

Lakes of Hyderabad: Would they survive?

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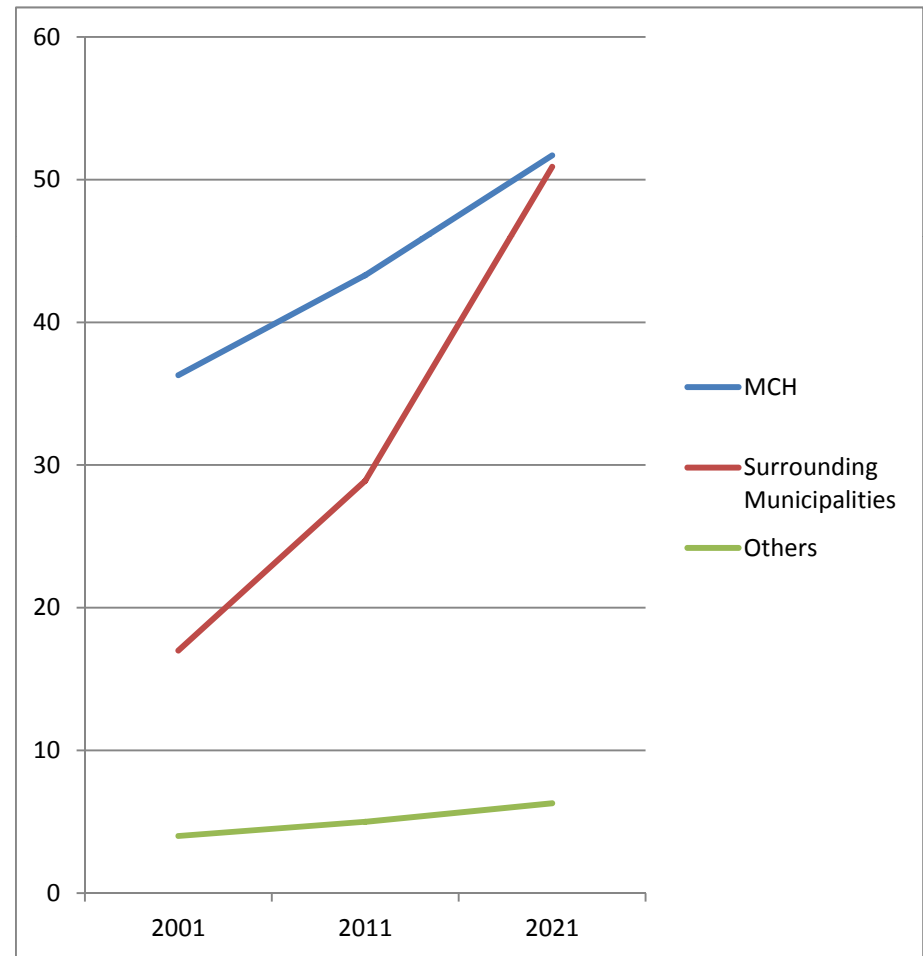
Presented at

Second Anil Agarwal Dialogue 2013: Excreta Does Matter
Centre for Science and Environment March 4-5, 2013, New
Delhi

The growth and expansion of Hyderabad

- Decadal growth rate (2001-2011) in Ranga Reddy district (of which Hyderabad is part of) is highest - 48.15% amongst other districts in the State; population of Hyd – 7 mn
- The surrounding municipalities will grow more rapidly and is expected to touch the population of MCH; adjoining villages also show growth (others)

Projected Population of Hyd Urban Agglomeration
(in lakh – 1 lakh = 100,000)



Source: Calculation from data in GHMC Hyderabad
undated

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Water (in)Security in Hyderabad, India

- Massive development in real estate due to IT industries
- Heavy Demand on water resources
- Severe water shortage and lack of access to water for the poor in lower socio-economic agglomerations
- The private tanker industry has flourished, and is rampantly extracting water to sell outside for commercial use



The Real estate Project (Lanco Hills) towering upto 33 floors in Manikonda, a sought after location for real estate growth

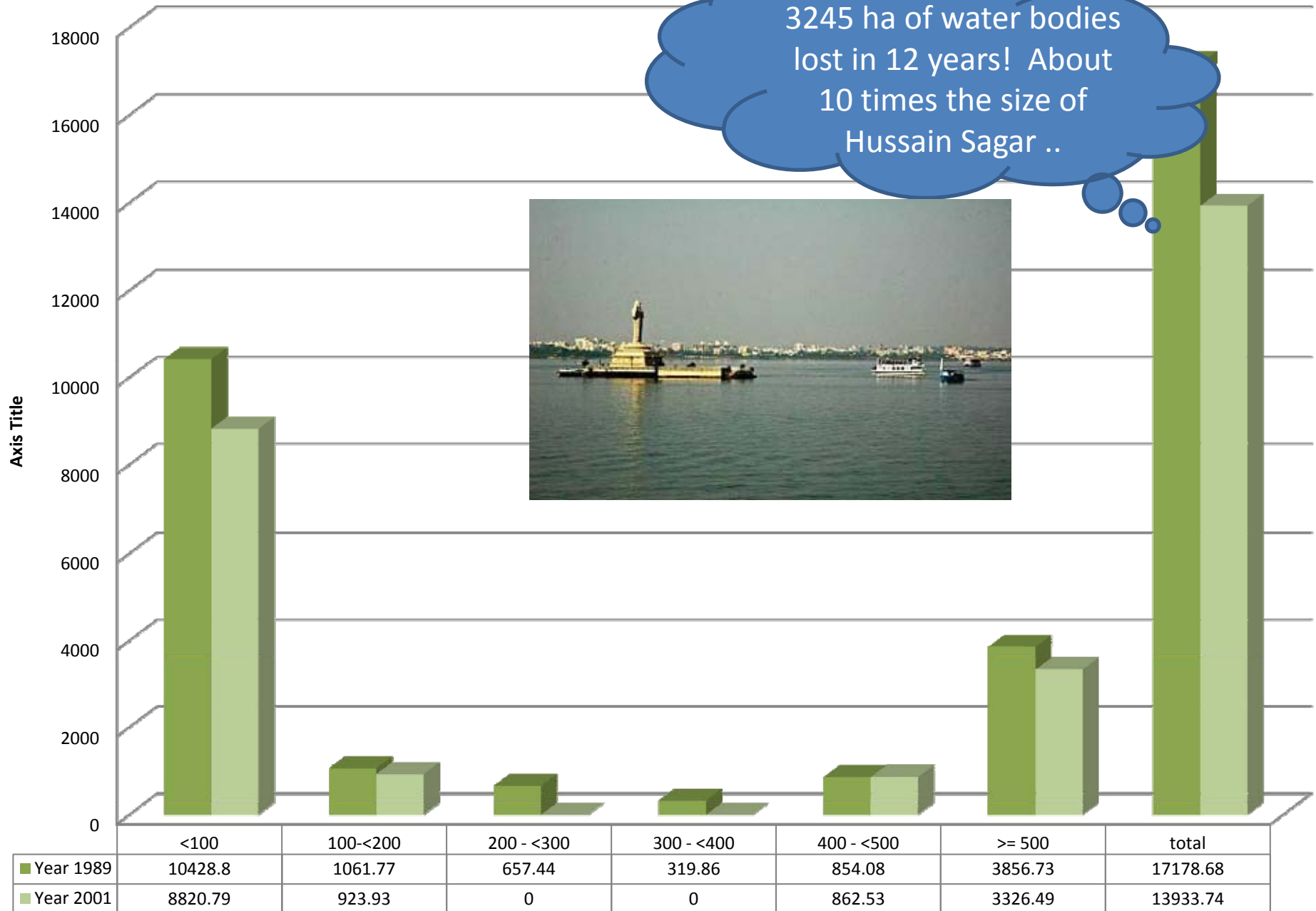
Water (in)Security in Hyderabad, India

- The city has cascade of lakes which are in bad condition – 3084 lakes in HMDA's core areas itself, many more in peri urban areas (data available – about 500)
- urban areas have lost several lakes during the process of development, which were earlier natural sources of water for agriculture and several other economic activities
- Sewerage water is diverted in the lakes which leads to pollution, ground water contamination and diseases



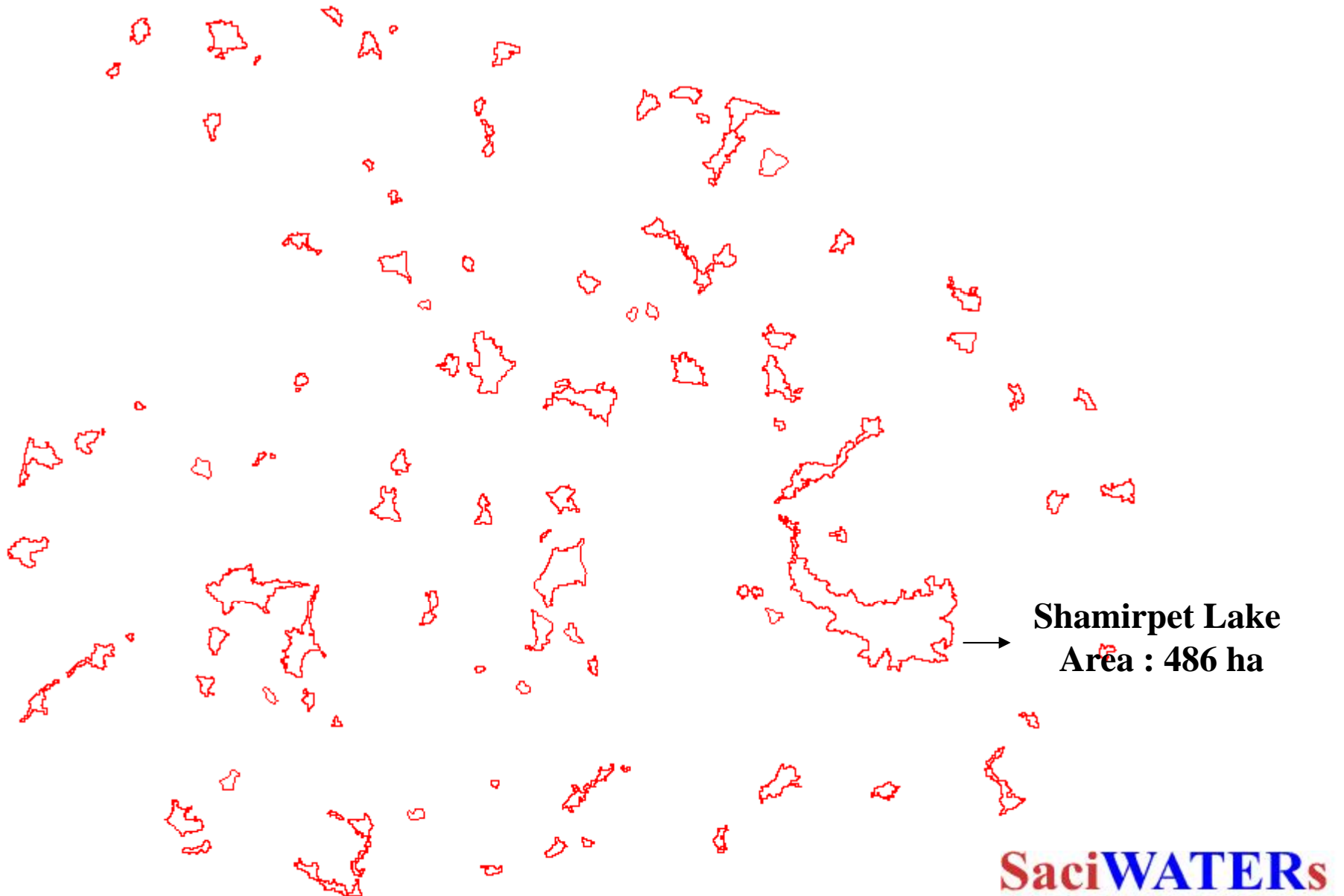
Shadan hospital near Peerancheru releases wastes into the lake

Change in areas of water bodies between 1989-2001



Source: Prasad et al, 2009

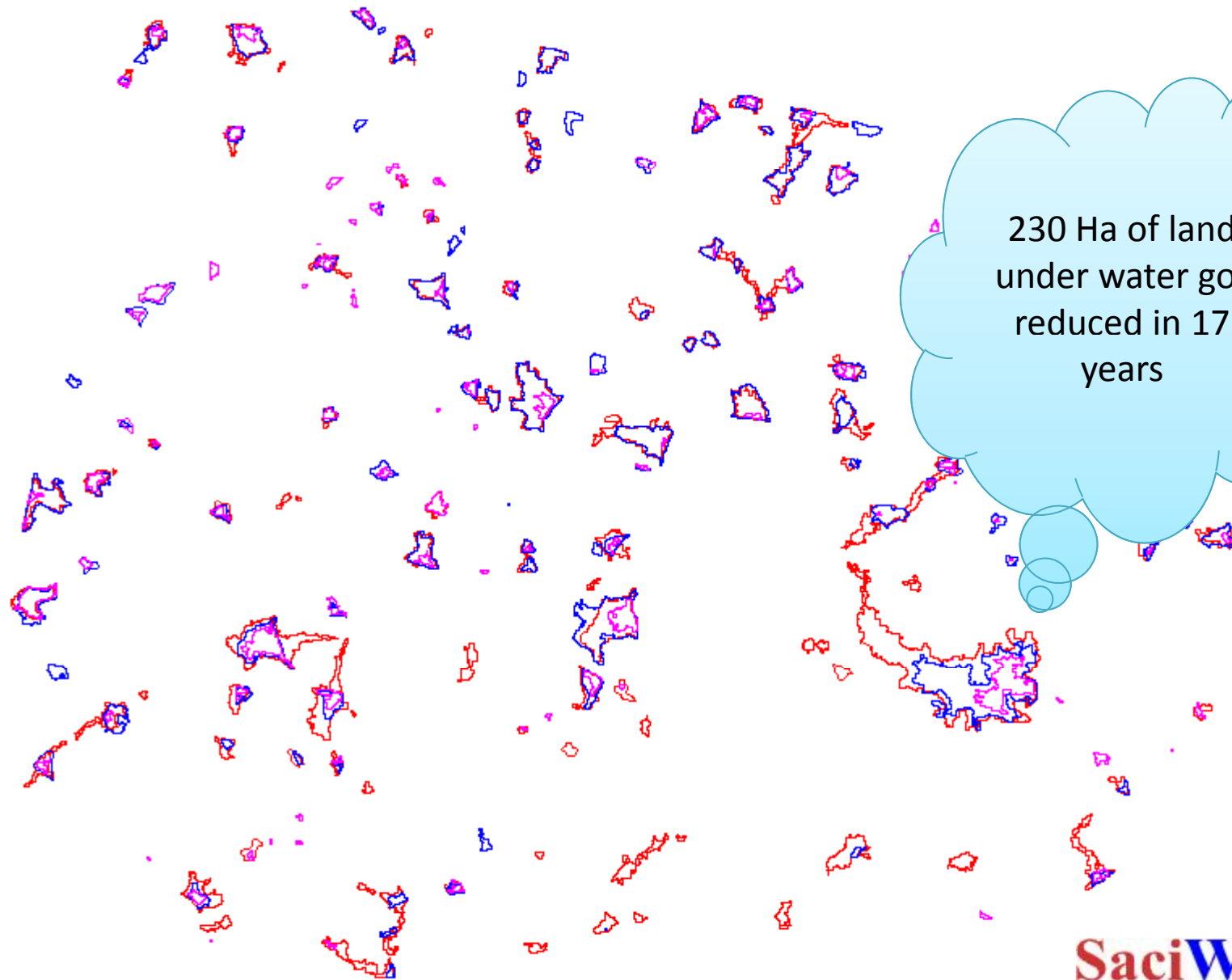
Shamirpet lake - 1989



Shamirpet lake - 2006



Shamirpet lake – 1989- 2006



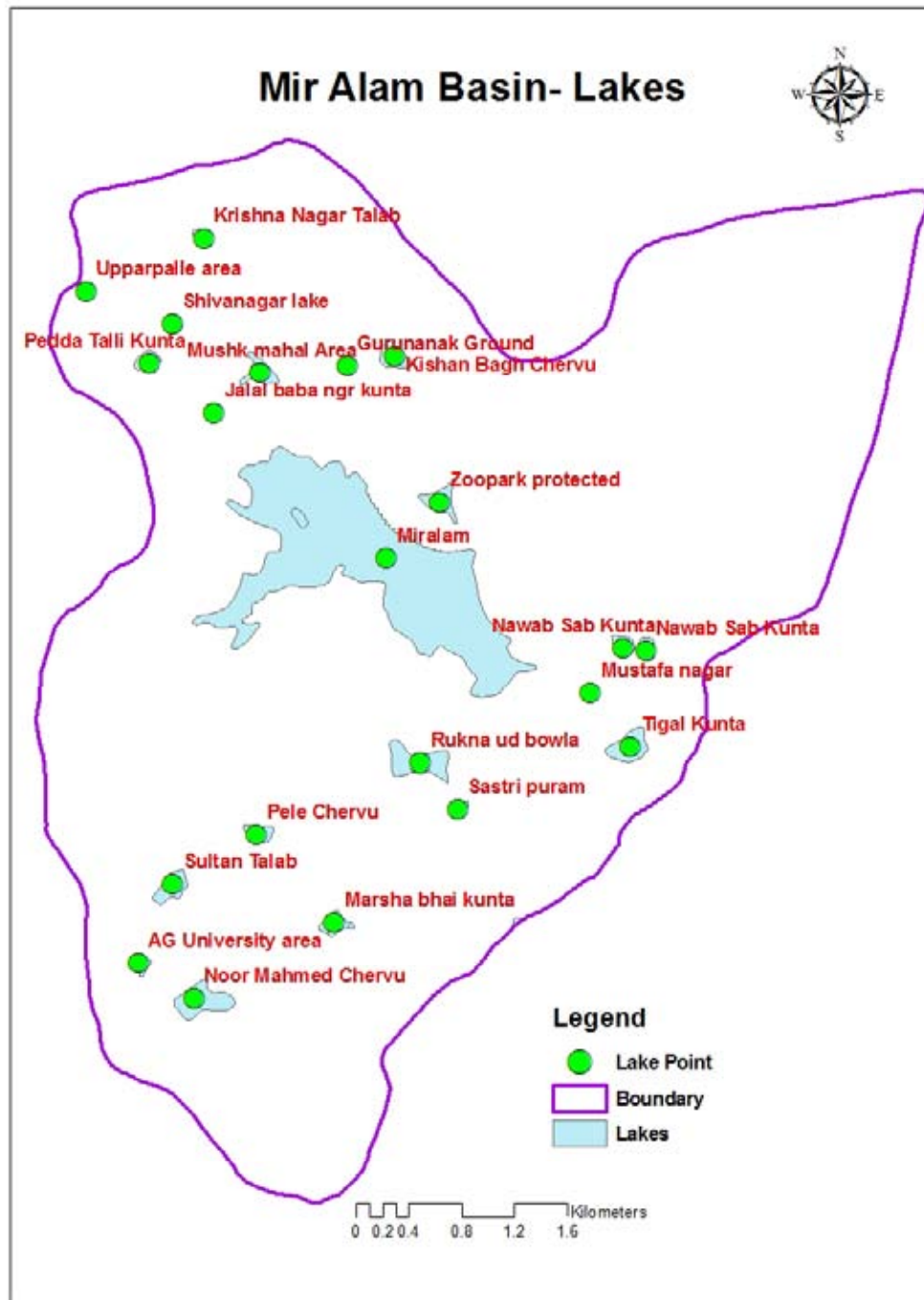
Kapra Lake , Sainikpuri



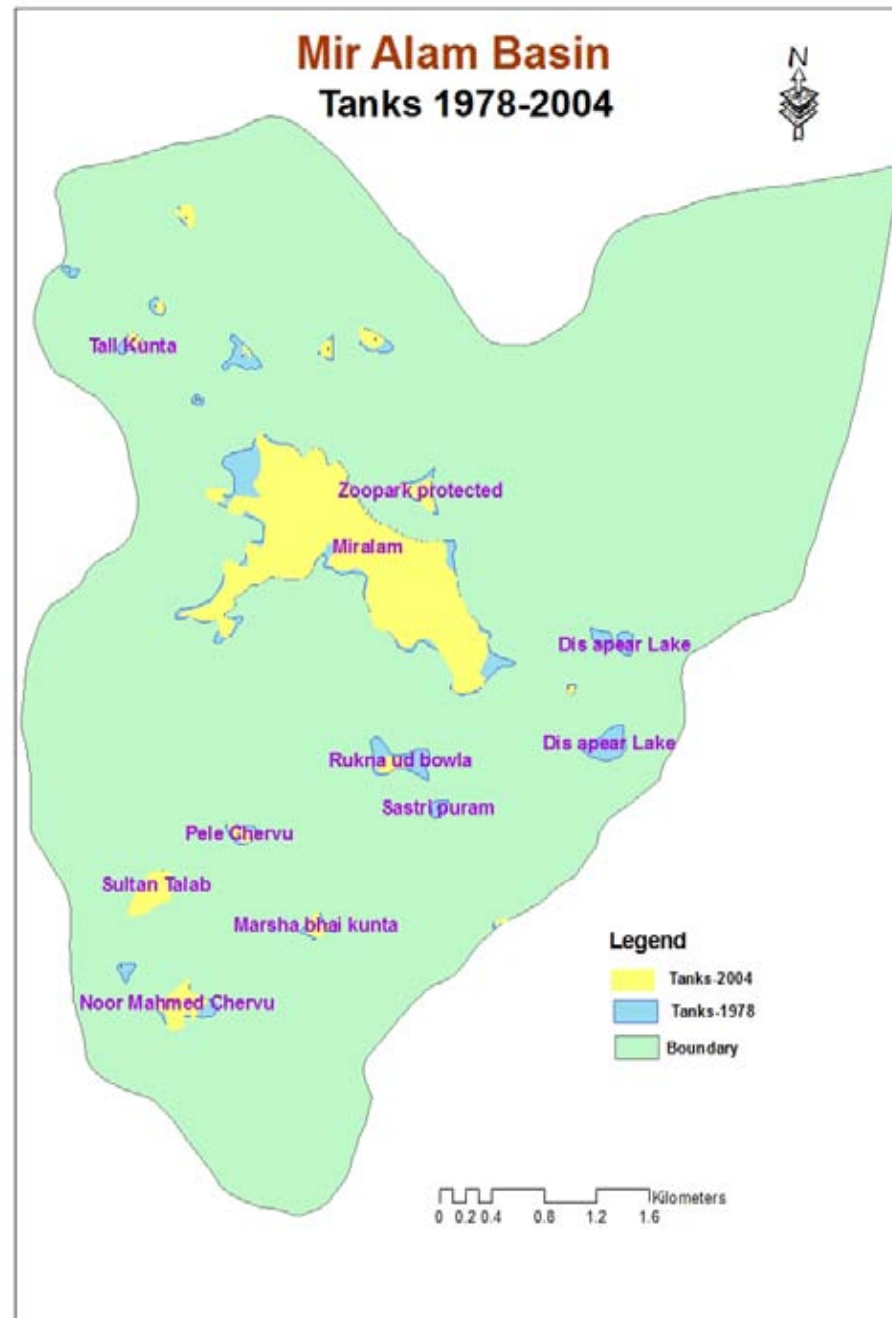


Fence in the middle of the Kapra lake – systematic filling

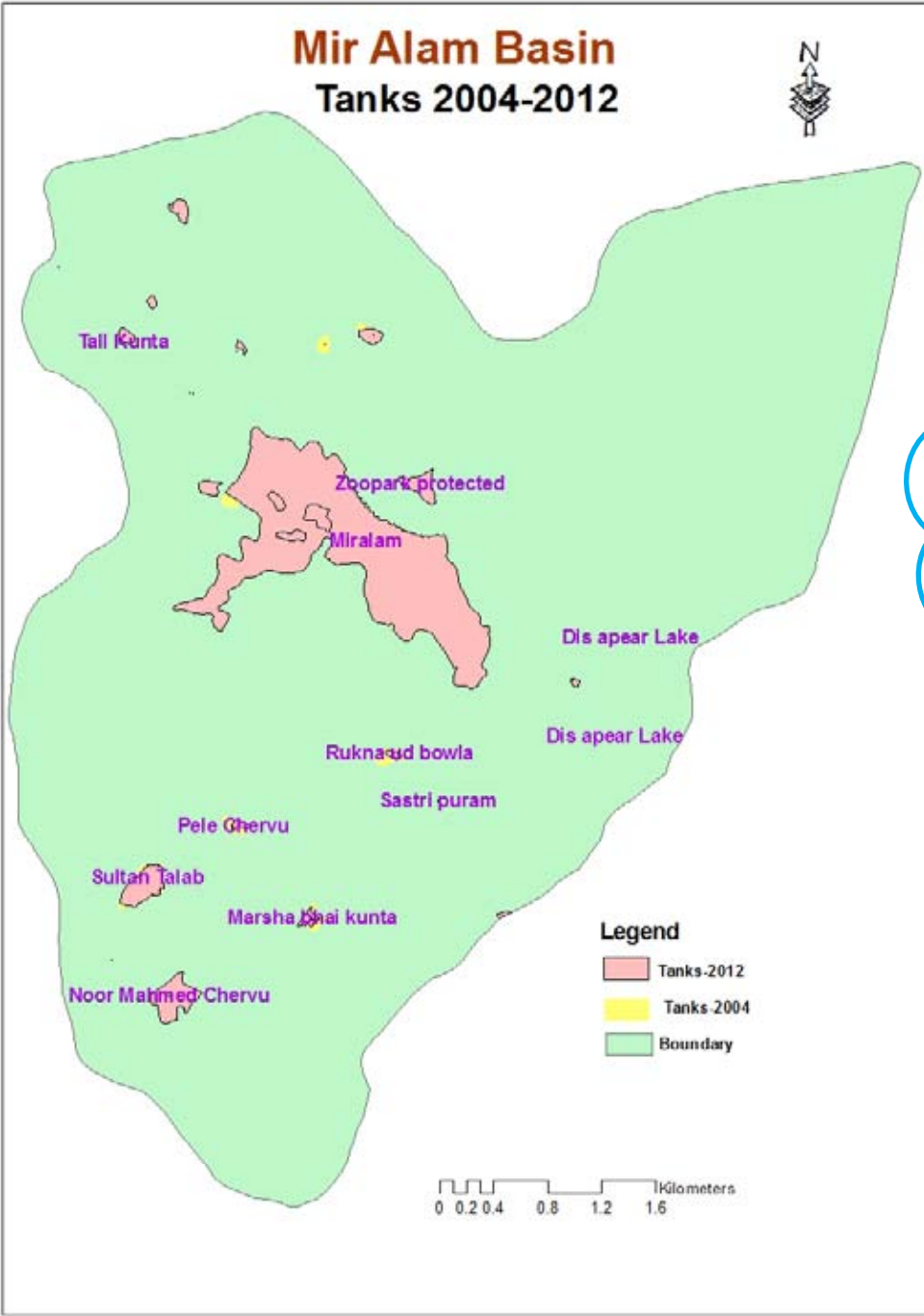




TBA = 310.216 sq.kms
 TWS (1978)=2.0814 sq.kms
 No. of lakes -21

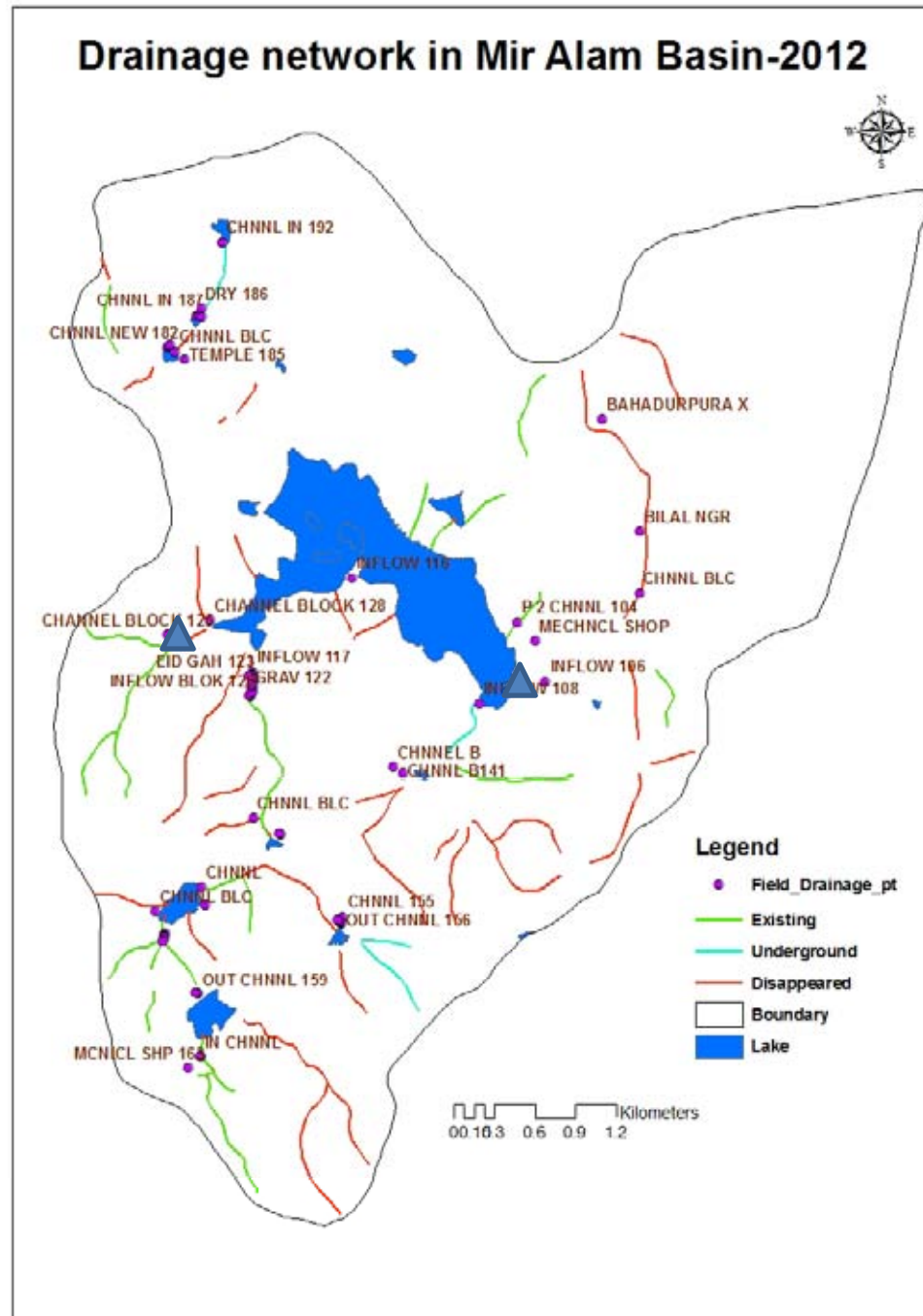


- Number of lakes reduced from 21 to 14
 - Sultan Talab and Noor Mohamed Chervu were in good shape
 - Lakes in AGU disappeared
 - Lakes in zoo park was affected
- TWS 2004=1.7184 sq kms**



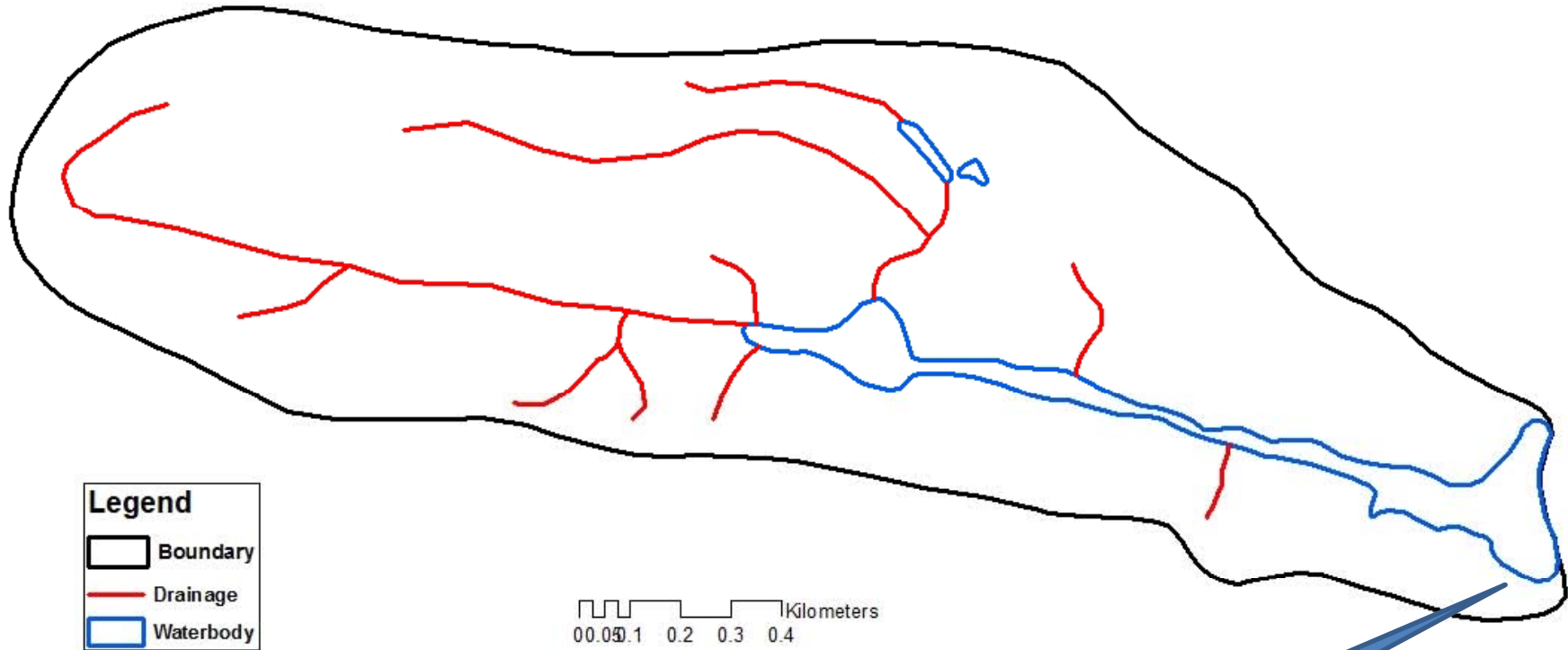
- 8 Lakes remaining
- Ruknawad bowla and Sastripuram were completely lost
- TWS 12=1.6754 sq kms

Drainage network in Mir Alam Basin-2012



Source: Field Survey 2012

Watershed of Hameed Khan Kunta

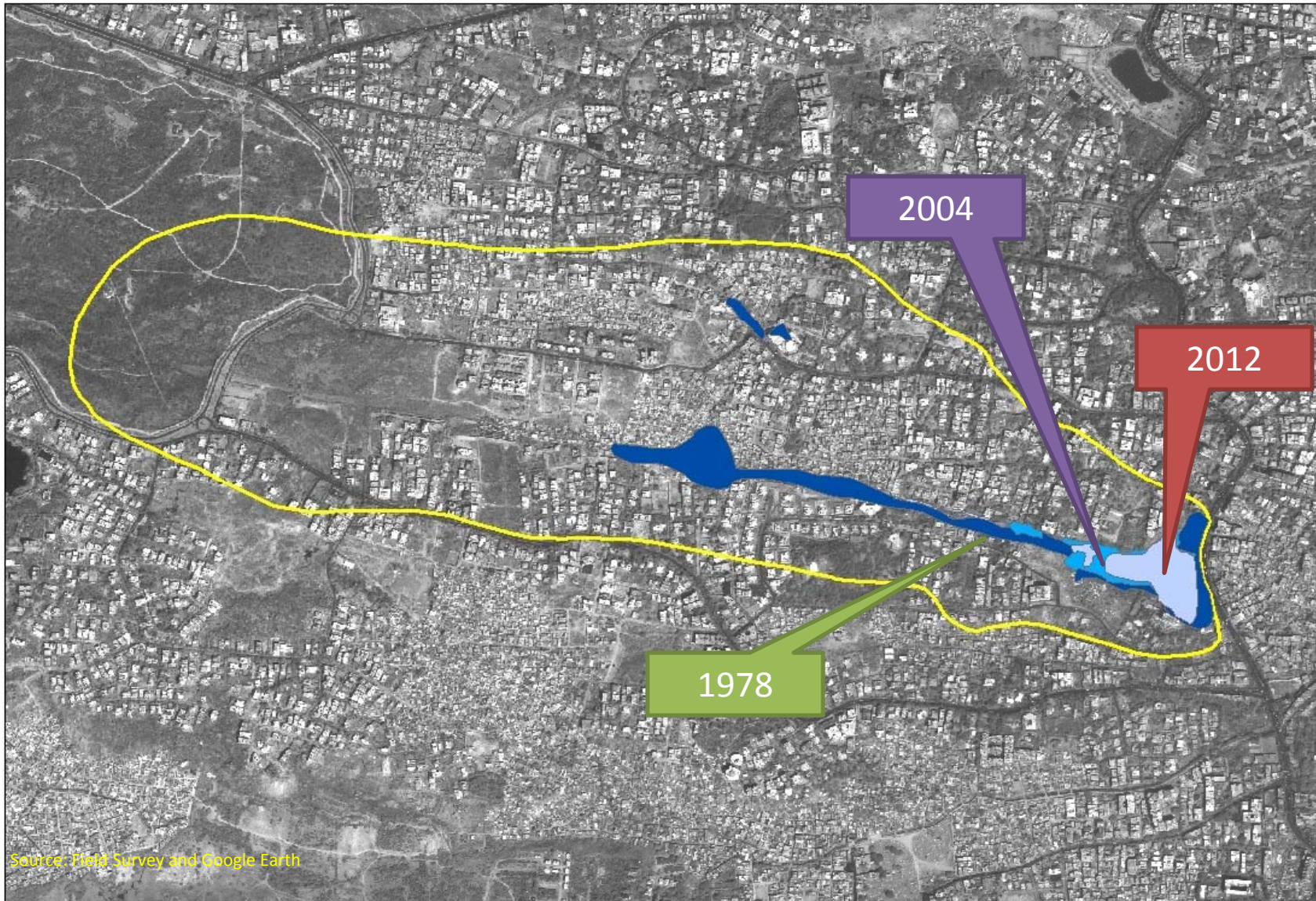


Survey of India Toposheet-1978

Hameed Khan
Kunta
(Banjara Lake)

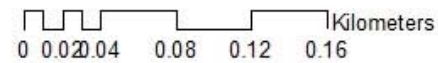
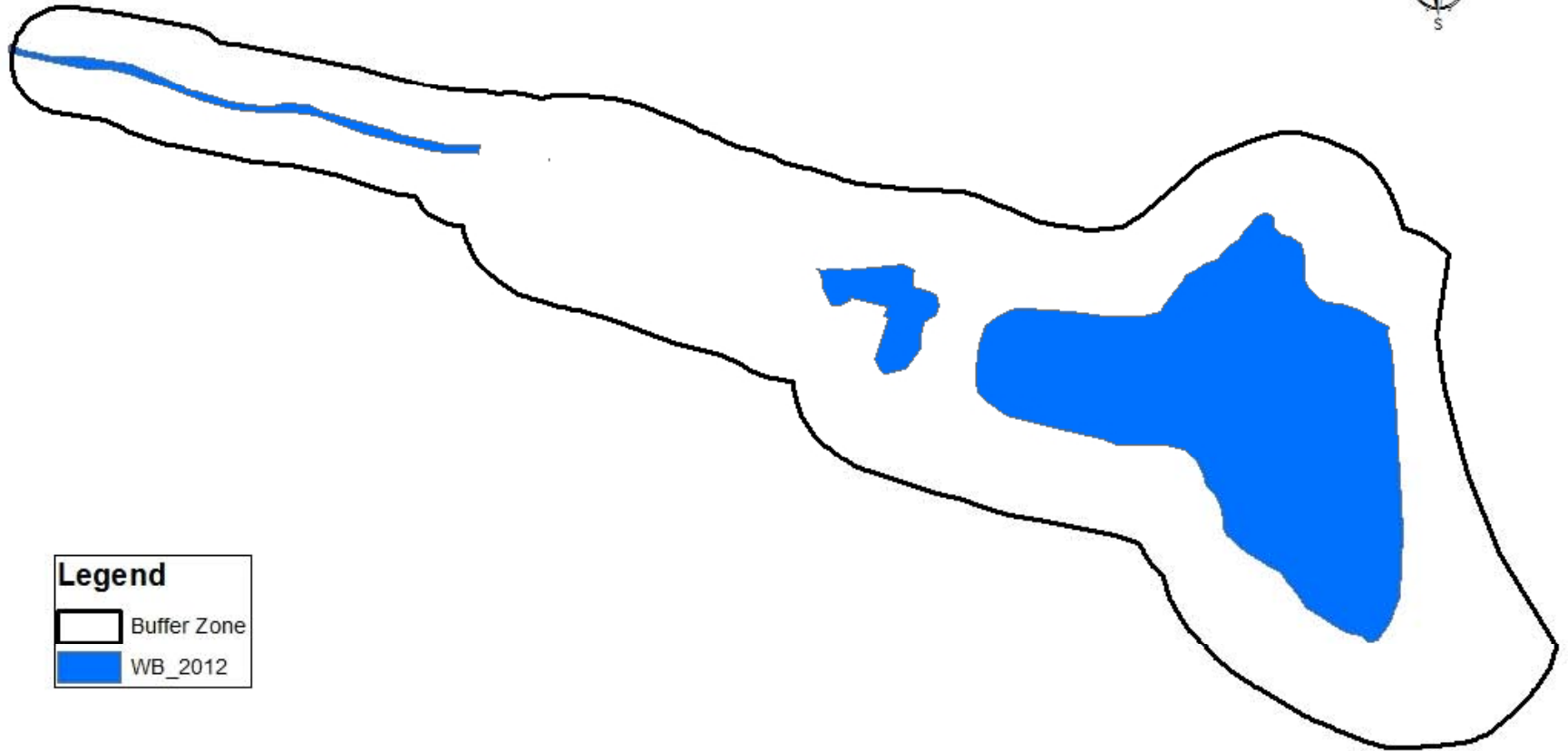
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Map Showing Temporal Change of the Water Spread Hameed Khan Kunta



Source: Field Survey and Google Earth

Map Showing Delineation of Buffer Zone along 30 mt Radius Hameed Khan Kunta



Source: Field Survey and Google Earth

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Map Showing Landuse/Land Cover along 30 mt Buffer Of Hameed Khan Kunta

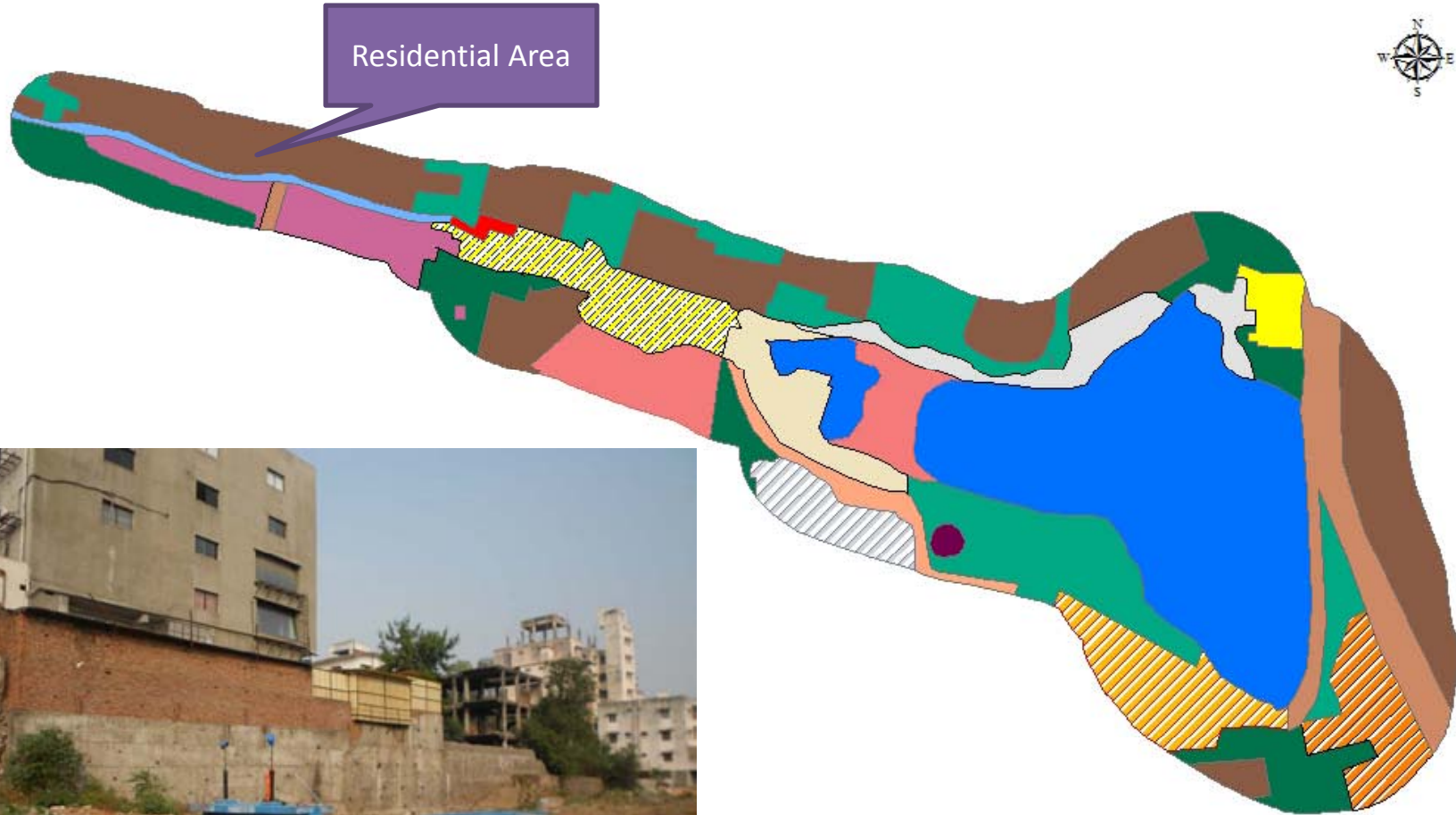


Legend

Banjara Lake	Plantation
Canal	Plastic Dump
Canal-Diversion	Residential Area
Commercial Area	Ambdekar Nagar Slum
Dumping Mud	Road
Garbage dump	STP
Grave Yard	Scrubland
Kacha Road	Taj Banjara Hotel
Lake Dry area	Temple
	Wasteland

0 0.02 0.04 0.08 0.12 0.16 Kilometers

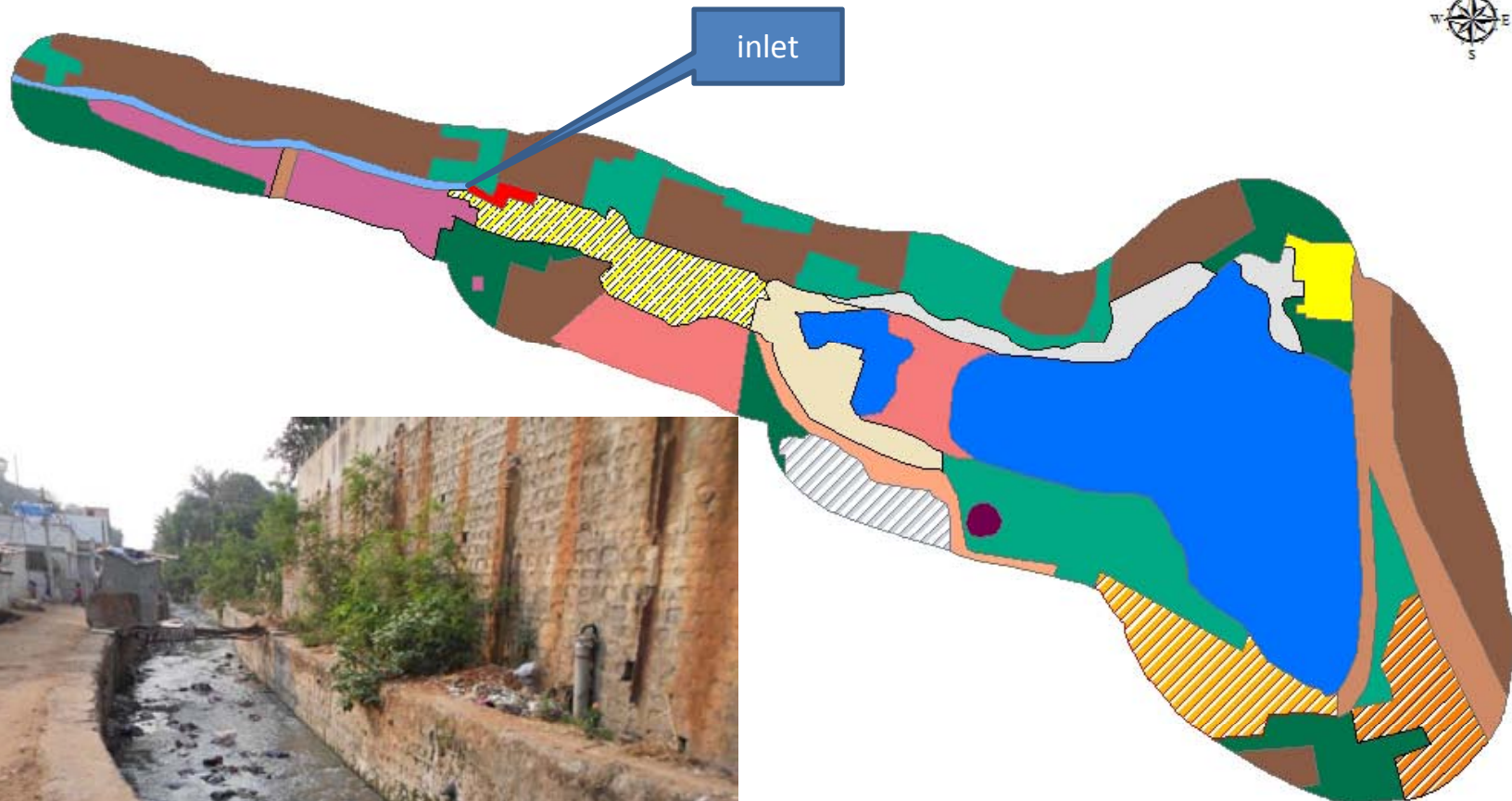
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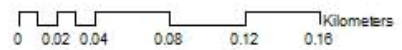
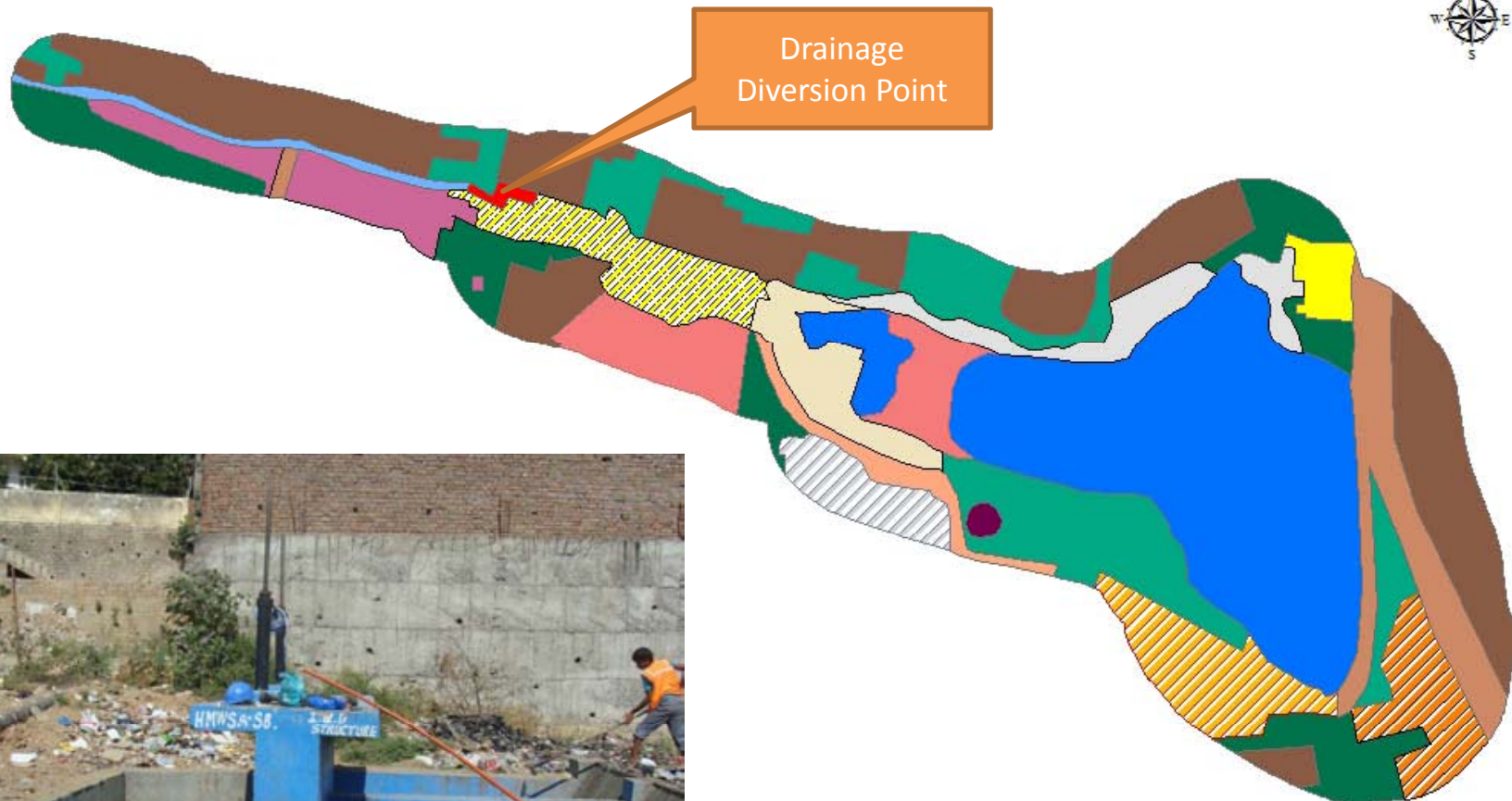
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Source: Field Survey and Google Earth

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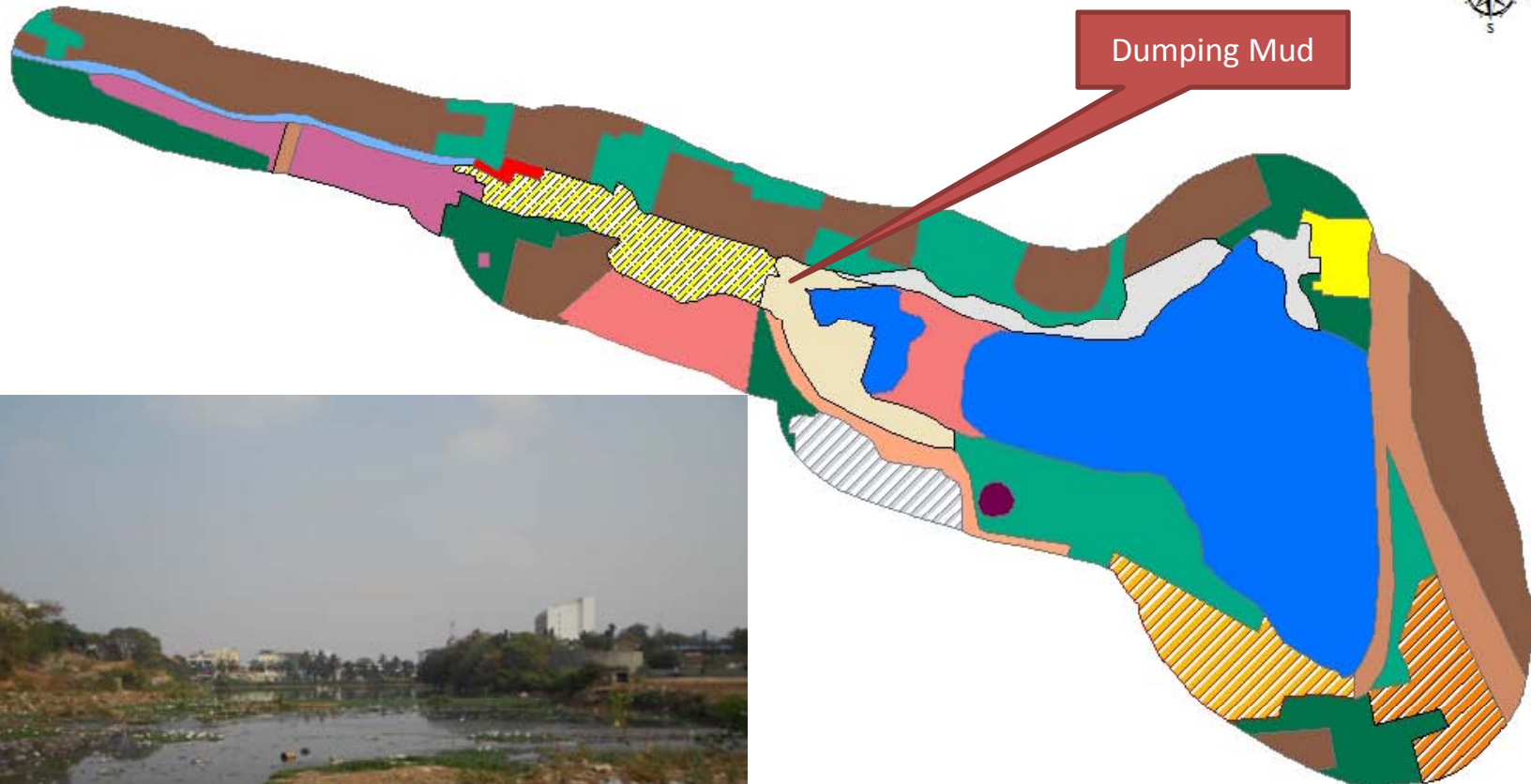


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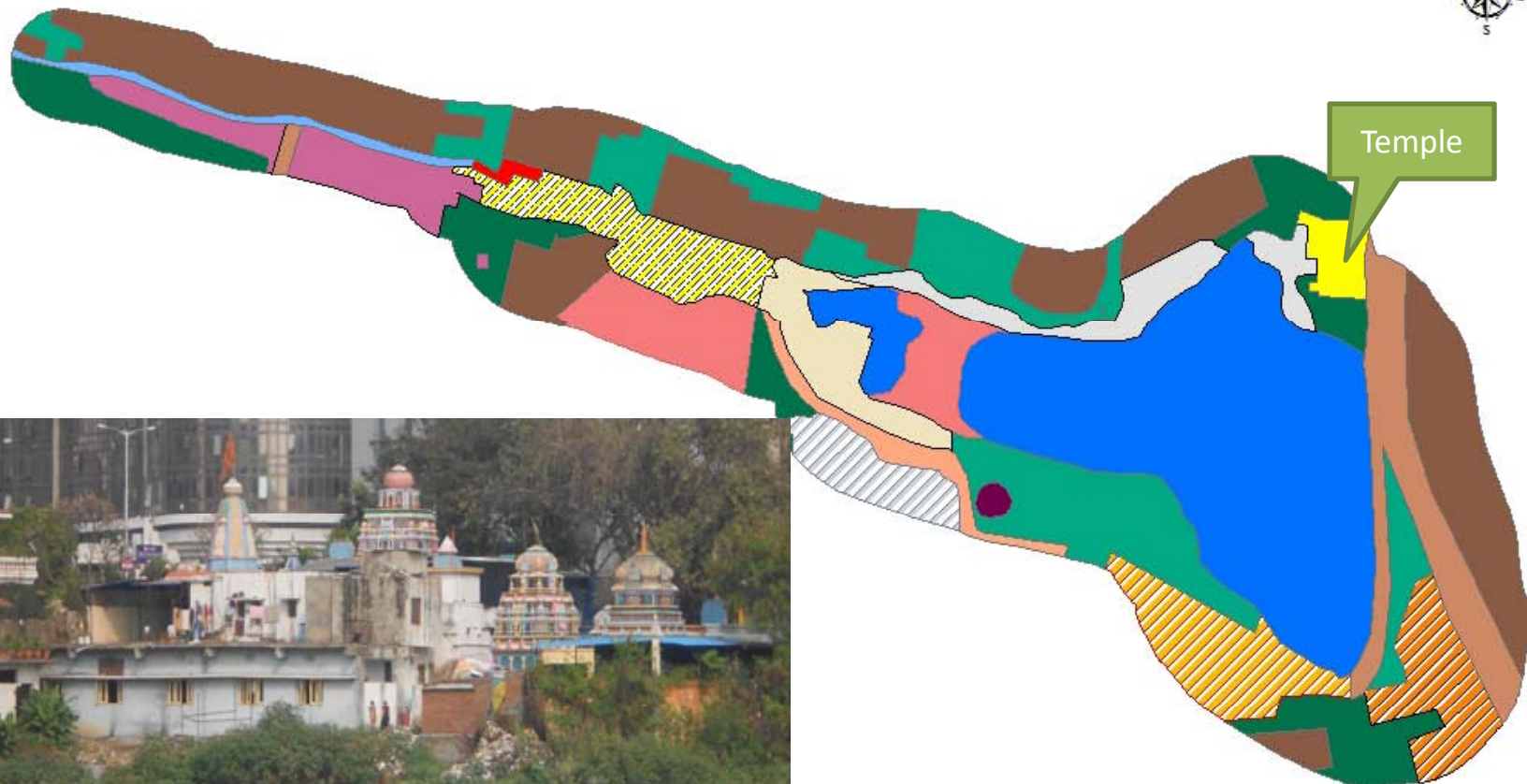
Dumping Mud



0.02 0.04 0.08 0.12 0.16 Kilometers

Source: Field Survey and Google Earth

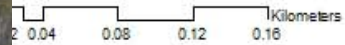
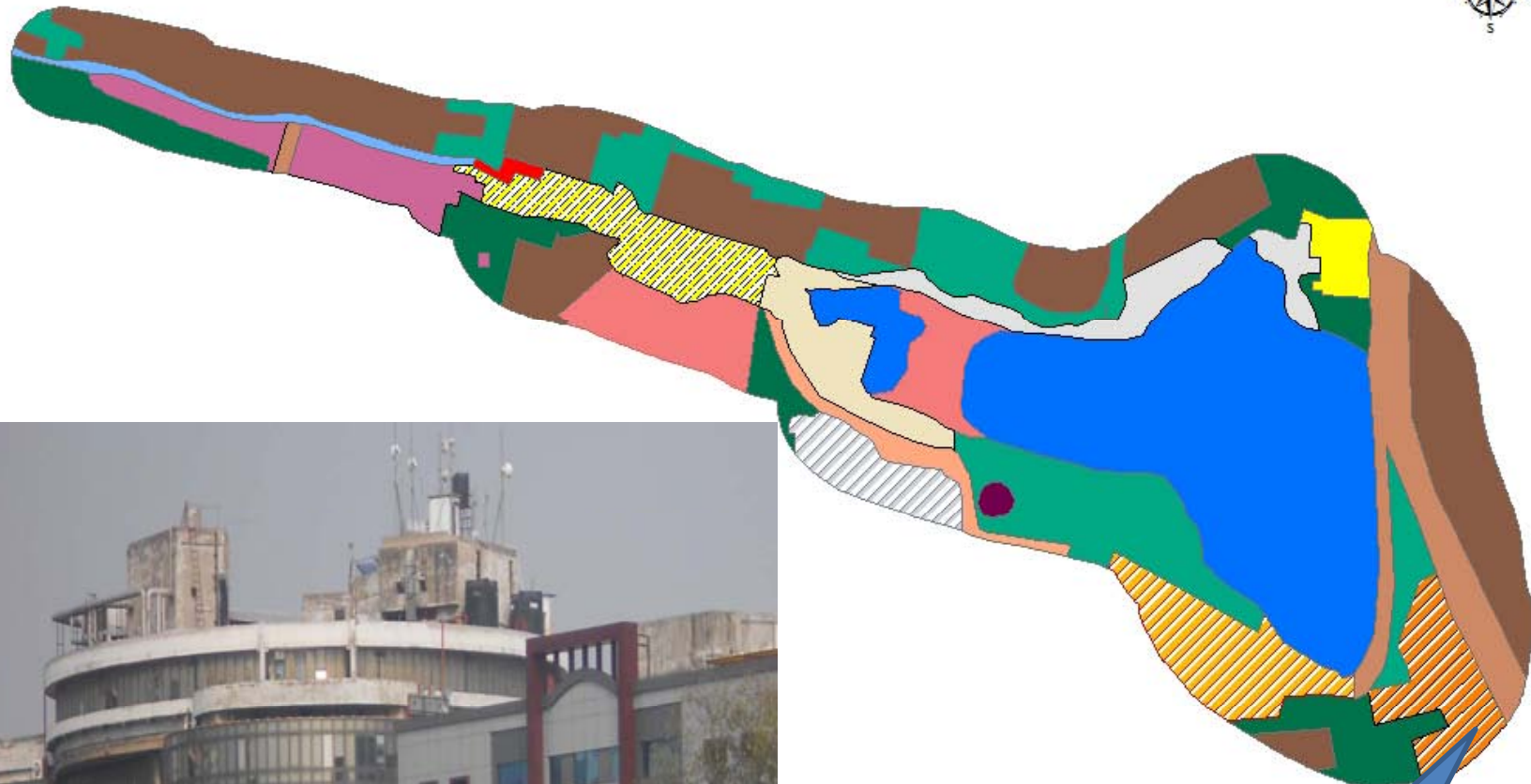
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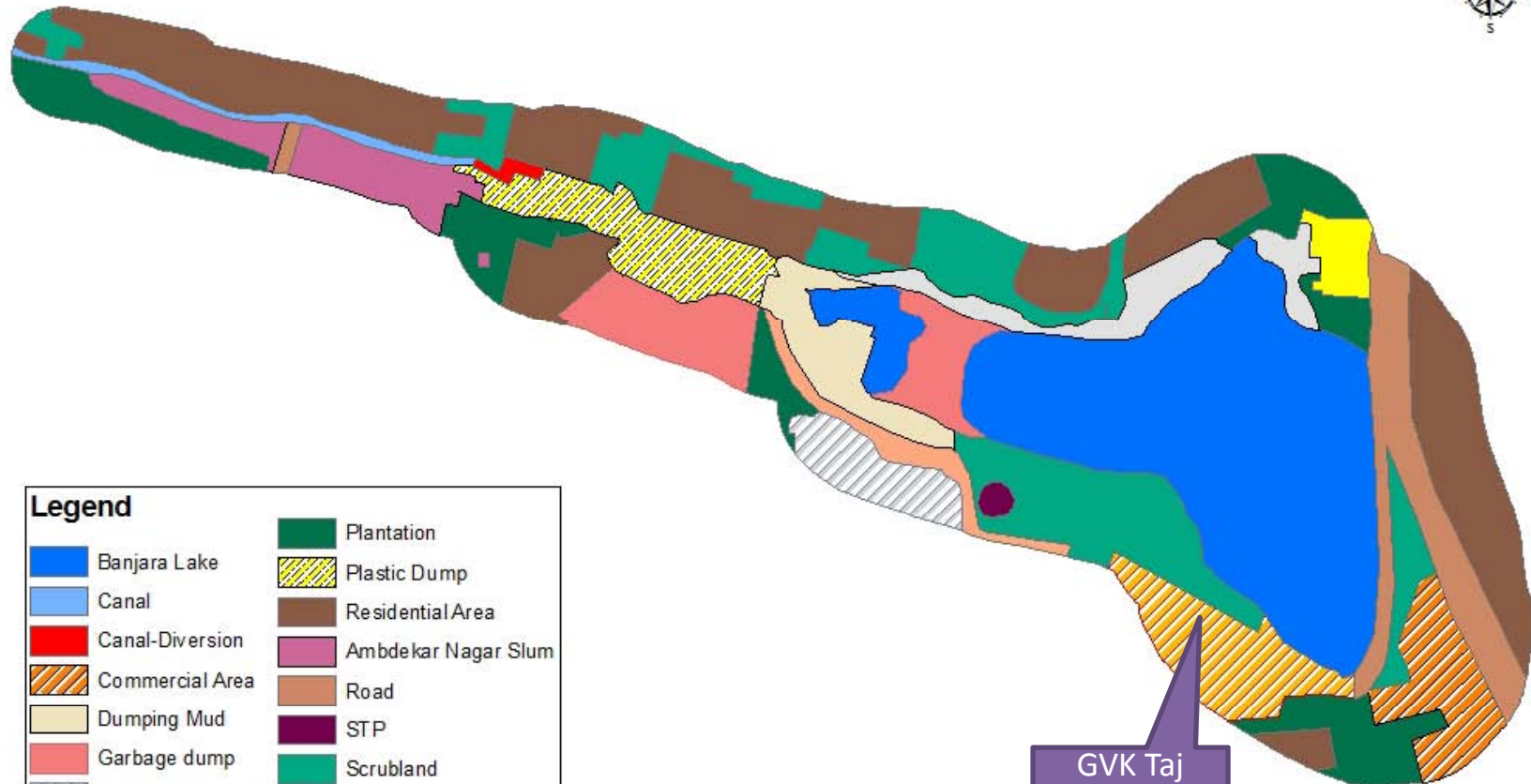
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Commercial Area

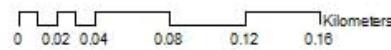
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Legend

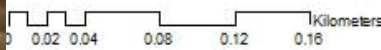
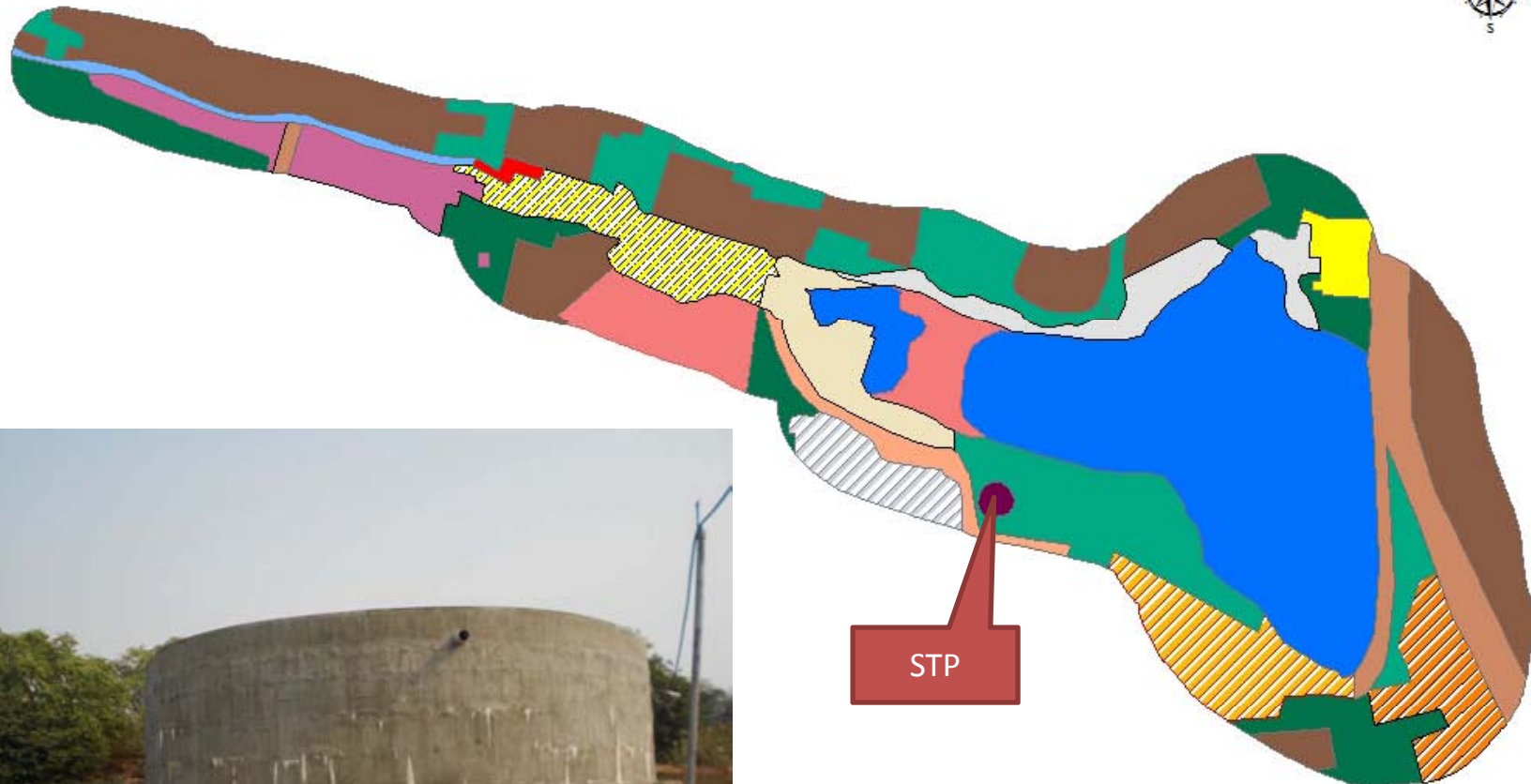
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GVK Taj
Banjara

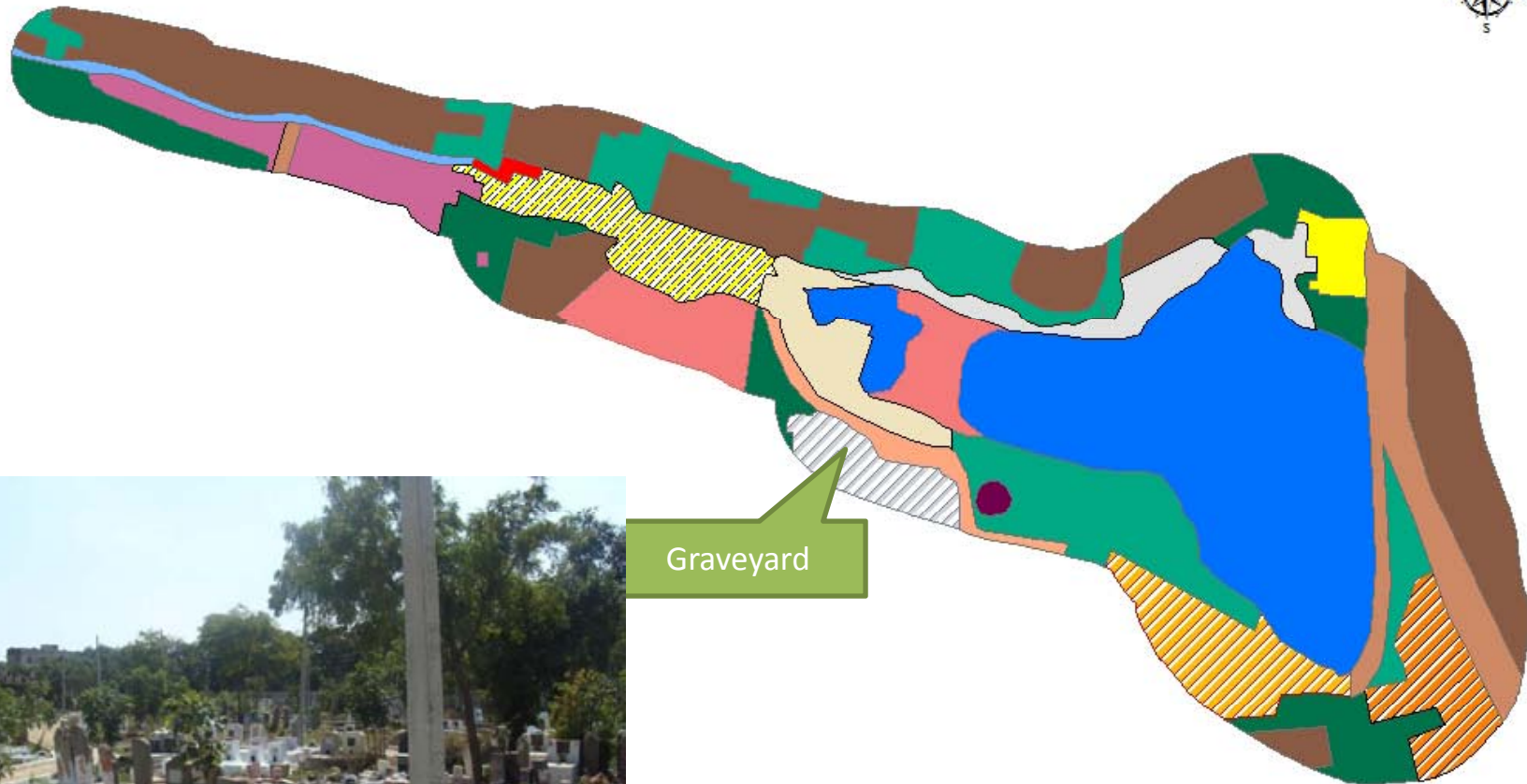
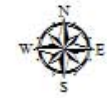
Source: Field Survey and Google Earth

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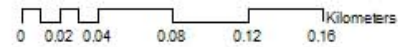


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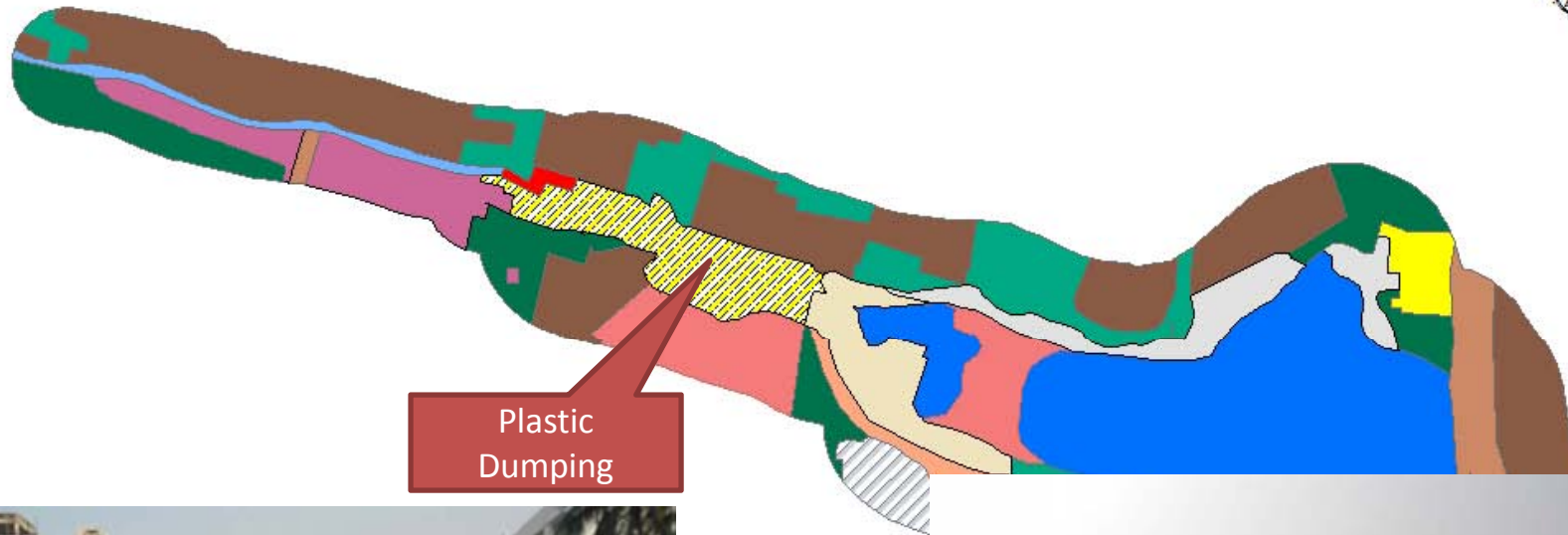


Graveyard

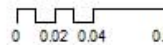


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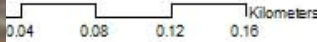
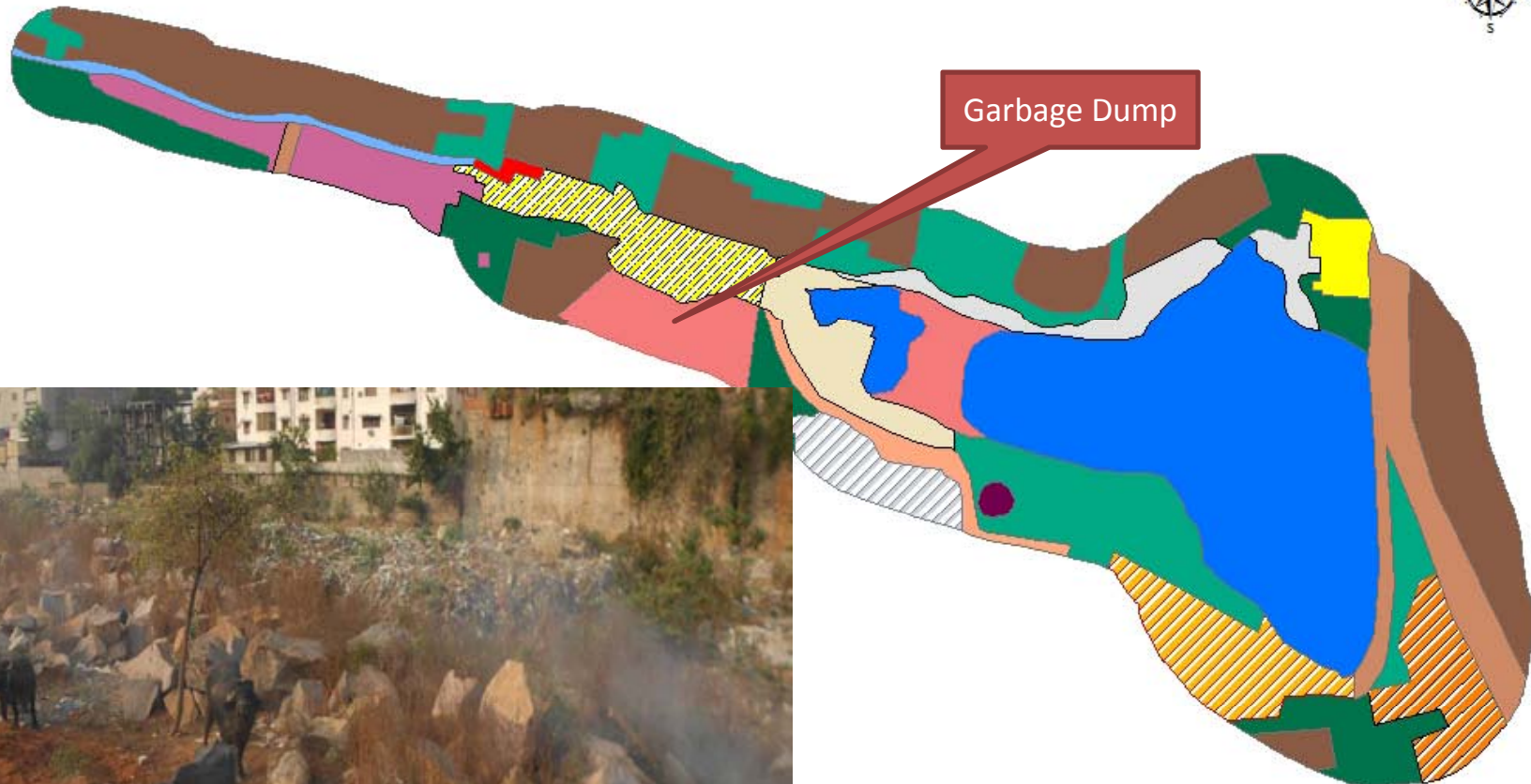
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Plastic Dumping



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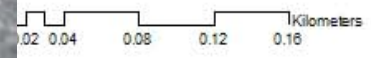


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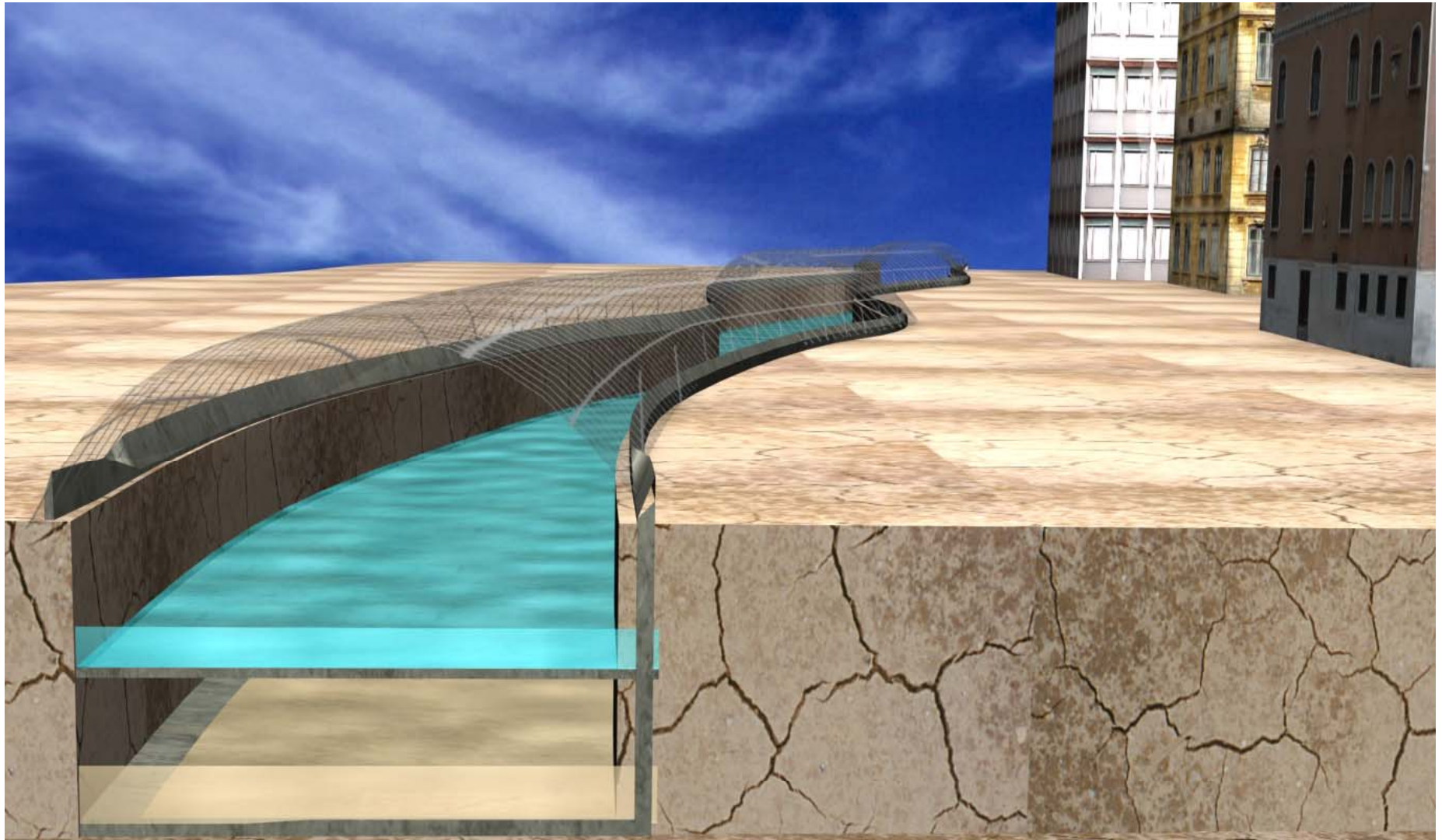
Ambedkar Nagar Slum



Source: Field Survey and Google Earth

Treatment for Inlet Channel

Hameed Khan Kunta



Roof Top Rain Water Harvesting



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In Sum... issues are of..

Rural urban water flow

- Water transfer through tankers
- Water received as waste

Disruption of natural water flow

- Natural water flow disrupted – floods and droughts

Pollution and heavy reliance on groundwater

- Lakes as cess pools and receptacles of industrial pollution
- Crisis for irrigation water for peri urban agriculture

Social characteristic of state

- State under influence of corporate bodies and real estate lobbyist

Thank you for your attention

Acknowledgements

- IDRC's support for peri urban project
- Department of Science and Technology
- US Consulate, Hyderabad
- Save our Urban Lakes (SOUL)

www.saciwaters.org/periurban



**DISAPPEARING
LAKES OF
HYDERABAD AND
THE NEED TO
PROTECT THEM,
THROUGH
AWARENESS AND
COMMUNITY
INVOLVEMENT**



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