

Sewage Flows into 47 Lakes

About 11,000 acres of lake bed in and around Bengaluru have been encroached upon, according to a preliminary report by a legislature panel that went into instances of encroachments of lakes. **The condition of whatever remains as lakes, however, is not very promising.** United Way Bengaluru, the local arm of the global nonprofit headquartered in the US, is studying the status of all 188 lakes in the city's municipal limits. **ET** looks at preliminary findings pertaining to 100 of them



DID YOU KNOW?

Water in Bengaluru is the most expensive in Asia, costing the government ₹82 to provide one kilolitre to users, compared to ₹28 in the national capital. This is because the 1,350 million litres per day (MLD) of Cauvery water the city gets flows 100 km after it is lifted 300 meters

LAKES: WHO MANAGES THEM

59 BBMP
5 LAKE DEVELOPMENT AUTHORITY
115 BDA
4 FOREST DEPARTMENT



CITIZEN PARTICIPATION?

How many lakes in the city are supported by the community? Here's a breakup

COMMUNITY INVOLVEMENT

Zone	Total lakes	Active	Partial	No involvement
Bommanahalli	21	10	6	5
Byatarayanapura	22	12	1	9
Dasarahalli	2	0	0	2
East	6	4	0	2
Mahadevapura	20	11	5	4
RR Nagar	8	1	1	6
South	14	3	5	6
West	3	2	0	1
Electronics City*	4	0	4	0

*INDUSTRIAL TOWNSHIP AUTHORITY



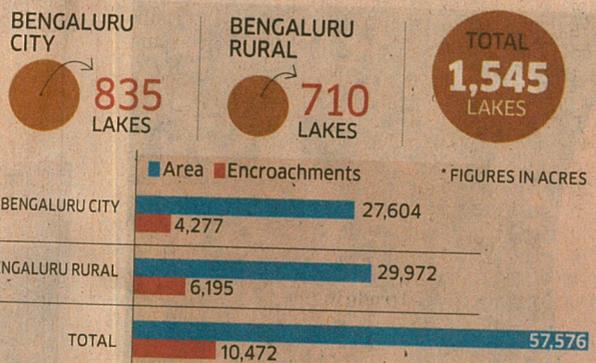
IT TURNS OUT...

- **Sewage has been diverted** from flowing into 43 lakes. Ten lakes have sewage treatment plants. But sewage continues to flow into 47 lakes.
- **A total of 59 lakes** have desilted beds, and desilting is underway in five lakes. The remaining 36 lakes are yet to be desilted.
- **46 lakes have flora plantation**, while 8 are in the process of receiving greenery. Another 46 lakes do not have flora.
- **At least 16 lakes have a kalyani** (temple tank or reservoir), and work is underway in three other lakes



AND FINALLY, THE ENCROACHMENTS

According to the KB Koliwad house committee



GRAPHIC: YOGESH MH

ET QUICK FIX BELLANDUR LAKE

With about 40% of the city's sewage flowing into it, the 797.21-acre Bellandur Lake is one of the most polluted water bodies in Bengaluru. With little or no sign of a remedy from the authorities, ET gets two experts to spell out quick and practical solutions to save this once-pristine lake

'By Jakkur Model, We Can Save It in 18 Months'



TV Ramachandra
Centre for Ecological Studies, IISc

It can be rejuvenated in 15-18 months. We just need to copy-paste the Jakkur lake's integrated wetlands ecosystem model that cost about ₹21.5 crore. This can be done at Bellandur for roughly the same cost

STEPS:

- **The lake's** capacity will increase if it is desilted after encroachments are removed
- **The lake** gets about 500 MLD of sewage. So we need a sewage treatment at the primary level. A man-made wetland and an algae pond will naturally bio-remediate the water in the secondary level
- **A tertiary-level** treatment is required to remove nutrients like phosphates and nitrogen, the reason for frothing. This can come later
- **The Indian army's** green battalions have all the capabilities to do this. It is just a matter of making the decision and entrusting it to them



'Toxicity can Come Down if Effluents are Treated Early'

STEPS:

- **Industries** are using water from borewells. So indiscriminate drilling of borewells in the area will control the quantity and toxicity of effluents
- **Remove hyacinth** on the lake surface to allow the entry of sunlight that can help break down some chemicals in the water
- **Lakes** are to be desilted every year. Bellandur has not been desilted for over 40 years. Dredging can be done even without removing the water. A public-private partnership can help finish this in a couple of months
- **Levels of triclosans** and phosphates in detergents must be brought down through regulation which doesn't involve any cost. This can reduce frothing going forward.



K Elangovan
Varthur lake group leader at Whitefield Rising

Industrial effluents going into the lake are toxic. The problem is about enforcement. If the Pollution Control Board can enforce treatment of effluents, it will bring down the toxicity we are adding to the lake right now.