

# Perils of pollution

**Lake Chapala still faces many challenges, experts and residents say**

BY **DIODORA BUCUR**  
Special to The News

CHAPALA, Jal. - When French-born Jean-Claude Tatinclaux first visited Chapala four decades ago, the lake appeared crystal clear, its waters shining under the tropical sun.

But it has since deteriorated to the point where pollution signs are hard to ignore, says the retired engineer who made a home in Chapala with his Mexican wife, Leticia Reyes.

"We came by to visit [the area] after we got married about 40 years ago ... At the time, the lake was very high and especially clean; the water was pretty transparent, [you could see] the white fish," he said. "Obviously there has been degradation in the water quality of the lake. Apparently it is still good for swimming, but you wouldn't want to drink it"

Lake Chapala supplies potable water to Guadalajara's 6 million inhabitants and is home to hundreds of flora and fauna species such as the migratory white pelican from Canada. But the lake is contaminated with toxic residues from industries, agricultural runoff and domestic waste. It is also prone to the proliferation of water hyacinth - a free-floating aquatic weed that chokes waterways, prevents sunlight from reaching aquatic plants and drains oxygen from water, killing fish.

Despite numerous efforts by local environmentalists to put Chapala on the political agenda, the issue has been sadly relegated to the sidelines in a country facing water shortages. (Mexico currently carries only half of the

reserves of potable water it had half a century ago, as the population has quadrupled over the same period of time, according to the World Bank.)

Raquel Gutiérrez Nájera, an environmental law professor at the University of Guadalajara and founder of the Environmental Law Institute, says little has been done to restore the lake to its former glory.

"There has always been a narrow vision for the lake, a vision which unfortunately has also been endorsed by the authorities in charge of administering the lake," she said, adding that water management falls under federal jurisdiction.

"When there is political will, things get done ... What we are trying to do right now is to get [the] president to re-address the issue and spell out what needs to be done to restore this natural treasure.

"There have been disputes over how water should be divided among the farmers, industries and domestic users," she said. "Whenever we ask for a certain quantity of water to be saved to ensure the hydrological balance of the lake, they say, 'No, the lake brings no economic benefits to the area, while we do.'"

Gutiérrez Nájera says the pollution issue extends to the entire Lerma-Chapala-Santiago-Pacific basin. Lake Chapala is both fed and drained by the Lerma River.

"Santiago River is even more contaminated; it is in worse shape than Lake Chapala," she said, explaining how the issue is hurting Chapala's fishing communities like Mezcala, where parts of heavy metal were found in contaminated fish. "Lake Chapala has three major problems, one that has to do with the water quality and the others [that] have to do with the quantity and the administration of water."

The lake has swelled considerably in recent years, thanks to abundant rainfall. "I would say it's a miracle, but certainly this was not done by man. Nature has been very benevolent and

today we have a recovered lake," said Gutiérrez Nájera.

"Fortunately, as water levels increase contamination levels decrease, the contamination appears more diluted. But there are still risks involving direct contact with the water."

Recent coliform bacteria tests commissioned by Los Amigos del Lago de Chapala, an association committed to preserving the lake, show the lake is safe for recreational purposes. However, it recommends against consuming Chapala's fish.

"The levels of pesticides, herbicides and heavy metals in the lake, while of concern because of bio-accumulation in some fish, are at such low levels that they do not negate the use of lake water for processing into drinking water for Guadalajara, nor do they present any hazard for recreational use of the water," concluded a March 2008 report compiled by six experts from Mexico and the United States. "The real concern is for people who eat the fish."

Lake Chapala's geological formation dates back millions of years. It wasn't until the early 1900s, during the time of Porfirio Díaz, that the exploitation of the Lerma-Chapala basin took off, according to the Jalisco government Web site. Over the ensuing decades, agricultural and later industrial activity intensified, with farmers and factories vying for access to inexpensive water without having to invest into efficient irrigation systems or water treatment plants.

Manuel Guzmán Arroyo, head of the Limnology Institute at the University of Guadalajara, slammed past governments for putting economic interests first.

"There is evidence that, since the time of President Porfirio Díaz, who used 55,000 hectares of water for the construction of the Maltaraña dam in Michoacán ..., the purpose has been to dry out the lake, or parts of it," he said, adding the lake is not far from becoming an ecological disaster.



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“State and federal governments, regardless of political affiliation, are not interested in preserving the lake.”

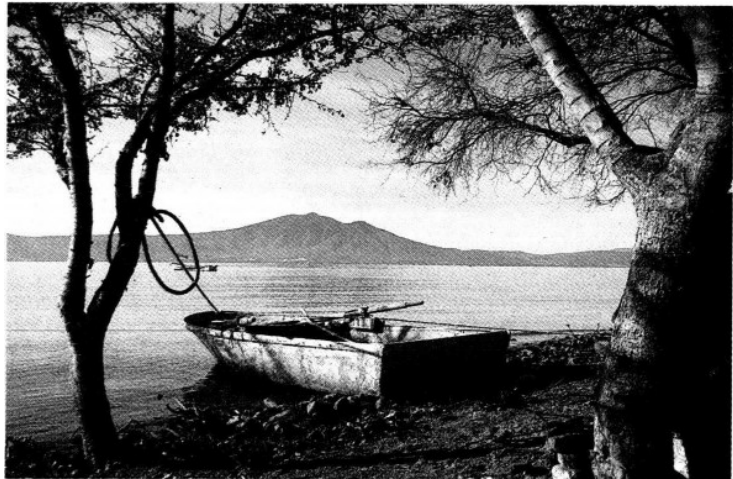
Meanwhile, Gutiérrez Nájera, who also works with Environmental Law Alliance Worldwide (ELAW), hopes to get the international community on board to save the lake.

“If nobody does anything [to preserve] the lake, it will be left to the mercy of nature. And this would be deplorable ... If precipitation is not enough ... the lake risks being condemned to die in the future. I totally discount this scenario,” she said.

She said that the International Commission of Environmental Cooperation (or CEC, the environmental side of the North American Free Trade Agreement) has finally agreed to look into the Chapala situation after her organization filed petitions. Last November, CEC held a fact-finding meeting in Chapala.

What’s more, green activists’ ef-

orts will pay off next month when Lake Chapala is set to join the Ramsar list of internationally-recognized wetlands, a title that will bind the government to protect the lake, according to the treaty signed in 1971.



THE NEWS/DAVID AGREN

A boat sits on the shores of Lake Chapala on a recent day.