



**SAFERUP!**  
Thinking Beyond the Pavement



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## ***PDIC - EIDEIC 2019***

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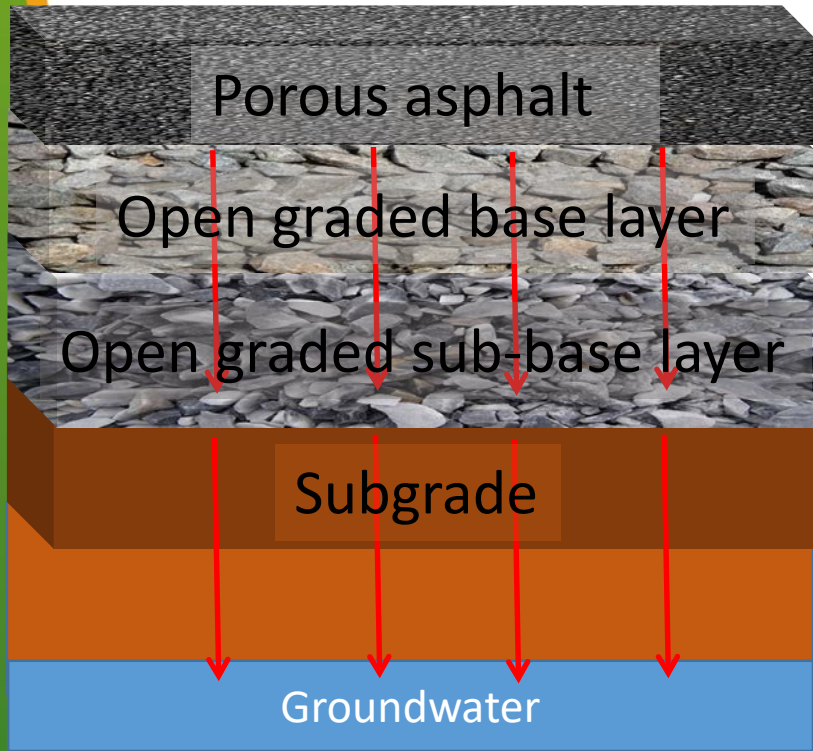
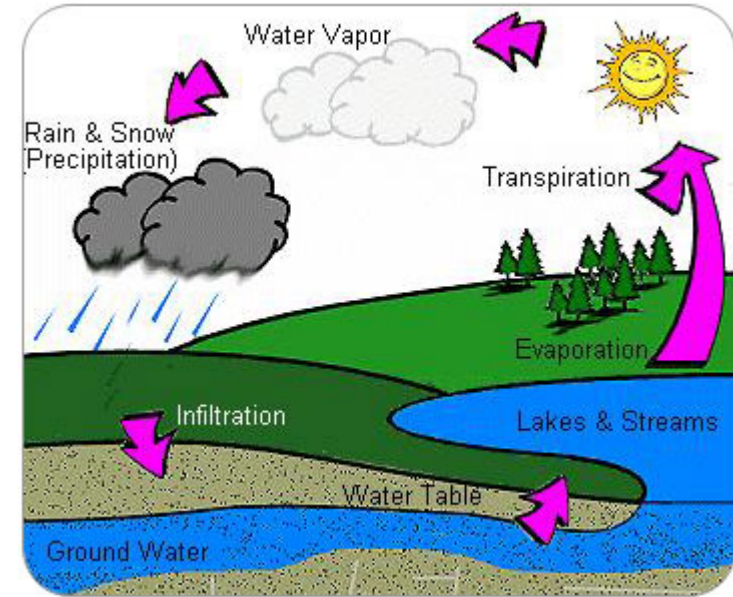
### ***ESR-10 Anik Gupta – UNICAN***

Resilient and sustainable Permeable Pavements For  
urban Flood Mitigation  
***(RePP4FM)***





Groundwater Recharge

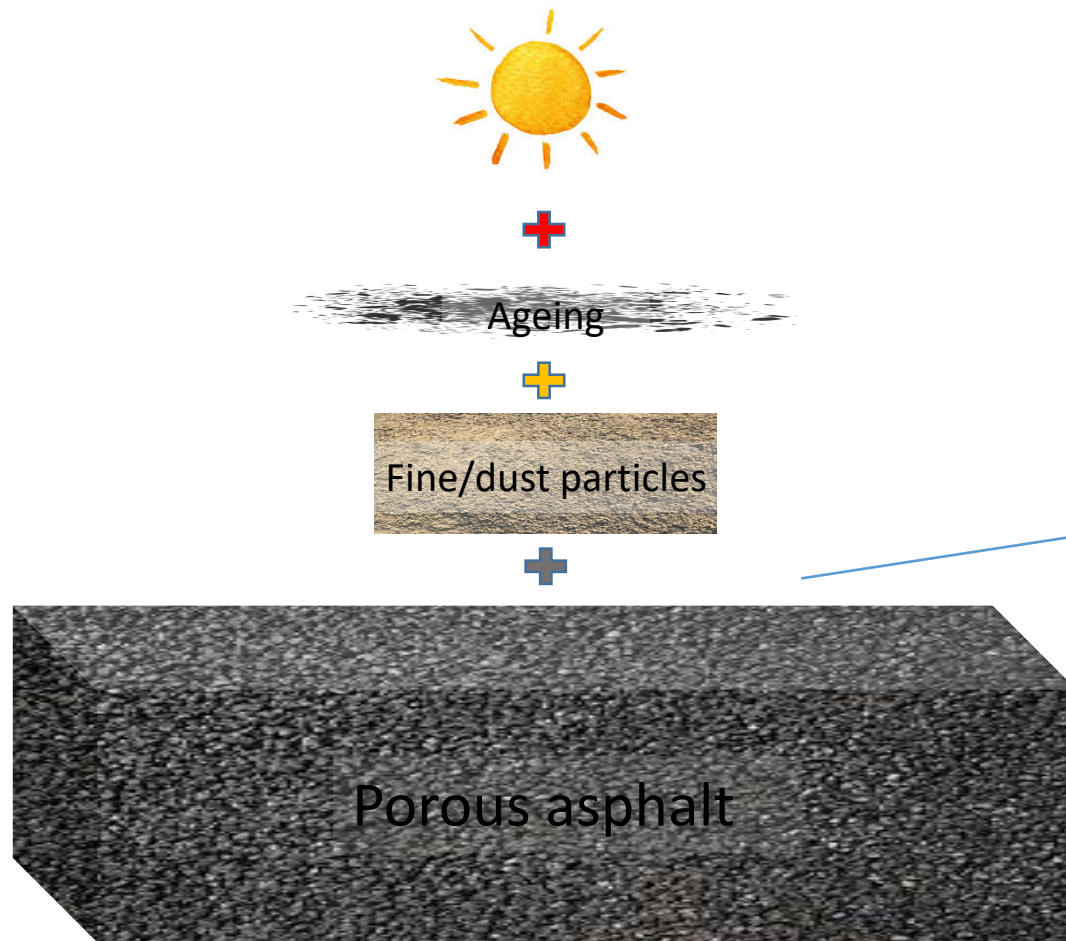


Reduction in water splashing

Skid resistance

Noise resistance

Local flood mitigation

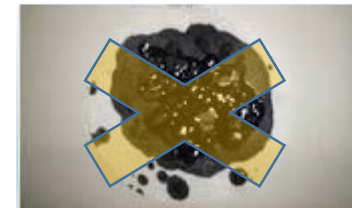
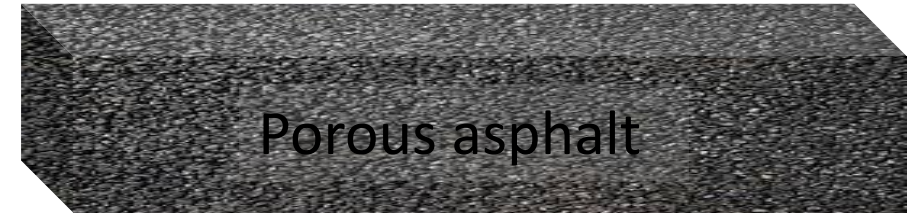
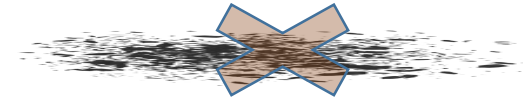


**Lesser design life**

**Ravelling  
Clogging  
Cracking  
Stripping of bitumen**

# How to improve?

- Additives like fibers to improve the stability of binder
- Improving the adhesion between aggregate and binder.



# GIS Application

## SUITABILITY

Area

Slope

Permeability

Groundwater level

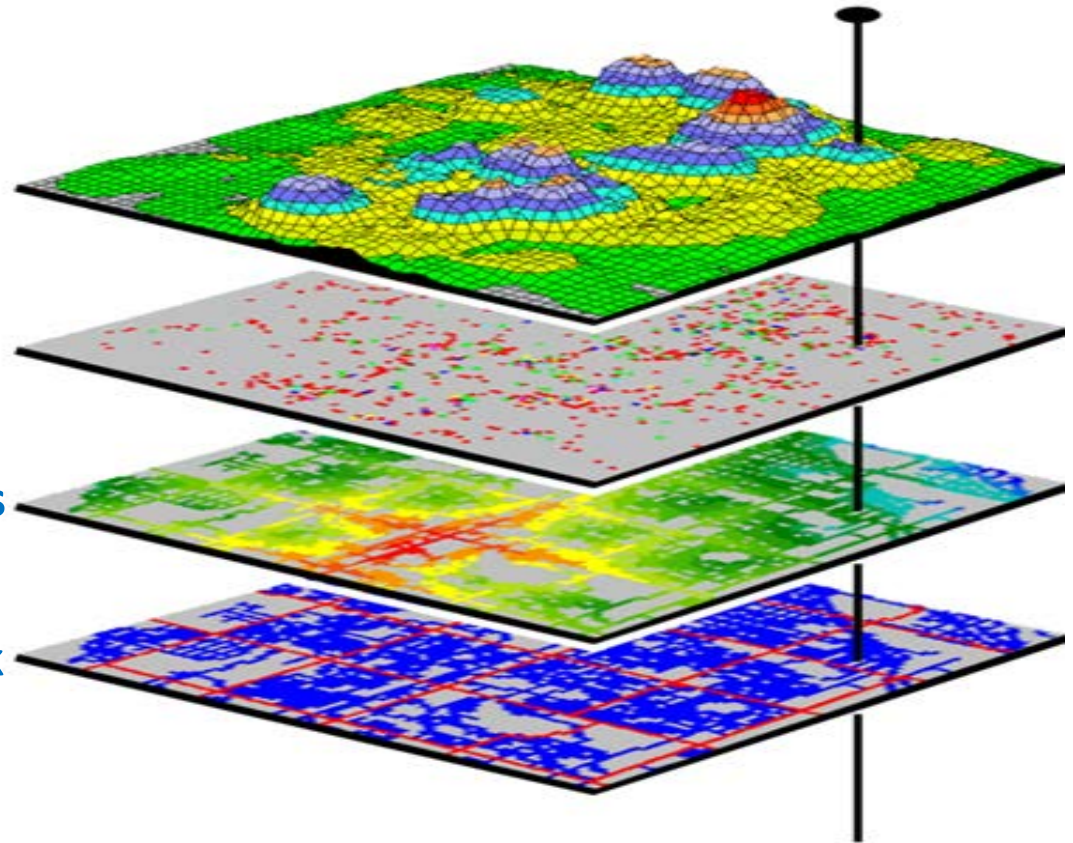
Traffic

Forest Cover and Land Use

Rainfall Data

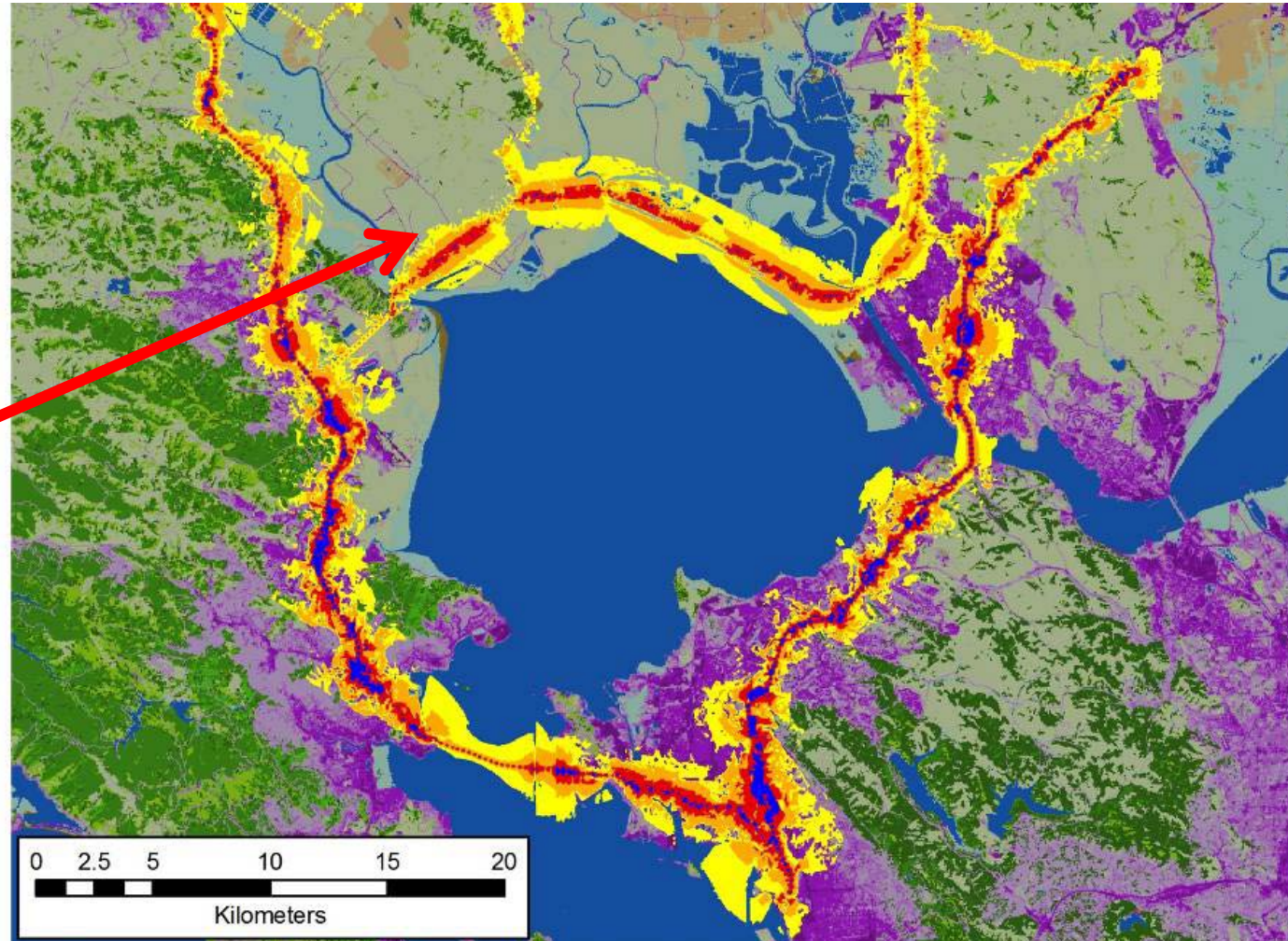
Urban Areas

Existing Road Network



# Prioritizing urban areas for pps

Requirement  
of PPS



Thank you