DEAD SEA IN FOCUS

As Dead Sea shrinks, concerns for future grow

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EIN GEDI, Israel (JTA) — The beach at the Ein Gedi Spa at the Dead Sea would seem like an ideal place for a little R&R amid the frenzy of modern Israel.

The sea's rapid retreat has made a mockery of signs warning of the dangers of deep water and left beaches like this one high and dry.

Dead canal is a bad idea

EIN GEDI, Israel (JTA) — The beach at the Ein Gedi Spa at the Dead Sea would seem like an ideal place for a little R&R amid the frenzy of modern Israel.

Set in the quiet of the desert, it has stunning views of Jordan's mountains and its therapeutic waters reputedly do wonders for the complexion.

In its place are empty lifeguard towers and abandoned beach umbrellas lodged in the parched earth that make a mockery of the Dead Sea's quiet retreat.

The sea actually still exists, but it's smaller, shallower and much more distant than it once was — some 160 feet from the original beach built at Ein Gedi.

The Dead Sea is shrinking because nearly every source of water that feeds into this iconic tourist destination has been cut off, diverted or polluted over the last half century.

“This is a completely man-made disaster,” says Gidon Bromberg, the Israel director of Friends of the Earth Middle East, an international environmental group. “There is nothing natural about this.”

A tram now shuttles visitors from the abandoned beach at Ein Gedi to the new beach, which sits at more than 1,300 feet below sea level. Thirty years ago this beach was submerged under water. In 10 years it likely will be dry, too, and the visitors' ramp again will have to be extended to reach the sea.

By 2025, the sea is expected to be at 1,440 feet below sea level.

The shrinking of the Dead Sea has become an issue of grave concern for environmentalists, industries that produce Dead Sea-related products and Israel's tourism sector, which worries that the visitors who come here from all over the world will disappear along with the sea.

To environmentalists, the shrinking of the sea is an environmental disaster that left unchecked could devastate the region in the coming decades.

The sea's retreat already has spawned thousands of dangerous sinkholes. Created by
retreating groundwater washing away salt deposits that had supported a surface layer of sand, the sinkholes have decimated beaches, nature reserves and agricultural fields in the area.

Future development along the northern rim of the sea has been suspended indefinitely, and the sinkholes have taken a toll on the area’s roads. Route 90, the Israeli highway that runs north-south along the Dead Sea’s western shore, has had to be rebuilt several times because of sinkholes opening up in its path.

In the meantime, the shifting groundwater has wreaked havoc with the natural oases and springs near the sea. Some natural habitats have been destroyed, and with them the feeding grounds of indigenous wildlife. Ornithologists say the annual migration of birds to this area -- the third-largest migration in the world -- has begun to taper off.

Perhaps most significantly for the people who live in the region, the economic consequences of the sea’s retreat have been staggering for agriculture and tourism.

“This has cost us more than $25 million since 1995, when the sinkholes started opening up,” Merav Ayalon, a spokeswoman for Kibbutz Ein Gedi, the largest Israeli town at the Dead Sea, said.

The kibbutz has had to close its resort village -- though it still operates guest houses -- abandon its groves of date palms and forego any expansion plans because it is virtually locked in now by mountains or unsafe, shifting ground.

Farther south, at the cluster of hotels on the Israeli side of the sea, hotels built decades ago along the Dead Sea’s shores have preserved their beaches only thanks to an artificial pool of sea water. The pool, which is connected to the Dead Sea, is maintained by Dead Sea Works, the massive mineral extraction plant whose operations have accelerated the sea’s disappearance through wholesale evaporation of water.

If not for the artificial pool, the hotels would be in the desert, since the southern portion of the Dead Sea no longer exists. Though visitors cannot tell that the hotels’ beaches are artificially maintained, hoteliers say they fear potential tourists are deterred from coming to the region because they think the sea’s retreat has left the hotels high and dry.

“Tourists from abroad don’t know exactly where the sea is located and where the sinkholes are, so they don’t come as much anymore,” said Avi Levy, who used to be the general manager of the Crowne Plaza Dead Sea but now works at the franchise’s hotel in Tel Aviv. “Also, I think, there is antagonism that we are allowing such a valuable site as the Dead Sea to be destroyed.”

Agricultural industries in Israel, Jordan and Syria siphon water from the rivers that used to feed into the Dead Sea, diverting the water flow for agricultural use. This, along with the dumping of sewage by these countries and the Palestinian Authority, has turned the Jordan River, the sea’s main tributary, from the voluminous flow described in the Bible to a muddy, polluted dribble that doesn’t even reach the Dead Sea anymore during the summer months.

In addition, companies like Dead Sea Works are removing water from the sea at a rate of about 150 million cubic meters per year to get at the lucrative minerals beneath the water. The minerals are used to produce chemical products for export such as potash and magnesium chloride.

Potash can be used to make glass, soap and fertilizer, and magnesium chloride can be used in the manufacture of foodstuffs and roadway deicing products.

The work of these companies has turned what once was the southern portion of the sea into a massive industrial site.

At the time of Israel’s founding in 1948, about 1.4 billion cubic meters of water per year flowed into the Dead Sea. That total has shrunk to 100 million cubic meters, much of it polluted. Today the only fresh water the sea gets is from underground springs and rainwater. With inadequate fresh water, the sea has become more salty and oleaginous.

Scientists estimate that the Dead Sea needs at least 650 million cubic meters of water per year in order to stabilize over the next two decades.

Short of a major change in water-use policy, which environmentalists say is imperative, the Dead Sea will continue to shrink at its current rate of 3.2 to 3.5 feet per year until it reaches an equilibrium in 100 to 200 years at some 1,800 feet below sea level, experts say.

There are two main ideas for stabilizing the Dead Sea.

Environmentalists want to restore flow to the sea from the Jordan River. But that would require a sharp reduction in the use of Jordan River water for agricultural and domestic consumption, as well as cooperation between the Israelis, Palestinians, Syrians and Jordanians. At this point, neither seems likely.
The other idea is to construct a canal to bring salt water to the Dead Sea from the Red Sea, some 125 miles to the south. Championed by Israeli President Shimon Peres and Israeli real estate magnate Isaac Tshuva, among others, this plan envisions the construction of up to 200,000 new hotel rooms and the transformation of the desert along the channel’s route into an Israeli-Jordanian “peace valley.”

Notwithstanding the enormous financial costs of such an enterprise -- $3 billion to $5 billion -- scientists say bringing salt water to a sea that heretofore has been fed only by fresh water has unknown risks.

“A decision like this cannot be made without checking the ecological impact on the environment,” said Noam Goldstein, project manager at Dead Sea Works, which has made a fortune extracting minerals like potash, table salt and bromide from the Dead Sea. “It’s possible that with a canal the sea will turn brown or red. It’s possible it will stink because of the introduction of new chemical and biological substances into the water.”

The World Bank is conducting a $14 million study into the practicalities of the channel, dubbed the Red-to-Dead Canal.

For the time being, no solution to the problem of the Dead Sea has moved beyond the review stage. Meanwhile, with the Holy Land facing its worst drought in 80 years, the sea continues to disappear.

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