## **Enviornment**



## To save Bellandur Lake, is Karnataka killing other lakes? Scientists question govt

(/article/save-bellandur-lake-karnataka-killing-other-lakes-scientists-question-govt-77250)

The state has decided to divert 120 MLD of Bellandur-Varthur's sewage water in close to 70 lakes in Anekal, but scientists are questioning this move.



The Bellandur Lake, or rather the residue of what used to be a thriving lake ecosystem, has brought a lot of shame to Bengaluru. The city has been plagued by headlines of the lake catching fire and burning.

The state government and civic agencies responsible for this man-made disaster were recently pulled up by the National Green Tribunal. The country's top green court had taken suo motu cognisance when the lake caught fire for the second time since February, 2017. Since then, state agencies, including top bureaucrats, have been summoned and asked to produce documents pertaining to the rejuvenation of lakes in Bengaluru.

Varthur is the lowermost lake in the city's complex network of lake-tank systems and part of the water flowing out of Bellandur flows into Varthur.

In order to prevent more embarrassments with the lake catching fire again and with the NGT closely monitoring the proceedings, the state government has decided to divert 120 MLD of Bellandur-Varthur's sewage water in close to 70 lakes in Anekal.

The government argued that other than preventing lakes from frothing it will also help farmers irrigate their fields.

But, according to subject-matter experts, this will only shift the existing problem away from the city's eyes to rural areas at a greater environmental cost. This will also contaminate the groundwater in the region, experts say.

According to the Minor Irrigation Department, the water from Bellandur will be transported to 70 lakes in Anekal by October end.

Also read: With Bellandur under NGT scanner, are Bengaluru civic bodies polluting other lakes?

(https://www.thenewsminute.com/article/bellandur-under-ngt-scanner-are-bengaluru-civic-bodies-polluting-other-lakes-76473)

D Dayanand, Executive Engineer at the Minor Irrigation Department told TNM, "The project will be finished by October 2018. Work has already begun in some places. Pipes are being laid in Bellandur. The water will be treated in Bellandur Lake and then it will be transported to other areas like Anekal. This water will be treated in secondary treatment plants (conventional

sewage treatment plants). There won't be any negative impact on the environment. STPs are under-construction and by the time we start this project they will be ready."

But TV Ramachandra, veteran scientist at IISc, argues that water treated at secondary treatment plants are not good enough to be released.

"Primary treatment will only remove the floating contaminants. Secondary treatment will remove chemical ions. To remove the nutrients there is a need for tertiary treatment. In their DPR it says the water quality detail is as bad as raw sewage. That is when I wrote to them that this water can't be distributed," Ramachandra told TNM.

"This water will contain phosphorus and nitrates. This will also pollute the surrounding groundwater. If there is a high concentration of nitrates in the water, it can be carcinogenic," he emphasised.

## Also read: How polluted is Bellandur?

(https://www.thenewsminute.com/article/bellandur-lake-fire-ngt-directs-k-taka-submit-timelines-treat-lake-jan-29-75331)

He suggested instead the right way to do this will be to follow the Jakkur model. In 2008, an integrated-secondary treatment plant was set up, where the treated water passes through an artificially created wetland and then it flows into an algae pond.

The resultant water is free of nutrients and contaminants.

"Before 2005, every borewell in the area had nitrates. I have been monitoring it for the last eight years and now none of the borewells have nitrates. This model is very productive – they can grow crop for fodder for their animals in the lakebed and Jakkur is also seeing a good yield of fish. Some days, people get 500 kg of fish. Show me a more productive ecosystem than that," the scientist said.

Moreover, locals said the reason for objecting this project is that the unnecessary culling of trees in all these lakes and also digging of a newly laid road in Sarjapur.

In a communication accessed by TNM between the MI Department and the Forest Department, the former has called for cutting of these trees apparently to ensure proper flow of water.

Ramachandra is very vocal against this. "Another serious thing is the removal of trees; there is no reason to do this. Why can't they come up with a plan so that there is no removal of trees? When you can drill for laying a pipe on roads, why can't you do it in the lakes too?"

He asserts, "The government is not stupid – if you give them money they will do it. I don't think that they have any concern to solve the problem of the people. It is civil work which gives them the money. That is why they are more interested in that. At the end of the day, if there is no water, they will claim they have done our job. They will say there is contamination, what should we do?"

Sandeep Anirudhan, an environmental activist, claims that the problem lies in the total disregard to environmental concerns and the greed of corrupt officials.

"The malaise is with the engineering education that teaches engineers to just reduce projects to pipes and motors, without understanding the ecosystem and environmental impact of each project. Hence, we have a reductionist approach. Lakes are ecosystems. If there is no water in them, it is because the catchment, wetlands and greenery around them have been destroyed. Restore them, and the lake will revive itself, sustainably," he said.

"Projects such as these are not just ignoring the real problem, but are perpetuating larger problems. They are wasting our tax money, so that engineering contractors and corrupt officials can take the money," he added.

Ramprasad, convenor of Friends of Lakes, is of the opinion that the project is not bad as it is on paper. He believes that some of the nutrients are good for agricultural purposes and, hence, farmers would have to use lesser fertilisers.

"However, anything in excess can be harmful. The real question mark is due to the lack of confidence we have in the Bangalore Water Supply and Sewerage Board (BWSSB). The BWSSB has faltered multiple times in the past. So, they have to really pull up their socks and ensure that all the chemical levels are up to the mark," Ramprasad said.

He added, "More than the nitrates and phosphorus, we have to be worried about heavy metals like mercury and lead in the sewage. So far, multiple tests have shown that they are under permissible levels, but this is a major concern."