Mikvaos – a Brief Overview: The Jewish Ritual Bath
By Rabbi Yair Hoffman

How Adherence to the Raavad's View on Mikvaos Saved 75,000 Hungarian Jews

Before we delve into the complex laws of mikvaos, let's begin with an extraordinary historical account that demonstrates how strict adherence to halacha literally saved lives.

In 1944, over 100,000 Jews were crammed into the Budapest ghetto. The Nazi regime ordered all Jewish charitable institutions to be shut down, except for the Jewish council, which they deemed necessary. An askan (community activist) named Maurice Lowinger, who ran the soup kitchen, managed to negotiate an agreement to keep the soup kitchen operating as part of the Jewish council.

The soup kitchen needed to produce 500 gallons of soup daily to feed the ghetto residents, requiring 1,250 gallons of water. This presented an enormous challenge, as the Nazis had cut off all water supply to the Jewish ghetto.

The solution came from an unexpected source: a long-forgotten mikveh in Budapest that was fed by an underground spring. This mikveh had been built according to the stringent opinion of the Raavad, who held that the majority of a mikveh's water must always come from an undrawn source.

Maurice Lowinger located engineers who were able to find and drill into this underground water source. The plan succeeded, providing the soup kitchen with abundant water. Thanks to strict adherence to the Raavad's opinion in mikveh construction decades earlier, 75,000 Budapest Jews survived during this critical period.

With this remarkable story in mind, let's now explore the laws and construction of mikvaos in greater detail.

What is a Mikveh?

A mikveh (also spelled mikvah) is a ritual bath used for spiritual purification. The word “mikveh” literally means “collection,” referring to a collection of water. Throughout Jewish history, the mikveh has been a cornerstone of Jewish family life and religious observance.

Note: This is a brief overview of a very complex area of halacha (Jewish law). It was written in order to give readers some familiarity with it. One should always consult one’s own Rav or Posaik for practical guidance.

The Minimum Size of a Mikveh

How Much Water Is Required?

According to the Mishna, a mikveh requires a minimum of 40 seah of water. This measurement comes directly from the Torah, as derived in the Gemara Avoda Zara 75b and also found in Eruvin 4b. The Shulchan Aruch (Yoreh Deah 201:1) codifies this requirement as fundamental. The size of 40 seah is measured as 1 amah x 1 amah x 3 amos.

In Modern Measurements

The minimal amount of a mikveh is theoretically 332 liters (about 88 gallons), but in practice, most mikvaos use double or triple that amount. Rav Chaim Noeh in Shiurei Torah (3:29 p. 257) calculated that since there are 24 log in a seah, 4 reviyos in a log, and 27 dirham in a reviyis, each of which is 3.2 grams of water, a 40-seah mikveh contains about 331.8 liters.

Full Body Immersion

A person who goes to the mikveh needs to be completely covered by the water at one time. The Sifra Emor 4:7 derives from Vayikra 22:6 that a person is only purified by going to the mikveh if they are completely covered by water at one time. The Shulchan Aruch (YD 198:1) clearly states this requirement.

Maintaining the Mikveh's Kosher Status

The Fundamental Challenge of Mikveh Construction

We know that a mikveh may not have water that is considered to have been drawn by human hands (mayim she'uvim). We also know that a mikveh should be as clean and attractive as possible. This author recalls a conversation with Rabbi Leo Jung ob"m in 1983 about how the saintly Chofetz Chaim had met with him and implored him to build beautiful and attractive mikvaos. The challenge, still today, is to accomplish both of these requirements effectively.

Keeping the 40 Seah

There needs to be 40 seah the entire time one goes in the mikveh. If as one goes into a mikveh some water spills out and there's less than 40 seah, then the mikveh becomes unfit for use. The Tashbetz 1:17 and Tosfos Yoma 31a both emphasize this point.

What Counts Toward the 40 Seah?

Mud can count for a mikveh if it is so thin that a cow would drink it, as stated in the Mishna Mikvaos 2:10. The Gemara Zevachim 22a confirms this standard. The Rambam (Mikvaos 8:9) and the Shulchan Aruch (YD 201:32) rule in accordance with this Gemara. (However, this wouldn't exacrly fit with what the Chofetz Chaim had told Rabbi Jung.)

Some say there is a fixed measure established by our Sages as a stringency: it needs to be so thin that if a straw were placed on top of it, the straw would fall in. This stringent view comes from one of the six opinions in the Mishna.

Creatures in the Water

Any creature that grows in the water, such as fish, can count toward the mikveh's volume if it is liquified. The Gemara Zevachim 22a establishes this

principle, and the Shulchan Aruch (YD 201:33) codifies it. (Also, not in accordance with above point)

Traditional Methods of Mikveh Construction

The Side-by-Side Method

Historically, most mikvaos were built using a side-by-side construction method. The pool of rainwater (called the bor) was built next to the actual immersion pool. A small hole was made connecting the two pools on the sidewall. This hole could be opened and closed, allowing the mikveh to be cleaned when the hole was closed, temporarily invalidating it. After the immersion pool was filled again, the hole could be reopened, creating a kosher mikveh once more.

Halacha requires that the connecting hole be equivalent in size to a Shfoferes HaNod (the opening of a container). In this manner of mikveh construction, the bor and the mikveh are positioned side by side.

The Lubavitch Method

Rabbi Shalom Dov Ber Schneerson (1860-1920), the fifth Lubavitcher Rebbe (known as the Rashab), preferred a different method of mikveh construction. In his notes on mikveh construction (cited at the end of “Taharas HaMayim”), he advocated three major changes:

He wanted the immersion pool to be positioned on top of the rainwater pool.
He advocated that the connecting hole be much larger than a Shfoferes HaNod – he wanted it to be a full handbreadth by a handbreadth.
He advocated having two holes, not just one.
The reason for positioning the immersion pool above the rainwater pool may have been to address the opinion of the Raavad more adequately. The Raavad held that a rainwater pool becomes invalid once it no longer contains a majority of its original rainwater. Perhaps the Rashab felt that the waters would not exchange as readily if constructed in this manner. Although the Raavad’s position is a minority view, it is worthwhile to attempt to fulfill the

mitzvah of mikveh according to as many opinions as possible (Tashbatz Vol I #17).

Alternatively, the Rashab might have advocated this type of mikveh as a protective measure to ensure that no one would accidentally invalidate it, by having a slab placed above the actual bor.

The Satmar Approach

The Rashab was not the only one to build such a mikveh. In a letter dated 1936, the Satmar Rebbe discusses an occasion when he built an immersion pool on top of the rainwater pool. He also advocated having multiple holes larger than a Shfoferes haNod.

The Satmar Rebbe added a fourth requirement: he wanted the concrete slab between the pools to be constructed from multiple pieces so that it would not be too heavy to lift. He advocated that each slab have its own hole.

Controversies Regarding the Top-Bottom Approach

Having the immersion pool on top has met with some controversy. Rabbi Meir Posen of London, in a monograph sent to Dayan Weiss of Jerusalem (cited in Minchas Yitzchok Vol. V #95), quotes the Divrei Chaim (2:88) as ruling that a mikveh on top of a bor is invalid and constitutes what is called “k’tafres.” The Mishna in Taharos (8:9) states: “K’tafres aino chibbur lo letumah velo letaharah” – a ktafres is not considered a connection neither to make impure nor to purify. A k’tafres is liquid streaming down from an angle.

However, luminaries such as Rav Meir Arik (Imrei Yosher Vol. II #167), Rav Moshe Feinstein (Igros Moshe YD Vol. III #65), the Satmar Rebbe (Divrei Yoel Vol. I YD #80), and Dayan Weiss disagree with Rabbi Meir Posen’s contention. They stated that the Divrei Chaim never invalidated this design on these grounds if there was a direct hole above the rainwater pool. Indeed, Rav Meir Arik even questions whether it would be invalid if water came down from an angled tube.

Scientific Considerations About Water Mixing

The notion that waters in a top-bottom arrangement do not mix does not have scientific validity. There are two methods by which fluids mix with each other: diffusion and convection.

Even with both bodies of water at a constant temperature, diffusion occurs according to the equation x = the square root of (d*t), where x is the distance in centimeters, d represents the diffusion coefficient of water at room temperature (approximately .00001 square centimeters per second), and t represents time in seconds. While diffusion is slow, waters can still mix through this process over time.

More significantly, waters mix through convection at a rate 10,000 times faster than diffusion. Convection mixing occurs through three mechanisms:

Heat gradient
General swirling
Gravity gradient
As the Satmar Rebbe points out, the general swirling that occurs during immersion in the upper pool would cause a quick exchange almost instantly. Thus, it is unlikely that the top-bottom arrangement successfully fulfills the Raavad's opinion, as the waters still mix.

The primary advantage of the Rashab's design appears to be ensuring that the mikveh does not get invalidated through human error. In modern times, with well-trained, God-fearing caretakers and rabbinic supervision, these concerns may be less pressing.

What If We're Not Sure There's 40 Seah?

When a Mikveh's Status Is Questionable

A kosher mikveh with 40 seah that was used by many people and then measured and found to still have 40 seah is presumed to have been kosher

the entire time. The Ran (responsa 66) explains this principle, which is codified in Shulchan Aruch (YD 201:65).

Nevertheless, it is proper to check that it has 40 seah before using it. The Taz (201:85) adds that it is usually sufficient to know that there's 40 seah afterwards to permit all previous immersions.

When a Mikveh Is Found to Be Lacking

If a kosher mikveh with 40 seah, which after many people used was measured to be less than 40 seah, is invalid, anyone who dipped in it at a time when it wasn't known if it had 40 seah has to go to the mikveh again. This comes from the Gemara Niddah 2b and is ruled by the Rambam (Mikvaos 10:6) and Shulchan Aruch (201:65).

Two Types of Kosher Water Sources: Mikveh and Mayan

What Is a Mayan?

A mayan is a natural spring. It differs from a standard mikveh in several important ways:

A mayan purifies utensils even with the smallest amount of water (Toras Kohanim 9)
A mayan can purify when the water is moving (flowing)
For a person who is going to purify themselves in a mayan, it requires 40 seah just like a mikveh, but the water of a mayan can be moving
The Rosh (Mikvaos no. 2) cites the Ri as holding that a mayan only purifies vessels with any amount but a person requires 40 seah. The Shulchan Aruch (YD 201:1) rules like the Ri.

A Mayan Dug Next to a River

If someone digs and finds a live spring, that is considered a mayan according to most opinions, as held by the Maharik. However, if someone digs next to a river and finds water, many hold that it isn't considered a mayan, but rather is

like a mikveh. The Tosefta Mikvaos 1:6 writes that someone who digs next to a river or ocean is considered like mey tamsiyut (water leaching from the ground) and not a mayan.

What Makes a Mikveh Invalid?

Drawn Water (Sheuvim)

What Is Drawn Water?

Drawn water (sheuvim) refers to water that was collected in a vessel. If the entirety of the mikveh or a majority of it is sheuvim (drawn water), it is invalid. The Mishna Mikvaos 2:7 and 4:1 establish this principle.

Is This Biblical or Rabbinic?

Ashkenazim hold that this invalidation is biblical, while Sephardim hold it is only rabbinic. The Rama (YD 201:3) writes that sheuvim is biblical, while the Shulchan Aruch (201:53) implies that it is only rabbinic.

Rabbenu Tam (Tosfos Pesachim 17b, Bava Batra 66a) and Rashbam hold the invalidation is biblical, while the Rambam (Mikvaos 4:2) holds it is rabbinic.

The Intention Matters

Water in a vessel is only considered drawn if it was gathered in the vessel intentionally. The Mishna Mikvaos 2:7 and 4:1 establish this, and the Shulchan Aruch (YD 201:34) codifies it.

Three Lug of Drawn Water

If 3 lug (about 10-12 cups) of drawn water fall into a mikveh that has less than 40 seah, it invalidates the mikveh. The Mishna Mikvaos 3:1 and Shulchan Aruch (YD 201:19) state this rule explicitly.

This rule applies whether the drawn water is added at the beginning or at the end, as long as the mikveh has less than 40 seah, as the Bach (201:27) and Shach (201:58) explain.

Moving Water (Zochlin)

Still Waters Only!

Only a mayan purifies whether the water is moving or stationary, but a mikveh is biblically invalid if the water is moving (zochlin). The Toras Kohanim Shemini 9:3, Mishna Mikvaos 1:7, and Rashi Shabbos 65b all establish this principle. The Shulchan Aruch (YD 201:51) rules accordingly.

What Is Considered “Moving”?

What exactly qualifies as “moving” water? There are several opinions:

The Rash (Mikvaos 5:5) explains that if there’s water coming out of a crack in a wall, the mikveh is invalid since it is moving.
The Rosh (Mikvaos n. 11 and responsa 31:4) writes that a crack in a wall isn’t considered zochlin. It is only considered zochlin if the water is gushing like a spring.
The Rashba (Toras Habayis Shaar Hamayim 2) writes that a mikveh is valid even if the water is draining slowly because otherwise every pit would be invalid since the earth absorbs the water slowly. If the drainage isn’t recognizable, it is valid.
The Shulchan Aruch (201:51) follows the Rashba’s lenient view.

Methods of Making a Mikveh Kosher

There are three principal methods to make a mikveh kosher even when using water that would otherwise be considered drawn:

Hashaka – Contact or “Kissing”

Hashaka is where the immersion pool makes contact with rainwater through an open hole, essentially “kissing” the pure rainwater. This is the most common method used in traditional mikveh construction.

Zriyah – Overflow
Zriyah involves filling a bor (pit) of rainwater with drawn water and allowing it to spill over into the immersion pool.

Hamshacha – Drawing Across Ground
Hamshacha is where drawn water is led across the ground and into the immersion pool that already has at least 20 seah of rainwater.

Rav Moshe Feinstein’s Suggestion for Modern Mikvaos

Rav Moshe Feinstein (IM YD Vol. I #111) suggested that, if the cost is not prohibitive, a mikveh with two boros could be built – one utilizing hashaka, and one utilizing zriyah. Although the Chazon Ish did not agree that anything could be gained with the two-boros system, Rav Moshe disagreed. He felt that one could fulfill the Raavad’s requirement with this method.

Special Cases and Solutions

Snow and Ice

Can Frozen Water Make a Valid Mikveh?

The Mishna Mikvaos 7:1 states that ice and snow contribute to the mikveh but don’t invalidate it. The Rambam (Mikvaos 7:3), Rosh, and Tur (201:30) hold that it is possible to make a complete mikveh of snow.

The Shulchan Aruch (201:30) only quotes the opinion of the Rambam and Rosh that snow can be used to create a complete mikveh. However, Rabbi Akiva Eiger mentions that the Raavad argues with this.

Snow or ice that was carried in a vessel or pipe isn’t considered drawn water after it melts, as the Rosh (Mikvaos n. 18) and Raavad explain. However, the

Shulchan Aruch (201:30) and Rama note that in practice, one shouldn't create a mikveh initially from tap water that was frozen and melted.

Hashaka (Connection to Valid Water)

Connecting Invalid and Valid Waters

It is possible to validate an entire pit of drawn water by connecting it with a mikveh momentarily through a process called hashaka. The Rashba and Rosh support this, and the Shulchan Aruch (YD 201:52) codifies it.

However, some say that the connection needs to remain open for the drawn water to remain fit. The Shach (201:112) writes that it is good to be strict on this point, but the Chdamm Sofer (YD 212) notes that the mikveh in his town for many years relied on the opinion that a momentary connection is sufficient.

Size of the Connection

According to Ashkenazim, the connection between the rainwater pit and sheuvim pit has to be a hole that has a diameter of 2 fingerbreadths, while according to Sephardim a hole of any size would suffice. The Rash (Taharot 8:9) and Meiri (Mikvaos 6:1) hold the lenient view, while the Shulchan Aruch (YD 201:52) and Rama (201:53) reflect these respective positions.

Hamshacha (Drawing Along the Ground)

Purifying by Flowing Over the Ground

Hamshacha refers to having water flow along the ground for some distance before it enters the mikveh. The Shulchan Aruch (201:45) requires this distance to be at least 3 tefachim (handbreadths).

Why does hamshacha work? Some rishonim hold that hamshacha makes the water like water coming out of the ground. The Yereyim explains this view. Others, like the Rambam (Mikvaos 4:8), hold that hamshacha is just a way of separating the water from the vessel.

What Kind of Ground Is Required?

According to the Shulchan Aruch (201:46), hamshacha works even on surfaces that don't absorb water. However, the Rama adds that Ashkenazim are strict to require that hamshacha be done on ground that could absorb water.

The Maharshag (1:65) and Chazon Ish hold that cement is water penetrable and works for hamshacha, though some poskim question this (Darkei Teshuva 201:206, 215).

Modern Mikveh Construction Concerns

Building a Mikveh So It Isn't a Kli – a Vessel

Making a mikveh with cement is acceptable. The Beis Shlomo (2:70) and Chazon Ish (Mikvaos 2:13) hold that it isn't considered a vessel when the pieces are being built into the ground and come together. That is considered building a structure, not a vessel.

Igros Moshe (YD 1:108) writes that making a mikveh with cement isn't considered a vessel because it couldn't be picked up as a vessel and would fall apart.

Reinforced Concrete

Rebar – which is Reinforced concrete with metal rods in the cement is a matter of discussion among poskim. The Minchas Yitzchak (2:22, 4:41) questions it, while Rav Moshe Feinstein permits having metal rods in the cement. In the past few decades a number of Mikvah builders have tried to avoid use of rebar to fit with the more machmir view.

Precast Concrete Slabs

A mikveh made of pre-made cement slabs, one per wall and one for the floor, is questionable. Rav Moshe zatzal in Igros Moshe (YD 2:95) writes that if a mikveh is made with cement pieces that were one slab per wall and one for the floor, it would be invalid.

Practical Mikveh Questions

Can a Mikveh Have a Filter?

Some say that if the filter in the mikveh was running when the person went in the mikveh, it is unfit since it is considered zochlin (moving water), while others hold it is fit.

Rav Meir Posen's in-mikveh filter is accepted by Rav Wosner, Rav Nissim Karelitz, and Rav Ovadia. The filter should be off when someone is immersing, though some authorities permit immersion even while it is running. However, Rav Elyashiv and Rav Shternbuch opposed using filters in a mikveh even if it is off.

Can Rivers and Oceans Be Used as Mikvaos?

A person shouldn't go to the mikveh in a river. The Rambam (Mikvaos 9:13) and Rosh (Mikvaos no. 10) rule like Rav in the Gemara Bechoros 55b that a river might not have enough spring water compared to rainwater. If there's no mikveh available, the Rama (201:2) notes there's what to rely on to go to the mikveh in a river, but one should consult with their rav first.

All oceans are like a mayan (natural spring) for immersion purposes, even though the water is moving. This is based on the Mishna Mikvaos 5:4, and the Shulchan Aruch (YD 201:5) rules that oceans are fit for dipping even if they're moving.

Trust in Mikveh Maintenance

Who Can Be Trusted About a Mikveh's Status?

A Jewish individual is trusted regarding the status of the mikveh if it is in their power to fix it, as stated by the Maharik (115) and cited in the Beis Yosef.

If a non-Jew owns a mikveh, the Rosh (responsa) writes that we can't rely on them because the mikveh might have become lacking and he completed it with drawn water. The Shulchan Aruch (201:4) accepts this ruling, though the Shach and Gra note some limited exceptions.

Assessing an Unknown Mikveh

If someone finds a man-made pit of water in Eretz Yisroel outside of a city, it used to be assumed to be rainwater and a kosher mikveh, but in Chutz LaAretz it was assumed to be non-kosher. This is from the Mishna Mikvaos 8:1 and Tosefta Mikvaos 6:1.

Interestingly, the Beis Yosef (201:74) comments that today even in Israel the lenient assumption doesn't apply since the Jews don't rule Israel. The Shulchan Aruch (201:74) rules accordingly that any pit found with water is presumed to be invalid.

Closing Thoughts

The laws of mikvaos are complex and detailed because of the mikveh's central importance in Jewish religious life. As we saw in the opening story about the Budapest ghetto, adherence to even minority opinions in mikveh construction can have remarkable and far-reaching consequences.

The Shulchan Aruch Yoreh Deah (sections 201-202) contains the primary codification of these laws, but there are numerous commentaries and responsa that address specific questions and scenarios.

For practical application, one should always consult with a qualified rabbi who is knowledgeable in these laws and familiar with local customs and traditions. The rabbi can provide guidance based on the specific situation and relevant halachic authorities.