

Advisory Board Meeting

February 7, 2019 Conference Call

Board Members Present (5 of 9)

Jerad Bales, Martin Doyle, Greg Gearheart, Sam Hermitte, and Sara Larsen

Welcome and Agenda

IoW will iterate with the board over the coming year around three main topics: use cases (pilots), common tools, and the business model for the IoW. Today's focus is to update everyone on use cases. Next month we will do a deeper dive into common tools, and the following month we will explore the business model for the IoW by 2021.

Around the Board

Sara Larsen has accepted a Deputy Director position with the Upper Colorado River Commission starting in the beginning of July. She is excited about the new opportunity and hopes to continue serving on the IoW board in her new role. Dr. Adel Abdallah will become the new director of WaDE. He has worked at WaDE for the past two years and is currently overseeing technical development of WaDE 2.0 architecture. The new schemas for WaDE were vetted with the [USGS Water Use Data and Research \(WUDR\)](#) team, who has decided to recommend states to format and submit their water use data using the [WaDE 2.0 schema](#). It is possible the schema will be modified once the USGS has modernized their National Water Information System. Dr. Abdallah is also familiar with CUAHSI and their approach to developing Hydroclient. There is an opportunity to improve interoperability between WaDE and CUAHSI systems. CUAHSI will be hosting their [Hydroinformatics conference](#) in Provo, UT on July 29-31.

California state agencies are working to meet an AB 1755 deadline to publish data onto a federated data platform by September 2019. There is good movement around creating a consortium that will provide support and accountability for the Department of Water Resources, State Water Resources Control Board, and Department of Fish and Wildlife. There is a lot of emphasis on telling better stories about water in California, particularly regarding the water challenges facing vulnerable communities. This includes climate, fire, safe drinking water, and affordable drinking water. Both the 2019 Water Data Challenge and a datathon at the [2019 California Water Data Science Symposium](#) on July 1-2 will be around water and vulnerable populations.

Texas is launching a new water data initiative group to discuss three use cases for Texas. The Texas Water Development Board (TWDB) will be the lead on a flood use case given the recent legislative support around improving flood-related water data. The TWDB will hire an individual to begin working towards this effort and towards developing a water data hub for Texas. CUAHSI has pulled together a visualization and data from [Hurricane Harvey](#) that might provide a good starting point for these efforts.

The Texas water data initiative will establish two additional use cases, and they hope the Mitchell Foundation and IoW will each support one of them. The use cases in CA and NM, as well as the ones performed in TX, need to demonstrate the value of these efforts prior to receiving substantial support from the legislature. It is unclear that either the Mitchell Foundation or the IoW can support these use cases. The IoW may need to raise additional funds to hire the staff to engage in a fourth use case, beyond providing some planning guidance, next year.

Updates from Chair and ED

Organizational Update

On June 3, 2019, Kyle Onda joined the IoW start-up team as our data architect. Kyle is trained as an environmental engineer, urban planner, and social scientist who has worked with a wide variety of users and providers of water data. Kyle has worked for Valor Water Analytics to analyze customer level water meter data to understand how customers react to prices, information and weather. The IoW is thrilled to have Kyle joining the team!

The IoW is in the process of hiring additional staff given the volume of work before us, including a more sustained engagement with the Water Data Collaborative. The Water Data Collaborative was awarded an additional \$400k from the Pisces foundation to build the hub for community science data.

Technical Update

CUAHSI, WaDE, and the IoW are planning a four hour training in Salt Lake City in conjunction with the American Water Resources Association (AWRA) annual conference. The training will focus on different aspects of the common tools we are developing. More on the training in the next meeting.

Pilot Update

California. The IoW met with folks in California in March and have developed a concept note outlining several potential use cases that include consumer confidence reports (CCRs), water budgets, and harmful algal blooms. A draft of the concept note is currently under review and will be submitted to our partners once it has been revised. Peter and Ashley will return to California at the end of June to attend the CA Water Data Symposium and meet with stakeholders.

New Mexico. New Mexico has new [Water Data Act](#) that requires five state agencies to work together to improve their water data infrastructure. Stacey Timmons at the Bureau of Geology is leading the effort. The Water Data Act requires that by January 2020 they will: (1) identify key water data, information and tools needed to support water management and planning; (2) develop common water data standards for data collection; (3) develop an integrated water data and information platform; and (4) identify available and unavailable water data. The IoW has been working closely with NM to develop a viable strategy for meeting this first legislative benchmark by January 2020 to ensure continued funding for

this effort. Briefly, in July and August we will identify the water data best used for decision-making. Fortunately, the Office of State Engineer has an initial water data inventory. The IoW will build a water data catalog prioritizing a few key water datasets and we are putting together a software vendor analysis to help them build the front-end platform. We are advising them to initiate an RFP in September. The selected vendor would then build the platform between October and December to demonstrate the end-to-end product for a few datasets.

North Carolina. The WIA of 2018 requires community water systems to assess the risk and resilience of their water systems. Many small to medium sized utilities are concerned about meeting this new reporting requirement. We are meeting with EPA and several utilities to understand their capacity to meet this new requirement and if there is space for the IoW to engage and ease the burden. Many of the smaller utilities will have until 2021 to meet these new rules, which provides some time to develop a strategy to address their data needs. North Carolina is an ideal state for this effort given the tremendous amount of focus and resources towards improving resiliency following several hurricanes. The new reporting requirements provide a unique window of opportunity to engage, educate, and empower utilities around their water data. Recommendation 2.3 of the IoW report: Bind regulation, management practices, permitting, and funding to the provision of open data. The IoW (and EPA) has an opportunity to lay the foundation for data to move from utilities to open, accessible, and interoperable databases and instill a mindset of best practices around data management for utilities.

Oregon. One of the top priorities for the current governor is water and they are trying to figure out what the State should investment to improve their water security. Oregon, similar to Texas, is observing what happens in CA and NM as a result of their water data legislation. They are considering the opportunity for the IoW to help them address some of their water challenges.

Indiana. A professor in Indiana is interested in developing an IoW for the Wabash River. He wants to explore using the river basin commission as the hub for water data along the Wabash River.

Potomac River. The IoW team briefed the staff of the Interstate Commission on the Potomac River Basin (ICPRB) on the Internet of Water, and the ICPRB expressed interest in being engaged in future conversations about the IoW in the Mid-Atlantic region.

Executive Session

The IoW Board met briefly in executive session to discuss board procedures and membership, including the role of the Vice Chair and possible expansion of the board membership to strengthen the board's diversity skill set mix, and to include more representation of different constituencies of interest to IoW. Nominations and other ideas will be submitted to Martin Doyle for future discussion.