

## State Profile

### Ground Water Scenario of Karnataka

Area (Sq.km)	1,91,791
Rainfall (mm)	1779
Total Districts / Talukas	30 Districts

#### Hydrogeology

The State is covered by peninsular gneisses, granites, schists, & basalts along with sedimentaries of Kaldagi and Bhima groups. The recent alluvium is restricted to coastal areas and stream courses. The water bearing and yield characteristics in hard rock are primarily controlled by the extent of weathering and fracturing. In limestone areas, solution cavities impart secondary porosity. The yield of tube wells tapping hard rocks is as high as 50 m<sup>3</sup>/hr. The tube wells in sedimentaries can yield up to 15 m<sup>3</sup>/hr.

<b>Dynamic Ground Water Resources (2011)</b>	
Annual Replenishable Ground water Resource	17.03 BCM
Net Annual Ground Water Availability	14.81 BCM
Annual Ground Water Draft	9.41 BCM
Stage of Ground Water Development	64 %
<b>Ground Water Development &amp; Management</b>	
Over Exploited	63 Talukas
Critical	21 Talukas
Semi- critical	34 Talukas
Artificial Recharge to Ground Water (AR)	<ul style="list-style-type: none"> <li>▪ Area identified for AR: 74007 sq km</li> <li>▪ Volume of water to be harnessed: 11367 MCM</li> <li>▪ Volume of water to be harnessed through RTRWH: 167.33 MCM</li> <li>▪ Feasible AR structures:                             <ul style="list-style-type: none"> <li>❖ Sub surface dyke- 271</li> <li>❖ Percolation Tank- 10166</li> <li>❖ Check dams - 59853</li> <li>❖ Point Recharge structures – 2695</li> <li>❖ RTRWH (H) - 665000</li> <li>❖ RTRWH (G&amp; I) - 35000</li> </ul> </li> </ul>
<b>Ground Water Quality Problems</b>	
<b>Contaminants</b>	<b>Districts affected (in part)</b>
Salinity (EC > 3000 µS/cm at 25 ° C)	Bagalkote, Bangalore-Rural, Bangalore-Urban, Belgaum, Bellary, Bijapur, Chamarajnagara, Chikballapur, Chikmagalur, Chitradurga, Dakshina Kannada, Davanagere, Dharwad, Gadag, Gulburga, Hassan, Haveri, Kodagu/ Coorg, Kolar, Koppal, Mandya, Mysore, Raichur, Ramanagara, Shimoga, Tumkur, Udupi, Uttara Kannada, Yadgir
Fluoride (> 1.5 mg/l)	Bagalkot, Bangalore Rural, Belgaum, Bellary, Bidar, Bijapur, Chamarajanagar, Chikkaballapur, Chikmagalur, Chitradurga, Davanagere, Dharwad, Gadag, Gulburga, Hassan, Haveri, Kolar, Koppal, Mandya, Mysore, Raichur, Shimoga, Tumkur, U. Kannada
Iron (> 1.0 mg/l)	Bagalkot, Bangalore Rural, Belgaum, Bellary, Bidar, Bijapur, Chikmagalur, Chitradurga, Dakshina Kannada, Davanagere, Gulburga, Hassan, Haveri, Kodagu, Kolar, Koppal, Mysore, Ramanagara, Raichur, Shimoga, Tumkur, Udupi, Uttar Kannada, Yadgir
Nitrate (> 45 mg/l)	Bagalkot, Bangalore Urban, Bangalore Rural, Belgaum, Bellary, Bidar, Bijapur, Chamarajnagar, Chikkaballapur, Chikmagalur, Chitradurga, Dakshina Kannada, Davanagere, Dharwad, Gadag, Gulburga, Hassan, Haveri, Kodagu/Coorg, Kolar, Koppal, Mandya, Mysore, Ramnagara, Raichur. Shimoga, Tumkur, Udupi, Uttar Kannada
Arsenic (above 0.05 mg/l)	Raichur and Yadgir district

**Central Ground Water Authority**

<p>Areas Notified for Regulation of ground water development</p>	<ul style="list-style-type: none"><li>▪ Badami Taluk, District Bagalkote</li><li>▪ Bagalkote(P) Taluk, District Bagalkote</li><li>▪ Anekal Taluk, District Bangalore (U)</li><li>▪ Bangalore (N) Taluk, District Bangalore (U)</li><li>▪ Bangalore (S) Taluk, District Bangalore (U)</li><li>▪ Devanhalli Taluk, District Bangalore(R)</li><li>▪ Dod Ballapur Taluk, District Bangalore(R)</li><li>▪ Hoskote Taluk, District Bangalore(R)</li><li>▪ Nelamangala(P) Taluk, District Bangalore(R)</li><li>▪ Ramdurg Taluk, District Belgaum</li><li>▪ Raybag(P) Taluk, District Belgaum</li><li>▪ Gadag(NC) Taluk, District Gadag</li><li>▪ Bangarapet Taluk, District Kolar</li><li>▪ Chik Ballapur Taluk, District Chikballapur</li><li>▪ Chintamani Taluk, District Chikballapur</li><li>▪ Gauribidanur Taluk, District Chikballapur</li><li>▪ Gudibanda Taluk, District Chikballapur</li><li>▪ Malur Taluk, District Kolar</li><li>▪ Mulbagal Taluk, District Kolar</li><li>▪ Sidlaghatta Taluk, District Chikballapur</li><li>▪ Koratagere(P) Taluk, District Tumkur</li><li>▪ Madhugiri(P) Taluk, District Tumkur</li></ul>
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