

THE RIVER IS FLOWING

Images of water permeate the story of creation. The very second verse of Torah describes the breath of God sweeping over water, which seems to pre-exist anything that God brings into existence in the story of creation. This water is then separated into water above, sky, and water below, earth. Water is thus introduced as the primary source of existence.

Water also appears in a description of paradise, the Garden of Eden. The second chapter of Genesis says: “A river issues from Eden to water the garden.” This river divides into four branches, including the Tigris and Euphrates, which flow through what today are Turkey, Syria, and Iraq. All four of the rivers described as flowing from Eden bypass what would become the land promised to Abraham and his descendants.

The promised land is described in the Bible as flowing, but it is with milk and honey, not with water. That essential element for existence seems by design to be something that the Israelites would have to seek out rather than passively receive.

Right before the Israelites are about to end their wandering, Moses advises them that “the land you are entering to take over is not like the land of Egypt where you planted your seed and irrigated it by foot.” Ancient civilizations emerged on fertile plains near flowing rivers, such as the Tigris and the Euphrates and the Nile, which allowed for the easy construction of irrigation channels. The land the Israelites will settle on is not like that. It is not a fertile plain. It is, Moses says, “a land of mountains and valleys.” Life there will depend not on the constancy of rivers but on the unpredictability of rain. Unlike earlier civilizations, the Israelite nation would be built in a place of uncertainty and insecurity. Israelite survival will demand a different kind of response than that of other ancient cultures.

According to Jewish legend, the primary source of water for the Israelites during their journey through the desert was Miriam. Her courage in saving her baby brother Moses and her creativity in composing music to raise the people’s spirits endowed her with the ability to bring water seemingly out of nothing. Legend describes Miriam as the guardian of a rolling rock, known as Miriam’s well, that

provided fresh water, which both sustained the people and their herds and also made the desert bloom with green pastures and beautifully scented flowers. Moses too extracts water out of nowhere. Twice he draws out water from a rock. Water for the Israelites, these stories teach us, will not merely present itself. It will require human intervention and approaches that challenge conventional thinking.

Modern Israel has continued this tradition of human intervention and innovative thinking to bring forth water in an arid land. Seth Siegel's book *Let There Be Water* is an extraordinary account of how Israel turned scarcity into abundance. Israel defied all expectations about how much water would be available to its population by making water development a national initiative embraced by every household and by unleashing a dynamic scientific-innovative spirit.

Israeli engineers and farmers developed an entirely new way to water crops. While most of the developing world relied on ancient flood irrigation and the developed world used sprinkler systems, Israel invented drip irrigation, which delivers precisely calculated amounts of water at particular times of day at exact levels of depth to targeted points for each crop. Over 75% of Israel's fields are irrigated in this manner.

Israel has become the world's top leader in collecting, treating and distributing wastewater for use by farmers for their crops. Over 85% of its national sewage is reused in this way. That contrasts with about 8% in the United States.

Israel has also invented new meter-reading technologies, developed real pricing models for water charges, and aggressively reduced municipal water system leaks.

And we here in California have benefitted from one of Israel's most extraordinary developments. For years, it was thought that it would be cost-prohibitive to remove salt from seawater and make it usable for farm irrigation and household consumption. Israel challenged that conventional thinking and proved the conventionalists wrong. Israel now has five operational desalination plants.

The Israeli state-owned enterprise, IDE Technologies, responsible for those revolutionary advances also designed, built and now operates the largest

desalination facility in the Western Hemisphere. It is located just 72 ½ miles from here in Carlsbad. The Carlsbad Desalination Plant started commercial operation last December. It provides 50 million gallons of water a day. That is enough water to serve the needs of 300,000 people. Last April the Carlsbad plant received the Desalination Plant of the Year Award at the Global Water Summit in Abu Dhabi, United Arab Emirates.

In the past decade there have been over two hundred water-based start-ups launched in Israel. That accounts for 10% of all such companies world-wide. As a result of this dynamic innovative approach Israel is the only country in the world which has less area covered by desert today than fifty years ago.

Even more important than what Israel has achieved for itself is what Israel has shared with others to make water more available to more people. As part of the 1994 peace treaty with Jordan and the 1995 Oslo Agreement with the Palestinian Authority, Israel provides water to each. It supplies the Palestinian Authority with 15 billion gallons of water in the West Bank and 2.6 billion gallons in Gaza annually. It also supplies Jordan with 14 billion gallons annually.

Recently, Israel entered into an even more ambitious cooperative project with Jordan and the Palestinian Authority, called the Red Sea-Dead Sea Conveyance Project. Under the terms of the project, Jordan will build a desalination plant on the Red Sea. Israel will take delivery of this desalinated Red Sea water and in turn give Jordan water from its own inventory of freshwater up north at the Sea of Galilee. This will allow the Jordanians to avoid the extreme costs of building a massive pumping project to send water up north to its more populated areas. Israel will use the water from Jordan to support its growing agriculture industry near the Dead Sea.

Israel has extended its innovations in drip irrigation, desalination, waste water treatment and reuse to countries across the globe in Asia, Africa, and South America. Some of these are countries outspoken in their appreciation for Israeli assistance. Others are vocal critics of Israel in international forums such as the United Nations. Yet, Israel, as it has always done, extends its help regardless of

the political environment. The impulse to make the water flow has been a part of the Jewish story since the very beginning.

The verse from the story of the Garden of Eden, “A river issues from Eden to water the garden,” is the most frequently cited one in the greatest kabbalistic work of literature, the Zohar. In the Zohar this river symbolizes the continual flow of divine plenty. The Hebrew lends itself nicely to this reading. The word for river in Hebrew *nahar* shares the same root and sounds the same as the verb to shine, *nahar*. Thus the Zohar easily makes the transition between the river of Eden being a source of water to its being a source of divine emanation that infuses all existence.

In the sacred mythology of kabbalah human beings have the capacity to either impede or facilitate this flow of divine plenty. The kabbalists identify a verse from the prophet Isaiah as describing this human facilitation of the divine flow: “You shall be like a spring whose waters do not fail” (58:11). Immediately preceding that verse Isaiah instructs us on how to become flowing waters rather than stagnant pools. They are words that we will read tomorrow morning in our haftarah: Unlock the fetters of wickedness; Free the oppressed; Break off every yoke; Feed the hungry; Help the poor; Clothe the naked! Then shall your light shine in the darkness, and you shall be like a spring whose waters do not fail.

This has always been our mission: To open up the channels of life through our ethical treatment of all of creation. To liberate. To comfort. To share. Israel as a country has modeled this ethical engagement, as have Jewish communities throughout the world and across time.

The watered garden that is continuously saturated by the river as described in Genesis appears in the Zohar as a description of the future perfection of humankind. We have the capacity to create such a world. Let us free the oppressed. Feed the hungry. Clothe the naked. Help those in need. Let us open up the channels and be flowing waters, like a spring whose waters do not fail.