LET THERE BE WATER: Israel’s Solution for a Water-Starved World

By Seth M. Siegel

Reviews/ summary/ author interview

SUMMARY

We are on the brink of a global water crisis and California’s drought is only the beginning. The U.S. government predicts that forty of our fifty states – and sixty percent of the earth's land surface – will soon face alarming gaps between the supply and growing demand for water. Without immediate action, food prices will rise, economic growth will slow, and political instability is likely to follow.

In remarkable defiance of this water emergency stands Israel. Despite its unforgiving terrain, rapid population growth, and low annual rainfall, Israel is not only fending off a water crisis; it boasts a water surplus. It even exports water to the Palestinians in the West Bank and Gaza and to the Kingdom of Jordan.

LET THERE BE WATER: Israel's Solution for a Water-Starved World  Martin’s by Seth M. Siegel is the first and only book on Israel’s growing global influence as a water superpower, detailing how the nation’s approach to water can help the rest of the world avoid disastrous water shortages.

In an engaging narrative, Siegel recounts the story of a small desert country, which long before its independence, developed unprecedented water sophistication. Today, its water influence has spread far and wide, from the contract it signed with the World Bank to share its water expertise with developing countries, to the Israeli firm IDE’s involvement in the Carlsbad Desalination Project in the parched region of San Diego.

Israel’s water mastery is decades in the making. Siegel dissects the nation’s innovations in science and engineering, in areas such as drip irrigation, desalination and wastewater treatment. In addition, Siegel explores Israel’s highly effective public policy approach to water, which includes real water pricing, public ownership of water, government control of consumption patterns, and a centralized and depoliticized water authority.
Siegel reveals how the rest of the world can adopt these measures now, and stay ahead of the looming global water crisis.

Israel's multi-faceted “all of the above” approach to water supply led the nation to achieve the world's most sophisticated water system – a system with valuable lessons for every country – and a multi-billion dollar water technology export industry.

As Israel continues to export its water technology and expertise around the world, Siegel explains how the unlikely resources of water and water know-how became Israel’s primary tools for global engagement, from running the majority of Iran’s water projects in the lead up to the Islamic Revolution, to using water development as a means to reverse China’s long-standing diplomatic freeze against Israel, to Israel’s current water projects throughout the developing world. This use of “hydro-diplomacy”, a term Siegel coins in the book, has offered Israel a crucial vehicle for opening diplomatic relations with countries around the globe.

The Israeli water solutions described in this book provide what renowned environmentalist Robert F. Kennedy, Jr. calls “a blueprint for the planet” and what Michael Bloomberg hails as “essential reading.” If we learn to follow Israel’s example of advance planning, effective governance, investment in innovation, and citizen involvement, the rest of our world can revert its course and achieve water security for all. Built on hundreds of interviews and rigorous research, Let There Be Water tells the inspiring story of Israel’s journey to water security, and how the rest of the world can follow suit before it’s too late.

**About Seth M. Siegel**

Seth M. Siegel is a businessman, activist, writer, and a member of the Council on Foreign Relations. He has spoken to audiences at the United Nations, AIPAC Policy Conference, the Aspen Ideas Festival, and the Council on Foreign Relations. He has written for The New York Times, The Wall Street Journal, and the Los Angeles Times and has been interviewed by The Today Show, CNN, CNBC, MSNBC, and Fox News as well as major print media. He graduated from Cornell University and Cornell Law School. He lives in New York City.

For more information, please visit: [http://www.sethmsiegel.com/](http://www.sethmsiegel.com/)
Reviews/praise for Let There Be Water

“Insightful...an instructive reminder that climate and geography don’t control a state’s destiny. Nature, as it turns out, is not as important as government nurture.”

—The Wall Street Journal

“A must-read that is both fascinating and informative.”

—San Francisco Chronicle

“Go anywhere in Israel — most of which is a desert and the rest of which is semi-arid—and turn any faucet: Pure water, safe to drink, will flow. It’s a miracle — right up there with turning water into wine. The most complete explanation for how that miracle has been achieved and what it could mean for the world is the subject of Seth Siegel’s Let There Be Water.”

—Washington Times

“With global water shortages generating political, military and humanitarian crises across the globe, Israel’s astonishing ingenuity for wresting abundance from drought is an inspiring and instructive blueprint for the planet.”

—Robert F. Kennedy, Jr.

“If you are worried about global water shortages—and you should be—read this book. Seth Siegel brings an urgent message of how the world can save itself using remarkable techniques and technology developed in Israel. Let There Be Water is essential reading. I highly recommend it.” —Michael Bloomberg

“A really interesting account of the possibilities for technology to solve one of the greatest and underestimated challenges of our age.”

—Tony Blair

“Water scarcity is one of the most urgent threats to our economy and society. In Let There Be Water, Seth Siegel explores the crisis through the lens of a solution, telling the powerful story of how the people of Israel came together to overcome their water problems, so that the rest of the world can learn from their example and get ahead of the looming crisis.”

—Arianna Huffington
“This extraordinary work will long be read by people grappling with water shortages and other seemingly insurmountable challenges.”

—Shimon Peres, Nobel Peace Prize laureate and former president of Israel

“Israel’s determination to create water security is a half-century-long lesson in the liberating economic power of smart water, and a vivid illustration that scarcity doesn’t need to lead to deprivation. It can often drive exactly the opposite: innovation and even abundance.”

—Strategy + Business

“A major contribution to this hotly debated issue and to broader questions of environmental policy.”

—Kirkus Reviews (starred review)

“This excellent, well-researched book enumerates the numerous 'bullets' Israel fired in its successful quest for water independence. Additionally, it offers the lessons learned in Israel as models for the world as climate change and population growth continue to stress the global supply of fresh water.”

—San Diego Jewish Book World

“From the arid front lines of the freshwater scarcity crisis, Siegel provides an eye-opening account how Israel turned adversity into opportunity to become an innovative pioneer in the global quest for a new water paradigm.”

—Steven Solomon, author, WATER: The Epic Struggle for Wealth, Power, and Civilization

“Let There Be Water is an essential look at the unknown story of how Israel has avoided the coming global water crisis despite being mostly desert. Through smart policies, conservation, technology and a new water-focused export industry, this book shares water-independent Israel's lessons that every interested citizen and country needs to know.”

—Dan Senor, co-author of the New York Times bestseller Start-Up Nation

“Let There Be Water is the expertly and movingly told story of how Israeli specialists and NGOs greatly helped many Africans gain access to clean water. Seth Siegel shows how Israel uses its water skills both to help developing nations and as a tool of diplomacy. We all have so much to learn from this superb book.”
“With current drought conditions across Western North America, this hard-won water wisdom should be of interest to concerned readers.”

—Library Journal

"Let There Be Water is an important work of non-fiction, a story that needs to be told. There are lessons in here for everyone."

—Former U.S. Senator Mark L. Pryor

“In the last 50 years, one place has taken water scarcity and turned it into water abundance—Israel. The Israelis did it with science, skill, and by thinking 50 years ahead. Seth M. Siegel’s book Let There Be Water pieces together the surprising story of how Israel made itself into a ‘water superpower’ with clarity, with verve, and most important, with a sense of hope for everyone else facing water problems.”

—Charles Fishman, New York Times bestselling author of The Big Thirst: The secret life & turbulent future of water

“Israel’s determination to create water security is a half-century-long lesson in the liberating economic power of smart water, and a vivid illustration that scarcity doesn’t need to lead to deprivation. It can often drive exactly the opposite: innovation and even abundance.”

—American Associates, Ben-Gurion University’ Impact magazine

“This smart, engaging, and extremely feel-good book tells one of the stories that best illustrates how Israel consistently turns crises into opportunities and challenges into victories...Siegel’s accessible handling of technological issues, his focus on key individuals inside and outside of government, and his boundless enthusiasm for Israel’s accomplishments and international leadership make Let There Be Water a highly appealing read.”

—Jewish Book Council

“A fact-filled and wholly fascinating account of the Jewish homeland’s ways with water.”

—Jewish Journal.com
A Conversation with Seth M. Siegel, author of *Let There Be Water*

Most of the water crisis reports we see in the news are confined to a few areas like California. Is there evidence that this could spread globally?

It already has. The drought that the media is mostly covering as the “California drought” is hitting all of the western states while at the same time the states of the High Plains in the middle of the country are being forced to reduce the water they pump out of the aquifers there. Around the world, scarcity is plaguing countries from Australia to Pakistan to Brazil. It is already a global phenomenon.

**Why is it becoming dangerous to think of water as a free, limitless resource?**

It’s exactly that thinking that helped to get us into this predicament in the first place. By over pumping aquifers, by being casual about not fixing broken municipal water infrastructure, by failing to modernize agriculture with use of water-saving technology, we’ve managed to sleepwalk into this crisis. When you think of water as free and limitless, you assume nothing in water practices need to change. Government leaders are also to blame because they failed to ask for a bit of sacrifice early to save us from a great amount of pain later.

**Why do government leaders do that?**

Water is never a top priority for mayors or governors unless there is a drought or a broken water main that causes a collapsing street to lead the evening news. Voters ask about parks or hospitals or schools or tax cuts, but not for new water projects. Elected officials have no incentive to start a water project today that will only get finished during the term of their successor.

**Why is Israel a model for how the rest of the world could better approach managing its water supply?**

Through trial and error, through wisdom, and maybe even thanks to luck here and there, Israel has the most sophisticated water resource management in the world. They centralize the management of water through an apolitical body. They charge the real price of water to assure there are funds for technological and infrastructure upgrades. And they use technology to a degree that no other country does.
Why is water conservation deeply engrained in Israeli consciousness but rarely in other cultures?

Israel’s culture is a blend of ancient Jewish tradition and modern Zionist ideology. Both have a reverence for water as an indispensable part of societal success. It isn't just the practical aspect of having enough water, but a part of the Israeli identity.

How has Israel’s fight for water and fight for nationhood been deeply entwined?

Israel’s focus on water infrastructure and an ample supply of water dates back to the time of the British Mandate in the 1930s. The British, who were then ruling the area, restricted immigration of Jews trying to flee Hitler’s Europe on the pretext that there wasn’t enough water to grow food for the small population then there. The pre-State Zionists became motivated to show the British that they were wrong. They didn’t succeed in persuading them, but it resulted in a focus on water as part of governance that continues to today.

What were the hurdles Israel had to overcome to achieve water security?

Israel had to do several things at once. At the same time that the country was defending its borders against attack, it was also absorbing so many immigrants that the population doubled in just a few years. But while all of that was going on, Israel’s leaders took on building a massive national water infrastructure. For a then-impoverished country, it was daring, visionary, even inspiring.

How has the arid nation of Israel managed to turn water into a multibillion dollar global export business?

In just the past 10 years, there have been more than 200 start-ups in Israel focused on water technology and solutions to water problems. The country serves as a terrific beta site for trying out the ideas developed by these companies. The concepts that work in these real-world settings quickly find interested customers in countries facing needs of their own in water infrastructure, conservation or technology.

Which Israeli water technology startups should investors be paying attention to?

There are many, but few are public companies yet. Among my favorite Israeli water companies that are still young, private companies are Atlantium, whose products purifying water with very low energy costs can be found in over 100 countries, Emefcy, which has several remarkable innovative approaches to wastewater treatment, Applied
Clean Tech, which mines sewage for cellulosic material that can be purified and reused, and HydroSpin, which generates electricity with miniature turbines inside municipal water pipes. Among the older private companies that everyone admires are Netafim, which started the drip irrigation revolution, and IDE, the builder of the world’s most sophisticated desalination plants. Recently, Mapal went public on the London Stock Exchange.

**Some U.S. cities have plentiful water supplies. Is the message of your book still applicable to such cities, in addition to areas like California?**

Just five years ago, who would have imagined that California would be in the middle of a water emergency? Until recently the largest city in Brazil, Sao Paulo, had ample water and now people called “water refugees” are leaving because of water scarcity. Chicago sits on Lake Michigan and can never run out of water, yet each year the city loses 35% of its water to leaks and failing infrastructure. The point of my book is that waiting until a water crisis is upon us is reckless and expensive. California’s troubles are made worse by the drought, but they would have water problems even without it.

**The Israeli attitude toward water is that water belongs to the nation. How has this helped the country historically?**

By being able to plan for what is best for the country as a whole, water policy focuses on long-term needs. This way, Israel can be ahead of demand. People give up the kind of individual water ownership rights that we have in the US, but, I'd argue, with far better results.

**In your book, you coin the phrase “hydro-diplomacy.” What is it and why is it important?**

Israel has been diplomatically isolated since its birth. Yet to a degree I found remarkable, Israel has used its water expertise as a door opener in one country after another. While the US had “ping pong diplomacy” to open the door to China, Israel established diplomatic relations there by sharing water know-how and technology. Israel uses water training as one of the major means of engagement with the less developed world. Many of these countries still vote against Israel in the UN, but those countries’ water needs offer a vehicle for establishing diplomatic relations and having ongoing dialogue. Even some countries – and I'm not allowed to say which ones – that don’t have diplomatic relations with Israel invite Israeli water professionals and companies into their countries to work quietly in irrigation and water projects.
You tell the amazing story of Israel’s role in Iran’s water industry.

Yes. From 1962 to the Islamic revolution in 1979, Israel, to a large degree, ran the water industry in Iran. The many Israeli water engineers there just barely got out. The irony is that today Iran has among the worst managed water systems in the world. They are running out of water.

Could cooperation on water between Israel and the Palestinians bring the region closer to peace?

Water has the potential to serve as a pathway to peace among the parties. Already, Israel provides water to the Palestinians and the Kingdom of Jordan every day. Israel also trains water professionals throughout the region. Everyone can build on this quiet but important cooperation.

Given Israel’s unique geography and civil society, will their water policies translate if exported to cities and governments that are completely different from Israel?

Not everything that Israel does is right for every country or community. But Israel’s focus on water problem solving, its long-range planning, its educating its people to be mindful with use of water resources, its utilizing its water fees for water infrastructure and technological innovation – all of these are relevant to everyone everywhere.

In what ways are Israelis helping California leaders with their current drought crisis?

The wisdom of the water agreement struck between California and Israel is that it isn’t just focused on government to government understandings, with the possibility that projects get stuck in bureaucratic gridlock. The agreement has incentives for Israeli and California universities to work together and likewise for businesses from each place to develop water projects. In each of these areas – government, academia and business – Israel and California are working together to clean polluted water resources, to use technology to improve water efficiency, and to adopt policies to improve water management.

What are the top water lessons that California and other regions should take away from what Israel has done?

Israel stands as an inspiring example that hard doesn’t mean impossible. Seemingly insurmountable challenges can be overcome with focus, planning, vision and the willingness to sacrifice today for a better tomorrow. Israel is 60% desert and has a fast-
growing population, and yet it has an abundance of water. It wasn’t easy to get to the point of being nearly immune to weather conditions, but they did and so can California and other places now facing the challenge of water scarcity.

**What led you to write a book about Israel and water?**

I became concerned about what looked like an all-but-certain worrisome water future. I wanted to do all I could to raise the alarm, to get public officials and civic leaders to focus. I thought that rather than just laying out the problem, concerned citizens and policymakers would want to have a model for what actually works and how we can blunt the worst of this coming water crisis. Israel is that model.