

INFORMATION ITEM

Data to Decision-Making: The Open and Transparent Water Data Act

Summary: Staff, together with representatives from the Department of Water Resources (DWR), State Water Resources Control Board (Water Board), and California Department of Fish and Wildlife (DFW), will brief the Council on progress of implementing the requirements of Assembly Bill 1755, the Open and Transparent Water Data Act (AB 1755).

Background

Science governance - in particular how policymakers get from data to decisions - is an area of increasing interest in the Delta. The 2018 Delta Science Plan update is exploring governance by working to make sense of the current structure in the Delta, and panel discussions on this topic were included in the March 2018 Interagency Ecological Program (IEP) Annual Workshop, 2017 State of the Estuary Conference, and 2016 Bay-Delta Science Conference. During the April 2018 Delta Plan Interagency Implementation Committee meeting, members discussed how science governance has evolved in the system and how the Delta governance structure can better support the decision-making process moving forward.

At the January 2018 Council meeting, IEP Lead Scientist Dr. Steven Culberson, provided the Council with an overview of the IEP program. As the lead monitoring collaborative in the Delta, the data that IEP scientists collect are integral to the analysis that needs to happen in order for policymakers to have the information they need to make decisions. Council members had many questions about the configuration and funding of the IEP as well as how decisions are made with respect to monitoring efforts.

To help increase understanding of science governance and especially the data to decision-making process, Council staff will provide an overview of a key component of the process at each Council meeting from May to September 2018. To kick-off the series, we are starting with a focus on data. From the recently released *Progress Report for Implementing the Open and Transparent Water Data Act¹ (Progress Report)*, "Data are an important tool that can help build common understanding, allow for more informed decision-making, and improve efficiency and effectiveness. In concert with experience and intuition, data can help us to define, measure, learn from, and adjust outcomes. Data form a strong foundation for collaboration and coordination, which will be essential for achieving sustainable water management in the face of climate change and other pressures on our water resources."

The technology and infrastructure necessary to make scientific data discoverable, accessible, and available on demand has evolved tremendously in the last decade.

Many organizations, availing themselves of the Internet, now make scientific data available on their organizational website, or through data portals maintained and managed by government agencies, university libraries, non-profit organization or other venues. Nonetheless, many obstacles remain, which make it difficult to organize, locate, and access scientific data from the many organizations that collect these data.

The Open and Transparent Water Data Act (AB 1755)

In, 2016, Governor Brown signed Assembly Bill 1755, the Open and Transparent Water Data Act (Attachment 1, AB 1755 Fact Sheet). The Act requires DWR, in consultation with the California Water Quality Monitoring Council, the Water Board, and DFW to improve the accessibility and usability of water and environmental data. The intended outcome for AB 1755 is to create, operate, and maintain a statewide integrated data platform that is operational with available water and environmental State agency datasets by Sept 1, 2019.

In its review of the sustainability of water and environmental management in the California Bay-Delta, the National Research Council (NRC) found that “only a synthetic, integrated, analytical approach to understanding the effects of suites of environmental factors (stressors) on the ecosystem and its components is likely to provide important insights that can lead to enhancement of the Delta and its species” (NRC 2012). The present “silos of data” have resulted in separate and compartmentalized science, impeding our ability to make informed decisions. AB 1755 aims to address this issue through implementation of a statewide integrated water data platform. The platform will effectively build a system where all environmental data can be accessed from a single source, which itself accesses multiple autonomous databases managed by federal, state, and local agencies and academia. Data will be aggregated using consistent and standardized formats resulting in accelerated knowledge discovery that supports efficient decision-making.

In January 2018, DWR released the *Progress Report* describing implementation of AB 1755 to date. The report included an initial draft strategic plan and preliminary protocols for data sharing, documentation, quality control, public access, and promotion of open-source platforms and decision support tools. Today’s panel includes representatives from the three agencies legislatively mandated to create, operate, and maintain a statewide integrated data platform; Christina McCready, DWR; Greg Gearheart, Water Board; and Tom Lupo, DFW. The panelists will be discussing the progress being made on deliverables related to AB 1755 and their individual roles in the development of the data platform:

Relevance to the Delta Plan

AB 1755 was partially informed by the Delta Science Program’s white paper entitled *Enhancing the Vision for Managing California’s Environmental Information²* (July 2015). The white paper was a product of the June 2014 Data Summit organized by the Delta Science Program to shed light on the great challenges associated with the use of disparate, large-scale, diverse, and high-resolution data sets that allow for complex

decision-making. The white paper contained a strategic vision and a compelling articulation of the complex needs faced by the state while providing a roadmap with a practical approach for achieving the goals.

The Delta Reform Act requires that the Delta Plan be based on and implemented using the best available science. Delta Plan recommendation WR R17 calls for improved water management information to provide accurate, timely, consistent, and transparent information on the management of California water supplies and beneficial uses. AB 1755 is intended to make water and environmental data available through an open and transparent platform, which is key to establishing best available science. Furthermore, accessibility of data from diverse sources is vital to timely and accurate reporting on Delta Plan performance measures and tracking progress in meeting the objectives of the Delta Plan. Council staff recently provided a comment letter on the *Progress Report*, which highlights several of the important connections of AB 1755 to the Delta Plan and efforts supported by the Council (Attachment 2).

Fiscal Information

Not applicable.

List of Attachments

Attachment 1: AB 1755 Fact Sheet

Attachment 2: Council Comment letter on AB 1755 Implementation

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¹ Department of Water Resources. 2018. <https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/AB-1755/AB1755ProgressReportinitialdraft13018v42.pdf>

² Delta Stewardship Council. 2015. *Enhancing the Vision for Managing California's Environmental Information*. <http://deltacouncil.ca.gov/docs/enhancing-vision-managing-california-s-environmental-information-final>