



- Board of Directors
Water Planning and Stewardship Committee

12/10/2019 Board Meeting

7-5

Subject

Express support for establishing the California Water Data Consortium and approve funding of \$200,000 to make The Metropolitan Water District of Southern California a founding member; the General Manager has determined the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

The California Water Data Consortium (Consortium) is a new nonprofit organization focused on supporting the State's efforts in implementing the Open and Transparent Water Data Act of 2016. The Consortium will facilitate collaboration between State agencies, the water industry, and other stakeholders.

Metropolitan has an opportunity to be a founding member of the Consortium and help lead its development. Staff proposes to invest \$200,000 in the Consortium to help fund its creation and early operations. Early engagement in the Consortium will increase the potential benefits of the State's open water data platforms to the member agencies and other water districts in Southern California. Metropolitan would work with partnering agencies to: (1) reduce redundant reporting to state agencies, (2) enhance access to state agency data, and (3) build consensus on the use of water data.

Details

Background

In 2016, the Governor signed AB 1755, known as the Open and Transparent Water Data Act (Open Water Data Act). The Open Water Data Act calls for a new approach for sharing and accessing water data in the state. AB 1755 requires the Department of Water Resources (DWR), the State Water Resources Control Board, and the Department of Fish and Wildlife to develop protocols for data sharing and to implement a statewide water data-sharing platform. **Attachment 1** contains AB 1755's provisions.

DWR released a strategic implementation plan for the Open Water Data Act in 2018. The Strategic Plan endorses the development of "federated" data platforms managed by each participating State agency as opposed to a single centralized statewide data repository. It also recognizes the need for State agencies to collaborate with other water industry stakeholders.

Following development of DWR's Strategic Plan, the Office of Planning and Research convened a Water Data Advisory Council (Advisory Council) to accelerate implementation of the Open Water Data Act. The Advisory Council includes representatives from State agencies, water utilities, environmental foundations, and related stakeholders. The Advisory Council issued a report in March 2019 recommending the formation of the California Water Data Consortium to complement State agency data sharing activities. The Consortium will replace the Advisory Council.

California Water Data Consortium

The Consortium will advise the State agencies charged with implementing AB 1755 on how to create the most value for water agencies and other stakeholders. The Consortium's charter is to:

- Complement State agency efforts
- Establish a neutral space for collaboration
- Provide value to stakeholders
- Foster trust through public engagement
- Build consensus on the use of water data

As envisioned, the Consortium would include a Board of Directors, a Steering Committee, an Executive Director, support staff, and stakeholder workgroups. The seven-member Board of Directors would include representatives from the State agencies charged with implementing AB 1755 and several at-large positions. **Attachment 2** shows the proposed organizational structure of the Consortium. In addition to serving on the Consortium's initial transitional Board, Metropolitan would have opportunities to participate on the Steering Committee and the workgroups.

The charter developed by the Advisory Council is clear on activities the Consortium is not to engage in. The Consortium will not develop regulations, raise taxes, or be responsible for facilitating State agency cooperation.

Metropolitan's proposed \$200,000 investment would bring the total committed and potential funding to \$1.4 million. This is close to the estimated \$1.5 million needed to launch the Consortium and to fund its early operations. A current list of committed and potential funding partners is contained in **Attachment 3**. The Advisory Council report recognized the need to identify sustainable funding sources as a short-term goal for the Consortium.

In addition to stakeholder financial support, the California Natural Resources Agency and the California Environmental Protection Agency have expressed support for the Consortium (**Attachment 4**). These agencies are responsible for implementing AB 1755 and view the Consortium as a valuable liaison for engaging open water data stakeholders.

Next steps

If directed by the Board, the General Manager will invest \$200,000 in the Consortium, and Metropolitan will become a founding member. Staff will collaborate with the funding partners, Advisory Council, and State agencies to appoint representatives to the Consortium's Board and Steering Committee. Staff would also participate in the Consortium's workgroups and report to the Board on the Consortium's progress as needed.

Policy

By Minute Item 50442, dated April 12, 2016, the Board authorized the General Manager to express support for AB 1755, if amended, (Dodd, D-Woodland) – The Open and Transparent Water Data Act.

Metropolitan Water District Administrative Code Section 11103: Participation in Projects or Programs Serving District Purposes.

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is not subject to CEQA because it involves continuing administrative activities, such as general policy and procedure, as well as government fiscal activities, which do not involve any commitment to any specific project that may result in a potentially significant physical impact on the environment (Sections 15378 (b)(2) and 15378(b)(4) of the state CEQA Guidelines).

Option #2:

None required

Board Options

Option #1

Express support for establishing the California Water Data Consortium and approve funding of \$200,000 to make Metropolitan a founding member.

Fiscal Impact: \$200,000 would be invested.

Business Analysis: Allows Metropolitan to provide sponsorship and co-found the statewide California Water Data Consortium. Early engagement by Metropolitan will help the Consortium provide value to member agencies and other water agency stakeholders. This includes improving access to State agency data and streamlining reporting to State agencies.

Option #2

Take no action.

Fiscal Impact: None

Business Analysis: Metropolitan would miss an opportunity to provide leadership in the Consortium and would have less influence in the development of the State's open water data platforms.

Staff Recommendation

Option #1

	11/21/2019
_____ Brad Coffey Manager, Water Resource Management	Date

	11/26/2019
_____ Jeffrey Nightlinger General Manager	Date

Attachment 1 – AB 1755's Provisions

Attachment 2 – Proposed organizational structure of the Consortium

Attachment 3 – Committed and potential funding partners

Attachment 4 – Support letter from California Natural Resources and CalEPA

Ref# wrm12665605

AB-1755's Provisions

The Open and Transparent Water Data Act of 2016 (AB 1755 – Dodd) calls for State agencies to create a statewide platform for sharing water data. The Act's full text is contained below for reference.

SECTION 1.

Part 4.9 (commencing with Section 12400) is added to Division 6 of the Water Code, to read:

PART 4.9. The Open and Transparent Water Data Act

CHAPTER 1. General Provisions

12400.

This part shall be known, and may be cited, as the Open and Transparent Water Data Act.

12401.

The Legislature finds and declares all of the following:

(a) The recent drought reveals that California needs to integrate existing water and ecological data into an authoritative open-access platform to help water managers operate California's water system more effectively and help water users make informed decisions based on water availability and allocation.

(b) State and federal leadership, increased awareness by business, governmental, and nongovernmental organizations through open and transparent access to data, and improved technology and availability of open-source platforms create a unique opportunity that California should seize upon to integrate and increase access to existing water data.

(c) California is working to increase access to water data collected by state agencies. The state board is piloting a project to make water quality datasets available online through an open data portal. The portal creates an opportunity to foster collaboration among state agencies, share and integrate existing datasets, improve state agency operations through data-driven decisionmaking, and improve transparency and accountability.

(d) State agencies should promote openness and interoperability of water data. Making information accessible, discoverable, and usable by the public can foster entrepreneurship, innovation, and scientific discovery.

(e) Water data and information technology tools and applications developed and gathered using state funds should be made publicly accessible. State delegation of data management to contractors should not result in the public losing access to its own information.

(f) The availability of open-source tools makes it easier to access and explore water and ecological data and could facilitate the creation of an online integrated water data platform without the need to create an expensive new centralized database.

12402.

Unless the context otherwise requires, the following definitions govern the construction of this part:

- (a) "Department" means the Department of Water Resources.*
- (b) "Metadata" means data that describes data.*
- (c) "Platform" means the statewide integrated water data platform described in Section 12415.*
- (d) "State board" means the State Water Resources Control Board.*

CHAPTER 2. Statewide Water Data Integration**Article 1. General Provisions****12405.**

The department, the state board, and the Department of Fish and Wildlife shall coordinate and integrate existing water and ecological data from local, state, and federal agencies. The purposes for integrating water and ecological data include, but are not limited to, providing adequate information to implement the Sustainable Groundwater Management Act (Part 2.74 (commencing with Section 10720)), improving the management of the state's water resources, and bringing greater transparency to water transfers and the market.

12406.

(a) The department, in consultation with the California Water Quality Monitoring Council, the state board, and the Department of Fish and Wildlife, shall develop protocols for data sharing, documentation, quality control, public access, and promotion of open-source platforms and decision support tools related to water data. The department shall develop and submit to the Legislature, in compliance with Section 9795 of the Government Code and by January 1, 2018, a report describing these protocols. The report shall be developed in collaboration with the California Water Quality Monitoring Council, the state board, the Department of Fish and Wildlife, relevant federal agencies, and interested stakeholders, including, but not limited to, technology and open data experts and water data users.

(b) Recipients of state funds through grants or contracts for research or projects relating to the improvement of water or ecological data shall, as a condition of the receipt of a grant or contract, adhere to the protocols developed pursuant to subdivision (a) for data sharing, transparency, documentation, and quality control.

(c) A grant or contract recipient that does not comply with subdivision (b) is not eligible for state funding until the grant or contract recipient complies with those requirements.

Article 2. Statewide Integrated Water Data Platform Creation**12410.**

(a) The department, in consultation with the California Water Quality Monitoring Council, the state board, and the Department of Fish and Wildlife, shall create, operate, and maintain a statewide integrated water data platform in accordance with Section 12415 and the following schedule:

(1) By January 1, 2018, the department shall do both of the following:

- (A) Make public the protocols developed pursuant to Section 12406.*
- (B) Publish a strategic plan for data management to guide the implementation of this part.*
- (2) By April 1, 2018, the department shall release any request for proposals necessary for the development of a statewide integrated water data platform.*
- (3) (A) By September 1, 2019, the department shall make available existing water and ecological data held by state agencies on the platform.*
- (B) The department shall quarterly add the information described in subparagraph (A) not available as of September 1, 2019, that becomes available at a later date.*
- (4) (A) By August 1, 2020, the department shall make available on the platform available water and ecological data related to California water supply and management that is held by the following agencies:*
- (i) The United States Bureau of Reclamation.*
 - (ii) The United States Fish and Wildlife Service.*
 - (iii) The National Oceanic and Atmospheric Administration.*
 - (iv) The United States Geological Survey.*
 - (v) The United States Forest Service.*
- (B) The department shall quarterly add the information described in subparagraph (A) not available as of August 1, 2020, that becomes available at a later date.*
- (5) By August 1, 2020, the department shall make available on the platform any other existing information listed in Section 12415.*
- (b) The department may partner with an existing nonprofit organization, with a new nonprofit organization that the department creates, organized under paragraph (3) of subsection (c) of Section 501 of Title 26 of the United States Code, or with another state agency to create, operate, or maintain, or any combination thereof, the platform.*
- (c) Notwithstanding subdivision (a), the department may enter into an agreement with an existing nonprofit organization, with a new nonprofit organization that the department creates, organized under paragraph (3) of subsection (c) of Section 501 of Title 26 of the United States Code, or with another state agency for that nonprofit organization or state agency to create, operate, or maintain, or any combination thereof, the platform.*
- (d) The Department of Technology is deemed to have delegated to the department any authority over the implementation of this part granted to it pursuant to Section 11546 of the Government Code.*
- (e) Nothing in subdivision (a) shall prevent a state agency from disseminating, managing, or publishing data separately from the platform.*

**Article 3. Statewide Integrated Water Data Platform Features
12415.**

The statewide integrated water data platform created pursuant to Section 12410 shall, at a minimum, do all of the following:

(a) Integrate existing water and ecological data information from multiple autonomous databases managed by federal, state, and local agencies and academia using consistent and standardized formats.

(b) Integrate the following datasets, as available:

(1) The department's information on State Water Project reservoir operations, groundwater use, groundwater levels, urban water use, and land use.

(2) The state board's data on water rights, water diversions, and water quality through California Environmental Data Exchange Network (CEDEN).

(3) The Department of Fish and Wildlife's information on fish abundance and distribution.

(4) The United States Geological Survey's streamflow conditions information through the National Water Information System.

(5) The United States Bureau of Reclamation's federal Central Valley Project operations information.

(6) The United States Fish and Wildlife Service's, United States Forest Service's, and National Oceanic and Atmospheric Administration Fisheries' fish abundance information.

(c) Provide data on completed water transfers and exchanges, including publicly available or voluntarily provided data on the volume, price, and delivery method, identity of the buyers and sellers, and the water right associated with the transfer or exchange.

(d) Provide documentation of data quality and data formats through metadata.

(e) Adhere to data protocols developed by state agencies pursuant to Section 12406.

(f) Be able to receive both spatial and time series data from various sources.

**CHAPTER 3. Water Data Administration Fund
12420.**

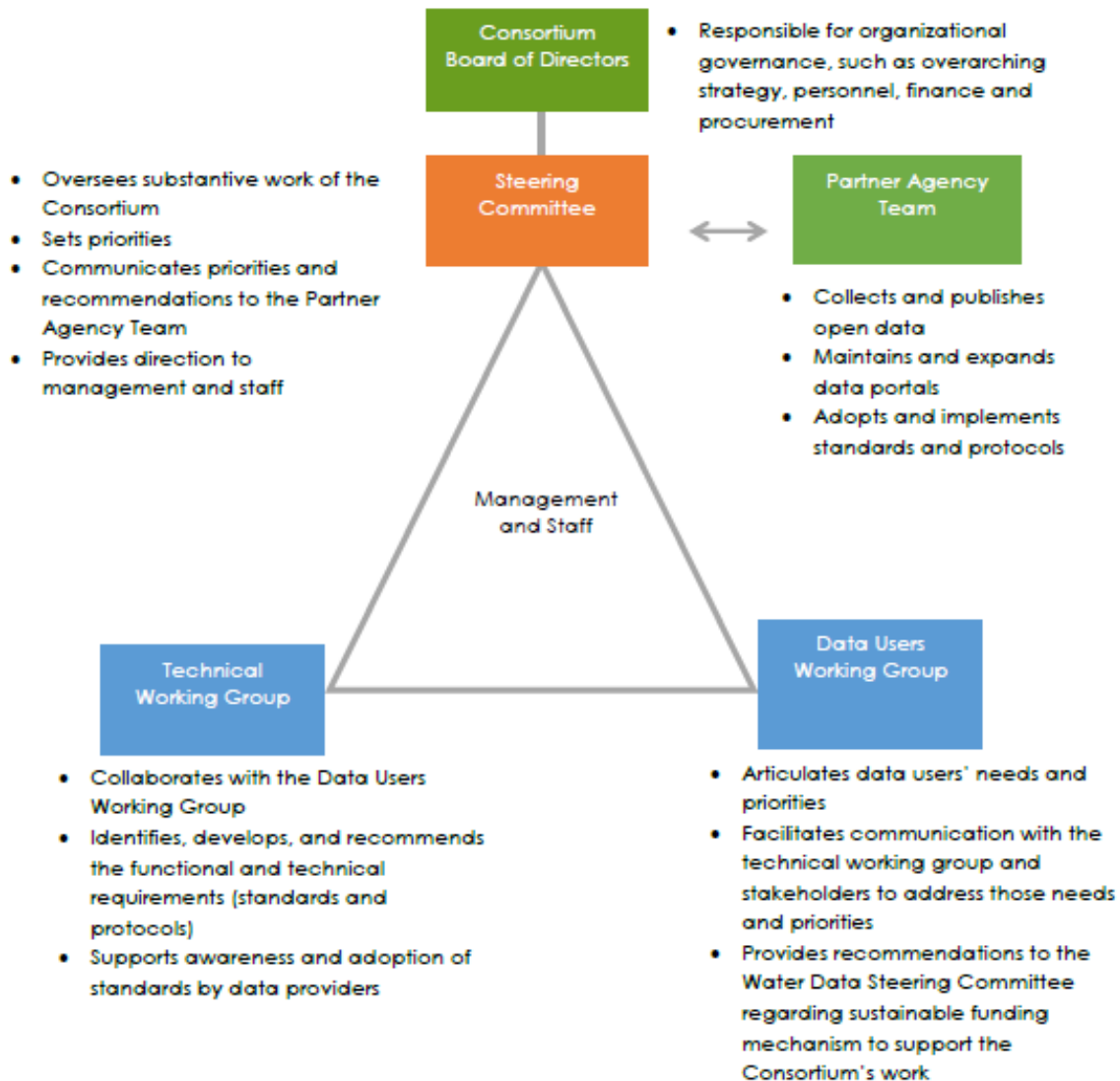
(a) The Water Data Administration Fund is hereby created. All moneys in the fund are available, upon appropriation, to the department, the state board, or the Department of Fish and Wildlife for the collection, management, and improvement of water and ecological data for the purposes of this part.

(b) The Department of Finance shall develop a standardized agreement to allow for the voluntary donation to the fund by any person, educational institution, government entity, corporation or other business entity, or organization.

Proposed organizational structure of the Consortium

In March 2019, the Water Data Advisory Committee released a report containing a recommendation for the formation of the California Water Data Consortium (Consortium) to complement State agency efforts in implementing the Open and Transparent Water Data Act (AB 1755).

The report included recommendations for the Consortium’s governance and organization. These recommendations are illustrated in the following diagram taken from the Water Data Advisory Committee’s report:



Source: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/AB-1755/Water-Data-Advisory-Council-Recommendations>

Committed and potential funding partners

In March 2019, the Water Data Advisory Council released a report containing a recommendation for the formation of the California Water Data Consortium (Consortium) to complement State agency efforts in implementing the Open and Transparent Water Data Act (AB-1755).

Funding for the launch and first year of the Consortium's operation will come from a number of funding partners. A total of \$1,200,000 has been identified. If authorized, Metropolitan's proposed \$200,000 investment would bring the total to \$1,400,000. This is close to the \$1,500,000 needed to establish the Consortium and fund its early operations. The following table shows existing and potential funding partners:

Partner	Amount	Status
Bechtel Foundation	\$1,000,000	Committed
Water Foundation	\$75,000	Committed
Moulton Niguel Water District	\$50,000	Received
Kern River Watershed Coalition / Kern Groundwater Authority	\$65,000	Proposed
Rosedale-Rio Bravo Water Storage District	\$10,000	Committed
Total	\$1,200,000	
<i>Metropolitan (If authorized)</i>	<i>\$200,000</i>	<i>Proposed</i>
Total with Metropolitan	\$1,400,000	

In addition, the Water Foundation is contributing \$195,000 in-kind legal and administrative services.

Beyond the initial start-up investment, the Consortium will identify funding sources to sustain long-term operations.



April 5, 2019

Partners,

This letter conveys our support for a new Water Data Consortium in California and expresses our agencies' commitment to coordinate closely with this new Consortium.

Better use of data on water and ecosystems will help us meet growing demands placed on our water resources by climate change, population growth and other factors. Data on climate change impacts, for example, can help shape local agencies' infrastructure investments to protect water reliability for their customers. Other types of data can help state agencies better understand where Californians are most vulnerable to drought, flood, and water quality impacts, which allows state government and local communities to strengthen resilience before the next crisis strikes. Data is also critical to implement key state goals such as the implementation of the Sustainable Groundwater Management Act (SGMA). For SGMA, groundwater data allows local agencies to set baselines and benchmarks for achieving groundwater sustainability and is necessary to identify opportunities to increase groundwater recharge and enable water trading where local water users find it useful.

Assembly Bill 1755 (AB 1755), the Open and Transparent Water Data Act passed in 2016, acknowledges the tremendous potential of California's water data. It requires the California Department of Water Resources (DWR), in consultation with the State Water Resources Control Board (Water Board), the California Department of Fish and Wildlife (DFW), and the California Water Quality Monitoring Council (Council), to make available important water and ecosystem data for widespread use. In response, DWR convened a broad Partner Agency Team comprised of the entities listed above and other state agencies that have data, expertise, and interest in implementing AB 1755. The Partner Agency Team then developed an [AB 1755 Strategic Plan](#) to guide AB 1755 implementation.

Implementing the AB 1755 Strategic Plan promises to improve water decision-making by making water and ecosystem data more accessible, useful, and ultimately well-utilized. To achieve this potential, the strategic plan acknowledges that broad public engagement is essential. Accordingly, the Partner Agency Team has convened collaborative venues and workshops to engage stakeholders and experts. A technical group is helping develop data standards and protocols, a UC Berkeley team spearheaded a set of sample use cases to demonstrate the connection between decisions and data, and public "water data challenges" have been developed that provide opportunity for civic engagement.

Development of a shared governance model to coordinate water data will build upon this public engagement and collaboration and will ensure that AB 1755 is implemented in a manner that enables data to be accessible, useful and well-utilized. For this governance model, AB 1755 authorizes DWR to "...partner with an existing nonprofit organization, with a new nonprofit organization that the

department creates..., or with another state agency to create, operate, or maintain, or any combination thereof, the platform.” The Partner Agency Team has opted to expand investment in two existing platforms, the data.ca.gov and data.cnra.ca.gov platforms, rather than create totally new data platforms.

These two state government data platforms will be “federated,” meaning that they will be made interoperable. Besides avoiding redundancy, creating a federation of data platforms enables connection with other federal and local data platforms that meet state standards and protocols. This approach provides the potential to exponentially expand data access and utilizations. The Strategic Plan recognizes that responsibility and authority over publishing state data and operating state-run portals needs to remain with state agencies but that a “shared governance space will provide the organizational infrastructure to support broad engagement, investment, adoption, and persistence of open data infrastructure” ([Governing California’s Open Water Data Infrastructure](#), p.2).

Inclusive engagement by a broad range of stakeholders will be enabled by the formation of a Water Data Consortium, which has been developed by the Water Foundation and other stakeholders and refined by the Water Data Advisory Council, a body convened by the Governor’s Office of Planning and Research. The Consortium has been designed to enable broad stakeholder participation; a continuous discourse centered around the needs of water data users; a shared venue for dialog and collaborative projects; and a dialogue to inform the state’s own use of water data. The Consortium steering committee will include state agency representatives, water managers, NGOs, and others with expertise on water data.

The California Natural Resources Agency, the California Environmental Protection Agency, and the members of the Partner Agency Team support the creation of a Water Data Consortium and commit to close coordination between state agencies and the activities of the Consortium. Our vision for the relationship between the state agencies and the Consortium is outlined in the attached table. We welcome the Consortium’s initial focus on streamlining data submissions to state agencies.

We greatly appreciate the commitment and investment being made by a broad range of groups and leaders working to create the Consortium. This shared effort provides an early example of the collaborative spirit we expect the Consortium to nurture.

Sincerely,



Wade Crowfoot
Secretary for Natural Resources



Jared Blumenfeld
Secretary for Environmental Protection

Partner Agency Team

Department of Water Resources

Karla Nemeth, Director

Department of Fish and Wildlife

Chuck Bonham, Director

State Water Resources Control Board

Joaquin Esquivel, Chair

Water Quality Monitoring Council

Nicholas Martorano, Executive Director

California Natural Resources Agency

Wade Crowfoot, Secretary

Delta Stewardship Council

Susan Tatayon, Chair

California Government Operations Agency

Marybel Batjer, Secretary

Governor's Office of Planning and Research

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Kamyar Guivetchi
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Greg Gearhart
Rafael Maestu

Nicholas Martorano

Tim Garza
David Harris

George Isaac

Stuart Drown
Angelica Quirarte

Debbie Franco

Open Water Data Infrastructure Activities

Tasks	Consortium	Partner Agency Team
	Gather feedback from stakeholders and make recommendations to improve data collection and publication by state agencies.	Collect, federate, and make available water and ecosystem data.
	Gather feedback from stakeholders and make recommendations to improve federation of existing and new data portals.	Maintain and expand federation of existing and future data portals.
	Develop shared data standards and protocols for voluntary adoption by organizations external to the state.	Adopt and implement state standards and protocols.
	Solicit input on and develop recommendations to improve the process of data submission to the state.	Consider and possibly implement recommendations for streamlining local agency data submission to the state.
	Develop pathway to leverage non-state funding for AB 1755 related activities.	Ensure adequate state funding for state responsibilities related to AB 1755.
	Promote innovation and lay the groundwork for pursuit of new opportunities.	Consider new opportunities developed by the Consortium.
	Build trust with data producers, providers, users, and consumers.	Build trust with data producers, providers, users, and consumers.
	Create a venue for stakeholders that includes state agencies to identify shared benchmarks and performance measures to ensure that water and ecological data are sufficient, accessible, useful, and used.	Evaluate progress on the implementation of the open water data infrastructure towards achieving identified shared benchmarks and performance measures.
	Develop, collect, and recommend use cases to increase effective decision making.	Prioritize data transformation to serve use cases, as appropriate and feasible.
	Recommend strategic direction for data standards, federation, and operation and maintenance of the data platform.	Collaborate with the Consortium on updates to the AB 1755 Strategic Plan, as needed to support water management