

Rainwater harvesting systems to come up for rapid rail corridor

Ghaziabad: NCRTC has developed 900 rainwater harvesting systems throughout 70km of the elevated section of the rapid rail corridor to tap rainwater for groundwater recharge. This will help conserve over 70 lakh litres of rainwater. The viaduct and roof of the stations are the catchment area for the rainwater. "About 900 rainwater harvesting structures or recharge pits have been constructed from Sarai Kale Khan in Delhi to Modipuram in Meerut. About 70km of the 82-km-long Namo Bharat Corridor is elevated, and the rest is underground. In the elevated part of the corridor, rainwater harvesting pits have been built in the road divider section below the viaduct span," said an official from NCRTC. "Each pit constructed at the stations is 2 metres in diameter and 2.5 metres deep, with a capacity to collect approximately 6,500 litres of rainwater. Meanwhile, the pits built beneath the viaduct measure 2.9 x 1.5 metres in size, with a depth of 1.5 metres, and can store about 8,700 litres of water each and together about 70 lakh litres of rainwater," added the official. You Can Also Check: [Noida AQI](#) | [Weather in Noida](#) | [Bank Holidays in Noida](#) | [Public Holidays in Noida](#) As part of the design, rainwater harvesting pits are constructed at intervals of one span under the viaduct. Two small water chambers are built opposite each other near the pillars at ground level and connected to the viaduct through pipes. The harvesting pit is located between these two chambers, connected to them through pipes. During rainfall, water from the viaduct flows into the two chambers and then percolates into the ground through the harvesting pit. To ensure the rainwater is filtered before absorption, each pit is equipped with a three-layer filtration system comprising gravel and sand. In addition to these two depots, two ponds measuring 1,160 square metres and 663 square metres respectively have also been constructed near Duhai depot. "These ponds, with depths ranging between 4 to 5 metres, are equipped with harvesting pits at their base to facilitate groundwater recharge. Together, these ponds can store over 66 lakh litres of rainwater," said the official. In the event of heavy rainfall, excess water from the harvesting pits will collect in the ponds and gradually seep into the ground. Additionally, the harvested water can be used for irrigating the depot's landscaping.

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