

Student Thesis Competition (STC) Season 5 on “Re-imagining Urban Rivers”

**ASSESSING THE INFLUENCE OF LANDCOVER CHANGES ON
THE BASEFLOW REGIME :
A CASE OF BHARATHAPUZHA RIVER**

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“A river doesn’t just
flow from
mountains—it flows
from the ground
beneath. When
baseflow dries up,
the river dies silently.”

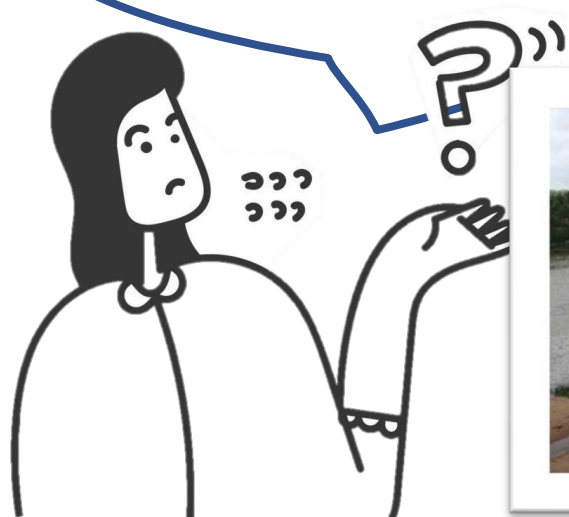
What Stops a River From Flowing?



Why this Study?

- Declining flows and ecological degradation
- Unregulated land cover
- Lack of flow-sensitive strategies, like baseflow and groundwater analysis, hinders effective rejuvenation.
- A localized, data-driven approach is needed to support sustainable planning and river-sensitive interventions in Kerala.

“How effective is Baseflow Index (BFI) as a tool
for evaluating the impact of river restoration
strategies on groundwater sustainability?”



Look at my Approach!

Condition of my site!

My Study Area!

Riparian Edge

Ground water recharging system

These are my tools!

Analysing the
baseflow regime

Analysing land cover
area from 1993 to
2023.

Analysing
Normalized
Difference Built-up
Index

Variations in Land
Cover area and their
respective area
changes

Surveying



Geo Spatial
Mapping

Base flow
Index

Govt.
Policies



My few Solutions!



Sponge Gardens

