ARKAVATHI POLLUTION ANALYSIS

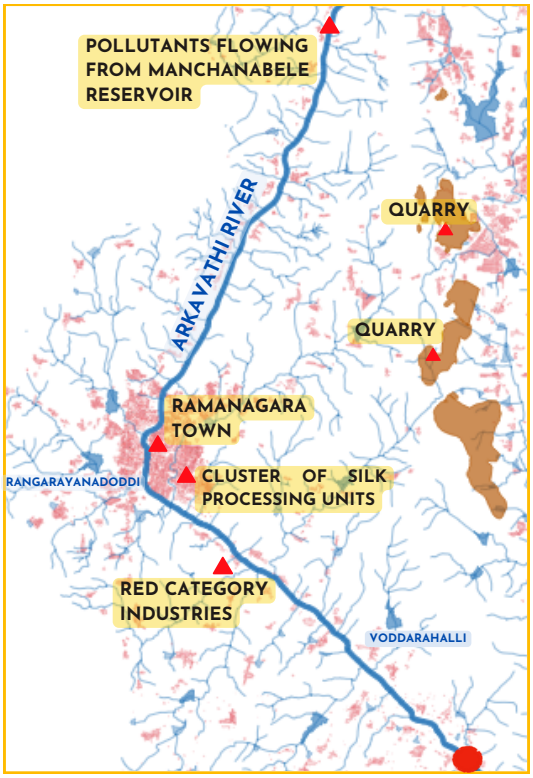
With government proposals to expand treatment and use of Arkavathi River water in Bangalore, it is important to identify, monitor, and stop the spread of harmful pollutants. The results below show trends in pollution at site 101, one of eight Arkavathi sites where Paani conducted sediment and water testing.

TESTING INFORMATION

SITE 101

UPSTREAM OF MUDUWADI BRIDGE

28 FEB 2024



Agriculture along with industrial activity, and quarries contribute to the pollution at this site

APPROPRIATE USE FOR WATER AT SITE

Water tested was only suitable for Central Pollution Control Board Class C

CPCB Designated-Best-Use of Sample					
~~A~~	~~B~~	C	~~D~~	~~E~~	~~N/A~~

Due to a high onsite pH of 8.7, water tested at Site 101 was not suitable for drinking water without conventional treatment, bathing, fishing or irrigation per CPCB guidelines.

ACTIVITIES AT SITE

Activity + Designated-Best Use		Points of Concern
Irrigation of private farmlands	~~E~~	Farm workers may be exposed to pollutants, and crops may be contaminated, high pH may impact crop health

POLLUTANTS OF CONCERN

Water and soil tested at this site did not meet international standards for pollution due to high amounts of chemicals including:

F- Flouride	Mineral *increases risk of skeletal fluorosis and teeth discoloration*	🏭	**26x above** Canada Water Quality Guidelines (Aquatic Life)
$C_{22}H_{14}$ Dibenz[a,h] anthracene	PAH cancer-causing byproduct of smoke and exhaust	🏭	**174x above** US Recommended Water Quality Criteria (Human Health)
Hg Mercury	Poisonous Metal *harms nervous, digestive, and immune systems*	🏭	**26x above** Canada Sediment Quality Guidelines (Aquatic Life)
DEHP Bis(2-ethylhexyl) phthalate	PAH plasticizer, *damages liver & reproductive system*	🏭	**94x above** US Recommended Water Quality Criteria (Human Health)

KEY: Industry, Agriculture, Various sources

SITE 101 IMAGES

Mostly dry river bed with puddles at the time of sampling

Sediment collection

paani.earth/rivers/arkavathi-river

PAANI