

SV Symphony Apartments - Water resilience through borewell recharge (Total area: 0.5 acres, no. of flats: 52 - two and three BHK)

Issues

- Reducing yield / no yield in the three existing borewells
- Heavy dependence on tanker water. Quantity: **7800 KL / annum**; cost: **8.4 lakhs / annum**

Solutions implemented

- Rooftop rainwater harvesting
- Direct borewell recharge from with the rooftop rainwater after filtration

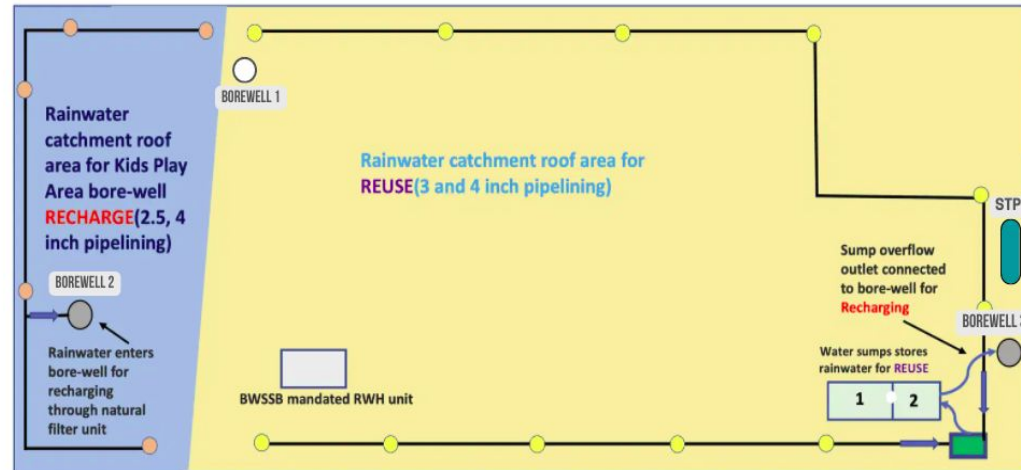
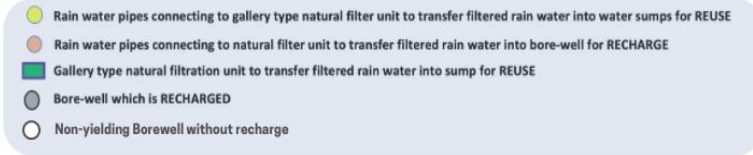
Rooftop rainwater harvesting

- The rooftop was divided into two parts - the north side and the south side
- North side (1440 sqm, RWH potential - 1263 KL) - harvested water is stored in a 44 KL sump and overflow is used to recharge borewell 3
- South side (134 sqm, RWH potential - 177 KL) - harvested rainwater is filtered and used to recharge borewell 2



Outcome

- 14 million litres of rainwater saved in the last five years - ₹3 lakhs savings per year on tanker water
- Increase in yield of borewells 2 and 3
- Improved water security for the apartment complex



SV SYMPHONY Apartments,
Doddakanahalli, Carmelaram Post

Layout of the RWH unit. Rainwater falling on one part of the rooftop (highlighted in yellow), is sent to sumps and a borewell after filtration. Water from the smaller rooftop, highlighted in blue, is used exclusively for borewell recharge.