Bond Case Briefs

Municipal Finance Law Since 1971

How California Business and Government Might Solve the Freshwater Crisis - Together

Does the public sector need the private sector's help to address the freshwater crisis? That's the controversial thesis of Stanford law and environmental social sciences professor Barton "Buzz" Thompson's provocatively titled new book: Liquid Asset: How Business and Government Can Partner to Solve the Freshwater Crisis. (Buzz is also a member of the PPIC Water Policy Center's research network.) We sat down with him to hear more.

How is the private sector currently involved in water?

The private sector is already involved in water in many ways, some more controversial than others. The private provision of water and water marketing are the most controversial because they impact how water is allocated—who gets it, and who doesn't. But the private sector also provides new technology to reduce the cost of important processes like recycling or desalinization. And many private companies, which are the largest consumers of water, have adopted corporate water stewardship programs to reduce their water footprint.

We think of the Sustainable Groundwater Management Act (SGMA) as a public program, and it is. The legislature passed the law, and public agencies are implementing it. But if you look carefully, you'll see private handprints all over SGMA's success. The private sector has been instrumental in SGMA's passage, its implementation, and dealing with its impact.

Philanthropic foundations helped lay the groundwork that led to SGMA's passage, and they've funded development of new data and modeling tools. Private consultants provided the scientific and technical knowledge needed for implementation. Nonprofit organizations like the Environmental Defense Fund (EDF) and The Nature Conservancy have helped monitor SGMA's implementation to make sure it's meeting the law. They've also helped develop local groundwater markets and programs to help transition some farms to other land uses, including the Multibenefit Land Repurposing Program.

Why did you decide to write about this topic now?

I've worked in the water sector for about four decades. It's clear that water crises are growing and multifaceted, whether it's climate change, aging infrastructure, or groundwater overdraft. The public sector, populated by dedicated, smart officials, is struggling to meet all these challenges. The more I looked at the public sector, the more I realized it needs the private sector's help.

For instance, cities would love to do more water recycling, but for a lot of cities that would require new pipes and digging up streets, which people don't like. Epic Cleantec in San Francisco has developed modular equipment to recycle water on-site so you don't have to dig up the street. A lot of small water suppliers—frequently for low-income communities—are having a hard time financing new infrastructure. Nonprofit organizations like Water Finance Exchange and Moonshot Missions try to match small water suppliers with financing.

Where the public sector struggles, private entities can try to help. But the public sector needs to be willing to reach out, and the private sector needs to realize it can't contribute without the public sector.

What are some of the changes you're advocating, and why?

We need new technologies to solve current challenges, but we face a technological deficit in the US: we're not getting new technologies out and adopted quickly enough.

Places like Singapore have made a lot of progress on issues like desalination and recycling by working with the private sector. Singapore funds innovation and allows businesses to use public infrastructure to test new technologies. These technologies have become an export industry, adding $2 billion to Singapore's economy and employing 14,000 people. Government needs to develop regulations that encourage the development of new technologies and work with private companies to test and adopt them.

But government also must ensure that private companies aren't negatively impacting the public interest in water. The petroleum industry creates immense amounts of produced water—for instance, in the Permian basin, for every barrel of oil, you produce about four barrels of water. Companies recycle that water for reuse, the government's role is to ensure that the reuse is safe, as California has done with the use of produced water in Kern County agriculture. That's a key role of government—policing the private sector to protect the public interest.

What disincentivizes engagement between the public and private sectors?

The public sector is inherently conservative, and it should be when it comes to freshwater. If your iPhone malfunctions, it's an inconvenience. If the system that supplies water to San Francisco malfunctions, that could be a public health crisis. But in many cases, it's too conservative. Governmental agencies just don't have the same incentive to embrace new, creative ideas as the private sector.

The public sector is also highly fragmented. Many small utilities don't have funds to replace current infrastructure, and frequently they have no R&D program, which is where you'd typically interact with the private sector. They can't invest in new technologies. That makes it hard to take advantage of what the private sector has to offer.

The energy sector operates very differently—it's dominated by private companies that are developing new technologies and implementing them with public support. Between 2001–14, governments in the US provided about $8 billion of funding to develop new energy technologies; in the water field, it was $28 million. If we want to know how to solve water challenges, we can look at what the energy sector has done.

What gives you hope?

I've taught a class at Stanford on "The Business of Water" for seven years, bringing in dozens of companies working in water. Their enthusiasm, dedication, and creativity give me confidence that, with the public sector, they can help solve key water challenges.

Public Policy Institute of California

Copyright © 2026 Bond Case Briefs | bondcasebriefs.com