

Findings and recommendations from preliminary outreach on community water and water data-related priorities

Summer 2023

During a May meeting, the Steering Committee discussed and recommended four priorities for the Consortium to advance between September 2023 and September 2024. The priorities flowed from a Consortium outreach initiative that drew from interviews and public hearings to better understand where community-informed insights could be brought into the Consortium's projects, operations, and governance structures.

The near-term priorities being recommended by the Steering Committee are:

- **Continue building relationships** with advocacy groups, NGOs, and others as potential partners on Consortium projects.
- **Continue learning from community-based expertise** by interviewing experts, attending public hearings, and holding group listening sessions.
- **Assess avenues through existing and future projects to address community water needs** by prioritizing water data projects for underserved communities and their partner organizations.
- **Continue to pursue more equitable and inclusive practices in the Consortium** through governance structures such as stipends/honorariums for community partners and continued recruitment of diverse leadership for the Steering Committee and Board of Directors.

The California Water Data Consortium acknowledges and seeks to address injustices perpetuated by systemic racism and reflected in a lack of representation in water decision-making. Indeed, the California Water Resources Control Board calls out the systemic inequities that have unjustly burdened individuals, households, and communities of color in their [Racial Equity Resolution](#) released in 2021. The Resolution aims to confront these inequities with humility and service, led by those who have been unjustly burdened. In addition, the California Department of Water Resources has undertaken efforts to better listen to, partner with, and serve underserved communities through its [Disadvantaged and Tribal Community Involvement Program](#) (DACTI Program). As a newly formed and developing organization, the Consortium seeks to build on these and other efforts to develop practices and governance structures to begin addressing inequities and injustices related to water quality, access, delivery, engagement, and decision-making representation.

The insights below draw from direct interviews and public hearings and will inform the Consortium's work on water data solutions, policies, and outcomes and help ensure projects reflect the priorities of California's diverse communities. In conducting this preliminary outreach, the Consortium aimed to:

- **Better understand the experiences, priorities, and interests of diverse leaders and the communities they serve** as they connect to water, water data, and related topics.
- **Better understand the capacity needs of communities** and community-based organizations to engage in water and water data issues.
- **Identify best practices for engagement** with underserved communities and community-based organizations.

The Consortium spoke with six civic leaders with expertise from grassroots organizing, community-based research, and public service. These leaders work on issues like the Sustainable Groundwater Management Act, public participation practices, water decision-making in the Central Valley, Tribal water rights in the Owens Valley, and health and environmental issues around the Salton Sea. The Consortium also listened to public commentary at gatherings across the state, including State Water Resources Control Board (SWRCB) meetings, regional water workshops, and a Farm Bill listening session.

This memo presents synthesized findings from interviews and public commentary and preliminary recommendations that suggest how and where community-informed insights can be brought into the Consortium's projects, operations, and governance structures.

Water Data Themes

Five major themes came up in the expert interviews and public listening sessions. It should be noted that water experiences and challenges vary greatly between communities and the highlighted themes are not a comprehensive nor exhaustive description of the priorities and interests of all Californian communities.

Findings on each theme are shared with brief recommendations for how insights can be used to inform efforts at the Consortium and other organizations and agencies in California.

1. Water data are more equitable and useful when they are developed collaboratively and are actionable.

Meaningfully involving community representatives in the development, interpretation, and use of water data, such as in the creation of water data tools, helps ensure that these resources are responsive to the needs and priorities of communities.

Building water data and water data tools from an equity and justice perspective requires that community-based experts are embedded in the design process. Even with the best intentions, data tools that fail to engage community representatives (community-based organizations and/or community members) often become too technical and inaccessible to envisioned users. Getting community-based input before design begins on conceptual goals and throughout the design process on data tool prototypes can help improve the overall outcomes and usefulness of these tools. Collaborative work takes time, is iterative, and requires building trust and relationships with community partners. Collaboration is resource intensive, but the benefits can be quickly recouped in the high quality of work produced.

A partnership is most effective when it can begin without expectations and with open-ended questioning about how to best plug in and be useful for a given community or community-based organization. Ongoing opportunities for community-based feedback can help create accountability and ensure community perspectives are actively represented in the work. Especially in Tribal contexts, partnerships require ongoing approval from Tribal Councils, Elders, or others at each new stage of work.

Active collaboration and engagement may necessitate changing goals, priorities, and projects. For example, a Californian water organization identified that there may be significant water data gaps in Tribal Nations and proposed doing a statewide water data assessment across Tribal Nations. Tribal Governments decided that they did not want to participate because the conceptual framework of being in a 'statewide assessment' as a collection of sovereign and separate Nations felt inappropriate and information in each Nation was not standardized. The water organization respected this wish and did not continue with the assessment. Respecting Tribal sovereignty, community agency, and self-determination requires not just collecting community-based perspectives, but also acting on them.

Along with providing perspectives on needs and data priorities, community representatives possess lived expertise that can be an important source of qualitative data. One interviewee worked with local agencies and community members to understand what they saw and experienced in the community around groundwater pumping, the impacts of climate change, and the impacts of industrial mining. Qualitative data can inform and be an invaluable companion to quantitative data.

A community-based, outcome-oriented approach to water data can help frame new tool development. Interviewees learned through their work with communities that water data is most helpful if it can help support water policy implementation, aid advocacy efforts, and improve the water realities in underserved communities. Water data can be made actionable by including analyses that offer clear and direct takeaways for users. As an example, aggregating water data by political districts would help data users better understand the water issues of constituents and provide compelling statistics that could be shared with elected officials to effect change.

Recommendations

- **Survey community-based organizations about their water advocacy needs and data questions.** A simple survey sent to community-based organizations could help illuminate more specific data questions that the Consortium could address in future projects as well as provide a resource to State partners about areas of potential focus.
- **Bring community goals into projects through user testing.** The Consortium can help make water data and tools more user-friendly and accessible through its projects, setting a model for active and inclusive community involvement. At different project phases, the Consortium could bring in community-based data users to test deliverables and offer feedback on how user-friendly and relevant it is for their work. Feedback can inform iterative development and shape final deliverables.
- **Create user guides and share use cases along with public deliverables.** To ensure community-based data users can make use of data products developed by the Consortium, prepare user guides that demonstrate how to use the data and ways that the information can be used to reach their goals. Clear flags would help data users quickly see if the information the data provides would be useful for their efforts.

2. More granular water data and sociodemographic data would help address community water vulnerabilities.

More local, granular water data can help underserved communities and their advocates better understand and address water issues. Improved water data would also help water managers better assess, prioritize, and advance water projects where they are most needed.

Localized, granular data is needed on water quality, present and future water availability, and water affordability, especially in low-income communities and communities of color that face some of the greatest water insecurity. Additional work is also needed to bring sociodemographic data and racial equity data into water data platforms and tools to show how conditions affect communities differently.

On water quality, interviewees suggested that more data is needed on drinking water safety from public water supplies and private wells, in small community water systems, and on contamination levels in irrigation canals. In low-income neighborhoods where water infrastructure and residential pipes may be the oldest, additional water quality testing at the tap (Point of Use testing) is especially useful. On water availability, additional water data is needed on domestic well levels, small-scale farm water use, snowpack projections, and groundwater levels. Interviewees highlighted that water data are needed on both current and projected water availability under different climate change scenarios and given potential demand changes (e.g., increased groundwater pumping or agricultural changes). On water affordability, local-level data is lacking on water rates and household water bills, especially regarding how water rates vary by neighborhood and community.

Water data projects could be well-suited for a community-engaged science approach that involves community members and community-based organizations in data collection. Including communities in data collection can help water users to be more connected to, and understand more about, their water data. Interviewees shared that, in the light of historic and ongoing systematic discrimination, some communities mistrust their water, government entities that manage it, and water data that is collected by the government. Involving communities in water data sampling and analyses is one avenue to help improve transparency and build confidence in data.

Incorporating sociodemographic data and racial equity data collection with water data was also identified as a priority by interviewees. SWRCB identifies race as the strongest predictor of water and sanitation access. The more water data tools and platforms can clearly show connections between water issues and sociodemographic indicators, the more likely systemic discrimination and inequities will be acknowledged and remedied.

Recommendations

- **Prioritize projects that focus on creating granular data for California’s most at-risk water users.** Work with community partners to design and execute projects to ensure that data tools collect granular data that are relevant to communities. The Consortium could use its current Groundwater Accounting and Data Reporting project as a testing ground to emphasize data collection and assessments for at-risk water users in the Central Valley.
- **Explore avenues to bring community-engaged science into pilot projects** to help build public trust and the capacity of communities to understand their water systems. Lessons learned and best practices from collaborative data collection can be shared with state partners, such as the avenues of communication and engagement preferred by certain community-based organizations and ways to best incorporate racial equity data into water data collection.
- **Incorporate sociodemographic data and map layers into water projects.** Bring in sociodemographic data from sources like the CalEnviroScreen and the U.S. Census to overlay with new water data products. Overlaid data may help identify relationships and connections between indicators that can inform future projects (e.g., a correlation between vulnerable groundwater wells and the prevalence of low-income communities).

3. Water data accessibility can be improved through streamlined sharing and capacity building.

Communities and community-based groups need additional support to access, interpret, and use relevant water data. Where water data already exists, it is often inaccessible. Interviewees shared that a major data challenge is finding relevant data resources in the first place. Once data is accessed, additional knowledge is needed to understand and analyze information and then use these findings in advocacy efforts. These challenges can be true for community-based organizations as well as community members who may be unfamiliar with the ins and outs of

state data platforms. Some academic and community-based groups provide water-related capacity building to communities through workshops, webinars, web-based tools, short videos, and community-engaged science projects, but there are still gaps and a need for additional training support.

Capacity building can help empower community-based organizations and enable community members better understand the quality and availability of their water, make more informed water choices for their households, and advocate for more equitable water policies and practices. One interviewee shared that it would be helpful to have “more forums for communication and safe environments to engage and learn” about water data. Another interviewee shared that more public outreach around water would help educate and inform community members about water issues in their region and empower them with the information they need to make choices for their households and communities.

Recommendations

- **Offer public workshops in partnership with state agencies** to help community-based organizations and/or community members identify and use relevant data sources. Training efforts could be tested through Consortium projects and expanded as internal staff capacity and external interest grows.
- **Identify and elevate state and community partners who offer water-related training** on the Consortium website and through other public venues.
- **Provide one-off support and advice to community-based organizations that would like to deepen partnerships with the Consortium.** The Consortium can help create value and build relationships by offering its technical expertise and connections to state agencies to new partners. For example, the Consortium could work with community-based organizations connected to the Consortium’s Delta project.

4. Information gaps around water governance, decision-making, and funding opportunities make water data less useful.

It is often difficult to identify who manages the water or a specific component of the water in a given locale, when public meetings are held, how community members can be involved in decision-making, and what resources are available to support water improvements. Without access to water governance, decision-making, and funding, even accessible water data may not end up being used or useful.

Simple factors can make water governing bodies largely inaccessible to the public. A UCLA Luskin Center study in Los Angeles County found that 22% of water governing bodies in the county lack websites and less than 10% offer resources translated into Spanish. Without a website, it is difficult for community-based organizations and community members to access water data, learn about their water, and get involved with local issues and management decisions. In a state as diverse as California, improving multi-lingual access is also critical so that all residents can engage.

Water governance inaccessibility is also shaped by how decision-making takes place. Community representatives at SWRCB and DWR hearings shared concerns about the transparency of regional water governance operations and the need to expand community engagement in decision-making to produce more equitable water outcomes. Even where communities, community-based organizations, or Tribal Nation members do regularly attend public meetings, they may not be able to shape decisions through traditional bureaucratic channels.

Knowledge gaps also exist around federal, state, and local water funding opportunities. Two interviewees shared that more resources are needed to help residents and community-based organizations understand what resources exist, whom to contact if they want to learn more, and what treatment options could help solve local water issues.

Recommendations

- **Help community partners access government bodies.** The Consortium's mandate is not one of an advocacy organization; however, the Consortium has unique access to and relationships with both public entities and private organizations across California. Where appropriate, the Consortium could help community-based partners identify and connect with State partners through its workgroups, governance bodies, and in one-off conversations and listening sessions.
- **Share funding opportunities related to water data projects.** In publicly available water data projects, the Consortium could include a list of potential State funding opportunities, contact information, and treatment options for interested parties to explore. For example, for the Groundwater Accounting and Data Reporting project, the Consortium could add a list of funds that support additional groundwater testing (such as SAFER) and groundwater treatment options.

5. Water data can be made more accessible through inclusive outreach.

A critical way to make water data accessible beyond its design and creation is by sharing data how, when, and where community representatives prefer. In their work with and for community representatives, several interviewees discussed how they strive to meet community representatives where they are.

An interviewee who works on SGMA in the San Joaquin Valley directly asked participants what methods of engagement and communication they prefer. Based on community input, they created tailored learning videos, flyers, and live workshops in English, Spanish, and Hmong to help train and get feedback on priorities from the community. Another interviewee who leads participatory-based research directed workshops with community members at typical gathering places and as an addendum to existing community meetings. Other interviewees host in-person workshops directly in underserved communities and host regional online meetings. The value of going directly to communities is often noted in inclusive engagement practices. Matching public outreach and engagement practices with community preferences can help ensure community representatives can participate fully.

Recommendations

- **Continue to conduct inclusive outreach with diverse communities** to understand priorities and preferences and reflect insights in project work, such as in the Groundwater Accounting and Data Reporting project.
- **Translate major Consortium deliverables into Spanish** and other relevant languages as needed. Encourage State partners to translate other public data resources. Additional languages to consider include Chinese, Hmong, and Tagalog.
- **Share relevant Consortium resources via communication channels run and used by community-based organizations.** For example, the Water Equity and Climate Resilience Caucus is a hub for community-based organizations and could be an effective channel for sharing resources about workshops, webinars, or blog posts.

Overarching Recommendations

The Consortium can continue to elevate community-based organizations' and community members' insights and expertise. Interviewees were excited and grateful for the Consortium to be actively listening and encouraged the team to continue this effort. The Consortium can build on the insights and proposed recommendations shared in this memo as well as:

- **Continue building relationships, especially with community-based organizations.** Community-based organizations like advocacy groups and NGOs are the best place to start when building collaborative, community-based work, as these organizations have direct ties and trust with community members. Identify potential partners to work with on Consortium projects and begin strengthening relationships.
- **Continue listening to and learning from community-based expertise** through direct interviews, attending public hearings, and holding group listening sessions. Ongoing outreach and engagement will help the Consortium stay attuned as community priorities and interests continue to evolve. Listening sessions may be especially useful when community leaders can provide insights and feedback on Consortium projects.
- **Assess avenues through existing and future projects to address community water needs and opportunities.** The Consortium can develop design processes for its water data projects that prioritize and benefit underserved communities. For example, through the Groundwater Accounting and Data Reporting project, small-scale historically underserved farmers and the community-based organizations that serve them could be engaged with compensation and asked for their feedback on the emergent tool. Through the Urban Water Reporting Project, the Consortium can help ensure that water rates and water scarcity data, both priorities shared by community-based experts, are more accessible to the California communities that are most vulnerable.
- **Continue to pursue more equitable and inclusive practices in the Consortium** through governance structures. As the Consortium continues to evolve and if capacity grows, the team can explore additional inclusive and equitable representation practices, including:

- **Offer engagement compensation or honorariums to community-based partners:** Compensating community-based experts for their time and expertise is an important practice that more public and social sector organizations are pursuing. Compensation typically ranges from \$50–\$100/hour to larger stipends or contracts for longer engagements.
- **Recruit diverse and community-based leaders to the Consortium Steering Committee and Board of Directors:** New leaders can bring new perspectives that benefit the Consortium while ensuring the organization actively reflects the needs and priorities of diverse and underserved communities.

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