

Diving Deep into the First Annual #CAWaterDataDive Data Innovation Challenge

by Jarma Bennett

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Data is big right now. There is data, data about data, and data about data about data, everywhere. To show that the State Water Board is not immune to this craze, it hosted a Data Dive including an Open House – Data Fair – and a Data Innovation Challenge, which wrapped up on April 22, with presentations and judging of the entries. The Data Innovation Challenge aimed to highlight the importance of data when making science-based decisions, promote the data that the Water Boards have to offer, and recognize that there are many “solutions” (tools, visualizations, analyses) that the Water Boards have yet to develop, or even think of. This is especially true when the many and varied datasets of the Water Boards, are looked at together.

The Data Innovation Challenge was kicked off by a Water Board Data Fair. This gave participants exposure to a number of data systems, and access to those systems’ data stewards. It was also kicked off by the release of some Water Boards’ data sets into the Office of Government Operations [Green Data portal](#).

This platform makes data from a growing number of state agencies available in a specified format, and equipped with web services for easier access, and integration. The site also contains some visualization capabilities allowing data users, including non-governmental organizations and members of the public, to look at data in different ways.

The Water Boards’ Office of Information Management and Analysis Director, Greg Gearheart, sees the open data platform approach as a key weapon in his role as data liberator. “Just like the water itself, the data we collect in our water jobs as trustees of the public belongs to everyone. Our hope is that by making key sets of data from our Water Board servers more accessible, we can empower our stakeholders to help us do our jobs better. Water is life and life is complex – just like your own health, it takes more than a simple thermometer to protect the health of our waters. The exciting thing is that everyone can help us now,” Gearheart says.

The Data Innovation Challenge resulted in eight entries. The winner, Orange County Public Works and CloudCompli, submitted a smart system that aggregates state and municipal water quality monitoring data sources to assist with source identification. The County has used this tool to direct inspections, and solve pollution problems. [Winner: <http://wqexplorer.cloudcompli.com/paper/>] The runner-up, UC Davis Center for Water-Energy Efficiency, submitted a proposal to correlate urban water conservation data, with reduction in energy use, and greenhouse gas emission. The insight revealed by this entry was that, through water conservation alone, Californians saved more electricity, with this one practice, than they did for all other energy efficiency practices, during the same time period, combined. [Runner Up: <https://cwee.shinyapps.io/greengov/>] For more information on these events, including records of the presentations, see the [Water Boards Data and Database](#) page, and become another data point (courtesy of Google Analytics).

