(cleanWATER)

REVITALIZATION OF THE NALAS OF BELAGAVI

READING GROUNDS
Project Summary

Site Location: Belagavi, Karnataka
Network Length: 38 Kilometers
Site Area: 169 Acres (approximately)

The City of Belagavi is a valley surrounded by mountains, and therefore situates itself into a system of natural streams - which over a period of last two centuries have been converted into a network of nalas (drains) that carry out the city’s waste.

Today, the city has an underground sewage system, and yet these nalas are used to dispose off waste. No policy stops one from releasing waste into this water network - be it from a household or an industry.

As Belagavi continues to develop, it is important that the nalas are reclaimed as network of waters that not only enrich the ecological fabric of the city, but also enliven social and cultural fabrics of the city.
Sewage and solid waste of over 35MLD/ day is let into the water network within city limits alone. Encroachments in buffer zones is not monitored and in certain cases, construction has taken place over the water network. In the proposed design, catchment areas of the current nalas, which are urbanised, are treated through management guidelines that control discharge into this network.

The buffer areas of the water network are maintained with vegetation, free of anthropogenic activities that hamper the ecological processes. Maintainance of the buffer area would help in replenishing the health of the water stream, and enrich the bio-diversity.

**Landuse Conditions**
Existing Conditions

The Nala flows through various contexts across the city such as residential neighbourhoods, along road edges, commercial areas and parks. Typical conditions are identified to resolve and propose solutions to change the outlook of the citizens towards the water stream - otherwise perceived as ‘Nala’.

**Condition 1: Both edges encorached upon**
The solutions looks towards maintaining a neatly constructed channel section by accomodating a pedestrian connection which is bare minimum requirement to keep the network connected.

Legend:
- Existing Nala
- Proposed Stream
- Built Areas
- Vehicular Movement
- Pedestrian Movement
- Cycle Track
- Open Space

Section Prototypes

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Existing Conditions

**Condition 2: Open space within the urban areas**

These areas can accommodate detention ponds, DEWAT system at identified locations - that can further be plugged in with other activities around it.

The stream is illegally encroached, in certain cases covered over and occupied. The proposal looks at such areas to be treated as connectors, since it allows movement from residential neighbourhoods as well as commercial areas and institutional areas within the city.

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**Legend:**
- **Existing Nala**
- **Proposed Stream**
- **Landscape Areas**
- **Open Space**
- **Built Areas**
- **Vehicular Movement**
- **Pedestrian Movement**
- **Cycle Track**
Existing Conditions

*Condition 3: The stream flowing out of the city - through probable expansion areas*

Since the area is not developed yet, design and planning guidelines can include the stream buffer areas. The design principles proposed integrate the urban requirements with ecological performance of the stream.
Existing Conditions

Condition 4: The stream flowing through open, green areas with potentials for ecological restoration.

Parks, mini forests and open areas with dense green covers act as connectors through the city. They encourage growth of indigenous flora and provide space for migratory birds.

Legend:
- Gray: Existing Nala
- Green: Proposed Stream
- Blue: Landscape Areas
- Orange: Built Areas
- Yellow: Vehicular Movement
- Blue: Pedestrian Movement
- Purple: Cycle Track

Section Prototypes
CONCLUSION

Revitalisation of Nalas of Belagavi is not only a project that looks at reviving the ‘nala’ - a storm water drain system (which otherwise has been perceived by commoners as a sewage network) - but also bringing the entire city together to build the city’s fabric ground-up.

The design will be taken in two parts i.e. as designers, engaging with stake-holders and bringing the ideas that align with city’s green network evolution, and also as designers becoming a mediator to bring the public into a forum to discuss and deliberate ideas.

Step 1 would be to realise that the ‘nala’ network is not a sewage system, which for decades has been used as one; but to look at transitioning space that will allow the city’s culture to flourish.

As the culture flourishes, the purpose of this network is to evolve and strengthen the community, connect the neighbourhoods through a safe network - accessed by foot or bicycles and rebuild the ecology whilst strengthening the network of city’s streams.

It is important to look at the city’s 21st century future by being pragmatic and fundamental in approach. As the city gears up to be developed under the smart city scheme, it is also important to not negate an alternative approach that can look at green as engagement with city, and not as mere infrastructure.