CONSORTIA INTERIM PROGRESS REPORTS

Vanderbilt University





CONSORTIUM FOR RISK EVALUATION WITH STAKEHOLDER PARTICIPATION (CRESP)

Consent-based Siting Consortia – Quarterly Meeting #4 May 22 and 23, 2024





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Overall Project Progress



Task 1: Prepare Body of Knowledge (BoK) on needed improvements in trust, risk communication, and community participation in decision-making.	75% complete
Task 2: Develop community background information using statistical analysis of data in DOE/EPA databases, advanced sentiment analysis of social media data.	70% complete

Scope Shift:

- CRESP plans to engage with *former members* of DOE-EM's site-specific advisory boards (SSABs) at Hanford and SRS to develop a mutual understanding of:
 - Local, state, and Tribal perspectives and values that influence risk decision-making; and
 - Experiences engaging with and including members that represent disadvantaged, underserved, and/or Tribal communities.



Key Developments

- 1. Body of Knowledge (BoK)
 - 6 case studies on hazardous facility siting have been developed.
 - 87 references have been reviewed to date.
 - References stored in Access database that is intended eventually be shared with consortia and DOE-NE.
 - Goal: finalize BoK prior to next quarterly meeting.

2. Community Background Information Development

- a) Media Ecosystem Analysis:
 - Completed data collection for Facebook and News media; ongoing for Reddit.
 - Analyzed 83 Facebook groups and 571 news articles to date.
 - Topic modeling and sentiment analyses partially completed.
- b) Demographic, social, economic, and environmental attribute mapping:
 - Analysis of the 23 counties and Tribes that expressed an interest in hosting interim storage facility as part of the Monitored Retrievable Storage (MRS) program in the 1990s has been drafted.
 - Analysis (in-process) of factors associated with local participation in civic activities specific to counties surrounding Hanford and SRS.





Key Observations—BoK

- Useful references include guides and handbooks (right) constructed to assist in community engagement generally.
- CRESP has also identified a variety of deliberation resources that appear relevant.
 - <u>MIT's Deliberatorium</u> is a web-based platform to assist in the decision-making process for large communities through largescale augmentation approach.
 - National Coalition for Dialogue and Deliberation's (NCDD's) online resource center provides best practice guides and approaches/frameworks to be considered when planning public engagements.
 - The Society for Technical Communication's Technical Communication Body of Knowledge includes resources to assist practitioners in planning for and executing technical communication activities.



Author	Title	Useful Information
Lundgren, R.E., & McMakin, A.H. (2018).	Risk Communication: A Handbook for Communication Environmental, Safety, and Health Risks, 6 th Ed.,	-Ch. 5: Ethics of Risk Communication -Ch. 6: Principles of Risk Communication -Ch. 10: Visual [Quantitative] Representations of Risks
U.S. Department of Energy. (2000).	A Guide for DOE Employees Working with Indian Tribal Nations	Includes background on DOE's trust responsibility, etiquette when visiting reservations , and building relationships with Tribes.



Key Observations—Community Background Information



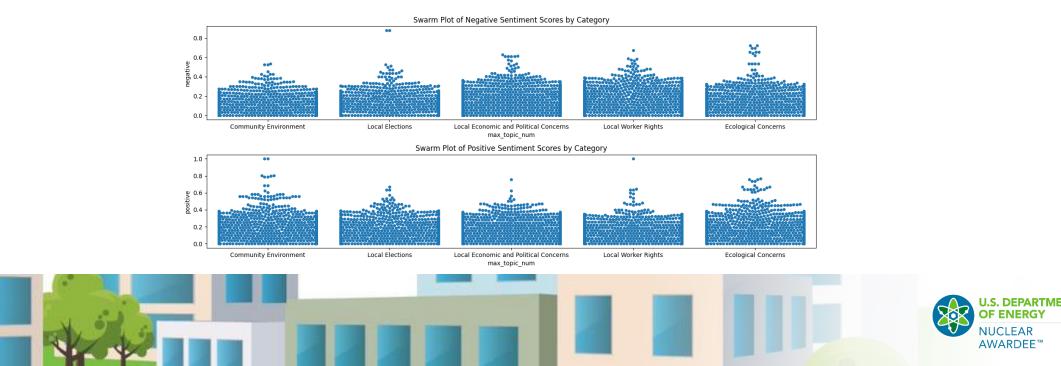
- Finalizing evaluations of local community news and information sources as a key basis for developing community background information.
- Data collection focused on Hanford Site and Savannah River Site +/- 100 miles in 2023.
 - Social Media: Public groups and pages
 - <u>Hanford</u>: Ex: Facebook -> 36 groups and pages
 - <u>SRS</u>: Ex: Facebook -> 47 groups and pages
 - Local community groups, local media pages, and local non-profit pages
 - i.e., "ALL about Tri-Cities Washington" or "Savannah Riverkeeper"
 - News Media:
 - <u>Hanford</u>: 331 articles, 22 local news outlets; 260 from Tri-City Herald, 26 from Seattle Times, average 3 articles from other outlets
 - <u>SRS</u>: 240 articles, 9 local news outlets; 158 from Aiken Standard, 15 from The Augusta Chronicle, average 10 articles from other outlets



Key Observations—Community Background Information



- A core component of the community background information has been an automated analysis of the text collected from the data collection phase (topic modeling, sentiment analysis).
- Sentiment analysis focused on understanding the variation in attitudes expressed on social media regarding core issues within community discussion groups.
 - Ex: Discussions of the local community & environmental issues in Hanford tend to be more positive; ecological discussions about broader environmental issues are more polarized.





Engagement

- CRESP does not intend to perform community engagements until Year 2 (FY25Q1).
- However, plans for stakeholder and Tribal engagements are underway.
 - IRB approvals are being pursued.
- Dialogue between DOE-NE, DOE-EM, and CRESP has been initiated...and informed project path forward.
 - Engagement subject matter will be determined in collaboration with DOE-NE, and possibly DOE-EM.
 - Potential focus: recommendations for improving the representativity, risk communication frameworks and strategies used by, and decision-making power of citizens advisory boards (CABs), generally.



Project focus is on understanding existing engagement frameworks and their effectiveness in defense- and research-related spent nuclear fuel (SNF) management and decision-making at Hanford and Savannah River Sites.

*CRESP and Tribal involvement will be on a technical level at this stage



Engagement Details



What is the engagement?	Date	Location	Brief description	# of Participants
Joint meeting between DOE-NE, DOE-EM, and CRESP	4/8/2024	Virtual	Achieve consistent understanding of CRESP's workscope, and its relationship to DOE-EM mission and programs. CRESP issued meeting summary/proposed path forward to DOE-NE on 5/8/2024.	6
Multimodal Information- gathering engagements	12/1/2024- 5/30/2025	Communities surrounding Savannah River Site, SC	Surveys, in-person interviews, listening sessions, etc. to elicit community-specific insights related to representativity of CABs,	TBD
Multimodal Information- gathering engagements	2/28/2025- 5/30/2025	Communities surrounding Hanford Site, WA	preferred methods of communication, risk communication preferences, risk perception, etc.	TBD
Deliberation Testing	5/30/2025- 8/30/2025	TBD (includes representatives from both sites)	Scope TBD—current plan is to test deliberation approaches developed from information-gathering engagements & gain insights on CAB structure/role for a future CISF.	~10-12



Next Steps

- BoK completion & distribution
- Completion of community background information development
- Development of engagement tools and methods
 - E.g., surveys, interview questions, handouts/flyers, websites, social media, etc.
- Continued conversations between DOE-NE, DOE-EM, and CRESP
- Finalize distribution approach for engagement participation funds





For questions or comments related to this consortium, please contact

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