California Water Data Consortium

California Water Data Consortium
Steering Committee Meeting Notes

February 28, 2024

1:00 – 4:00 p.m.

Meeting Goals

- Welcome our new Steering Committee member
- Provide a venue for Steering Committee members to update one another on their water data-related work and potential opportunities for collaboration or coordination
- Jointly discuss ideas for demonstrating the return on investment for a modern water and ecological data future
- Discuss Consortium projects and potential decision points

Action Items

- Please send any additional recommendations for regions, sectors, or people to talk to for the economic analysis work to Tara Moran and Patrick Kallerman.
- Keep an eye out for emails from Kristine Johnson and Dave Orth regarding the CEO Search.
- Reach out to staff if you have any questions or want to become more involved with any of the project work.

Welcome, Goals, and Agenda Overview

Martha Davis, Consortium Steering Committee Co-Chair, welcomed Katie Regan as a new Steering Committee member and reviewed the agenda.

Approval Items

Approve: Consent Items

Nick Martorano asked if there were any changes suggested to the draft minutes from the October 11th, 2023 meeting. There were no changes suggested. There was not a quorum, and this approval item will be revisited if quorum is established.

Discussion Items

Communicating the value of investing in water and ecological data for a modern data future in California

Tara Moran gave an overview of the work to date. During the last Steering Committee meeting, there was a robust conversation around interviews that Consortium staff conducted with 17 AB 1755 implementing agency staff. Based on that conversation, Hannah Ake has developed a series of figures around current and potential governance structures, data roles, and data

structures that we anticipate being necessary to accelerate the adoption of AB 1755 across the full Partner Agency Team. While the Consortium can begin advancing metadata standards (highlighted as an acute need during our last Steering Committee meeting), the interviews highlighted the long-term need for resources across state agencies to fully engage AB 1755 implementation. Achieving this goal will require a concerted and ongoing effort with state agency decisionmakers, funders, and others. While a larger campaign around water data modernization has not yet been developed, we would like to develop an initial economic analysis that can serve as the basis for these conversations.

The economic analysis is being undertaken in partnership with the Bay Area Council Economic Institute. Tara Moran introduced Patrick Kallerman, Vice President of Research at the Bay Area Economic Institute, who has joined the Steering Committee meeting to help facilitate the conversation. Patrick Kallerman gave an overview of the work of the Bay Area Economic Institute who is undertaking the economic analysis with the Consortium.

Tara Moran and Patrick Kallerman have been reaching out to a number of individuals to determine what kind of economic analysis would land well with state leadership and decision makers. The goal is to make a clear, compelling, case of the value of water and ecological data.

Discussion questions:

- Are there any examples / case studies that you think we should consider?
    - Patrick Kallerman stated that he heard that there is a great case study in the energy sector, there is a fantastic energy data infrastructure and reporting system and means of communicating between agencies and states. Thought this was compelling. What if CA or the US had a water data system like the energy sector?
    - Tara Moran added what the redundancy in urban water reporting costs both suppliers and state agencies, could be a possible case study. One concern is that getting too deep or niche, may not land with our desired audience(s).
    - Paul Shipman suggested the Groundwater Sustainability Plans as an example of data out there that is in very different scales that does not add up very well. This is a somewhat recurrent problem; data is narrow and has no residual value outside of the specific data being reported.
    - Martha Davis suggested examining water demand and assumptions that water demand will rebound and how important it will be to manage water supply for resiliency and demand trends. As we deal with climate change, how do we better understand trends and manage infrastructure planning in that context?
        - Patrick Kallerman added that this illustrates how things are going to get more complicated in the future, and the need to be able to respond more quickly in the future.
        - Hannah Ake added that recycled water use models are also probably modeled on historic water use.

        - Martha Davis also wanted to raise the issue of rate structure and water affordability as a huge concern. The state needs to ensure reliable water supplies that are affordable.
            - Tara Moran agreed that this relates well to the energy sector and thinking about tiered pricing.
    - Katie Regan mentioned the open data group out of NASA that is doing work on open data for life in space. Data that can be used by NASA and research alike. Would be so interesting to talk to them about how they are funded and their data architecture and how they are thinking about scaling.
        - https://osdr.nasa.gov/bio/
    - Nick Mortorano suggested getting a better understanding of water supply, need more stream gauges. There must have been more research for State Bill 361. There have to be other states who are doing this better as well. Also thinks swimming safety could be a good opportunity, California does not do a good job of measuring water quality for swimming or other uses.
    - Tara Moran asked if wells have gone dry, is that a good data set to explore? Eddie O'Campo replied there is some data collection but we need to consider if the data being collected consistent and accessible. This is a challenge with water data collection. The Consortium might be able to provide some uniformity expectations to help with this.
- Tara Moran asked are there other regions we should be focused on?
    - Eddie O'Campo suggested some studies done in Central Mexico.
- Hannah Ake asked if was there any economic analysis before AB1755?
    - Greg Gearheart replied that there were some articles and reports published, there was the Aspen Institute that did a report on open water data and the Redstone Strategy paper, Sustainable Governance and Funding for Open Water Data in California.
- Martha Davis suggested reaching out to Newsha Ajami, Mike Antos, and Chris McCready since they are not able to participate here today.
- Tara Moran asked if there are other good examples in other sectors?
    - Katie Regan suggested the Cradle to Career team that is tackling education data. Cradle to Career is tackling the longitudinal data set from early education to career progression.
    - Nick Martorano suggested impacts to the fishing industry and Indigenous and subsistence fishers that rely on fish, from mismanaged or under allocated water flows.
    - Greg Gearheart suggested the California Energy Commission which just pivoted to a 15 minute data collection and did some technical gymnastics to pull that off.
    - Paul Shipman suggested to reference the Data for Water Decision Making from Berkeley: Data for Water Decision Making - Berkeley Law. This included 20 identified use cases, although does not get into economics at all.
    - Hannah Ake suggested National Science Foundation (NSF), which for decades has been investing in open data repositories with public funding and requires NSF grantees to publish the public domain repository.

    - Paul Shipman suggested the flood example at Tulare Lake. The flood fight specialists that came back from that event gave some internal talks on the difference in data between that event and other emergency response DWR engages in.

Patrick Kallerman invited people to continue giving recommendations offline. Tara Moran thanked the Steering Committee for participating in the brainstorm, once there are more concrete materials to respond to, staff will send those out for review.

Patrick Kallerman left at approximately 1:55pm.

Update: Updates from Steering Committee / Working Group Co-Chairs

This part of the meeting is an opportunity for everyone gathered here to learn about what everyone else is doing. This can be events, projects, or other pertinent updates.

- Nick Martorano shared that there is a gap in state representation on the Consortium Steering Committee and the Partner Agency Team had been hoping to recruit Laurel Larsen's replacement on the Delta Stewardship Council. The current person is on a limited term and the Delta Stewardship is working on a new chair for a 3-year term. In the meantime, if people have suggestions of a state agency person that might be a good fit, please email Nick Martorano and Chris McCready.
- David Harris shared that the California Natural Resources Agency (CNRA) has been making some enhancements to the data library to meet the requirements of AB1755. Building a new analytics page that should be done in the next 2 weeks. The water data community has really been active and taking advantage of the data.
- Nick Martorano shared that the SWRCB had been trying to publish the harmful algal blooms data for quite a while and finally was able to publish it on the CNRA open data portal.
    - David Harris said he just saw that appear which means federation is working.
- Katie Regan wanted to highlight the work that was previously done on the State of California Open Data portal and the usability of the portal as a tool. Will be looking for user feedback. They have been thinking about user personas and about how we can architect and transform the way that the users come to this portal. Helping make the user be the lead of the storyline, how can we serve our users as best we can?
    - Paul Shipman said the Partner Agency Team would be interested in a presentation on that work.
    - Tara Moran added this could be a great topic for data for lunch.
    - Eddie O'Campo asked if they were targeting any folks who have historically not been users of this data?
        - Katie Regan replied that they want to understand who the current consumers of data are, and then look at who is not using the data and who has not been engaged yet. She would love for this group to help

shine the light on who has not been engaged or engaged in a meaningful way.

- Greg Gearhart shared the State Board's update to the Water Board's Racial Equity Action Plan and one year status update data dashboard which are on the Water Board's website here.
- Paul Shipman shared that DWR has been focused primarily on improving data publication workflows and federating to other state repositories. Also been developing internal data training and trying to get that off the ground to get DWR staff more literate. DWR staff have also been developing some guidelines for recipients of state funds to help them better meet AB1755 requirements to help get their data in to open data portals.
- Mahesh Gautam shared that DWR has finished work on an open data guidance document and is now working on implementation and doing engagement and outreach. More data sets are being reviewed by DWR's data and metadata subcommittee. DWR is working in close coordination with CNRA and has been working on some of the enhancement activities, for example trying to address lingering issues of inconsistency among multiple types of dates for a single data set. Planning to work on these small inconsistencies which are a high impact for the users.
- Martha Davis attended the Consortium LiDAR working group this month and was really impressed that there are contracts in place to cover the whole state with LiDAR.

Dave Orth and Kristine Johnson joined at approximately 2:15pm.

CEO Update

Tara Moran provided updates on the following topics.

- Water Data Legislation
    - The Consortium was invited by Senator Dodd, in partnership with the Environmental Defense Fund to submit legislative ideas for water data for this legislative cycle, with no guarantees that they would be able to incorporate those ideas. The proposed bill focused on opportunities to continue to improve the Open and Transparent Water Act through i) a report made by the Partner Agency Team and the Consortium to the legislature every three years and ii) the development of data-related best management practices. Importantly, the bill includes, for the first time, formal legislative language defining the California Water Data Consortium and the Partner Agency Team. While the bill did not end up part of Senator Dodd's final bill package, the Consortium now has draft language that it will use in future legislative processes.
- CEO Resignation
    - Earlier this month, Tara Moran let the Board, Steering Committee, Working Group Co-Charis and staff know that she will be formally stepping down from her current role as CEO, effective no later than May 31, 2024.
    - Tara Moran thanked the Steering Committee for their time together and supporting the Consortium.

- The Steering Committee was joined by Kristine Johnson, Chair of the CEO Search Committee and Dave Orth, Board Chair, who provided updates.
    - Kristine Johnson introduced herself as a new Board member and the chair of the CEO Search Committee. The Search Committee also includes Board members Ashley Boren and Joone Lopez as well as involves the Board Chair, Dave Orth, and Vice Chair, Meredith Lee.
    - Kristine Johnson gave an overview of the CEO search process. The CEO Search Committee sees the Steering Committee and Working Group Co-Chairs as having an important role in this process. The CEO Search Committee wants to draw on your expertise, and networks to find potential candidates, and input on the job description and what kind of CEO will best lead the Consortium for the next 3 -5 years.
  - Areas of input:
    - Will be asking the Steering Committee and WG Co-Chairs in March about candidate attributes
    - April and on-going, will ask everyone to help with outreach

Martha Davis thanked Kristine Johnson and Dave Orth for coming to talk through the CEO search and transition process.

Kristine Johnson and Dave Orth left at approximately 2:45pm.

Overview of Existing Consortium Projects and Programs

Groundwater Accounting and Data Reporting

Hannah Ake reviewed the project objectives of platform scaling and co-development of data reporting formats. Hannah Ake gave updates on the project:

- Platform Scaling
    - Currently working with 5 pilot partners, will be transitioning from pilot meetings to a user group meeting in light of bringing on additional GSAs to use the platform
    - Second Landowner / grower workshop for Merced Subbasin was hosted on Nov 2, 2023
    - Will be presenting to multiple GSA boards in Q1 2024 to support Platform adoption and expansion
    - Demo the Platform at: www.groundwateraccounting.org
    - Have been having discussions with Community Water Center about their drinking water tool, and see potential overlap between the Platform and their tool. See possible integration of their water tool with the Platform's scenario planning. Would be wonderful to use their water quality data layers to integrate with scenario planning and wells.

        - Martha Davis added that in Merced, there will be need to run planning for wells in the urban space, can the platform address this need? Hannah Ake will follow up with Martha Davis.
- Groundwater Data Reporting Formats
    - Have developed draft groundwater elevation data reporting format and crosswalks and our Technical Quarterly Working Group is providing feedback
    - Integrating crosswalks into a data translation portal as a pilot to test the formats
    - Consultant team is working on several technical reports to describe our approach and lessons learned
    - Considering best approach to support state agencies in adoption / implementation
        - Would like to know if anyone has suggestions or advice on hurdles for state adoption

Telemetered Data Project

Sonya Milonova reviewed the project vision for the Telemetered Data Project. Sonya Milonova gave project updates:

- Signed a contract with State Water Resources Control Board last summer.
- Hired Sonya Milonova as Program Lead
- Contracted with Environmental Science Associates (ESA), who started in October 2023 to support Task 1 and 2 of the scope of work:
    - Task 1: Research and report on best management practices and lessons learned from other networks.
    - Task 2: Develop watershed-specific recommendations for a pilot project in one watershed in California.
- Delivered first two deliverables this month.
- Consortium and ESA will continue work in the watershed selected through the spring and summer to develop specific recommendations for telemetered water monitoring. This work will include stakeholder engagement and technical design of the proposed monitoring network.
- Request to Steering Committee – it would be great to have support in ensuring appropriate messaging of the project, please reach out to Sonya Milonova, if you want to learn more or have feedback.
    - Martha Davis volunteered.
    - Eddie O'Campo asked if anything has been installed yet, has been working with someone on what sounds like a similar project. He will follow up and loop Greg Gearhart.
    - Greg Gearhart will follow up with Sonya Milonova on Delta Consortium work on telemetry.

Urban Water Reporting Project

Tara Moran reviewed the project vision: in partnership with DWR and SWRCB, the Consortium is aligning urban water supply and use data to: reduce reporting burdens, expand access to more timely data and improve data use. Tara Moran provided project updates:

- Updating synthesis materials
    - Updating a previous overview of the various urban water reporting programs, which was done in early 2023, to include new reporting requirements.
    - Working on materials which will be updated on the Consortium's website which focuses on data accessibility with links to datasets and data dictionaries or other resources where they exist.
        - Greg Gearheart added that this is based on two different data experiences or uses. First putting these data resources or sets together and then recognize the value and opportunity to take this urban water ecosystem and build a data model so people don't have to build the data model themselves.
- Focusing on urban water data accessibility on two use cases:
    - Conservation reporting
    - Drought metrics
    - *Importantly focusing on making these data available to external data users*
- Next steps:
    - The Consortium will continue advancing the workplan with the State Board and Department of Water Resources (meets biweekly)
    - Vet interim products with broader urban water working group (meets monthly)
    - Begin scoping a workshop to test data accessibility with external data users
        - Martha Davis raised that she would like to see this working group re-engage NGOs and other user groups for the vetting of interim products.
        - Greg Gearheart mentioned this group that helped them with a different workshop that helped inform this process. He wants to make sure they are doing inclusive engagement with an equity focus in this project.
        - Greg Gearheart noted that this ties back to the AB1755 strategic plan to make data useful and make sure it's used.

LiDAR update:

- David Harris shared that it was pretty remarkable how the state and federal groups came together to do all the data acquisitions for the state-wide LiDAR coverage.

Adjourn and Next Steps

- Please send any additional recommendations for regions, sectors, or people to talk to for the economic analysis work to Tara Moran and Patrick Kallerman.
- Keep an eye out for emails from Kristine Johnson and Dave Orth regarding the CEO Search
- Reach out to staff if you have any questions or want to become more involved with any of the project work.

Martha Davis closed the meeting at approximately 3:25 pm.

Meeting Attendance

Participants who called in to the virtual meeting via telephone only are not included in this list.

Steering Committee Members

- **Martha Davis,** Retire Assistant General Manager / Executive Manager for Policy Development for Inland Empire Utilities
- **Greg Gearheart,** Deputy Director, California State Water Resources Control Board of the Office of Information Management and Analysis
- **David Harris,** Enterprise Chief Data Officer, California Natural Resources Agency
- **Nick Martorano,** Director, California Water Quality Monitoring Council
- **Eddie Ocampo,** Program Director of the Community Sustainability Department, Self Help Enterprises
- **Katie Regan, State Data Services Manager,** California Department of Technology

Working Group Co-Chairs

- **Mahesh Gautam,** Senior Water Resources Engineer, CA Department of Water Resources

Board Members

- **Dave Orth**, Principal, David Orth Strategic Water Consulting
- **Kristine Johnson**, Founder and Executive Director, Kingfisher Foundation

Consortium Staff, Volunteers, and Consultants

- **Hannah Ake,** Senior Program Manager, California Water Data Consortium
- **Amanda Miller,** Senior Operations Manager, California Water Data Consortium
- **Tara Moran,** President and CEO, California Water Data Consortium
- **Sonya Milonova,** Senior Program Manager, California Water Data Consortium

Other Participants

- **Patrick Kallerman,** Vice President of Research, Bay Area Council Economic Institute
- **Paul Shipman,** Senior Water Resources Engineer, CA Department of Water Resources