





Water: Appreciating a Limited Resource

By Rabbi Yonatan Neril¹

Human beings depend on a sufficient supply of high quality fresh water for their survival. Because of this essential dependence, Jewish sources equate water with life.² By recognizing our dependence on water, and ultimately our dependence on G-d, we can strengthen our appreciation and protection of our precious natural resources, and our relationship with the Creator of the world.

Even before the Israelites entered the land of Israel, water was central to their collective experience. In the desert, uncertainty about water resources inspired numerous complaints and lessons for the wandering Jews.³ The Talmud teaches that in the merit of Miriam's song, a well appeared in the desert which accompanied the Jews wherever they went.⁴ G-d gave us this essential resource, without which we could not live for more than a few days, in the water-scarce desert. But the long-term security of the resource was never certain.

The Biblical experiences with water in the desert can be understood as a spiritual training to cultivate appreciation for G-d's goodness. Through the process of taking water for granted, losing it and then receiving it directly from G-d, the desert wanderers certainly appreciated water and the One Who provided it. The Prophet Jeremiah refers to G-d as the 'Source of Living Waters,' since water is one of the chief means by which G-d provides life to people. Thus, at the end of the Jews' desert experience, they sang an exultant song about their appreciation to God for water. 6

Upon entering Israel, the experience of water scarcity continued for our ancestors, living in an agrarian society whose bounty or famine was regulated by rain. Israel is a semi-arid country with no major rivers. It receives modest rainfall, averaging less than 100 millimeters per year in the extreme south to 1,128 millimeters in the north.⁷ (By comparison, New York City averages between 710 and 1140 millimeters of precipitation per year.⁸) Until the 20th century, most agriculture in Israel was rain-fed and not irrigated; farmers depended on the winter rains in order to eat and live. Our sources⁹ teach that this water insecurity is by Divine design, to help us realize that G-d is the ultimate Provider not only of water, but all our needs.¹⁰

Evonne Marzouk contributed significantly to the development of this piece.

² Avot of Rabbi Natan 34:10. This introduction is based on Dr. Akiva Wolff's "Water: A Sukkos Drash"

³ See, for example, Numbers 20:3

⁴ Midrash Tanchuma Bamidbar 2 and Babylonian Talmud, Tractate Ta'anit 9a,. When Miriam dies, the well goes away (see Numbers 20:1-2)

⁵ Jeremiah 2:12, 17:13

⁶ Numbers 21:17

⁷ "Climate: Israel". U.S. Library of Congress, online at http://countrystudies.us/israel/36.htm

Normals & Extremes, Central Park, New York, 1869 to Present, National Weather Service Forecast Office, 01 April 2006.

For example, Rabbi Alex Israel teaches regarding rain in the Land of Israel: "The dependency of the mountain-land makes it a difficult place to live. Throughout the book of Genesis we read of periodic famine in Canaan. Israel is destined to live a life of dependency on God. This is Israel's legacy, its historic challenge. *The land of Israel is naturally insecure and that is precisely the reason that it was destined for Israel*." Commentary to Parshat Eikev, 5766, originally posted on website of Midreshet Lindenbaum, Jerusaslem.

The Talmud teaches that G-d directly waters the land of Israel and the rest of the world is watered by a messenger, as Job 5:10 says. Babylonian Talmud, Taanit 10a. Th`1us when rain is withheld in Israel, it is because of Divine intervention in response to Israel's actions, as the second paragraph of Shema makes clear.

Jewish prayers and texts reinforce this message and remind us of what our ancestors knew about water. Our prayers and texts are replete with appreciation for rain, profound recognition of the importance of water, prayers imploring G-d to provide us with water, and gratitude for the rains when they come. For example, Dr. Jeremy Benstein notes that Biblical Hebrew contains at least six different words to describe liquid precipitation (geshem, matar, yoreh, malkosh, revivim, se'irim), which denote different times and intensities of rainfall. ¹¹ *Yoreh* refers to the early rains of October, and *malkosh* refers to the late rains of April.

Furthermore, the Talmud records: "Rav Judah said in the name of Rav: 'We give thanks to You, Hashem, our G-d for every single drop which you have caused to fall upon us." This is said at the beginning of each fall rainy season. And the Talmud teaches, "The day when rain falls is as great as the day on which heaven and earth were created." Kabbalistically, water symbolizes consciousness, and is thus an appropriate means through which we cultivate our awareness of G-d. Praying for rain helps develop our relationship with our Creator by reminding us that G-d provides us water – along with everything else we need – each day.

Today, the industrialization of water distribution has increased the availability of water yet reduced our appreciation of its importance. We generally do not see where food is grown or the rain or irrigation that waters the crops. In Israel, for example, the National Water Carrier distributing water from the Kinneret (Sea of Galilee) and electric pumping of the underground aquifers has enabled irrigation of most Jewish farmland, increasing crop yields. Most recently, desalinization of Mediterranean seawater is becoming an increasing source of freshwater to fulfill increasing demand and to make up for expected future decrease supply from these other sources. (However, desalinization requires a significant amount of energy to produce the water.) Throughout the world, irrigation through electric pumping of water has transformed crop production. For households, piped water now comes directly to us, replacing reliance on local water sources.

These innovations have relieved us from transporting water from streams and cisterns to our homes. While this represents a tremendous improvement in quality of life, it also blinds us to where water comes from - both physically and spiritually. With this, we have lost the deep-seated experience of the preciousness of water. For many, this is partly a spiritual loss: lacking the sense of our ultimate dependence on G-d for all our needs. But it also has very significant practical impacts, because where appreciation ends, misuse begins.

The world increasingly faces a water crisis, experienced most by those in Africa, South Asia, and China. A lack of sufficient drinking water is recognized to be a leading cause of death in the world. Some 884 million people in the world do not have access to safe drinking-water sources.15 The United Nations Environment Program notes that two-thirds of the world's population is likely to face water stress by 2025, a result of "climate change, uncontrolled urbanization, unplanned water withdrawal and inappropriate water policies." ¹⁶

In the United States, many counties in the West and Southeast experience increasing water scarcity, with government agencies forced to regulate consumption or call for conservation. ¹⁷ Overpumping of groundwater in Texas, India, and elsewhere threatens the agricultural future of many farmers. ¹⁸

In the Land of Israel, Israel's main aquifers and the Sea of Galilee have dipped below their red lines in recent

[&]quot;Forgotten Language of Rain," Jerusalem Report, Fall 2005. Moses uses four of the words in one verse of Torah (Deuteronomy 32:2)

Babylonian Talmud, Tractate Ta'anit, p. 6b

Babylonian Talmud, Tractate Ta'anit 7b, Artscroll translation.

¹⁴ See, for example, <u>Sefer Yetzira</u>.

The 2010 Report of the World Health Organization/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, available online at http://www.wssinfo.org/download.php?id_document=1289

[&]quot;Note of the Executive Director," 2003, available online at www.unep.org/GC/GC22/Document/K0263442.doc

Andrew Gumbel, "The wrath of 2007: America's great drought," *The In dependent* (UK) June 11, 2007, available online at http://news.independent.co.uk/world/americas/article2643033.ece

Ogallala Aquifer: Water Hotspots, BBC News 2003, online at http://news.bbc.co.uk/2/shared/spl/hi/world/03/world_forum/water/html/ogallala_aquifer.stm

years, endangering water quality. ¹⁹ This has been due to increasing demand and overall reduced rainfall. The Israeli Ministry of the Environment has warned that "Preservation of the country's scant water sources may be the greatest challenge facing Israel today." ²⁰

Piped water and irrigated fields give us the mis-impression that the availability of fresh water is virtually limitless. Yet freshwater is scarce on planet earth.²¹ And these technologies obscure how water is becoming even more limited due to a plethora of factors, among them increasing demand, climate change, and pollution of freshwater supplies. Can human society simultaneously enjoy pumped and piped water and use it wisely?

For modern use of water to continue in the long-term, we will have to develop a deeper water awareness. That is where the teachings of our 3000-year old tradition come in. These teachings on rain and water can help us cultivate an appreciation for water, and inspire us every day to value and protect everything we use.

This material was produced as part of the Jewcology project. <u>Jewcology.com</u> is a new web portal for the global Jewish environmental community. Thanks to the <u>ROI community</u> for their generous support, which made the Jewcology project possible.

Summer 2008, from Israeli Ministry of the Environment, www.environment.gov.il and Adam Teva v'Din, www.adamteva.org.il

Israeli Ministry of the Environment, "The Environment in Israel," 2002, p. 73

The Science Advisory Board of Canfei Nesharim write: "Although water is seemingly abundant, the amount of fresh water is not. 97.5% of all water on Earth is salt water, leaving only 2.5% as fresh water. Nearly 70% of that fresh water is frozen in the icecaps of Antarctica and Greenland; most of the remainder is present as soil moisture, or lies in deep underground aquifers as groundwater not accessible to human use. Less than 1% of the world's fresh water (~0.007% of all water on earth) is accessible for direct human uses. This is the water found in lakes, rivers, reservoirs and those underground sources that are shallow enough to be tapped at an affordable cost. Only this amount is regularly renewed by rain and snowfall and is therefore available on a sustainable basis. Water, however, is not equally distributed. Of the very small amount of water that is usable by humans, approximately 20% is in the Great Lakes of North America (equal to 84% of all surface freshwater in the US, with another 20% in the Russian Lake Baikal."