

State Profile

Ground Water Scenario of Delhi (NCT)

Area (Sq.km)	1483
Physiography	<ul style="list-style-type: none"> ▪ Masudpur-Wazirabad Ridge ▪ Older Alluvial Plain ▪ Yamuna Flood Plain
Drainage	The State is drained by river Yamuna
Rainfall (mm)	Average Annual rainfall: 611.8 mm
Total Districts	9 Districts

Hydrogeology

The Ground water availability in the territory is controlled by the hydrogeological situation characterized by occurrence of alluvial formation and hard rocks such as quartzite. The hydrogeological set up and the following distinct physiographic units further influence the ground water occurrence: (1) Older Alluvial Plain on the eastern and western side of the ridge. (2) Yamuna Flood Plain deposits. (3) Isolated and nearly closed Chattarpur alluvial basin. (4) NNE-SSW trending Quartzite Ridge. The yield of tube wells ranges between 18-144 m³/hr in Yamuna Flood Plain aquifers. In Older Alluvium of eastern and western sides of the ridge, the yield of tube wells ranges between 12 to 36 m³/ hr. Tube wells constructed in Chattarpur alluvial basin tapping the aquifers of both alluvium and weathered and fractured quartzite yield about 9 to 27 m³ / hr. Discharge of tube wells constructed in Quartzites varies from 6-15 m³ / hr.

Dynamic Ground Water Resources (2011)	
Annual Replenishable Ground water Resource	0.31 BCM
Net Annual Ground Water Availability	0.29 BCM
Annual Ground Water Draft	0.39 BCM
Stage of Ground Water Development	137 %
Ground Water Development & Management	
Over Exploited	18
Critical	2
Semi- critical	5
Artificial Recharge to Ground Water (AR)	<ul style="list-style-type: none"> ▪ Area identified for AR: 699.86 sq. km. ▪ Volume of water to be harnessed: 24.39 MCM ▪ Volume of water to be harnessed through RTRWH: 14.69 MCM ▪ Feasible AR structures: <ul style="list-style-type: none"> ❖ Recharge Shaft- 17850 ❖ Check dams- 8 ❖ RTRWH (H)- 118750 ❖ RTRWH (G & I) - 6250
Ground Water Quality Problems	
Contaminants	Districts affected (in part)
Fluoride (>1.5 mg/l)	North West Delhi, South West Delhi and West Delhi
Nitrate (>45 mg/l)	East Delhi, New Delhi, North West Delhi, South West Delhi, West Delhi
Lead (above 0.01 mg/l)	West Delhi, North Delhi, South Delhi, South West Delhi, North West Delhi
Cadmium (above 0.003 mg/l)	West Delhi
Chromium (above 0.05 mg/l)	West Delhi, North Delhi, North East Delhi, East Delhi, South West Delhi, North West Delhi

Central Ground Water Authority

Areas Notified for Regulation of ground water development	South West District
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South District

Yamuna Flood Plain area