



THE TIMES

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NADAL DOWNS DEL POTRO IN STRAIGHT SETS TO REACH 11TH FRENCH OPEN FINAL, SETS UP TITLE SHOWDOWN WITH DOMINIC THIEM **23**

Groundwater in parts of Delhi has arsenic, fluorides: Report

Says Delhi Is Overdrawing Water By 27%

TIMES NEWS NETWORK

New Delhi: Even as the capital grapples with the problem of its fast depleting groundwater, there's another cause for alarm regarding the city's underground resource — contamination by lethal toxins such as arsenic, nitrates and fluorides in parts of Delhi.

A recent Lok Sabha secretariat report reveals that east and northeast districts of Delhi suffer from arsenic contamination of groundwater while other districts have recorded nitrate and fluoride pollution.

The report also quantifies how much the city is overdrawing its groundwater. The overexploitation was to the extent of 27% — that is, for every 100 litres that gets replenished, Delhiites draw out 127 litres. It's based on analysis of groundwater use between

DANGER IN EACH DROP

Groundwater contamination in Delhi districts

S

Salinity (Electrical conductivity above 3,000 micro mhos/cm)
New Delhi, North, South, East, West, Northwest, Southwest

F

Fluorides (above 1.5mg/l)
East Delhi, New Delhi, Northwest, South, Southwest, North, West

N

Nitrates (above 45 mg/l)
East, Central, New Delhi, North, Northwest, South, Southwest, West

A

Arsenic (above 0.01 mg/l)
East, Northeast

Source: Lok Sabha secretariat



2011 and 2013, the latest year for which data is available.

The arsenic contamination is not widespread, but it may point to unacceptable groundwater pollution in the city.

"Arsenic contamination has been found in some parts of the Yamuna flood plains but it's still a rare occurrence. Though arsenic pollution is considered geogenic (naturally occurring) in other parts of India, some papers

have attributed arsenic contamination to fly ash from thermal power plants in Delhi," said Shashank Shekhar, assistant professor of geology at Delhi University.

Shekhar said nitrate pollution in Delhi may be linked to sewage seepage, runoff from landfills into groundwater aquifers in different parts of the city.

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At 6,934 MW, power demand at all-time high

TIMES NEWS NETWORK

New Delhi: It's turning out to be the hottest summer ever for Delhiites. The intense heatwave has sent electricity demand on a constant upward spiral and, for the first time, power consumption, already at a record high, jumped nearly 300 MW within a week. Just a few days ago, Delhi had recorded an all-time-high power demand of 6,651 MW, but that was overtaken on Friday, when the capital's electricity consumption was recorded at 6,934 MW, which is approximately 6.2% higher than the previous year.

And with more hot and humid days to follow in the next few weeks, power sector experts say discoms should be prepared for demand to touch 7,200-7,300 MW.

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Contaminated groundwater posing grave health risks

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Fluoride contamination is restricted to the western part of Delhi where there is high groundwater salinity. Some studies have linked fluoride contamination to brick kiln activity while some say it is geogenic," he said.

All three pollutants have severe health impacts. While arsenic is carcinogenic, high nitrate levels are known to cause methemoglobinemia, or "blue baby" disease. Shekhar said one of the reasons for high groundwater depletion is large scale concretisation.

"Most parts of the city have

been concretised by way of urbanisation. There are very little recharge options. The focus should be on recharge, recycle and reuse in the city, otherwise it may be too late," he said.

"The overexploited (groundwater) areas are mostly concentrated in three parts of the country — northwestern part of the country including Punjab, Haryana, Delhi and western Uttar Pradesh where although replenishable resources are abundant, there has been indiscriminate withdrawal of groundwater leading to over-exploitation," says the report.

The other two over-exploited zones in the country are in

the west (parts of Rajasthan and Gujarat) and peninsular India (parts of Karnataka, Andhra Pradesh, Telangana and Tamil Nadu).

In its recent report called "Hydrogeological Framework and Groundwater Management Plan of NCT Delhi," the Central Ground Water Board (CGWB) had recommended zone wise groundwater extraction criteria.

Out of the four zones it had made, CGWB recommended stopping extraction of groundwater in a 1km-zone on either side of the Najafgarh drain and from landfill and industrial sites because of the water there being highly polluted.

Rain likely over weekend

TIMES NEWS NETWORK

New Delhi: The capital could get some respite from heat over the weekend with Met office forecasting rain on both Saturday and Sunday. Delhi's maximum temperature was recorded at 40.5 degrees Celsius on Friday, but, humidity levels stayed high. Palam was the hottest location in Delhi with a maximum of 42.1 degrees Celsius.

Met officials said Delhi will see thundershowers along with gusts of wind on Saturday, while Sunday has a chance of light rain and drizzle in parts of city. "Maximum could come down to 39 degrees Celsius due to rain and minimum is expected to be 31 degrees Celsius," said a met official.