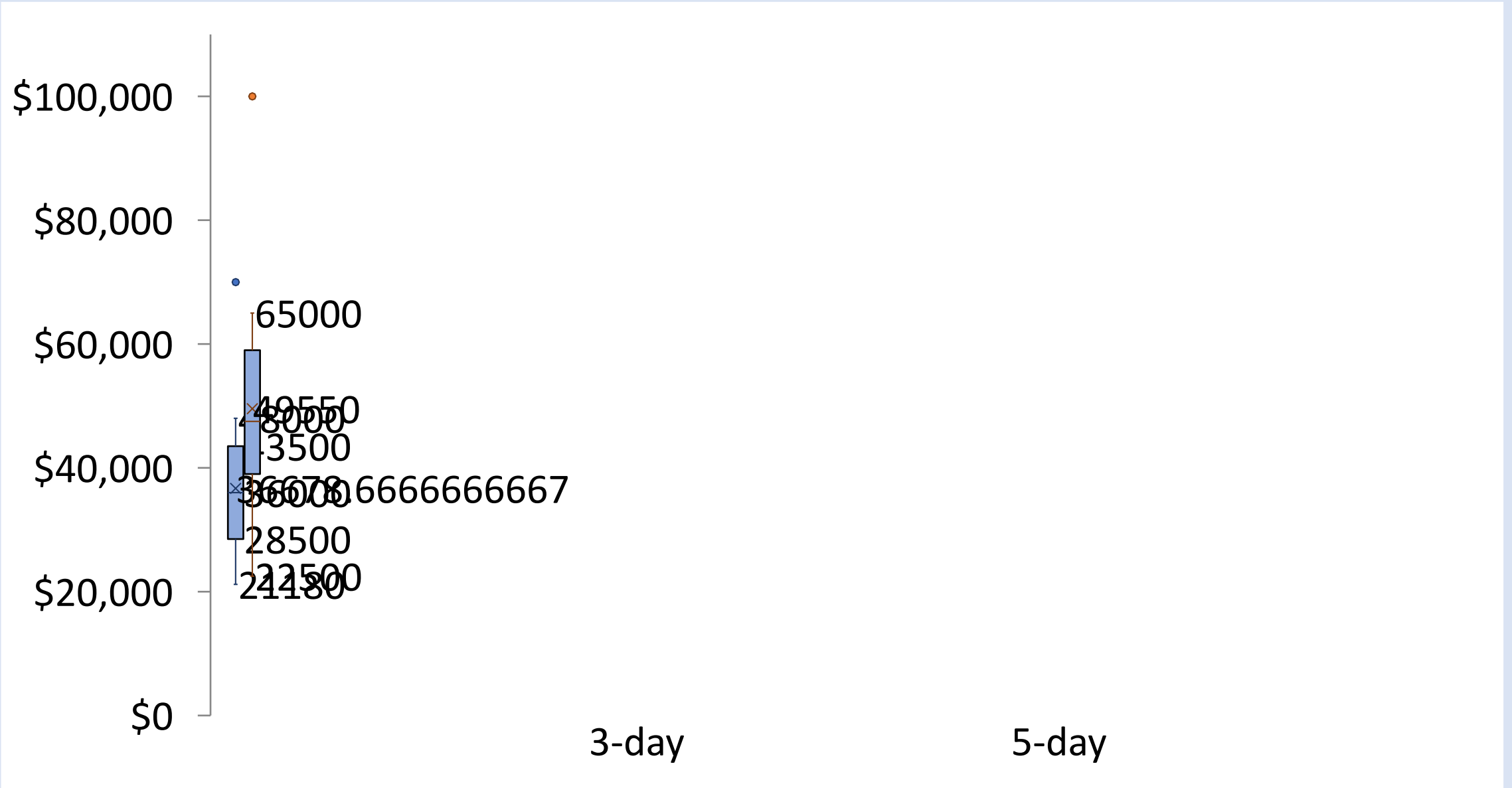
Avg. -15%

-60% -40% -20% 0% 20% 40% 60%

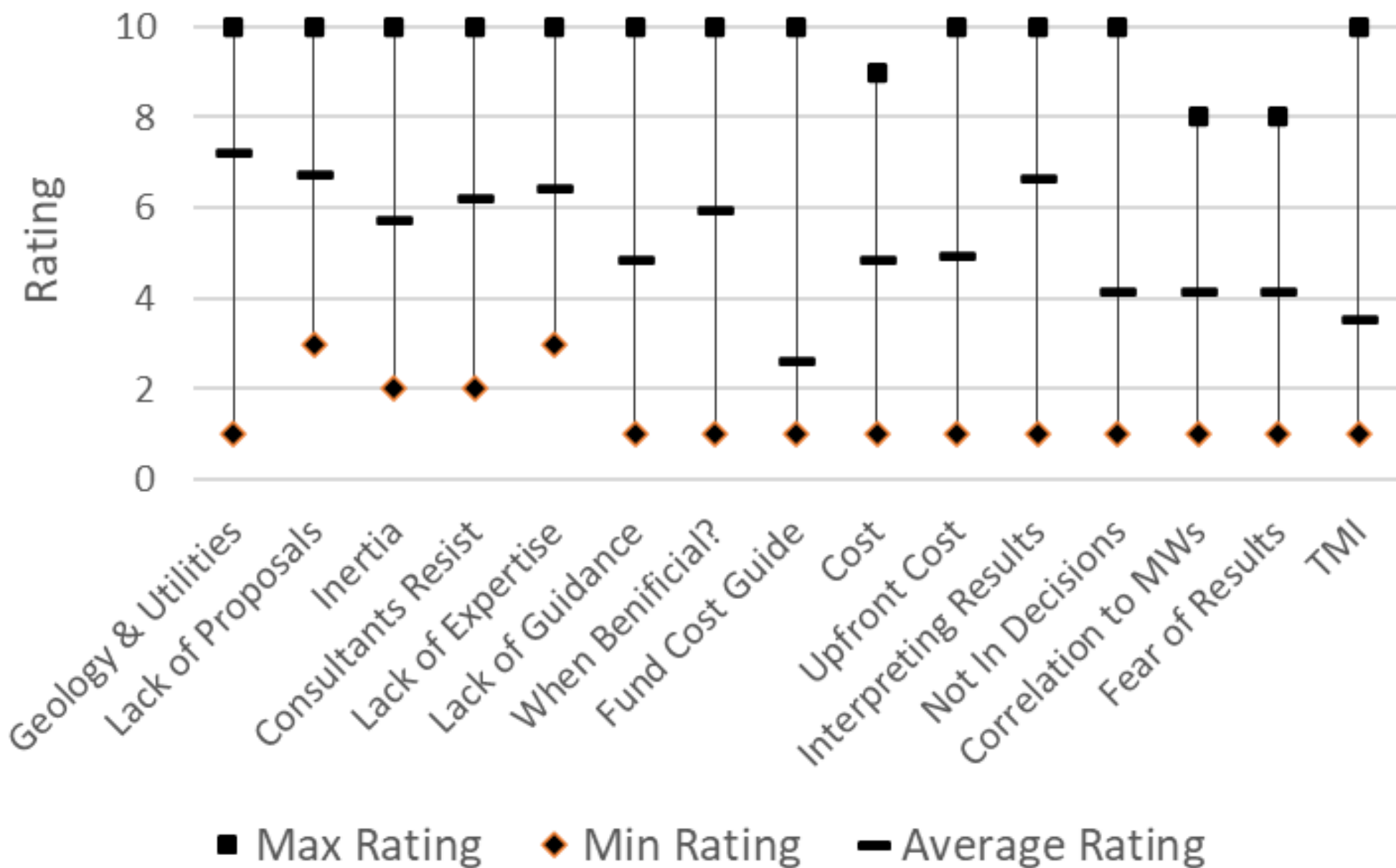
Percentage Change in Total Project Cost with HRSC Compared to Traditional Characterization



HRSC Cost



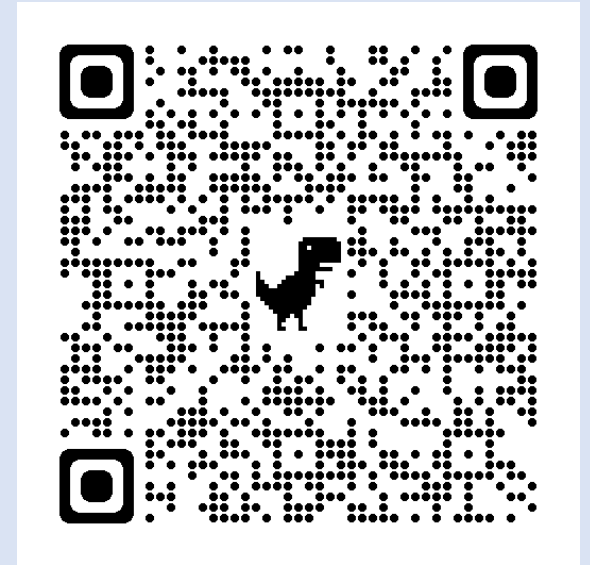
Barrier Ratings



Conclusions and Next Steps

- Worth the investment
- Present findings to EPA, state, and industry partners
- Develop guidance for using HRSC in Indian country
- Work with ITRC on additional guidance and training
- Work with partners to overcome barriers

Questions?



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