

The reality about water and the rest of the world

Markos Kounalakis, Sacramento Bee, 2-2-14

A decade ago, I would represent Gov. Gray Davis at some Sacramento meetings with international dignitaries when the governor was out of town. In my role as vice chairman of the California State World Trade Commission, I once met with a young African prime minister at a business hotel near the majestically flowing Sacramento River. As per protocol, I asked what California could offer the prime minister's country, Cape Verde, in terms of trade and commerce. His response that evening still takes me aback.

Were Capo Verdians interested in Silicon Valley technology? How about introductions to the entertainment industry, where his country's Cesaria Evora sang and swayed her way to international success? Surely, increased educational opportunities and exchanges for their youth must be of interest? Prime Minister José Maria Neves looked me in the eye intently. His answer in Portuguese was unequivocal and needed no interpretation:

“Agua.”

When I arrived in Sacramento at the start of the 21st century, our city had no meters and water was generally considered both flowing and free. Prime Minister Neves confronted me with his own parched nation's reality and of the ongoing regional problems of freshwater stress and shortage around the world.

Real water scarcity – or lack of infrastructure to deliver available water – affects about half the world's population. The United Nations has designated 2005-15 as a “Water for Life” international decade for action and declared that there is enough water for the world's population; however, it is “distributed unevenly and too much of it is wasted, polluted and unsustainably managed.”

Californians are now reminded of these same issues of distribution, pollution and management. Water availability, water politics, and water infrastructure and management are at the fore of the current drought-driven conversations on conservation. What could help advance these conversations, however, is a bit of perspective on how the state's water issues compare to the rest of the world. An understanding of how good we really have it here in California is essential.

California currently faces drought conditions, but from a global perspective, it is a wet wonderland. While much of the world is in dire need of this most basic resource, we are still seemingly able to spill, slosh, ski and shower in the stuff as wantonly as we want.

I lived through the California droughts of the '70s, but the daily and ongoing water reality abroad has left a more lasting impression on me. While living and working overseas, I encountered meters on kitchen and bathroom plumbing (urban Germany). A quick rinse-soap-rinse “military shower” was a luxury (rural Greece). During my childhood summers on the island of Crete with my grandparents, they and their neighbors had no

indoor plumbing or toilet. In many places where tap water was barely potable (Afghanistan) or stored in insect-ridden cisterns, using butane stoves to boil before drinking was the norm (Turkey).

For a good part of my life I carried water-purifying iodine tablets in my travel kit. Bottled water (and lots of beer) was the only potable option in some countries where I worked (Laos, Uzbekistan, Mexico). While the beer may have dampened my immediate concerns during my work as a foreign correspondent, I still longed for the San Francisco waiters who would look down on bottled water and instead insist on serving up a cool, fresh glass of tap water. "Hetch Hetchy's finest," they would call it.

The global complexities of water scarcity stretch beyond questions of availability and use. Certainly, there are parts of the world like Cape Verde that do not have enough natural water resources to meet their needs. The islands of Cape Verde supplement their freshwater stocks by using expensive desalination plants. The precious resource is put into trucks that travel dusty roads to areas where women wait in line to fill and pay for their five-bucket daily ration. This dry reality means that sanitation suffers and agriculture never fully gets the water it needs. Cape Verde remains far from verdant.

But we don't need to travel far to find arid places. Our own fertile Imperial Valley along the Mexican border would be as dry and agriculturally impoverished as Cape Verde were it not for the 1901-built Imperial Canal diverting water from the Colorado River.

Desert lands can function normally, if absurdly, as in Dubai. In 2012, I traveled there with my family and stayed at the Atlantis, a hotel that is part aquarium. An oasis of fountains and frolic, its central feature is a water park with cleverly engineered river rapids. While tubing in Dubai was fun, it was no match for the sensation of putting on parkas and schussing down manufactured snow-filled slopes at a hugely refrigerated Dubai shopping mall. It is hard to believe that this manufactured oasis is in one of the driest places on earth and that energy-voracious desalination plants are the primary freshwater source. The mirage of water abundance, however, is necessary if Dubai is to continue to attract the foreign investment, tourism and workers on which it relies.

While Dubai and Cape Verde need to deal with their natural water shortages, they are not on the frontline of international water politics or the immediate challenges faced by failed states that cannot provide their populations with water security.

International water politics have brought countries to war. And if a crippling economic embargo has brought Iran to the negotiating table with the United States, imagine what leverage a water embargo can have on a neighboring state. It should not take too much imagination; the battle for water resources led to armed hostilities between Israel and Syria in the 1950s and to the Six-Day War in 1967. According to Masahiro Murakami's book "Managing Water for Peace in the Middle East," "the increase in water-related Arab-Israeli hostility was a major factor leading to the June 1967 war." Further south, in 1989, Senegal and Mauritania fought over grazing rights on the River Senegal. Dams, diversions and upstream polluting of common waters between nations can often be justification for war.

There is one bone of contention in the Northern California-Southern California relationship that is even stronger than the San Francisco Giants and Los Angeles Dodgers rivalry, and that is the fight for water. But while there are clear disagreements over diversions, nobody – other than a few Giants fans – is raising a call to arms over our differences.

We are now in a period of California history when our state legislative and executive branches are functioning by working together and solving problems. Broken government – and governments that are broke – have a very difficult time providing the basics for their citizenry. There are many states in the world that just cannot deliver the freshwater they have. Water security is not only a problem for arid states; places with lots of rivers and rainfall also have difficulty managing their resources – Vietnam, for example.

Despite being a nation of rivers, potable freshwater is inaccessible to the majority of the rural population. Economically growing Vietnam has nearly every known problem of water pollution and waterborne disease imaginable. Add to infrastructure problems the stresses of typhoons and flooding, and it is no wonder the government identifies polluted water as the cause of 80 percent of disease.

Our freshwater abundance is something we take for granted – even in drought years. Those who have been through stretches of California water shortages in the past reckon that it is cyclical and that the current crisis is an opportunity to loosen up environmental rules. Those who are opposed to obscene wastefulness see the crisis as an opportunity to call for drastic conservation measures, put a curb on growth or put pressure on agribusiness.

California water, however, is popularly considered as “free” and its clean abundance does not give us a full appreciation of how fortunate and rare our situation really is – or an understanding of how to keep it so.

Political battles will be fought during and after this drought crisis. The false choice between farms and fish will continue to be presented for constituent consumption and political gain. But there is water here, and its management during times of flood or drought is achievable.

In comparison to other countries, our water politics are civil and our water problems solvable. State government will need to work at an accelerated pace called for by the crisis, while fighting the overreach of entrenched interests. But a big part of the solution is also up to individual citizens and industries.

California entrepreneurs have developed multiple disruptive technologies that affect our daily lives. Systems exist where houses and cars, financial institutions and even our politics provide real-time feedback. And studies show that this feedback often leads to modified, conscious and more informed behavior.

Now is the time to create and deploy these technologies around water. Whether smartphone water monitors, “dam-cams” or home cistern systems, bringing water use and awareness closer to individuals – as it is in nearly every other country in the world – will result in a popular critical awareness and caution about our water and shape demands on our government.