



**JEWISH NATIONAL FUND**  
**MY OH MAYIM: WATER IN JEWISH THOUGHT**  
**A Handbook to Accompany World Water Monitoring Day, Water Monitoring Kits**

Dear Educator:

Thank you for your interest in World Water Monitoring Day. Jewish National Fund is delighted to once again provide you with these kits and our updated handbook to help you integrate this activity into your curriculum.

Recognizing the varied backgrounds of our readers, we have created a handbook that is navigable, varied and user-friendly. Please share your feedback with us so we can continue to improve these materials.

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As the basic building block of life, water plays a critical role in our ecological integrity and our spiritual practice. All living things need water to survive, and according to both Genesis and evolutionary theory, life began in the water.

Sadly, pollution and over-consumption threaten waterways in America, Israel and throughout the world. The work of World Water Monitoring Day is an important step in helping the scientific, political and environmental activist communities monitor the state of the world’s waterways, and insure aquatic protection around the world. Thank you for your involvement!

L'Shalom U'Vracha,  
 In Blessings of Peace,

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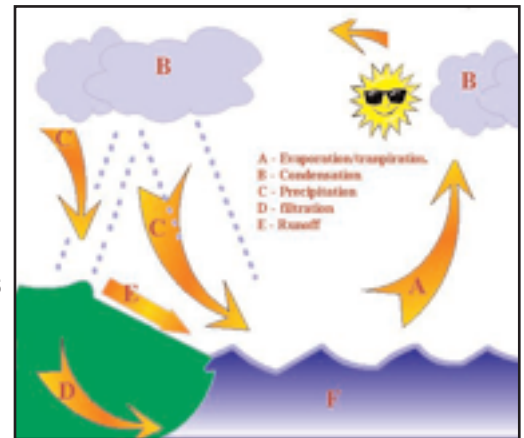
## Background to Water Resources, Pollution & Over Consumption

To understand the spiritual and environmental significance of water, we must first understand the science that underlies both how water works in our global system, and how human activity is affecting the water all creatures need to live.

### The Water Cycle

*"All rivers flow to the sea yet the sea is never full, from where they flow, there they return."* Ecclesiastes 1:7

Water on Earth is constantly traveling in an endless loop. The oceans are the driving force behind our climate and the largest source of water, so we will start our discussion there. Evaporation of ocean water by the sun fuels our climate and weather. Condensation of this water forms clouds which move across the skies. Precipitation in the form of rain, dew and snow bring this fresh water back to Earth. Some of this water stays on the surface of the planet in the form of lakes, streams and rivers. This water is subject to evaporation or can run off into the ocean. The rest of the water seeps into the ground, undergoing a natural filtration, forming the aquifers from which we draw most of our drinking water.



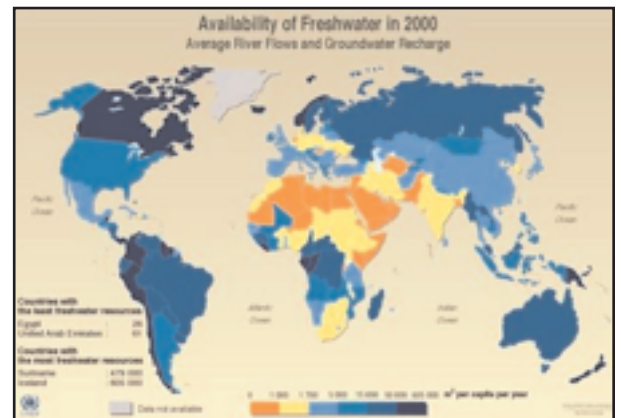
Climate Institute, [www.climate.org](http://www.climate.org)<sup>3</sup>

While the Earth is abundant with water, most water is not available for human consumption:

- 97.5% of the world's water is salt water
- 1.7% is glacier and permanent snow
- 0.7% is groundwater including swamps and permafrost
- 0.001% is available freshwater including lakes, rivers and shallow aquifers <sup>1,2</sup>

### Human Caused Problems: Over-Consumption

Beyond the general scarcity of freshwater (water free of salt), global distribution of water is not equal. Some areas are abundant with water and have more than they need, and other areas are in constant shortage. Human populations are growing exponentially, regardless of the supply of freshwater, including regions without sufficient or sustainable water sources. In these regions, human use is outstripping the water systems' ability to replenish itself, and water depletion has become an acute problem. Due to the strain of over-consumption placed on the water supply, levels in aquifers, rivers and lakes are decreasing annually. Consequently, the pollution and salinity (salt content) levels increase proportionally.



Fortunately, there is hope. Great strides are being made in the development of alternative sources of water. One particularly interesting method is desalination, a process by which salt is removed from sea water converting it to freshwater, which is now being practiced on a large scale in Israel, producing close to 15% of Israel's freshwater<sup>4</sup>. In addition, we can help reduce the rate of water consumption by eliminating wasteful water habits. Some solutions are obvious, such as buying water-efficient appliances and turning off taps when they are not in use. Surprisingly, many other conservation initiatives can help save huge amounts of water, as they require large quantities of water during production. For example, reducing the amount of paper, plastic and metal we use, meat we eat and miles we drive are all methods by which we can become more efficient consumers of the precious water on our planet. For more information on how we can make a difference, click here.

## Human-Caused Problems: Pollution

Water pollution is another major threat to humans, plants and animals. For centuries water has been used to remove waste from human communities. In previous times, the adage “the solution to pollution is dilution” was touted as a universal cure-all. Even today, popular wisdom says that rivers will remove pollution and clean themselves over a very short stretch of river. While rivers and waterways do have an amazing ability to ‘cleanses’ themselves of naturally occurring pollutants, through the continually churning of the water, and the abundance of plant and animal life, the conclusion that the solution to pollution is dilution, is clearly an illusion! The quantities of human-produced pollution being emitted into rivers around the United States, Israel and around the world are far greater than these rivers could possibly clean.

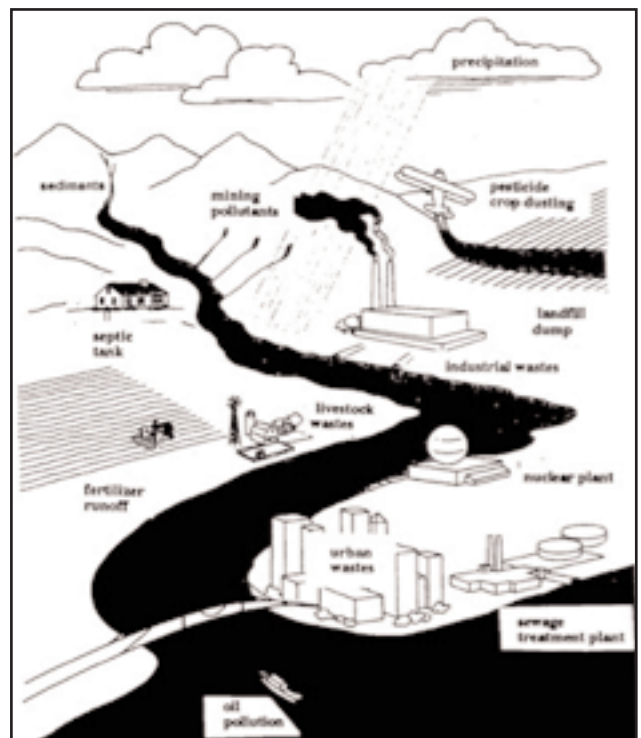
The effects of this aquatic pollution are now easily seen: once beautiful waterways are now bare of plant life. Fish, amphibian and insect populations are reduced. Once beloved and safe waters are so polluted, people cannot swim in them or drink from them for fear of death or disease.

More than five million people, most of them children, die every year from illnesses caused by drinking poor-quality water.<sup>5</sup>

Most of the world’s aquatic pollution can be traced to three sources: industrial release, sewage release, and runoff from agriculture.

90% of the Developing World’s waste water is discharged untreated into local rivers and streams.<sup>5</sup>

Taking action on this global problem begins in your community. Testing your water through World Water Monitoring Day will let you know how your local watershed (the land area that drains into a particular lake, river or ocean) is doing. Once you have tested the health of your water, find out who your local polluters are and see what you can do to help protect your local water. For more information on how we can make a difference, click here.<sup>6</sup>



## Jewish Values Related to Water

Water, specifically rain, is an important part of Jewish belief and ritual. Rain is believed to be a foundation of the world. Rain in the proper seasons is God's way of giving blessing. With this in mind, we pray for rain (or dew) daily in the *Amidah* in the proper season according to the land of Israel.

### Importance of Rain: *Mayim = Chayim*

*"Three things are of equal importance: Earth, Humans, and Rain... without Earth, there is no rain, and without rain, the Earth cannot endure, and without either, humanity cannot exist."* Midrash Genesis Rabbah 13:3

### *Mayim* (water) is *Chayim* (life)

Rabbi Tanhum Ben Chaya said: *"The sending of rain is an event greater than the giving of the Torah. The Torah was a joy for Israel only, but rain gives joy to the entire world including animals and birds. For as it is said: 'You take care of the east and irrigate it.'"* Midrash Psalms 117, based on Psalm 65:10

### Rain as sustenance, *Shefa* (Divine Abundance) and God's Judgment

As noted above, rain in the proper seasons is God's form of offering blessing towards humans, animals and the Earth, providing that which is needed for survival. However, withholding rain or bringing rain at the wrong time is viewed as a curse, and is a direct consequence of inappropriate human behavior (such as serving false gods.) Jewish tradition teaches that our actions have a direct impact on the rain we receive and consequently on the health of our planet.

*"I will grant you rains in their seasons, so that the Earth shall yield its produce and trees of the field their fruit... You will eat your fill of bread and dwell securely in your land."* Leviticus 26:4-5

*"I will grant the rain for your land in season... you will eat and be satisfied. Take care not to be lured away to serve other gods and bow to them. For the Lord's anger will flare up against you, and He will shut up the skies so that there will be no rain and the ground will not yield its produce; and you will soon perish from the good land that the Lord is giving to you."* Deuteronomy 11:13-17

*"On account of three things does rain fall: for the sake of the land, for the sake of God's loving kindness and for the sake of God's corrective trials. All three are mentioned in these verses: 'God loads the clouds with moisture, scatters lightening clouds, causing each of them to happen to God's land, whether as a plague or as a blessing.'"*

*Talmud Taanit 3:3, based on Job 37:11, 13*

## Rain in Israel, the Focus of Our Prayers

Rain in Israel has always been central to Jewish prayer and practice. Beginning on *Shemini Atzeret* and continuing until *Pesach*, Jews around the world pray for rain in Israel three times daily during the *Amidah* prayer. (Some communities pray for dew the rest of the year.) These prayers remind us of our ties to our homeland and of our role in the three-way relationship which includes humanity, God and the Earth.

## ***Sukkot, Shemini Atzeret and Water, a Match Made in Heaven***

The holidays of *Sukkot* and *Shemini Atzeret* quickly follow *Rosh Hashanah* and *Yom Kippur*, and they are often overlooked and under-celebrated. These holidays celebrate the culmination of the agricultural year, the corresponding Jewish holiday cycle, and mark the beginning of winter. Just as we want to spend most of our time indoors, as days are getting shorter and temperatures are getting colder in the Northern Hemisphere, we are forced back outside into our *Sukkah*, to shake the *Lulav*, and celebrate food, harvest, community and water. Culminating the entire holiday cycle is *Shemini Atzeret*, where we offer a prayer for rain and begin the winter prayers for rain in the *Amidah*.

### ***Lulav, an Ancient Rainstick***

Shaking the Four Species including the *Lulav* (palm branch) along with the *Hadas* (willow), *Aravot* (myrtle) and *Etrog* (citron) is an important part of the *Sukkot* ritual. Many interpretations exist as to the meaning of these symbols, but two stand out as having direct significance. First, the *Lulav*, a branch of the date palm tree, is a desert plant, a symbol of agricultural success in the desert. The growth of this tree would not have been possible without the properly-timed rains in the desert. Interestingly, long before the Israelites inhabited *Eretz Yisrael*, the date palm branch was rumored to have been used by cultures throughout Africa and the Middle East in a variety of rituals for rain, human and earthly fertility.<sup>1</sup> [Click here for a related craft activity.](#)

### ***Hadas, the Jordan River Lover***

The *Hadas*, willow branch, is another symbol of the deep ties to water inherent in the *Sukkot* symbols. Willow is a tree which requires a great deal of water to thrive. In Israel it grows only in the Jordan River Valley and along the *Kinneret* (Sea of Galilee.) These branches serve as a reminder that like the willow tree, we are dependent on an abundance of water for survival. It motivates us to give thanks for the gift of rivers and waterways such as the Jordan.

### ***Shemini Atzeret, The World is Judged for Rain***

The holiday of *Shemini Atzeret* marks the end of the agricultural and festival seasons and a transition into winter. In the Talmud, it is also understood as the day on which the world's rainfall for the next year is determined. This holiday and its central ritual, the annual prayer for rain, while assuming a minor role in modern times was extremely important in an agricultural society. Conducted during the *Musaf* service, this special blessing asks God, for the sake of our ancestors, not to withhold rain and water. In addition to this prayer, *Shemini Atzeret* marks the transition in the *Amidah* prayer from praying for dew to praying for rain in the land of Israel.

### ***Simchat Beit Hashoevah***

*"Whoever has not seen the rejoicing of the Beit Hashoevah has never seen rejoicing in his life."* *Mishnah Sukkah 5:1*

*Simchat Beit Hashoevah*, the water libation ceremony, was a Temple service not to be missed. It was based around a joyous parade in which the Israelites marched to the Temple, drawing the water from Jerusalem's spring, and then pouring it on the sacrificial altar. *Mishnah Sukka 4: 9-10*

The Levites played their musical instruments throughout the Temple. Giant oil lamps lit the night sky - the light was so bright it could be seen from every hill in Jerusalem. The people danced and prayed in celebration of water and life. Notably, the first mention of Biblical recycling is related to this holiday. According to the Talmud, on this day the priests received new clothes, and the used undergarments of the priests were used as the wicks in the lamps. Water libations, recycled wicks, what a Biblical eco-celebration!



## Jewish Values Related to Environmental Conservation/Pollution Prevention

Genesis 2:15 tells us that since the time of the Garden of Eden, human beings are instructed to both work and guard the Earth. This instruction gives us the power to destroy as well as the responsibility to preserve, a difficult line to maintain. While Jewish tradition with regard to environmental stewardship is fraught with this dichotomy, one thing is clear: *“The advantage of land is supreme; even the king is subject to the soil.” Ecclesiastes 5:8*

### Love and Awe of Creation

*“To be a Jew means to wake up and to keep your eyes open to the many beautiful, mysterious, and holy things that happen all around us every day.” Rabbi Lawrence Kushner, Book of Miracles, Page 6*

How many of us really live our lives this way? Jewish teaching reminds us that we must notice the gifts of Creation, and hopefully this appreciation will breed responsibility.

*“There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle.” Dr. Albert Einstein (attributed)*

*“How great are Your works, O God, in wisdom You have made all of them. The earth is filled with your creations.” Daily Morning Prayers, Yotzer Or*

### God’s Stewards

As human beings we have special gifts and responsibilities. Created in the image of God, we are able to transform the landscape of the Earth, reroute rivers, and invent incredible technologies. Unfortunately, our abilities have also led to large-scale environmental destruction, species extinction and climate change. Fortunately these same gifts, if applied to stewardship and conservation, can go a long way in bringing us back from the brink.

*“And the Lord took Adam and placed him in the Garden of Eden, to work it and guard it.” Genesis 2:15*

*“Upon creating the first human beings, God guided them around the Garden of Eden, saying; ‘Look at my creations! See how beautiful and perfect they are! I created everything for you. Make sure you don’t ruin or destroy My world. If you do, there will be no one after you to fix it.’ Midrash Kohelet (Ecclesiastes) Rabbah 7:20*

### Pollution Prevention

Pollution prevention has long been a concern of urban planners. Ancient Jews were no exception. The Mishnah, edited around 1800 years ago, makes clear indications as to how to treat communal resources. Interestingly, specific mention is made as to where to locate polluters, to have the least effect on people.

*“All carcasses, cemeteries and tanneries must be kept at fifty cubits’ distance from a town. A tannery can only be set up on the east side of town [because the east wind is gentle and will not carry the fumes to town].”*

*Mishnah Baba Batra 2:9*

*“One is forbidden from gaining a livelihood at the expense of another's health.”*

*Rabbi Isaac Sheshet, Responsa 196, (14th Century)*

### Responsibility to Act

Once a threat has been identified, Jewish values teach us that we have a clear responsibility to act. With large, decentralized issues like water pollution, this can often be a challenge and can seem overwhelming. However, we

must act in spite of our concerns, and while we may not be able to accomplish the entire task ourselves, we still must begin the process.

*"If you believe you have the power to damage, believe you have the power to fix."* Rabbi Nachman of Bratslav (attributed)

*"A burning coal/object left in a place where the public can be injured by it - one is allowed [and instructed] to extinguish it [even on Shabbat]."* Rabbi Yosef Caro in Shulchan Aruch, Oreh Hayim 334:27

### **The Nachson Story, a Midrash** (based on Numbers Rabbah xiii. 9.)

When it came time to cross the Dead Sea, Moses and the Jews approached the edge and nothing happened, no miracle. Moses put his staff in the water and still nothing happened. The people started to panic; the Egyptians were coming and there was no miracle in sight. One man of incredible faith, Nachshon, decided to just walk into the water. He walked, announcing that God would bring a miracle, but still nothing happened. He walked in deeper and deeper. The water passed his waist, his shoulders, his chin. When finally the water had covered his head and he was walking entirely on faith, with no way to breathe, the sea split open, creating a dry path that he and the Israelites could follow.

Nachshon's story teaches us that even when the odds seem impossible, we must continue to lead with our courage and faith that our leadership will have a positive outcome. Just one person can make a difference.

# Water Pollution and Protection in Our Homelands, America & Israel

## Over-Consumption in the USA

In the United States, the city of Las Vegas is a 'glowing' example of this problem. America's fastest growing city, Las Vegas, is home to millions of people in the middle of a water-poor desert. Even in this climate, the average resident uses 230,000 gallons of water a year,<sup>1</sup> not including the hotel canals and lagoons on the Strip! This in a region that receives an average of 4.16 inches of annual precipitation.<sup>2</sup>

However, you don't have to look only at Las Vegas to see signs of over-consumption. Most states in America are currently experiencing a water deficit. And as the global climate shifts, most models predict this problem will only get worse.

## Water Pollution in the USA

Water pollution and disruption of aquatic ecosystems is a major concern in the United States, with 45% of rivers and streams, and 47% of lakes, ponds and reservoirs impaired. America's major causes of pollution include agricultural and industrial waste and habitat alterations for human development.<sup>3</sup>

While most American waterways are clean enough for swimming, drinking any surface water (ie. drinking directly from lakes, rivers and streams) in the lower 48 states, without purification, is considered dangerous.

## Moving Towards Cleaner Rivers in the USA

Fortunately, great strides are being made to help clean up America's rivers and lakes. Most of America's largest and most polluted rivers, such as the Hudson, the Mississippi, and the infamous Cuyahoga River in Cleveland, Ohio which caught fire in 1969, are much cleaner today than they were a decade ago. Great improvements continue, making them cleaner and safer for people and wildlife.

Many people and organizations have played important roles in the movement to clean our water. One organization stands out as an example of how change can happen. Clearwater was founded in 1966 by musician Pete Seeger and other activists with the intention of stopping General Electric (GE) from dumping

Pollution and Other Water Quality Statistics from the EPA Report to Congress 2002<sup>3</sup>

| <u>Rivers &amp; streams</u>                                     |                       |
|---|-----------------------|
| Total percentage of impaired rivers & streams -- 45%            |                       |
| Causes of Impairment  | % of streams effected |
| Sediment/Siltation  | 12.3                  |
| Pathogens   | 10.0                  |
| Habitat Alterations   | 9.9                   |
| Metals  | 6.4                   |
| Nutrients   | 6.4                   |
|   |                       |
| Sources of Impairment   | % of streams effected |
| Agriculture   | 13.5                  |
| Hydro modifications   | 9.5                   |
| Habitat alterations (not hydro)                                 | 6.1                   |
| Natural   | 5.0                   |
| Unknown   | 10.9                  |
|   |                       |
| <u>Lakes, Ponds and Reservoirs</u>                              |                       |
| Total percentage of impaired lakes, ponds and reservoirs -- 47% |                       |
| Causes of Impairment  | % of streams effected |
| Nutrients   | 14.0                  |
| Metals  | 13.8                  |
| Organic Enrichment w O2   | 6.5                   |
| Sediment/Siltation  | 6.4                   |
| Nuisance Exotic Species   | 6.2                   |
|   |                       |
| Sources of Impairment   | % of streams effected |
| Agriculture   | 10.1                  |
| Atmospheric Deposition  | 8.8                   |
| Land Application/ Waste Sites                                   | 7.4                   |
| Hydromodifications  | 7.4                   |
| Unknown/unspecified   | 13.2                  |



industrial waste into the Hudson River in upstate New York. As a result of this campaign, not only has dumping stopped in the river, but polluters have been forced to clean up the river.

In addition to their work on the Hudson River, Clearwater serves as a model of environmental education. The sloop Clearwater, a 106-foot wooden sailing ship designed after 18th and 19th century Dutch sailing sloops, serves as a moveable classroom, laboratory, stage, and forum. Recently decreed as “America’s Environmental Flagship” by Congress, the sloop educates more than 13,000 children and adults annually. More than a dozen national and international programs have successfully modeled programs after Clearwater. Maybe there is one in your community. For more information, visit [www.clearwater.org](http://www.clearwater.org).

### Over-Consumption in Israel

Water is in short supply in Israel and the entire Middle East. Average rainfall in Israel is approximately 22 inches/year,<sup>4</sup> and Israelis consume 2.3 times as much water as naturally replenishes.<sup>5</sup> Israeli population growth over the last half century, more than 5 million people, has led to a dramatic drop in water levels in all Israeli lakes and aquifers. Some aquifers, such as the coastal aquifer, have become essentially unusable as drinking water. As freshwater levels drop in the aquifer, salt water seeps in from the Mediterranean. The Dead Sea is the worst hit by this overconsumption and diversion of natural waterways for human usage; it is dropping more than 1 meter (3 feet) per year.

### Water Pollution in Israel

Israel’s rivers and streams are some of the most polluted in the world<sup>6</sup> and most are not safe for swimming or drinking. In fact, in recent years a number of incidents have occurred in which people have died from exposure to Israeli rivers. The most famous of these examples is the 1994 Macabee Games disaster, where 4 Australian athletes died from inhaling the polluted waters of the Yarkon River, near Tel Aviv, after a bridge collapsed.

### Moving Toward Cleaner Rivers in Israel

Fortunately, pollutant loads discharged to Israel’s main rivers have decreased by more than 50% between 1994 and 2005

- Total organic carbon - 76% decrease.
- Total nitrogen - 42% decrease
- Total phosphorus - 86% decrease.

A look at some of Israel’s rivers over the same time period shows the following:<sup>7</sup>

- Major improvement in 6 rivers: Soreq, Taninim, Kishon, Hadera, Harod and Alexander.
- Moderate improvement in 3 rivers: Yarkon, Poleg and Lachish
- Moderate deterioration in 1 river: Ayalon
- Major deterioration in 1 river: Lower Na’aman River

Click here to order a map of water in Israel.

**Jewish National Fund (JNF)/Keren Kayemet L'Yisrael (KKL)** has played a major role in restoring river ecosystems and creating reservoirs throughout the country. The Alexander river, one of the 6 rivers mentioned above as having undergone ‘major improvements’ has been the focus of **JNF** activity for more than a dozen years. In 2003, it won the International Thiers Riverprize, given annually in Australia to further promote excellence in river rehabilitation worldwide.<sup>8</sup>

| Rank, (of 68 countries) | Country       | Tons/cubic km |
|-------------------------|---------------|---------------|
| #1                      | Israel        | 27.07         |
| #2                      | Jordan        | 11.53         |
| #14                     | China         | 3.78          |
| #16                     | Egypt         | 3.58          |
| #30                     | United States | 1.14          |
| #32                     | India         | 0.97          |
| #60                     | Canada        | 0.11          |

Definition: Industrial organic pollutants per available freshwater (Metric Tons of BOD Emissions per Cubic Km of Water)

**JNF's** most ambitious water project of recent memory, the revitalization of Nahal Be'er Sheva, is already underway in Israel's 'Southern Capital' Be'er Sheva. A massive water and economic development project, the dry riverbed – *wadi* - that intersects the city from east to west has already been cleaned. There are plans to create a park and a lake, plant trees and create trails. To make the river flow, **JNF** plans to improve the recycling program to recycle the city's water (after treatment) by releasing it down the now dry riverbed.<sup>9</sup> [Click here for more information.](#)

A number of grassroots organizations have begun to organize within Israel to protect and restore aquatic environments. Most notable is the group "Zalul Environmental Association," an organization committed to protecting and maintaining clean, clear water along Israel's rivers and shorelines. Founded in 1999 by a group of concerned citizens alarmed by the ongoing degeneration of Israel's water resources and the lack of regulations to safeguard them, Zalul has made great strides in promoting clean water and preservation of aquatic habitats. [Click here for more information.](#)

## **How We Can Help Protect our Aquatic Ecosystems and Precious Water Sources**

Researching and learning about water pollution is an important first step, and must be followed up with personal and communal change.

*"It is not up to you to finish the task, but neither are you free to dissociate from it."* Rabbi Tarfon, Mishnah Pirkei Avot 2:21

### **Creating Social Change**

Once you have tested a waterway in your region, find out the causes of pollution in that particular watershed, river or lake, and also conservation and restoration projects under consideration. Find a way to have your students get involved in a local campaign to protect or restore the waterway. Examples of initiatives include contacting elected officials, conducting education campaigns in the community, and directly cleaning up river beds.

### **Creating Communal Change**

Our schools and synagogues are settings where we use large quantities of water and create pollution. How our community behaves in these spaces articulates how we view the issues of over-consumption and pollution. Have your class pick a project within your school or synagogue to help conserve water or eliminate pollution.

### **Creating Personal Change**

The average American household uses 69.3 gallons<sup>1</sup> of water a day for personal consumption, and toxic products dumped down the drain account for a major source of water pollution. How individuals and families behave in their homes can have a huge impact on protecting our water sources. Have each student, in conjunction with his or her family, choose two things they can each do in their own lives. (One to save water and one to reduce pollution.) Have students commit to this for at least 4 - 6 weeks and check in regularly on their progress.

# MY BRIT MAYIM: COVENANT WITH THE WATERS

I \_\_\_\_\_ in order to fulfill my commitments to protect Mayim Chayim,  
the waters of life, herby promise to: (choose one from each category)

## WATER CONSERVATION

- Turn of tap when brushing my teeth
- Take shorter showers
- Stop using disposable bottled water
- Switch to 'low flow' faucets and shower
- Other: \_\_\_\_\_

## POLLUTION REDUCTION

- Use biodegradable household cleaners
- Buy local organic food
- Dispose of hazardous waste properly
- Drive less (use public transit, bike, walk)
- Other: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## Appendix: Resources List for More Information on Water, Water Pollution and More

### Jewish Environment Resources

#### Jewish National Fund

Teachers resource section (Wind and water) [www.jnf.org/yourpage](http://www.jnf.org/yourpage)

Green Times Newsletter for Youth, Water Edition [http://www.jnf.org/site/DocServer/green\\_log.pdf?docID=2301](http://www.jnf.org/site/DocServer/green_log.pdf?docID=2301)

#### Canfei Nesharim, Orthodox Environmental Organization

Online Learning: <http://canfeinesharim.org/learning/torah.php>

The Halachos of Netilas Yadayim and Water Conservation

<http://canfeinesharim.org/learning/torah.php?page=11348>

Shemini Atzeres and Simchas Torah: A Connection <http://canfeinesharim.org/learning/torah.php?page=11348>

#### COEJL, Coalition on the Environment and Jewish Life

Source for Environmental Education, Discourse and Study

<http://www.coejl.org/programbank/index.php>

Roots and Branches: Section 2 - Wasting Water

<http://www.coejl.org/programbank/displayprog.php?id=162>

### Water Quality/ Pollution Resources

#### US EPA

Water News <http://www.epa.gov/ow/>

Surf your watershed <http://cfpub.epa.gov/surf/locate/index.cfm>

**Water Pollution Guide (UK)** <http://www.water-pollution.org.uk/>

**Zalul Environmental Association for Israel's Water** <http://www.zalul.org/en/default.asp>

#### Israeli Ministry of Environmental Protection

[http://www.sviva.gov.il/bin/en.jsp?enPage=e\\_BlankPage&enDisplay=view&enDispWhat=Zone&enDispWho=water\\_top&enZone=water\\_top](http://www.sviva.gov.il/bin/en.jsp?enPage=e_BlankPage&enDisplay=view&enDispWhat=Zone&enDispWho=water_top&enZone=water_top)

## References/Endnotes

### Background to Water Resources, Pollution & Over-Consumption

1. Natural Resources Canada, "Atlas of Canada – Freshwater"  
<http://atlas.nrcan.gc.ca/site/english/maps/freshwater/1> (accessed July 14, 2008)
2. United Nations Environmental Program, "Vital Water Graphics,"  
<http://maps.grida.no/go/collection/vital-water-graphics> (accessed July 14, 2008)
3. Climate Institute, "Water and Climate Change," [www.climate.org/topics/water.html](http://www.climate.org/topics/water.html) (accessed July 15, 2008)
4. Neal Sandler, "Israel Waterworks for the World?" Business Week, December 30, 2005  
[http://www.businessweek.com/technology/content/dec2005/tc20051230\\_495029.htm](http://www.businessweek.com/technology/content/dec2005/tc20051230_495029.htm) (accessed July 16, 2008)
5. Maude Barlow & Tony Clarke, "Blue Gold," New Press, Sept 2005
6. Dr. J. Gordon Millichap, "Our Water Safe to Drink?"  
<http://www.nutrition4health.org/nohanews/NNF95WaterSafeToDrink.htm> (accessed July 16, 2008)

### Water Pollution and Protection in Our Homelands, America & Israel

1. Insider View Las Vegas, "Las Vegas and Nevada Facts," <http://www.insidervlv.com/didyouknow.html>  
(accessed July 28, 2008)
2. Answers.com, "Los Vegas Information" <http://www.answers.com/topic/las-vegas-nevada> (accessed July 28, 2008)
3. United States Environmental Protection Agency, "National Water Quality Inventory: Report to Congress, 2002"  
<http://www.epa.gov/305b/2002report/> <http://www.epa.gov/305b/2002report/> (accessed July 28, 2008)
4. Atlapedia Online, "Israel" <http://www.atlapedia.com/online/countries/israel.htm> (accessed July 29, 2008)
5. The Global Education Project, "Middle East Information – Water"  
<http://www.theglobaleducationproject.org/mideast/info/water.html> (accessed July 29, 2008)
6. Nation Master, "Water – Freshwater Pollution by Country,"  
[http://www.nationmaster.com/graph/env\\_wat\\_fre\\_pol-environment-water-freshwater-pollution](http://www.nationmaster.com/graph/env_wat_fre_pol-environment-water-freshwater-pollution)  
(accessed July 29, 2008)
7. Israeli Ministry of Environmental Protection, "River Monitoring,"  
[http://www.sviva.gov.il/bin/en.jsp?enPage=e\\_BlankPage&enDisplay=view&enDispWhat=Object&enDispWho=Articles^I4894&enZone=River\\_Monitoring](http://www.sviva.gov.il/bin/en.jsp?enPage=e_BlankPage&enDisplay=view&enDispWhat=Object&enDispWho=Articles^I4894&enZone=River_Monitoring) (accessed July 29, 2008)
8. Jewish National Fund, "JNF Nahal Alexander Restoration Project Wins..."  
[http://www.jnf.org/site/PageServer?pagename=PR\\_Nahal](http://www.jnf.org/site/PageServer?pagename=PR_Nahal) (accessed July 31, 2008)
9. Jewish National Fund, "The Negev – Projects – Beer Sheva,"  
<http://www.jnf.org/site/PageServer?pagename=negevProjectsBeersheva> (accessed July 31, 2008)

### How We Can Help Protect our Aquatic Ecosystems and Precious Water Sources

1. American Drinking Water Association, "Water Use Statistics,"  
<http://www.drinktap.org/consumerdnn/Default.aspx?tabid=85> (accessed July 18, 2008)