

Water from sewage-fed lakes in cans

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It was one of those days when the Cauvery water supply was disrupted on the IISc campus, owing to some maintenance issues. Tanker water suppliers were summoned. Wanting to know where these tankers get water from, a student from the institute followed a tanker. After a 10km journey, the vehicle stopped near a lakebed. The operator got down and fixed the borewell pipe to the tanker for refilling. There was no primary treatment or other checks. He also filled up many bottles of 30-litre capacity from the same source. This is how the water tanker mechanism works in most parts of the city.

Prof Ramachandra TV, scientist at the Centre for Ecological Sciences, IISc said they conducted a groundwater quality assessment study last year at the buffer zones of water bodies, from where most bottling units extract water from. "Overlay of environmental parameters along with water sources reveals higher levels of nitrates due to the sustained inflow of waste water to the water bodies. The ground water closer to these sewage-fed water bodies had higher levels of nitrates pointing to the contamination of water," he added.

A scientist associated with the study said that the nitrate content in Bengaluru's ground water varied from less than 1mg/l to 554mg/l with an average of 38.34mg/l. Also nitrate level in ground water is more than the contaminated surface of water bodies and sustained inflow of sewage concentrates nitrate levels in ground water. This highlights the need for immediate interventions in solid and liquid waste treatment to prevent further contamination of ground water, he said.

Lake beds, vacant sites on the outskirts and erstwhile farm areas are fertile spots for bottling units. "However, the water quality itself is getting depleted in lakes and it is ditto with ground water. Despite primary treatment at some bottling units, one can't ensure safety," said another scientist.