

Moving Toward Consent-Based Siting of a Federal Consolidated Interim Storage Facility (CISF): Improving Strategies for Community-Informed Decision-Making during Stakeholder and Tribal Engagements

Project Introduction for the Savannah River Site (SRS) Citizens Advisory Board (CAB)

November 5, 2024



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CRESPP

Consortium for Risk Evaluation with Stakeholder Participation (CRESP)



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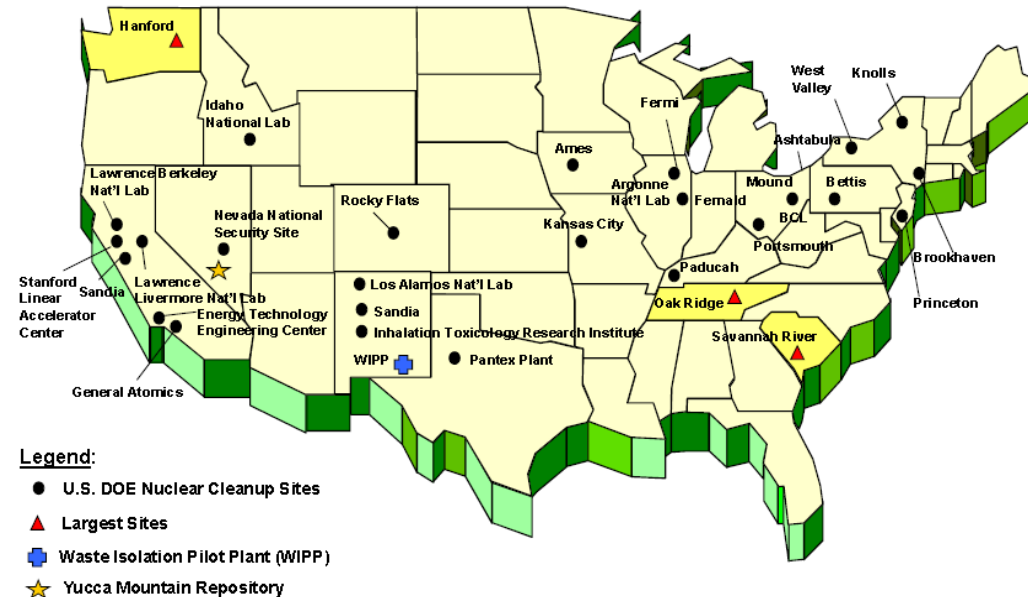


Mission: Support safe, effective, publicly-credible, risk-informed management of existing and future nuclear waste from government and civilian sources through independent strategic analysis, review, applied research and education.

Established in 1995 in response to recommendation of the National Academies of Science, Engineering and Medicine



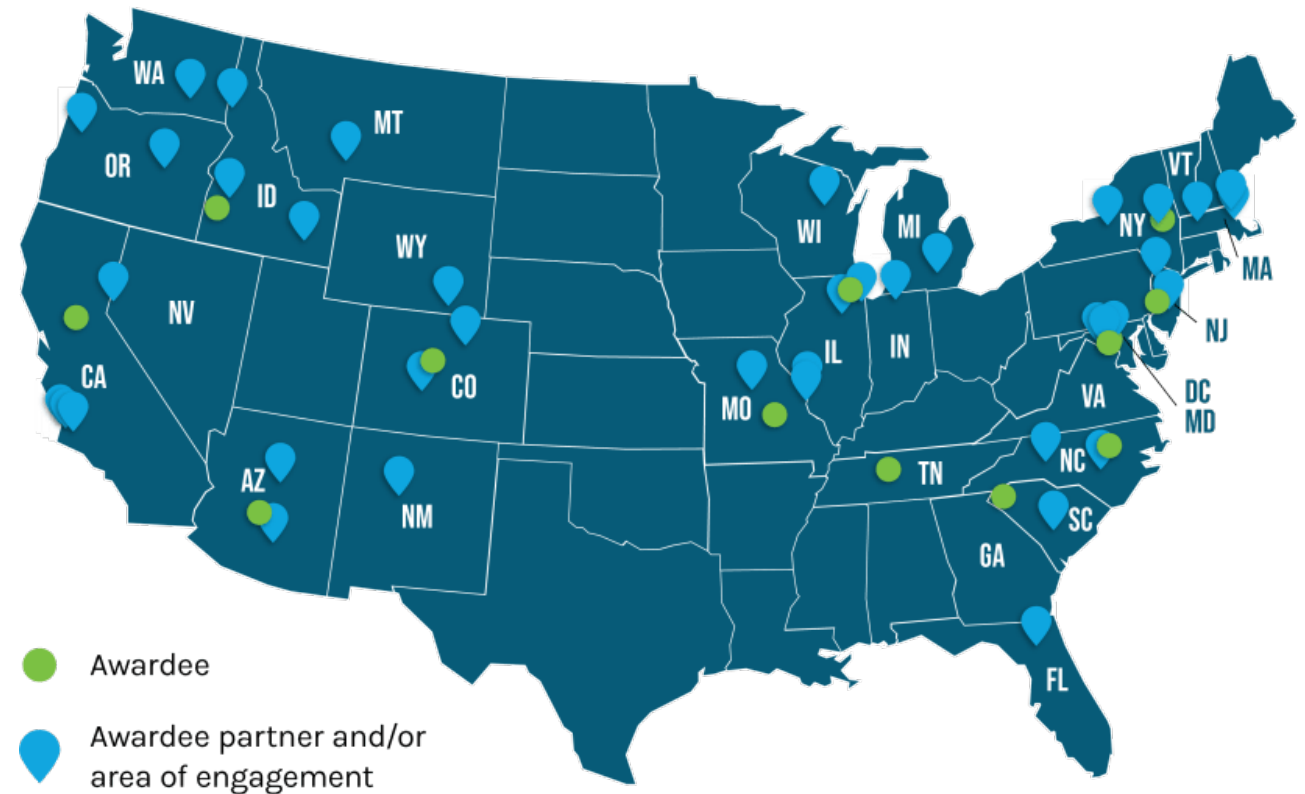
The U.S. Department of Energy's Cleanup Sites





Introduction to DOE-NE's Consent-Based Siting Consortia

In June 2023, DOE-NE announced the selection of its Consent-Based Siting Consortia—a group of 12 geographically and institutionally diverse awardees (one of which was the CRESP team).

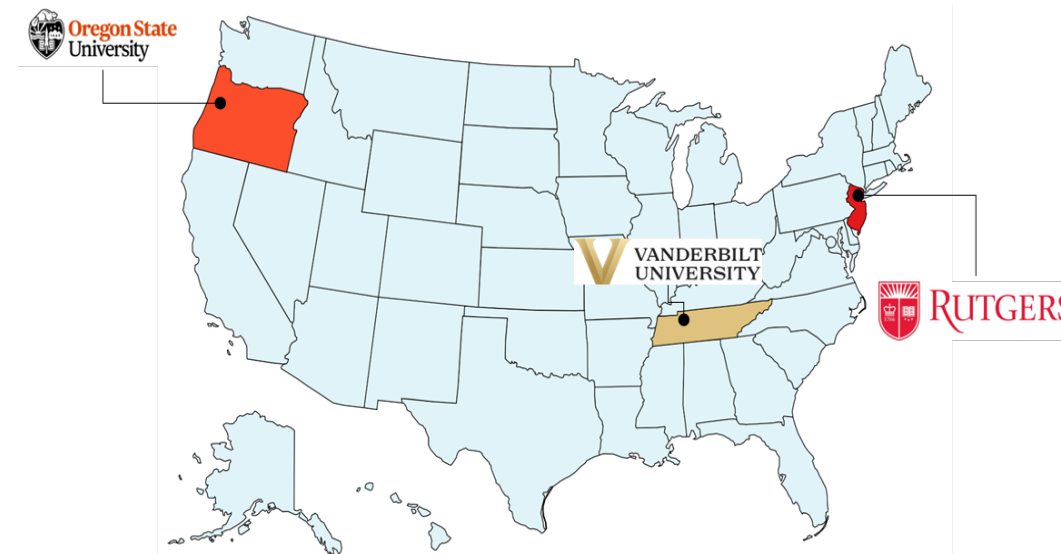


This Consortia was founded to assist DOE-NE with research regarding its pursuit of one or more federal consolidated interim storage facilities (CISFs) using a multi-stage consent-based approach that puts communities' interests at the forefront.



Introduction to CRESP Project Team

- CRESP has been performing independent, interdisciplinary research focused on waste management and environmental legacy from production of defense nuclear materials and nuclear energy for 30 years.
- Three CRESP member organizations are involved in the consent-based siting workscope:



Vanderbilt University (Steve Krahn [PI], David Kosson, Henry Mayer*, Mike Greenberg*, Tim Fields*, Joy Lee Pearson*, Megan Harkema)

Rutgers University (Joanna Burger, Matt Weber [co-PI])

Oregon State University (Kathy Higley)

* Consultants to Vanderbilt University

Areas of Expertise:

- Project management
- Risk assessment
- Stakeholder communications and Tribal outreach
- Public policy
- Communication technology
- Biology
- Health physics
- Nuclear facility safety and engineering



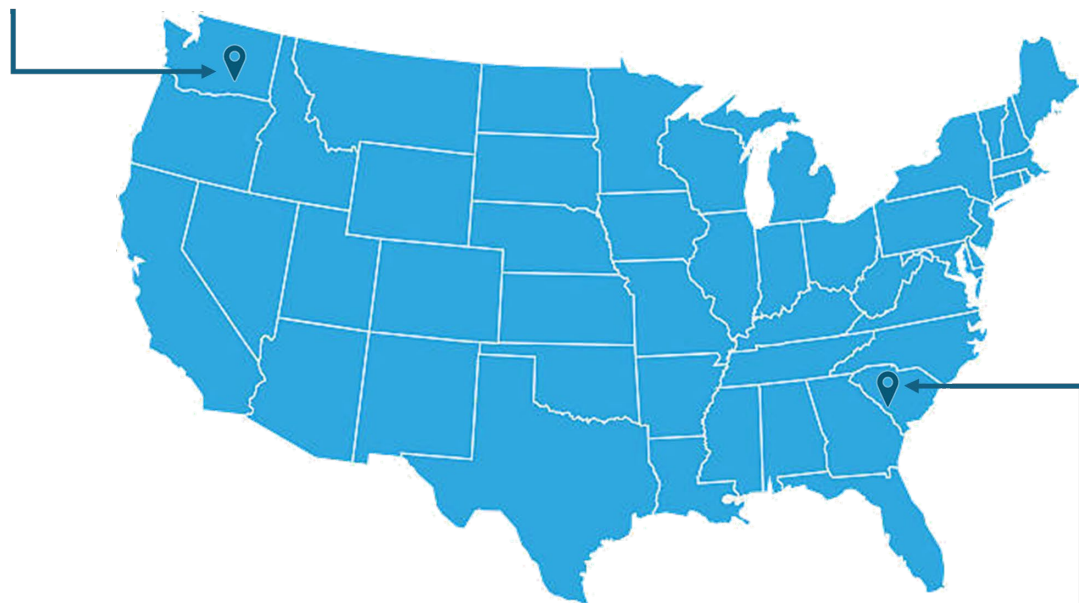
Areas of Engagement



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CRESP's project is focused on understanding existing engagement frameworks and their effectiveness at DOE sites involved in defense- and research-related spent nuclear fuel (SNF) management and decision-making.

THE HANFORD SITE

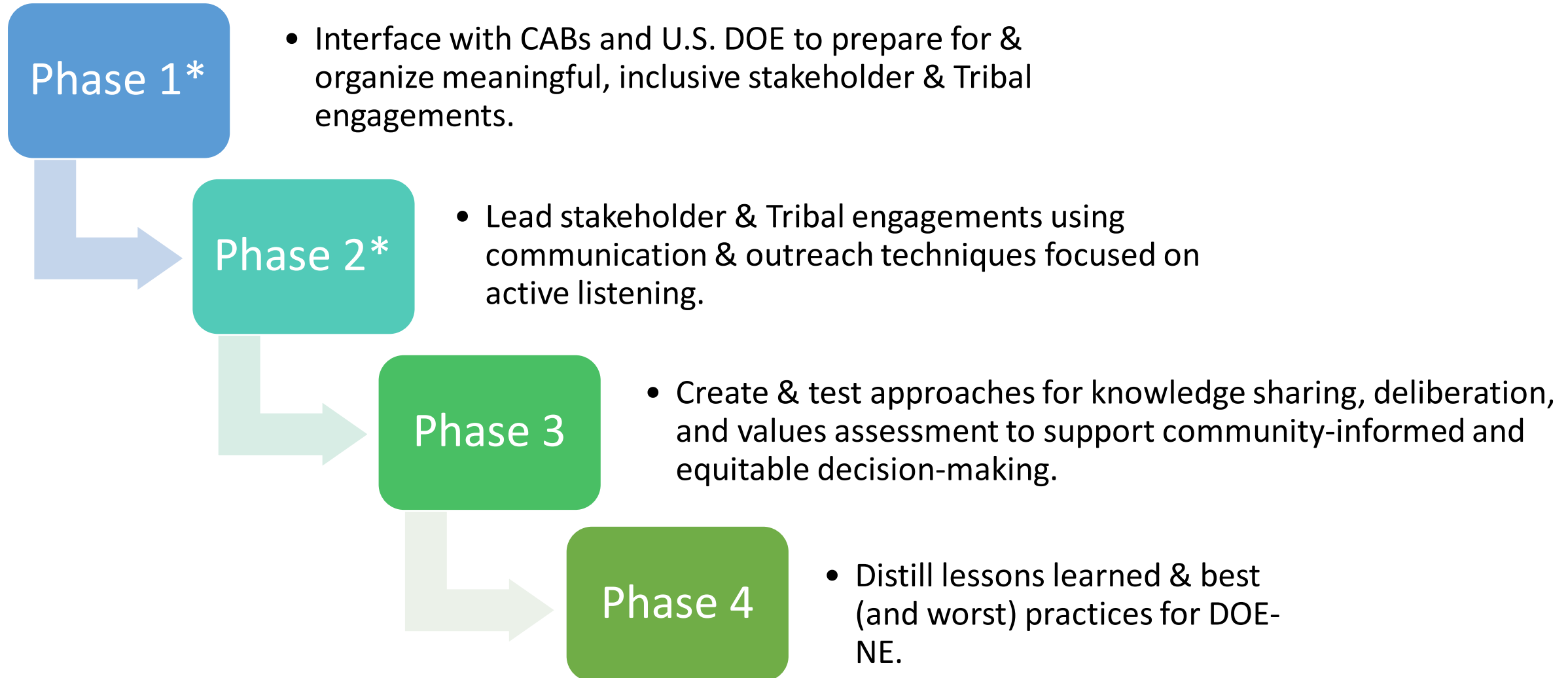


 Savannah River Site™

- CRESP understands the important role that citizens advisory boards (CABs) can play in facility siting decision-making.
- Our goal is to engage CAB members (as individuals), former CAB members, disadvantaged communities, and Tribal Nations surrounding DOE sites hosting defense- and research-related SNF:
 - Savannah River Site (SC)
 - Hanford Site (WA)
- Phased Approach—starting at SRS and then expanding to Hanford



Research Process



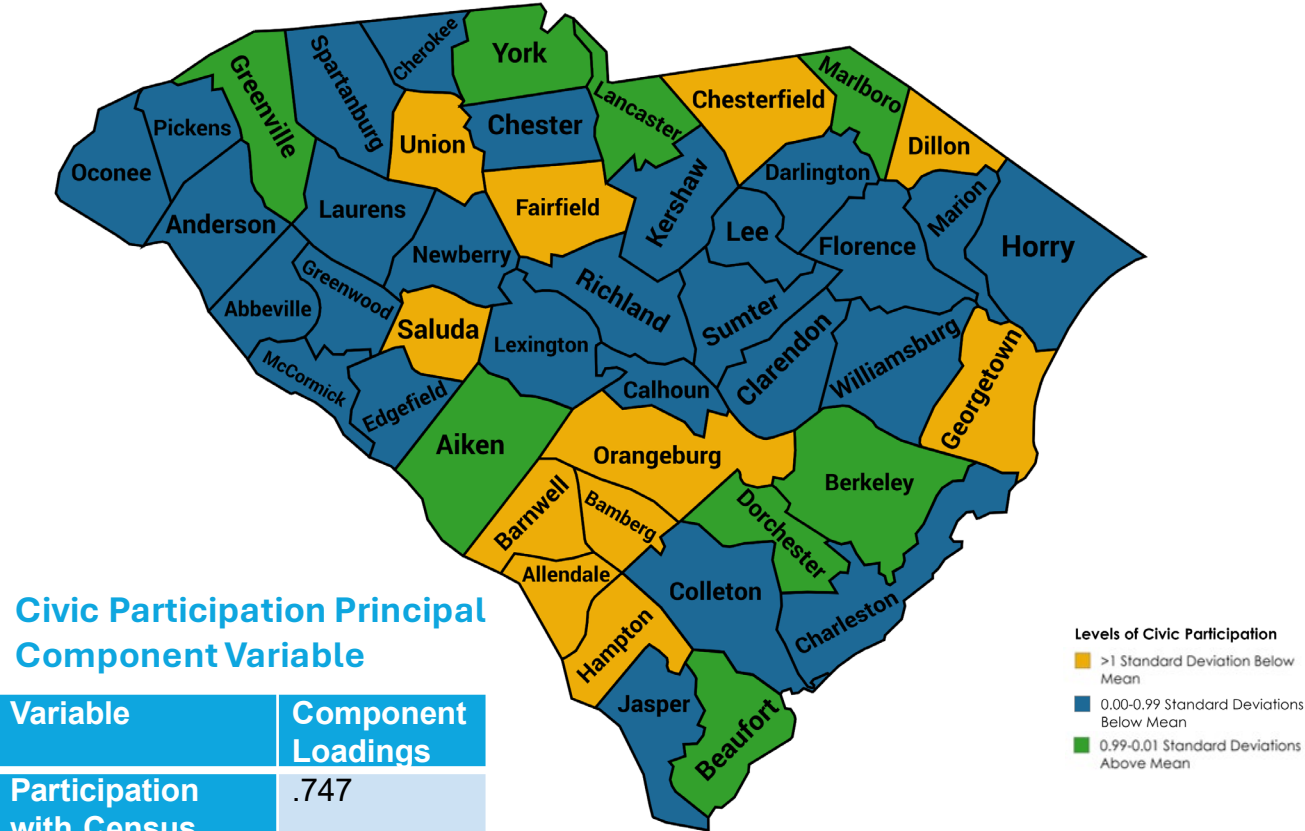
* Ongoing



Some Interim Results of Interest

What is ‘social association rate’?

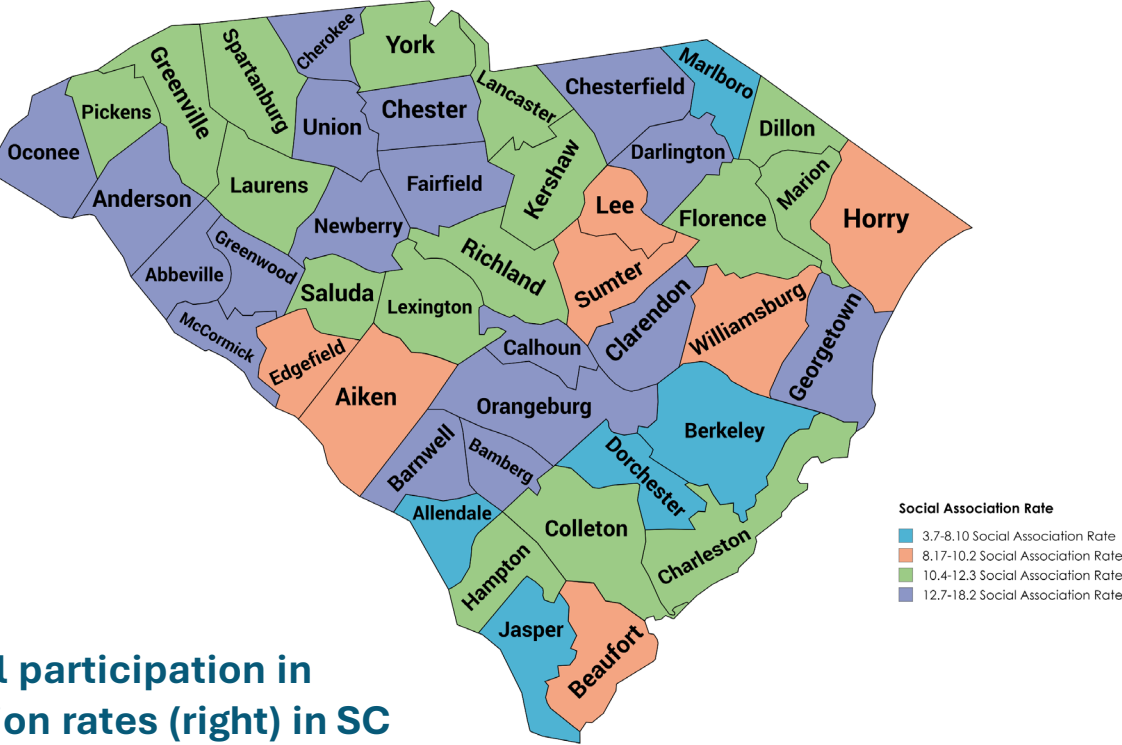
Number of membership associations per 10,000 population in local civic groups, including, e.g., bowling, golf and other sports groups, political organizations, labor and other business and professional groups



Civic Participation Principal Component Variable

Variable	Component Loadings
Participation with Census Bureau	.747
Main street program	.741
Social association rate	-.607
Voter turnout	.531
Eigenvalue*	1.757 (44%)

Analysis of factors associated with local participation in civic activities (left) and social association rates (right) in SC





Ongoing Activities in Communities Surrounding SRS

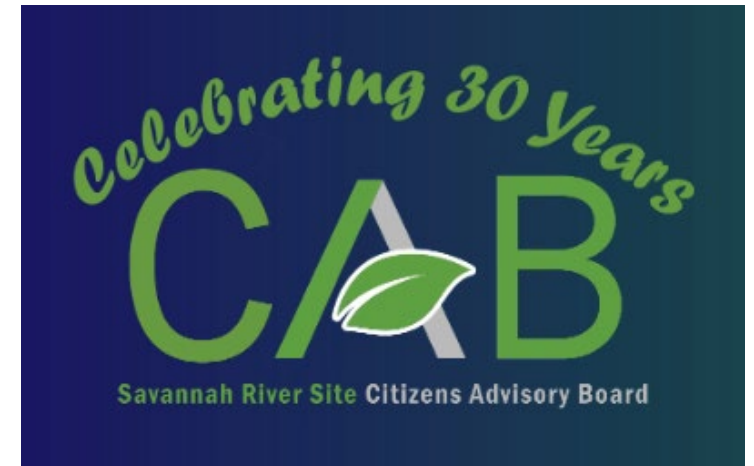


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Research team has been actively engaged in Aiken, Columbia and Augusta, as well as analyzing relevant media

- Analyzed more than 240 recent news articles from the surrounding counties on issues related to nuclear energy
- Similarly, evaluated major themes present in social media discussions within community related groups / pages
- Reviewed and analyzed transcripts from last three years of CAB meetings
- Currently conducting background interviews with community members & media

Working to identify trusted sources of information; early findings focus on the power of word of mouth & community information sharing





CAB Engagement Objectives

Round 1

Voluntary interviews and surveys focused on:

- Local, state, and Tribal* perspectives and values that influence risk decision-making; and
- Experiences of CABs at Hanford and SRS engaging with and including members that reflect a full diversity of viewpoints (e.g., environmental, public health, civic groups, labor, local and Tribal government, education, local businesses, economic development, and demographics such as ethnicity, age, and gender).

Round 2

Small-group session (with diverse representation, including volunteer CAB members from SRS) used to discuss recommendations for improving the following elements of CABs:

- Representativity;
- Risk communication frameworks;
- Strategies & decision-making; and
- Others(?).

* Tribal perspectives will be part of the Hanford engagements.



Round 1 Subjects of Interest



- **Member recruitment & retention**
- **Board representativity**
- **Opportunities for board member training**
 - Risk communication
 - Risk-informed decision making
- **Board member engagement with surrounding communities**
- **Board impacts on site decision-making**
- **Accessibility of board meetings & activities to the public**
- **Board access to technical resources/experts**
- **Board member suggestions on persons CRESPP should interview (e.g., other stakeholders, community members, state & local officials, etc.)**



Thank You!

Further participation is voluntary

All personal identifying information (PII) will be protected

For questions or comments related to this consortium,
please contact:

Name: Steve Krahn (PI)

Email: steve.krahn@vanderbilt.edu

Name: Matt Weber (Co-PI)

Email: matthew.weber@rutgers.edu

Name: Megan Harkema (assistant project manager)

Email: megan.e.harkema@vanderbilt.edu

Interested in Participating?

Email:

consent.based.siting@vanderbilt.edu



Back-Up Slides



Prior CRESP Research at the SRS and Hanford Sites



- Burger, J. (2011). Stakeholders, Risk from Mercury, and the Savannah River Site: Iterative and Inclusive Solutions to Deal with Risk from Fish Consumption. In: J Burger (ed) Science and Stakeholders: Achieving Implementable Solutions to Energy and Environmental Issues. Springer: New York.
- CRESP, 2018. Hanford Site-Wide Risk Review Project - Final Report, Consortium for Risk Evaluation with Stakeholder Participation, Vanderbilt University, Nashville, TN. Available from: <http://www.cresp.org/hanford/>. [31 August 2018]
- Greenberg, M.R., ., Mayer, H., and Kosson, D. (2021). Environmental and Social Justice for DOE EM Site-Regions: A Geographical Analysis. Project Report, date. Report by Consortium for Risk Evaluation with Stakeholder Participation, Vanderbilt University, Department of Civil & Environmental Engineering, VU Station B#351831, Nashville, TN., September. 23, 2021.
- Burger, J, Gochfeld, M, Kosson, D.S., Brown, KG, Salisbury, J, Greenberg, M & Jeitner, C 2022, 'Combining ecological, eco-cultural, and environmental justice parameters to create Eco-EJ indicators to monitor cultural and environmental justices for diverse communities around contaminated site', Environmental Monitoring and Assessment, vol. 194, no. 3, pp. 1-22. Available at: <https://doi.org/10.1007/s10661-021-09535-8>.
- Burger, J., Gochfeld, M., Kosson, D.S., Brown, K.G., Salisbury, J & Jeitner, C 2020, 'A paradigm for protecting ecological resources following remediation as a function of future land use designations: a case study for the Department of Energy's Hanford Site', Environmental Monitoring and Assessment, vol. 192, no. 3, pp. 1-29. Available at: <https://doi.org/10.1007/s10661-020-8084-x>.
- Greenberg, M., H. Mayer, D. Kosson. "Enhancing and Protecting Assets in DOE's Major Site Regions: A Test of Ideas Using Savannah River Site Census Tract Data", special study submitted to the U.S. Department of Energy, Environmental Management, October 2022.