

## State Profile

### Ground Water Scenario of Bihar

Area (Sq.km)	94,163
Rainfall (mm)	1030 mm
Total Districts / Blocks	38 Districts

### Hydrogeology

Hydrogeologically, the various litho-units of the State can be grouped as unconsolidated / Alluvial formation, semi-consolidated formations and consolidated/fissured formations. The main alluvial tract covers entire north Bihar and a sizeable area south of the Ganga River. These alluvial formations constitute prolific aquifers where the tubewell can yield between 120-247 m<sup>3</sup>/hr. The potentiality of these aquifer decreases due south in the marginal tract. Auto flow conditions occur in the sub-Tarai region of Madhubani, Sitamarhi and West Champaran Districts. In the hard rock areas of South Bihar, borewells located near lineaments/fractures can yield between 10-50 m<sup>3</sup>/hr.

<b>Dynamic Ground Water Resources (2011)</b>	
Annual Replenishable Ground water Resource	29.34 BCM
Net Annual Ground Water Availability	26.88 BCM
Annual Ground Water Draft	11.95 BCM
Stage of Ground Water Development	44 %
<b>Ground Water Development &amp; Management</b>	
Over Exploited	NIL
Critical	NIL
Semi- critical	11
Artificial Recharge to Ground Water (AR)	<ul style="list-style-type: none"> <li>▪ Area identified for AR: 760.3 sq. km.</li> <li>▪ Volume of water to be harnessed: 83.14 MCM</li> <li>▪ Volume of water to be harnessed through RTRWH:23.13                             <ul style="list-style-type: none"> <li>❖ Percolation tanks-227</li> <li>❖ Recharge Shafts-118</li> <li>❖ RTRWH(H)-95000</li> <li>❖ RTRWH(G&amp;I)-5000</li> </ul> </li> </ul>
<b>Ground Water Quality Problems</b>	
<b>Contaminants</b>	<b>Districts affected (in part)</b>
<b>Fluoride</b> (>1.5 mg/l)	Aurangabad, Banka, Bhagalpur, Buxar, Gaya, Jamui, Kaimur( Bhabua), Munger, Nawada, Rohtas, Supaul
<b>Iron</b> (>1.0 mg/l)	Aurangabad, Begusarai, Bhojpur, Buxar, East Champaran, Gopalganj, Katihar, Khagaria, Kishanganj, Lakhiserai,

	Madhepura, Muzaffarpur, Nawada, Rohtas, Saharsa, Samastipur, Siwan, Supaul, West Champaran
<b>Nitrate</b> (>45 mg/l)	Aurangabad, Banka, Bhagalpur, Bhojpur, Darbhanga, Kaimur(Bhabua), Patna, Rohtas, Saran, Siwan
<b>Arsenic</b> (>0.05 mg/l )	Begusarai, Bhagalpur, Bhojpur, Buxar, Darbhanga, Katihar, Khagaria, Kishanganj, Lakhisarai, Munger, Patna, Purnea, Samastipur, Saran, Vaishali

**Central Ground Water Authority**

Areas Notified for Regulation of ground water development	one
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