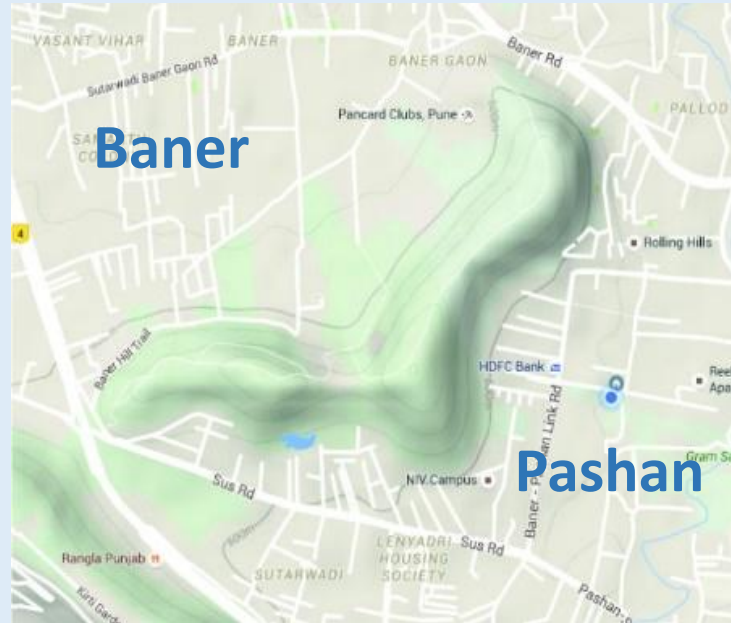


Public Groundwater Recharge Project at Baner Pashan Hills (Bio Diversity Park)



भूजल अभियान

MISSION GROUNDWATER

Recharge . Conserve . Sustain

Baner Pashan Bio Diversity Park (BDP)

- The BDP area is spread over about 200 hectares which is primarily hills and hill slopes.
- The rain water flows down the hills, erodes the soil in the process and muddy water flows through the residential areas, over streets, and into stormwater drainage pipes.
- This high volume of surface runoff results in soil depositing on the roads and choking of the stormwater drainage system.
- Millions of litres of precious rainwater is wasted by such drainage

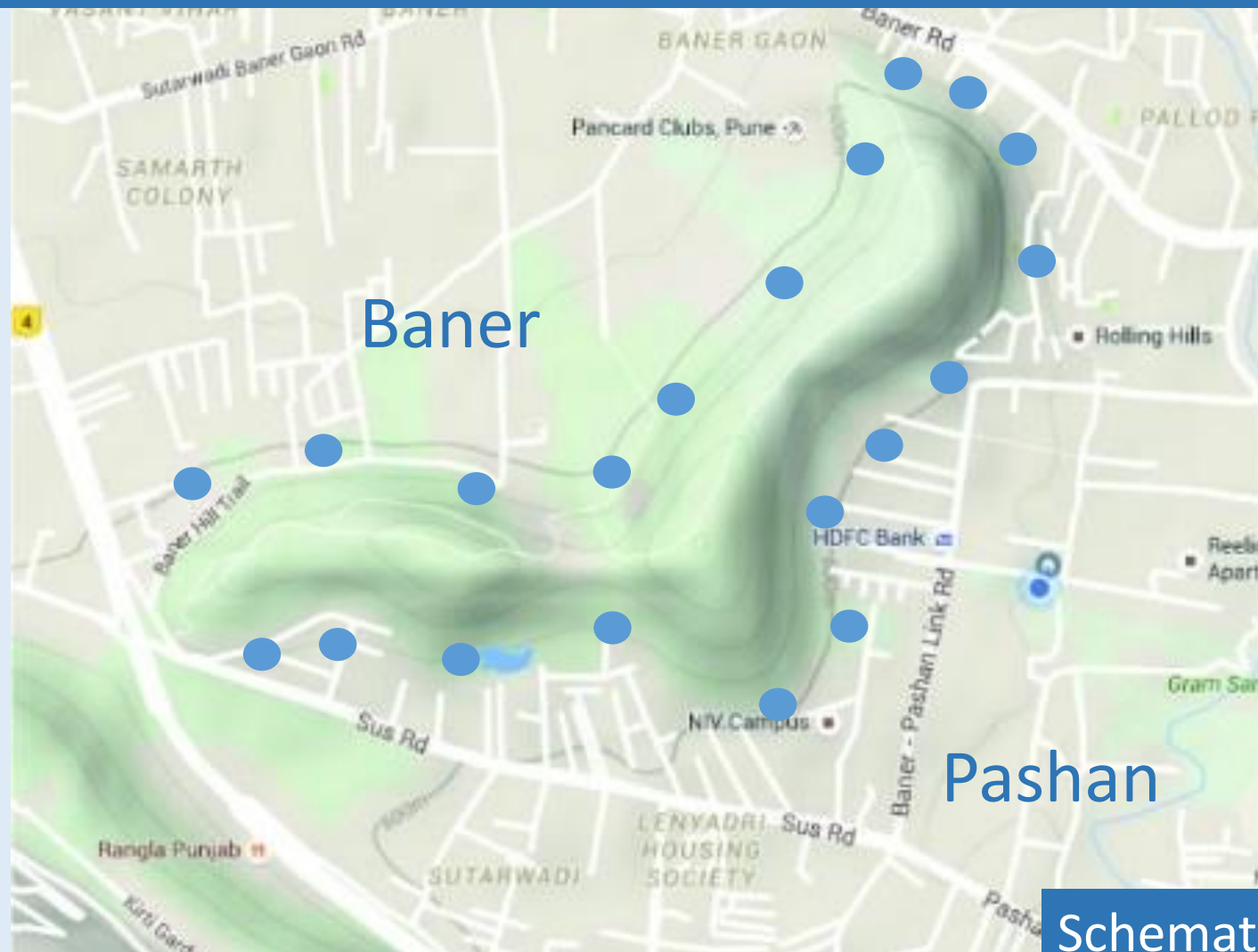
Public Groundwater Recharge Project

- * Mission Groundwater (Bhujal Abhiyan) has proposed a public groundwater recharge project to the govt authorities.
- The project aims to collect, filter, and divert the flowing rainwater from the BDP hills through 25 meter deep vertical shafts to reach the underground aquifer.
- Each recharging structure is to be erected every 60 mtrs. around the hills; total about 70 borewells for about 5 km of circumference of BDP.
- Groundwater storage in the aquifers will be augmented by this.
- This is a one time investment for next few decades, with minimal maintenance.

Why Artificial Recharging ?

- - The current usage of yielding borewells has depleted ground water to alarming levels.
 - Most of the borewells go dry after January every year.
 - The recharging of ground water happens only naturally and hence takes hundreds of years.
 - Artificial groundwater recharge is a solution to the artificial extraction of groundwater.

Proposed Recharge Spots around BDP



Schematic Representation

Benefits – Water Supply

- The bore-wells in residential areas will have improved yield
 - This will reduce the dependence on reservoir based water distribution system.
 - This in turn will save the cost of filtration, distribution, and maintenance of water supply.
 - This will also aid the plan of 24x7 water supply.
 - Groundwater is an critical reserve in drought years and increase in groundwater levels will mitigate water scarcity to an extent.

Benefits to environment

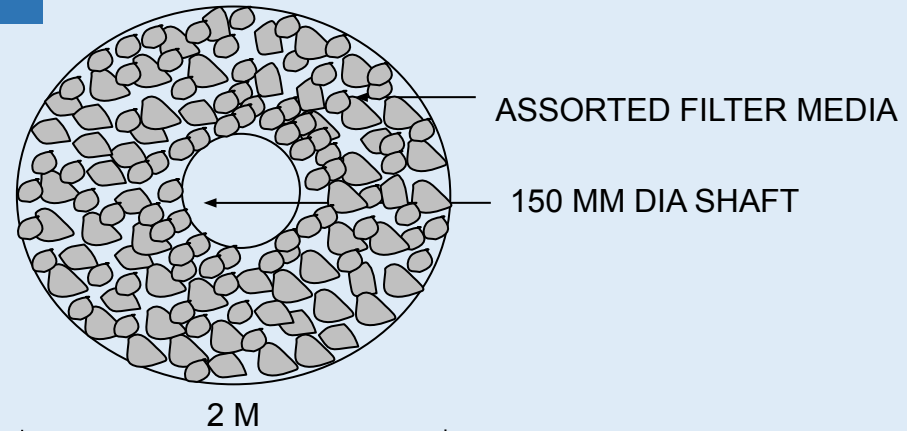
- The green cover, vegetation on the hills will improve.
 - It will augment the soil retention on the hills.
 - The hills will get greener and cooler.
 - The flora and fauna will thrive naturally.
 - The increased green cover will reduce the heat island effect.

Benefits – Soil Erosion

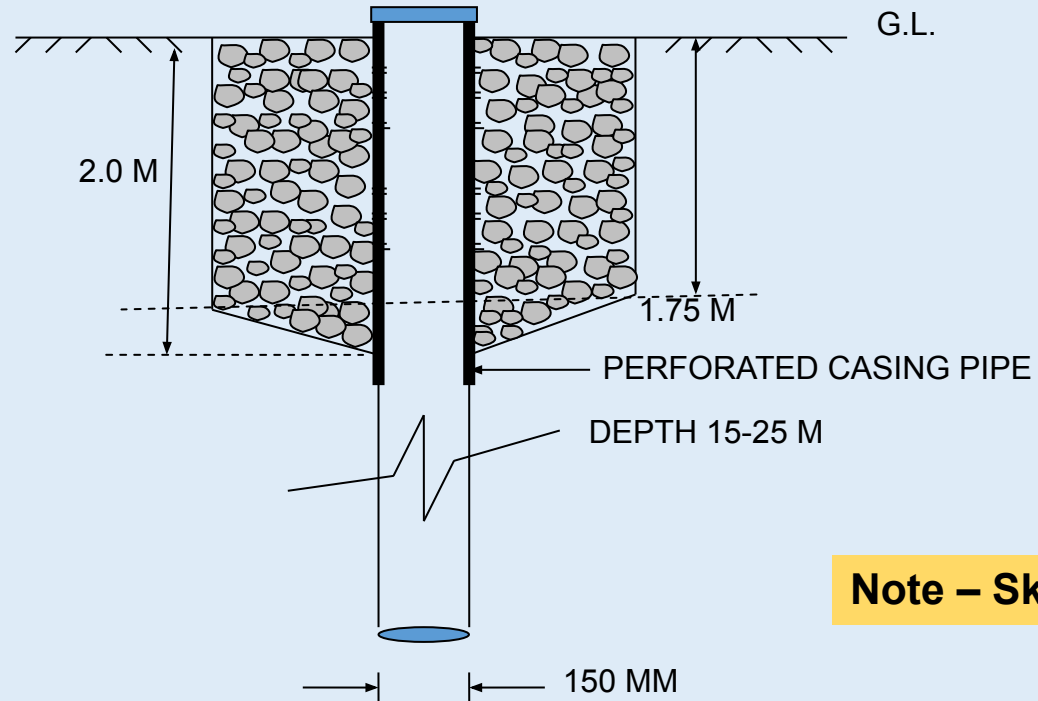
- Erosion of soil is reduced.
 - As a result, less soil will flow onto the streets and drainage system.
 - This in turn will reduce accidents.
 - Roads will require less maintenance.
 - Traffic will not be hampered.

Recharge Shaft (on surface)

A - PLAN



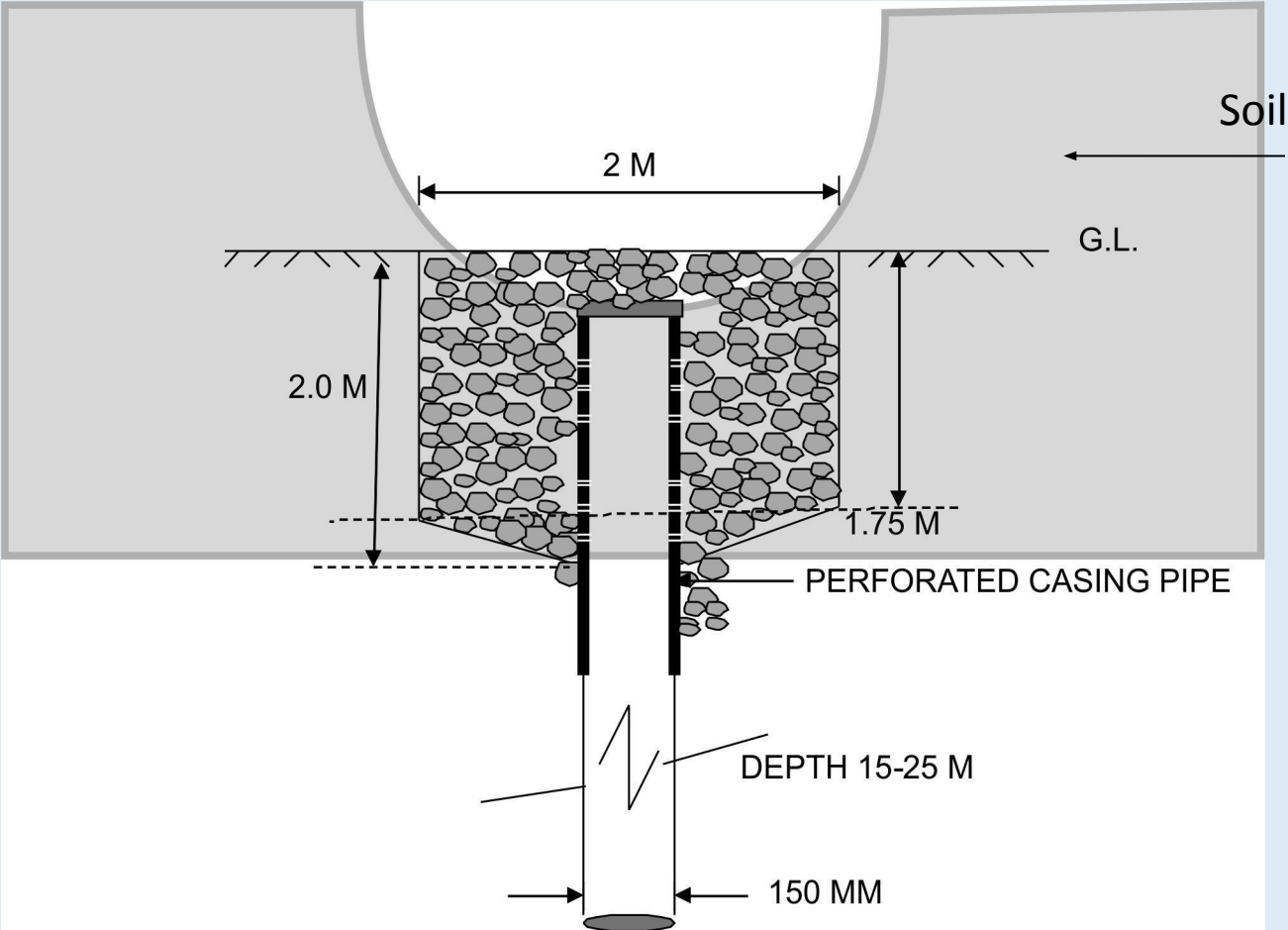
B - SECTION



Note – Sketch not to the scale

Trench Canal

B Section



Progress till date

- The technical evaluation & survey done by Groundwater Survey Development Agency, Govt of Maharashtra endorses the project.
- Survey & research done by ACWADAM – India's leading research organisation in hydrogeology has verified that the Baner Pashan BDP area is conducive for artificial groundwater recharge.
- Mission Groundwater has proposed the Community Recharge project to the District Collector Pune and Pune Municipal Corporation.
- PMC for 2019-2020 has provisioned a budget of 2 crores for groundwater recharge.
- Mission Groundwater has proposed formation of a Groundwater Cell within PMC to take up projects related to groundwater. . The Mayor of Pune has proposed formation of a Committee in the interim period.

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