

| Example Community Engaged Methods | Description | Climate and Health Program Maturity* | Alignment with Spectrum of Community Engagement to Ownership** | Considerations |
|---|---|---|--|---|
| Community Partner Forums or Workshops | Meetings open to the public that engage residents to provide inputs on projects, issues, problems, and needs. ¹ | Emerging | Consult | Consider how workshops can be implemented to facilitate participation (e.g., time and location). Hold these events at multiple times and in locations that are easily accessible. |
| Focus Groups or Listening Sessions | Group sessions that seek in-depth insights by gathering specific opinions and ideas. Platform for people with similar demographic characteristics or with shared experiences to express their unique concerns and perspectives. | Emerging | Consult | It is important to have trained and experienced facilitators. Consider having community members lead focus groups and listening sessions to foster trust and buy-in. Pay careful attention to who is invited to ensure that diverse perspectives are heard. |
| World Café Method | Structured conversations across multiple tables, with participants rotating to engage in ongoing discussions on a given topic. ² | Emerging | Involve | In collaboration with partners, develop compelling questions that are relevant to participant's lives and generate energy and insight as participants move from one small discussion to the next. |



| Example Community Engaged Methods | Description | Climate and Health Program Maturity | Alignment with Spectrum of Community Engagement to Ownership | Considerations |
|--|---|--|--|--|
| Surveys | Can be written or oral, but typically feature structured questions. They are helpful in collecting data on local attitudes towards specific issues or opportunities, using either open-ended questions or multiple-choice formats. | Established | Consult | Surveys that rely on "convenience samples" will often generate skewed samples that only reflect the perspectives of certain groups and not others. Working with a professional survey vendor can help to alleviate some of these concerns. |
| Community Assessment for Public Health Emergency Response (CASPER) | A type of Rapid Needs Assessment that provides household-level information to public health officials and emergency managers. The results can be used to initiate public health action, identify information gaps; facilitate disaster planning; allocate resources, and assess needs in the community. | Established | Inform/Consult | Traditional CASPER methods can be adapted to feature more community engagement in the design, implementation, and interpretation of results. ³ |
| Interviews | In-depth information is gathered from individual participants, usually involving open-ended questions and probes. Interviews can be unstructured, semi-structured or structured. | Established*** | Consult | Interviews can be time intensive to conduct, which can limit the number that can be done. Consider who has the most important perspectives for the topic at hand. Include critics and dissenters. |

^{***}Individual 1:1 interviews are not technically difficult, and they can be extremely valuable for emerging, established, and advanced programs in terms of understanding the context in which work on climate and health may be taking place. However, interviews can be time consuming, and they should be conducted by someone with at least basic experience/training in interviewing.



| Example Community Engaged Methods | Description | Climate and Health Program Maturity | Alignment with Spectrum of Community Engagement to Ownership | Considerations |
|---|--|--|--|---|
| Storytelling | A space for individuals to share their personal stories or narratives related to their own experiences. Offer interest holders to portray how a topic or issue has personally impacted them as a way to teach others about a topic and provide culturally-relevant information. | Advanced | Involve | With consent, stories can be used in multimedia to convey insights to a larger audience. Creating a guiding set of prompts for participants can help focus stories. Stories should be relatively brief to be most engaging. |
| Storytelling Circles; Indigenous methods | A space for individuals to share their stories or ideas related to a theme, fostering a diversity of perspectives within the group. Indigenous community engagement and evaluation methods have their own unique approach. These approaches offer opportunities for participants to share their insights, concerns, and aspirations, helping to ensure that methods align with cultural values. | Advanced | Involve | Strong Indigenous leadership and facilitation experience is needed to implement these techniques. Indigenous healing circles are a related approach; this is best used when the method is selected, organized, and led by Indigenous People themselves. |
| Asset or Community Mapping | Technique for cataloging assets or resources a community has access to. There are three types: (1) <i>Institution mapping</i> involves creating a map of positive community institutions. (2) <i>Individual mapping</i> identifies the capacities of community members or partners. (3) <i>Citizen association mapping</i> creates a map of the associations through which community members and partners collaborate. | Advanced | Involve | This strategy aligns naturally with an asset-based approach. It is also particularly helpful in resource-limited settings where understanding available assets and pooling assets are key. ⁹ |



| Example Community Engaged Methods | Description | Climate and Health Program Maturity | Alignment with Spectrum of Community Engagement to Ownership | Considerations |
|---|---|--|--|---|
| Ripple Effect Mapping | Ripple effect mapping (REM) documents the impacts of a project, program, or partnership. It combines several different types of methods (e.g., individual interviews, focus groups, mind mapping) to tell the story of how collective actions can lead to change over time. As such, it is also an evaluative technique. 10 REM sessions are typically 1-2 hours in duration. Participants can choose to use mind-mapping software or just notes taped to a wall. | Advanced | Involve | The process helps participants to see connections among the effects ("ripples") that they are creating. This method works best with no more than 20 participants at a time. Participants also typically build personal relationships. A facilitator and a mapper (co-facilitator) are usually needed to manage the session. |
| PhotoVoice | Community members take photos to illustrate issues affecting their everyday lives. 11, 12 Selected photos are shared in group settings and used to explore the reasons, emotions and experiences that have informed their chosen images. Participants can also select a forum (e.g., town meeting, art gallery, or virtual space) to share their images with others. | Advanced | Involve | This is best for groups of 8-10 participants. PhotoVoice can also be easily disseminated to wider audiences. Both participants and staff will need training. Among other ethical issues, consider issues of informed consent, safe photographing practices, ownership, and copyright at the beginning. |
| Participatory GIS (PGIS) | Combines various forms of geospatial information and methods (e.g., global positioning systems (GPS), story mapping) to represent the experiences of a place. Maps are used for contextual learning, discussion, analysis, decision making and advocacy. 13, 14 | Advanced | Involve | PGIS implies making geographic technologies available to structurally marginalized groups to support capacity-building and leadership. It can be combined with techniques like PhotoVoice and storytelling. |



References:

- 1. Donovan M. *Community Engagement Types and Tools.* Published online 2023. Accessed February 26, 2024. https://scholars.unh.edu/cgi/viewcontent.cgi?article=2232&context=extension
- 2. McGrath C, Kennedy MR, Gibson A, Musse S, Kosar Z, Dawson S. World Cafés as a participatory approach to understanding research agendas in primary care with underserved communities: reflections, challenges and lessons learned. *Research Involvement and Engagement*. 2023;9(1):101. doi:10.1186/s40900-023-00509-3
- 3. CDC. Overview of CASPER. Published April 8, 2024. Accessed September 12, 2024. https://www.cdc.gov/casper/php/overview/index.html#:~:text=CASPER%20is%20a%20type%20of%20rapid%20needs%20assessment,a %20cross-sectional%20epidemiologic%20design%3B%20it%20is%20not%20surveillance.
- 4. Belone L, Rae R. *TALC Tribal Accreditation Learning Center.* Published December 11, 2015. Accessed April 15, 2024. https://www.nihb.org/docs/01042016/2015TALCWebnair.pdf
- 5. Wali S, Superina S, Mashford-Pringle A, Ross H, Cafazzo JA. What do you mean by engagement? evaluating the use of community engagement in the design and implementation of chronic disease-based interventions for Indigenous populations scoping review. International Journal for Equity in Health. 2021;20(1):8. doi:10.1186/s12939-020-01346-6
- 6. Wilder Research, Bowman Performance Consulting, Minnesota Department of Education. Indigenous Evaluation 101 Guidebook. Published October 2022. Accessed May 14, 2024. https://www.wilder.org/sites/default/files/imports/IndigenousEvaluationGuide_Accessible_10-22.pdf
- 7. Aytur S, Hecht J, Kirshen P. Aligning Climate Change Adaptation Planning with Adaptive Governance: Lessons from Exeter, NH.; 2015. Accessed March 17, 2024. https://nerrssciencecollaborative.org/media/resources/Aytur_et_al-2015-Journal_of_Contemporary_Water_Research_%26_Education.pdf
- 8. Baird L, Peterson M. Introduction to Community Asset Mapping: Training for New York City Department of Probation.; 2023.



- 9. FEMA. A Whole Community Approach to Emergency Management: Principles, Themes, and Pathways for Action.; 2011. Accessed March 3, 2024. https://www.fema.gov/sites/default/files/2020-07/whole_community_dec2011_2.pdf
- 10. University of Minnesota Extension. Ripple effect mapping. University of Minnesota Extension. Published 2024. Accessed May 14, 2024. https://extension.umn.edu/community-development/ripple-effect-mapping
- 11. Rimmler SM, Shaughnessy S, Tatum E, et al. Photovoice Reveals Residents' Concerns for Air and Water Quality in Industry-Impacted Rural Community. *International Journal of Environmental Research and Public Health*. 2023;20(9). doi:10.3390/ijerph20095656
- 12. Wang C, Burris MA. Photovoice: Concept, Methodology and Use for Participatory Needs Assessment. *Health Education and Behavior*. 1997;24(3):369-387.
- 13. Riggsbee K, Riggsbee J, Vilaro MJ, et al. More than Fast Food: Development of a Story Map to Compare Adolescent Perceptions and Observations of Their Food Environments and Related Food Behaviors. *International Journal of Environmental Research and Public Health*. 2018;16. https://api.semanticscholar.org/CorpusID:58575920
- 14. Williams B, Szaro R, Shapiro C. Adaptive management: The U.S. Department of the Interior technical guide. Published 2009. Accessed March 17, 2024. https://www.usgs.gov/publications/adaptive-management-us-department-interior-technical-guide