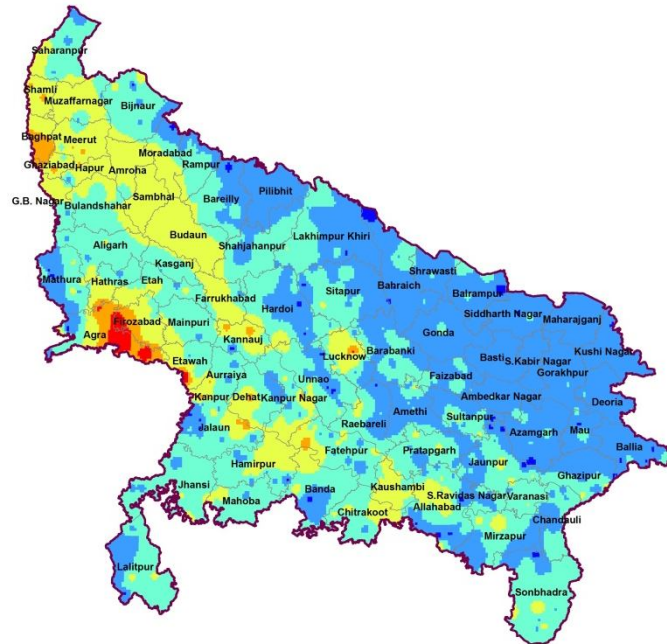




CENTRAL GROUND WATER BOARD
MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT
AND GANGA REJUVINATION
GOVERNMENT OF INDIA



GROUND WATER YEAR BOOK
UTTAR PRADESH
(2020 -2021)

December, 2021

GROUND WATER YEAR BOOK
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(2020 - 2021)

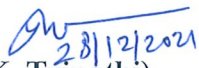
Foreword

Groundwater on account of its universal availability, dependability and low capital cost, is the major source of water to meet the requirement of various sector in India. However, with a rapid growth of population and all round development, there is incessant pressure on the ground water withdrawal resulting in compulsive awakening in terms of both the quality and quantity. Ground water has an important role in meeting the water requirements of agriculture, industrial and domestic sectors in the State. About 78% percent of irrigation requirements in the Uttar Pradesh state are being met from ground water resources. If the present trend of the increasing demand remains uncontrollable, the resource may become as strategic as are the minerals resources. Though in contrast to this, the groundwater resource as a part of hydrologic cycle is replenishable.

The indiscriminate exploitation of groundwater has led to depletion in storage and its replenishable is essential in order to avoid the adverse impact. This could be achieved only after careful monitoring of various inputs of hydrological system. Temporal variation in the ground water system needs to be studied for the scientific management of the resource. In view of this Central Ground Water Board, Northern Region, Lucknow has setup a network of 987 Ground Water Monitoring Wells all over the state to maintain a regular database. The behavior of water level is monitored four times every year in May, August, November and January. To ascertain the hydro-chemical behavior of ground water, samples are collected from representative wells once a year during the month of May and samples are analyzed in the chemical laboratory of the office. The data thus generated are analyzed and subjected to various types of interpretation using dedicated software – GEMS (Ground Water Estimation and Management System).

The present report, Ground Water Year Book 2020-21, is the outcome of efforts made by Dr. R.K. Prasad, Scientist 'B' (HM) and Sh. Kuldeep Gopal Bhartariya, Scientist 'B' (Chemist). Their efforts in compilation of report are praiseworthy. The input data is generated by the untiring efforts of technical personnel in the field and chemical lab.

It is hoped that the information and data presented will be of immense use to planners and ground water managers associated with the development and management of ground water resources in the state.


(P.K. Tripathi)
Head of Office

GROUND WATER YEAR BOOK

UTTAR PRADESH

(2020 - 21)

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Contributors

Dr. R. K. Prasad, Scientist 'B' (HM)

Sh. Kuldeep Gopal Bhartariya, Scientist 'B' (Senior Chemist)

EXECUTIVE SUMMARY

- ❖ The state of Uttar Pradesh covering an area of 2,40,928Sq.km forms a part of the vast Gangetic plain. It is a south easterly sloping flat terrain with a gentle, variable land slope, steeper in western part and flattening eastward. The river Ganga is the major drainage with Yamuna, Ramganga, Gomti and Ghagra as its main tributaries. The state consists of two geomorphic units (i) Central Ganga plains (ii) Bundelkhand plateau. The Central Ganga plain covers nearly 85% area and is underlain by a thick pile of unconsolidated alluvial sediments of Quaternary age overlying the Precambrian basement. These sediments consist of sands of different grades with clay, silt and occasional gravel and kankar. The southern part of the state comprises of hard rocks of Bijawar and Vindhyan groups. The alluvium forms a very rich reservoir of ground water. The exploratory data have shown that ground water occurs in a multiple aquifer system which can broadly be divided into four groups. The shallow aquifer is being extensively exploited and hence is under heavy stress.
- ❖ The State is covered with rich fertile soil and underlain by a large thickness of alluvium making it one of the richest ground water repositories of the world. The State being the most populous in the country with a population density of 649 persons per sq. km and a high rate of population growth (26%), its demand for water is soaring. Also due to industrialization, urbanization and modern farming practices, its quality is also at stake. To meet this high irrigational requirement, water resources are being increasingly developed. Ground water contributes to about 71% of the irrigation needs of the State. The indiscriminate development of ground water has resulted in depletion of groundwater storage and lowering of water levels in certain areas on one hand. On other side, the surface water canals in areas having shallow water level has resulted in water logging and soil salinisation.
- ❖ All these negative impacts on the resource give rise to the need for regular and continuous monitoring of the ground water regime. The monitoring of hydrological regime is of utmost importance for scientific and planned management of the resource. In order to manage the water resources and plan development on scientific lines, a data base needs to be generated. In view of relative importance of this valuable resource, it becomes imperative to adopt sound and scientific management of ground water resources.

- ❖ The State experienced a sub-humid and tropical climate with three distinct seasons summer, monsoon & winter. The summer is hot and dry with maximum daily temperature ranging between 38⁰C to 43⁰C.
- ❖ The monsoon starts retreating from the State in late September or early October. There is large variation in temperature both in time and space. The normal rainfall of the State is 955 mm and the average annual rainfall for the year 2020 is 793.30mm. The amount of average monsoonal and non-monsoonal rain fall is 647.08mm and 140.35mm respectively. Central Ground Water Board has been monitoring the ground water regime since 1969 and has generated a vast database to understand the behavior of water levels in response to recharge to ground water storage or withdrawal from it. The data is being analysed and reported annually. The present report is one in the series. There are 987 Ground Water Monitoring Wells as on 31.3.21 out of which 202 are piezometers and 785 open dug wells.

Depth to Water Level during 2020 - 21

The depth to water level was found to vary from season to season over the state. The percentage of wells showing water level depth of different range during the year 2020 -21 is summarized below:

DEPTH RANGE (M)	No. and Percentage of wells			
	<i>MAY'20</i>	<i>AUG'20</i>	<i>NOV'20</i>	<i>JAN'21</i>
0-2	33 (13.80%)	185(38.86%)	128 (17.04%)	59(7.84%)
2-5	72(30.12%)	128 (26.89%)	313 (41.67%)	341(45.34%)
5-10	78 (32.63%)	96 (20.16%)	170 (22.63%)	205 (27.26%)
10-20	44 (18.41%)	52 (10.92%)	114(15.17%)	121 (16.09%)
>20	12 (5.01%)	15 (3.15%)	26(3.45%)	26(3.44%)

Pre monsoon Depth to Water Level (May 2020)

The pre-monsoon period as it appears after one complete cycle of inputs and outputs. Generally this period shows the deepest water levels during the year. May is the dry season and the water levels are used for most of the ground water calculations. Although, water level monitoring in most of the district were not completed due to Covid-19 Pandemic. The monitoring was possible only in 24 districts of Uttar Pradesh. The analyses of 239 wells have carried out for ground water studies.

- The water level ranges mostly from 2 to 20 mbgl, however parts of the state show variation of 20 mbgl or above. The water levels in the range of 0 to 2 mbgl (i.e., water logged condition) is observed only in 33 wells.
- Water level in the range of 2 - 5 mbgl is observed in 72 Monitoring Wells (about 32.12%). It is usually observed along the Terai belt, extending from parts of Saharnapur to Siddarthnagar and upto Ballia in eastern U.P. As per available data, the given range of water level is found in the district of Sitapur, Bahraich, Gonda, Azamgarh, Ghazipur, Mirzapur and Sonbhadra.
- About 32.63 % of wells (78 nos.) show water level between 5 and 10 m bgl. This area is observed in almost all parts of U.P. The water level of 5 to 10 mbgl is observed in Saharanpur, Muzaffarnagr, Sitapur, Barabanki, Hamirpur, Mahoba, Banda, Chitrakoot, Fatehpur, Pratapgarh, Jaunpur, Allahabad, Mirzapur, Varanasi, Sonbhadra and Ghazipur. Water level in the range of 10 – 20m have been observe in 44 wells (18.41%) mainly in Sharanpur, Shamli, Muzaffarnagar, Meeut, Ghaziabad, Hapur, Hamirpur, Fatehpur, Chitrakoot and some parts of Allahabad districts. There were few wells (11) where was water level recorded between 20 to 40mbgl whereas one in well Lucknow district, occurs in Urban area, measured as 40mbgl.

Post Monsoon Depth to Water Level (November 2020)

- ❖ The water level starts receding gradually after August with lateral flow of ground water due to change in hydraulic conditions with recession of monsoon and ground water storage.
- ❖ The water level stabilizes by November and there after natural out flow reduces considerably. Water logged area showing DWL 0-2 mbgl has been found in 128 wells (17.04%) and are located in patches like Lakhimpur Khiri, Banda, Bahraich, Shrawasti, Balrampur, SiddharthNagar, Maharajganj, KushiNagar, Sultanpur, Azamgarh, Ghazipur, Mau, Ballia, Chandauli and Sonbhadra district.
- ❖ The depth to water level from 2 to 5mbgl is found in 313 monitored wells (41.67%) This range is observed in most parts of the districts in Terai, Eastern, Central U.P and few districts of Bundelkhand region. Along the Gomti, Ghaghra and Sharda rivers water level ranges from 2 to 5 mbgl. Most parts of districts of eastern U.P. and Terai region shows DWL < 5mbgl.

- ❖ The depth to water levels from 5 to 10 mbgl are observed in 170 wells (22.63%). This range is prominent in Western, Central & Southern U.P. A thin strip showing this range runs along the Ganga river, and extends over the Ganga - Ramganga interfluvial area. This range is also seen along the Ganga-Yamuna doab from Aligarh up to Allahabad through Mathura, Kanpur Dehat, Kanpur Nagar, Jalaun, Hamirpur and Banda. On both the sides of Betwa river in Jhansi and Jalaun water level are observed to vary from 5 to 10 mbgl.
- ❖ The water levels of 10 to 20 mbgl are noticed in 114 wells (15.17%), mostly along the Yamuna river upto Varanasi, through Mathura, Agra, Kanpur, Jalaun, Fatehpur, Hamirpur, Chitrakoot and Banda districts. This is mainly due to higher elevation of natural levee formed on either side of the Yamuna river. Most parts of districts of western U.P. Bulandshahr, Baghpat, Ghaziabad, G.B.Nagar, J.P. Nagar, Moradabad, show water level in this range. Few patches are seen in Agra, Allahabad, Bijnor, Chitrakoot, Fatehpur, Ghazipur, Hamirpur, Hathras, Kaushambi, Pratapgarh, Sultanpur and Unnao districts. Along the Ganga river a wide patch shows water level in the range. In Lucknow city water level in this range is observed in most of the wells.
- ❖ The depth range of 20 - 30mbgl are found in 23 wells along Agra, Baghpat, Meerut, Firozabad, and Lucknow districts. In Lucknow city DWL in this range is found only in 3 wells (13.64%). Only 28 wells show depth to water levels greater than 20m. These areas showing deeper water levels are due to bearing of geomorphology as presence of alluvial tract along the Yamuna and Betwa rivers. The water level observed between 30 – 40mbgl are noticed in three districts such as Agra, Firozabad and Lucknow.

❖ **Depth to Water Level – January 2021**

- Winter season is the peak season of ground water abstraction for Rabi cultivation. Consequently bulk of ground water storage is depleted during this season which is well reflected in the water level measurement during January 2021.
- The water logged area showing depth to water level in the range of 0-2 mbgl has been reduced to 59%. Water levels in the range of 2–5 and 5-10 mbgl are predominant during this period as reflected at 45.34% and 27.26% of monitored wells respectively. The moderate water level zone remains at 16.09%. The very deep water level occurs in 3.44% wells. Thus there seems to be a balance between the input and output in these areas. The water level in the range of 0 - 2 mbgl is observed as isolated patches in Bijnour, Moradabad, Pilibhiy, Lakhimpur Khiri, Bhraich, Bareilly, Bahraich, Balrampur , Banda, Azamgarh, Ballia, Chandaulli, and Sonbhadra district.
- The water level in the range of 2 – 5 mbgl is seen in most of the districts except in western part; being predominantly concentrated along the northern border (Terai region) eastern and North eastern parts of the state and as scattered patches in central and southern part of the State. The depth to water level of 5 - 10 m.bgl is observed predominantly in the central, western, southern and lower eastern parts of U.P from Saharanpur to Sonbhadra districts.
- The water level in range of 10-20 m.bgl is observed all along Yamuna river and parts of western U.P. This range is observed as patches in Agra, Etawah, Aurriya, Allahabad, Baghat, Chitrakoot, Gautam Buddha Nagar, Ghaziabad, Hamirpur, Jalaun, , Kaushambi, Lucknow, Meerut, Muzaffar Nagar, St.Ravidas Nagarand Sonbhadra districts.
- The water level of 20 mbgl and more is present only along Yamuna river in isolated patches in Bagpat, Ghaziabad, Agra, Firozabad Etawah, Muzaffarnagar and Shamli districts. This is due to effluent nature of river Yamuna and also due to higher elevations in the area. In the central parts of city area of Lucknow, more than 20 mbgl water level is also observed.
- In Gandak and Saryu canal commands water level predominately ranges from 2 to 5 mbgl. ShardaSahayak canal command shows predominance of DWL between 2 and 10 m.bgl while Ram Ganga canal command shows predominance of 5 - 10 m.bgl water level range.

Seasonal Fluctuation during 2020 -21

May 2020 – November 2020

- ❖ The difference between the pre and post-monsoon water level of the year is the most important seasonal fluctuation which gives a clear picture of groundwater potential which could be fruitfully utilized for various uses over the succeeding year. This fluctuation is used to evaluate the dynamic ground water resource through the change in ground water storage.
- ❖ As due to covid -19 Pandemic, the water level data was not monitored from the entire district. From the analyzed data, it is found that there is a rise in 140 wells (60.86%) and fall in 87 wells (37.82%) general rise in water levels from 0 to 2 m as noticed in 103 wells (46.39%). The rise in water level is noticed in almost all the covered districts.
- ❖ The rise in water levels in the range of 0 - 2 m is observed in 105 wells (45.65%). It observed mostly in Fatehpur, Pratapgarh, Chitrakoot, Mirzapur, Muzaffarnagar, and Saharanpur. The fall in water level, occurs in the range of 0 to 2mbgl is noticed 78 wells (33.91%) of the analyzed data.

May 2020 – January 2021

- ❖ By January the rainfall infiltration starts dissipating and ground water extraction which had come down during the monsoon also starts building up. But the rise in water level continues though at a lower scale.
- The water level data during pre-monsoon period i.e. May'20 and that of January'2021 have been analyzed to estimate the change in water levels. There is a rise of water level in 116 no. of analyzed wells (52.25%) and a fall in 105 no. (47.29%) wells.
- The rise in the range of 0–2 m is seen in 46.39 % wells covering almost all the districts of the state. Rise of 2 – 4 m is observed in 5.40% wells spread throughout the state. The fall in the range of 0 – 2mbgl is observed in 82 wells (36.93%).

Fluctuation Change of Groundwater Storage in U.P. (2020-21)

Magnitude of Change (m)	May'20 – Nov'20		May'20 – Jan'21	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	105 (45.65%)	78 (33.91%)	103 (46.39%)	82 (36.93%)
2-4	31 (13.47%)	8 (3.47%)	12 (5.40%)	14 (6.30%)
>4	4 (1.73%)	1 (0.43%)	1 (0.45%)	9 (4.05%)

It is evident from analyses that ground water has been recharged in most parts of the state and the quantum of recharge is reflected through a rise in water level to a tune of 0-4 m. Number of wells showing rise of 0-2 m in water level from May'2020 to November'2020 and it has further increases while comparing with May'2020 to January'2021 from 45.65% to 46.39% respectively. The rise of water level in the range of 2-4m has been decrease from 13.47 % to 5.40% while compared with May 2020 –November 20120 to May 2020 to January 2021 respectively and number of wells showing rise of water level of more than 4 m has also been reduced from 1.73% to 0.45%.

Annual Fluctuation

Whereas the seasonal fluctuation in the water level occurs due to rainfall and irrigation as the two main factors during different periods of the year it is the annual fluctuation which gives the net result of one whole cycle of recharge and discharge that has taken place during one year. An annual decline indicates that ground water extraction has been in excess of the rainfall recharge in broad terms.

Annual fluctuation during May 2019-20

- ❖ The water level data collected during May'2020 has been compared with May'2019 data to evaluate the rise and fall in water levels since last one year. The wells have been categorized depending on rise and fall in water levels.
- It is found that 151 no. (79.47%) monitoring wells show rise and 39 no. (20.52%) show fall in water level. The fall of 0 - 2 m is observed in (18.42%) monitoring wells in almost all parts of the state. This fall is prominent in Muzaffarnagar, Meerut, Fatehpur, Sitapur, Lucknow and Sonbhadra districts and the water level fall between 2

to 4mbgl and more 4m are mostly found in Baghpat, Meerut, Ghaziabad, and Sonbhadra district.

- A rise of 0 - 2 m in water level are observed in almost 29.47% (56) of the monitoring wells in Saharanpur, Shamli, Baghpat, Ghaziabad, Hapur, Sitapur, Hardoi, Kanpur Nagar, Hamirpur, Mahoba, Banda, Chitrakoot, Lalitpur, Kaushambi and some parts of Mirzapur and Sonbhadra. Rise of 2-4 and more than 4m water level is observed in 62 and 33 wells respectively.

Fluctuation during November 2019 -20:

The water level data collected during November'2020 has been compared with November'2019 data to evaluate the rise and fall in water levels since last one year. It is observed that 236 wells (36.47%) show rise and 400 wells(61.82%) show fall in water level due to scanty monsoonal rainfall resulting in to decline of groundwater level.

A rise of 0 -2m,water levels, is observed in 205 wells (31.68%) covering Saharanpur, Muzaffarnagar, Bijnaur, Moradabad, Lahimpur Khiri, Shahjahnpur, Sitapur, Shrawasti, Balrampur, Siddharth Nagar, Gonda, S.Kabir Nagar,Basti, Gorakhpur, Ambedkar Nagar, Sultanpur, Pratapgarh, Ballia, Ghaazipur, Chndaulli, Mirzapur, Chitrakoot, Banda, Hamirpur, Fatehpur, Unnao, Lucknow and Barabanki districts of the State. Rise of 2 - 4 m is observed mainly Southern and South East district of the State such as Hamirpur, Banda, Chitrakoot, Mirzapur and Chandaulli.

The fall of 0-2 m in levels is observed in 336 wells (51.93%) covering in all parts of the State excepts few districts of Terai region. A fall of 2 - 4m and more than 4m are observed in 45wells (6.95%) and 19 wells (2.93%) respectively. It observed mainly in Sonbhadra, S,Ravidas Nagar, Allahbad, Pratapgarh, Fatehpur, Hamirpur, Lalitpur and Agra District.

The overall status of annual fluctuation in the state is summarized in following table.

Annual Fluctuation in Water Level During 2020 –21, U.P.

FLUCTUATION RANGE	May 19 – 20		August 19 – 20		November 19 -20		January 20 – 21	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	56 (29.47%)	35 (17.36%)	208 (48.03%)	106 (24.48%)	205 (31.68%)	336 (51.93%)	178 (25.64%)	431 (62.10%)
2-4	62 (32.63%)	2 (1.05%)	77 (17.78%)	5 (1.15%)	22 (3.40%)	45 (6.95%)	12 (1.72%)	50 (7.20%)
>4	33 (17.36%)	2 (1.05)	32 (7.39%)	3 (0.69%)	9 (1.39%)	19 (2.93%)	2 (0.28%)	17 (2.44%)
TOTAL	151 (79.47%)	39 (20.52%)	317 (73.21%)	114 (26.32%)	236 (36.47%)	400 (61.82%)	192 (27.66%)	498 (71.75%)

From the analysis of table it is evident that the water level has shown minimum decline in May 19 -20 which is gradually increase and gets maximum in January 20 -21. The rise in water level is observed maximum in May and August 19 -20 from the analyzed wells as compared to November 19-20 and January 20-21.

❖ **Fluctuation form the Decadal Mean during 2019 -20**

The fluctuations in water level described earlier are very much dependent on the rainfall and give a very short term picture. In order to remove the rainfall anomalies the long term water level is considered as this would normalize the erratic highs and lows.

Mean May (2010-19) - May 2020

- ❖ The pre-monsoon water level data for 2020 has been compared to decadal mean (2010-2019) for pre-monsoon periods. The analyzed data show total of 167no. (69.87%) wells show rise and 72no. (30.12%) show fall in water level.
- ❖ It is observed that 53 no. Monitoring wells (22.17%) shows fall in the range of 0-2m. It is mainly occurs in Saharanpur, Meeut, Ghaziabad, Hapur, Sitapur, Lucknow, Barabanki, Banda, Chitrakoot, Jaunpur, S.Ravidas Nagar, Varanasi and Sonbhadra district. A fall in water levels between 2- 4m and more than 4m is observed in 13 and 6 wells respectively. It is located in Shamli, Muzaffarnagar, Baghpat, Meerut, Fatehpur, Banda, Chitrakoot, Jaunpur, Lucknow and Barabanki District.
- ❖ There is a rise in water level from 0 to 2 m and 2-4m are observed in 68 and 61 wells respectively and more than 4m is observed in 38wells from the analyzed well. The

rise of 0-2m is mostly occurs in Saharanpur, Sitapur, Barabanki, Hamirpur, Mahoba, Banda, Chitrakoot, Pratapgarh, Jaunpur, Ghazipur and Sonbhadra District.

- ❖ The rise in 2-4m is mostly concentrated in the South East portion of the state and more than 4m is observed in few districts such as Sonbhadra, Mirzapur, Chandauli, Allahabad and Varanasi districts.

Mean November (2010-19) – November 2020:

- ❖ The average water level of last 10 years (2010-19) for each hydrograph station for the month of November has been evaluated and compared with water level data of November'20. The wells have been categorized depending on rise and fall in water levels.
- ❖ There is an equal no. of wells showing rise and fall in the States from the analyzed wells. The rise and fall is observed in 374 wells. A rise in the range 0-2m is observed in 315 as compared to fall of 287 wells. Similarly, rise and fall in the range of 2-4m is found in 45 and 64 well respectively.
- ❖ The fall in the range of 2-4m and more than 4m is observed in Baghpat, Meerut, Ghaziabad, Amroha, Sambahal, Agra, Firozabad, Kasganj, Budaun, Kannuj, Auraiya, Kanpur Dehat, Jalaun, Hamirpur, Banda, Lucknow and Sonbhadra districts.

DECADAL FLUCTUATION 2020 – 21, U.P.

FLUCTUATION RANGE	Mean May (2010-19) to May 20		Mean August (2010-19) to August 20		Mean Nov(2010-19) to November 20		Mean Jan(2011-20) to January 21	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	68 (28.45%)	53 (22.17%)	244 (50.83%)	120 (25%)	315 (42.11%)	287 (38.36%)	317 (42.32%)	295 (39.38%)
2-4	61 (25.52%)	13 (5.43%)	53 (11.04%)	31 (6.45%)	45 (6.01%)	64 (8.55%)	35 (4.67%)	64 (8.54%)
>4	38 (15.89%)	6 (2.51%)	19 (3.95%)	13 (2.70%)	14 (1.87%)	23 (3.07%)	10 (1.33%)	28 (3.73%)
Total	167 (69.87%)	72 (30.12%)	316 (65.83%)	164 (34.16%)	374 (50%)	374 (50%)	362 (48.33%)	387 (51.66%)

Trend of Water Level:

The seasonal, annual and decadal fluctuation gives an idea of the behavior of the water level but is subjected to many anomalous factors which give a short-term picture. To have a true picture where highs and lows are balanced out, the long-term trend for ten years 2011 to 2020 has been worked out and analyzed on the basis of DWL data of Ground Water Monitoring Wells.

The results of water level trend data during Pre-monsoon for the period 2011-2020 are summarized as follows:

Percentage of wells showing Pre-monsoon DWL Trend (cm/year) from 2011 -2020								
Total Well Analysed	Rise (cm/year)			Fall (cm/Year)			Total	
	0 -20	20-40	>40	0 -20	20 -40	>40	Rise	Fall
712	148 (20.78%)	34 (4.77%)	24 (3.37%)	266 (37.35%)	131 (18.40%)	109 (15.31%)	206 (28.93%)	506 (71.06%)

- ❖ The declining trend is observed in 71.06 % of the monitoring wells (506) covering over 10 year's period. Decline of 0 – 20 cm/yr is commonly observed in 37.35% wells followed by 20 – 40 cm/yr in 18.40% wells and >40 cm/yr in 15.31%.
- ❖ The low decline is spread all over the state but dominant in eastern and central parts and along Terai belt of the state. Higher decline occurs in most of the districts of western and southern regions.
- ❖ There is a rising trend observed in 206 wells (28.93%), out of which 20.78 % and 4.77% of analysed wells shows rising trend in the range of 0-20cm/year and 20-40cm/year respectively and very few wells of 3.37% shows rising trend of more than 40cm/year

The results of Water Level trend data during Post-monsoon for the period 2011-2020 are summarized as follows:

Percentage of wells showing Post-monsoon DWL Trend (cm/year) from 2011 -2020								
Total Well Analysed	Rise (cm/year)			Fall (cm/Year)			Total	
	0 -20	20-40	>40	0 -20	20 -40	>40	Rise	Fall
828	238 (28.74%)	36 (4.34%)	29 (3.50%)	278 (35.57%)	115 (13.88%)	132 (15.94%)	303 (36.59%)	525 (63.40%)

- ❖ There is a declining trend in 63.40% of the monitoring wells over 10 years period. Decline of 0 – 20 cm/yr is mostly observed in 35.57% wells followed by 20 – 40 cm/yr in 13.88% wells and more than 40 cm/yr is found in 15.94% wells.
- ❖ The low decline is spread all over the state but dominant in central, eastern part and along Terai belt of the state. Higher decline occurs in most of the districts of western, north western and southern parts and along Yamuna River.
- ❖ There is a rise in trend in 36.59% of the monitoring wells over 10 years period. Rise of 0 – 20cm/year is found in 28.74% followed by 20-40cm/year in 4.34% and very few wells of 3.50% showing water level trend of more than 40cm/year.

GROUND WATER QUALITY

To evaluate the chemical quality of ground water in phreatic zones, 817 water samples were collected from Ground Water Monitoring Stations (GWMS) established by CGWB, Lucknow during the Pre monsoon period. (A.A.P. 2020-21). Generally the monitoring stations are Hand pumps IM-II tapping phreatic aquifer. All the samples were analysed for the determination of pH, EC, CO₃, HCO₃, Cl, F, NO₃, SO₄, PO₄, SiO₂, T.H., Ca, Mg, Na& K.

Suitability of Ground Water for Potable Purposes

The suitability of ground water for drinking purposes has been assessed according to the guidelines laid down by BIS (2012) for various analysed parameters

Hydro-Chemical Data of Ground Water in Uttar Pradesh (2020 - 2021)

S. No.	Constituents	Minimum	Maximum	Average	Std. Dev.
1	pH	7.35	8.99	7.93	0.23
2	EC μ S/cm at 25 °C	216	27200	1225	2163
3	CO ₃ mg/l	nil	96	0.44	6.52
4	HCO ₃ mg/l	98	1366	408	153.7
5	Cl mg/l	7.1	7871	128	578.18
6	F mg/l	0	1.74	0.49	0.39
7	NO ₃ mg/l	0	218	14.5	25

S. No.	Constituents	Minimum	Maximum	Average	Std. Dev.
8	SO ₄ mg/l	0	2304	78.6	328.73
10	TH (as CaCO ₃) mg/l	40	4100	328.7	350.66
11	Ca mg/l	8	1180	59.45	82.34
12	Mg mg/l	2.4	384	43.51	47.15
13	Na mg/l	2.8	4200	129.3	329.25
14	K mg/l	0	700	12.35	60.47

Conclusion:

- ❖ By and large, the chemical quality of ground water of phreatic zone in Uttar Pradesh is found to be suitable for drinking purposes as per available analysed chemical parameter data (as per BIS 2012).
- ❖ Presence of some constituents beyond the permissible limit at some locations renders the water unfit for public water supply.
- ❖ Considering the parameters responsible for suitability of ground water of Uttar Pradesh, it is observed that it is generally fit for irrigation purposes as per Electrical conductivity, Residual Sodium Carbonate, Sodium Adsorption Ratio except at few places where corrective measures are to be taken before agricultural usage.

Ground Water Challenges:

- ❖ The rise in the number of over-exploited blocks in the state of U.P is a biggest challenge because these are the blocks wherein storage ground water resources are depleting very fast. There is a probability for adjacent block which may also be comes in water stressed category in future if proper effective intervention is not taken by stakeholder
- ❖ Non scientific and disconnected approach of ground water development for agriculture and industrial use is also creating hurdles in managing this precious resource.

- ❖ Rigidity in adoption of new cropping pattern depending on available groundwater resources because of high market value of the present crop and non availability of market for the adopted crop.
- ❖ There is increase in total Sodic soil due to water logging in most of canal command area due to excess use of surface water irrigation causing decrease in per hectare yield potential.
- ❖ Deteriorating ground water quality due to geogenic and anthropogenic contamination is biggest challenge before the scientific fraternity to provide the safe domestic water.
- ❖ Agriculture and industrial revolution in central Ganga plain has added challenge both in terms quality and quantity.
- ❖ The change in climatic pattern is also exerting withdrawal pressure on groundwater resource creating imbalance in groundwater resources.

GROUND WATER YEAR BOOK

UTTAR PRADESH

(2020 – 21)

CHAPTER 1

INTRODUCTION

The State of Uttar Pradesh forms a part of vast Gangetic Alluvial Plain covering an area of 2,40,928 Sq. Km. and lies between North latitude $23^{\circ}52'12''$ & $30^{\circ}24'30''$ and East longitude $77^{\circ}05'38''$ & $84^{\circ}38'30''$. It is bounded by Uttaranchal on the NW, Nepal on the NE, Bihar on the East, Madhya Pradesh in the South, and Haryana, Delhi & Rajasthan in the West.

The state is covered with rich fertile soil and underlain by a large thickness of alluvium making it one of the richest ground water repositories of the world. Ground water is a major source of fresh water on earth. It is the most dependable source of water, comparatively free from the vagaries of nature, easily accessible, available at the point of use and economical. Hence it is being developed indiscriminately and the ground water reservoir is stressed. The State being the most populous in the country with a population density of 649 persons per sq. km and a high rate of population growth (26%) its demand for water is soaring. Also due to industrialization, urbanization and modern farming practices its quality is also at stake.

The food production in UP is commensurate with the self sufficiency of the country. One of the major contributors for this sufficiency is irrigation. To meet this high irrigational requirement, water resources are being increasingly developed. Ground water contributes to about 71% of the irrigation needs of the State. The indiscriminate development of ground water has resulted in depletion of groundwater storage and lowering of water level in certain areas on one hand. On other side the surface water development in areas having shallow water level has resulted in water logging and soil salinization.

All these negative impacts on the resource give rise to the need for regular and continuous monitoring of the ground water regime. The monitoring data forms the base of management practices. In order to manage the water resources and plan development on scientific lines a data base needs to be generated. In view of relative importance of this valuable resource it becomes imperative to adopt sound and scientific management of groundwater resources.

With this in view the Central Ground Water Board, an apex organization of India in the field of ground water studies has established a network of 987 monitoring wells, mostly open wells spread all over the State. These are being monitored four times a year (January, May, August & November). Few wells are being monitored through participatory monitoring

program for the remaining eight months. To study the hydro chemical behavior ground water samples are collected from these stations once a year in May and analysed in the Regional chemical laboratory. The data thus generated are carefully analysed and interpreted to study the impact of various developmental activities on the groundwater regime. As dug wells are fast becoming obsolete, these are slowly being replaced by special bore wells for monitoring called Piezometers.

The statistical analysis of water level is carried out to decipher the water level status during different seasons of the year and prepare a zoning. The water levels of different periods are compared to analyse the behavioral patterns. The trend of water level behavior is worked out and future predictions are estimated. The management programs are framed safe guarding the environment and meet the requirement to optimal possibility.

Ground water is a dynamic resource; hence it requires continuous monitoring both in terms of quality and quantity. The main objectives of ground water monitoring are:

- To study the behavior of the water level in space and time in response to recharge and discharge.
- To study the long term behavior and trends for future predictions.
- To assess the ground water resource.
- To study the hydro chemical behavior of shallow ground water.
- To develop Artificial Recharge plan.

The district wise status of Ground Water Monitoring Wells (G.W.M.W.) as on 31.3.2021 are shown in Table-1 and location of wells are shown in Plate -1

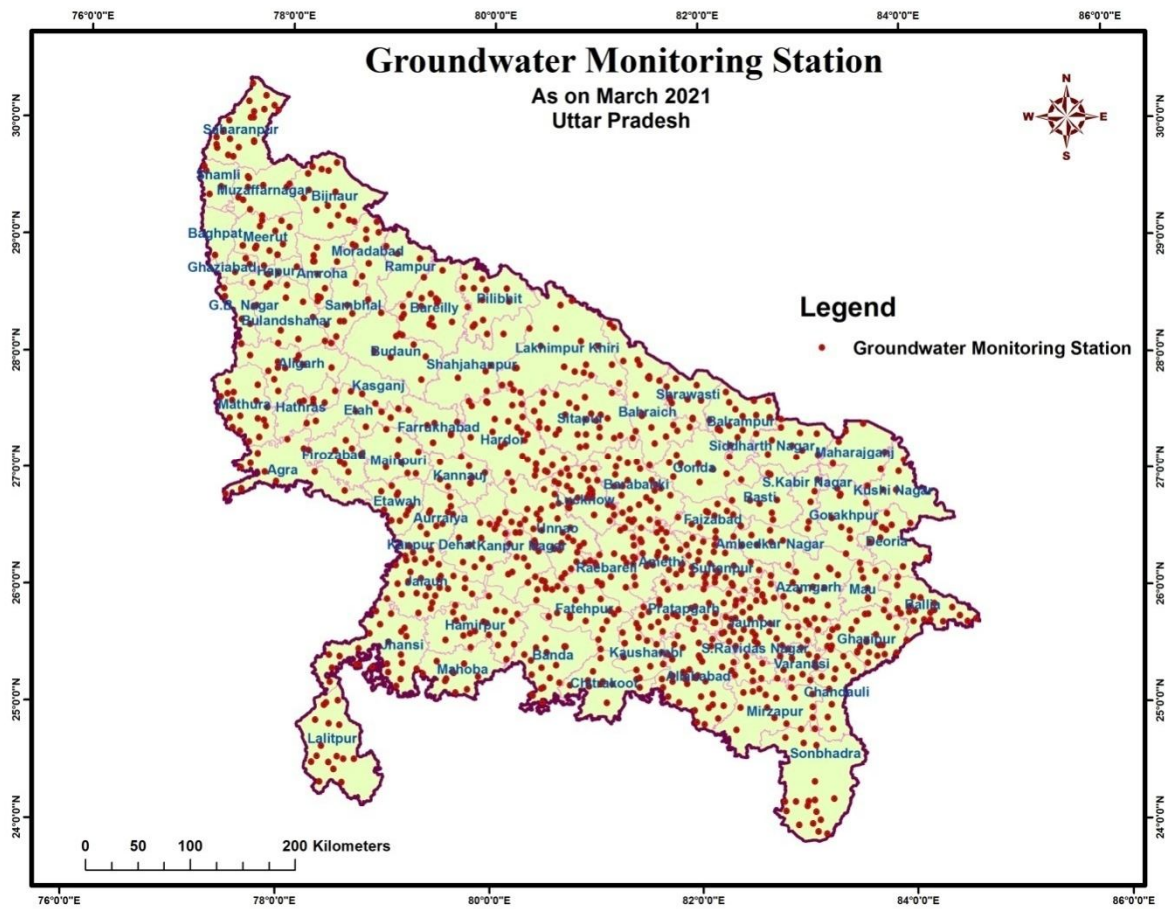


Table: 1

**STATUS OF GROUND WATER MONITORING WELLS (G.W.M.W.), UTTAR
PRADESH AS ON 31.3.2021**

Sl. No.	Name Of The District	No. of G.W.M.W. as on 31.03.2021		
		DW	PZ	Total
1	Agra	4	7	11
2	Aligarh	11	0	11
3	Allahabad	35	0	35
4	Ambedkar Nagar	6	3	9
5	Amethi	14	0	14
6	Auraiya	11	2	13
7	Azamgarh	20	0	20
8	Baghpat	0	2	2
9	Bahraich	16	4	20
10	Ballia	23	0	23
11	Balrampur	16	4	20
12	Banda	15	0	15
13	Barabanki	23	5	28
14	Bareilly	7	5	12
15	Basti	7	1	8
16	Bijnor	6	6	12
17	Budaun	0	4	4
18	Bulandshahar	1	1	2
19	Chandauli	10	0	10
20	Chitrakoot	9	0	9
21	Deoria	9	0	9
22	Etah	3	5	8
23	Etawah	8	3	11
24	Faizabad	12	2	14
25	Farrukhabad	1	1	2
26	Fatehpur	15	3	18
27	Ferozabad	0	4	4
28	G.B. Nagar	0	5	5
29	Ghaziabad	0	6	6

Sl. No.	Name Of The District	No. of G.W.M.W. as on 31.03.2021		
		DW	PZ	Total
30	Ghaziipur	26	0	26
31	Gonda	7	4	11
32	Gorakhpur	8	0	8
33	Hamirpur	14	1	15
34	Hapur	0	7	7
35	Hardoi	14	10	24
36	J.P. Nagar	0	9	9
37	Jalaun	31	0	31
38	Jaunpur	29	0	29
39	Jhansi	22	0	22
40	Kannauj	4	4	8
41	Kanpur Dehat	10	1	11
42	Kanpur Nagar	15	2	17
43	Kanshiram Nagar	0	2	2
44	Kaushambi	9	0	9
45	Kushinagar	5	0	5
46	Lakhimpur	11	2	13
47	Lalitpur	20	0	20
48	Lucknow	7	18	25
49	Mahamaya Nagar	2	0	2
50	Maharajganj	7	0	7
51	Mahoba	9	1	10
52	Mainpuri	4	5	9
53	Mathura	17	0	17
54	Maunathbhanjan	8	0	8
55	Meerut	1	13	14
56	Mirzapur	14	0	14
57	Moradabad	3	8	11
58	Muzaffarnagar	2	4	6
59	Pilibhit	8	3	11
60	Pratapgarh	30	0	30
61	Rae Bareli	23	4	27
62	Rampur	2	2	4
63	Saharanpur	8	7	15

Sl. No.	Name Of The District	No. of G.W.M.W. as on 31.03.2021		
		DW	PZ	Total
64	Sambhal	0	2	2
65	Sant Ravidas Nagar	5	0	5
66	Santkabir Nagar	5	0	5
67	Shahjahanpur	2	0	2
68	Shamli	0	6	6
69	Shrawasti	11	1	12
70	Siddharth Nagar	10	2	12
71	Sitapur	20	5	25
72	Sonbhadra	19	0	19
73	Sultanpur	20	6	26
74	Unnao	30	0	30
75	Varanasi	11	0	11
	Grand Total	785	202	987

Chapter 2

PHYSIOGRAPHY AND DRAINAGE

The State of Uttar Pradesh can broadly be divided into 2 physiographic units, the Central Ganga Plain and the Bundelkhand and Vindhyan Plateau.

The Ganga Plain covering 85% of the State is a vast, flat expanse of alluvium having a gentle south easterly regional slope. The highest elevation is around 350mamsl in the north western parts and lowest 60mamsl in extreme south eastern part of the state. The land slope is variable, being steep in the north western parts and gradually diminishing south east wards. The slope ranges between less than a meter per kilometer to 5m/km. This Plain has three sub divisions – the Terai in the northwest, the Central Ganga Plain in the center and the Marginal alluvial Plain in the south.

The southern part of the state south of the Marginal Alluvial Plain is a part of Bundelkhand and Vindhyan plateau. This plateau region slopes northerly and is represented by undulating hilly terrain. The land slope varies from 550 – 130mamsl in the western part and 650 – 100 mamsl in the eastern part with steeper gradients than those in the northern Ganga plain.

The State forms a part of Ganga basin. The master drainage of the state is river Ganga and its tributaries. The Ramganga, Ghagra and Gomti are the main left bank tributaries, while the Yamuna is the main right bank tributary. All these rivers except Gomti originate from Himalayan ranges and are snow fed. Initially the rivers flow southward in the northwestern part of the State, then turn south eastward and finally leave the State in an easterly direction.

Chapter 3

CLIMATE AND RAINFALL

The State experiences a sub-humid and tropical climate with three distinct seasons summer, monsoon & winter. The intervening periods are transitional period on the basis of IMD long term normal data. The summer is hot and dry with maximum daily temperature ranging between 38°C. to 43°C. The humidity during this season is lowest ranging between 30% to 53% at 08.30 hrs and 18% to 42% at 17.30 hrs. Summer seasons ends by May and transition period starts. The rainy season commences by late June when south western monsoon sets in over the State. The humidity gradually increases and reaches above 80%. August is the peak rainy season. The bulk of annual rainfall about 85% occurs during monsoon period (June to September). The monsoon starts retreating from the State in late September or early October. Then commences another transitional period followed by winter from late November till February. January is the coldest month of the period. Another transitional period follows between winter and summer.

There is large variation in temperature both in time and space. The lowest temperature is observed during January when night temperature ranges between 2°C & 6°C over the state. With the start of summer the temperature starts rising with maximum during May when the mercury may touch 45°C in central and eastern parts of the State. Gradually with the beginning of rainy season the temperature drops which again shows a mild rising trend during the intervening period before winter (October, November). The wind speed varies between 8-10 km/hr during summer season and 4-6 km/hr during winter and rainy seasons. The wind is mainly south westerly during summer and south easterly during winter. The Normal annual potential Evapotranspiration of Uttar Pradesh is 1491.5 mm. The Normal annual potential Evapotranspiration of East Uttar Pradesh is 1484.0 mm and of West Uttar Pradesh is 1499.0 mm. The monthly normal potential Evapotranspiration is high in hot months and low in winter months. Normal potential Evapotranspiration is highest in the month of May with value of 217.8 mm followed by June with value of 201.6 mm. The normal potential Evapotranspiration is lowest in the month of December with value of 50.7 mm followed by January with value of 55.6 mm.

Rainfall:

The rainfall is variable over the State ranging from maximum 1910.5 to minimum of 98.9 mm at Basti and Gautam Budh Nagar district respectively. The normal rainfall of the State is 955 mm and the average annual rainfall for the year 2020 is 793.30mm. The amount of average monsoonal and non-monsoonal rain fall is 647.08mm and 140.35mm respectively. Monthly and annual Rainfall has been given in table 2. The Isohyetal and Normal Rainfall map of U.P has shown in plate 2 and plate 3 respectively. It is observed that, there is a variability of rainfall takes place, out of which, maximum has taken place towards, North Eastern and South Eastern parts of the districts. The amount rainfall gradually decreases towards the western parts of the districts.

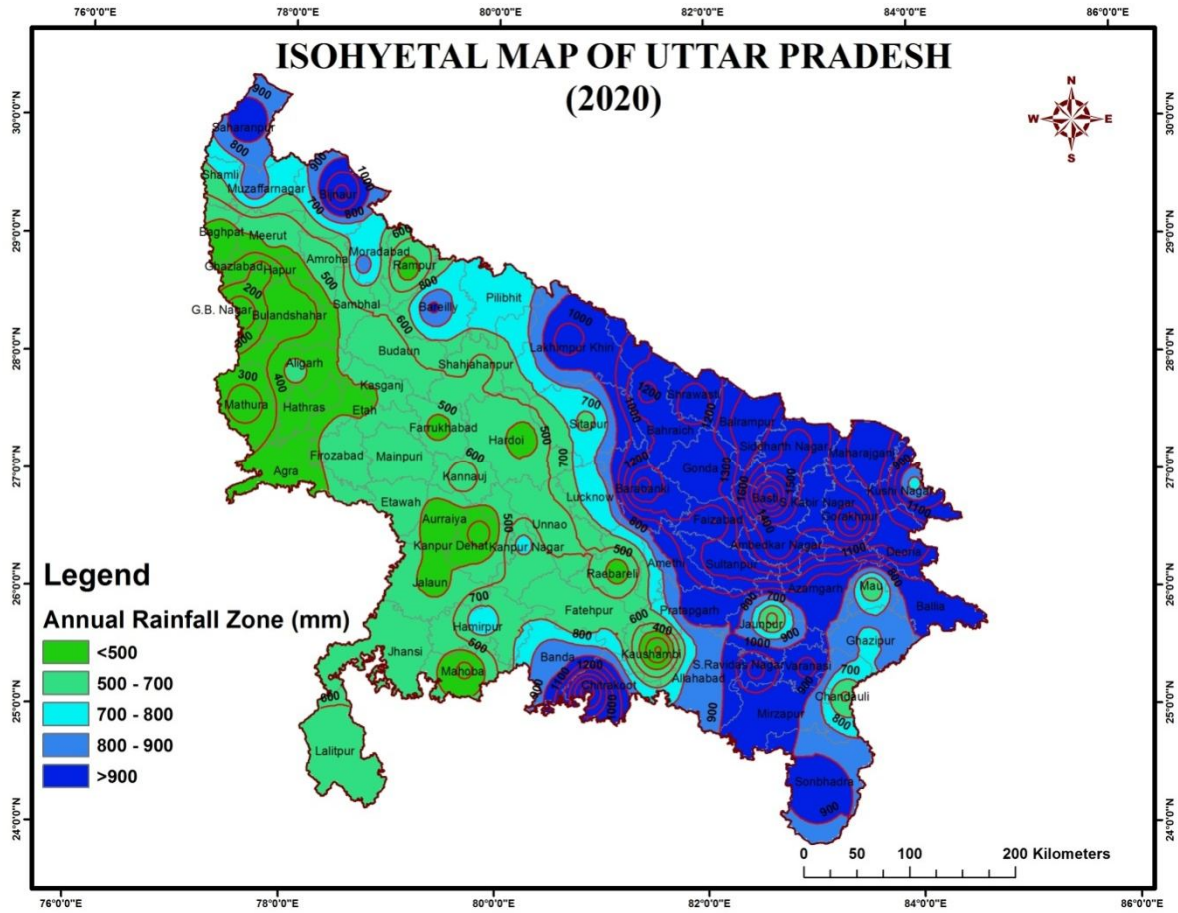
Table 2: Monthly and Annual Rainfall (mm) for the Year – 2020

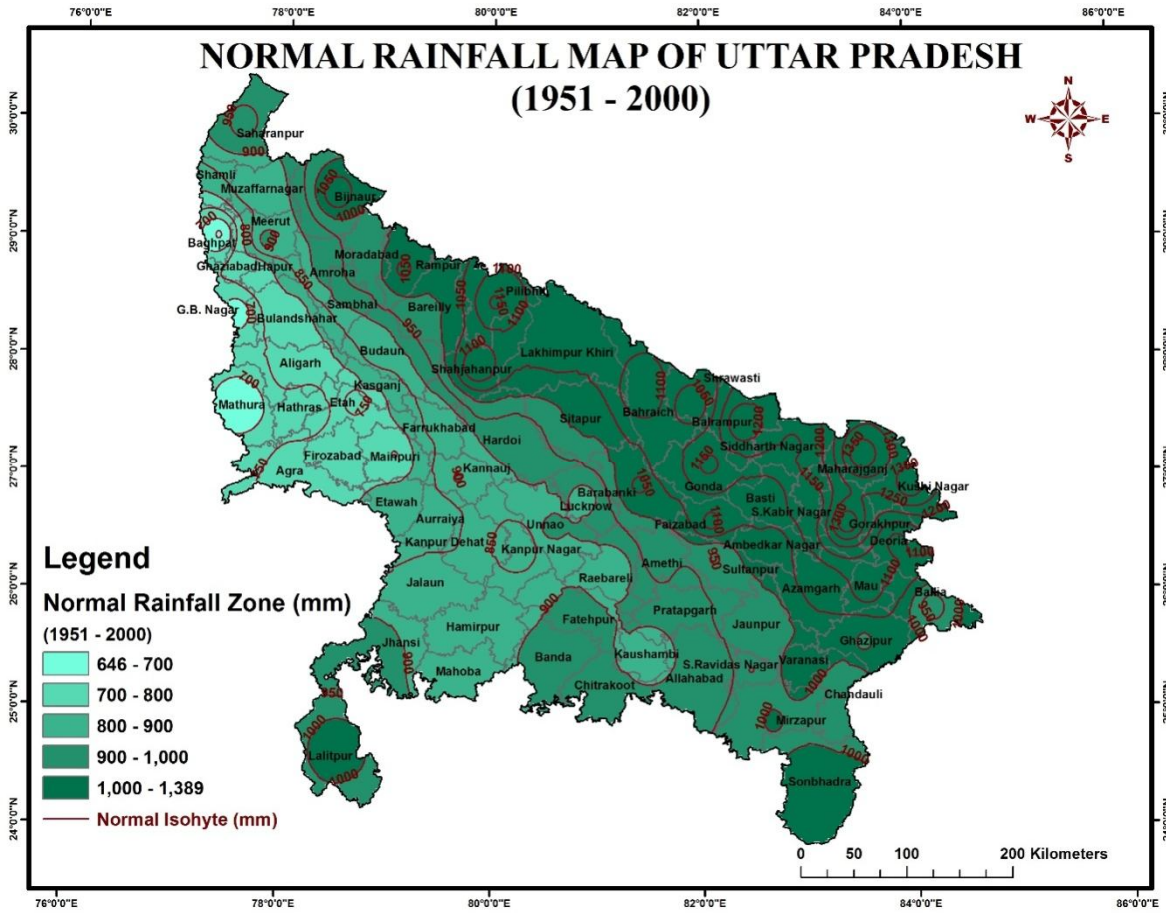
S. No	DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Total	Monsoon	Non-Monsoon
1	AGRA	20.1	0.1	24.9	7.2	32.4	42.6	90.5	175.5	13.3	0	12.5	0	419.1	321.9	97.2
2	ALIGARH	23.6	8.3	111.3	6.9	19.3	16.1	104.4	227.5	5.7	0	9.2	0	532.3	353.7	178.6
3	AMBEDKAR NAGAR	13	17	31	13.2	50	572	405	100	253	0	18	0	1472.2	1330	142.2
4	AURAIYA	31	0	26	5	13	96.9	121	128.2	9.5	0	7	0	437.6	355.6	82
5	AYODHYA	14.9	68.3	61.8	5.5	47.5	245.9	204.7	224	118.1	2.3	5.3	0	998.3	792.7	205.6
6	AZAMGARH	3.8	10.7	41.8	5.9	23.7	186.8	239.8	162.3	248.3	5.5	0	0	928.6	837.2	91.4
7	BAGHPAT	26	7	75	3	61	43	114	141	0	0	0	0	470	298	172
8	BAHRAICH	46.1	32.7	59.4	11.1	103	240.6	432.2	214.9	75.5	0	5.8	0	1221.3	963.2	258.1
9	BALLIA	2	8.3	18	2.4	45	203.5	301.1	135.3	220.1	4.3	0.8	0	940.8	860	80.8
10	BALRAMPUR	74.4	32.6	74.1	0	49.3	428.4	251.3	280.7	150.8	0	6	0	1347.6	1111.2	236.4
11	BANDA	44.1	0	12.6	32.9	39.6	256.6	142.1	240.1	107.1	0	1.5	0	876.6	745.9	130.7
12	BARABANKI	87.2	12.8	67.8	7.3	60.3	165.5	445	370.2	97.2	0	15.6	0	1328.9	1077.9	251
13	BAREILLY	67.4	22.6	80.6	48.8	47.5	109.8	294.2	211.8	30	0	2.5	0	915.2	645.8	269.4
14	BASTI	40.5	50.9	74.2	35.8	85.6	473.7	522	262.3	361.5	1.1	2.9	0	1910.5	1619.5	291
15	BIJNOR	64.8	48	89.8	32.8	27	37.7	318.8	501.1	4.8	0	0.2	7	1132	862.4	269.6
16	BADAUN	29.3	17.3	59	8.3	17	34.3	248	136.8	2.8	0	3.8	0	556.6	421.9	134.7
17	BULANDSHAHR	16.2	7	44.4	8	19.1	10.3	97	107.2	6.6	0	0.8	0	316.6	221.1	95.5
18	CHANDAULI	5	0	19	4	41	155	163.2	106	91	2	1.5	1	588.7	515.2	73.5
19	CHITRAKOOT	18.5	1	47	28	98	333.5	213.5	384.9	297.4	0	7.5	13.5	1442.8	1229.3	213.5
20	DEORIA	5.5	21	19.5	55.5	62.5	273	351.7	207	257	0	0.5	0	1253.2	1088.7	164.5
21	ETAH	21.8	3.7	36.1	8.3	15.7	21.3	100.7	226.7	18.7	0	26.7	0	479.7	367.4	112.3

S. No	DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Total	Monsoon	Non-Monsoon
22	ETAWAH	39	0	29.5	7	17.2	62	130.1	240.5	3.7	0	16.2	0	545.2	436.3	108.9
23	FARRUKHABAD	22	0.4	30.2	16	16.2	25.2	114.8	200	46.5	0	11.8	0	483.1	386.5	96.6
24	FATEHPUR	30.5	0	12.2	18.2	42.8	91	222.6	111.5	78.4	0	0	0	607.2	503.5	103.7
25	FIROZABAD	19.5	0	37.5	13.5	72.6	70.4	132.6	222.6	4.9	0	20.2	0	593.8	430.5	163.3
26	GAUTAM BUDDHA NAGAR	8.5	0	14.6	1.5	5	6	11	49.3	2	0	1	0	98.9	68.3	30.6
27	GHAZIABAD	12.8	0.8	44.9	3.8	20.3	15.5	53.5	87.7	0	0	1.1	1.4	241.8	156.7	85.1
28	GHAZIPUR	0	8.6	17.8	3	52.1	192.2	211	136.3	156	0	0	2	779	695.5	83.5
29	GONDA	61.2	19.9	77	7.7	90.4	236.1	348.1	201.7	65.6	0	7.2	0	1114.9	851.5	263.4
30	GORAKHPUR	22.9	31.4	44.1	16.6	59	400.2	614.2	160.1	294.8	2.2	5.3	0	1650.8	1469.3	181.5
31	HAMIRPUR	33.3	0.3	15.7	12	38.3	106.3	270.6	221	59.3	0	1.3	0	758.1	657.2	100.9
32	HARDOI	22.9	2.8	26.6	10.9	24	69.7	112.5	137.2	30.2	0	10.8	0	447.6	349.6	98
33	JALAUN	33	0	6	10.6	11.4	46.8	188.3	137.7	44.8	0	0	0	478.6	417.6	61
34	JAUNPUR	1.7	3.4	15.4	5.5	17.9	93.9	204.3	102.1	126.6	0.9	0.4	1.1	573.2	526.9	46.3
35	JHANSI	25.3	0	11.6	1.6	19.1	98.6	158.7	206.2	33	0	1.1	0	555.2	496.5	58.7
36	JYOTIBA PHULE NAGAR	35	0	41	23	36.5	11.6	176.3	168.5	21	0	0.3	0	513.2	377.4	135.8
37	KANNAUJ	35.5	0.6	33	12	39.6	82.2	171.9	216.9	34.9	0	33.1	0	659.7	505.9	153.8
38	KANPUR DEHAT	31.6	0.5	13.6	4.6	17.4	38.9	89.9	130.1	9	0	8.2	0	343.8	267.9	75.9
39	KANPUR NAGAR	65.8	2.8	34.7	15.3	37.3	81	205.9	212	64.2	0	15.7	0	734.7	563.1	171.6
40	KANSIRAM NAGAR	28.6	10	49.6	7.1	10.4	60.1	127.9	178.5	23	0	5.3	0	500.5	389.5	111
41	KAUSHAMBI	14.6	0	12.5	0	17.6	72.3	75.6	65.2	30.5	0	0	0	288.3	243.6	44.7
42	KHERI	29.4	30.5	52.6	7.5	68.1	120.4	320	303.6	107.9	0	3.9	0	1043.9	851.9	192

S. No	DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Total	Monsoon	Non-Monsoon
43	KUSHINAGAR	17.3	4.5	14.7	7.8	10.5	88	363.5	63.5	205.2	0	0	0	775	720.2	54.8
44	LALITPUR	31	0	6.5	0	1	89.6	144.1	312.8	54	0	1.7	5.3	646	600.5	45.5
45	LUCKNOW	59.3	4.2	42.4	22	65.5	78.5	179.8	189.5	45.7	0	21.5	0	708.4	493.5	214.9
46	MAHAMAYA NAGAR	34.4	9	54.6	7.1	11.7	35.1	103.2	207.3	6.4	0	11.1	0	479.9	352	127.9
47	MAHARAJGANJ	37	25	29.8	19.6	38.2	275.5	465.3	69.8	292	0	0	0	1252.2	1102.6	149.6
48	MAHOBA	9.9	0	12.9	4.3	17.6	66.2	77.2	149.2	38.9	0	2.5	0	378.7	331.5	47.2
49	MAINPURI	26.8	1	46.7	6.6	55.4	39.2	144.3	193.5	27.7	0	9	0	550.2	404.7	145.5
50	MATHURA	15	0	38	0	11	22.1	49.5	111	0	0	2.2	0	248.8	182.6	66.2
51	MAU	0	1	11	18.5	18.5	110.5	217.5	115	118	0	0	0	610	561	49
52	MEERUT	31.6	11	41	9.9	34.3	29.5	221.1	131.3	0	0	1.2	6.1	517	381.9	135.1
53	MIRZAPUR	24	6	79.2	9.5	18.5	310.8	242.9	191.5	50.8	0.3	8.5	0	942	796	146
54	MORADABAD	63.4	31.2	70.7	23.4	20.3	53.6	227.2	346.1	3.6	0	0	0	839.5	630.5	209
55	MUZAFFARNAGAR	58.2	24.8	112.2	22.1	57.1	52.5	266.2	215	56.8	0	0.8	1	866.7	590.5	276.2
56	PILIBHIT	59.2	7.2	55.2	7.1	38.5	99.4	344.1	158.8	18.9	0	0.3	0	788.7	621.2	167.5
57	PRATAPGARH	17.7	5	19.3	24	40.3	160.2	335	229.7	122.3	0	0	0	953.5	847.2	106.3
58	PRAYAGRAJ	16.5	5.4	34.8	21.9	35.6	147	228.5	223	135.2	0	2.5	5.4	855.8	733.7	122.1
59	RAE BARELI	10.9	3.6	9.6	15.6	27.6	87.9	108.6	134.5	38.4	0	3.5	0	440.2	369.4	70.8
60	RAMPUR	49.8	6.6	25.5	14.4	27.3	55.2	108.9	142	14.4	0	0	0	444.1	320.5	123.6
61	SAHARANPUR	55.3	16.3	81	28.3	51.8	74.7	311	293.7	44	0	12.8	4.2	973.1	723.4	249.7
62	SANT KABIR NAGAR	39	22	25	9	21.5	384.5	507	229	190.3	0	6.5	0	1433.8	1310.8	123
63	SANT RAVI DAS NAGAR(BHADOHI)	28	16	48	55	47	279	324	188	152	0	0	0	1137	943	194
64	SHAHJAHANPUR	13.7	10	53.3	28.4	27	31	288.4	111.4	16	0	6.3	0	585.5	446.8	138.7

S. No	DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Total	Monsoon	Non-Monsoon
65	SHRAWASTI		37.1	62	0	20.7	316.6	292.9	187	113.8	0	3.6	0	1033.7	910.3	123.4
66	SIDDHARTH NAGAR	28	39.7	50.5	32	32.4	500.2	471.8	81.6	303.6	0	0.4	0	1540.2	1357.2	183
67	SITAPUR	18.7	11.4	33.7	6	25.1	98.4	207.1	241.9	29.6	0	10.5	0	682.4	577	105.4
68	SONBHADRA	11.7	11.2	63.3	15.4	43.1	267.2	189.9	156.7	146.3	5.8	24.6	9.2	944.4	760.1	184.3
69	SULTANPUR	20.1	14.7	55.6	16.3	54.3	309.5	275.8	233.9	176.7	1.4	10.6	0	1168.9	995.9	173
70	UNNAO	59.3	2.5	17	21.5	35.8	44.3	118.3	161	33.5	0	6.5	0	499.7	357.1	142.6
71	VARANASI	11.1	16.7	44.6	40.1	39.5	285.7	236.5	194.6	141.3	14.5	3.3	4.5	1032.4	858.1	174.3





Chapter 4

HYDROGEOLOGICAL FRAME WORK

The geology and structure of the formations existing in an area control occurrence and movement of ground water. The geomorphic conditions also have a great impact on ground water scenario. The larger part of the State is underlain by fluvial sediments laid down in the fore deep between Plateau region in south and Himalayas in north during the Quaternary period by the Indus-Ganga system of drainage over the Precambrian topography existing during geological past. These deposits owe their origin to riverine activity. The southern part of the State has entirely different geological conditions being underlain by Precambrian formations under a thin alluvial cover. Broadly, the State can be divided into two hydrogeological units.

1. Unconsolidated zone.
2. Consolidated, hard rock zone.

The hydrogeological conditions of the above two units widely differ and are discussed subsequently in brief.

Unconsolidated Zone:

This unit covers nearly 85% of the State area. The unconsolidated formations comprising the area have been deposited through mighty rivers originating from great Himalayan Mountains. These sediments are an admixture of pebble, gravel, sand, silt, clay and kankar. The sediments are generally coarser in the north and gradually become finer south east ward along downstream of the drainage which is a typical feature of fluvial deposits. This zone consists of mainly two parts, the Terai and the Alluvial Plain. However, foot hill zone is very small part of Bhabar belt and lies in the northern parts of Bijnore and Saharanpur districts. The Terai is a narrow disconnected belt along the north western fringe of the State. The Alluvial Plain occupies the area south of Terai and can further be divided in two sub units - Younger Alluvium and Older Alluvium.

The younger alluvium occurs mostly along the present day flood plain area. The continuous shifting of the drainage network with time caused reworking of their earlier deposits giving rise to the younger alluvium. The older alluvium occupying comparatively high area covers major part of the Plain. A typical characteristic of older alluvium is formation of kankar within itself due to leaching of calcium carbonate under favourable climatic conditions. The kankar occasionally forms pans restricting downward movement of water.

The thickness of alluvial sediments is variable and generally goes upto 500m. below which occur the semi-consolidated Upper Siwalik formations. The Shallower basement occurs in isolated areas which are known as "Basement highs."

This unconsolidated zone is porous and permeable with primary intergranular porosity and has good ground water potential. The sub-surface correlation of formations in the state has shown presence of several aquifers down to a depth of 750 m below the ground. These aquifers mainly encountered in Central Ganga Plain have been grouped on the basis of lithological characters as well as based on interpretation of electrical logs of Boreholes drilled and are as follows

- | | |
|-----------------------|----------------------|
| 1. First aquifer | 0.0 – 150.00 mbgl |
| 2. Second aquifer | 160.00 – 210.00 mbgl |
| 3. Third aquifer | 250.00 – 360.00 mbgl |
| 4. Forth deep aquifer | 380.00 – 600.00 mbgl |

The upper part of first aquifer down to 50 mbgl is the main source of drinking water through hand pumps and dug wells and is unconfined in nature. The first aquifer as a whole which is under unconfined to semi-confined conditions, it is the most potential aquifer group which is the main source of groundwater in the State extensively exploited through private as well as Government tube wells to meet the drinking water and irrigation needs. The deeper aquifers are confined in nature being exploited to a very limited extent. The yield of second aquifer is limited while the third aquifer is potential. The shallow and phreatic aquifers are under heavy stress.

Consolidated Zone:

The Bundelkhand Vindhyan plateau region is underlain by variety of Precambrian formations, mostly granite and granite gneisses, Vindhyan sandstone, limestone & shale, under a thin alluvial cover or without alluvial cover. As such these formations are hard and compact and devoid of any primary porosity. The ground water in these formations occurs in the secondary porosity of these formations. The secondary porosity has developed due to cracks and fractures which are open at the surface and tighten at depth. The ground water occurs under unconfined or water level conditions in these formations. The alluvial sediments of moderate depth along the river courses and in valleys form potential groundwater repositories. The weathered mantle over the entire unit also forms potential aquifers. These aquifers are being monitored mostly through open wells over the area.

Chapter 5

BEHAVIOUR OF WATER LEVEL

The groundwater storage is largely controlled by the prevailing hydrogeological and geomorphic conditions. Besides, magnitude of input (recharge) to the ground water system and output (discharge) from it also influences the status of groundwater regime. In the State of Uttar Pradesh hydrogeological as well as the geomorphological conditions are highly variable as evident from earlier chapters. The chief source of recharge to storage is rainfall which is highly variable over space and time. The main source of discharge is ground water abstraction which is also varying and also growing exponentially. The regions having ground water as the main source for irrigation always remain under heavy stress. The imbalance between the recharge and discharge expresses itself in terms of variations in the ground water level. Thus, the water level is a very important parameter for ground water studies. The behavior of the water level in the state during year 2020-21 has been studied based upon the observations made on the permanent Ground Water Monitoring Wells and described in the following paragraphs.

Depth to Water Level during 2020 -21

The depth to ground water level in the state is highly variable throughout the year ranging from ground level to 41.49 mbgl. The distribution pattern remains same during the year with the areas under different ranges increasing/reducing in different seasons.

The water level in general increases from north-east to south-west roughly parallel to the northern boundary of the State. The shallow water level occurs in the north, north eastern part and parts of central region of the state. The moderate water level occurs in the north western part, the central part and along the southern boundary. The deeper water level occurs in the western part, along Yamuna river, parts of southern U.P. and cities.

There are four canal command areas in the state but these do not have the same depth to water level pattern and all do not necessarily show very shallow ground water levels. The Gandak and Saryu command areas in general show very shallow water level 2 – 5 mbgl and water logging conditions exists in the monsoon and post monsoon period with few areas within these zones showing 5 – 10 mbgl. Generally the larger areas in Sharda Sahayak command fall

under 5 – 10 mbgl water level range In comparison to above commands, in Ramganga command the water level is generally deeper falling in the range of 5 – 10 mbgl in the north eastern part and 10 – 20 mbgl in the south western part along the River Yamuna.

The different water level zones are controlled by geomorphological features such as flood plains, natural levees of main rivers, interfluves areas etc. as well as by the nature of deposits.

May 2020:

This is the pre-monsoon period as it appears after one complete cycle of inputs and outputs. Generally this period shows the deepest water levels during the year. May is the dry season and the water levels are used for most of the ground water calculations. Although, water level monitoring in most of the district were not completed due to Covid-19 Pandemic. The monitoring was possible only in 24 districts of Uttar Pradesh. The analyses of 239 wells have carried out for groundwater studies.

In general water level ranges mostly from 2 to 20 mbgl, however parts of the state show variation of 20 mbgl or above. The water levels in the range of 0 to 2 mbgl(i.e., water logged condition) is observed only in 33 wells.

Water level in the range of 2 - 5 mbgl is observed in 72 Monitoring Wells (about 32.12%). It is usually observed along the Terai belt, extending from parts of Saharnapur to Siddarthnagar and upto Ballia in eastern U.P. As per available data, the given range of water level is found in the district of Sitapur, Bahraich, Gonda, Azamgarh, Ghazipur, Mirzapur and Sonbhadra.

About 32.63 % of wells (78 nos.) show water level between 5 and 10 m bgI. This area is observed in almost all parts of U.P. The water level of 5 to 10 mbgl is observed in Saharanpur, Muzaffarnagr, Sitapur, Barabanki, Hamirpur, Mahoba, Banda, Chitrakoot, Fatehpur, Pratapgarh, Jaunpur, Allahabad, Mirzapur, Varanasi, Sonbhadra and Ghazipur. Water level in the range of 10 – 20m have been observe in 44 wells (18.41%) mainly in Sharanpur, Shamli, Muzaffarnagar, Meeut, Ghaziabad, Hapur, Hamirpur, Fatehpur, Chitrakoot and some parts of Allahabad districts. There were few wells (11) where was water level recorded between 20 to 40mbgl whereas one in well Lucknow district, occurs in Urban area, measured as 40mbgl.

DISTRICT- WISE DEPTH TO WATER LEVEL, U.P.
May, 2020

State : Uttar Pradesh

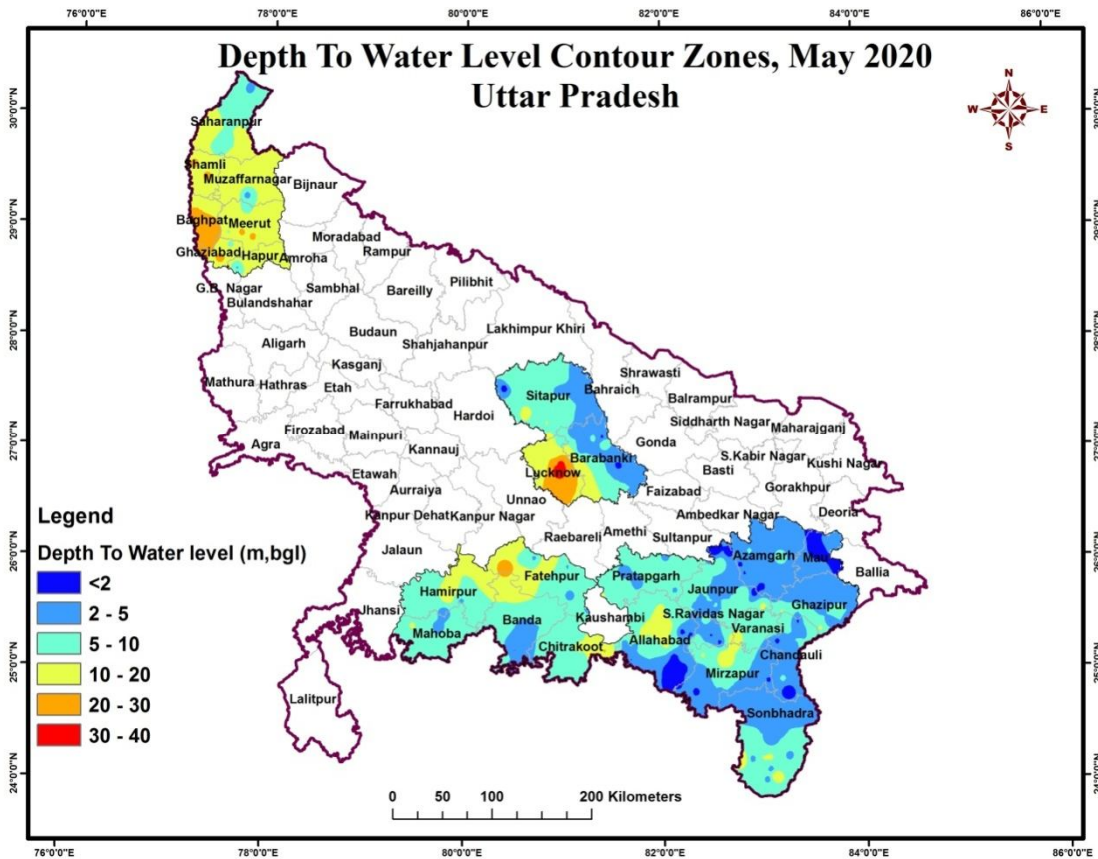
District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0-40.0	> 40.0
ALLAHABAD	30	0.02	17.80	8 26.67%	7 23.33%	7 23.33%	8 26.67 %	0	0
AZAMGARH	14	0.40	7.35	3 21.43%	8 57.14%	3 21.43%	0	0	0
BAGHPAT	2	26.39	28.91	0	0	0	0	2 100.00%	0
BANDA	8	-0.17	11.42	2 25.00%	4 50.00%	1 12.50%	1 12.50 %	0	0
BARABANKI	8	1.19	5.79	1 12.50%	5 62.50%	2 25.00%	0	0	0
CHANDAULI	7	0.78	7.19	3 42.86%	2 28.57%	2 28.57%	0	0	0
CHITRAKOOT	8	5.00	21.18	0	1 12.50%	4 50.00%	2 25.00 %	1 12.50%	0
FATEHPUR	7	4.80	30.29	0	1 14.29%	3 42.86%	2 28.57 %	1 14.29%	0
GHAZIABAD	6	4.99	21.74	0	1 16.67%	2 33.33%	2 33.33 %	1 16.67%	0
GHAZIPUR	15	0.69	11.67	3 20.00%	7 46.67%	2 13.33%	3 20.00 %	0	0
HAMIRPUR	4	2.64	15.55	0	2 50.00%	1 25.00%	1 25.00 %	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0-40.0	> 40.0
JAUNPUR	6	0.19	12.20	4 66.67%	0	1 16.67%	1 16.67 %	0	0
LUCKNOW	8	5.92	40.22	0	0	1 12.50%	4 50.00 %	2 25.00%	1 12.50%
MAHOBA	9	3.50	10.84	0	2 22.22%	6 66.67%	1 11.11 %	0	0
MAU	4	0.50	3.32	3 75.00%	1 25.00%	0	0	0	0
MEERUT	9	8.19	22.75	0	0	5 55.56%	2 22.22 %	2 22.22%	0
MIRZAPUR	9	1.75	16.09	3 33.33%	3 33.33%	1 11.11%	2 22.22 %	0	0
MUZAFFARNAGAR	7	3.05	21.09	0	1 14.29%	2 28.57%	2 28.57 %	2 28.57%	0
PRATAPGARH	18	3.30	10.53	0	5 27.78%	11 61.11%	2 11.11 %	0	0
SAHARANPUR	12	3.42	17.39	0	2 16.67%	7 58.33%	3 25.00 %	0	0
SANT RAVIDASNAGAR	4	1.06	10.00	2 50.00%	0	2 50.00%	0	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0-40.0	> 40.0
SITAPUR	21	1.89	12.34	1 4.76%	9 42.86%	9 42.86%	2 9.52 %	0	0
SONBHADRA	16	2.10	16.80	0	9 56.25%	3 18.75%	4 25.00 %	0	0
VARANASI	7	2.81	16.56	0	2 28.57%	3 42.86%	2 28.57 %	0	0
Total	239	-0.17	40.22	33	72	78	44	11	1

The district wise categorization table of water level during May 2020 is presented in table-3 and the pictorial view is shown in Plate –IV.

Plate IV



August 2020:

The water level during August indicates the immediate impact of rain fall on ground water storage. This is the month of peak monsoon rainfall hence this measurement is carried out to get the peak of the water level hydrograph. The water level rises in response to rainfall.

Water level has become shallower in large part of the state as per available data due to Covid -19 Pandemic. Out of 476 analyzed well 185 (38.86%) falls in the range of 0 to 2mbgl and 128 wells (26.89%) fall in the range of 2 – 5mbgl, it occurs mainly in Lakhimpur Khiri, Shrawasti, Bahraich, Balrampur, Gonda, Ayodhya, Ambedkar Nagar, Azamgarh, Sidarth Nagar, Mau, Ballia and northern part of Sonbhadra Districts. The water level in the range of 5-10 and 10-20mbgl occur in the 20.19% and 10.92% respectively. As per record, the water level between 10 – 20 are observed mainly western UP such as Saharanpur, Shamli, Muzaffarnagar, Baghpat, Meerut, Hapur and some parts of Kannauj and Lucknow Districts.

The district wise categorization table of water level during August 2020 is presented in table-4 and the pictorial view is shown in Plate-V.

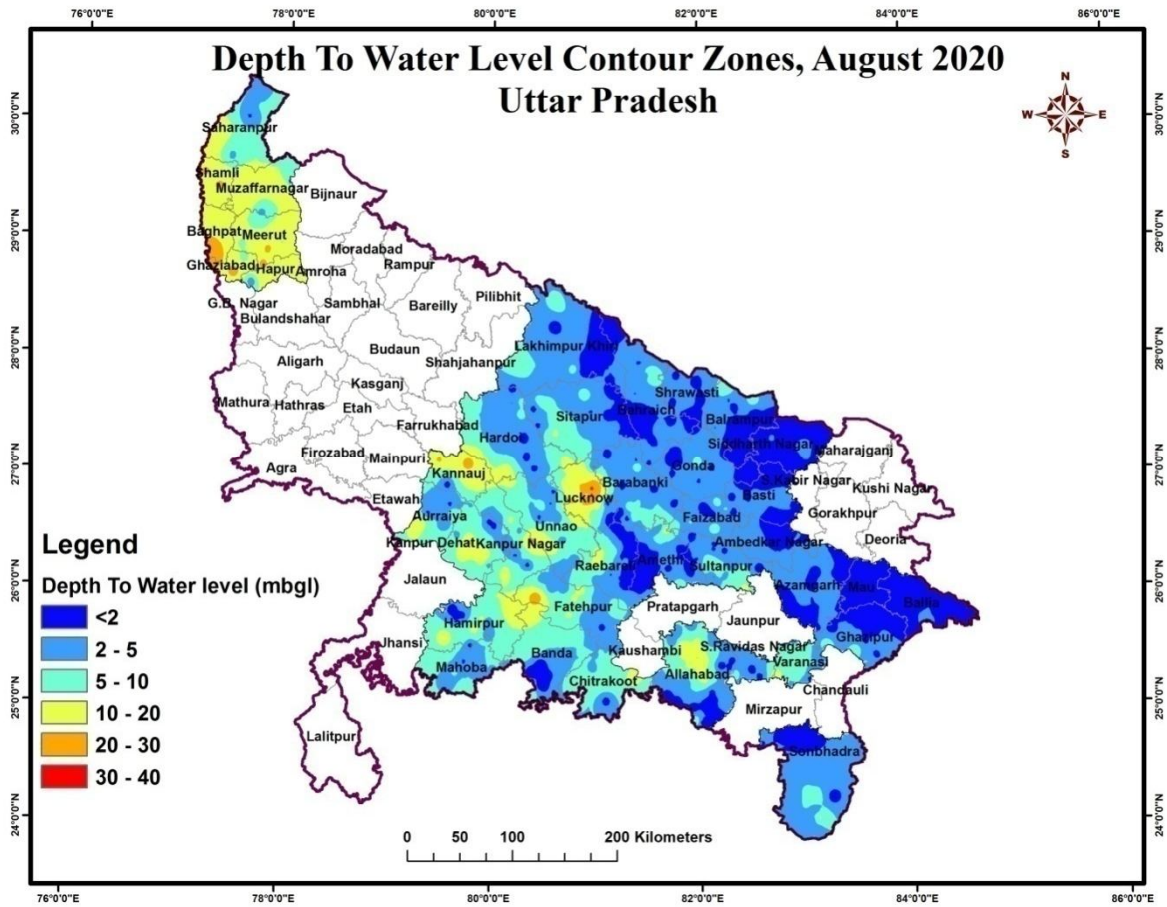


Table-4

**DISTRICT- WISE DEPTH TO WATER LEVEL, U.P.
August, 2020**

State : Uttar Pradesh

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
ALLAHABAD	35	-0.45	16.63	13 37.14%	10 28.57%	3 8.57%	9 25.71 %	0	0
AMBEDKAR NAGAR	7	1.29	4.10	2 28.57%	5 71.43%	0	0	0	0
AURAIYA	8	1.22	19.69	2 25.00%	1 12.50%	4 50.00%	1 12.50 %	0	0
AZAMGARH	16	0.65	5.45	8 50.00%	7 43.75%	1 6.25%	0	0	0
BAGHPAT	2	27.29	32.38	0	0	0	0	2 100.00%	0
BAHRAICH	11	0.82	9.15	7 63.64%	2 18.18%	2 18.18%	0	0	0
BALLIA	16	0.19	4.10	13 81.25%	3 18.75%	0	0	0	0
BALRAMPUR	15	0.53	9.20	9 60.00%	4 26.67%	2 13.33%	0	0	0
BANDA	12	0.36	9.33	4 33.33%	2 16.67%	6 50.00%	0	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
BARABANKI	19	0.52	11.10	6 31.58%	9 47.37%	3 15.79%	1 5.26 %	0	0
BASTI	7	0.63	3.33	5 71.43%	2 28.57%	0	0	0	0
CHITRAKOOT	9	0.80	14.24	1 11.11%	2 22.22%	4 44.44%	2 22.22 %	0	0
FAIZABAD	12	0.70	8.50	4 33.33%	4 33.33%	4 33.33%	0	0	0
FATEHPUR	12	1.73	29.76	2 16.67%	3 25.00%	3 25.00%	3 25.00 %	1 8.33%	0
GHAZIABAD	6	2.65	22.58	0	1 16.67%	2 33.33%	2 33.33 %	1 16.67%	0
GHAZIPUR	17	0.25	7.20	9 52.94%	5 29.41%	3 17.65%	0	0	0
GONDA	7	0.70	6.42	5 71.43%	1 14.29%	1 14.29%	0	0	0
HAMIRPUR	7	0.80	15.59	3 42.86%	1 14.29%	1 14.29%	2 28.57 %	0	0
HARDOI	18	0.41	8.13	7 38.89%	7 38.89%	4 22.22%	0	0	0
KANNAUJ	4	0.36	23.86	1 25.00%	0	1 25.00%	0	2 50.00%	0
KANPUR DEHAT	7	3.62	20.00	0	2 28.57%	4 57.14%	1 14.29 %	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
KANPUR NAGAR	12	0.43	41.49	4 33.33%	2 16.67%	4 33.33%	1 8.33%	0	1 8.33%
KHERI	8	0.33	7.76	4 50.00%	3 37.50%	1 12.50%	0	0	0
LUCKNOW	23	-0.42	39.92	2 8.70%	4 17.39%	3 13.04%	9 39.13%	5 21.74%	0
MAHOBA	9	1.55	8.88	1 11.11%	3 33.33%	5 55.56%	0	0	0
MAU	4	0.23	1.45	4 100.00%	0	0	0	0	0
MEERUT	9	7.91	22.93	0	0	5 55.56%	2 22.22%	2 22.22%	0
MUZAFFARNAGAR	8	2.26	21.08	0	2 25.00%	2 25.00%	3 37.50%	1 12.50%	0
RAE BARELI	26	0.38	15.42	14 53.85%	6 23.08%	3 11.54%	3 11.54%	0	0
SAHARANPUR	12	1.43	16.52	2 16.67%	2 16.67%	5 41.67%	3 25.00%	0	0
SANT RAVIDAS NAGAR	5	1.25	8.60	2 40.00%	2 40.00%	1 20.00%	0	0	0
SHRAWASTI	11	0.59	5.00	8 72.73%	3 27.27%	0	0	0	0
SIDDHARTH NAGAR	10	0.55	4.79	9 90.00%	1 10.00%	0	0	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
SITAPUR	21	0.89	11.37	5 23.81%	10 47.62%	5 23.81%	1 4.76%	0	0
SONBHADRA	15	0.33	11.36	6 40.00%	5 33.33%	3 20.00%	1 6.67%	0	0
SULTANPUR	37	0.20	13.33	17 45.95%	10 27.03%	5 13.51%	5 13.51%	0	0
UNNAO	11	0.21	13.53	4 36.36%	3 27.27%	2 18.18%	2 18.18%	0	0
VARANASI	8	1.37	13.90	2 25.00%	1 12.50%	4 50.00%	1 12.50%	0	0
Total	476	-0.45	41.49	185	128	96	52	14	1

November 2020:

The water level starts receding gradually after August with lateral flow of ground water due to change in hydraulic conditions with recession of monsoon and ground water storage. The water level stabilizes by November and there after natural out flow reduces considerably. This is the post monsoon water level which reflects the change in ground water storage which is the dynamic ground water resource. The volume of water available in storage may be safely used during the remaining year. This water level is an important parameter for resource estimation, planning etc.

Water logged area showing DWL 0-2 mbgl has been found in 128 wells (17.04%) and are located in patches like LakhimpurKhiri, Banda, Bahraich, Shrawasti, Balrampur, SiddharthNagar, Maharajganj, KushiNagar, Sultanpur, Azamgarh, Ghazipur, Mau, Ballia, Chandauli and Sonbhadra district.

The depth to water level from 2 to 5mbgl is found in 313 monitored wells (41.67%) This range is observed in most parts of the districts in Terai, Eastern, Central U.P and few districts of Bundelkhand region. Along the Gomti, Ghaghra and Sharda rivers water level ranges from 2 to 5 mbgl. Most parts of districts of eastern U.P. and Terai region shows DWL < 5mbgl.

The depth to water levels from 5 to 10 mbgl are observed in 170 wells (22.63%). This range is prominent in Western, Central & Southern U.P. A thin strip showing this range runs along the Ganga river, and extends over the Ganga - Ramganga interfluvial area. This range is also seen along the Ganga-Yamuna doab from Aligarh up to Allahabad through Mathura, Kanpur Dehat, Kanpur Nagar, Jalaun, Hamirpur and Banda. On both the sides of Betwa river in Jhansi and Jalaun water level are observed to vary from 5 to 10 mbgl.

The water levels of 10 to 20 mbgl are noticed in 114 wells (15.17%), mostly along the Yamuna river upto Varanasi, through Mathura, Agra, Kanpur, Jalaun, Fatehpur, Hamirpur, Chitrakoot and Banda districts. This is mainly due to higher elevation of natural levee formed on either side of the Yamuna river. Most parts of districts of western U.P. Bulandshahar, Baghpat, Ghaziabad, G.B.Nagar, J.P.Nagar, Moradabad, show water level in this range. Few patches are seen in Agra, Allahabad, Bijnor, Chitrakoot, Fatehpur, Ghazipur, Hamirpur, Hathras, Kaushambi, Pratapgarh, Sultanpur and Unnao districts. Along the Ganga

river a wide patch shows water level in the range. In Lucknow city water level in this range is observed in most of the wells.

The depth range of 20 - 30mbgl are found in 23wells along Agra, Baghpat, Meerut, Firozabad, and Lucknow districts. In Lucknow city DWL in this range is found only in 3 wells (13.64%).Only 28 wells shows depth to water levels greater than 20m. These areas showing deeper water levels are due to bearing of geomorphology as presence of ravenous tract along the Yamuna and Betwa rivers. The water level observed between 30 – 40mbgl are noticed in three districts such as Agra, Firozabad and Lucknow

Table-5

**DISTRICT-WISE DEPTH TO WATER LEVEL, U.P.
November, 2020**

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
AGRA	10	1.86	44.21	2 20.00%	1 10.00%	0	3 30.00 %	3 30.00%	1 10.00%
ALIGARH	7	3.01	10.65	0	3 42.86%	1 14.29%	3 42.86 %	0	0
ALLAHABAD	33	1.05	16.75	7 21.21%	14 42.42%	5 15.15%	7 21.21 %	0	0
AMBEDKAR NAGAR	7	3.07	4.75	0	7 100.00%	0	0	0	0
AURAIYA	8	1.72	19.91	1 12.50%	1 12.50%	5 62.50%	1 12.50 %	0	0
AZAMGARH	17	0.82	6.25	5 29.41%	9 52.94%	3 17.65%	0	0	0
BAGHPAT	2	27.57	28.88	0	0	0	0	2 100.00%	0
BAHRAICH	11	1.12	9.30	4 36.36%	5 45.45%	2 18.18%	0	0	0
BALLIA	18	0.68	8.21	10 55.56%	5 27.78%	3 16.67%	0	0	0
BALRAMPUR	18	0.20	9.25	8 44.44%	8 44.44%	2 11.11%	0	0	0
BANDA	14	-0.40	12.67	5 35.71%	4 28.57%	4 28.57%	1 7.14 %	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
BARABANKI	19	-0.05	10.20	2 10.53%	13 68.42%	3 15.79%	1 5.26 %	0	0
BAREILLY	10	3.10	10.62	0	4 40.00%	5 50.00%	1 10.00 %	0	0
BASTI	7	1.40	4.21	2 28.57%	5 71.43%	0	0	0	0
BIJNOR	6	1.01	17.67	1 16.67%	2 33.33%	1 16.67%	2 33.33 %	0	0
BUDAUN	3	6.50	21.00	0	0	1 33.33%	1 33.33 %	1 33.33%	0
BULANDSHAHR	3	7.02	11.04	0	0	1 33.33%	2 66.67 %	0	0
CHANDAULI	8	0.97	8.21	2 25.00%	4 50.00%	2 25.00%	0	0	0
CHITRAKOOT	9	2.37	16.25	0	1 11.11%	4 44.44%	4 44.44 %	0	0
DEORIA	9	0.94	3.80	3 33.33%	6 66.67%	0	0	0	0
ETAH	8	4.53	14.06	0	1 12.50%	4 50.00%	3 37.50 %	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
FAIZABAD	12	1.85	8.65	1 8.33%	6 50.00%	5 41.67%	0	0	0
FARRUKHABAD	2	3.19	15.99	0	1 50.00%	0	1 50.00 %	0	0
FATEHPUR	12	3.16	31.49	0	5 41.67%	1 8.33%	5 41.67 %	1 8.33%	0
FIROZABAD	4	8.10	25.87	0	0	1 25.00%	2 50.00 %	1 25.00%	0
GHAZIABAD	6	3.66	22.04	0	1 16.67%	2 33.33%	2 33.33 %	1 16.67%	0
HAZIPUR	16	0.66	8.70	6 37.50%	6 37.50%	4 25.00%	0	0	0
GONDA	6	1.70	6.55	1 16.67%	4 66.67%	1 16.67%	0	0	0
GORAKHPUR	4	1.76	3.86	1 25.00%	3 75.00%	0	0	0	0
HAMIRPUR	8	1.24	15.63	1 12.50%	5 62.50%	0	2 25.00 %	0	0
HARDOI	20	1.17	8.80	4 20.00%	11 55.00%	5 25.00%	0	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
HATHRAS	4	3.83	23.32	0	1 25.00%	1 25.00%	1 25.00%	1 25.00%	0
JALAUN	25	0.91	28.25	5 20.00%	5 20.00%	10 40.00%	2 8.00%	3 12.00%	0
JAUNPUR	23	0.49	14.19	5 21.74%	9 39.13%	6 26.09%	3 13.04%	0	0
JHANSI	14	2.88	12.80	0	5 35.71%	7 50.00%	2 14.29%	0	0
JYOTIBA PHULE NAGAR	7	11.33	18.27	0	0	0	7 100.00%	0	0
KANNAUJ	4	0.61	23.94	1 25.00%	0	1 25.00%	0	2 50.00%	0
KANPUR DEHAT	6	3.84	20.00	0	2 33.33%	3 50.00%	1 16.67%	0	0
KANPUR NAGAR	12	1.16	41.74	1 8.33%	4 33.33%	5 41.67%	1 8.33%	0	1 8.33%
KAUSHAMBI	6	3.88	22.08	0	1 16.67%	0	4 66.67%	1 16.67%	0
KHERI	8	1.81	8.80	2 25.00%	5 62.50%	1 12.50%	0	0	0

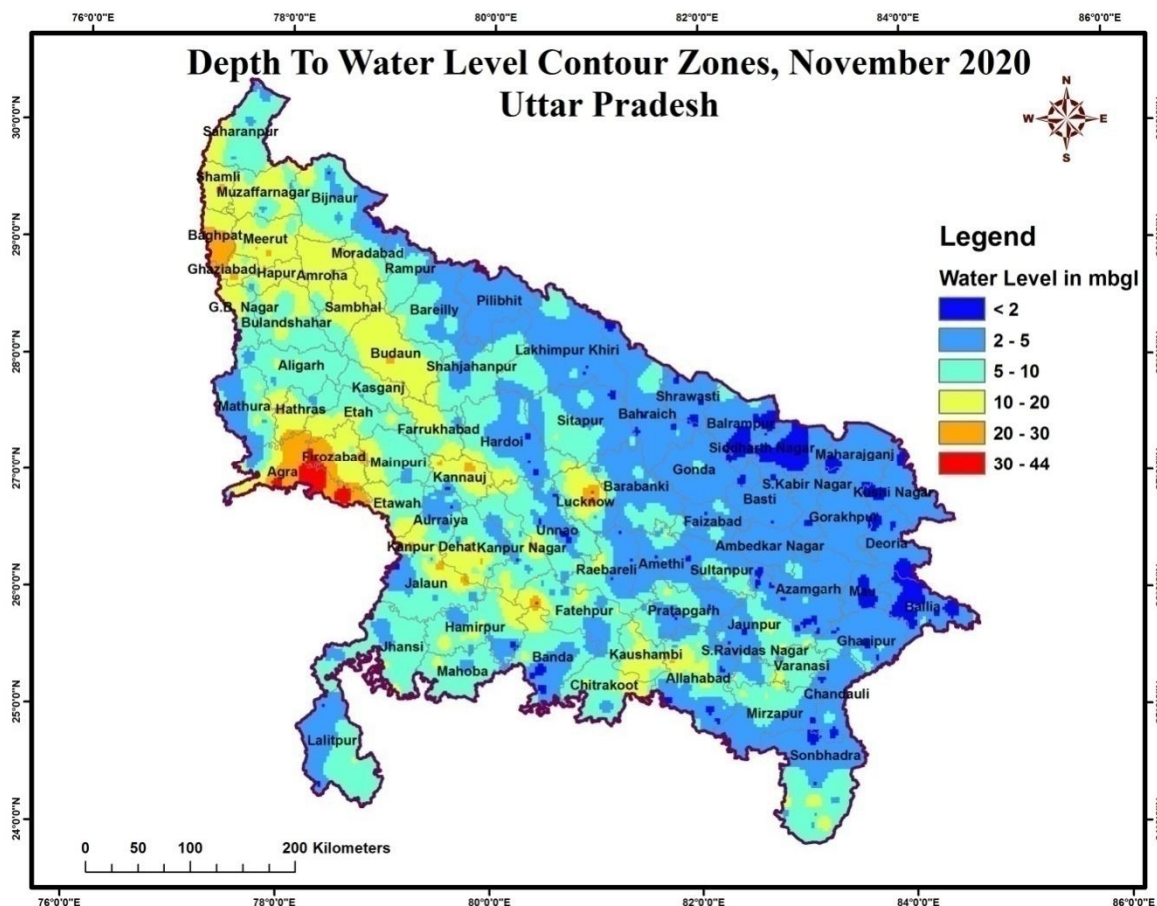
District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
KUSHINAGAR	5	1.05	3.65	2 40.00%	3 60.00%	0	0	0	0
LALITPUR	15	1.60	10.55	3 20.00%	4 26.67%	7 46.67%	1 6.67%	0	0
LUCKNOW	22	-1.25	40.92	2 9.09%	6 27.27%	3 13.64%	7 31.82%	3 13.64%	1 4.55%
MAHOBA	9	2.72	12.11	0	3 33.33%	5 55.56%	1 11.11%	0	0
MAHRAJGANJ	6	1.35	3.30	2 33.33%	4 66.67%	0	0	0	0
MAINPURI	5	3.05	7.03	0	1 20.00%	4 80.00%	0	0	0
MATHURA	14	1.93	14.37	1 7.14%	8 57.14%	1 7.14%	4 28.57%	0	0
MAU	6	0.37	4.20	2 33.33%	4 66.67%	0	0	0	0
MEERUT	8	8.11	23.03	0	0	3 37.50%	2 25.00%	3 37.50%	0
MIRZAPUR	10	1.72	11.80	2 20.00%	5 50.00%	1 10.00%	2 20.00%	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
MORADABAD	7	0.95	16.23	2 28.57%	1 14.29%	0	4 57.14 %	0	0
MUZAFFARNAGAR	10	2.90	21.46	0	2 20.00%	2 20.00%	5 50.00 %	1 10.00%	0
PILIBHIT	10	2.58	4.93	0	10 100.00%	0	0	0	0
PRATAPGARH	26	1.69	14.60	3 11.54%	15 57.69%	5 19.23%	3 11.54 %	0	0
RAE BARELI	22	1.49	14.45	5 22.73%	13 59.09%	1 4.55%	3 13.64 %	0	0
RAMPUR	2	4.20	10.02	0	1 50.00%	0	1 50.00 %	0	0
SAHARANPUR	15	2.91	16.51	0	4 26.67%	8 53.33%	3 20.00 %	0	0
SANT KABIRNAGAR	4	1.60	2.54	2 50.00%	2 50.00%	0	0	0	0
SANT RAVIDASNAGAR	5	2.23	11.70	0	3 60.00%	1 20.00%	1 20.00 %	0	0
SHAHJAHANPUR	2	5.65	5.77	0	0	2 100.00%	0	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 - 10.0	10.0 - 20.0	20.0 - 40.0	> 40.0
SHRAWASTI	11	1.26	5.10	6 54.55%	4 36.36%	1 9.09%	0	0	0
SIDDHARTHANAGAR	9	1.12	2.65	3 33.33%	6 66.67%	0	0	0	0
SITAPUR	21	1.62	11.07	2 9.52%	11 52.38%	7 33.33%	1 4.76 %	0	0
SONBHADRA	18	0.20	17.39	3 16.67%	7 38.89%	4 22.22%	4 22.22 %	0	0
SULTANPUR	38	1.25	12.48	3 7.89%	23 60.53%	7 18.42%	5 13.16 %	0	0
UNNAO	16	0.55	15.38	5 31.25%	4 25.00%	4 25.00%	3 18.75 %	0	0
VARANASI	9	2.66	15.60	0	2 22.22%	5 55.56%	2 22.22 %	0	0
Total	751	-1.25	44.21	128	313	170	114	23	3

The district wise status of water level during the month has been shown in table -5 and pictorial view is shown in Plate-VI.

Plate VI



January 2021:

Winter season is the peak season of ground water abstraction for Rabi cultivation. Consequently bulk of ground water storage is depleted during this season which is well reflected in the water level measurement during January 2021.

The depth to water level shows a large variation. The distribution pattern of the various depth ranges is the same only a general deepening in the water level is seen. The water logged area showing depth to water level in the range of 0-2 mbgl has been reduced to 59%. Water levels in the range of 2-5 and 5-10 mbgl are predominant during this period as reflected at 45.34% and 27.26% of monitored wells respectively. The moderate water level zone remains at 16.09%. The very deep water level occurs in 3.44% wells. Thus there seems to be a balance between the input and output in these areas. The water level in the range of 0 - 2 mbgl is observed as isolated patches in Bijnour, Moradabad, Pilibhiy, Lakhimpur Khiri,

Bhraich, Bareilly, Bahraich, Balrampur , Banda, Azamgarh, Ballia, Chandaulli, and Sonbhadra district.

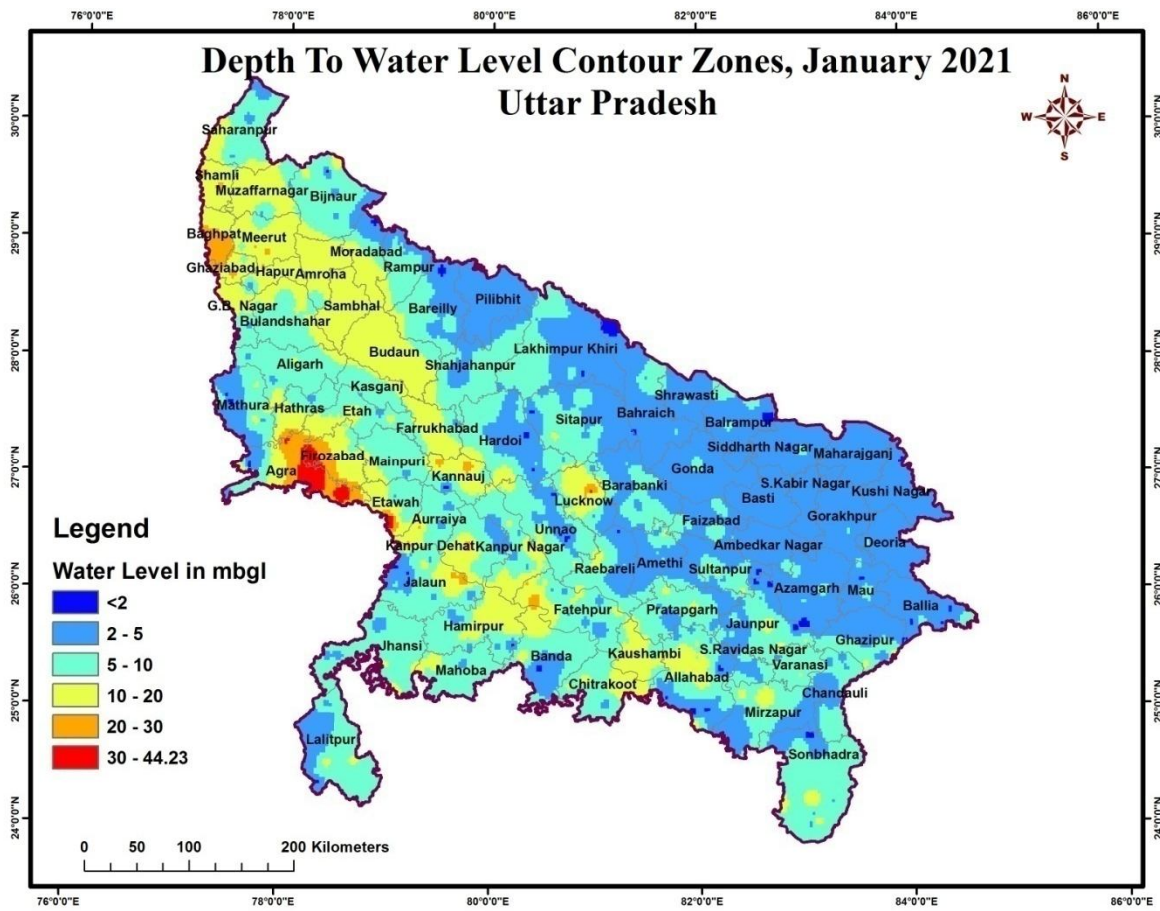
The water level in the range of 2 – 5 mbgl is seen in most of the districts except in western part; being predominantly concentrated along the northern border (Terai region) eastern and North eastern parts of the state and as scattered patches in central and southern part of the State. The depth to water level of 5 - 10 m.bgl is observed predominantly in the central, western, southern and lower eastern parts of U.P from Saharanpur to Sonbhadra districts.

The water level in range of 10-20 m.bgl is observed all along Yamuna river and parts of western U.P. This range is observed as patches in Agra, Etawah, Aurriya, Allahabad, Baghat, Chitrakoot, Gautam Buddha Nagar, Ghaziabad, Hamirpur, Jalaun, , Kaushambi, Lucknow, Meerut, Muzaffar Nagar, St.Ravidas Nagar and Sonbhadra districts.

The water level of 20 mbgl and more is present only along Yamuna river in isolated patches in Baghat, Ghaziabad, Agra, Firozabad Etawah, Muzaffarnagar and Shamli districts. This is due to effluent nature of river Yamuna and also due to higher elevations in the area. In the central parts of city area of Lucknow, more than 20 mbgl water level is also observed.

In Gandak and Saryu canal commands water level predominately ranges from 2 to 5 mbgl. Sharda Sahayak canal command shows predominance of DWL between 2 and 10 m.bgl while Ram Ganga canal command shows predominance of 5 - 10 m.bgl water level range.

The district wise status of water level during the month has been shown in Table-6 and the same has been depicted in Plate-VII.



DISTRICT- WISE DEPTH TO WATER LEVEL, U.P.

January, 2021

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 -10.0	10.0 -20.0	20.0 -40.0	> 40.0
AGRA	7	1.49	44.35	1 14.29%	2 28.57%	0	1 14.29 %	2 28.57%	1 14.29%
ALIGARH	7	3.20	11.60	0	3 42.86%	3 42.86%	1 14.29 %	0	0
ALLAHABAD	32	1.24	18.84	4 12.50%	13 40.63%	6 18.75%	9 28.13 %	0	0
AMBEDKAR NAGAR	7	3.00	5.06	0	5 71.43%	2 28.57%	0	0	0
AURAIYA	8	2.47	20.86	0	2 25.00%	5 62.50%	0	1 12.50%	0
AZAMGARH	18	1.30	6.55	1 5.56%	14 77.78%	3 16.67%	0	0	0
BAGHPAT	2	27.77	28.37	0	0	0	0	2 100.00%	0
BAHRAICH	11	1.45	9.35	4 36.36%	5 45.45%	2 18.18%	0	0	0
BALLIA	19	1.70	9.10	4 21.05%	11 57.89%	4 21.05%	0	0	0
BALRAMPUR	16	0.30	9.50	1 6.25%	13 81.25%	2 12.50%	0	0	0
BANDA	11	0.80	13.40	2 18.18%	5 45.45%	1 9.09%	3 27.27 %	0	0

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of						
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 -10.0	10.0 -20.0	20.0 -40.0	> 40.0	
BARABANKI	19	2.22	10.28	0	11 57.89%	7 36.84%	1 5.26 %	0	0	
BAREILLY	9	1.23	8.99	1 11.11%	3 33.33%	5 55.56%	0	0	0	
BASTI	7	2.65	5.00	0	7 100.00%	0	0	0	0	
BIJNOR	6	1.63	20.24	1 16.67%	2 33.33%	1 16.67%	1 16.67 %	1 16.67%	0	
BUDAUN	4	13.80	19.30	0	0	0	4 100.00 %	0	0	
BULANDSHAHR	2	6.68	12.21	0	0	1 50.00%	1 50.00 %	0	0	
CHANDAULI	8	2.57	10.09	0	5 62.50%	2 25.00%	1 12.50 %	0	0	
CHITRAKOOT	9	3.04	20.82	0	1 11.11%	4 44.44%	2 22.22 %	2 22.22%	0	
DEORIA	7	2.05	4.65	0	7 100.00%	0	0	0	0	
ETAH	9	3.03	14.40	0	2 22.22%	4 44.44%	3 33.33 %	0	0	
ETAWAH	5	4.71	38.13	0	1 20.00%	2 40.00%	1 20.00 %	1 20.00%	0	
FAIZABAD	12	2.43	8.85	0	6 50.00%	6 50.00%	0	0	0	
FARRUKHABAD	2	4.35	15.44	0	1 50.00%	0	1 50.00 %	0	0	
FATEHPUR	14	4.10	29.60	0	3	2	7	2	0	

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 -10.0	10.0 -20.0	20.0 -40.0	> 40.0
					21.43%	14.29%	50.00 %	14.29%	
FIROZABAD	3	8.42	19.34	0	0	1	2	0	0
						33.33%	66.67 %		
GAUTAM BUDDHA	2	4.96	17.08	0	1	0	1	0	0
					50.00%		50.00 %		
GHAZIABAD	6	3.59	21.53	0	1	2	2	1	0
					16.67%	33.33%	33.33 %	16.67%	
GHAZIPUR	16	0.35	12.30	1	10	3	2	0	0
				6.25%	62.50%	18.75%	12.50 %		
GONDA	7	2.60	6.80	0	6	1	0	0	0
					85.71%	14.29%			
GORAKHPUR	4	2.36	5.16	0	3	1	0	0	0
					75.00%	25.00%			
HAMIRPUR	9	1.27	16.36	1	5	0	3	0	0
				11.11%	55.56%		33.33 %		
HARDOI	19	0.98	9.09	2	12	5	0	0	0
				10.53%	63.16%	26.32%			
HATHRAS	3	4.25	12.37	0	1	1	1	0	0
					33.33%	33.33%	33.33 %		
JALAUN	25	1.00	30.43	5	4	10	3	3	0
				20.00%	16.00%	40.00%	12.00 %	12.00%	
JAUNPUR	24	-0.99	14.68	5	8	8	3	0	0
				20.83%	33.33%	33.33%	12.50 %		
JHANSI	16	2.55	12.98	0	4	10	2	0	0
					25.00%	62.50%	12.50 %		
JYOTIBA PHULE NAGAR	7	11.37	18.55	0	0	0	7	0	0
							100.00 %		

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of						
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 -10.0	10.0 -20.0	20.0 -40.0	> 40.0	
KANNAUJ	5	0.88	25.20	1 20.00%	0	2 40.00%	0	2 40.00%	0	
KANPUR DEHAT	5	4.01	7.22	0	1 20.00%	4 80.00%	0	0	0	
KANPUR NAGAR	12	1.89	41.01	1 8.33%	4 33.33%	4 33.33%	2 16.67%	0	1 8.33%	
KAUSHAMBI	5	6.02	17.37	0	0	1 20.00%	4 80.00%	0	0	
KHERI	8	1.31	9.06	2 25.00%	5 62.50%	1 12.50%	0	0	0	
KUSHINAGAR	5	1.40	3.75	1 20.00%	4 80.00%	0	0	0	0	
LALITPUR	16	1.62	11.19	2 12.50%	5 31.25%	8 50.00%	1 6.25%	0	0	
LUCKNOW	21	2.32	40.98	0	7 33.33%	3 14.29%	8 38.10%	2 9.52%	1 4.76%	
MAHOBA	8	3.82	12.40	0	1 12.50%	5 62.50%	2 25.00%	0	0	
MAHRAJGANJ	5	2.10	4.05	0	5 100.00%	0	0	0	0	
MAINPURI	5	4.01	7.24	0	1 20.00%	4 80.00%	0	0	0	
MATHURA	14	1.30	13.88	2 14.29%	7 50.00%	1 7.14%	4 28.57%	0	0	
MAU	7	1.40	6.77	1 14.29%	4 57.14%	2 28.57%	0	0	0	
MEERUT	9	8.17	22.25	0	0	3	3	3	0	

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 -10.0	10.0 -20.0	20.0 -40.0	> 40.0
						33.33%	33.33 %	33.33%	
MIRZAPUR	10	2.52	15.50	0	6	2	2	0	0
					60.00%	20.00%	20.00 %		
MORADABAD	8	1.30	17.75	2	1	0	5	0	0
				25.00%	12.50%		62.50 %		
MUZAFFARNAGA	9	3.19	21.02	0	2	1	5	1	0
					22.22%	11.11%	55.56 %	11.11%	
PILIBHIT	11	2.80	4.97	0	11	0	0	0	0
					100.00%				
PRATAPGARH	23	1.10	14.06	1	10	10	2	0	0
				4.35%	43.48%	43.48%	8.70 %		
RAE BARELI	25	1.47	12.80	2	14	6	3	0	0
				8.00%	56.00%	24.00%	12.00 %		
RAMPUR	3	4.43	9.95	0	1	2	0	0	0
					33.33%	66.67%			
SAHARANPUR	14	-0.40	16.19	1	4	6	3	0	0
				7.14%	28.57%	42.86%	21.43 %		
SANT KABIRNAGAR	4	2.50	3.74	0	4	0	0	0	0
					100.00%				
SANT RAVIDASNAGAR	5	2.90	9.75	0	3	2	0	0	0
					60.00%	40.00%			
SHAHJAHANPUR	2	5.35	6.07	0	0	2	0	0	0
						100.00%			
SHRAWASTI	11	2.06	5.60	0	10	1	0	0	0
					90.91%	9.09%			
SIDDHARTHANAGAR	10	1.73	6.55	1	8	1	0	0	0
				10.00%	80.00%	10.00%			

District	No. of Wells Analysed	Depth to Water Table (mbgl)		No. / Percentage of Wells Showing Depth to Water Table (mbgl) in the Range of					
		Min	Max	0.0 - 2.0	2.0 - 5.0	5.0 -10.0	10.0 -20.0	20.0 -40.0	> 40.0
SITAPUR	20	1.15	11.31	1 5.00%	12 60.00%	6 30.00%	1 5.00 %	0	0
SONBHADRA	16	0.32	14.40	1 6.25%	6 37.50%	5 31.25%	4 25.00 %	0	0
SULTANPUR	37	1.36	12.81	2 5.41%	21 56.76%	9 24.32%	5 13.51 %	0	0
UNNAO	19	0.75	14.81	5 26.32%	5 26.32%	5 26.32%	4 21.05 %	0	0
VARANASI	8	3.95	10.10	0	2 25.00%	5 62.50%	1 12.50 %	0	0
Total	752	-0.99	44.35	59	341	205	121	23	3

A summarized status of water level over the state during different seasons of the year 2020 –21 is as follows:

DEPTH RANGE (M)	No. and Percentage of wells			
	May'20	Aug'20	Nov'20	Jan'21
0-2	33 (13.80%)	185(38.86%)	128 (17.04%)	59(7.84%)
2-5	72(30.12%)	128 (26.89%)	313 (41.67%)	341(45.34%)
5-10	78 (32.63%)	96 (20.16%)	170 (22.63%)	205 (27.26%)
10-20	44 (18.41%)	52 (10.92%)	114(15.17%)	121 (16.09%)
>20	12 (5.01%)	15 (3.15%)	26(3.45%)	26(3.44%)

From the table it is seen that:-

1. There is a large variation in water logged area, water logging being maximum during August'20, reducing in Nov'20 and in Jan'21.
2. Shallow water level condition (2-5 mbgl) keeps fluctuating in response to the factors such as rainfall recharge and ground water draft.
3. The area having moderate depth to water level between 5-10 is lesser in May'20 and gradually increases in August'20, November'20 and reaches maximum in January'21.
4. The deep water level conditions (above 10 mbgl) increases from May'20 to January 21.
5. The spatial and temporal distribution of deeper water level zones is more or less constant.

The well-wise Depth to Water level of Ground Water Monitoring Wells of the state for May'20, Aug'20, Nov'20 & Jan'21 is given in **Annexure-I**.

Chapter 6

WATER LEVEL FLUCTUATIONS

Ground water is a dynamic resource and its storage changes in response to many factors such as monsoon rainfall, ground water draft for various purposes, hydrogeological conditions, topography, landuse, cropping pattern, irrigation status – surface and ground water etc. These changes in storage are reflected in form of water level fluctuations. The periodic monitoring of water levels gives an insight into these changes through study of spatial and temporal variations of water level throughout the year. The seasonal, annual and decadal comparisons of the water level data monitored at stations have been done and isanalyzed as follows.

6.1 Seasonal Fluctuation during 2020 -21

The fluctuation of the water level in a particular year gives a picture of the response to rainfall and ground water extraction. The water level of May, the pre-monsoon water level, which is the lowest water level after all the inputs and outputs during one year, has been compared with that of Post-monsoon water level i.e. November'2020 and January'2021.

May2020 – November 2020

The difference between the pre and post-monsoon water level of the year is the most important seasonal fluctuation which gives a clear picture of groundwater potential which could be fruitfully utilized for various uses over the succeeding year. This fluctuation is used to evaluate the dynamic ground water resource through the change in ground water storage. The depth to water level data during pre and post monsoon seasons of the year 2020 has been compiled and computed to estimate the seasonal change in water level. The same has been presented on district level in Table-7 and depicted in Plate-VIII.

Table -7

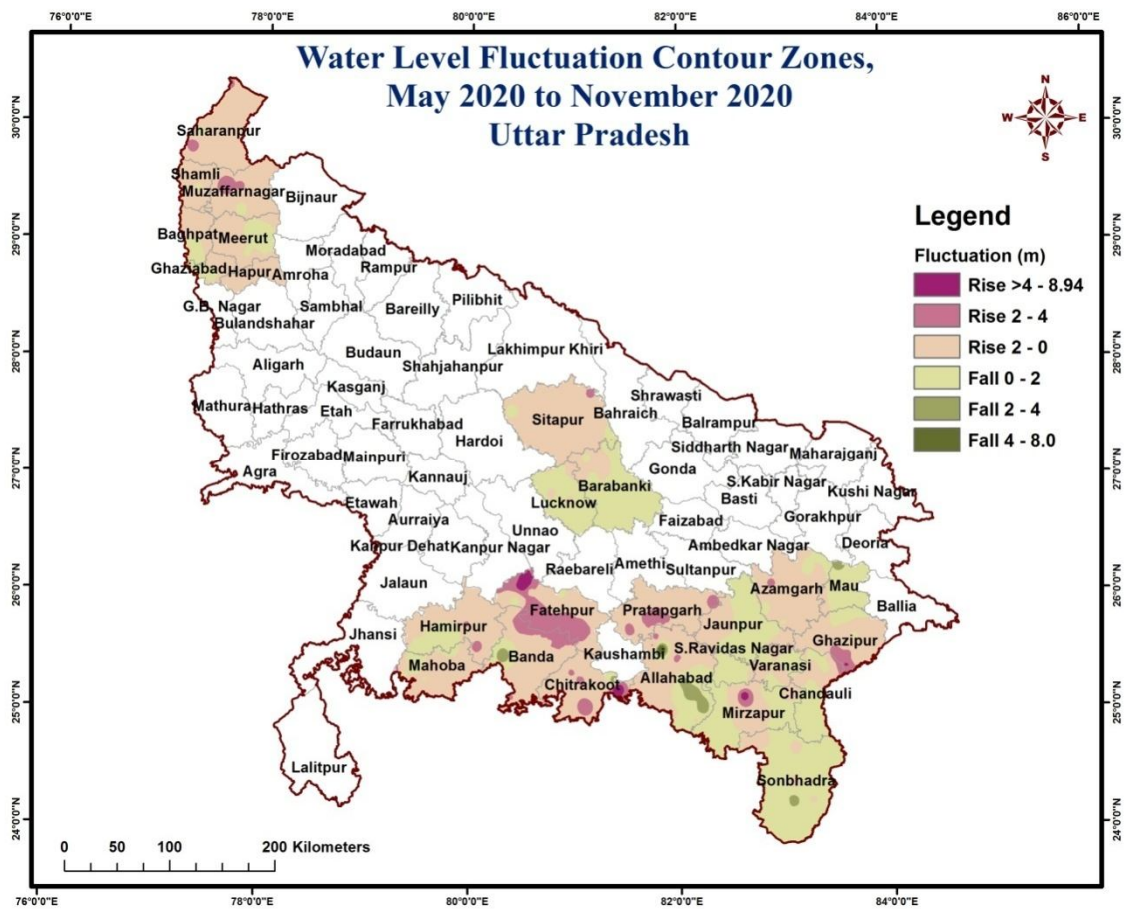
**DISTRICT WISE –SEASONAL WATER LEVEL FLUCTUATION, U.P.
May' 2020 – November' 2020**

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
ALLAHABAD	29	0.23	3.73	0.01	8.64	14 48.28%	5 17.24 %	0	6 20.69%	3 10.34%	1 3.4%	19	10
AZAMGARH	14	0.05	2.73	0.03	0.90	7 50.00%	2 14.29 %	0	5 35.71%	0	0	9	5
BAGHPAT	2	0.03	0.03	1.18	1.18	1 50.00%	0	0	1 50.00%	0	0	1	1
BANDA	8	0.79	2.60	0.12	0.34	3 37.50%	2 25.00 %	0	3 37.50%	0	0	5	3
BARABANKI	8	0.15	1.03	0.20	1.05	4 50.00%	0	0	4 50.00%	0	0	4	4
CHANDAULI	7	0.26	0.26	0.40	1.42	1 14.29%	0	0	6 85.71%	0	0	1	6
CHITRAKOOT	8	1.43	7.71	0.75	3.91	2 25.00%	3 37.50 %	1 12.50%	1 12.50%	1 12.50%	0	6	2
FATEHPUR	7	1.56	3.85	1.20	1.20	2 28.57%	4 57.14 %	0	1 14.29%	0	0	6	1

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
GHAZIABAD	6	0.01	1.33	0.30	0.30	5 83.33%	0	0	1 16.67%	0	0	5	1
GHAZIPUR	14	0.46	4.99	0.55	0.85	5 35.71%	3 21.43%	2 14.29%	3 21.43%	0	0	10	3
HAMIRPUR	4	0.91	2.88	0.16	0.86	1 25.00%	1 25.00%	0	2 50.00%	0	0	2	2
JAUNPUR	5	0.25	0.25	0.30	0.58	1 20.00%	0	0	4 80.00%	0	0	1	4
LUCKNOW	8	0.25	1.95	0.46	1.17	4 50.00%	0	0	4 50.00%	0	0	4	4
MAHOBA	8	0.38	2.35	0.22	1.27	3 37.50%	1 12.50%	0	4 50.00%	0	0	4	4
MAU	4	-	-	0.43	3.30	0	0	0	3 75.00%	1 25.00%	0	0	4
MEERUT	7	0.80	1.47	0.28	0.80	4 57.14%	0	0	3 42.86%	0	0	4	3
MIRZAPUR	9	0.04	5.69	0.37	0.90	3 33.33%	0	1 11.11%	5 55.56%	0	0	4	5
MUZAFFAR NAGAR	7	0.23	3.36	0.37	0.68	3 42.86%	1 14.29%	0	3 42.86%	0	0	4	3

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
PRATAPGARH	18	0.34	3.07	-	-	13 72.22%	5 27.78%	0	0	0	0	18	0
SAHARANPUR	12	0.27	3.21	0.66	0.66	8 66.67%	2 16.67%	0	1 8.33%	0	0	10	1
SANT RAVIDAS NAGAR	4	-	-	0.63	1.70	0	0	0	4 100.0%	0	0	0	4
SITAPUR	19	0.08	2.32	0.30	2.21	14 73.68%	2 10.53%	0	1 5.26%	1 5.26%	0	16	2
SONBHADRA	16	0.20	0.68	0.50	3.67	4 25.00%	0	0	10 62.50%	2 12.50%	0	4	12

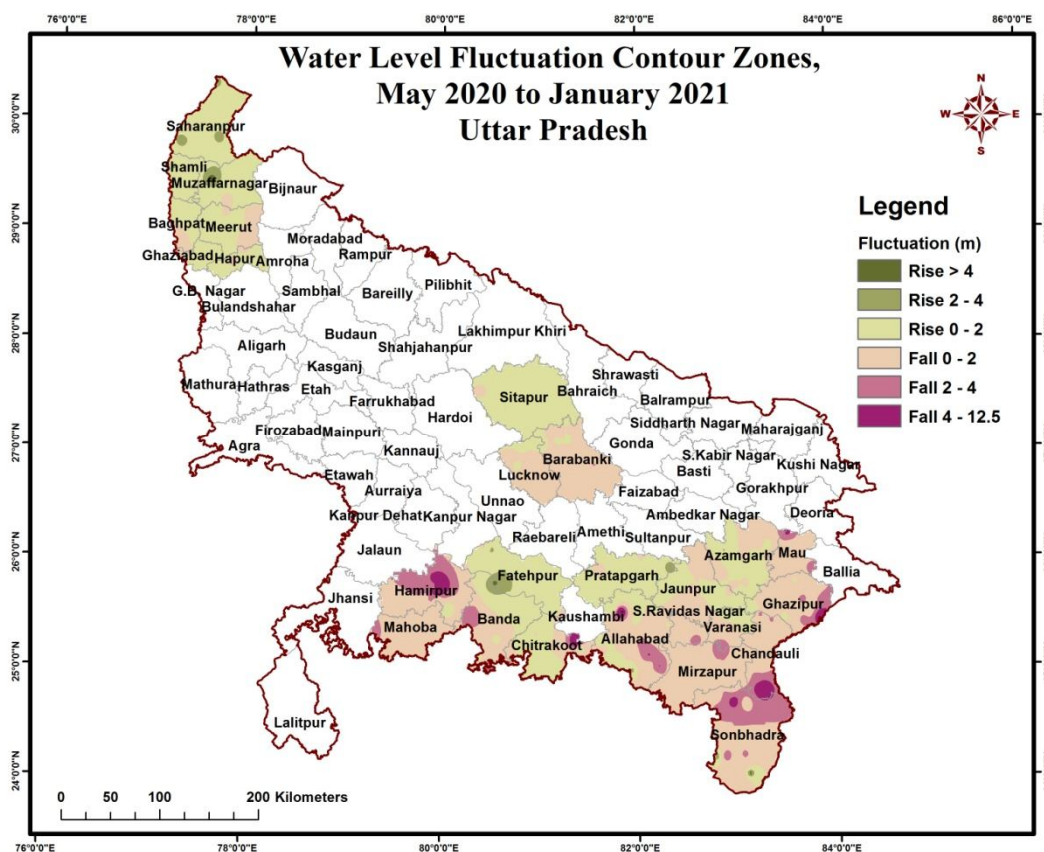
District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
VARANASI	6	0.45	1.10	0.70	1.81	3 50.00%	0	0	3 50.00%	0	0	3	3
Total	230	1.56	0.03	0.00	8.64	105	31	4	78	8	1	140	87



As due to covid -19 Pandemic, the water level data was not monitored from the entire district. From the analyzed data, it is found that there is a rise in 140 wells (60.86%) and fall in 87 wells (37.82%) general rise in water levels from 0 to 2 m as noticed in 103 wells (46.39%).The rise in water level is noticed in almost all the covered districts. The rise in water levels in the range of 0 - 2 m is observed in 105wells (45.65%). It observed mostly in Fatehpur, Pratapgarh, Chitrakoot, Mirzapur, Muzaffarnagar, and Saharanpur. The fall in water level, occurs in the range of 0 to 2mbgl is noticed 78 wells (33.91%) of the analyzed data.

May 2020 – January 2021:

By January the rainfall infiltration starts dissipating and ground water extraction which had come down during the monsoon also starts building up. But the rise in water level continues though at a lower scale. The water level data during pre-monsoon period i.e. May'20 and that of January'2021 have been analyzed to estimate the change in water levels. The same has been presented on district level in table-8 and depicted in Plate-IX.



There is a rise of water level in 116 no. of analyzed wells (52.25%) and a fall in 105no. (47.29%) wells. The rise in the range of 0–2 m is seen in 46.39 % wells covering almost all the districts of the state. Rise of 2 – 4 m is observed in 5.40% wells spread throughout the state. The fall in the range of 0 – 2mbgl is observed in 82 wells (36.93%).

The overall picture of change of ground water storage over the entire state during 2020 -21 which emerged from the analysis of pre and post monsoon water level observation and water level fluctuation during May’20 and January’21 has been summarized as follows.

Fluctuation Change of Groundwater Storage in U.P. (2020-21)

Magnitude of Change (m)	May’20 – Nov’20		May’20 – Jan’21	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	105 (45.65%)	78 (33.91%)	103 (46.39%)	82 (36.93%)
2-4	31 (13.47%)	8 (3.47%)	12 (5.40%)	14 (6.30%)
>4	4 (1.73%)	1 (0.43%)	1 (0.45%)	9 (4.05%)

It is evident from analyses that ground water has been recharged in most parts of the state and the quantum of recharge is reflected through a rise in water level to a tune of 0-4 m. Number of wells showing rise of 0-2 m in water level from May'2020 to November'2020 and it has further increases while comparing with May'2020 to January'2021 from 45.65% to 46.39% respectively. The rise of water level in the range of 2-4m has been decrease from 13.47% to 5.40% while compared with May 2020 –November 20120 to May 2020 to January 2021 respectively and number of wells showing rise of water level of more than 4 m has also been reduced from 1.73% to 0.45%.

Table- 8

**DISTRICT WISE – SEASONAL WATER LEVEL FLUCTUATION, U.P.
May' 2020 – January' 2021**

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
ALLAHABA D	28	0.24	1.73	0.04	9.09	12 42.86%	0	0	12 42.86%	1 3.57%	3 10.7%	12	16
AZAMGARH	13	0.28	2.16	0.33	1.80	6 46.15%	1 7.69 %	0	6 46.15%	0	0	7	6
BAGHPAT	2	1.14	1.14	1.98	1.98	1 50.00%	0	0	1 50.00%	0	0	1	1
BANDA	8	0.01	0.57	0.03	1.01	4 50.00%	0	0	4 50.00%	0	0	4	4
BARABANKI	8	0.53	0.66	0.25	2.00	2 25.00%	0	0	6 75.00%	0	0	2	6
CHANDAULI	7	-	-	0.35	7.60	0	0	0	3 42.86%	3 42.86%	1 14.2%	0	7
CHITRAKOOT	8	0.62	2.55	1.76	8.48	4 50.00%	1 12.50 %	0	1 12.50%	0	1 12.5%	5	2
FATEHPUR	7	0.63	3.29	0.19	0.47	4 57.14%	1 14.29 %	0	2 28.57%	0	0	5	2
GHAZIABAD	6	0.18	1.40	0.10	0.10	5 83.33%	0	0	1 16.67%	0	0	5	1

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
GHAZIPUR	12	0.01	1.95	0.40	7.03	4 33.33%	0	0	4 33.33%	3 25.00%	1 8.3%	4	8
HAMIRPUR	4	1.99	1.99	0.58	0.81	1 25.00%	0	0	3 75.00%	0	0	1	3
JAUNPUR	6	1.82	1.98	0.51	1.45	3 50.00%	0	0	3 50.00%	0	0	3	3
LUCKNOW	7	0.43	1.82	0.52	1.23	3 42.86%	0	0	4 57.14%	0	0	3	4
MAHOBA	6	0.11	0.11	0.32	4.78	1 16.67%	0	0	4 66.67%	0	1 16.6%	1	5
MAU	4	-	-	0.90	4.45	0	0	0	2 50.00%	1 25.00%	1 25.0%	0	4
MEERUT	8	0.30	1.31	0.08	0.24	6 75.00%	0	0	2 25.00%	0	0	6	2
MIRZAPUR	9	0.05	0.59	0.40	3.60	2 22.22%	0	0	5 55.56%	2 22.22%	0	2	7
MUZAFFAR NAGAR	7	0.07	3.65	0.28	0.58	4 57.14%	1 14.29%	0	2 28.57%	0	0	5	2
PRATAPGARH	17	0.09	2.53	0.07	0.80	13 76.47%	2 11.76%	0	2 11.76%	0	0	15	2

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
SAHARANPUR	11	0.07	7.90	0.34	0.34	6 54.55%	3 27.27 %	1 9.09%	1 9.09%	0	0	10	1
SANT RAVIDAS NAGAR	4	0.25	0.25	1.30	2.90	1 25.00%	0	0	2 50.00%	1 25.00%	0	1	3
SITAPUR	20	0.39	1.83	0.03	0.03	19 95.00%	0	0	1 5.00%	0	0	19	1
SONBHADRA	15	2.86	3.90	0.20	5.30	0	2 13.33 %	0	10 66.67%	2 13.33%	1 6.6%	2	13
VARANASI	5	0.88	2.05	1.85	3.50	2 40.00%	1 20.00 %	0	1 20.00%	1 20.00%	0	3	2
Total	222	2.86	0.11	0.03	9.09	103	12	1	82	14	9	116	105

6.2 Annual Fluctuation

Whereas the seasonal fluctuation in the water level occurs due to rainfall and irrigation as the two main factors during different periods of the year it is the annual fluctuation which gives the net result of one whole cycle of recharge and discharge that has taken place during one year. An annual decline indicates that ground water extraction has been in excess of the rainfall recharge in broad terms.

To evaluate the annual change in groundwater levels during 2020-21 as a resultant of different variables and to develop a strategy for future development, the water level of different seasons over the state was compared to that of the same season in the previous year. The outcome is discussed subsequently in brief.

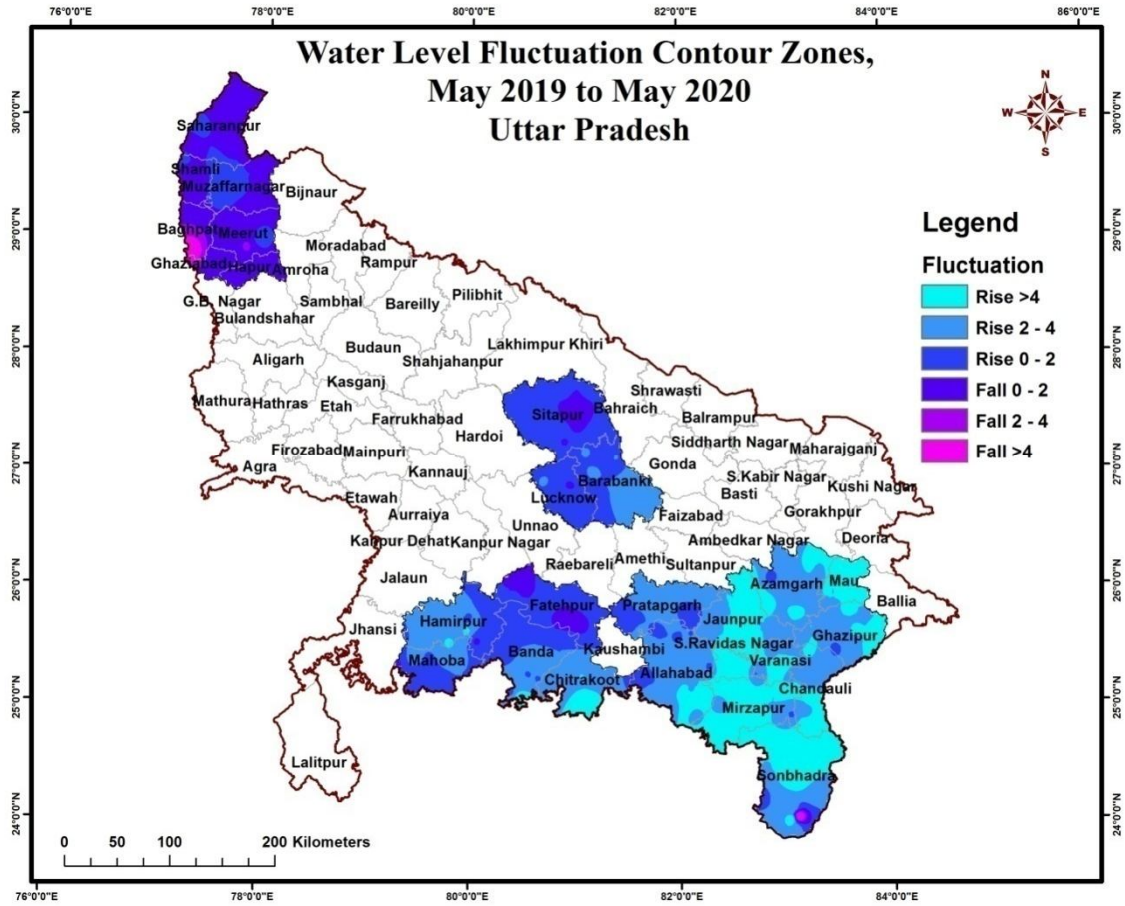
May 2019 –20:

The water level data collected during May'2020 has been compared with May'2019 data to evaluate the rise and fall in water levels since last one year. The wells have been categorized depending on rise and fall in water levels.

It is found that 151 no. (79.47%) monitoring wells show rise and 39 no. (20.52%) show fall in water level. The fall of 0 - 2 m is observed in (18.42%) monitoring wells in almost all parts of the state. This fall is prominent in Muzaffarnagar, Meerut, Fatehpur, Sitapur, Lucknow and Sonbhadra districts and the water level fall between 2 to 4mbgl and more 4m are mostly found in Baghpat, Meerut, Ghaziabad, and Sonbhadra district.

A rise of 0 - 2 m in water level are observed in almost 29.47% (56) of the monitoring wells in Saharanpur, Shamli, Baghpat, Ghaziabad, Hapur, Sitapur, Hardoi, Kanpur Nagar, Hamirpur, Mahoba, Banda, Chitrakoot, Lalitpur, Kaushambi and some parts of Mirzapur and Sonbhadra. Rise of 2-4 and more than 4m water level is observed in 62 and 33 wells respectively.

The district wise changes have been shown in Table-9 and the same is depicted in Plate-X



**DISTRICT WISE – ANNUAL WATER LEVEL FLUCTUATION, U.P.
May' 2019-2020**

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
ALLAHABA D	22	0.32	7.28	-	-	7 31.82%	11 50.00 %	4 18.18%	0	0	0	22	0
AZAMGARH	11	0.54	5.43	-	-	1 9.09%	6 54.55 %	4 36.36%	0	0	0	11	0
BAGHPAT	1	-	-	6.84	6.84	0	0	0	0	0	1 100.0%	0	1
BANDA	8	1.43	3.48	-	-	3 37.50%	5 62.50 %	0	0	0	0	8	0
BARABANKI	8	0.38	3.38	-	-	3 37.50%	5 62.50 %	0	0	0	0	8	0
CHANDAULI	6	2.05	10.48	-	-	0	3 50.00 %	3 50.00%	0	0	0	6	0
CHITRAKOOT	5	2.17	7.53	-	-	0	3 60.00 %	2 40.00%	0	0	0	5	0
FATEHPUR	7	0.07	0.56	0.33	1.19	3 42.86%	0	0	4 57.14%	0	0	3	4

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
GHAZIABAD	6	-	-	0.39	0.93	0	0	0	6 100.0 %	0	0	0	6
GHAZIPUR	12	1.91	8.78	0.79	1.20	1 8.33%	5 41.67 %	4 33.33%	2 16.67%	0	0	10	2
HAMIRPUR	4	3.17	4.99	0.53	0.53	0	1 25.00 %	2 50.00%	1 25.00%	0	0	3	1
JAUNPUR	1	5.85	5.85	-	-	0	0	1 100.00%	0	0	0	1	0
LUCKNOW	8	0.02	1.70	0.22	0.22	7 87.50%	0	0	1 12.50%	0	0	7	1
MAHOBA	7	0.22	3.41	-	-	4 57.14%	3 42.86 %	0	0	0	0	7	0
MAU	3	3.36	5.70	-	-	0	1 33.33 %	2 66.67%	0	0	0	3	0
MEERUT	8	1.42	1.42	0.07	3.00	1 12.50%	0	0	5 62.50%	2 25.00%	0	1	7
MIRZAPUR	7	1.42	8.47	-	-	1 14.29%	2 28.57 %	4 57.14%	0	0	0	7	0
MUZAFFAR NAGAR	7	0.47	1.17	0.20	0.70	4 57.14%	0	0	3 42.86%	0	0	4	3
PRATAPGAR H	13	0.56	3.75	-	-	5 38.46%	8 61.54 %	0	0	0	0	13	0

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
SAHARANPUR	9	0.63	1.03	0.16	1.59	2 22.22%	0	0	7 77.78%	0	0	2	7
SANT RAVIDAS NAGAR	2	3.97	5.82	-	-	0	1 50.00%	1 50.00%	0	0	0	2	0
SITAPUR	17	0.20	1.54	0.06	0.92	11 64.71%	0	0	6 35.29%	0	0	11	6
SONBHADRA	11	0.32	10.85	10.60	10.60	1 9.09%	6 54.55%	3 27.27%	0	0	1 9.0%	10	1
VARANASI	7	0.07	5.49	-	-	2 28.57%	2 28.57%	3 42.86%	0	0	0	7	0
Total	190	5.85	0.56			56	62	33	35	2	2	151	39

August 2019-20:

The water level data collected during August'2020 has been compared with Aug'2019 data to evaluate the rise and fall in water levels since last one year. The wells have been categorized depending on rise and fall in water levels.

There is rise of water level in 317 wells (73.21%) and fall in 114 wells (26.32%). The fall in water level is due to scanty monsoonal rainfall in some of the area. A rise of 0 -2 m is observed in almost all parts of the covered district during Covid 19 Pandemic. It is noticed in 208 monitoring stations (48.03%) of the districts such as Saharanpur, Shamli, Muzaffarnagar, LakhimpurKhiri, Sitapur, Hardoi,Aurraiya, Kanpur Dehat, Unnao, Fatehpur, Raebarelli, Amethi, Ambedkar, Sultanpur, Ballia and Sonbhadra. A rise of 2-4 m is seen in 77 wells (17.78%) and rise of more than 4 m is seen in 32 wells (7.39 %)mainly in eastern and southern districts of the state such as Ballia, Ghazipur,Mau, Varanasi, Sonbhadra, S.RavidasNagar,Allahabad, Chitrakoot, Banda, Hamirpur and Mahoba.

The fall of 0 -2 m in levels is observed in 106 wells(24.48% of the monitored wells) present in the scattered pattern coveringSaharanpur, Meerut, Baghpat, Ghaziabad, Hapur, northern part of LakhimpurKhiri, Hardoi,Kannauj, Aurraiya, Kanpur Dehat, Raebarelli, Ayodhya, Shravasti, Bahraich, Ballia and Sonbhadra districts of the State.A fall of 2 - 4m and more than 4m is observed in 5 (1.15% wells) and 3(0.69%) respectively.

The district wise changes have been shown in Table-10 and the same is depicted in Plate-XI.

Plate-XI

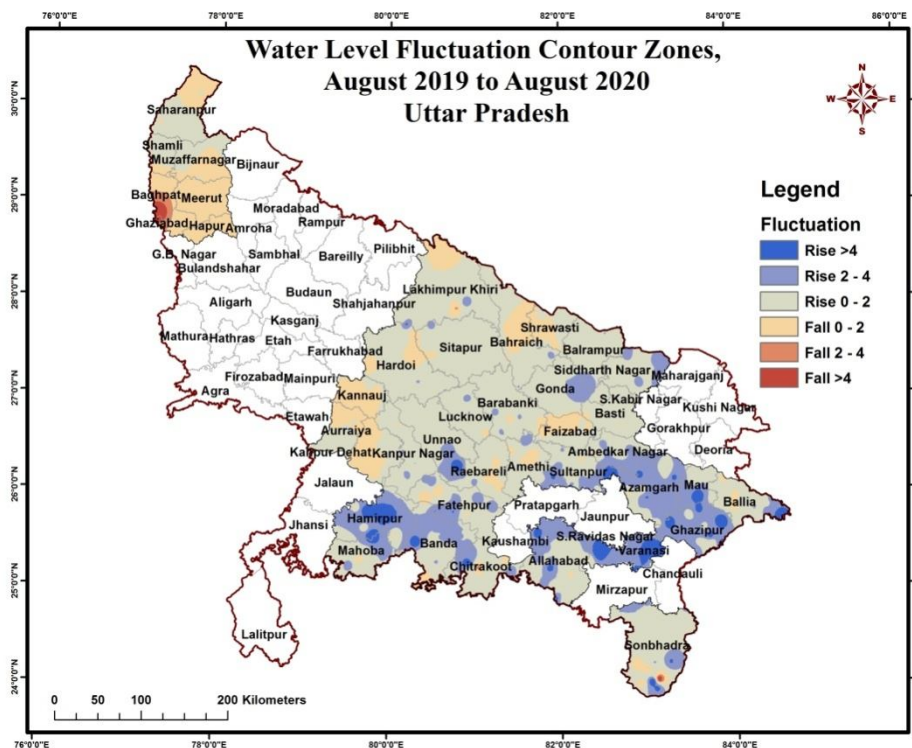


Table-10

DISTRICTWISE- ANNUAL WATER LEVEL FLUCTUATION, U.P
August' 2019 -2020

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
ALLAHABAD	33	0.07	6.32	0.11	0.24	14 42.42%	8 24.24 %	6 18.18%	4 12.12%	0	0	28	4
AMBEDKAR NAGAR	7	0.01	2.75	0.41	0.41	3 42.86%	3 42.86 %	0	1 14.29%	0	0	6	1
AURAIYA	8	0.19	0.84	0.02	1.78	5 62.50%	0	0	3 37.50%	0	0	5	3
AZAMGARH	15	0.24	4.86	0.26	0.40	5 33.33%	5 33.33 %	3 20.00%	2 13.33%	0	0	13	2
BAGHPAT	2	-	-	6.59	7.48	0	0	0	0	0	2 100.0%	0	2
BAHRAICH	9	0.52	2.35	0.10	0.40	3 33.33%	1 11.11 %	0	5 55.56%	0	0	4	5
BALLIA	16	0.41	5.69	0.15	0.45	7 43.75%	2 12.50 %	1 6.25%	6 37.50%	0	0	10	6
BALRAMPU R	15	0.05	3.59	0.25	0.25	12 80.00%	2 13.33 %	0	1 6.67%	0	0	14	1

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BANDA	9	0.08	5.68	0.22	3.78	5 55.56%	1 11.11 %	1 11.11%	1 11.11%	1 11.11%	0	7	2
BARABANKI	19	0.12	3.22	1.87	1.87	15 78.95%	3 15.79 %	0	1 5.26%	0	0	18	1
BASTI	7	0.29	1.90	0.10	0.27	4 57.14%	0	0	3 42.86%	0	0	4	3
CHITRAKOOT	9	0.31	7.72	0.26	3.58	3 33.33%	1 11.11 %	2 22.22%	2 22.22%	1 11.11%	0	6	3
FAIZABAD	10	0.06	2.50	0.14	1.83	2 20.00%	2 20.00 %	0	6 60.00%	0	0	4	6
FATEHPUR	9	2.65	4.27	0.30	1.87	0	4 44.44 %	2 22.22%	3 33.33%	0	0	6	3
GHAZIABAD	6	-	-	0.06	1.62	0	0	0	6 100.0 %	0	0	0	6
GHAZIPUR	15	0.32	7.54	0.26	1.15	4 26.67%	4 26.67 %	5 33.33%	2 13.33%	0	0	13	2
GONDA	7	0.60	3.73	-	-	5 71.43%	2 28.57 %	0	0	0	0	7	0
HAMIRPUR	5	0.91	7.53	0.41	0.41	1 20.00%	2 40.00 %	1 20.00%	1 20.00%	0	0	4	1

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
HARDOI	15	0.21	5.02	0.02	2.31	6 40.00%	1 6.67%	1 6.67%	6 40.00%	1 6.67%	0	8	7
KANNAUJ	4	0.11	0.11	0.18	1.93	1 25.00%	0	0	3 75.00%	0	0	1	3
KANPUR DEHAT	7	0.20	1.28	0.13	1.11	2 28.57%	0	0	5 71.43%	0	0	2	5
KANPUR NAGAR	11	0.22	3.18	0.19	0.26	4 36.36%	5 45.45%	0	2 18.18%	0	0	9	2
KHERI	7	0.17	3.71	0.20	0.88	4 57.14%	1 14.29%	0	2 28.57%	0	0	5	2
LUCKNOW	22	0.04	3.30	-	-	19 86.36%	3 13.64%	0	0	0	0	22	0
MAHOBA	6	0.79	3.18	3.46	3.46	4 66.67%	1 16.67%	0	0	1 16.67%	0	5	1
MAU	3	1.01	1.68	-	-	3 100.00%	0	0	0	0	0	3	0
MEERUT	9	-	-	0.15	1.44	0	0	0	9 100.0%	0	0	0	9
MUZAFFAR NAGAR	8	0.08	1.28	0.08	0.35	5 62.50%	0	0	3 37.50%	0	0	5	3
RAE BARELI	23	0.01	2.86	0.01	0.37	16 69.57%	1 4.35%	0	6 26.09%	0	0	17	6

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
SAHARANPUR	11	0.12	1.02	0.03	0.60	5 45.45%	0	0	6 54.55%	0	0	5	6
SANT RAVIDAS NAGAR	3	2.40	9.60	0.35	0.35	0	1 33.33 %	1 33.33%	1 33.33%	0	0	2	1
SHRAWASTI	11	0.03	0.72	0.02	1.20	6 54.55%	0	0	5 45.45%	0	0	6	5
SIDDHARTH NAGAR	9	0.29	3.80	-	-	4 44.44%	5 55.56 %	0	0	0	0	9	0
SITAPUR	17	0.10	1.96	0.06	0.06	16 94.12%	0	0	1 5.88%	0	0	16	1
SONBHADRA	13	0.16	7.64	0.65	7.11	3 23.08%	3 23.08 %	3 23.08%	2 15.38%	1 7.69%	1 7.6%	9	4
SULTANPUR	35	0.07	5.01	0.03	1.90	14 40.00%	12 34.29 %	2 5.71%	6 17.14%	0	0	28	6
UNNAO	11	0.15	2.15	0.05	0.18	7 63.64%	2 18.18 %	0	2 18.18%	0	0	9	2
VARANASI	7	1.53	7.15	-	-	1 14.29%	2 28.57 %	4 57.14%	0	0	0	7	0
Total	433	2.65	0.11			208	77	32	106	5	3	317	114

November 2019 – 20:

The water level data collected during November'2020 has been compared with November'2019 data to evaluate the rise and fall in water levels since last one year. It is observed that 236 wells (36.47%) show rise and 400 wells(61.82%) show fall in water level due to scanty monsoonal rainfall resulting in to decline of groundwater level.

A rise of 0 -2m,water levels, is observed in 205 wells (31.68%)covering Saharanpur, Muzaffarnagar, Bijnaur, Moradabad, LahimpurKhiri, Shahjahnpur, Sitapur, Shrawasti, Balrampur, Siddharth Nagar, Gonda, S.KabirNagar,Basti, Gorakhpur, Ambedkar Nagar, Sultanpur, Pratapgarh, Ballia, Ghaazipur, Chndaulli, Mirzapur, Chitrakoot, Banda, Hamirpur, Fatehpur, Unnao, Lucknow and Barabankidistricts of the State. Rise of 2 - 4 m is observed mainly Southern and South East district of the State such as Hamirpur, Banda, Chitrakoot, Mirzapur and Chandaulli.

The fall of 0-2 m in levels is observed in 336 wells (51.93%) covering in all parts of the State excepts few districts of Terai region. A fall of 2 - 4m and more than 4m are observed in 45wells (6.95%) and 19 wells (2.93%) respectively. It observed mainly in Sonbhadra, S,Ravidas Nagar, Allahbad, Pratapgarh, Fatehpur, Hamirpur, Lalitpur and Agra District.

The district wise changes have been shown in Table-11 and the same is depicted in Plate-XII

DISTRICTWISE– ANNUAL WATER LEVEL FLUCTUATION, U.P
November' 2019– 2020

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
AGRA	10	4.14	4.14	0.16	7.84	0	0	1 10.00%	5 50.00%	2 20.00%	2 20.00%	1	9
ALIGARH	7	1.10	1.10	0.06	1.88	1 14.29%	0	0	6 85.71%	0	0	1	6
ALLAHABA D	30	0.02	1.21	0.02	8.23	9 30.00%	0	0	19 63.33%	1 3.33%	1 3.3%	9	21
AMBEDKAR NAGAR	7	0.30	1.27	0.50	0.58	5 71.43%	0	0	2 28.57%	0	0	5	2
AURAIYA	8	0.04	0.04	0.21	3.34	1 12.50%	0	0	4 50.00%	3 37.50%	0	1	7
AZAMGARH	16	0.08	1.50	0.35	2.96	8 50.00%	0	0	6 37.50%	1 6.25%	0	8	7
BAGHPAT	2	-	-	0.78	1.67	0	0	0	2 100.0 %	0	0	0	2
BAHRAICH	11	0.03	0.14	0.07	0.45	4 36.36%	0	0	7 63.64%	0	0	4	7
BALLIA	18	0.04	1.64	0.11	2.27	5 27.78%	0	0	12 66.67%	1 5.56%	0	5	13

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BALRAMPU R	18	0.10	2.60	0.05	0.07	10 55.56%	2 11.11 %	0	4 22.22%	0	0	12	4
BANDA	10	0.31	3.16	0.14	3.49	4 40.00%	1 10.00 %	0	3 30.00%	2 20.00%	0	5	5
BARABANKI	18	0.14	0.49	0.11	0.94	6 33.33%	0	0	11 61.11%	0	0	6	11
BAREILLY	10	0.30	0.50	0.35	6.10	2 20.00%	0	0	5 50.00%	1 10.00%	1 10.00%	2	7
BASTI	7	0.08	1.80	-	-	7 100.00%	0	0	0	0	0	7	0
BIJNOR	5	0.19	0.46	0.09	0.65	3 60.00%	0	0	2 40.00%	0	0	3	2
BUDAUN	2	-	-	1.40	3.40	0	0	0	1 50.00%	1 50.00%	0	0	2
BULANDSH AHR	1	-	-	0.59	0.59	0	0	0	1 100.0 %	0	0	0	1
CHANDAULI	7	2.00	2.17	0.57	2.55	1 14.29%	1 14.29 %	0	3 42.86%	2 28.57%	0	2	5
CHITRAKOO T	8	0.12	7.29	0.83	1.01	2 25.00%	2 25.00 %	2 25.00%	2 25.00%	0	0	6	2
DEORIA	8	0.59	0.90	0.10	1.20	2 25.00%	0	0	6 75.00%	0	0	2	6

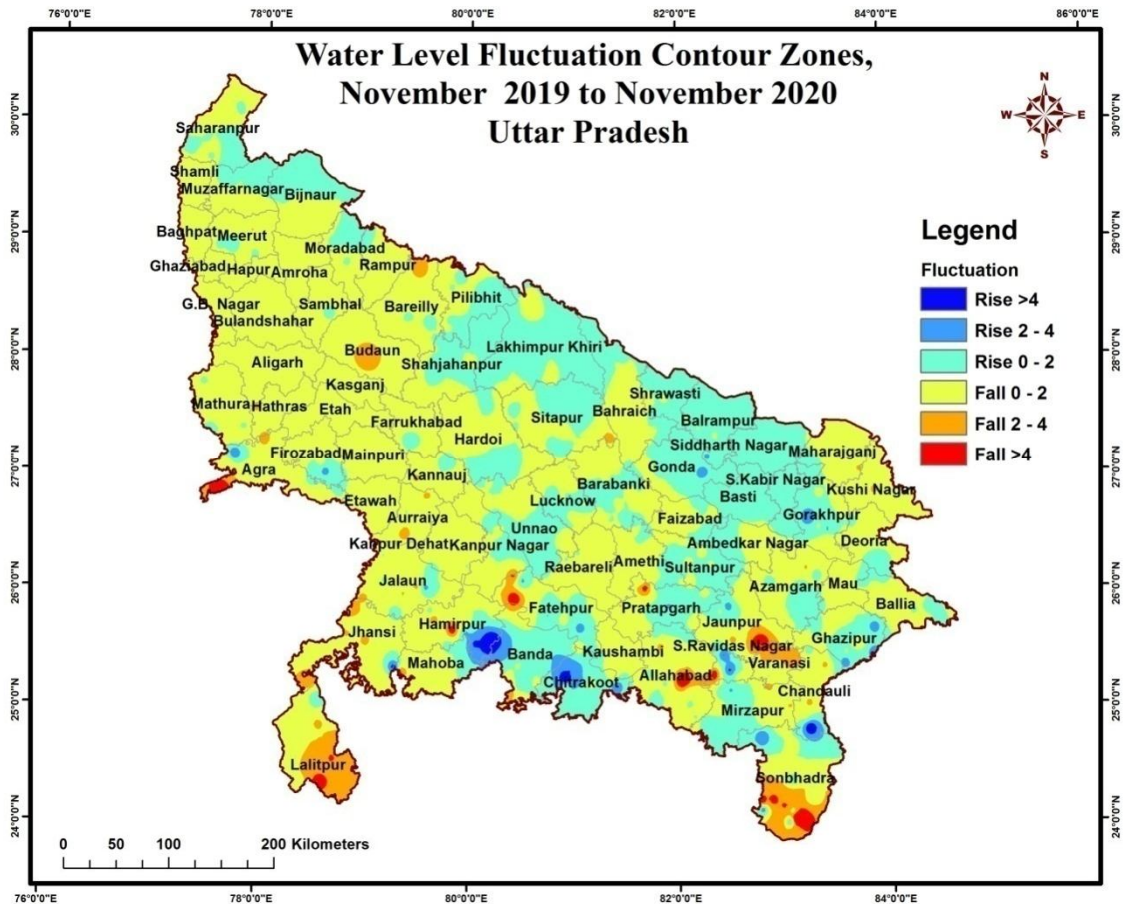
District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
ETAH	8	-	-	0.11	1.77	0	0	0	8 100.0%	0	0	0	8
FAIZABAD	11	0.13	0.47	0.10	0.89	4 36.36%	0	0	6 54.55%	0	0	4	6
FARRUKHABAD	2	-	-	0.26	0.79	0	0	0	2 100.0%	0	0	0	2
FATEHPUR	9	0.73	2.14	0.16	6.16	2 22.22%	1 11.11%	0	4 44.44%	0	2 22.2%	3	6
FIROZABAD	4	2.89	2.89	0.36	0.75	0	1 25.00%	0	3 75.00%	0	0	1	3
GHAZIABAD	5	-	-	0.13	0.87	0	0	0	5 100.0%	0	0	0	5
GONDA	6	0.03	2.65	-	-	5 83.33%	1 16.67%	0	0	0	0	6	0
GORAKHPUR	4	2.45	2.45	0.30	1.13	0	1 25.00%	0	3 75.00%	0	0	1	3
HAMIRPUR	7	0.51	8.38	0.04	3.05	2 28.57%	1 14.29%	2 28.57%	1 14.29%	1 14.29%	0	5	2
HARDOI	15	0.01	1.25	0.15	1.78	6 40.00%	0	0	9 60.00%	0	0	6	9
HATHRAS	3	-	-	1.18	2.39	0	0	0	2 66.67%	1 33.33%	0	0	3

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
JALAUN	24	0.36	2.87	0.11	2.85	3 12.50%	1 4.17 %	0	15 62.50%	3 12.50%	0	4	18
JAUNPUR	14	0.13	3.43	0.10	7.70	4 28.57%	1 7.14 %	0	6 42.86%	2 14.29%	1 7.1%	5	9
JHANSI	14	8.89	8.89	0.23	4.06	0	0	1 7.14%	7 50.00%	5 35.71%	1 7.1%	1	13
JYOTIBA PHULE NAGAR	7	0.24	0.24	0.26	1.16	1 14.29%	0	0	6 85.71%	0	0	1	6
KANNAUJ	4	1.06	1.06	0.03	2.35	1 25.00%	0	0	2 50.00%	1 25.00%	0	1	3
KANPUR DEHAT	5	-	-	0.13	1.24	0	0	0	4 80.00%	0	0	0	4
KANPUR NAGAR	11	0.03	1.68	0.33	1.28	6 54.55%	0	0	5 45.45%	0	0	6	5
KAUSHAMBI	6	0.18	0.18	0.22	0.99	1 16.67%	0	0	5 83.33%	0	0	1	5
KHERI	6	0.06	2.07	0.62	0.62	4 66.67%	1 16.67 %	0	1 16.67%	0	0	5	1
KUSHINAGA R	5	-	-	0.05	2.38	0	0	0	4 80.00%	1 20.00%	0	0	5
LALITPUR	15	1.97	1.97	0.18	5.21	1 6.67%	0	0	9 60.00%	3 20.00%	2 13.3%	1	14

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
LUCKNOW	22	0.41	11.23	0.03	1.05	5 22.73%	1 4.55 %	1 4.55%	15 68.18%	0	0	7	15
MAHOBA	8	0.33	5.65	0.71	5.02	1 12.50%	0	1 12.50%	4 50.00%	1 12.50%	1 12.50%	2	6
MAHARAJGA NJ	5	-	-	0.98	2.20	0	0	0	3 60.00%	2 40.00%	0	0	5
MAINPURI	5	-	-	0.45	1.65	0	0	0	5 100.0 %	0	0	0	5
MATHURA	14	0.05	0.76	0.12	1.40	4 28.57%	0	0	10 71.43%	0	0	4	10
MAU	4	0.94	0.94	0.24	0.68	1 25.00%	0	0	3 75.00%	0	0	1	3
MEERUT	7	0.28	1.05	0.07	2.16	2 28.57%	0	0	4 57.14%	1 14.29%	0	2	5
MIRZAPUR	10	0.08	2.15	0.35	2.30	4 40.00%	1 10.00 %	0	4 40.00%	1 10.00%	0	5	5
MORADABA D	7	0.15	0.71	1.03	1.47	5 71.43%	0	0	2 28.57%	0	0	5	2
PILIBHIT	8	0.15	0.62	0.06	1.53	4 50.00%	0	0	4 50.00%	0	0	4	4

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
PRATAPGAR H	23	0.06	2.40	0.20	5.54	7 30.43%	1 4.35 %	0	12 52.17%	2 8.70%	1 4.3%	8	15
RAE BARELI	22	0.24	0.48	0.02	2.31	3 13.64%	0	0	18 81.82%	1 4.55%	0	3	19
RAMPUR	2	0.12	0.12	0.50	0.50	1 50.00%	0	0	1 50.00%	0	0	1	1
SANT KABIR NAGAR	3	0.46	0.89	-	-	3 100.00%	0	0	0	0	0	3	0
SANT RAVIDAS NAGAR	4	3.68	4.19	1.00	8.95	0	1 25.00 %	1 25.00%	1 25.00%	0	1 25.00%	2	2
SHAHJAHAN PUR	2	0.80	0.80	0.30	0.30	1 50.00%	0	0	1 50.00%	0	0	1	1
SHRAWASTI	11	0.03	0.95	0.05	0.22	8 72.73%	0	0	3 27.27%	0	0	8	3
SIDDHARTH NAGAR	9	0.10	2.15	0.92	0.92	7 77.78%	1 11.11 %	0	1 11.11%	0	0	8	1
SITAPUR	17	0.20	1.75	0.02	3.63	11 64.71%	0	0	5 29.41%	1 5.88%	0	11	6
SONBHADR A	16	1.08	3.54	0.45	13.84	1 6.25%	3 18.75 %	0	4 25.00%	3 18.75%	5 31.2%	4	12

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
SULTANPUR	38	0.07	1.60	0.16	0.88	19 50.00%	0	0	18 47.37%	0	0	19	18
UNNAO	16	0.01	0.54	0.02	0.75	7 43.75%	0	0	8 50.00%	0	0	7	8
VARANASI	6	1.25	1.25	1.20	4.25	1 16.67%	0	0	2 33.33%	2 33.33%	1 16.6%	1	5
Total	647	8.89	0.04	0.00	13.84	205	22	9	336	45	19	236	400



January 2020 –21

To evaluate the rise and fall in water level in January’2021 with respect to January’2020, water level data of wells have been analysed. The fluctuation data shows rise of water level in 192 Nos (27.66%) and fall in 498 Nos (71.75%) of the analyzed wells.

The fluctuation data of the state shows a fall of 0 to 2 m in 431 no. of analysedwells (62.10%) is observed in all districts of the States where a fall of 2 to 4m and more than 4m are observed in 50(7.20%) and 17(2.44%) wells. It is observed mostly in Meerut, Hamirpur, Jalaun, Jhnasi, Lalitpur, Mahoba, Hamirpur, Chitarkoot, Allahabad, S.Ravidas Nagar, Varansi and Sonbhadra districts.

A rise of 0-2 m in water level is noticed in 178 no. of analysed wells (25.64%). It scatters in patches, mainly Saharanpur, Pilibhit, Shahjahnpur, G.B.Nagar, Bulandshahar, Aligarh, Agra, Banda, Fatehpur, Sultanpur, Ambedkar Nagar, Azamgarh, Gorakhpur, Mau, Deoria and BalliaDistricts. Rise of 2-4m is observed in 12 wells mainly in Gorakhpur, S. RavidasNadar, Banda, Agra and G B Nagar districts whereas more than 4m is observed only

in Banda and G B Nagar district. The district wise changes has been shown in Table-12 and depicted in the Plate-XIII.

Plate -XIII

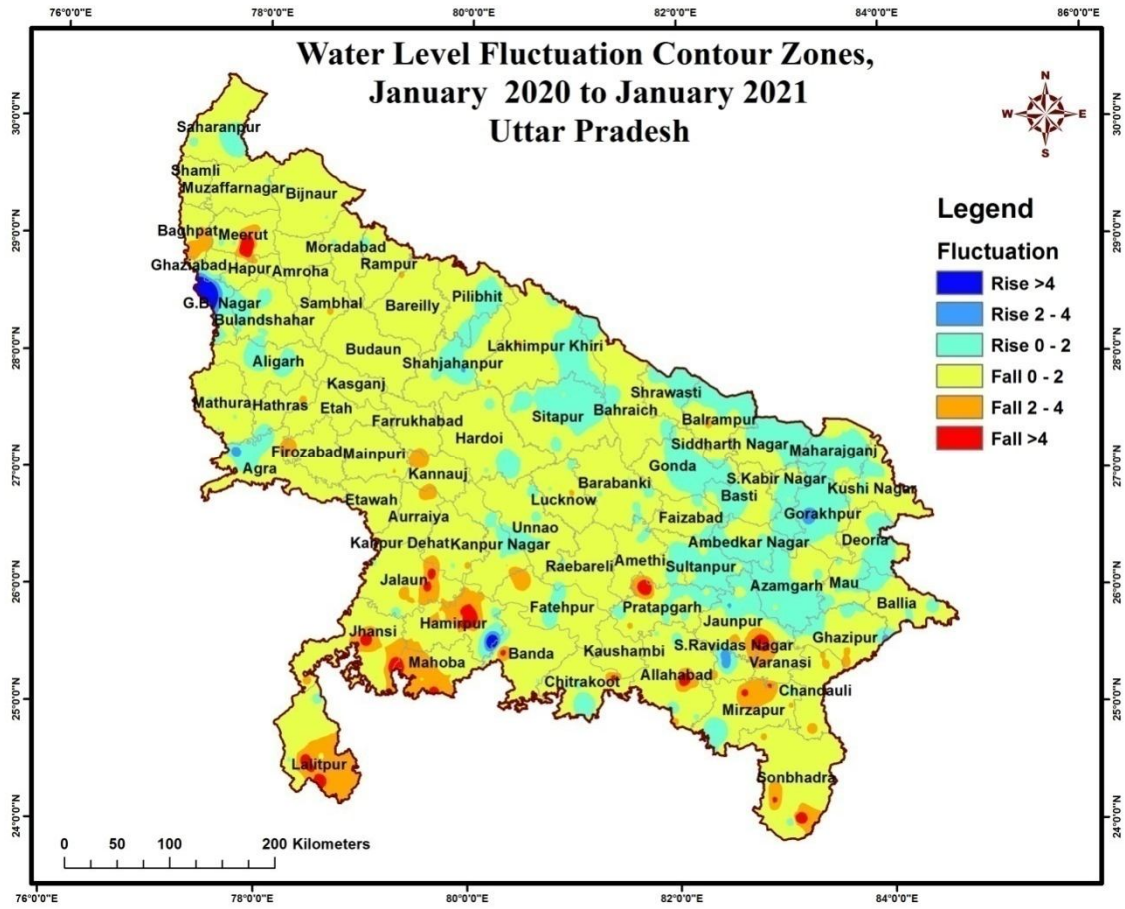


Table -12

DISTRICTWISE- ANNUAL WATER LEVEL FLUCTUATION, U.P
January' 2020 – 2021

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
AGRA	7	1.48	3.81	0.12	1.87	1 14.29%	1 14.29%	0	5 71.43%	0	0	2	5
ALIGARH	7	0.12	1.59	0.99	1.62	4 57.14%	0	0	3 42.86%	0	0	4	3
ALLAHABA D	32	0.03	0.90	0.02	8.13	5 15.63%	0	0	23 71.88%	3 9.38%	1 3.1%	5	27
AMBEDKAR NAGAR	7	0.10	1.14	0.23	0.33	5 71.43%	0	0	2 28.57%	0	0	5	2
AURAIYA	8	0.07	0.19	0.34	3.75	2 25.00%	0	0	4 50.00%	2 25.00%	0	2	6
AZAMGARH	15	0.30	2.57	0.32	1.25	9 60.00%	3 20.00%	0	3 20.00%	0	0	12	3
BAGHPAT	2	-	-	3.37	3.43	0	0	0	0	2 100.00%	0	0	2
BAHRAICH	11	0.10	0.45	0.05	0.93	3 27.27%	0	0	8 72.73%	0	0	3	8

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BALLIA	19	0.15	0.71	0.01	2.98	5 26.32%	0	0	13 68.42%	1 5.26%	0	5	14
BALRAMPU R	16	0.07	1.98	0.13	0.77	7 43.75%	0	0	9 56.25%	0	0	7	9
BANDA	9	0.01	0.13	0.36	5.00	2 22.22%	0	0	6 66.67%	0	1 11.1%	2	7
BARABANKI	18	0.18	0.31	0.03	1.38	2 11.11%	0	0	16 88.89%	0	0	2	16
BAREILLY	9	-	-	0.05	2.08	0	0	0	7 77.78%	1 11.11%	0	0	8
BASTI	7	0.55	1.55	0.22	0.73	2 28.57%	0	0	5 71.43%	0	0	2	5
BIJNOR	5	0.10	0.10	0.35	1.60	1 20.00%	0	0	4 80.00%	0	0	1	4
BUDAUN	2	-	-	0.83	0.95	0	0	0	2 100.0%	0	0	0	2
BULANDSH AHR	2	0.18	0.56	-	-	2 100.00%	0	0	0	0	0	2	0

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
CHANDAULI	7	-	-	0.15	2.60	0	0	0	2 28.57%	4 57.14%	0	0	6
CHITRAKOOT	9	0.23	1.04	0.55	5.18	4 44.44%	0	0	3 33.33%	1 11.11%	1 11.1%	4	5
DEORIA	5	1.12	1.19	0.35	2.16	2 40.00%	0	0	2 40.00%	1 20.00%	0	2	3
ETAH	9	-	-	0.33	2.15	0	0	0	8 88.89%	1 11.11%	0	0	9
ETAWAH	4	-	-	0.26	1.33	0	0	0	4 100.0%	0	0	0	4
FAIZABAD	11	0.03	0.40	0.17	1.08	4 36.36%	0	0	7 63.64%	0	0	4	7
FARRUKHABAD	2	-	-	0.27	2.05	0	0	0	1 50.00%	1 50.00%	0	0	2
FATEHPUR	14	0.16	1.88	0.10	4.18	4 28.57%	0	0	7 50.00%	2 14.29%	1 7.1%	4	10
FIROZABAD	3	-	-	0.59	1.17	0	0	0	3 100.0%	0	0	0	3

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
GAUTAM BUDDHA NAGAR	2	19.88	19.88	0.83	0.83	0	0	1 50.00%	1 50.00%	0	0	1	1
GHAZIABAD	6	-	-	0.17	0.65	0	0	0	6 100.0%	0	0	0	6
GHAZIPUR	15	0.25	1.37	0.07	2.99	4 26.67%	0	0	9 60.00%	2 13.33%	0	4	11
GONDA	7	0.02	1.88	0.05	0.59	4 57.14%	0	0	3 42.86%	0	0	4	3
GORAKHPUR	4	0.30	0.69	0.10	0.10	3 75.00%	0	0	1 25.00%	0	0	3	1
HAMIRPUR	8	0.06	9.06	0.02	2.68	3 37.50%	0	1 12.50%	3 37.50%	1 12.50%	0	4	4
HARDOI	14	0.16	0.65	0.21	1.78	4 28.57%	0	0	10 71.43%	0	0	4	10
HATHRAS	3	-	-	0.03	2.51	0	0	0	1 33.33%	2 66.67%	0	0	3
JALAUN	25	0.30	0.89	0.16	5.70	3 12.00%	0	0	18 72.00%	2 8.00%	2 8.00%	3	22

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
JAUNPUR	18	0.25	3.95	0.05	7.27	4 22.22%	2 11.11%	0	9 50.00%	2 11.11%	1 5.5%	6	12
JHANSI	16	-	-	0.09	5.93	0	0	0	13 81.25%	2 12.50%	1 6.2%	0	16
JYOTIBA PHULE NAGAR	7	0.15	0.15	0.05	1.78	1 14.29%	0	0	6 85.71%	0	0	1	6
KANNAUJ	3	-	-	0.85	3.27	0	0	0	2 66.67%	1 33.33%	0	0	3
KANPUR DEHAT	5	0.31	0.31	0.11	2.26	1 20.00%	0	0	3 60.00%	1 20.00%	0	1	4
KANPUR NAGAR	12	0.57	1.82	0.09	2.18	3 25.00%	0	0	8 66.67%	1 8.33%	0	3	9
KAUSHAMBI	5	0.17	0.17	0.34	1.79	1 20.00%	0	0	4 80.00%	0	0	1	4
KHERI	6	0.05	2.03	1.73	1.73	4 66.67%	1 16.67%	0	1 16.67%	0	0	5	1
KUSHINAGAR	5	0.35	0.60	0.22	0.76	2 40.00%	0	0	3 60.00%	0	0	2	3

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
LALITPUR	15	0.07	0.70	0.14	4.85	3 20.00%	0	0	8 53.33%	1 6.67%	3 20.0%	3	12
LUCKNOW	20	0.28	1.02	0.11	1.71	2 10.00%	0	0	18 90.00%	0	0	2	18
MAHOBA	7	-	-	0.24	7.22	0	0	0	2 28.57%	3 42.86%	2 28.5%	0	7
MAHRAJGA NJ	4	0.20	0.30	0.09	0.66	2 50.00%	0	0	2 50.00%	0	0	2	2
MAINPURI	5	-	-	0.66	2.16	0	0	0	4 80.00%	1 20.00%	0	0	5
MATHURA	14	0.07	0.22	0.35	1.18	4 28.57%	0	0	10 71.43%	0	0	4	10
MAU	6	0.17	2.02	0.01	1.16	2 33.33%	1 16.67%	0	3 50.00%	0	0	3	3
MEERUT	8	0.11	0.56	0.14	1.48	2 25.00%	0	0	6 75.00%	0	0	2	6
MIRZAPUR	10	0.78	1.53	0.18	3.95	2 20.00%	0	0	6 60.00%	2 20.00%	0	2	8
MORADABA D	7	0.04	0.04	0.05	2.18	1 14.29%	0	0	5 71.43%	1 14.29%	0	1	6

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
MUZAFFAR NAGAR	8	0.22	0.22	0.27	1.45	1 12.50%	0	0	7 87.50%	0	0	1	7
PILIBHIT	10	0.63	0.67	0.04	1.20	2 20.00%	0	0	8 80.00%	0	0	2	8
PRATAPGAR H	20	0.48	1.76	0.02	2.81	7 35.00%	0	0	10 50.00%	3 15.00%	0	7	13
RAE BARELI	22	-	-	0.24	2.88	0	0	0	19 86.36%	3 13.64%	0	0	22
RAMPUR	3	0.20	0.53	0.43	0.43	2 66.67%	0	0	1 33.33%	0	0	2	1
SAHARANP UR	13	0.05	1.10	0.08	1.05	3 23.08%	0	0	10 76.92%	0	0	3	10
SANT KABIR NAGAR	3	-	-	0.05	0.52	0	0	0	2 66.67%	0	0	0	2
SANT RAVIDAS NAGAR	4	3.64	3.94	1.20	4.16	0	2 50.00%	0	1 25.00%	0	1 25.00%	2	2
SHAHJAHAN PUR	2	2.60	2.60	1.00	1.00	0	1 50.00%	0	1 50.00%	0	0	1	1

District Name	No. of Wells	Range of Fluctuation(m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
SHRAWASTI	11	0.25	1.00	0.42	0.80	4 36.36%	0	0	7 63.64%	0	0	4	7
SIDDHARTH NAGAR	10	0.07	0.93	0.28	0.64	7 70.00%	0	0	3 30.00%	0	0	7	3
SITAPUR	18	0.14	1.42	0.14	0.42	11 61.11%	0	0	6 33.33%	0	0	11	6
SONBHADR A	14	2.16	2.16	0.06	9.20	0	1 7.14 %	0	9 64.29%	2 14.29%	2 14.2%	1	13
SULTANPUR	37	0.11	1.40	0.02	1.59	18 48.65%	0	0	19 51.35%	0	0	18	19
UNNAO	16	0.02	0.52	0.01	0.90	3 18.75%	0	0	13 81.25%	0	0	3	13
VARANASI	6	1.23	1.23	0.35	4.75	1 16.67%	0	0	3 50.00%	1 16.67%	1 16.6%	1	5
Total	694	19.88	0.04	0.00	9.20	178	12	2	431	50	17	192	498

The overall status of annual fluctuation in the state is summarized in following table.

Annual Fluctuation in Water Level During 2020 –21, U.P.

FLUCTUATION RANGE	May 19 – 20		August 19 – 20		November 19 -20		January 20 – 21	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	56 (29.47%)	35 (17.36%)	208 (48.03%)	106 (24.48%)	205 (31.68%)	336 (51.93%)	178 (25.64%)	431 (62.10%)
2-4	62 (32.63%)	2 (1.05%)	77 (17.78%)	5 (1.15%)	22 (3.40%)	45 (6.95%)	12 (1.72%)	50 (7.20%)
>4	33 (17.36%)	2 (1.05)	32 (7.39%)	3 (0.69%)	9 (1.39%)	19 (2.93%)	2 (0.28%)	17 (2.44%)
TOTAL	151 (79.47%)	39 (20.52%)	317 (73.21%)	114 (26.32%)	236 (36.47%)	400 (61.82%)	192 (27.66%)	498 (71.75%)

From the analysis of table it is evident that the water level has shown minimum decline in May 19 -20 which is gradually increase and gets maximum in January 20 -21. The rise in water level is observed maximum in May and August 19 -20 from the analyzed wells as compared to November 19-20 and January 20-21.

6.3 Fluctuation from the Decadal Mean during 2019 – 20

The fluctuations in water level described earlier are very much dependent on the rainfall and give a very short term picture. In order to remove the rainfall anomalies the long term water level is considered as this would normalize the erratic highs and lows. For this the water level of each season has been compared to the mean water level of past 10 years. This has been done to evaluate the status of water level during the year 2020-21 with respect to long term mean. The outcome of the analysis has been compiled on district level and the same has been discussed subsequently for the four seasons of observation.

Mean May (2010- 19) – May 2020

The pre-monsoon water level data for 2020 has been compared to decadal mean (2010-2019) for pre-monsoon periods, and district-wise analysis of Ground Water Monitoring wells has been compiled in Table-13 and fluctuation map has been prepared and given in Plate –XIV. The analyzed data show total of 167no. (69.87%) wells show rise and 72no. (30.12%) show fall in water level.

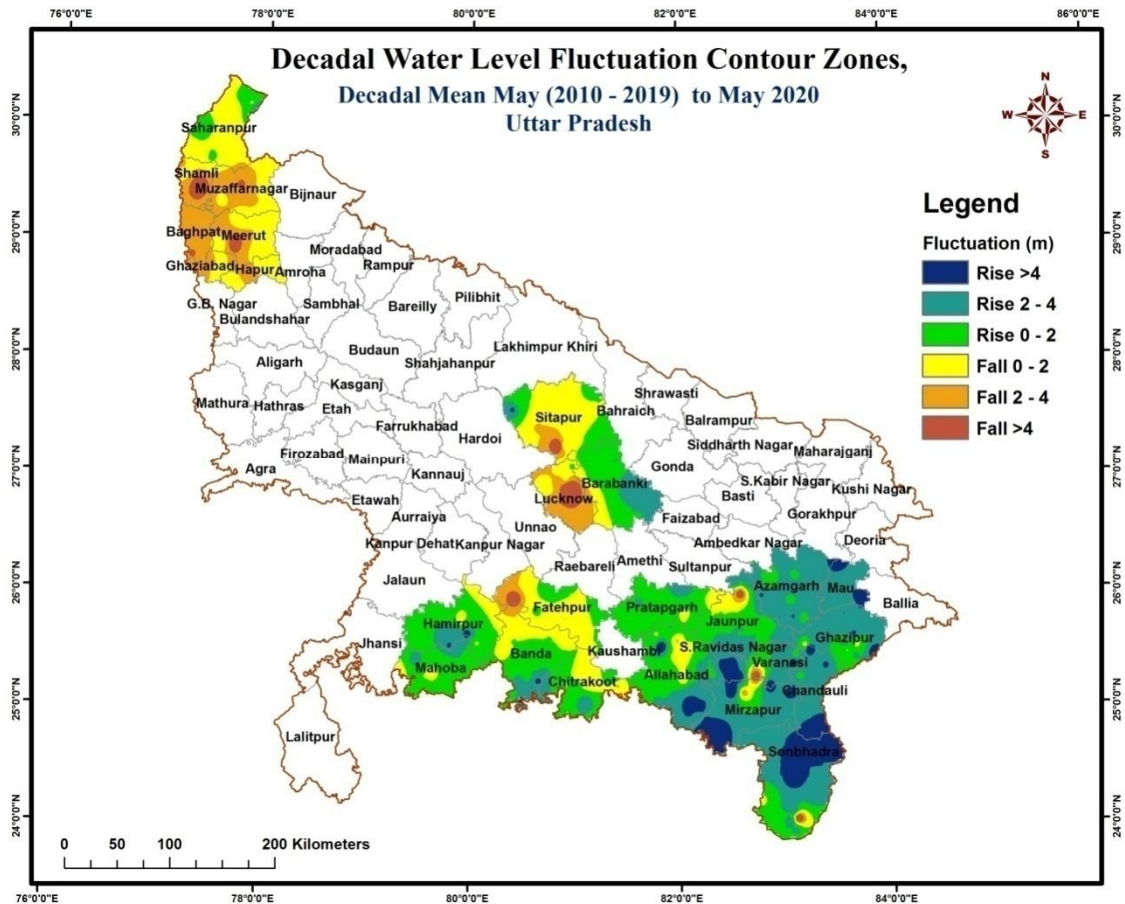
Table-13

**DISTRICT WISE – DECADAL WATER LEVEL FLUCTUATION, U.P.
Mean May (2010 – 2019) – May, 2020**

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
ALLAHABAD	30	0.47	8.29	0.10	4.81	12 40.00 %	7 23.33%	4 13.33%	6 20.00%	0	1 3.33%	23	7
AZAMGARH	14	0.88	4.44	-	-	3 21.43 %	10 71.43%	1 7.14%	0	0	0	14	0
BAGHPAT	2	-	-	3.05	4.23	0	0	0	0	1 50.00 %	1 50.00%	0	2
BANDA	8	0.95	4.66	-	-	4 50.00 %	3 37.50%	1 12.50%	0	0	0	8	0
BARABANKI	8	0.28	2.59	-	-	5 62.50 %	3 37.50%	0	0	0	0	8	0
CHANDAULI	7	1.37	8.68	-	-	1 14.29 %	3 42.86%	3 42.86%	0	0	0	7	0
CHITRAKOOT	8	0.60	4.79	2.41	2.41	4 50.00 %	1 12.50%	2 25.00%	0	1 12.50 %	0	7	1

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
FATEHPUR	7	2.81	2.81	0.04	4.72	0	1 14.29%	0	2 28.57%	3 42.86 %	1 14.29%	1	6
GHAZIABAD	6	-	-	0.83	2.84	0	0	0	4 66.67%	2 33.33 %	0	0	6
GHAZIPUR	15	0.79	7.26	0.42	1.21	2 13.33 %	6 40.00%	4 26.67%	3 20.00%	0	0	12	3
HAMIRPUR	4	4.47	5.61	0.16	1.30	0	0	2 50.00%	2 50.00%	0	0	2	2
JAUNPUR	6	1.96	3.87	-	-	1 16.67 %	5 83.33%	0	0	0	0	6	0
LUCKNOW	8	0.12	1.53	0.95	6.98	4 50.00 %	0	0	1 12.50%	1 12.50 %	2 25.00%	4	4
MAHOBA	9	0.20	1.77	0.07	0.74	5 55.56 %	0	0	4 44.44%	0	0	5	4
MAU	4	2.68	5.79	-	-	0	2 50.00%	2 50.00%	0	0	0	4	0
MEERUT	9	-	-	0.37	3.47	0	0	0	6 66.67%	3 33.33 %	0	0	9

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
MIRZAPUR	9	2.08	7.83	2.13	2.13	0	3 33.33%	5 55.56%	0	1 11.11%	0	8	1
MUZAFFAR NAGAR	7	0.33	12.45	1.19	2.71	2 28.57%	0	1 14.29%	3 42.86%	1 14.29%	0	3	4
PRATAPGARH	18	0.07	3.68	0.55	0.66	13 72.22%	3 16.67%	0	2 11.11%	0	0	16	2
SAHARANPUR	12	0.18	4.72	0.16	1.69	5 41.67%	0	1 8.33%	6 50.00%	0	0	6	6
SANT RAVIDAS NAGAR	4	3.27	5.59	-	-	0	1 25.00%	3 75.00%	0	0	0	4	0
SITAPUR	21	0.06	3.74	0.01	1.53	7 33.33%	1 4.76%	0	13 61.90%	0	0	8	13
SONBHADRA	16	2.21	8.59	0.69	7.14	0	9 56.25%	5 31.25%	1 6.25%	0	1 6.25%	14	2
VARANASI	7	2.29	6.97	-	-	0	3 42.86%	4 57.14%	0	0	0	7	0
Total	239	1.53	4.47		7.14	68	61	38	53	13	6	167	72



It is observed that 53no. Monitoring wells (22.17%) shows fall in the range of 0-2m. It is mainly occurs in Saharanpur, Meerut, Ghaziabad, Hapur, Sitapur, Lucknow, Barabanki, Banda, Chitrakoot, Jaunpur, S.Ravidas Nagar, Varanasi and Sonbhadra district. A fall in water levels between 2- 4m and more than 4m is observed in 13 and 6 wells respectively. It is located in Shamli, Muzaffarnagar, Baghpat, Meerut, Fatehpur, Banda, Chitrakoot, Jaunpur, Lucknow and Barabanki District.

There is a rise in water level from 0 to 2 m and 2-4m are observed in 68 and 61 wells respectively and more than 4m is observed in 38wells from the analyzed well. The rise of 0-2m is mostly occurs in Saharanpur, Sitapur, Barabanki, Hamirpur, Mahoba, Banda, Chitrakoot, Pratapgarh, Jaunpur, Ghazipur and Sonbhadra District. The rise in 2-4m is mostly concentrated in the South East portion of the state and more than 4m is observed in few districts such as Sonbhadra, Mirzapur, Chandauli, Allahabad and Varanasi districts.

Mean August (2010- 2019) – August 2020

The average water level of last 10 years (2010 to 2019) for each well for the month of August has been evaluated and compared with water level data for August'2020. The wells have been categorized depending on rise and fall in water levels and shown in Table-14 and fluctuation map has been given in Plate-XV.

Table-14

DISTRICT WISE – DECADAL WATER LEVEL FLUCTUATION, U.P.
Mean August (2010 – 2019) – August, 2020

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
ALLAHABAD	35	0.01	3.74	0.06	4.12	20 57.14 %	7 20.00%	0	5 14.29%	2 5.71 %	1 2.86%	27	8
AMBEDKAR NAGAR	7	0.95	1.76	0.26	0.26	6 85.71 %	0	0	1 14.29%	0	0	6	1
AURAIYA	8	-	-	0.10	4.52	0	0	0	5 62.50%	2 25.00 %	1 12.50%	0	8
AZAMGARH	17	0.60	4.43	-	-	8 47.06 %	7 41.18%	2 11.76%	0	0	0	17	0
BAGHPAT	2	-	-	6.01	6.10	0	0	0	0	0	2 100.0%	0	2
BAHRAICH	11	0.03	1.40	0.03	0.89	5 45.45 %	0	0	6 54.55%	0	0	5	6
BALLIA	16	0.05	4.35	-	-	12 75.00 %	3 18.75%	1 6.25%	0	0	0	16	0

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BALRAMPUR	16	0.01	3.20	0.02	0.67	9 56.25 %	1 6.25%	0	6 37.50%	0	0	10	6
BANDA	13	0.19	3.46	0.07	4.94	6 46.15 %	1 7.69%	0	3 23.08%	2 15.38 %	1 7.69%	7	6
BARABANKI	19	0.21	3.97	0.03	2.08	10 52.63 %	3 15.79%	0	5 26.32%	1 5.26 %	0	13	6
BASTI	7	0.09	1.32	-	-	7 100.0 %	0	0	0	0	0	7	0
CHITRAKOOT	9	0.25	3.78	0.33	0.94	4 44.44 %	2 22.22%	0	3 33.33%	0	0	6	3
FAIZABAD	12	0.13	1.70	0.73	1.22	8 66.67 %	0	0	4 33.33%	0	0	8	4
FATEHPUR	12	0.93	3.38	0.34	4.41	4 33.33 %	2 16.67%	0	4 33.33%	1 8.33 %	1 8.33%	6	6
GHAZIABAD	6	0.56	0.56	1.03	4.03	1 16.67 %	0	0	3 50.00%	1 16.67 %	1 16.67%	1	5
GHAZIPUR	17	0.18	6.40	0.05	1.08	5 29.41 %	5 29.41%	4 23.53%	3 17.65%	0	0	14	3

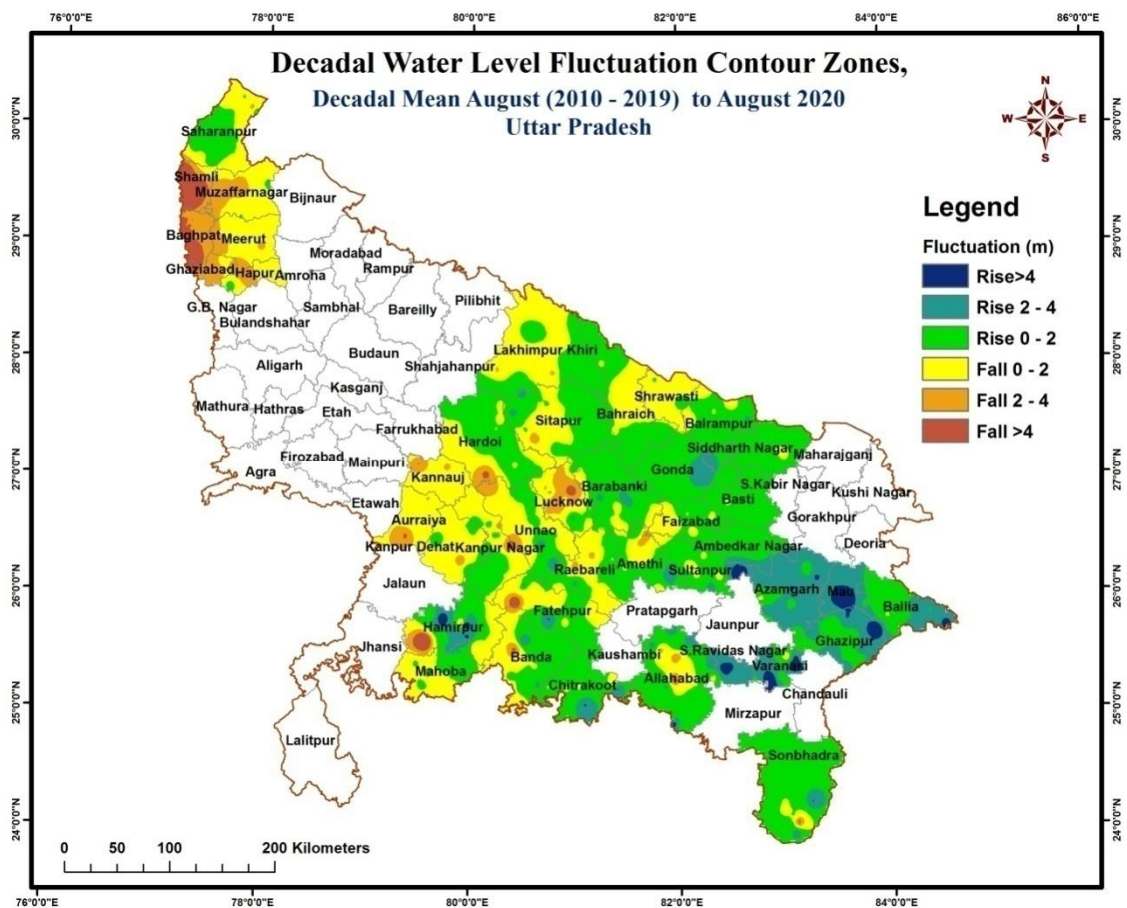
District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
GONDA	7	0.24	2.11	-	-	6 85.71 %	1 14.29%	0	0	0	0	7	0
HAMIRPUR	7	0.69	4.52	0.96	2.53	1 14.29 %	2 28.57%	1 14.29%	2 28.57%	1 14.29 %	0	4	3
HARDOI	18	0.53	3.85	0.13	1.54	11 61.11 %	2 11.11%	0	5 27.78%	0	0	13	5
KANNAUJ	4	-	-	0.01	4.14	0	0	0	2 50.00%	1 25.00 %	1 25.00%	0	4
KANPUR DEHAT	7	1.08	2.28	1.22	3.69	2 28.57 %	1 14.29%	0	3 42.86%	1 14.29 %	0	3	4
KANPUR NAGAR	12	0.11	2.05	1.40	2.03	9 75.00 %	1 8.33%	0	1 8.33%	1 8.33 %	0	10	2
KHERI	8	0.68	1.24	0.07	1.08	5 62.50 %	0	0	3 37.50%	0	0	5	3
LUCKNOW	23	0.01	2.07	0.22	7.78	9 39.13 %	1 4.35%	0	6 26.09%	4 17.39 %	3 13.04%	10	13
MAHOBA	9	0.23	1.27	0.92	2.11	5 55.56 %	0	0	2 22.22%	2 22.22 %	0	5	4

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
MAU	5	1.75	6.32	-	-	1 20.00 %	3 60.00%	1 20.00%	0	0	0	5	0
MEERUT	9	-	-	0.26	4.16	0	0	0	5 55.56%	3 33.33 %	1 11.11%	0	9
MUZAFFAR NAGAR	8	0.39	10.85	0.46	2.27	2 25.00 %	0	1 12.50%	4 50.00%	1 12.50 %	0	3	5
RAE BARELI	26	0.03	2.98	0.07	3.10	12 46.15 %	1 3.85%	0	10 38.46%	3 11.54 %	0	13	13
SAHARANP UR	12	0.16	2.08	0.01	3.10	7 58.33 %	1 8.33%	0	3 25.00%	1 8.33 %	0	8	4
SANT RAVIDAS NAGAR	5	0.96	7.90	-	-	2 40.00 %	2 40.00%	1 20.00%	0	0	0	5	0
SHRAWASTI	11	0.05	1.14	0.24	1.39	5 45.45 %	0	0	6 54.55%	0	0	5	6
SIDDHARTH NAGAR	10	0.12	1.17	0.71	0.71	9 90.00 %	0	0	1 10.00%	0	0	9	1
SITAPUR	21	0.16	2.34	0.27	2.83	14 66.67 %	2 9.52%	0	3 14.29%	2 9.52 %	0	16	5

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
SONBHADR A	15	0.21	4.13	0.91	5.20	11 73.33 %	0	2 13.33%	1 6.67%	0	1 6.67%	13	2
SULTANPUR	37	0.01	4.27	0.03	3.50	21 56.76 %	4 10.81%	2 5.41%	8 21.62%	2 5.41 %	0	27	10
UNNAO	11	0.42	1.51	0.11	1.43	5 45.45 %	0	0	6 54.55%	0	0	5	6
VARANASI	8	1.00	8.50	1.86	1.86	2 25.00 %	1 12.50%	4 50.00%	1 12.50%	0	0	7	1
Total	480	0.56	1.75	0.00	7.78	244	53	19	120	31	13	316	164

There is rise in water level in 316 wells (65.83%) and fall in 164 (34.16%) wells. However, a rise of 0 to 2 m water level occurs in 50.83% of analyzed wells, It is located in mainly in the Eastern and Southern district of the State. Such as Sitapur, Hardoi, Hamirpur, Mahoba, Chitrakoot Allahabad, Sultanpur, Ambedkar Nagar, Basti, Ballia, Ghazipur, Sonbhadra districts etc. Rise of 2 -4m and more than 4 m is observed in 53 (11.04%) and 19 wells (3.95%) wells respectively.

Plate-XV



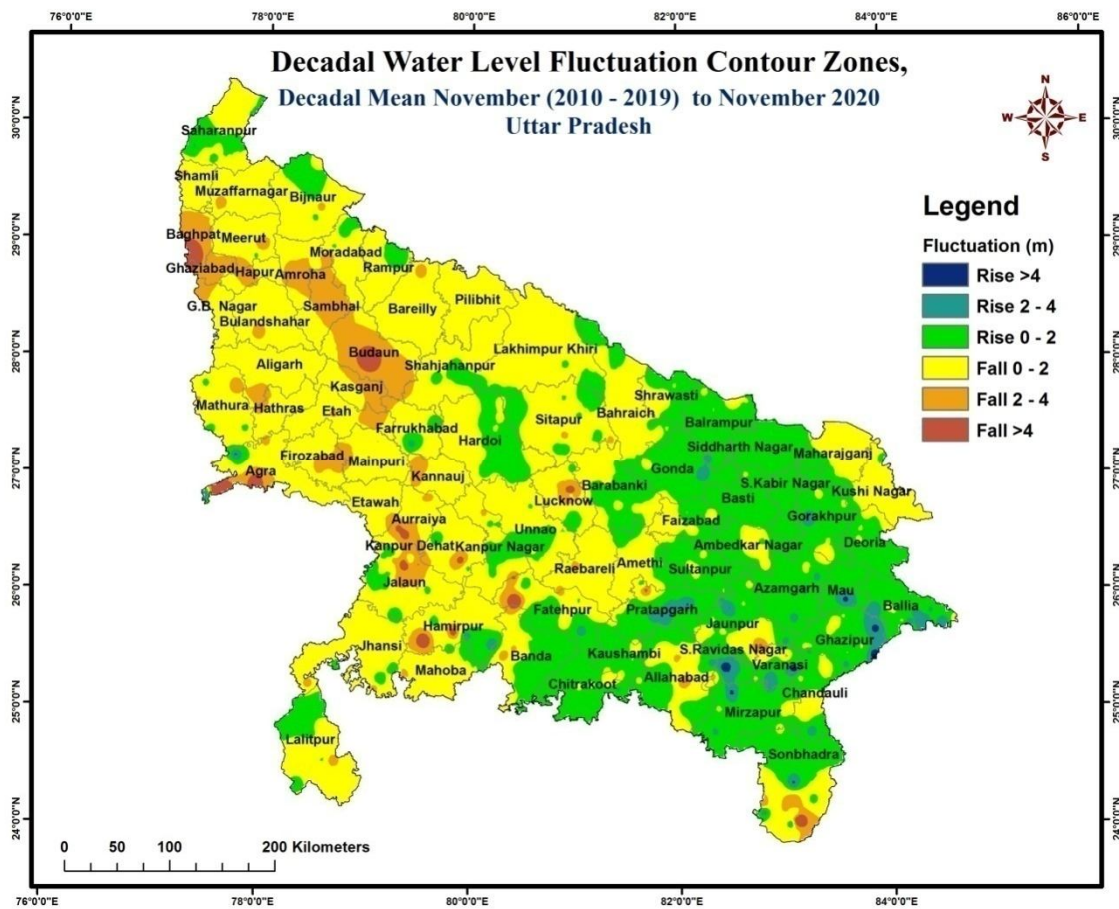
The fall in water level are noticed in 164 wells (34.16% of the monitored wells). Most of the districts of western parts of the state and few in south eastern U.P. show a fall in the range of 0 - 2 m at 120 wells (25%). The fall of 2-4m and more than 4m are observed in 31 and 13 wells and it is located in Shamli, Muzaffarnagar, Baghpat, Ghaziabad, Hapur, Kanpur Dehat, Lucknow, Barabanki, Allahabad and Sonbhadra Districts.

Mean November (2010- 19) – November 2020:

The average water level of last 10 years (2010-19) for each hydrograph station for the month of November has been evaluated and compared with water level data of November'20.

The wells have been categorized depending on rise and fall in water levels and shown in table-15 and fluctuation map has been given in Plate-XVI.

Plate-XVI



There is an equal no. of wells showing rise and fall in the States from the analyzed wells. The rise and fall is observed in 374 wells. A rise in the range 0-2m is observed in 315 as compared to fall of 287 wells. Similarly, rise and fall in the range of 2-4m is found in 45 and 64 well respectively. The fall in the range of 2-4m and more than 4m is observed in Baghpat, Meerut, Ghaziabad, Amroha, Sambahal, Agra, Firozabad, Kasganj, Budaun , Kannuj, Auraiya, Kanpur Dehat, Jalaun, Hamirpur, Banda, Lucknow and Sonbhadra districts.

Table-15

**DISTRICT WISE – DECADAL WATER LEVEL FLUCTUATION, U.P.
Mean November (2010 – 2019) – November, 2020**

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
AGRA	10	4.42	4.42	0.81	8.55	0	0	1 10.00%	5 50.00%	1 10.00 %	3 30.00%	1	9
ALIGARH	7	0.63	0.63	0.77	1.68	1 14.29 %	0	0	6 85.71%	0	0	1	6
ALLAHABAD	33	0.07	3.12	0.05	3.58	21 63.64 %	2 6.06%	0	8 24.24%	2 6.06 %	0	23	10
AMBEDKAR NAGAR	7	0.14	1.82	0.63	0.63	6 85.71 %	0	0	1 14.29%	0	0	6	1
AURAIYA	8	-	-	0.34	5.33	0	0	0	3 37.50%	3 37.50 %	2 25.00%	0	8
AZAMGARH	17	0.23	3.04	1.38	1.38	13 76.47 %	3 17.65%	0	1 5.88%	0	0	16	1
BAGHPAT	2	-	-	6.94	7.47	0	0	0	0	0	2 100.0%	0	2
BAHRAICH	11	0.05	0.44	0.11	0.59	5 45.45 %	0	0	6 54.55%	0	0	5	6
BALLIA	18	0.05	4.35	0.17	1.15	9 50.00 %	4 22.22%	1 5.56%	4 22.22%	0	0	14	4
BALRAMPU R	18	0.02	2.54	0.03	0.35	14 77.78 %	1 5.56%	0	3 16.67%	0	0	15	3

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BANDA	13	0.43	1.57	0.08	3.23	8 61.54 %	0	0	3 23.08%	2 15.38 %	0	8	5
BARABANKI	19	0.10	7.65	0.23	1.10	9 47.37 %	0	1 5.26%	9 47.37%	0	0	10	9
BAREILLY	10	-	-	0.16	6.76	0	0	0	8 80.00%	1 10.00 %	1 10.00%	0	10
BASTI	7	0.28	1.01	-	-	7 100.0 %	0	0	0	0	0	7	0
BIJNOR	6	0.06	0.95	0.04	0.53	3 50.00 %	0	0	3 50.00%	0	0	3	3
BUDAUN	3	-	-	1.11	5.90	0	0	0	1 33.33%	0	2 66.67%	0	3
BULANDSH AHR	3	-	-	1.23	1.96	0	0	0	3 100.0%	0	0	0	3
CHANDAULI	8	0.12	3.41	0.19	1.50	1 12.50 %	2 25.00%	0	5 62.50%	0	0	3	5
CHITRAKOOT	9	0.52	2.56	0.13	2.19	4 44.44 %	2 22.22%	0	2 22.22%	1 11.11 %	0	6	3

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
DEORIA	9	0.06	1.87	0.22	0.40	6 66.67 %	0	0	3 33.33%	0	0	6	3
ETAH	8	-	-	0.87	3.48	0	0	0	5 62.50%	3 37.50 %	0	0	8
FAIZABAD	12	0.07	0.79	0.52	1.08	8 66.67 %	0	0	4 33.33%	0	0	8	4
FARRUKHABAD	2	0.72	0.72	4.04	4.04	1 50.00 %	0	0	0	0	1 50.00%	1	1
FATEHPUR	12	0.14	1.97	0.85	7.74	5 41.67 %	0	0	4 33.33%	1 8.33 %	2 16.67%	5	7
FIROZABAD	4	-	-	1.58	2.72	0	0	0	2 50.00%	2 50.00 %	0	0	4
GHAZIABAD	6	-	-	1.07	2.95	0	0	0	3 50.00%	3 50.00 %	0	0	6
GHAZIPUR	16	0.20	5.38	0.16	2.21	4 25.00 %	6 37.50%	2 12.50%	3 18.75%	1 6.25 %	0	12	4
GONDA	6	0.22	1.66	-	-	6 100.0 %	0	0	0	0	0	6	0
GORAKHPUR	4	0.16	1.67	0.15	0.15	3 75.00 %	0	0	1 25.00%	0	0	3	1

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
HAMIRPUR	8	0.60	3.43	0.13	1.37	3 37.50 %	2 25.00%	0	3 37.50%	0	0	5	3
HARDOI	20	0.01	2.81	0.39	1.69	11 55.00 %	2 10.00%	0	7 35.00%	0	0	13	7
HATHRAS	4	-	-	0.51	3.52	0	0	0	2 50.00%	2 50.00 %	0	0	4
JALAUN	25	0.35	1.95	0.28	6.54	9 36.00 %	0	0	10 40.00%	5 20.00 %	1 4.00%	9	16
JAUNPUR	22	0.30	4.37	0.13	5.04	7 31.82 %	5 22.73%	1 4.55%	8 36.36%	0	1 4.55%	13	9
JHANSI	14	0.41	1.39	0.62	2.70	4 28.57 %	0	0	8 57.14%	2 14.29 %	0	4	10
JYOTIBA PHULE NAGAR	7	-	-	0.49	3.77	0	0	0	3 42.86%	4 57.14 %	0	0	7
KANNAUJ	4	-	-	0.16	3.78	0	0	0	2 50.00%	2 50.00 %	0	0	4
KANPUR DEHAT	6	0.29	1.48	1.41	3.27	3 50.00 %	0	0	2 33.33%	1 16.67 %	0	3	3
KANPUR NAGAR	12	0.02	2.63	0.01	3.21	6 50.00 %	1 8.33%	0	4 33.33%	1 8.33 %	0	7	5

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
KAUSHAMBI	6	0.54	1.37	0.40	0.92	4 66.67 %	0	0	2 33.33%	0	0	4	2
KHERI	8	0.01	0.24	0.04	0.82	2 25.00 %	0	0	6 75.00%	0	0	2	6
KUSHINAGAR	5	0.09	0.31	0.09	1.58	2 40.00 %	0	0	3 60.00%	0	0	2	3
LALITPUR	15	0.23	1.97	0.02	3.49	8 53.33 %	0	0	6 40.00%	1 6.67 %	0	8	7
LUCKNOW	22	0.02	9.48	0.16	7.40	6 27.27 %	0	1 4.55%	9 40.91%	4 18.18 %	2 9.09%	7	15
MAHOBA	9	1.77	1.77	0.01	4.12	1 11.11 %	0	0	5 55.56%	2 22.22 %	1 11.11%	1	8
MAHRAJGANJ	5	0.02	0.31	0.53	1.29	2 40.00 %	0	0	3 60.00%	0	0	2	3
MAINPURI	5	-	-	0.82	2.05	0	0	0	4 80.00%	1 20.00 %	0	0	5
MATHURA	14	0.35	1.04	0.27	2.69	3 21.43 %	0	0	9 64.29%	2 14.29 %	0	3	11

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
MAU	6	0.36	4.57	-	-	5 83.33 %	0	1 16.67%	0	0	0	6	0
MEERUT	8	0.64	2.59	0.77	4.03	1 12.50 %	1 12.50%	0	2 25.00%	3 37.50 %	1 12.50%	2	6
MIRZAPUR	10	0.16	4.55	0.15	1.40	6 60.00 %	1 10.00%	1 10.00%	2 20.00%	0	0	8	2
MORADABAD	7	0.43	1.70	0.42	2.89	3 42.86 %	0	0	2 28.57%	2 28.57 %	0	3	4
MUZAFFAR NAGAR	10	0.32	12.16	0.17	2.86	1 10.00 %	0	1 10.00%	6 60.00%	2 20.00 %	0	2	8
PILIBHIT	10	-	-	0.08	0.88	0	0	0	10 100.0%	0	0	0	10
PRATAPGARH	26	0.04	3.81	0.48	5.10	16 61.54 %	7 26.92%	0	2 7.69%	0	1 3.85%	23	3
RAE BARELI	22	0.04	1.53	0.02	3.17	5 22.73 %	0	0	15 68.18%	2 9.09 %	0	5	17
RAMPUR	2	-	-	0.41	0.95	0	0	0	2 100.0%	0	0	0	2
SAHARANPUR	15	0.51	3.48	0.11	2.13	5 33.33 %	2 13.33%	0	7 46.67%	1 6.67 %	0	7	8

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
SANT KABIR NAGAR	4	0.36	1.21	-	-	4 100.0 %	0	0	0	0	0	4	0
SANT RAVIDAS NAGAR	5	1.03	6.62	3.76	3.76	2 40.00 %	1 20.00%	1 20.00%	0	1 20.00 %	0	4	1
SHAHJAHAN PUR	2	1.88	1.88	0.94	0.94	1 50.00 %	0	0	1 50.00%	0	0	1	1
SHRAWASTI	11	0.03	0.94	0.13	0.52	7 63.64 %	0	0	4 36.36%	0	0	7	4
SIDDHARTH NAGAR	9	0.01	0.70	-	-	9 100.0 %	0	0	0	0	0	9	0
SITAPUR	21	0.03	1.91	0.05	3.07	8 38.10 %	0	0	11 52.38%	2 9.52 %	0	8	13
SONBHADRA	18	0.56	4.39	0.09	10.05	6 33.33 %	1 5.56%	1 5.56%	5 27.78%	2 11.11 %	3 16.67%	8	10
SULTANPUR	38	0.04	2.29	0.04	2.05	24 63.16 %	1 2.63%	0	12 31.58%	1 2.63 %	0	25	13
UNNAO	16	0.01	0.73	0.06	1.39	4 25.00 %	0	0	12 75.00%	0	0	4	12
VARANASI	9	0.35	6.85	0.28	2.80	3 33.33 %	1 11.11%	2 22.22%	2 22.22%	1 11.11 %	0	6	3

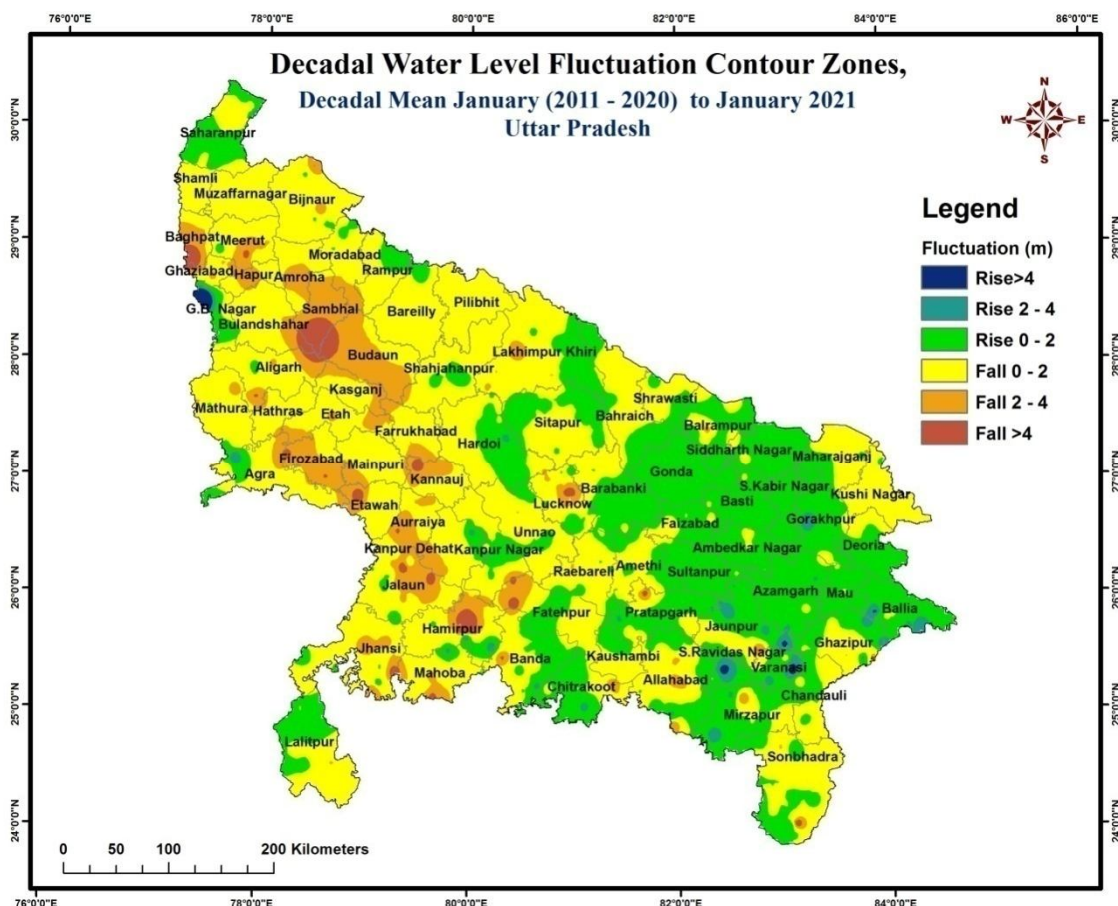
District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
Total	748	0.24	4.42	0.00	10.05	315	45	14	287	64	23	374	374

Mean January (2011- 20) – January 2021:

Monitoring station for the month of January has been evaluated and compared with water level data for January'2020. The wells have been categorized depending on rise and fall in water levels and shown in Table-16 and map showing this fluctuation is shown in Plate-XVII.

There is a rise in water level for 362 no. of analysed wells (48.33%) and nearly equal percentage (51.66%) are showing fall in 387 no. About 42.32.54% of analysed wells (317 no.) shows rise of 0 to 2 m in water levels. This rise is observed mainly in Eastern and South Eastern partsof districts such as Barabanki, Gonda, SiddharNagar, S. Kabir Nagar, Ambedkat Nagar, Sultanpur, Azamgarh, Mau etc. A rise of 2 to 4 m is noticed only in 35 (4.67%) wells and rise of > 4 mbgl is observed only in 10wells (1.33%).

A fall of 0 to 2 m is observed in 295 no. wells (about 39.38%) in major parts of the State, mainly inWestern, South Western and Central region of the district.Saharanpur, Shamli, Muzaffarnagar, Bijnour, Meerut, Gahziabad, Hapur, Aligarh, Mathura, Agra, Etah, Farrukabad, Hardoi, Kannauj, Kanpur Dehat., Hamirpur, Mahoba, Banda, Raebareli, Lucnow, Siatpur, LakhimpurKhiri, Pilibhit, Bahraich, Shrawasti, Kushi Nagar, Ghazipur, Chandauli, Allahabad, Kaushambi, Junpur, Mirzapur and Sonbhadra. A fall in the range of 2-4m and more than 4m are observed in 64 and 28 wells respectively. It observed mainly in Baghpat, Meerut, Ghaziabad, Sambhal, Etawah, Lucknow and Hamirpur.



DECADAL FLUCTUATION 2020 – 21, U.P.

FLUCTUATION RANGE	Mean May (2010-19) to May 20		Mean August (2010-19) to August 20		Mean Nov(2010-19) to November 20		Mean Jan(2011-20) to January 21	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	68 (28.45%)	53 (22.17%)	244 (50.83%)	120 (25%)	315 (42.11%)	287 (38.36%)	317 (42.32%)	295 (39.38%)
2-4	61 (25.52%)	13 (5.43%)	53 (11.04%)	31 (6.45%)	45 (6.01%)	64 (8.55%)	35 (4.67%)	64 (8.54%)
>4	38 (15.89%)	6 (2.51%)	19 (3.95%)	13 (2.70%)	14 (1.87%)	23 (3.07%)	10 (1.33%)	28 (3.73%)
Total	167 (69.87%)	72 (30.12%)	316 (65.83%)	164 (34.16%)	374 (50%)	374 (50%)	362 (48.33%)	387 (51.66%)

DISTRICT WISE – DECADAL WATER LEVEL FLUCTUATION, U.P.
Mean January (2011 – 2020) – January, 2021

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
AGRA	7	4.29	4.29	0.47	2.04	0	0	1 14.29%	5 71.43%	1 14.29%	0	1	6
ALIGARH	7	0.32	0.56	0.69	2.97	3 42.86%	0	0	3 42.86%	1 14.29%	0	3	4
ALLAHABA D	32	0.02	1.75	0.07	4.77	14 43.75%	0	0	12 37.50%	4 12.50%	2 6.25%	14	18
AMBEDKAR NAGAR	7	0.21	1.60	0.27	0.27	6 85.71%	0	0	1 14.29%	0	0	6	1
AURAIYA	8	-	-	0.37	4.53	0	0	0	4 50.00%	3 37.50%	1 12.50%	0	8
AZAMGARH	18	0.08	2.42	0.82	0.82	14 77.78%	3 16.67%	0	1 5.56%	0	0	17	1
BAGHPAT	2	-	-	5.51	7.15	0	0	0	0	0	2 100.0%	0	2

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BAHRAICH	11	0.04	0.57	0.01	0.87	5 45.45 %	0	0	6 54.55%	0	0	5	6
BALLIA	19	0.02	5.23	0.25	1.03	13 68.42 %	1 5.26%	2 10.53%	3 15.79%	0	0	16	3
BALRAMPU R	16	0.01	1.77	0.39	0.47	13 81.25 %	0	0	3 18.75%	0	0	13	3
BANDA	11	0.43	2.92	0.34	4.48	2 18.18 %	1 9.09%	0	7 63.64%	0	1 9.09%	3	8
BARABANKI	19	0.06	0.88	0.00	0.51	10 52.63 %	0	0	9 47.37%	0	0	10	9
BAREILLY	9	0.62	0.62	0.21	1.21	1 11.11 %	0	0	8 88.89%	0	0	1	8
BASTI	7	0.26	0.75	0.08	0.08	6 85.71 %	0	0	1 14.29%	0	0	6	1
BIJNOR	6	0.11	0.34	0.67	4.46	3 50.00 %	0	0	1 16.67%	1 16.67 %	1 16.67%	3	3
BUDAUN	4	-	-	2.23	10.55	0	0	0	0	3 75.00 %	1 25.00%	0	4

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
BULANDSHAHR	2	-	-	0.73	1.48	0	0	0	2 100.0%	0	0	0	2
CHANDAULI	8	0.41	2.40	0.11	1.61	1 12.50%	1 12.50%	0	6 75.00%	0	0	2	6
CHITRAKOOT	9	0.67	2.62	0.04	3.56	3 33.33%	1 11.11%	0	3 33.33%	2 22.22%	0	4	5
DEORIA	6	0.12	1.12	0.40	0.86	4 66.67%	0	0	2 33.33%	0	0	4	2
ETAH	9	-	-	0.80	3.34	0	0	0	5 55.56%	4 44.44%	0	0	9
ETAWAH	5	-	-	0.67	3.60	0	0	0	4 80.00%	1 20.00%	0	0	5
FAIZABAD	12	0.03	0.61	0.27	0.99	9 75.00%	0	0	3 25.00%	0	0	9	3
FARRUKHABAD	2	-	-	0.28	2.77	0	0	0	1 50.00%	1 50.00%	0	0	2
FATEHPUR	14	1.01	1.90	0.35	5.87	5 35.71%	0	0	4 28.57%	3 21.43%	2 14.29%	5	9

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
FIROZABAD	3	-	-	1.37	4.02	0	0	0	1 33.33%	1 33.33%	1 33.33%	0	3
GAUTAM BUDDHA NAGAR	2	11.38	11.38	0.24	0.24	0	0	1 50.00%	1 50.00%	0	0	1	1
GHAZIABAD	6	-	-	0.41	3.51	0	0	0	2 33.33%	4 66.67%	0	0	6
GHAZIPUR	16	0.05	3.17	0.57	2.73	6 37.50%	2 12.50%	0	5 31.25%	3 18.75%	0	8	8
GONDA	7	0.22	1.53	-	-	7 100.0%	0	0	0	0	0	7	0
GORAKHPUR	4	0.58	0.95	0.05	0.05	3 75.00%	0	0	1 25.00%	0	0	3	1
HAMIRPUR	8	0.08	3.54	0.51	2.30	2 25.00%	3 37.50%	0	2 25.00%	1 12.50%	0	5	3
HARDOI	19	0.10	3.31	0.19	1.44	12 63.16%	1 5.26%	0	6 31.58%	0	0	13	6
HATHRAS	3	-	-	1.54	4.39	0	0	0	2 66.67%	0	1 33.33%	0	3

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
JALAUN	25	0.11	1.58	0.21	7.02	6	0	0	11	5	3	6	19
						24.00 %			44.00%	20.00 %	12.00%		
JAUNPUR	24	0.16	5.09	0.18	4.38	8	7	1	7	0	1	16	8
						33.33 %	29.17%	4.17%	29.17%		4.17%		
JHANSI	16	0.12	1.29	0.29	4.21	5	0	0	8	1	2	5	11
						31.25 %			50.00%	6.25 %	12.50%		
JYOTIBA PHULE NAGAR	7	-	-	0.45	4.27	0	0	0	4	2	1	0	7
									57.14%	28.57 %	14.29%		
KANNAUJ	5	-	-	0.17	5.37	0	0	0	1	3	1	0	5
									20.00%	60.00 %	20.00%		
KANPUR DEHAT	5	0.34	0.34	0.22	1.71	1	0	0	4	0	0	1	4
						20.00 %			80.00%				
KANPUR NAGAR	12	0.33	1.82	0.05	1.94	5	0	0	7	0	0	5	7
						41.67 %			58.33%				
KAUSHAMBI	5	0.18	0.71	0.06	0.31	3	0	0	2	0	0	3	2
						60.00 %			40.00%				
KHERI	8	0.01	0.35	0.59	0.91	6	0	0	2	0	0	6	2
						75.00 %			25.00%				

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
KUSHINAGA R	5	0.43	0.43	0.17	1.13	1	0	0	4	0	0	1	4
						20.00 %			80.00%				
LALITPUR	16	0.21	1.67	0.02	2.25	5	0	0	10	1	0	5	11
						31.25 %			62.50%	6.25 %			
LUCKNOW	21	0.08	1.68	0.14	8.39	8	0	0	9	2	2	8	13
						38.10 %			42.86%	9.52 %	9.52%		
MAHOBA	8	0.06	0.06	0.57	5.85	1	0	0	2	2	3	1	7
						12.50 %			25.00%	25.00 %	37.50%		
MAHRAJGA NJ	4	0.08	0.22	0.11	1.04	2	0	0	2	0	0	2	2
						50.00 %			50.00%				
MAINPURI	5	-	-	1.15	1.75	0	0	0	5	0	0	0	5
									100.0%				
MATHURA	14	0.04	0.40	0.06	2.73	3	0	0	9	2	0	3	11
						21.43 %			64.29%	14.29 %			
MAU	7	0.21	2.63	0.09	0.34	4	1	0	2	0	0	5	2
						57.14 %	14.29%		28.57%				
MEERUT	9	0.44	1.02	0.15	3.13	2	0	0	4	3	0	2	7
						22.22 %			44.44%	33.33 %			

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
MIRZAPUR	10	0.03	3.03	2.00	3.30	6 60.00 %	2 20.00%	0	0	2 20.00 %	0	8	2
MORADABAD	8	0.11	1.24	0.84	4.04	3 37.50 %	0	0	1 12.50%	3 37.50 %	1 12.50%	3	5
MUZAFFAR NAGAR	9	0.12	11.36	0.74	1.56	2 22.22 %	0	1 11.11%	6 66.67%	0	0	3	6
PILIBHIT	11	-	-	0.06	0.65	0	0	0	11 100.0%	0	0	0	11
PRATAPGAR H	23	0.20	2.95	0.53	5.19	13 56.52 %	4 17.39%	0	5 21.74%	0	1 4.35%	17	6
RAE BARELI	25	0.02	0.85	0.02	3.21	10 40.00 %	0	0	13 52.00%	2 8.00 %	0	10	15
RAMPUR	3	2.02	2.02	0.30	1.25	0	1 33.33%	0	2 66.67%	0	0	1	2
SAHARANPUR	14	0.07	11.44	0.56	1.70	8 57.14 %	0	1 7.14%	5 35.71%	0	0	9	5
SANT KABIR NAGAR	4	0.22	0.67	-	-	4 100.0 %	0	0	0	0	0	4	0

District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
SANT RAVIDAS NAGAR	5	0.57	7.00	0.15	0.15	1 20.00 %	2 40.00%	1 20.00%	1 20.00%	0	0	4	1
SHAHJAHAN PUR	2	2.26	2.26	1.14	1.14	0	1 50.00%	0	1 50.00%	0	0	1	1
SHRAWASTI	11	0.03	0.74	0.32	0.66	6 54.55 %	0	0	5 45.45%	0	0	6	5
SIDDHARTH NAGAR	10	0.13	0.49	0.10	0.10	9 90.00 %	0	0	1 10.00%	0	0	9	1
SITAPUR	20	0.14	2.48	0.06	1.80	10 50.00 %	1 5.00%	0	9 45.00%	0	0	11	9
SONBHADRA	16	0.21	2.38	0.14	6.77	9 56.25 %	1 6.25%	0	4 25.00%	1 6.25 %	1 6.25%	10	6
SULTANPUR	37	0.09	1.87	0.01	1.50	28 75.68 %	0	0	9 24.32%	0	0	28	9
UNNAO	19	0.22	0.73	0.01	2.79	4 21.05 %	0	0	13 68.42%	2 10.53 %	0	4	15
VARANASI	8	0.82	5.74	1.11	1.54	2 25.00 %	2 25.00%	2 25.00%	2 25.00%	0	0	6	2
Total	749	0.06	11.38	0.00	10.55	317	35	10	295	64	28	362	387

From the analysis of table, it is evident that the water level has shown a maximum fall in January 21 as compared to May 20. It is seen that the water level has started declining in May 20 and gradually it attains the maximum in January 21. The changes in water level with respect to mean were confined to a magnitude of 0-2 m. The rise/fall of higher magnitude was limited and isolated in nature.

WATER LEVEL TREND

The seasonal, annual and decadal fluctuation gives an idea of the behavior of the water level but is subjected to many anomalous factors which give a short term picture. To have a true picture where highs and lows are balanced out, the long term trend for ten years 2011 to 2020 has been worked out and analysed on the basis of DWL data of Ground Water Monitoring Wells. The pre monsoon, post monsoon and annual trend for the said period is given in **Annexure-II and Plate XVIII and XIX** respectively.

The results of water level trend data during Pre-monsoon for the period 2011-2020 are summarized as follows:

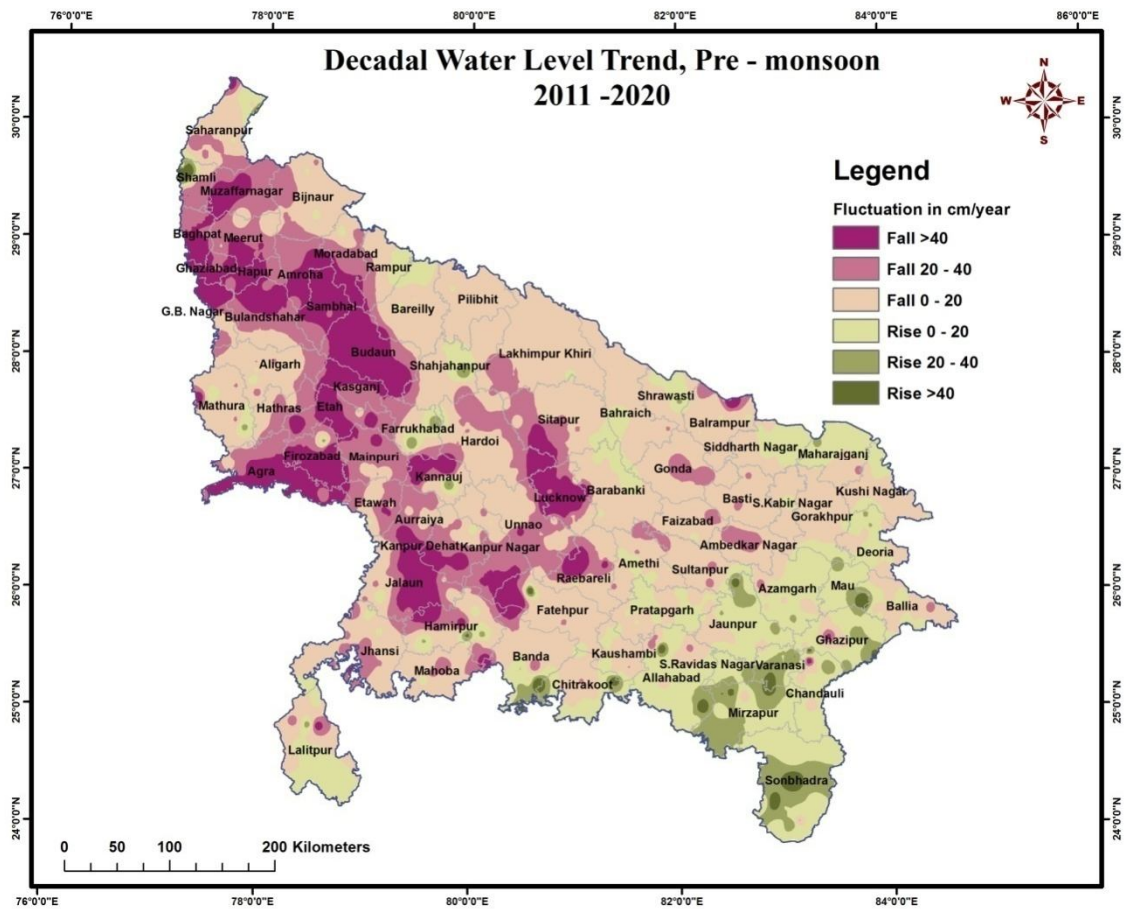
Percentage of wells showing Pre-monsoon DWL Trend (cm/year) from 2011 -2020								
Total Well Analysed	Rise (cm/year)			Fall (cm/Year)			Total	
	0 -20	20-40	>40	0 -20	20 -40	>40	Rise	Fall
712	148	34	24	266	131	109	206	506
	(20.78%)	(4.77%)	(3.37%)	(37.35%)	(18.40%)	(15.31%)	(28.93%)	(71.06%)

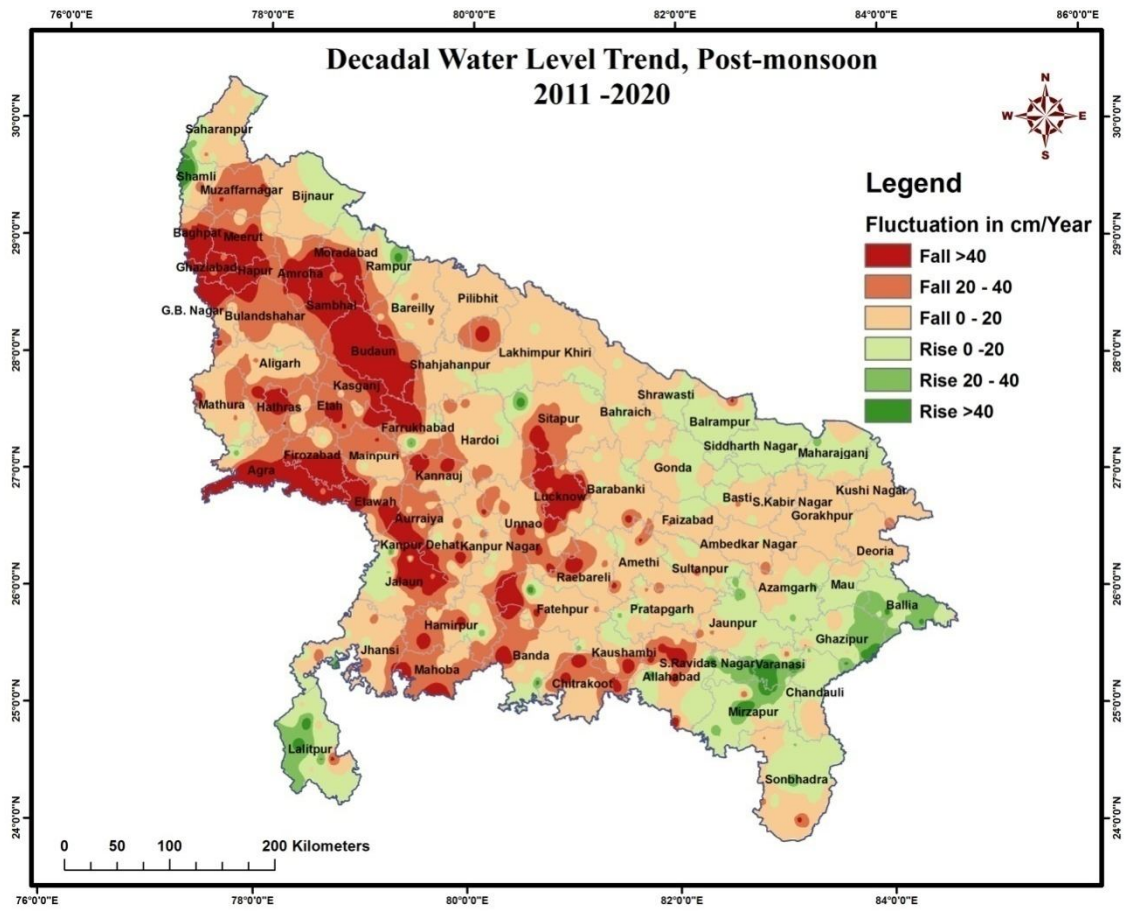
The declining trend is observed in 71.06 % of the monitoring wells (506) covering over 10 year's period. Decline of 0 – 20 cm/yr is commonly observed in 37.35% wells followed by 20 – 40 cm/yr in 18.40% wells and >40 cm/yr in 15.31%. The low decline is spread all over the state but dominant in eastern and central parts and along Terai belt of the state. Higher decline occurs in most of the districts of western and southern regions. There is a rising trend observed in 206 wells (28.93%), out of which 20.78 % and 4.77% of analysed wells shows rising trend in the range of 0-20cm/year and 20-40cm/year respectively and very few wells of 3.37% shows rising trend of more than 40cm/year.

The results of Water Level trend data during Post-monsoon for the period 2011-2020 are summarized as follows:

Percentage of wells showing Post-monsoon DWL Trend (cm/year) from 2011 -2020								
Total Well Analyzed	Rise (cm/year)			Fall (cm/Year)			Total	
	0 -20	20-40	>40	0 -20	20 -40	>40	Rise	Fall
828	238	36	29	278	115	132	303	525
	(28.74%)	(4.34%)	(3.50%)	(35.57%)	(13.88%)	(15.94%)	(36.59%)	(63.40%)

There is a declining trend in 63.40% of the monitoring wells over 10 years period. Decline of 0 – 20 cm/yr is mostly observed in 35.57% wells followed by 20 – 40 cm/yr in 13.88% wells and more than 40 cm/yr is found in 15.94% wells. The low decline is spread all over the state but dominant in central, eastern part and along Terai belt of the state. Higher decline occurs in most of the districts of western, north western and southern parts and along Yamuna River. There is a rise in trend in 36.59% of the monitoring wells over 10 years period. Rise of 0 – 20cm/year is found in 28.74% followed by 20-40cm/year in 4.34% and very few wells of 3.50% showing water level trend of more than 40cm/year.





Chapter 7

CHEMICAL QUALITY OF GROUND WATER OF U.P

(Based on partial NHS data 2020 and comparison with complete NHS data 2019 due to COVID 19)

INTRODUCTION

The availability of fresh water for human consumption, irrigation, agricultural development and other activities is associated with the growing needs of modern living conditions but is decreasing day by day due to increase in population, urbanisation, industrialisation and erratic behavior of rains. To meet the requirement of fresh water, the dependency on ground water is increasing in comparison to surface water because during summer season most of the surface water bodies do not have sufficient water, while ground water is easily accessible throughout the year.

The quality of groundwater is affected in three ways i.e. physical, chemical and bacteriological, although the procedure is very slow and complex to understand. The quality of ground water in the phreatic aquifer depends on the nature of rocks, contact time, circulation and temperature. It is also dependent on the solubility of the minerals present in the rocks. To some extent the atmospheric precipitation (rain water) is also contributory factor for affecting the quality of ground water as during the rain fall most of the gases such as CO₂, SO₂ and NO₂ present in the atmosphere gets dissolved in the rain water during the course of downward travel and percolate down through the earth surface dissolving mainly calcium and magnesium present in the soil forming calcium bicarbonate. The pH plays an important role in the geochemical reactions as low pH tends to help faster dissolution of the minerals. The quality of ground water is also influenced by the excessive use of fertilizers and pesticides for agricultural production and also industrial activity.

Ground water due to its long standing with minerals and rocks is generally more mineralized than surface water. This was found to be confirmed largely for water in phreatic zones. The chemical quality of ground water in phreatic zones is also affected by anthropogenic sources at the ground surface, whether it is domestic, agriculture or industrial in nature.

METHODOLOGY

Only 217 no. of ground water samples were collected during the A.A.P. 2020-21 out of established 825 ground water monitoring stations due to pandemic COVID-19. Generally the monitoring stations are Hand pumps IM-II tapping phreatic aquifer. All the samples were analysed for the determination of pH, EC, CO₃, HCO₃, Cl, F, NO₃, SO₄, PO₄, SiO₂, T.H., Ca, Mg, Na & K. These water samples were analysed as per standard methods (APHA 2005) at NABL accredited Regional Chemical Laboratory of CGWB, Lucknow. Following standard methods (Table-17) have been adopted for the chemical analysis of different constituents in water samples.

TABLE -17 Method used for Chemical Analysis of Ground Water Samples

Sl. No.	Constituents	Method Used
1.	pH	pH Meter
2.	EC	EC Meter
3.	Carbonate	Titrimetric method
4.	Bi-carbonate	-do-
5.	Chloride	Mohr's method
6.	Fluoride	Spectrophotometric method
7.	Nitrate	-do-
8.	Sulphate	-do-
9.	Phosphate	-do-
10.	Silica	-do-
11.	Total Hardness	Titrimetric method
12.	Calcium	-do-
13.	Magnesium	Evaluation from TH and Ca
14.	Sodium	Flame emission photometric method
15.	Potassium	-do-

The chemical analysis results for 217 nos. of water samples have been tabulated in Annexure 1. To know the chemical quality of ground water in phreatic zones of Uttar Pradesh, the chemical analysis results of 817 ground water samples of previous year (2019-20) are given in Annexure-2.

CHEMICAL QUALITY OF GROUND WATER IN UTTAR PRADESH

The chemical quality of ground water depends on various factors like source of water such as rainfall, erosion, dry fall out, weathering of rocks and as a result of chemical reactions taking place on and below the surface. Thus, the chemical quality of water is dependent on geological and hydro geological conditions prevailing in the area, climate, and topography, nature of soil, physicochemical characteristics of rocks, nature of plantation and finally the activities of man resulting in environmental pollution. Therefore, it becomes necessary to assess the suitability of ground water for drinking and irrigation purpose before corrective measures are undertaken.

SUITABILITY OF GROUND WATER FOR POTABLE PURPOSES

The suitability of ground water for drinking purposes has been assessed according to the guidelines laid down by BIS (2012) for various analysed parameters. The minimum, maximum, average and standard deviation values of various constituents determined during chemical analysis have been summarized in following Table-18.

TABLE -18 Hydro-Chemical Data of Ground Water in Uttar Pradesh (an overview)

S. No.	Constituents	Minimum	Maximum	Average	Std. Dev.
1	pH	7.35	8.99	7.93	0.23
2	EC $\mu\text{S}/\text{cm}$ at 25 °C	216	27200	1225	2163
3	CO ₃ mg/l	nil	96	0.44	6.52
4	HCO ₃ mg/l	98	1366	408	153.7
5	Cl mg/l	7.1	7871	128	578.18
6	F mg/l	0	1.74	0.49	0.39
7	NO ₃ mg/l	0	218	14.5	25
8	SO ₄ mg/l	0	2304	78.6	328.73
10	TH (as CaCO ₃) mg/l	40	4100	328.7	350.66
11	Ca mg/l	8	1180	59.45	82.34
12	Mg mg/l	2.4	384	43.51	47.15
13	Na mg/l	2.8	4200	129.3	329.25
14	K mg/l	0	700	12.35	60.47

Hydrogen Ion Concentration (pH):

The pH value of ground water in the state of U.P. varies from 7.35 to 8.99 and is generally well within the permissible limit and the water is slightly alkaline in nature. The average pH value has been found to be 7.93.

Carbonate & Bicarbonate (CO₃& HCO₃):

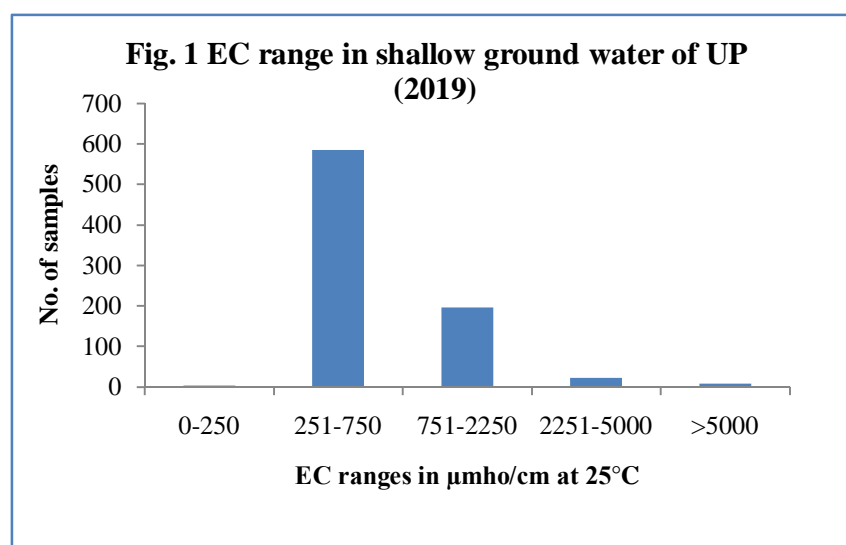
The Carbonate concentration has been observed to be nil in most of the cases however it has been found upto 96 mg/l & Bicarbonate concentration has been observed in the range of 98 to 1366 mg/l with an average value of 408 mg/l.

Electrical Conductivity (EC):

The Electrical Conductivity is a reflection of the concentration of various chemical constituents in ground water and gives the overall quality of ground water for its various uses like drinking, irrigation and other purposes. In the study area, E.C. value varied from 216 – 27200 μ Siemens/cm at 25°C with an average value of 1225 μ Siemens/cm at 25°C. The highest value of E.C. 27200 μ S/cm was observed in ground water from Nandgaon (Mathura district).

TABLE -19 The blocks exhibiting high values of E.C. (>5000 μ S/cm at 25°C μ S/cm)

S.No.	District	Block	Source	Location Details	EC μ S/cm at 25°C
1	Mathura	Raya	H.P.I.M.II.	Raya Block Office	6583
2	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	8715
3	Mathura	Chhata	H.P.I.M.II.	Chhata Block Office	8500
4	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	27200
5	Mathura	Choumuhan	H.P.I.M.II.	Choumuhan Block Office	10460
6	Mathura	Farah	H.P.I.M.II.	Farah Primary Health Centre	7580



The comparative statement of five years i.e. (2014-15), (2015-2016), (2016-17), (2017-18) & (2018-19) of E.C values show a very slight variation in the water quality as evident from the following table-

TABLE -20 Comparative Statement of Water Quality as per EC for five years

EC $\mu\text{S/cm}$ at 25°C	Percentage of Water Samples					
	Year	2014-15	2015-16	2016-17	2017-18	2018-19
0-2250		95.5	94.4	95.81	96.62	96.97
2251-5000		3.6	5.1	3.4	2.42	1.86
>5000		0.90	0.5	0.79	0.96	1.17

Total Dissolved Solids (TDS):

The total load of dissolved solids in water is determined theoretically by taking into account the EC of that particular water body.

Thus,

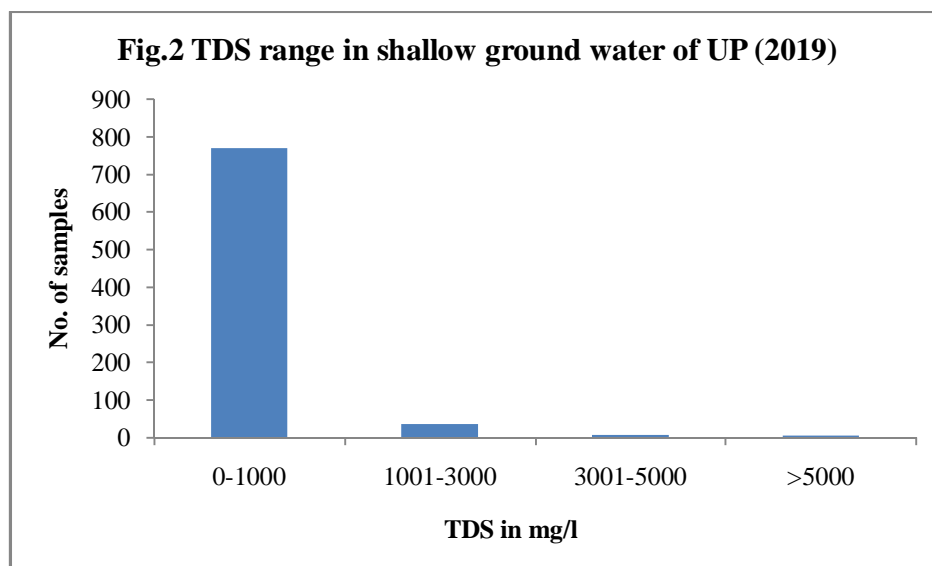
$$\text{TDS}_{\text{cal}} = \text{EC} * 0.65 \text{ mg/l} \quad \text{where EC is in } \mu\text{S/cm at } 25^\circ \text{C}$$

TDS is responsible for the mineralization of water and gives its degree of salinity. The perusal of the analysis data of U.P. shows that the ground water is fresh in most of the samples analysed. The calculated value of TDS greater than 2000 mg/l was found at 8 locations as given below-

Table - 21 T.D.S. more than 2000 mg/l in NH Stations of U.P.

S.No.	District	Block	Source	Location Details	TDS
1	Mathura	Raya	H.P.I.M.II.	Raya Block Office	4279
2	Mathura	Manth	H.P.I.M.II.	Manth Block Office	2275
3	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	5664
4	Mathura	Chhata	H.P.I.M.II.	Chhata Block Office	5525
5	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	17680
6	Mathura	Choumuhan	H.P.I.M.II.	Choumuhan Block Office	6799
7	Mathura	Goverdhan	H.P.I.M.II.	Goverdhan outside Shree Jee Flour Mil	2730
8	Mathura	Farah	H.P.I.M.II.	Farah Primary Health Centre	4927

Figure-2 depicts the T.D.S. range in shallow ground water of U.P (2019)



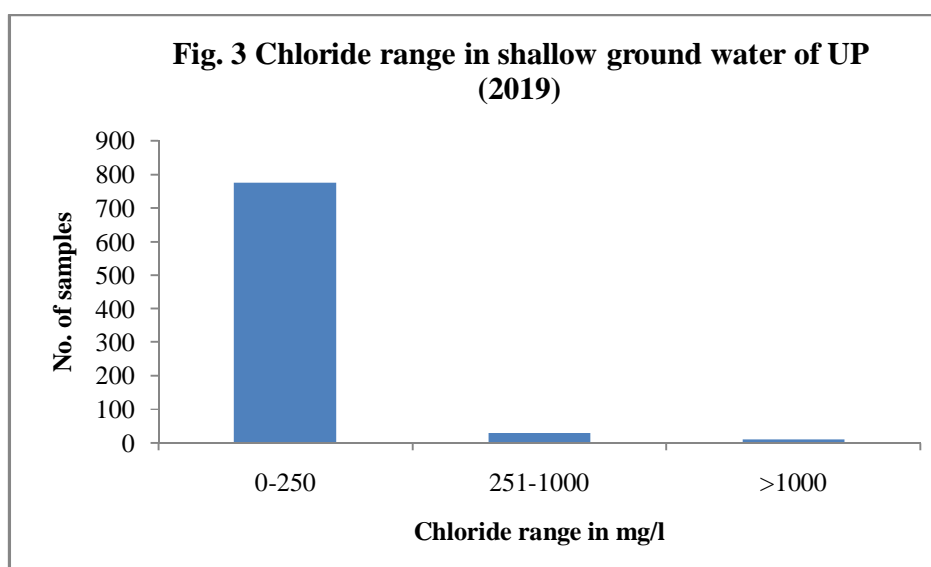
Chloride (Cl):

The chemical data reveals that concentration of chloride ion ranges from 7.1 to 7871 mg/l with an average value of 128 mg/l. 2.3 % samples exhibit Chloride values > 1000 mg/l. The various blocks exhibiting high values of Cl (>1000 mg/l) are tabulated in following table below-

TABLE-22 Blocks exhibiting high values of Cl (>1000 mg/l)

S.No.	District	Block	Source	Location Details	Cl in mg/l
1	Mathura	Raya	H.P.I.M.II.	Raya Block Office	1492
2	Mathura	Chhata	H.P.I.M.II.	Chhata Block Office	1170
3	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	7871
4	Mathura	Choumuhan	H.P.I.M.II.	Choumuhan Block Office	1844
5	Mathura	Farah	H.P.I.M.II.	Farah Primary Health Centre	1950

Fig. 3 depicts the range of Chloride in shallow ground water of U.P. (2019)



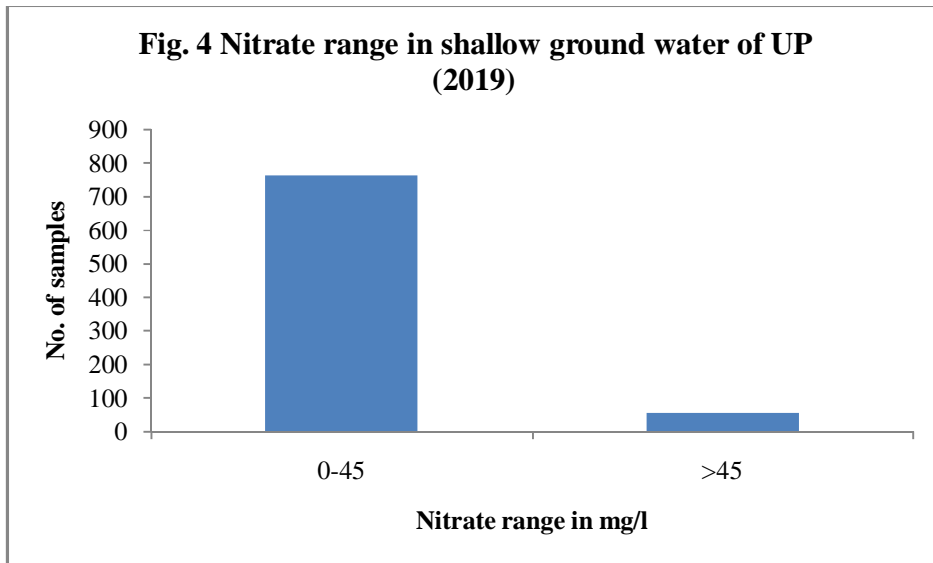
Nitrate (NO₃):

The concentration of Nitrate has been found varying widely. It ranges between not detectable to 218 mg/l with an average value of 14.5 mg/l. 8.3% samples have higher level of Nitrate concentration with the highest value 218 mg/l recorded at Sardhanablock (Meerut district). High Nitrate is found all over the state and does not follow any definite pattern of distribution. The various blocks exhibiting high values of nitrate concentration (>45 mg/l) are tabulated in following table:

TABLE -23 Blocks associated with high values of nitrate (>45 mg/l)

S.No.	District	Block	Source	Location Details	NO ₃ mg/l
1	Allahabad	Manda	H.P.I.M.II.	Block Office	60
2	Bagpat	Chaprauli	H.P.I.M.II.	Block Office	66
3	Banda	Banda(HQ)	H.P.I.M.II.	Block Office	49
4	Chitrakoot	Karvi	H.P.I.M.II.	Block Office	50
5	Chitrakoot	Pahari	H.P.I.M.II.	Block Office	51
6	Fatehpur	Bahua	H.P.I.M.II.	Block Office	50
7	Kanpur Nagar	Shivrajpur	H.P.I.M.II.	Block Office	47
8	Mahoba	Kabrai	H.P.I.M.II.	Block Office	51
9	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	52
10	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	55
11	Mathura	Choumuhan	H.P.I.M.II.	Choumuhan Block Office	59
12	Meerut	Hastinapur	H.P.I.M.II.	Block Office	66
13	Meerut	Sardhana	H.P.I.M.II.	Block Office	218
14	Muzaffarnagar	Charthawal	H.P.I.M.II.	Block Office	70
15	Saharanpur	Baliakheri	H.P.I.M.II.	Block Office	151
16	Saharanpur	Gangoh	H.P.I.M.II.	Block Office	108
17	Sant Rabidas Nagar	Gyanpur	H.P.I.M.II.	Block Office	57
18	Varanasi	Kashividya Peeth	H.P.I.M.II.	Block Office	110

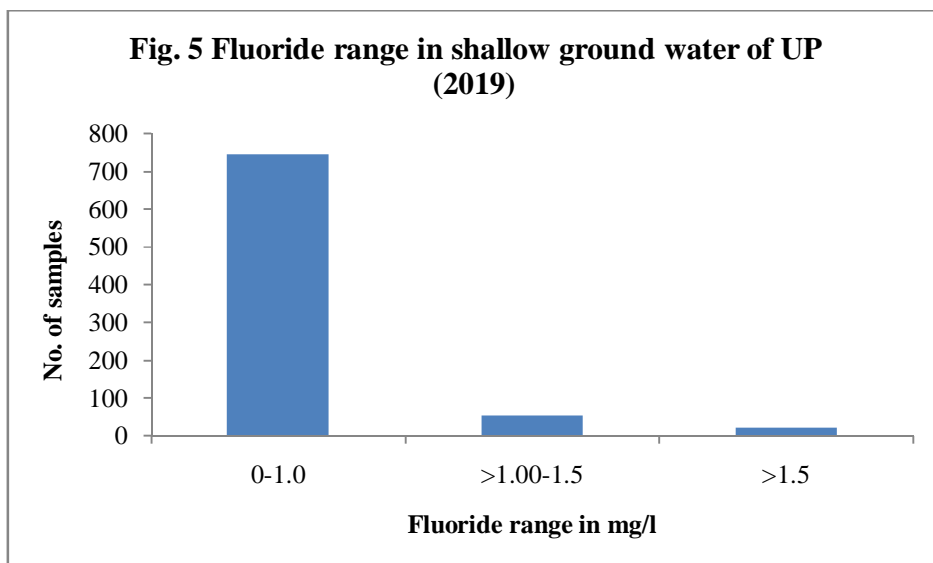
Fig. 4 depicts the nitrate range in shallow ground water of U.P. (2019)



Fluoride (F):

Small quantities of Fluoride are beneficial in reducing tooth decay, whereas excess concentration (>1.5 mg/l) is harmful causing staining of tooth enamel and Fluorosis. The value of Fluoride concentration is found to range between not detectable to 1.74 mg/l. The highest value of 1.74 mg/l has been recorded at BabaBekhermath, Pratapgarh district. The value of fluoride was found more than 1.5 mg/l/ at three locations.

Figure-5 depicts the fluoride range in shallow ground water of U.P. (2019)



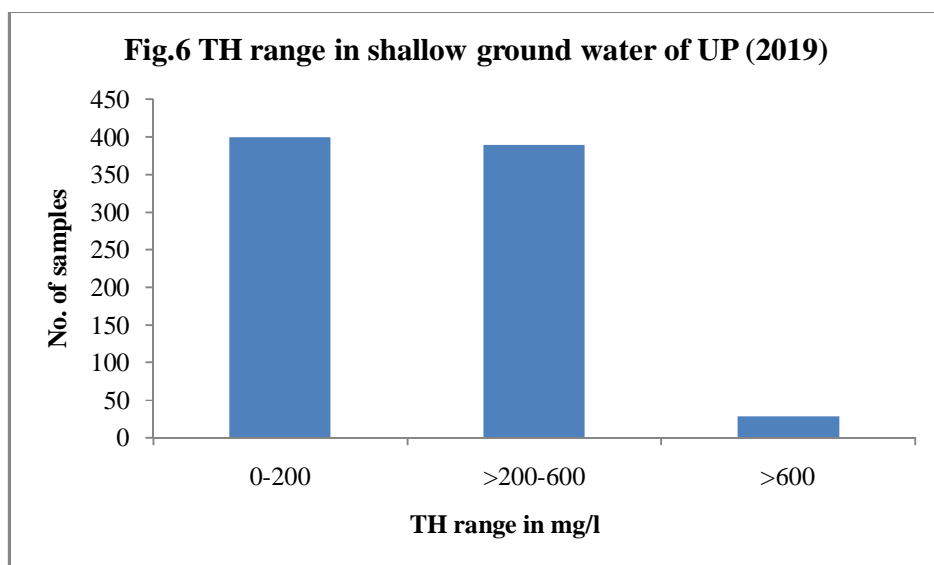
Total Hardness (T.H.):

The concentration of Total Hardness has been found to vary widely (S.D 328.73). It ranges between 40 to 4100 mg/l with 5.1 % of water samples falling above the permissible limit of 600 mg/l (BIS- 2012) and the highest value 4100 mg/l recorded at Nandgaon block (Mathura district). The various Blocks exhibiting high values of T.H. concentration (>600 mg/l) are tabulated in table below-

TABLE -24 Blocks exhibiting high values of Total Hardness (>600 mg/l)

S.No.	District	Block	Source	Location Details	TH in mg/l
1	Chitrakoot	Karvi	H.P.I.M.II.	Block Office	740
2	Chitrakoot	Pahari	H.P.I.M.II.	Block Office	750
3	Kanpur Nagar	Shivrajpur	H.P.I.M.II.	Block Office	640
4	Mathura	Raya	H.P.I.M.II.	Raya Block Office	900
5	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	1900
6	Mathura	Chhata	H.P.I.M.II.	Chhata Block Office	1150
7	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	4100
8	Mathura	Choumuhan	H.P.I.M.II.	Choumuhan Block Office	1950
9	Mathura	Goverdhan	H.P.I.M.II.	Goverdhan outside Shree Jee Flour Mil	740
10	Mathura	Farah	H.P.I.M.II.	Farah Primary Health Centre	2050
11	Sant Rabidas Nagar	Gyanpur	H.P.I.M.II.	Block Office	610

Figure 6- depicts the T.H. range in shallow ground water of U.P. (2019)



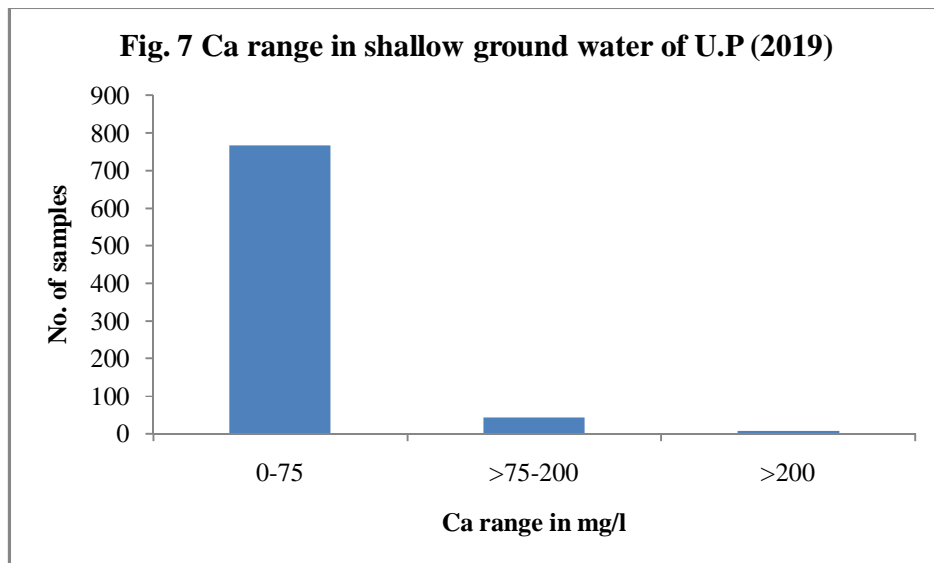
Calcium (Ca):

The concentration of Calcium has been found varying widely. It ranges between 8.0 mg/l to 1180 mg/l with nearly 14 % of water samples have calcium concentration greater than 75 mg/l and only 1.8 % samples have calcium concentration greater than 200 mg/l. with a maximum value of 1180 mg/l recorded at Nandgaon block (Mathura district). The various Blocks exhibiting high values of Calcium concentration (>200 mg/l) are tabulated in following table –

TABLE -25 Blocks exhibiting high values of Calcium (>200 mg/l)

S.No.	District	Block	Source	Location Details	Ca in mg/l
1	Chitrakoot	Pahari	H.P.I.M.II.	Block Office	216
2	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	220
3	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	1180
4	Mathura	Farah	H.P.I.M.II.	Farah Primary Health Centre	280

Figure-7 depicts the Calcium range in shallow ground water of U.P. (2019)



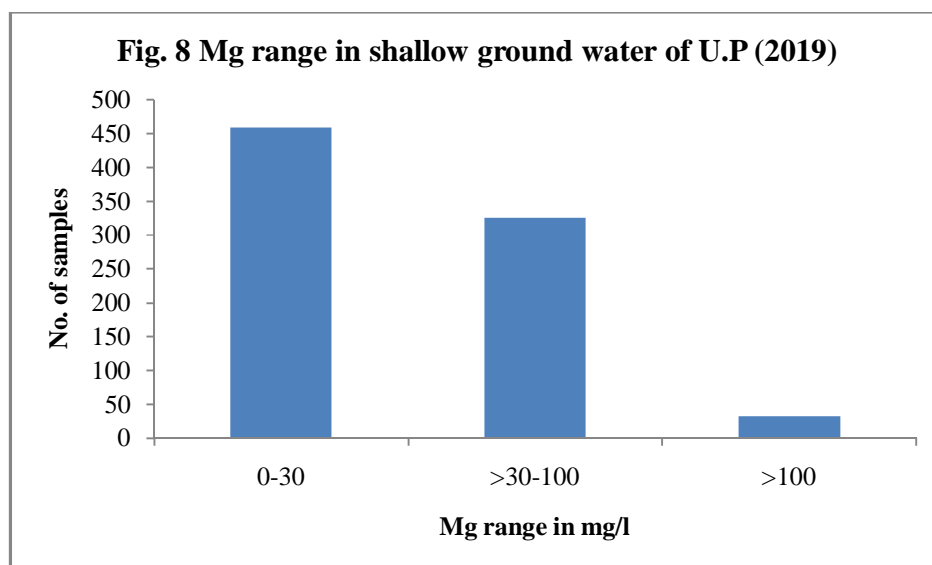
Magnesium (Mg) :

The main sources of magnesium in ground water are (i) rain water (ii) evaporate deposits & (iii) weathering of magnesium silicate minerals. The source of magnesium in igneous rocks is olivine, pyroxenes, amphiboles, dark coloured micas etc. Among the sedimentary rocks, the sources are chlorite, serpentine biotite, amphiboles, staurolite etc. Mg is one of the constituents responsible for hardness of water. The lower concentration of Mg is not harmful but higher concentration is laxative. The concentration of Magnesium has been found varying widely. It ranges between 2.4 mg/l to 384 mg/l with 57% of water samples have Mg concentration greater than 30 mg/l. Only 4.15 % water samples exhibited Mg values >100 mg/l with a maximum value of 324 mg/l recorded at Farah block (Mathura district). The various Blocks exhibiting high values of Magnesium concentration (>100 mg/l) are tabulated in following table-

TABLE-26 Blocks exhibiting high values of Magnesium (>100 mg/l)

S.No.	District	Block	Source	Location Details	Mg in mg/l
1	Chitrakoot	Karvi	H.P.I.M.II.	Block Office	122
2	Kanpur Nagar	Shivrajpur	H.P.I.M.II.	Block Office	103
3	Mathura	Raya	H.P.I.M.II.	Raya Block Office	156
4	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	324
5	Mathura	Chhata	H.P.I.M.II.	Chhata Block Office	204
6	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	276
7	Mathura	Choumuhan	H.P.I.M.II.	Choumuhan Block Office	384
8	Mathura	Goverdhan	H.P.I.M.II.	Goverdhan outside Shree Jee Flour Mil	184
9	Mathura	Farah	H.P.I.M.II.	Farah Primary Health Centre	324

Figure-8 depicts the Magnesium range in shallow ground water of U.P. (2019)



Sodium (Na):

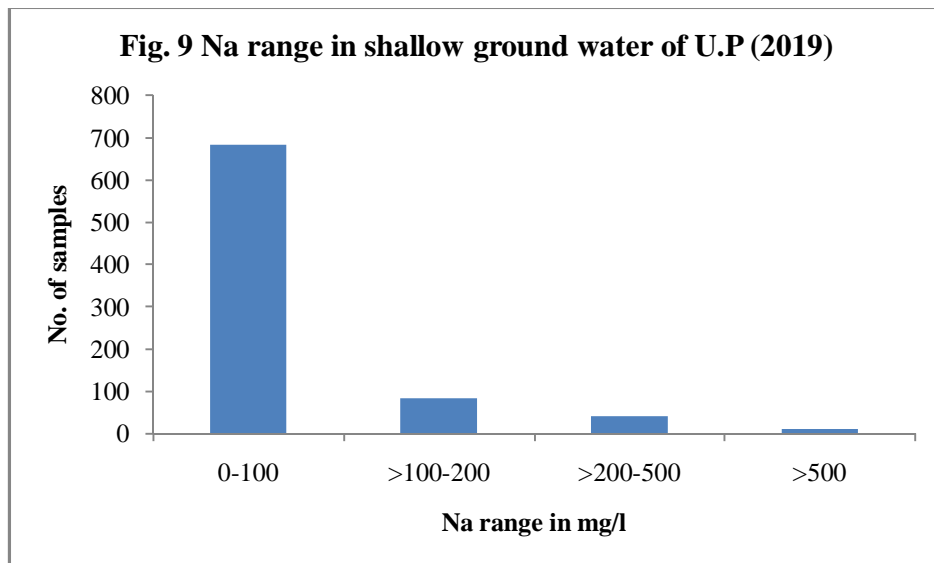
It is found in varying concentrations in all natural waters. It is found in evaporates and sea water in high concentration. It occurs among silicate minerals in feldspar, mica, amphiboles and pyroxenes. The main sources of sodium in ground water are (i) rain water, (ii) evaporate deposits, (iii) weathering of rock minerals present in the soil, (iv) disposal of sewage and industrial wastes containing sodium. The higher concentration of Na in drinking water is harmful especially to those suffering from cardiac, renal diseases pertaining to circulatory system of the human body.

The analysis result of shallow ground water indicate that sodium ranges between 2.8 mg/l to 4200 mg/l with an average value of 129.3 mg/l. 3.7 % samples were found to be associated with extremely high levels of Na concentration >500 mg/l with a maximum value of 4200 mg/l recorded at Nandgaon block (Mathura district). The various Blocks exhibiting high values of Sodium concentration (>500 mg/l) are tabulated in following table-

TABLE-27 Blocks exhibiting high values of Sodium (>500 mg/l)

S.No.	District	Block	Source	Location Details	Na in mg/l
1	Mathura	Raya	H.P.I.M.II.	Raya Block Office	1120
2	Mathura	Manth	H.P.I.M.II.	Manth Block Office	580
3	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	730
4	Mathura	Chhata	H.P.I.M.II.	Chhata Block Office	1460
5	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	4200
6	Mathura	Choumuhan	H.P.I.M.II.	Choumuhan Block Office	1200
7	Mathura	Goverdhan	H.P.I.M.II.	Goverdhan outside Shree Jee Flour Mil	640
8	Mathura	Farah	H.P.I.M.II.	Farah Primary Health Centre	780

Figure-9 depicts the Sodium range in shallow ground water of U.P. (2019)



Potassium (K):

Although potassium is more abundant than sodium in sedimentary rocks, its concentration in natural waters is quite low due to greater resistance to weathering of potassium bearing minerals. The main sources of K in natural waters are (i) rain water, (ii) weathering of Potash silicate minerals, (iii) potash fertilizers. K enters into structure of clay and clay bearing minerals during weathering. In illite K ions are incorporated in spaces between crystal layers where these are not removable by further ion exchange reactions (Buckman & Brady, 1960). Usually the concentration of K in water from natural source is small but high concentration of this ion if present may be attributed to pollution.

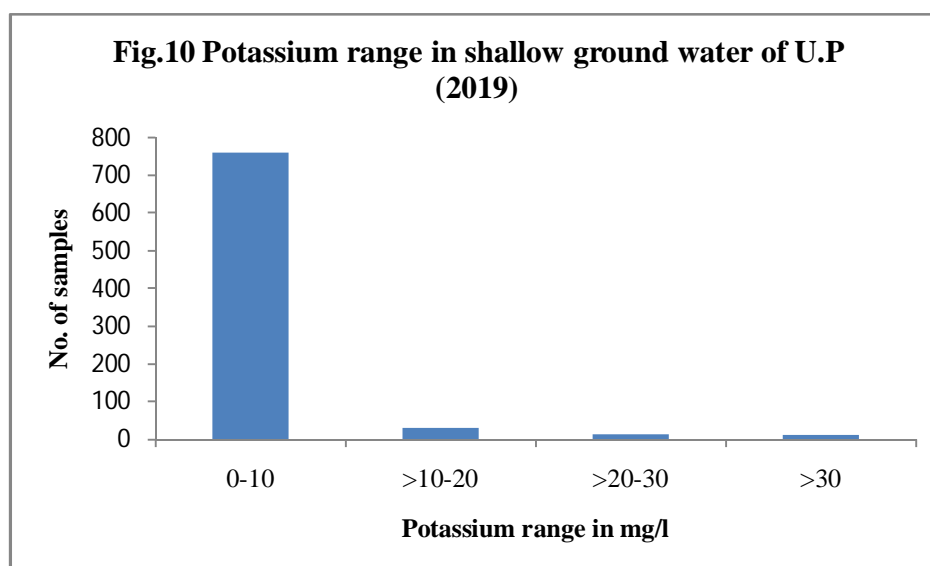
Potassium is an essential plant nutrient. It plays an important role in maintenance of cellular organization and in keeping the protoplasm in a proper degree of hydration by stabilizing the emulsions of highly colloidal particles. K deficiency causes water imbalance. The carbohydrate metabolism is also affected by inadequate supplies of potassium.

The analysis result of shallow ground water indicate that Potassium ranges between 0 to 700 mg/l with an average value of 12.35 mg/l. 3.7 % samples were found to be associated with extremely high level of K concentration >30 mg/l with a maximum value of 700 mg/l recorded at Naujhil block (Mathura district). The various Blocks exhibiting high values of Potassium concentration (>30 mg/l) are tabulated in following table-

TABLE- 28 Blocks exhibiting high values of Potassium (>30 mg/l)

S.No.	District	Block	Source	Location Details	K in mg/l
1	Ghaziabad	Loni	H.P.I.M.II.	Block Office	38
2	Mathura	Manth	H.P.I.M.II.	Manth Block Office	40
3	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	700
4	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	260
5	Mathura	Choumuhan	H.P.I.M.II.	Choumuhan Block Office	500
6	Meerut	Machhra	H.P.I.M.II.	Block Office	33
7	Saharanpur	Nakur	H.P.I.M.II.	Block Office	33
8	Varanasi	Kashividya Peeth	H.P.I.M.II.	Block Office	34

Figure-10 depicts the Potassium range in shallow ground water of U.P. (2019)



SUITABILITY OF GROUND WATER FOR IRRIGATION PURPOSE

The chemical quality of water is an important factor to be considered in evaluating its usefulness for irrigation purposes. Plants grown by irrigation absorb and transpire the water but leave nearly all the salts behind in the soil, where they accumulate and eventually prevent plant growth. Excessive concentrations of solute interfere with the osmotic process by which plant root membranes are able to assimilate water and nutrients. CaCO_3 has low solubility, it may precipitate harmlessly but the bulk of residual solutes present a disposal problem that must be solved effectively to maintain productivity of the irrigated soil. In areas where natural drainage is inadequate, the irrigation water infiltrating the root zone will cause water table to rise excessively. The crop productivity depends on the quality of the water used for irrigation. Water suitability for irrigation needs to be evaluated on the basis of hazards it can create in the soil, affecting yield & quality of crops.

In addition to problems caused by excessive concentration of dissolved solids (TDS), certain constituents in irrigation water are especially undesirable and some may be damaging even when present in small concentrations viz. Residual Sodium Carbonate (RSC). The potential hazards to crop growth are salinity, sodicity, alkalinity & toxicity.

Electrical Conductivity (EC):

The Electrical Conductivity is a reflection of the concentration of various chemical constituents in ground water and gives the overall quality of ground water for its various uses like irrigation. The Electrical Conductivity data reveals that the majority of the samples belong to C2, C3 class as per USSL classification.

TABLE –29 Frequency distribution of Electrical Conductivity

EC ranges in $\mu\text{S}/\text{cm}$ at 25°C	0-250	251 – 750	751-2250	>2250
	C1	C2	C3	C4
No. of samples	1	94	112	10
Percentage	0.5	43.3	51.6	4.6

Alkalinity Hazard or Residual Sodium Carbonate (RSC):

When carbonate or bicarbonate concentration in irrigation water is relatively higher than the alkaline earth metals, there is tendency for calcium and magnesium ions to precipitate as carbonates in the soil, thereby reducing the level of calcium and magnesium ions and increasing the relative levels of sodium in the soil. The highly soluble sodium carbonate (black alkali) known as residual sodium carbonate (RSC) is defined as –

$$\text{RSC} = (\text{HCO}_3 + \text{CO}_3) - (\text{Ca} + \text{Mg})$$

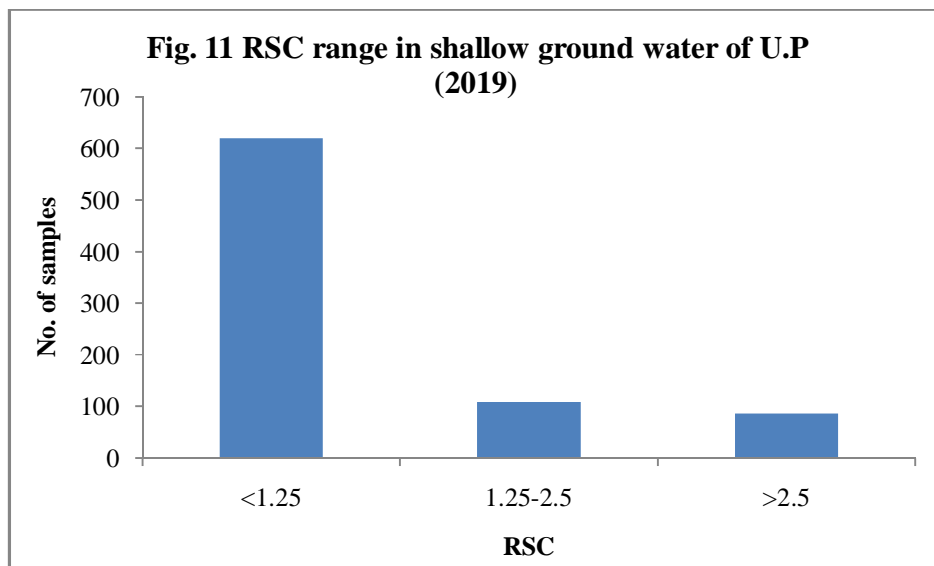
where concentrations are expressed in meq/l.

On computation of chemical analysis shows that the Residual Sodium Carbonate value are less than 1.25 in nearly 76% samples.

Table -30 Frequency Distribution of R.S.C. in NH Stations of U.P

RSC range (meq/l)	No. of samples	Percentage
<1.25	137	63.1
1.25-2.5	42	19.4
>2.5	38	17.5

Figure-11 depicts the R.S.C. range in shallow ground water of U.P (2019)



Conclusion:

Only 2017 ground water samples were collected during pre monsoon in 2020 out of 825 ground water monitoring stations due to prevailing COVID 2019 pandemic. On the basis of chemical analysis results of 217 ground water samples, the chemical quality of ground water of phreatic zone in Uttar Pradesh by and large is found to be suitable for drinking purposes (as per BIS 2012). Presence of some constituents beyond the permissible limit at some locations renders the water unfit for public water supply. The chemical analysis results of 817 ground water samples for the year 2019 are given in Annexure-2 for ready reference and are incorporated in this year write up.

Considering the parameters responsible for suitability of ground water of Uttar Pradesh it is observed that it is generally fit for irrigation purposes as per Electrical conductivity, Residual Sodium Carbonate except at few places where corrective measures are to be taken before agricultural usage.

CHANGE IN CHEMICAL QUALITY OF GROUND WATER FOR THE LAST FOUR YEARS (2016-17, 2017-18, 2018-19& 2019-20)

Following table shows that there is not much variation in the maximum, minimum and average values of pH, Electrical conductivity, CO₃, HCO₃, Cl, F, NO₃, SO₄, SiO₂, PO₄, TH, Ca, Mg, Na and K.

TABLE- 31 Hydro-Chemical Data of Ground Water in Uttar Pradesh (an overview) (2016-17)

S. No.	Constituents	Minimum	Maximum	Average
1.	pH	7.06	9.07	8.18
2.	EC μ S/cm at 25 °C	215	16440	852
3.	CO ₃ mg/l	Nil	204	8.87
4.	HCO ₃ mg/l	61	696	289
5.	Cl mg/l	3.5	3816	77
6.	F mg/l	Nd	5.5	0.54
7.	NO ₃ mg/l	Nd	1580	26
8.	SO ₄ mg/l	0	2888	60
9.	SiO ₂ mg/l	6.0	116	32
10.	PO ₄ mg/l	Nd	0.31	0.001
11.	TH (as CaCO ₃) mg/l	65	4240	249
12.	Ca mg/l	4.0	640	40
13.	Mg mg/l	1.2	730	36
14.	Na mg/l	4.0	2600	86
15.	K mg/l	0	862	8.6

**TABLE-32 Hydro-Chemical Data of Ground Water in Uttar Pradesh (an overview)
(2017-18)**

S. No.	Constituents	Minimum	Maximum	Average
1.	pH	7.0	9.8	8.12
2.	EC μ S/cm at 25 °C	122	13121	789
3.	CO ₃ mg/l	Nil	108	8.7
4.	HCO ₃ mg/l	49	781	256
5.	Cl mg/l	3.5	4071	78
6.	F mg/l	Nd	7.4	0.47
7.	NO ₃ mg/l	Nd	1200	19
8.	SO ₄ mg/l	0	1550	51
9.	PO ₄ mg/l	Nd	2.0	0.003
10.	TH (as CaCO ₃) mg/l	15	4140	212
11.	Ca mg/l	4.0	508	30
12.	Mg mg/l	0	689	33
13.	Na mg/l	2.0	1480	84
14.	K mg/l	0	742	8.2

**TABLE -33 Hydro-Chemical Data of Ground Water in Uttar Pradesh (an overview)
(2018-19)**

S. No.	Constituents	Minimum	Maximum	Average	Std. Dev.
1	pH	7.4	8.95	8.09	0.25
2	EC μ S/cm at 25 °C	200	27660	837	1283..95
3	CO ₃ mg/l	nil	108	36	20.17
4	HCO ₃ mg/l	67	1832	299	123.62
5	Cl mg/l	4	9657	87	385.13
6	F mg/l	nd	6.53	0.58	0.49
7	NO ₃ mg/l	nd	765	39	62.84
8	SO ₄ mg/l	nd	1650	56	151.35
9	PO ₄ mg/l	nd	0.5	0.4	0.14
10	TH (as CaCO ₃) mg/l	30	8253	272	379.59
11	Ca mg/l	2	822	47	46
12	Mg mg/l	0	1981	40	88.93
13	Na mg/l	1	2805	78	150.92
14	K mg/l	0	250	6.36	15.07

**TABLE -34 Hydro-Chemical Data of Ground Water in Uttar Pradesh (an overview)
(2019-20)**

S. No.	Constituents	Minimum	Maximum	Average	Std. Dev.
1	pH	7.2	8.95	7.98	0.31
2	EC $\mu\text{S/cm}$ at 25 °C	165	21410	817	1182.82
3	CO ₃ mg/l	nil	144	7.3	21.16
4	HCO ₃ mg/l	12	793	281	84.32
5	Cl mg/l	7.0	5602	87.88	325
6	F mg/l	nd	5.9	0.45	0.5
7	NO ₃ mg/l	nd	246	9.9	21.85
8	SO ₄ mg/l	nd	2240	44	324.53
9	PO ₄ mg/l	nd	1.082	0.3	0.14
10	TH (as CaCO ₃) mg/l	50	7550	262	379.43
11	Ca mg/l	2	840	41	45
12	Mg mg/l	1.3	1308	38	68
13	Na mg/l	4	1340	74	112
14	K mg/l	0	860	6.8	31

Annexure – I

**WELL-WISE DEPTH TO WATER LEVEL OF GROUND WATER MONITORING
WELLS, U.P DURING MAY'20, AUG'20, NOV'20, JAN'21**

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
1	Agra	Achhanera PZ-GWD			1.86	2.24
2	Agra	Lohkhera				
3	Agra	Paitikhera Bagh				
4	Agra	Sarendhi Chauraha				
5	Agra	Sehta Thapi				
6	Agra	Malpura				
7	Agra	Bah Pz-GWD			35.4	35.42
8	Agra	Gopalpura				
9	Agra	Shahganj Prithvi Nath				
10	Agra	Samai				
11	Agra	Fatehabad Pz-GWD			44.21	44.35
12	Agra	Dabar Pz-GWD			16.01	16.67
13	Agra	Fatehpur Sikri				
14	Agra	Fatehpur sikri- NEW				
15	Agra	Fatehpur Sikri Pz-GWD				
16	Agra	Undera			1.72	1.29
17	Agra	Bhara (jagnair)				
18	Agra	Gangapur Basai			3.91	3.47
19	Agra	Jagner Pz-GWD			17.14	
20	Agra	Mewli (Bhara)			14.35	
21	Agra	Jaitpur Kalan Pz-GWD				
22	Agra	Natauli				
23	Agra	Khundauli Pz-GWD			30.07	31.17
24	Agra	Kagraul				
25	Agra	Kheragarh Pz-GWD				
26	Agra	Kolua				
27	Agra	Nagla Udaiya				
28	Agra	Manikpura Pz-GWD				
29	Agra	Saiyan				
30	Agra	Saiyan Pz-GWD			32.53	
31	Agra	Tehra				
32	Agra	Shamsabad Pz-GWD				
33	Agra	Etmadpur			28.14	
34	Aligarh	Gopi				
35	Aligarh	Bhikampur				
36	Aligarh	Sankra				
37	Aligarh	Hardanaganj			4.8	3.3
38	Aligarh	Harduaganj				4.92
39	Aligarh	Safedpur			6.59	5.62
40	Aligarh	Gonda			3.01	3.2
41	Aligarh	Gorai				
42	Aligarh	Jawan				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
43	Aligarh	Sudiyal			10.65	11.6
44	Aligarh	Andla			10.13	9.15
45	Aligarh	Khair			10.57	7.7
46	Aligarh	Palachand				
47	Aligarh	Lodha (GWD PZ)				
48	Aligarh	Taquipur(new)			4.11	4.83
49	Allahabad	Aandwa		16.63	16.95	17.46
50	Allahabad	Aandwal	16.94	15.88		
51	Allahabad	Akodha		2.67	3.04	6.19
52	Allahabad	Bikapur				
53	Allahabad	Hanumanganj				
54	Allahabad	Allahabad	10.22	6.44	6.49	9.09
55	Allahabad	Atrampur	6.41	2.14	4.01	4.68
56	Allahabad	Bairi	1.81	0.04	1.05	1.57
57	Allahabad	Bara	2.98	1.45	2.23	2.58
58	Allahabad	Barautl	0.52	0.91	1.18	1.47
59	Allahabad	Barokhar		8.22	10.36	13.13
60	Allahabad	Bawarikalaan	1.62	0.88	1.39	2.25
61	Allahabad	Chilla	11.48	9.19	9.57	11.83
62	Allahabad	Gadwa Fort	3.29	3	3.39	3.54
63	Allahabad	Gauhania	3.82	1.22	2.38	3.14
64	Allahabad	Ghoose		0.76	2.52	
65	Allahabad	Jasra				
66	Allahabad	Handia	0.87	0.57	1.05	1.24
67	Allahabad	Holagarh	5.35	2.07	2.76	3.75
68	Allahabad	Imamganj	5.01	1.27	3.34	4.61
69	Allahabad	Iradat Nagar	17.37	15.39	15.68	18.84
70	Allahabad	Karchanna		10.58	9.14	11.19
71	Allahabad	Kasarua	17.8	16.55		
72	Allahabad	Khaptia Kheri	3.06	1.38	2.14	2.55
73	Allahabad	Koraon	0.02	0.18	1.11	1.68
74	Allahabad	Ladiri Bazar	2.51	0.92	1.91	0.08
75	Allahabad	Lalpur	3.99	2.58	3.04	3.19
76	Allahabad	Madraha				
77	Allahabad	Malka Harhar	6.6	16.02	15.24	15.69
78	Allahabad	Mallhan	5.24	3.32	3.78	4.76
79	Allahabad	Mau-Aima	5.39	2.86	3.18	3.69
80	Allahabad	Meja	1.19	1.49	5.04	5.51
81	Allahabad	Meja Road	11.53	12.87	14.68	14.62
82	Allahabad	Naini	12.47	11.26	11.01	13.09
83	Allahabad	Jail Road (Power House)				
84	Allahabad	Narayan Crossin				
85	Allahabad	Pasna	1.15	0.84	1.62	2.31
86	Allahabad	Phulpur2	4.86	3.95	4.46	4.96
87	Allahabad	Bida				
88	Allahabad	Mugersan				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
89	Allahabad	Rampur tulapur	1.42	2.77	5.32	5.63
90	Allahabad	Saraon	5.07	3.28	4.12	5.11
91	Allahabad	Sikandra1	11.8	10.91	10.66	10.56
92	Allahabad	Naribari				
93	Allahabad	Naribari				
94	Allahabad	Seorajpur				
95	Allahabad	Zari Bazar (Sirathu)				
96	Allahabad	Zari Bazar	3.84	1.62		
97	Ambedkar Nagar	Akbarpur Pz GWD NEW		4.1	4.75	5.05
98	Ambedkar Nagar	Akbarpur Pz-GWD				
99	Ambedkar Nagar	Akbarpur PzII-GWD				
100	Ambedkar Nagar	Baskhari Pz-GWD		1.95	3.55	3
101	Ambedkar Nagar	Tanda1				
102	Ambedkar Nagar	Bhiti				
103	Ambedkar Nagar	Bhiti New		2.68	4.35	5.06
104	Ambedkar Nagar	Mahrua gola-New		3.37	4.23	4.98
105	Ambedkar Nagar	Nevada				
106	Ambedkar Nagar	Jalapur Pz-GWD				
107	Ambedkar Nagar	Jalapur1				
108	Ambedkar Nagar	Kesharpur		1.25	4.07	3.69
109	Ambedkar Nagar	Akbarpur1		2.64	3.42	4.45
110	Ambedkar Nagar	Katehari		2.05	3.5	4.45
111	Ambedkar Nagar	Neori1				
112	Ambedkar Nagar	Ram Nagar pz-GWD				
113	Ambedkar Nagar	Alanpur				
114	Ambedkar Nagar	Tanda Pz-GWD				
115	Ambedkar Nagar	Bhiyaon New Pz			5.55	5.83
116	Ambedkar Nagar	Surapur		1.03	2	2.84
117	Auraiya	Achhalda				
118	Auraiya	Ajitmal-Q				20.86
119	Auraiya	Atsu				
120	Auraiya	Pz GWD Ajitmal		19.69	19.91	
121	Auraiya	Auraiya				
122	Auraiya	Bhaupur				
123	Auraiya	Hasulia		8.01	7.98	7.93
124	Auraiya	Basundhara		1.87	2.52	2.47
125	Auraiya	Chapta				
126	Auraiya	Phaphund		5.41	6.73	6.71
127	Auraiya	Bandhamau		4.66	5.83	6.54
128	Auraiya	Bidhuna Pz				
129	Auraiya	Airwakatra				
130	Auraiya	Kunderkot				
131	Auraiya	Gadhalot				
132	Auraiya	Dinamau				
133	Auraiya	Sahar		1.22	1.72	3.07
134	Auraiya	Sahayal		6.86	6.99	7.87

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
135	Auraiya	Newalganj (Achhalda)		5.02	5.06	5.04
136	Auraiya	Premnagar-Bajera		0.12	0.85	
137	Azamgarh	Ahraula		3.15	6.75	6
138	Azamgarh	Bazidpur				
139	Azamgarh	Sageri	4.15	1.35	2.63	3.25
140	Azamgarh	Badihari	2.7	2.25	3.5	4.5
141	Azamgarh	Langerpur		2.06	4.22	3.1
142	Azamgarh	Kanauna				2.06
143	Azamgarh	Kanauna1				
144	Azamgarh	Rahul Nagar				3.93
145	Azamgarh	Rampur	2.42	0.53		1.77
146	Azamgarh	Deogaon	0.4	0	0.82	1.3
147	Azamgarh	Lalgaanj2				
148	Azamgarh	Madayan	2.6	1.2	1.52	3.2
149	Azamgarh	Captainganj				
150	Azamgarh	Belwana	1.87	0.65	2.18	3.25
151	Azamgarh	Karsandia Kalan			1.7	
152	Azamgarh	Saraimir	4.15	2.38	2.78	2.4
153	Azamgarh	Bahrapur	4.03	1.9	1.9	3.05
154	Azamgarh	Bairadih		3.24	6.17	5.33
155	Azamgarh	Azamgarh	7.35	5.45	5.75	6.55
156	Azamgarh	Mukusudia				
157	Azamgarh	Phulpur	5.36	3.12	2.63	3.2
158	Azamgarh	Lohra				
159	Azamgarh	Bibipur Khatauli	3.27	1.36	3.3	3.8
160	Azamgarh	Nizamabad	2.82	0.56	3.03	3.45
161	Azamgarh	Kharihani	5.1	3	3.5	4.25
162	Azamgarh	Sidhauna	2.73	1.66	1.22	2.45
163	Azamgarh	Kharsahan Kalan	1.75	0.84		2.1
164	Baghpat	Baghpat Pz				
165	Baghpat	Burnawal				
166	Baghpat	Daha Pz				
167	Baghpat	Khekhra Pz	26.39	27.29	27.57	28.37
168	Baghpat	Pilana Pz	28.96		28.93	27.82
169	Bahraich	Beria				
170	Bahraich	Kamolia Bazar				
171	Bahraich	Huzurpur		0.9	1.8	1.55
172	Bahraich	Maraucha				
173	Bahraich	Parpatganj		4.02		
174	Bahraich	Jarwall		1.6	2.45	3.01
175	Bahraich	Bhakrauli Ka purwa		1.65	2.35	2.68
176	Bahraich	Sablapur		1.93	3.13	2.68
177	Bahraich	Gaighat		1.35	2.54	3.23
178	Bahraich	Katarniaghat		0.98	1.73	1.35
179	Bahraich	Motipur				
180	Bahraich	Murthia(jalia)				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
181	Bahraich	Tapri godh		2.58	3.56	3.5
182	Bahraich	Fakharpur				
183	Bahraich	Razichauraha		0.82	1.12	1.72
184	Bahraich	Bhopatpur		8.07	7.82	8.47
185	Bahraich	Dhanauli				
186	Bahraich	Lachmanpur		7.47		8.57
187	Bahraich	Nanpara		9.15	9.3	9.35
188	Bahraich	Phulwari				
189	Bahraich	Baisanpurwa		1.55	2.15	2.3
190	Bahraich	Kapurpur		0.83	1.78	1.83
191	Bahraich	Baba Kutir		1.3		1.93
192	Bahraich	Kolhuwa		4.65	5	4.55
193	Bahraich	Mihirpurwa(Kudwa)		2.85	3.75	4.2
194	Bahraich	Mote Baba		0.93		1.5
195	Bahraich	Nanpara – Ii		7.15		8.1
196	Bahraich	Pyagpur – I		4.93	5.6	5.85
197	Ballia	Bairia		1.56		
198	Ballia	Babhnauli		0.19	0.68	2.89
199	Ballia	Bansdih				
200	Ballia	Bansdih New		0.51	2.33	2.75
201	Ballia	Balesara		1.3	2.28	2.82
202	Ballia	Haldi			2.49	1.75
203	Ballia	Chilkahar New		0.8	1.8	2.94
204	Ballia	Jahangrapur				2.95
205	Ballia	Ballia		2.58	1.78	2.67
206	Ballia	Chilkhar				
207	Ballia	Chitbargaon		0.42	0.88	1.7
208	Ballia	Garwar		0.48	1.57	2.4
209	Ballia	Manihar		2.58	5	4.72
210	Ballia	Nasirabad		4.1	8.21	9.1
211	Ballia	Kharsanda		0.82	1.57	2.2
212	Ballia	Dalan Chapra		1.17	2.92	6.43
213	Ballia	Jaiprakashnagar			6.44	6.45
214	Ballia	Aurikalan				
215	Ballia	Jamuan		1.06	2.45	2.95
216	Ballia	Sikanderpur		0	2.42	
217	Ballia	Kureji				
218	Ballia	Pur		1.46	1.62	2.65
219	Ballia	Pakka inar				
220	Ballia	Rasra		0	1.46	1.9
221	Ballia	Rewati		0.52	0.74	1.8
222	Ballia	Narla				
223	Ballia	Ubhavan		1.75	0.82	
224	Ballia	Narhi			5.67	7.63
225	Ballia	Sikandarpur2				1.3
226	Balrampur	Balrampur PZ(GWD)		2.75	2.9	3.54

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
227	Balrampur	Balrampur1		3.02	3.35	3.75
228	Balrampur	Deoria1		2.83	2.73	
229	Balrampur	Utraula		1.36	1.95	2.9
230	Balrampur	Sonpur			1.45	
231	Balrampur	Sridutganj1		0.53	1.7	2.45
232	Balrampur	Gainsari		0.85	1.6	2.06
233	Balrampur	Gaura Crossing		0.7	1.42	2.37
234	Balrampur	Jarwa		8	7.7	8.35
235	Balrampur	Semri1		1.44	2.54	4.06
236	Balrampur	Bankatwa		9.2	9.25	9.5
237	Balrampur	Chandanpur		2.43	3.03	3.8
238	Balrampur	Pachperwa		0	0.2	0.3
239	Balrampur	Bhainsa Baba				
240	Balrampur	Rehrabazar PZ(GWD)		1.17	1.85	2.8
241	Balrampur	Bank Bhawanipur				
242	Balrampur	Gangnar		1.91	2.5	6.72
243	Balrampur	Harriaya bazar		1.72	2.4	3.45
244	Balrampur	Sipahia Village		1.52	2	2.06
245	Balrampur	Tulsipur (Devipatan)			2.2	2.8
246	Balrampur	Tulsipur1				
247	Balrampur	Pachperwa – Ii		1.55	2.8	3.48
248	Balrampur	Pachperwa – I		11.4	11.26	
249	Banda	Aliha				
250	Banda	Baberu New			3.4	
251	Banda	Baberu1				
252	Banda	Banda	9.33	9.04	12.67	13.4
253	Banda	Bargaini		9.01	8.87	
254	Banda	Jamnipurwa				
255	Banda	Mataundh				
256	Banda	Sukulkuan				
257	Banda	Bisanda	3.29	2.32	2.5	3.32
258	Banda	Kazi ka Tola				
259	Banda	Bhitari ka dera				
260	Banda	Chilla				
261	Banda	Pailani				
262	Banda	Dadoghat				
263	Banda	Kamasin				
264	Banda	Atarra	4.74	1.31	2.91	4.24
265	Banda	Girwan		0.36	1.26	2.78
266	Banda	Khhurand		0	0.17	0.89
267	Banda	Naraini				
268	Banda	Naraini New	3.55	0.6	0.95	3.74
269	Banda	Pangara	0.94	0.53	1.06	1.95
270	Banda	Badausa	4.72	2.54	4.88	4.71
271	Banda	Badehan	11.42	9.33	9.52	11.32
272	Banda	Mukera	7.94	5.06	5.45	7.37

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
273	Banda	Roli Kalyanpur		8.83	9.11	11.1
274	Banda	Paprenda				
275	Banda	Tindwari		6.04		
276	Barabanki	Bhitaria		2.22		
277	Barabanki	Kalkeshwar temp		8.73	9.11	9.61
278	Barabanki	Barabanki(New)				
279	Barabanki	Baba ki Kuti	3.08	1.24	3.46	3.72
280	Barabanki	Fatehpur(new)	3.7	2.49	3.55	3.95
281	Barabanki	Kitlupur	3.36	2.83	3.1	2.83
282	Barabanki	Chaubisi		2.53	2.38	2.97
283	Barabanki	Datauli Chanda		11.1	10.2	10.28
284	Barabanki	Haidergarh pz gwd				
285	Barabanki	Kabulpur				
286	Barabanki	Subeha				
287	Barabanki	Zaidpur				
288	Barabanki	Badosarai				
289	Barabanki	Dewa	2.5	2.13	2.7	3.41
290	Barabanki	Masauli Chaurah		3.03	4.46	5.1
291	Barabanki	Rasauli		0.52	1.31	2.22
292	Barabanki	Safdarganj chau				
293	Barabanki	Kotwa Sarai		3.69		7.35
294	Barabanki	Ramdin Purwa				
295	Barabanki	Ramsanehighat				
296	Barabanki	Babaganj				
297	Barabanki	Kursi				
298	Barabanki	Bariu bagh				
299	Barabanki	Bhanmau				
300	Barabanki	Daryabad	0.6	0.2	2.16	2.83
301	Barabanki	Rani Katra	4.42	4.95	5.32	5.68
302	Barabanki	Sarai Barai			3.89	4.47
303	Barabanki	Tikaitnagar	5.28	2.92	5.13	6.55
304	Barabanki	Purwa amarsingh	1.19	1.32	2.24	3.19
305	Barabanki	Sundhia mau	5.79	4.89	4.76	5.13
306	Barabanki	Dullapur				
307	Barabanki	Miyankapur				
308	Barabanki	Rudauli I				
309	Barabanki	Kaisarganj		7.14	7.81	8.38
310	Barabanki	Sidhaur		5.4	3.46	3.18
311	Barabanki	Bhiwal		0.68	4.6	
312	Barabanki	Gutauna		1.03	2.88	3.47
313	Barabanki	Trivediganj		0.86	3.74	4.28
314	Barabanki	Barabanki I		5.72	6.07	6.49
315	Barabanki	Harakh		2.03	2.76	3.83
316	Barabanki	Pure Dalai (Pz Gwd)			3.72	4.08
317	Barabanki	Ramnagar	7.37	7.74	8.21	7.99
318	Bareilly	Alampur Zafrabad Pz GWD				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
319	Bareilly	Aonla				
320	Bareilly	Baheri			4.5	1.23
321	Bareilly	Kanman				
322	Bareilly	Manpur Pz GWD				
323	Bareilly	Bhojipura				
324	Bareilly	Bhojipura Pz GWD				
325	Bareilly	Mohammadpur Jatan Pz GWD				
326	Bareilly	Nawabganj1			5.62	4.12
327	Bareilly	Bhuta			5.75	5.73
328	Bareilly	Dhaneli Purwi				
329	Bareilly	Bareilly Pz GWD				
330	Bareilly	Izzat Nagar Pz GWD				
331	Bareilly	Faridpur1				
332	Bareilly	Fatehganj East Pz GWD				
333	Bareilly	Bhitora Pz GWD				
334	Bareilly	Dunka-1				
335	Bareilly	Shahi Pz GWD			5	5.03
336	Bareilly	Bareilly1			6	6.25
337	Bareilly	Itaura Sukhdevpur Pz GWD				
338	Bareilly	Kandharpur Pz GWD			3.1	3.35
339	Bareilly	Aliganj				
340	Bareilly	Majhgawan Pz GWD				
341	Bareilly	Mirganj Pz GWD			6.7	6.85
342	Bareilly	Ramnagar1				
343	Bareilly	Ramnagar2			11.6	11.6
344	Bareilly	Siroli Pz GWD			9.1	8.99
345	Bareilly	Shishgarh			4.5	5.18
346	Bareilly	Deorania			3.2	2.95
347	Bareilly	Gularia Gauri Shankar				
348	Bareilly	Nakati Narayan			3.2	
349	Basti	Kalwari		1.25	1.93	2.65
350	Basti	Kharauan jat		1.85	2.13	2.77
351	Basti	Jagdishpur				
352	Basti	Mathauli1				
353	Basti	Basti		3.1	4.21	5
354	Basti	Haraiya		1.8	2.53	3.15
355	Basti	Captainganj1		3.33	2.93	3.18
356	Basti	Bhanpur		0.63	1.4	2.8
357	Basti	Rudauli		1.1	2.82	3.42
358	Basti	Bhikamjot		1.42	2.32	3.39
359	Bijnor	Dhampur			7.05	6.75
360	Bijnor	Mubarakpur/lpur				
361	Bijnor	Milak Beniram			2.87	2.67
362	Bijnor	Dara Nagar				
363	Bijnor	Chandok			17.55	20.12
364	Bijnor	Ratanpur Riyaya Pz GWD				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
365	Bijnor	Kaziwala				
366	Bijnor	Nagina			2.77	4.08
367	Bijnor	Puraini				
368	Bijnor	Bijnor Pz GWD				
369	Bijnor	Swaheri Khurd			9.65	9.85
370	Bijnor	Najibabad				1.63
371	Bijnor	Najibabad New			1.01	
372	Bijnor	Shahjadpur Or Nagal				
373	Bijnor	Sneh Rd.rly.stn.			9.81	13.08
374	Bijnor	Mahua				
375	Bijnor	Sarakthal			3.67	4.19
376	Bijnor	Chandpur			11.09	11.05
377	Bijnor	Haldaur				
378	Bijnor	Motamahadev (Vijaypur)			6.32	6.8
379	Bijnor	Nehatoor/ Nehtaur			9.85	9.77
380	Bijnor	Noorpur				
381	Bijnor	Rasoolpur				
382	Bijnor	Seohara			6.22	6.1
383	Budaun	Biswali				
384	Budaun	Dudhauni				
385	Budaun	Asafpur Pz GWD				13.8
386	Budaun	Bisauli Pz GWD				
387	Budaun	Silhari Pz GWD				
388	Budaun	Daharpur Pz GWD				
389	Budaun	Dandi				
390	Budaun	Dataganj				
391	Budaun	Dhanari Railway Station Pz GWD				
392	Budaun	Gunnaur I				
393	Budaun	Deora Pz GWD				
394	Budaun	Badaun Pz GWD				
395	Budaun	Dabthara Shyam Pz GWD			6.5	15.9
396	Budaun	Hazratpur				
397	Budaun	Mansa Nagla Pz GWD			19.8	19.3
398	Budaun	Asrasi				
399	Budaun	Nagla				
400	Budaun	Qadar Chowk Pz GWD				
401	Budaun	Kolhai Pz GWD				
402	Budaun	Binawar Pz-GWD				
403	Budaun	Parhali Bajhara				
404	Budaun	Kachla				
405	Budaun	Ujhani Pz GWD			21	
406	Budaun	Ujhani I				18.1
407	Budaun	Pupupur				
408	Budaun	Sarauriya Pz GWD				
409	Budaun	Wazirganj Pz GWD				
410	Budaun	Dhanari				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
411	Budaun	Sihawali				
412	Bulandshahar	Anup Shahar				
413	Bulandshahar	Anup Shahar (GWD PZ)				
414	Bulandshahar	Arnia Khurd (GWD PZ)				
415	Bulandshahar	Batli				
416	Bulandshahar	Ugrasan nagla				
417	Bulandshahar	Daulatpur Khurd EW/Pz			11	
418	Bulandshahar	Jargawan				
419	Bulandshahar	Nandpur				
420	Bulandshahar	Gulauthi				
421	Bulandshahar	Tajpur I				
422	Bulandshahar	Khurja Pz				
423	Bulandshahar	Lakhaothi Pz			7.16	6.77
424	Bulandshahar	Chattari				
425	Bulandshahar	Pahasu (GWD PZ)				
426	Bulandshahar	Chola rly. Stn.				
427	Bulandshahar	CholaChowki				
428	Bulandshahar	Sikandrabad				
429	Bulandshahar	Sikandrabad I				12.21
430	Bulandshahar	Bagrasi				
431	Bulandshahar	Bara Ferozpur				
432	Bulandshahar	Bhainsaura				
433	Bulandshahar	Unchagaon				
434	Bulandshahar	Unchagaon (GWD PZ)			10.79	
435	Chandauli	Amna				
436	Chandauli	Kamalpur	3.47		4.14	4.67
437	Chandauli	Naubatpur				
438	Chandauli	Chahniya			2.915	3.595
439	Chandauli	Marufpur xing	7.19		8.21	10.09
440	Chandauli	Chakia	4.28		4.73	4.693
441	Chandauli	Baburi				
442	Chandauli	Chandauli				
443	Chandauli	Dhanpur	1.165		2.185	3.635
444	Chandauli	Chandraprabha	5.75		7.17	8
445	Chandauli	Naugarh	0.78		1.18	8.38
446	Chandauli	Mugal Sarai	1.23		0.97	2.633
447	Chandauli	Sakaldiha				
448	Chitrakoot	Chakrajafar		10.28	13.34	15.25
449	Chitrakoot	Karvi pz GWD				
450	Chitrakoot	Karwi	7.12	6.03	5.69	6.5
451	Chitrakoot	Pahra ka Purwa				
452	Chitrakoot	Pausaunja				
453	Chitrakoot	Rani Purbhatt				
454	Chitrakoot	Bhaunri	9.79	7.66	8.19	8.3
455	Chitrakoot	Jorwara	9.53	4.54	6.49	6.98
456	Chitrakoot	Manikpur	5	0.8	2.37	3.04

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
457	Chitrakoot	Pokhri Purwa				
458	Chitrakoot	Chiwalaha	21.18	9.72	13.47	20.03
459	Chitrakoot	Mau	12.34	14.24	16.25	20.82
460	Chitrakoot	Deval				
461	Chitrakoot	Harison Pura				
462	Chitrakoot	Pahari Buzurg				
463	Chitrakoot	Pahari Buzurg New	7.2	3.62	5.05	7.2
464	Chitrakoot	Prasidhpur				
465	Chitrakoot	Rajajipur (new)				
466	Chitrakoot	Raipura	10.59	6.67	11.34	12.35
467	Chitrakoot	Ramnagar				
468	Chitrakoot	Ramnagar pz GWD				
469	Deoria	Ratasia Kothi			3.6	3.95
470	Deoria	Barhaj				
471	Deoria	Baitalpur			2.33	2.9
472	Deoria	Deoria2			2.47	3.8
473	Deoria	Desai Deoria			2.07	2.55
474	Deoria	Gauri Bazar			0.94	3.59
475	Deoria	Sirsia				
476	Deoria	Lar road			1.05	2.05
477	Deoria	Pathardewa (Narayanpur Kothi)			3.8	
478	Deoria	Rampur Karkhana			1.7	2
479	Deoria	Tarkulwa				
480	Deoria	Rudrapur1			3.3	5.1
481	Deoria	Baitalpur			1.85	
482	Deoria	Usra Bazaar			3.98	4.45
483	Etah	Guiwar Asodullahrpur				
484	Etah	Amanpur				4.6
485	Etah	Amanpur Pz-GWD			4.53	
486	Etah	Awagarh Pz-GWD				
487	Etah	Awagarh1				
488	Etah	Ganjdundwara Pz-GWD				
489	Etah	Jaithra Pz-GWD			11.63	11.8
490	Etah	Jalesar Pz-GWD			11.73	11.79
491	Etah	Locha				
492	Etah	Kasganj Pz-GWD				
493	Etah	Marahchi				
494	Etah	Marahchi Pz-GWD			9.35	9.35
495	Etah	Nidhauli Pz-GWD				
496	Etah	Daryaganj			9.91	9.96
497	Etah	Pahra i.b.canal				
498	Etah	Patiali 1				
499	Etah	Patiali Pz-GWD				
500	Etah	Sahawar Pz-GWD				
501	Etah	Sahawar 1				
502	Etah	Fafotu				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
503	Etah	Sakit (new)				
504	Etah	Sakit Pz-GWD			8.09	8.23
505	Etah	Bhagwala1				
506	Etah	Etah Pz-GWD			14.06	14.4
507	Etah	Jaisukhpur				
508	Etah	Shitalpur Pz-GWD				
509	Etah	Dhumri				
510	Etah	Dhumri1				3.03
511	Etah	Sidhpura Pz-GWD			5.77	5.83
512	Etah	Manpur Nagaria				
513	Etah	Nagla Khanji				
514	Etah	Soron				
515	Etah	Soron Pz-GWD				
516	Etawah	Korikua				
517	Etawah	Udi				
518	Etawah	Govt ITI Parisar				
519	Etawah	Bahadurpur				
520	Etawah	Bareshar-Q				
521	Etawah	Pz GWD Bareshar				
522	Etawah	Barthana				
523	Etawah	Bharthana2				
524	Etawah	Pakkatal				
525	Etawah	Bharthana Pz				
526	Etawah	Barecha				38.13
527	Etawah	Pz GWD Jaswant Nagar				16.14
528	Etawah	Pz GWD Safai				
529	Etawah	Ujhayani				4.71
530	Etawah	Bakewar				5.19
531	Etawah	Patya Chaturpur				8.56
532	Etawah	Sabdalpur				
533	Etawah	Nagla Ajit				
534	Faizabad	Amaniganj		4.45	5.32	5.3
535	Faizabad	Chaure bazar		4.6	5.3	5.67
536	Faizabad	Khajurahat		8	8.15	8.25
537	Faizabad	Paraspur Sakara				
538	Faizabad	Faizabad Pz-CGWB		6.9	7.05	7.3
539	Faizabad	Madhopur		1.1	2.15	3.05
540	Faizabad	Naokua		0.76	1.85	2.43
541	Faizabad	Sakhupura		1.05	2.44	3.34
542	Faizabad	Bakarganj		0.93	2.8	3.06
543	Faizabad	Gosaiganj new		2.5	3.63	4.32
544	Faizabad	Gosaiganj Pz-GWD		2.35	3.7	4.25
545	Faizabad	Meethagaon				
546	Faizabad	Milkipur		5.32	5.15	5.35
547	Faizabad	Pure Bazar Pz-GWD				
548	Faizabad	Sarai Rasi		5.62	5.65	6.07

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
549	Faizabad	Rudauli 1			2.79	
550	Faizabad	Ramdin Purwa		5.32	5.97	5.91
551	Farrukhabad	Pz Barhpura				
552	Farrukhabad	Pz Fatehgarh				
553	Farrukhabad	Kaimganj2				
554	Farrukhabad	Kampil				
555	Farrukhabad	Pz Moahanpur				
556	Farrukhabad	Anchara Taqipur				
557	Farrukhabad	Pz Dabhau				
558	Farrukhabad	Rajepur			3.19	4.35
559	Farrukhabad	Khaga PZ Gwd				
560	Farrukhabad	Pz GWD Shukrullahpur				15.44
561	Farrukhabad	Shamsabad2				
562	Farrukhabad	Shamsabad3				
563	Farrukhabad	Mohammadabad				
564	Farrukhabad	Rudayan Rly Stn				
565	Farrukhabad	Shamshabad			15.99	
566	Fatehpur	Khaga2				
567	Fatehpur	Khaga3				
568	Fatehpur	Naubasta		8.41	10.78	11.64
569	Fatehpur	Ramapur				
570	Fatehpur	Ramapur(CHOUBE KI SARAI)				
571	Fatehpur	Amoli				
572	Fatehpur	Deori(choti)				
573	Fatehpur	Asother	6.02	2.01	3.23	4.1
574	Fatehpur	Datauli				
575	Fatehpur	Lalauli	13.34	9.09	9.49	10.05
576	Fatehpur	Gazipur				
577	Fatehpur	Gazipur New		10.56	11.72	11.2
578	Fatehpur	Bela	4.8	2.06	3.16	4.17
579	Fatehpur	Bhitaura PZ Gwd	13.89	14.32	15.47	12.48
580	Fatehpur	Bilanda	5.23		3.67	
581	Fatehpur	Jamrwan				
582	Fatehpur	Barwa	30.29	29.76	31.49	29.6
583	Fatehpur	Devmai	5.98	1.91	3.79	5.95
584	Fatehpur	Hathgaon PZ Gwd				
585	Fatehpur	Kishanpur				
586	Fatehpur	Thariyayan				
587	Fatehpur	Thariyayan1				
588	Fatehpur	Saunt harjan co				
589	Fatehpur	Jahanabad				21.6
590	Fatehpur	Musfha	12.8	6.74	10.67	12.99
591	Fatehpur	Sarain Bakewar		3.47	3.81	6.45
592	Fatehpur	Aung2				
593	Fatehpur	Bindki 1		2.28		4.35
594	Fatehpur	Fatehpur PZ Gwd	12.51	11.09	10.74	10.72

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
595	Fatehpur	Sanvra				
596	Fatehpur	Umradiapur				
597	Fatehpur	Fatehpur2				
598	Fatehpur	Saha				
599	Fatehpur	Amni				
600	Fatehpur	Baba Kuwan	14.16	4.43	5.07	11.85
601	Fatehpur	Bahua	11.18	6.74	12.18	13.6
602	Fatehpur	Chiralighat				
603	Fatehpur	Khaga				
604	Fatehpur	Khajuha				
605	Fatehpur	Malwan	4.04	1.8	3.16	3.95
606	Fatehpur	Sadhuwapur	4.43	1.57	1.99	3.05
607	Firozabad	Araon Pz GWD			25.87	
608	Firozabad	Eka Pz GWD				
609	Firozabad	Mustafabad				
610	Firozabad	Jasrana Pz GWD			8.1	8.42
611	Firozabad	Kusiari				
612	Firozabad	Madanpur Pz-GWD			11.16	14.6
613	Firozabad	Bhura ka pul				
614	Firozabad	Shikohabad Pz-GWD			18.93	19.49
615	Firozabad	Tundla			31.58	33.86
616	Firozabad	Kanwara				
617	Gautam Buddha Nagar	Sector 63 Pz				
618	Gautam Buddha Nagar	Sector -92 Pz				
619	Gautam Buddha Nagar	Sector-44 Pz				
620	Gautam Buddha Nagar	Sector-62 A Pz				16.93
621	Gautam Buddha Nagar	Sector-72 Pz				
622	Gautam Buddha Nagar	Sector-81 Pz				
623	Gautam Buddha Nagar	Dadri				
624	Gautam Buddha Nagar	Chauki Pz				4.54
625	Gautam Buddha Nagar	Dhankaur				
626	Gautam Buddha Nagar	Jewar (new)				
627	Gautam Buddha Nagar	Jewar Pz				
628	Ghaziabad	Bhojpur-Pz				
629	Ghaziabad	Dhaulana		2.1		3.04
630	Ghaziabad	Dhaulana-Pz	4.44		3.11	
631	Ghaziabad	Garhmukteshwar				
632	Ghaziabad	Garhmukteshwar-Pz	14.76	14.6	14.54	14.58

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
633	Ghaziabad	Nanpur				
634	Ghaziabad	Neknampur Nanai-Pz				
635	Ghaziabad	Abdullahpur mandi-II-Pz				
636	Ghaziabad	Azad Nagar-Pz				
637	Ghaziabad	Badauli-Hapur-Pz				
638	Ghaziabad	Hafizpur-Hapur Pz				
639	Ghaziabad	Hapur-Pz	19.2	19.36	19.19	19.3
640	Ghaziabad	Pilkuha-Pz				
641	Ghaziabad	Simbhawali				
642	Ghaziabad	Upheda-Pz				
643	Ghaziabad	Charauri-PZ				
644	Ghaziabad	Sahibabad				
645	Ghaziabad	Modi Nagar-Pz 1	8.14	7.36	7.58	7.91
646	Ghaziabad	Modi Nagar-Pz II	8.54	7.61	8.21	7.71
647	Ghaziabad	Muradnagar				
648	Ghaziabad	Raoli				
649	Ghaziabad	Ghaziabad Pz				
650	Ghaziabad	Morta Pz GWD	21.74	22.58	22.04	21.53
651	Ghazipur	Dildar nagar	1.44	0.85	0.98	4.8
652	Ghazipur	Gahmar	4.52	2.26	3.36	11.55
653	Ghazipur	Deokali				
654	Ghazipur	Ghazipur (Urban)	2.3	0.9	2.3	0.35
655	Ghazipur	Ghazipur Church	3.7	2.96	0.66	4.26
656	Ghazipur	Ghazipur Sadar new	1.3	0.85	0.8	5.23
657	Ghazipur	Orulari	2.1	1.07	2.65	3.35
658	Ghazipur	Mainpur				
659	Ghazipur	Alawalpur				
660	Ghazipur	Sidhagarghat				4.31
661	Ghazipur	Kathgarha				
662	Ghazipur	Manihari		2.18	3.51	4.32
663	Ghazipur	Kabirpur	2.68	0.93	3.53	
664	Ghazipur	Mardah	3.33	0.25		3.03
665	Ghazipur	Mohammadabad2	11.67		6.68	
666	Ghazipur	Sadikapur	1.69	0.9	2.46	4.64
667	Ghazipur	Ajaiipur		2.48		2.04
668	Ghazipur	Bhadaura				
669	Ghazipur	Nandganj	7.44	4.67	6.37	
670	Ghazipur	Reotipur	7	3.96	5.02	7.2
671	Ghazipur	Bhimapur				
672	Ghazipur	Pyrepur	2.8	1.03	1.56	3.2
673	Ghazipur	Tanda Bairakh			1.96	3.94
674	Ghazipur	Bhole Nagar Chatti				
675	Ghazipur	Khanpur				
676	Ghazipur	Saidpur				
677	Ghazipur	Saidpur1	10.94	7.2	8.7	9.85
678	Ghazipur	Karimuddinpur		0.78	2.22	

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
679	Ghazipur	Kasimabad				4.24
680	Ghazipur	Birnon				
681	Ghazipur	Baresar	11.4	5.3	6.8	12.3
682	Ghazipur	Deoria	5.32	2.04	2.38	5.31
683	Ghazipur	Karnda	11.25	7.42	7.68	10.3
684	Ghazipur	Naudar (Chotti)	8.5	6.3	5.56	8.28
685	Gonda	Gaura Chowraha				
686	Gonda	Umri Begamganj				
687	Gonda	Chapiya		0.7	1.7	2.6
688	Gonda	Parsa gondri		1.75	2.55	3.02
689	Gonda	Itiathok				
690	Gonda	Gonda (Urban)		6.42	6.55	6.8
691	Gonda	Gonda I				
692	Gonda	Kazi Dewar		1.66	3.01	4.25
693	Gonda	Birpur Katra		1.29	2.1	2.85
694	Gonda	Mankapur-II		3.65	3.7	4.27
695	Gonda	Subhagpur				
696	Gonda	Bhauriganj		1.93		3.37
697	Gonda	Colonelganj				
698	Gonda	Paraspur				
699	Gonda	Baleshwar ganj				
700	Gonda	Karanailganj		1.87	2.45	2.95
701	Gonda	Mankapur		2.34	2.6	3.45
702	Gonda	Mankapur – I		3.75	3.93	4.46
703	Gonda	Tarabganj		1.89		2.52
704	Gorakhpur	Geruababa			3.72	3.75
705	Gorakhpur	Dubauli			3.24	3.64
706	Gorakhpur	Jangal kauria				
707	Gorakhpur	Ramgarh				
708	Gorakhpur	Rampur				
709	Gorakhpur	Kauriram			3.86	5.16
710	Gorakhpur	Khajani				
711	Gorakhpur	Jagdishpur I			2.1	2.5
712	Gorakhpur	Belipar				
713	Gorakhpur	Urwabazar				
714	Gorakhpur	Bharohia			4.2	4.6
715	Gorakhpur	Maniram			3.85	4.2
716	Gorakhpur	Mehra			3.2	3.9
717	Gorakhpur	Tola Bhawan Bari			3.8	4.4
718	Hamirpur	Gohand				
719	Hamirpur	Rihunta				
720	Hamirpur	Kuchecha				
721	Hamirpur	Kurara				
722	Hamirpur	Kurara New				
723	Hamirpur	Kapsa			0.36	1.27
724	Hamirpur	Khanna	6.19	5.24	3.31	4.2

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
725	Hamirpur	Kunetha	4.01	2.92	4.17	4.59
726	Hamirpur	Maudaha				
727	Hamirpur	Bewar	15.55	13.52	14.64	16.36
728	Hamirpur	Kharela		1.09		3.27
729	Hamirpur	Kharela A	2.64		3.5	
730	Hamirpur	Muskara				
731	Hamirpur	Rath		14.49	12.59	
732	Hamirpur	Chandaul				
733	Hamirpur	Dhagwan		0.8	3.26	3.96
734	Hamirpur	Jalalpur				
735	Hamirpur	Sarila NEW DW		1.42	3.28	4.16
736	Hamirpur	Chhani Buzurg 1				
737	Hamirpur	Inghota				
738	Hamirpur	Lalpura				
739	Hamirpur	Pachkura				15.36
740	Hamirpur	Sumerpur PZ Gwd				
741	Hamirpur	Terha		15.59	15.63	15.53
742	Hamirpur	Bibhuni	5.18	0.74	2.34	18.7
743	Hamirpur	Bihuni Khurd		9.73	10.96	11.3
744	Hamirpur	Damu Purwa	14.44	12.99	16.37	16.2
745	Hamirpur	Mamna		0.94	2.76	4.1
746	Hamirpur	Maudha				
747	Hardoi	Ahrori		1.23	2.7	2.9
748	Hardoi	Sahabadpur			1.37	0.98
749	Hardoi	Bawan Pz-GWD		2.04	3.04	3.28
750	Hardoi	Behdar(GWD PZ)		1.24	1.87	2.41
751	Hardoi	Gokul Behta				
752	Hardoi	Hardoi2				
753	Hardoi	Atrauli (GWD PZ)				
754	Hardoi	Dalel Nagar rly		4.62		5.4
755	Hardoi	Gangau		0.41	1.17	1.47
756	Hardoi	Quasimpur				
757	Hardoi	Atrauli 1				
758	Hardoi	Barkhani Pz-GWD			8.8	
759	Hardoi	Pali				
760	Hardoi	Pali-New				
761	Hardoi	Panch deora			5.15	5.24
762	Hardoi	Dhobia		6.02	6.03	6.06
763	Hardoi	Gopamau		6.89	7.05	7.16
764	Hardoi	Harpalpur PZ-GWD		7.33	7.55	7.69
765	Hardoi	Jayantnagar				
766	Hardoi	Kachauna		0.99	2.37	3.17
767	Hardoi	Kachauna (GWD PZ)		1.13	1.9	3.04
768	Hardoi	Marhia				
769	Hardoi	Kothawan				
770	Hardoi	Sadarpur				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
771	Hardoi	Mallawan		13.05	13	13.63
772	Hardoi	Del Panderwa		0.6	2.08	2.69
773	Hardoi	Gomti_ west Bank				
774	Hardoi	Pihani		1.87	2.44	2.87
775	Hardoi	Mohammadpur				
776	Hardoi	Sandila				
777	Hardoi	Sandila (GWD PZ)		3.49	4.35	4.74
778	Hardoi	Shahabad Pz-GWD				
779	Hardoi	Shahabad2			4.88	5.37
780	Hardoi	Manjila		2.73	3.82	3.94
781	Hardoi	Rasulpur				
782	Hardoi	Rasulpur-New				
783	Hardoi	Sursa (GWD PZ)		3.66	4.08	4.22
784	Hardoi	Barganwar		3.98	4.23	4.65
785	Hardoi	Bhadaial				
786	Hardoi	Tediaon (GWD PZ)		2.33	3.39	3.61
787	Hardoi	Bharawan				3.88
788	Hardoi	Bharkhani		8.13		9.09
789	Hardoi	Dalel Nagar Rly				5.4
790	Hardoi	Budhagaon				
791	Hardoi	Saidpur				
792	Hathras	Hasyan				
793	Hathras	Rattika Nagla			3.83	4.25
794	Hathras	Hathras Jn.				
795	Hathras	Hathras(New)				
796	Hathras	Thulai				
797	Hathras	Iglas			11.34	12.37
798	Hathras	Sathini				
799	Hathras	Kanchna				
800	Hathras	Mitai				
801	Hathras	Mursan				
802	Hathras	Mursan(GWD PZ)			23.32	
803	Hathras	Biswar				
804	Hathras	Gursoti				
805	Hathras	Sadabad				
806	Hathras	Pihura(sahpau)				
807	Hathras	Alipur Mohna				
808	Hathras	Ruheri				
809	Hathras	Agsauli				
810	Hathras	Bhatikra				
811	Hathras	Purdil Nagar				
812	Hathras	Sikandara Rao			5.1	6.32
813	Jalaun	Ait2			8.21	8.24
814	Jalaun	Dekor			7.72	7.7
815	Jalaun	Hardoi				
816	Jalaun	Hardoi Gujar				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
817	Jalaun	Kishora Mauza			5.7	5.96
818	Jalaun	Kukargaon				
819	Jalaun	Kusumilia			6.43	7.56
820	Jalaun	Marora			5.5	6.07
821	Jalaun	Orai			3.34	3.24
822	Jalaun	Jalaun			8	7.77
823	Jalaun	Ata			9	12.89
824	Jalaun	Babina				
825	Jalaun	Babina-new			1.78	1.98
826	Jalaun	Itaura				
827	Jalaun	Kukartaal				
828	Jalaun	Keolari-New			1.97	1.67
829	Jalaun	Keorari				
830	Jalaun	Konch				
831	Jalaun	Konch(new)			5.71	5.32
832	Jalaun	Chhota Rampur				
833	Jalaun	Hadrukh			15.25	15.43
834	Jalaun	Khutahaund				
835	Jalaun	Sirsakalar			3.95	4.19
836	Jalaun	Madhogarh			3.9	4.11
837	Jalaun	Churkhi			12.95	11.89
838	Jalaun	Damras			28.75	
839	Jalaun	Kalpi			26.3	26.39
840	Jalaun	Mahewa			17.7	22.19
841	Jalaun	Musaria				
842	Jalaun	Bangar				
843	Jalaun	Gopalpura1			0.92	
844	Jalaun	Kailaiya			7.02	6.45
845	Jalaun	Kamsaira			1.95	1.71
846	Jalaun	Kanasi			4.92	5.31
847	Jalaun	Nadigaon				
848	Jalaun	Gohan			5.8	6.04
849	Jalaun	Jagmanpur			> 30	30.43
850	Jalaun	Rajpura			1.6	1.62
851	Jalaun	Umri			3.6	3.73
852	Jaunpur	Badlapur			6.81	7.36
853	Jaunpur	Bandhwa				
854	Jaunpur	Barai par				
855	Jaunpur	Bareri Dasmi				
856	Jaunpur	Barji Kalan			2.47	3.41
857	Jaunpur	Barsathi				
858	Jaunpur	Belwa Tarpatti			1.91	2.72
859	Jaunpur	Belwal				
860	Jaunpur	Buxal				
861	Jaunpur	Chakwa			3.11	2.07
862	Jaunpur	Chandwak	12.2		11.95	10.35

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
863	Jaunpur	Chitwan				
864	Jaunpur	Dhitauli				
865	Jaunpur	Dhiuraha				
866	Jaunpur	Dinamau				
867	Jaunpur	GaneshganjBazaar				
868	Jaunpur	Ghanshyampur				
869	Jaunpur	Hasanpur			4.52	5.12
870	Jaunpur	Haripur			8.29	8.41
871	Jaunpur	Itaili(muftiganj)	8.27		8.63	6.45
872	Jaunpur	Janghai			2.98	3.57
873	Jaunpur	Jaunpur1			14.19	14.68
874	Jaunpur	Kheta Sarai1			2.16	3.25
875	Jaunpur	Khuthan	7.965		9.625	8.38
876	Jaunpur	Kirakat1				
877	Jaunpur	Machhalishahr			0.85	1.6
878	Jaunpur	Madhupur1				
879	Jaunpur	Maharajganj2			2.57	3.47
880	Jaunpur	Maheshganj				6.23
881	Jaunpur	Marihun			4.26	5.67
882	Jaunpur	Mehreon1				
883	Jaunpur	Mungra Badshahpur			7.33	7.74
884	Jaunpur	Mungra Badshahpur Old				
885	Jaunpur	Mungra Badshahpur1				
886	Jaunpur	Narar(jamnipur)			1.77	2.57
887	Jaunpur	Pisara	0.2		0.78	0.99
888	Jaunpur	Raja Bazar			2.84	3.41
889	Jaunpur	Rampur1			2.28	3.08
890	Jaunpur	Sarpatha	0.19		0.49	0.7
891	Jaunpur	Shahganj1	0.995		1.635	1.215
892	Jaunpur	Shankarganj				
893	Jaunpur	Sigra mau			2.56	3.53
894	Jaunpur	Sikrara				
895	Jaunpur	Tarti			12	12.2
896	Jhansi	Babina Pz-GWD				
897	Jhansi	Babinal			6.04	
898	Jhansi	Khailara			7.9	7.99
899	Jhansi	Raksa			4.6	4.72
900	Jhansi	Badagaon				
901	Jhansi	Barua Sagar				
902	Jhansi	Ghugawa			6.4	6.81
903	Jhansi	Jhansi1			4.33	4.49
904	Jhansi	Phutera				
905	Jhansi	Ajneri Madhopura				6.86
906	Jhansi	Bamaur			6.79	6.64
907	Jhansi	Eairach				
908	Jhansi	Farida				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
909	Jhansi	Garutha				
910	Jhansi	Auldan-New			10.65	10.81
911	Jhansi	Bangra Pz				7.94
912	Jhansi	Sakrar1			7.45	7.89
913	Jhansi	Baghaura				
914	Jhansi	Khillawari			3.9	7.93
915	Jhansi	Semri			5.6	5.71
916	Jhansi	Atar Suva				
917	Jhansi	Pandauha				
918	Jhansi	Pandhawa				
919	Jhansi	Rewan				7.84
920	Jhansi	Kuangaon			12.8	
921	Jhansi	Mauranipur Rajpaharia			5.66	5.28
922	Jhansi	Moth			2.9	2.57
923	Jhansi	Punch				
924	Jhansi	Samthar			6.43	6.61
925	Jhansi	Pandawaha				
926	Jyotiba Phule nagar	Amroha Pz CGWB			15.53	15.21
927	Jyotiba Phule nagar	Chhajlet				
928	Jyotiba Phule nagar	Matlabpur Pz GWD				
929	Jyotiba Phule nagar	Dhanaura Pz CGWB				
930	Jyotiba Phule nagar	Gajraula Pz CGWB				
931	Jyotiba Phule nagar	Gajraula Pz GWD			13.9	14.01
932	Jyotiba Phule nagar	Jalapur Kalan Pz GWD				
933	Jyotiba Phule nagar	Jogipura Pz GWD			14.47	14.08
934	Jyotiba Phule nagar	Daurala Pz GWD				
935	Jyotiba Phule nagar	Bagadpur Pz GWD			18.27	18.1
936	Jyotiba Phule nagar	Bawankheri Pz GWD				
937	Jyotiba Phule nagar	Hasanpur Pz GWD			16.85	
938	Jyotiba Phule nagar	Joya Pz GWD			16.3	16.15
939	Jyotiba Phule nagar	Dariyal			6.22	6.02
940	Jyotiba Phule nagar	Rehra			7.68	7.45
941	Kannauj	Chibramau Pz-GWD		21.41	21.23	22.85
942	Kannauj	Haseran Pz-GWD		0.36	0.61	0.88
943	Kannauj	Indergarh				
944	Kannauj	Jalalabad Pz-GWD		23.86	23.94	25.2
945	Kannauj	Kannauj Pz-GWD				
946	Kannauj	Kannauj1				7.04
947	Kannauj	Phagua				
948	Kannauj	Tirwaganj				
949	Kannauj	Kharni Pz-GWD		5.05	5.9	5.65
950	Kannauj	Gurshaiganj1				
951	Kannauj	Ram ashram				
952	Kannauj	Akbarpur				
953	Kannauj	Harharpur				
954	Kannauj	Lohemarg		18.36	18.48	18.61

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
955	Kannauj	Tirwaganj				
956	Kanpur Dehat	Raura		5.85	6.04	7.22
957	Kanpur Dehat	Pukhrayan				
958	Kanpur Dehat	Pukhrayan I			7.08	
959	Kanpur Dehat	Baghpur		5.58		4.01
960	Kanpur Dehat	Kadari		3.62	4.75	5.71
961	Kanpur Dehat	Muhammadpur		20	21.95	
962	Kanpur Dehat	Shahjahanpur				
963	Kanpur Dehat	Kainjari		5.77	5.98	6.33
964	Kanpur Dehat	Jaunra		3.84	3.84	
965	Kanpur Dehat	Gajner				
966	Kanpur Dehat	Derapur		22.28	23.25	23.29
967	Kanpur Dehat	Pukhanraya		6.95		
968	Kanpur Dehat	Sahtawanpurwa		1.07	2.71	3.53
969	Kanpur Dehat	Shivli				3.49
970	Kanpur Nagar	Bhailasa				
971	Kanpur Nagar	Sarh		0.53	2.24	3.48
972	Kanpur Nagar	Bilhaur				
973	Kanpur Nagar	Bilhaur Pz-GWD				
974	Kanpur Nagar	Niwada Dhamni		7.62	7.43	7.14
975	Kanpur Nagar	Chaubepur I		12.65	12.27	12.59
976	Kanpur Nagar	Ghatampur-New				
977	Kanpur Nagar	Sakha Janwari				
978	Kanpur Nagar	Babupurwa Pz GWD				
979	Kanpur Nagar	Bithoor-Nganj		9.62	9.94	10.02
980	Kanpur Nagar	Chitra degree College Pz GWD				
981	Kanpur Nagar	Comisner Office pz				
982	Kanpur Nagar	Defence Colony Pz		41.44	41.69	40.96
983	Kanpur Nagar	Bidhnu Pz				
984	Kanpur Nagar	Fazalganj Pz GWD				
985	Kanpur Nagar	Motipura		3.45	3.15	4.62
986	Kanpur Nagar	Narmau(new)		6.01	6.47	6.63
987	Kanpur Nagar	Sachendi		1.95	2.53	3.33
988	Kanpur Nagar	Samadhi Naubast				
989	Kanpur Nagar	Bhitargaon				
990	Kanpur Nagar	Patara				
991	Kanpur Nagar	Ramsari		4.54	5.08	5.86
992	Kanpur Nagar	Kulgaon				
993	Kanpur Nagar	Sarsol Pz GWD				
994	Kanpur Nagar	Bhaisana		1.91	3.48	4.04
995	Kanpur Nagar	Sheoli				
996	Kanpur Nagar	Baradari		5.63	6.83	6.87
997	Kanpur Nagar	Bidhnu		4.05	1.16	1.89
998	Kanpur Nagar	Bhadras		16.47	16.04	16.97
999	Kanpur Nagar	Moyaiya		10.31	8.49	8.48
1000	Kanpur Nagar	Sambarpur		2.22	2.6	2.41

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
1001	Kaushambi	Ajrauli				
1002	Kaushambi	Ajrauli Pz				
1003	Kaushambi	Andaawa				
1004	Kaushambi	Kailashpuri				
1005	Kaushambi	Kasia			14.17	14.49
1006	Kaushambi	Kushambhi			11.08	11.73
1007	Kaushambi	Lehdari			13.64	14.06
1008	Kaushambi	Kotari				
1009	Kaushambi	Mahgaon				
1010	Kaushambi	Kokhraj				
1011	Kaushambi	Mandari			22.45	
1012	Kaushambi	Perai				
1013	Kaushambi	Pulia Sandalpur				
1014	Kaushambi	Sallahpur			16.55	17.37
1015	Kaushambi	Bairagipur				
1016	Kaushambi	Sarai Akil				
1017	Kaushambi	Usargaura			3.88	6.02
1018	Kaushambi	Sirathu l				
1019	Kaushambi	Zari Bazar				
1020	Kheri	Mailani				
1021	Kheri	Bijua		1.23	2.2	2.35
1022	Kheri	Dhaurehra-l				
1023	Kheri	Ishanagar				
1024	Kheri	Khajanchi purwa		4.46	3.84	3.96
1025	Kheri	Behjam				
1026	Kheri	Dharmapur		8.78	7.96	8.8
1027	Kheri	Gularia				
1028	Kheri	Asogapur		1.69	3.07	3.28
1029	Kheri	Chamlapur		0.33	1.82	1.31
1030	Kheri	Chauapur		0.48	1.81	1.95
1031	Kheri	Jhandi raj		2.79	2.87	3.05
1032	Kheri	Chandan Chowki		2.16	3.39	3.78
1033	Kheri	Dudhwa f.r.h.		7.76	8.8	9.06
1034	Kheri	Chapartala				
1035	Kheri	Gomti_east bank				
1036	Kheri	Maigalganj l				
1037	Kheri	Pasgawan		2.55	4.4	8.06
1038	Kheri	Gomti_ West Bank				
1039	Kheri	Khajanchi Purwa				3.96
1040	Kheri	Khiri Pz		6.44	6.4	6.8
1041	Kheri	Mohammadi		10.18	10.1	10.59
1042	Kheri	Ramia Behar		0.58	2.41	3.63
1043	Kheri	Phool Behar				
1044	Kushinagar	Fazil Nagar				
1045	Kushinagar	Captanganj l				
1046	Kushinagar	Mansurganj			1.55	3

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
1047	Kushinagar	Kasial				
1048	Kushinagar	Chittauni			1.05	1.7
1049	Kushinagar	Khadda				
1050	Kushinagar	Mathauli			1.65	2.55
1051	Kushinagar	Naurangia			2.55	3.2
1052	Kushinagar	Belwa				
1053	Kushinagar	Rambar			3.46	3.56
1054	Kushinagar	Bisunpura				
1055	Lalitpur	Bar			5.92	6.24
1056	Lalitpur	Gugarwara				
1057	Lalitpur	Udaipura				
1058	Lalitpur	Buragaon				
1059	Lalitpur	Amjhari Ghati			1.67	1.83
1060	Lalitpur	Betna			6.55	7.58
1061	Lalitpur	Birdha Pz-GWD				12.64
1062	Lalitpur	Deogarh				
1063	Lalitpur	Jakhlaun			2.78	2.68
1064	Lalitpur	Khitwans			6.67	6.92
1065	Lalitpur	Pali2				
1066	Lalitpur	Piparia Vansha Pz-GWD				
1067	Lalitpur	Burari				
1068	Lalitpur	Bansi			3.1	3.14
1069	Lalitpur	Jakhaural			2.45	2.33
1070	Lalitpur	Lalitpur			2.35	2.17
1071	Lalitpur	Banpur				
1072	Lalitpur	Mahroni				
1073	Lalitpur	Mahroni 1			10.65	11.19
1074	Lalitpur	Saidpur			6.8	7.23
1075	Lalitpur	Silawan			7.42	7.78
1076	Lalitpur	Digwar			7.21	7.42
1077	Lalitpur	Madaura				
1078	Lalitpur	Umaria				
1079	Lalitpur	Hisar kalan			5.03	5.16
1080	Lalitpur	Talbhet				6.24
1081	Lalitpur	Talbhet-III				
1082	Lalitpur	Talbhet-IV			4	4.37
1083	Lalitpur	Talbhet-New			1.4	2.12
1084	Lucknow	Amaniganj				
1085	Lucknow	Bakshi ka talab	14.1	11.9	14.7	14.62
1086	Lucknow	Behta Bazar				
1087	Lucknow	Itaunja	10.34	10.81	10.98	11.5
1088	Lucknow	Itaunja Pz	12.98		11.84	
1089	Lucknow	kathwara				
1090	Lucknow	Kumrahawan	5.92	2.62	3.97	4.1
1091	Lucknow	Arjunganj				
1092	Lucknow	Bhujal Bhawan				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
1093	Lucknow	Indira Nagar				
1094	Lucknow	Lu New Campus	22.18	21.66	22.64	23.2
1095	Lucknow	Lu Old Campus				
1096	Lucknow	Mahanagar H Park				
1097	Lucknow	New Hyderabad				
1098	Lucknow	Vikasnagar	40.05	39.92	40.92	40.98
1099	Lucknow	gangaganj				
1100	Lucknow	Gosaiganj1		0.43	2.12	2.73
1101	Lucknow	Khawas Khera				2.32
1102	Lucknow	Munshiganj		3.11	4.24	5.13
1103	Lucknow	Campbell Road				
1104	Lucknow	Fatehganj		16.42	14.66	14.42
1105	Lucknow	Jehta				
1106	Lucknow	Kushalganj				
1107	Lucknow	Malha				
1108	Lucknow	Rajajipuram				
1109	Lucknow	Tej Kishen Khera			3.03	
1110	Lucknow	Aat Garhi Sonra		13.5	13.62	13.9
1111	Lucknow	Gopamau				
1112	Lucknow	Kathwara(New)				
1113	Lucknow	Mal				13.21
1114	Lucknow	Rehta		8.2	8.6	8.57
1115	Lucknow	Rehta New				
1116	Lucknow	Saidapur				
1117	Lucknow	Bhatoiya		10.11		
1118	Lucknow	Malihabad	12.22	13.16	13.42	12.89
1119	Lucknow	Rahimabad		5.55	6.23	
1120	Lucknow	Rehman Khera	10.32	9.16	9.96	9.89
1121	Lucknow	Tejkishan Khera		2.55		4.39
1122	Lucknow	Gulistan Colony	40.22	38.93	39.97	
1123	Lucknow	Mohanlalganj		2.7	3.51	4.01
1124	Lucknow	Nagram		0.87	1.94	2.39
1125	Lucknow	Nigohan				
1126	Lucknow	Nigohan1				
1127	Lucknow	Rehmat Nagar				
1128	Lucknow	Sisandi1				
1129	Lucknow	Arya Nagar		19.05	20.5	20.88
1130	Lucknow	Bani1				
1131	Lucknow	Bijnor		11.6	10.54	11.8
1132	Lucknow	Cantt		33.2		
1133	Lucknow	Dilkusha				
1134	Lucknow	Gondauli				
1135	Lucknow	Mahila College-Aminabad				
1136	Lucknow	Mohanlalganj		2.7	3.87	4.01
1137	Lucknow	Narayanpur (new)				
1138	Lucknow	Narayanpur1				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
1139	Lucknow	Narhi				
1140	Lucknow	Piparsand Pz				
1141	Lucknow	Rakabganj Crossing		10		
1142	Lucknow	River Bank Colony		29.81		
1143	Lucknow	Sarojininagar				
1144	Lucknow	Utrathia				
1145	Mahoba	Charkhari	3.5	1.55	2.78	3.82
1146	Mahoba	Bela Tal	5.47	4.63	5.86	6.48
1147	Mahoba	Bharwara				
1148	Mahoba	Jaitpur New	6.41	4.31	6.03	6.3
1149	Mahoba	Kulpahar1				
1150	Mahoba	Kulpahar1 New	4.42	2.1	2.78	
1151	Mahoba	Kulpahar2	7.36	6.74	7.58	7.98
1152	Mahoba	Chatesar pz GWD	10.84	9.38	12.11	12.4
1153	Mahoba	Kabrai				
1154	Mahoba	Mahoba	8.77			
1155	Mahoba	Mahoba NEW				
1156	Mahoba	Pipramauf				7.9
1157	Mahoba	Srinagar		5.78	7.97	9.75
1158	Mahoba	Kashipura	7.94	5.53	4.59	11.72
1159	Mahoba	Panwari				
1160	Mahoba	Teiyal	6.9	5.57	7.64	
1161	Mahrajganj	Koluhi			2.23	2.98
1162	Mahrajganj	Campierganj				
1163	Mahrajganj	Ghughali			2.95	4
1164	Mahrajganj	Thakulwa				
1165	Mahrajganj	Maharajganj2			2.5	2.85
1166	Mahrajganj	Kukesar			2.9	
1167	Mahrajganj	Paniyara1				
1168	Mahrajganj	Partawal				
1169	Mahrajganj	Pharenda pz Gwd			1.35	2.1
1170	Mahrajganj	Siswa Bazar			3.55	4.1
1171	Mahrajganj	Munila Tola			2.85	3.6
1172	Mainpuri	Nagla rampichha				
1173	Mainpuri	Barnahal Pz-GWD				
1174	Mainpuri	Nagal Bhujia				
1175	Mainpuri	Bewar Pz-GWD			7.03	
1176	Mainpuri	Majhaura				
1177	Mainpuri	Ghirore				
1178	Mainpuri	Madhan				
1179	Mainpuri	Karhal Pz-GWD				
1180	Mainpuri	Takrau Bridge				
1181	Mainpuri	Katra Saman			3.05	4.01
1182	Mainpuri	Kishni Pz-GWD			6.6	6.79
1183	Mainpuri	Kuraoli Pz-GWD			5.52	6.21
1184	Mainpuri	Mainpuri				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
1185	Mainpuri	Mainpuri Pz-GWD				
1186	Mainpuri	Bhongaon				
1187	Mainpuri	Sultanganj Pz-GWD			6.17	6.54
1188	Mainpuri	Ajitganj			5.53	5.69
1189	Mathura	Baldeo			5.65	7.49
1190	Mathura	Jamunapar Thana			14.37	13.88
1191	Mathura	Sahar1			2.35	1.3
1192	Mathura	Chhata New			2.88	2.87
1193	Mathura	Kariri Gaon				
1194	Mathura	Nagra Chhitar Singh			3.15	2.43
1195	Mathura	Jhinga Nagla			3.58	3.04
1196	Mathura	Paintha (Govardhan)			3.1	3.02
1197	Mathura	Palson gaon				
1198	Mathura	Saunkh			2.74	4.15
1199	Mathura	Mat				
1200	Mathura	Surir (new)			10.45	10.47
1201	Mathura	Jachoda			1.93	1.93
1202	Mathura	Vridavan				
1203	Mathura	Barsana			10.25	10.35
1204	Mathura	Chaumuhan				
1205	Mathura	Kosi			2.58	2.51
1206	Mathura	Kharab			3.74	3.6
1207	Mathura	pirsua			11.15	11.38
1208	Mathura	Raya				
1209	Mathura	Auwa Nagla			3.58	2.83
1210	Mathura	Khairas			2.43	1.9
1211	Mau	Ghosi	0.5	0	1.28	1.4
1212	Mau	Amila				
1213	Mau	Dhorighat	0.9	0.63	4.2	5.35
1214	Mau	Jejawali	2.9	0.9	3.33	4.48
1215	Mau	Kora-Uli				
1216	Mau	Kamal Sagar				
1217	Mau	Paharipur				
1218	Mau	Paharipur- NEW			3.91	3.66
1219	Mau	Kapaganj				
1220	Mau	Kapaganj1				6.77
1221	Mau	Ghinahapur				
1222	Mau	Mau (Urban)		0.23	0.37	3.67
1223	Mau	Garthauli				
1224	Mau	Ratanpura	1.3	1.55	2.72	3.75
1225	Mau	Bhiti		1.46		6.62
1226	Meerut	Lanarkhan				
1227	Meerut	Mataur Pz				
1228	Meerut	Sakoti Tanda Pz	8.19	7.91	8.18	8.27
1229	Meerut	Hastinapur 1	10.19	10.26	8.81	10.69
1230	Meerut	Hastinapur Pz				

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1231	Meerut	Jani Pz				
1232	Meerut	Timkia Kothi Pz I	9.14	9.08	8.11	8.17
1233	Meerut	Timkia Kothi Pz II	9.4	9.13	8.6	8.66
1234	Meerut	Timkia Kothi Pz III	9.17	9.08		
1235	Meerut	Kaili Pz		22.16	20.78	20.8
1236	Meerut	Hasanpur kalan				
1237	Meerut	Behsuma Pz 1				
1238	Meerut	Behsuma Pz II				
1239	Meerut	Chota mawana				
1240	Meerut	Chota mawana Pz	11.97		12.77	
1241	Meerut	Meerut Pz	21.78		20.31	20.47
1242	Meerut	Parikshat garh		9.61		
1243	Meerut	Parikshat garh Pz	9.78		10.26	10.02
1244	Meerut	Sisauli	22.75	22.93	23.03	22.25
1245	Meerut	Rohta Pz				
1246	Meerut	Sarurpur Pz				
1247	Meerut	Daurala				
1248	Meerut	Machhra-Pz I-8" (Shallow-45M)		12.45	12.33	
1249	Meerut	Machhra-Pzii-6" (Deep-274M)	12.69	12.51	12.35	12.98
1250	Meerut	Machhra-Pziii-2.5" (Shallow-35M)	12.56	12.44	12.22	12.36
1251	Meerut	Mawana Khurd/Chota Mawana		11.81		11.36
1252	Meerut	Shatabdinagar-Pzi-6" (Deep-415M)				
1253	Meerut	Shatabdinagar-Pziii6"(Depth-345M)				
1254	Mirzapur	Gaipura	10.9		11.8	12.7
1255	Mirzapur	Halia	1.77		2.59	3.25
1256	Mirzapur	Purjagir				
1257	Mirzapur	Lalganj	2.37		2.74	2.77
1258	Mirzapur	Lohangpur	1.75		2.53	5.35
1259	Mirzapur	Baghura			2.9	4.21
1260	Mirzapur	Kalwari				
1261	Mirzapur	Kunabimar				
1262	Mirzapur	Marihan				
1263	Mirzapur	Kotwa				
1264	Mirzapur	Goplapur	7.9		7.05	9.3
1265	Mirzapur	Mirzapur	16.09		10.4	16.4
1266	Mirzapur	Mirzapur New				
1267	Mirzapur	Adalhat	2.57		1.8	2.52
1268	Mirzapur	Ahraura	2.85		3.55	4.87
1269	Mirzapur	Chunar				
1270	Mirzapur	Barhpural				
1271	Mirzapur	Barhanchuan	1.76		1.72	2.64
1272	Mirzapur	Madhupur				
1273	Mirzapur	Dadra				
1274	Mirzapur	Sukrit				
1275	Moradabad	Asmauli Pz GWD				

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1276	Moradabad	Gumsaini Pz GWD				
1277	Moradabad	Sahapura Sirpura-Pz				
1278	Moradabad	Bahjoi Pz GWD			14.54	16.3
1279	Moradabad	Maukather Pz GWD				
1280	Moradabad	Chandausi-PZ				17.75
1281	Moradabad	Chaudhapur Pz GWD				
1282	Moradabad	Fauladpur			3.24	3.45
1283	Moradabad	Karanpur Pz GWD				
1284	Moradabad	Dingarpur Pz GWD			13.46	13.38
1285	Moradabad	Kundarki Pz GWD				
1286	Moradabad	Mahmudpurmafi Pz GWD			16.23	15.73
1287	Moradabad	Ratanpur Kalan Pz GWD				
1288	Moradabad	Aghwanpur				
1289	Moradabad	Aghwanpur1				
1290	Moradabad	Moradabad Pz GWD			10.48	10.75
1291	Moradabad	Moradabad-Pz				
1292	Moradabad	Mundha Pande				
1293	Moradabad	Fatehulla Ganj Pz GWD				
1294	Moradabad	Sambhal Pz				
1295	Moradabad	Painapur			2.42	2.8
1296	Moradabad	Sarifnagar				
1297	Moradabad	Thakurdwara			0.95	1.3
1298	Moradabad	Jahangir Puri				
1299	Moradabad	Keiladevi				
1300	Moradabad	Matlabpur			11.33	11.37
1301	Moradabad	Phoolpur Mithanpur				
1302	Muzaffarnagar	Baghra		12.89		12.28
1303	Muzaffarnagar	Baghra Pz	15.93		12.57	
1304	Muzaffarnagar	Chartawal			8.2	
1305	Muzaffarnagar	Chartawal Pz				
1306	Muzaffarnagar	Jansath2				
1307	Muzaffarnagar	Kairana Pz				
1308	Muzaffarnagar	Inchauli(Ratanpuri) Pz GWD				
1309	Muzaffarnagar	Khatauli		2.3		3.67
1310	Muzaffarnagar	Khatauli Pz(GWD)	3.11		3.63	
1311	Muzaffarnagar	Khatauli 1				
1312	Muzaffarnagar	Mansoorpur				
1313	Muzaffarnagar	Morna Pz	18.14	17.67	17.01	17.26
1314	Muzaffarnagar	Sukratal		2.4	2.9	3.19
1315	Muzaffarnagar	Kukra-Sadar Pz	14.85	13.04	12.57	12.86
1316	Muzaffarnagar	Barla				
1317	Muzaffarnagar	Basera				
1318	Muzaffarnagar	Paldi Pz GWD	20.14	19.27	18.97	18.52
1319	Muzaffarnagar	Shikarpur Pz GWD				
1320	Muzaffarnagar	Shamli PZ GWD	21.19	21.18	21.56	21.12
1321	Muzaffarnagar	Thana Bhawan Pz				

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1322	Muzaffarnagar	Kamalpur Pz	9.79		10.47	
1323	Muzaffarnagar	Un Pz (CGWB)	25.29	24.58	22.94	22.64
1324	Muzaffarnagar	Purkaji				
1325	Muzaffarnagar	Unn(State)	6.87	6.67	6.64	6.62
1326	Pilibhit	Faradia			4.85	4.97
1327	Pilibhit	Baldeopur			4.39	4.81
1328	Pilibhit	Bilsanda1				3.97
1329	Pilibhit	Bilaspur Pz GWD			4.35	4.45
1330	Pilibhit	Jeora Kalyanpur			4.08	4.46
1331	Pilibhit	Bargad Chauraha			3.18	3.45
1332	Pilibhit	Bhamora			2.9	3.23
1333	Pilibhit	Gajraula1			3.02	3.32
1334	Pilibhit	Jahanabad1			4.65	4.95
1335	Pilibhit	Pilibhit Pz GWD			3.05	3.2
1336	Pilibhit	Madho tanda				
1337	Pilibhit	Madho Tanda Pz GWD				
1338	Pilibhit	Madho tanda1				
1339	Pilibhit	Puranpur Pz GWD			2.58	2.8
1340	Pratapgarh	Arjunpur				
1341	Pratapgarh	Ateha	6.13		4.77	5.83
1342	Pratapgarh	Belhupur			3.7	
1343	Pratapgarh	Bhusar			2.71	3.32
1344	Pratapgarh	Bibipur				
1345	Pratapgarh	Chhaunga				
1346	Pratapgarh	Dih Balri	5.16		2.57	4.52
1347	Pratapgarh	Ganaidih			1.78	
1348	Pratapgarh	Garhi Manikpur			10.17	8.36
1349	Pratapgarh	Gaura	4.32		2.82	3.69
1350	Pratapgarh	Gaura 1			2.62	
1351	Pratapgarh	Gorai 1				
1352	Pratapgarh	Gutni	10.37		10.03	10.28
1353	Pratapgarh	Jamtoli				
1354	Pratapgarh	Jathwara	4.28		1.83	3.71
1355	Pratapgarh	Kithawar				
1356	Pratapgarh	Kohdaur	4.56		3.96	4.63
1357	Pratapgarh	Kuagaon				
1358	Pratapgarh	Kohola				
1359	Pratapgarh	Kunda	8.33		5.26	7.26
1360	Pratapgarh	Lalganj2	3.3		2.29	1.1
1361	Pratapgarh	Lalgopalganj	5.47		3.51	5.04
1362	Pratapgarh	Leelapur				
1363	Pratapgarh	Maddupur			3.82	
1364	Pratapgarh	Mandhata	6.46		4.12	5.03
1365	Pratapgarh	Mohanganj	10.53		8.57	9.53
1366	Pratapgarh	Nanasukul purwa	5.86		5.05	5.39
1367	Pratapgarh	Narainpur	4.02			3.1

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1368	Pratapgarh	Narainpur	4.02		1.89	3.1
1369	Pratapgarh	Patti 1				
1370	Pratapgarh	Pratapgarh				13.46
1371	Pratapgarh	Rampur Batauli	3.93		3.13	4.73
1372	Pratapgarh	Raniganj	9.13		7.53	7.8
1373	Pratapgarh	Sangipur (Deopashchim)			14.6	14.06
1374	Pratapgarh	Sangramgarh	5.52		4.72	4.88
1375	Pratapgarh	Sarai anadio				
1376	Pratapgarh	Setapur Patulki				
1377	Pratapgarh	Bishahia	5.77		4.64	5.04
1378	Pratapgarh	Udai Shahpur	7.5		4.89	4.97
1379	Pratapgarh	Vishvanath ganj			8.44	
1380	Rae Bareli	Chauraha Dusti		0.73	1.49	2.25
1381	Rae Bareli	Cheek dadar		2.85		5.8
1382	Rae Bareli	Dhonda ka Purwa		1.35	3.02	4.35
1383	Rae Bareli	Fursatganj		0.97	2.82	3.37
1384	Rae Bareli	Kachunda		1.15	2.1	2.13
1385	Rae Bareli	Sidhuna				
1386	Rae Bareli	Bachhrawan				
1387	Rae Bareli	Churwa				
1388	Rae Bareli	Inchauli 1				
1389	Rae Bareli	Rani Khera				
1390	Rae Bareli	Jais		0.98		1.92
1391	Rae Bareli	Mazzamganj ngr				
1392	Rae Bareli	Nigohan 1		0.87	1.92	2.3
1393	Rae Bareli	Dalmau		3.5		5.2
1394	Rae Bareli	Dalmau			5.7	
1395	Rae Bareli	Dalmau-1				
1396	Rae Bareli	Gopalipur		2.55	4.87	5.73
1397	Rae Bareli	Katghar		1.71	1.87	2.41
1398	Rae Bareli	Chaturpur				
1399	Rae Bareli	Dih				
1400	Rae Bareli	Mau 1				
1401	Rae Bareli	Mohanganj 1		1.12	2.89	2.66
1402	Rae Bareli	Harchandpur		6.8		7.37
1403	Rae Bareli	Jagatpur		1.7	2.2	2.42
1404	Rae Bareli	Ketanpurwa		4.67		5.54
1405	Rae Bareli	Kheron PZ (GWD)		6.63	6.5	7.95
1406	Rae Bareli	Kheron-New				
1407	Rae Bareli	Lalaganj-new				
1408	Rae Bareli	Bhagwantnagar				
1409	Rae Bareli	Hardoi 2				
1410	Rae Bareli	Maharajganj 2				
1411	Rae Bareli	Mau garbi		0.7	2.5	2.3
1412	Rae Bareli	Rampur 2				
1413	Rae Bareli	Belabhela				

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1414	Rae Bareli	Hanumanganj1				
1415	Rae Bareli	Laxmanganjbazar		0.4	3	3.72
1416	Rae Bareli	Rae Bareli				
1417	Rae Bareli	Salon				
1418	Rae Bareli	Shankarganj1				
1419	Rae Bareli	Suchi				
1420	Rae Bareli	Daulatpur1				
1421	Rae Bareli	Rawalpur		7.16		
1422	Rae Bareli	Binjh		12.36	12.06	12.6
1423	Rae Bareli	Domapur		15.47	14.5	12.85
1424	Rae Bareli	Hunsepur		11.75	10.54	11
1425	Rae Bareli	Jagjeevanpur Amaria				
1426	Rae Bareli	Sataon				
1427	Rae Bareli	Ahrauri bhawani		1.45	2.6	3.27
1428	Rae Bareli	Bhawanigarh		0.38	1.67	1.47
1429	Rae Bareli	Koni				
1430	Rae Bareli	Kumbhi ka purwa		2.3	3.97	3.53
1431	Rae Bareli	Raja-fatehpur-New				
1432	Rae Bareli	Shivratan Ganj				
1433	Rae Bareli	Simrauta(ii)		2.37	2.25	
1434	Rae Bareli	Matrwa		0.77	3.21	2.33
1435	Rae Bareli	Simrauta			3.02	3.67
1436	Rae Bareli	Unchahar PZ (GWD)				
1437	Rae Bareli	Unchahar-pure Ichhani				
1438	Rampur	Bilaspur Pz CGWB			5.04	5.07
1439	Rampur	Kemri				
1440	Rampur	Kemri Pz GWD				
1441	Rampur	Tanda urmatnaag				
1442	Rampur	Pahari Dis				
1443	Rampur	Thunapur				
1444	Rampur	Shahabad Pz GWD			10.02	9.95
1445	Rampur	Azimnagar Thana				
1446	Rampur	Karanpur1				
1447	Rampur	Tanda			4.37	4.6
1448	Rampur	Dhaneli Purwi			5.15	5.39
1449	Saharanpur	Deoband 1				
1450	Saharanpur	Gangoh				
1451	Saharanpur	Mainpura Pz GWD	17.39	16.52	14.18	14.47
1452	Saharanpur	Babail Buzurg	6.92	4.81	6.7	5.93
1453	Saharanpur	Dhaura Kuan		5.24	7	7.73
1454	Saharanpur	Mohand	9.54	8.82	9.54	9.23
1455	Saharanpur	Shakhambari	3.42	1.98	2.91	2.2
1456	Saharanpur	Sunderpur1	7.5	6.49	7.23	7.15
1457	Saharanpur	Nagal Pz GWD				
1458	Saharanpur	Tilhari Buzurg	11.36		9.39	9.06
1459	Saharanpur	Chandrapal Kheri	16.05	15.65	16.71	16.39

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1460	Saharanpur	Lundi Pz GWD			7.62	7.57
1461	Saharanpur	Nakur Pz				
1462	Saharanpur	Siriska Pz GWD			12.94	12.56
1463	Saharanpur	Nanauta Pz GWD	4.84	2.37	3.79	4.18
1464	Saharanpur	Tikrol Pz GWD	9.27	7.99	8.86	8.36
1465	Saharanpur	Ghuna	5.04	1.43	3.48	3.29
1466	Saharanpur	Haraiti				
1467	Saharanpur	Rampur Pz GWD	7.68		6.65	
1468	Saharanpur	Bagh colony	6.91		4.6	4.67
1469	Saharanpur	Mirzapur2				
1470	Saharanpur	Sadauli Quadim				
1471	Saharanpur	Sarsawan Pz GWD				
1472	Sant Kabir Nagar	Dhanghata			2.4	3.2
1473	Sant Kabir Nagar	Nathnagar			1.6	2.5
1474	Sant Kabir Nagar	Khalilabad			2.48	3.53
1475	Sant Kabir Nagar	Maidawal			2.54	4
1476	Sant Kabir Nagar	Pipra First				
1477	Sant Kabir Nagar	Tighra			2.58	2.4
1478	Sant Ravidas Nagar	Aurai	1.06	1.36	2.76	3.96
1479	Sant Ravidas Nagar	Kawalpur				
1480	Sant Ravidas Nagar	Bhadohi				
1481	Sant Ravidas Nagar	Koirauna	10	8.6	11.7	9.75
1482	Sant Ravidas Nagar	Gyanpur	1.585	1.245	2.225	2.895
1483	Sant Ravidas Nagar	Gyanpur New				
1484	Sant Ravidas Nagar	Pali 1	1.98	2.13	3.05	3.43
1485	Sant Ravidas Nagar	Suriyawan	5.89	4.59	6.76	7.19
1486	Shahjahanpur	Banda2(Pasyapur)				
1487	Shahjahanpur	Jalalpur2				
1488	Shahjahanpur	Sehramau				
1489	Shahjahanpur	Shahjahanpur1			5.65	5.35
1490	Shahjahanpur	Dadraul Pz GWD				
1491	Shahjahanpur	Ali Akbarpur Newada				
1492	Shahjahanpur	Jalalabad3				
1493	Shahjahanpur	Kalan Pz GWD				
1494	Shahjahanpur	Madnapur				
1495	Shahjahanpur	Kasrakh Pz GWD				
1496	Shahjahanpur	Malika				
1497	Shahjahanpur	Pawayan				
1498	Shahjahanpur	Gurgaon				
1499	Shahjahanpur	Sidhauri			5.77	6.07
1500	Shahjahanpur	Tilhar				
1501	Shrawasti	Bhagwanpur		0.59	1.34	2.42
1502	Shrawasti	Madora chowki		1.15	1.5	2.32
1503	Shrawasti	Dikauli		1.22	1.95	3.1
1504	Shrawasti	Tulsipur2		3.13	3.68	4.46
1505	Shrawasti	Bhinga2				

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1506	Shrawasti	Laxman Nagar		5	5.1	5.6
1507	Shrawasti	Badla Village				
1508	Shrawasti	Lachmanpur				
1509	Shrawasti	Pakaria		1.7	2.55	3.3
1510	Shrawasti	Parpatganj				
1511	Shrawasti	Patna				
1512	Shrawasti	Pratapur		1.24	1.55	2.1
1513	Shrawasti	Shrawasti		0.98	1.26	2.06
1514	Shrawasti	Bhujanga		1.32	1.84	2.79
1515	Shrawasti	Ratanpur		1.45	2.2	3.5
1516	Shrawasti	Sirsial		2.05	2.9	3.8
1517	Shrawasti	Sirsiya		2.5	3.25	3.96
1518	Siddharthnagar	Bansil		0.55	1.57	2.3
1519	Siddharthnagar	Kajhai		4.79		6.55
1520	Siddharthnagar	Badhni		1.18	2.15	2.83
1521	Siddharthnagar	Parsa		1.25	2.65	3.37
1522	Siddharthnagar	Ramnagara		1.87	2.7	4.2
1523	Siddharthnagar	Birdpur		1.17	2.32	2.96
1524	Siddharthnagar	Dumariyaganj		1.01	1.91	3.01
1525	Siddharthnagar	Uska		1.55	2.25	4.44
1526	Siddharthnagar	Belwa Laghunahi		1.5	2.45	3.33
1527	Siddharthnagar	Chilihia		0.6	1.12	1.73
1528	Siddharthnagar	Basti(naugarh)				
1529	Siddharthnagar	Itwa		2.19	2.06	2.45
1530	Siddharthnagar	Shohratgarh		0.65	1.86	2.63
1531	Sitapur	Tikra				
1532	Sitapur	Behta	3.94	1.38	1.62	2.6
1533	Sitapur	Deokalia	7.43	5.01	6.74	6.9
1534	Sitapur	Manpur Chowki			4.73	
1535	Sitapur	Kasmanda (GWD PZ)				
1536	Sitapur	Shekhwapur	4.39	2.46	3.26	2.73
1537	Sitapur	Khamaria	5.61	3.17	5	4.52
1538	Sitapur	Sitapur				
1539	Sitapur	Laharpur Pz-GWD	9.1	7.34	7.92	8.16
1540	Sitapur	Karauna	12.34	11.37	11.07	11.31
1541	Sitapur	MachchretaPz-GWD	9.81	9.57	9.81	9.84
1542	Sitapur	Bahoranpur	3.74	1.96	2.81	3.04
1543	Sitapur	Purwara Gosai	3.49	2.42	3.07	3.1
1544	Sitapur	Maholi Pz-GWD	9.62	8.54		8.52
1545	Sitapur	Thawai				
1546	Sitapur	Kutub Nagar				
1547	Sitapur	Misrikhl	6.36	4.44	5.48	5.83
1548	Sitapur	Naimisharanya				
1549	Sitapur	Naimisharanya-1	0.74	0.91	1.04	1.15
1550	Sitapur	Dularpur				
1551	Sitapur	Narainpur				

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1552	Sitapur	Pahala(GWD PZ)	8.73			
1553	Sitapur	Sikandrabad			8.82	8.87
1554	Sitapur	Dhouthi		2.79	3.96	
1555	Sitapur	Hargaon	5.79	3.66	4.16	3.96
1556	Sitapur	Piswan			4.75	
1557	Sitapur	Madnapur	3.29	1.01	2	2.31
1558	Sitapur	Rampur Mathura Pz-GWD	4.08	2.02	6.29	3.43
1559	Sitapur	Biswan2	5.45	4.16		4.79
1560	Sitapur	Biutmani	3.58	1.63	3.5	2.8
1561	Sitapur	Jahangirabad	3.24	0.92	2.24	2.34
1562	Sitapur	Sanda	4.48	2.22	3.13	3.36
1563	Sitapur	Sidhauri (GWD PZ)	10.39	7.55	8.37	8.81
1564	Sitapur	Sidhauri2				
1565	Sitapur	Bada Gaon		2.18	5.06	4.29
1566	Sitapur	Ramdana Crossing		5.86	5.94	6.78
1567	Sonbhadra	Asandih				
1568	Sonbhadra	Babhani	8.82	3.14	9.52	9.11
1569	Sonbhadra	Chopan	2.86	2.41	3.36	4.2
1570	Sonbhadra	Hatinala	16.8	11.36	17.34	12.9
1571	Sonbhadra	Pannuganj				
1572	Sonbhadra	Bhagwan Nagar	2.1	4.41	1.42	
1573	Sonbhadra	Telgudwa				
1574	Sonbhadra	Ghorawal1	2.2	1.46	2	3.92
1575	Sonbhadra	Son Barsa	2.55	1.32	3.05	3.81
1576	Sonbhadra	Dudhi	4.33	0.33	4.13	4.91
1577	Sonbhadra	Anpara	15.5		16.9	12.64
1578	Sonbhadra	Bairpan	3.32	1.9	5.1	7.05
1579	Sonbhadra	Dhrtidand1	5.8	5.08	7.89	6
1580	Sonbhadra	Gara	11.6	7.47	12.77	12.2
1581	Sonbhadra	Jarha	5.75	3.47	7.27	6.1
1582	Sonbhadra	Kohraul			2.4	
1583	Sonbhadra	Kohraul New				
1584	Sonbhadra	Muirpur	2.58	2.18	3.2	4.12
1585	Sonbhadra	Renukoot	11.43	7.87	15.1	14.4
1586	Sonbhadra	Kakrahi			0.2	
1587	Sonbhadra	Markundi				
1588	Sonbhadra	Markundi New				
1589	Sonbhadra	Robertsganj1	2.45	1.64	2.15	0.32
1590	Sonbhadra	Shahganj	2.8	1.03	3.56	8.1
1591	Sultanpur	Akhand Nagar		0.85	0.75	1.45
1592	Sultanpur	Amethi				
1593	Sultanpur	Amethi-NEW				
1594	Sultanpur	Kusitali		2	2.35	3.45
1595	Sultanpur	Munshiganj1		2.1	2.55	3.55
1596	Sultanpur	Abhiya Kalan				
1597	Sultanpur	Bhadayan				

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1598	Sultanpur	Bhadayian Pz-GWD		13.05	12.5	11.85
1599	Sultanpur	Ramgarh1		0.66	2.1	3.01
1600	Sultanpur	Rampur Hanumang				
1601	Sultanpur	Sultanpur2		11.5	12.3	12.55
1602	Sultanpur	Bhim Pashim		0.8	3.78	4.08
1603	Sultanpur	Pratushmanik		0.6	1.72	2.7
1604	Sultanpur	Kutta		2.37	3.34	3.75
1605	Sultanpur	Khaluhat1		1.71	2.88	2.99
1606	Sultanpur	Bhadar		5.73	5.93	6.86
1607	Sultanpur	Sultanpur Pz-GWD				
1608	Sultanpur	Gauriganj				
1609	Sultanpur	Gauriganj new-2		1.62	2.56	
1610	Sultanpur	Gauriganj-New				3.27
1611	Sultanpur	Jagdishpur2		10.3	9.9	9.67
1612	Sultanpur	Khutahna		2.6	3.71	3.6
1613	Sultanpur	Thauri				
1614	Sultanpur	Jaisinghpur				
1615	Sultanpur	Naghipur Bajhana		1.21	1.91	1.95
1616	Sultanpur	Bani1				
1617	Sultanpur	Bhatgaon		4.1	5.18	5.32
1618	Sultanpur	Goriabad		0.95	1.6	1.71
1619	Sultanpur	Jamon1				
1620	Sultanpur	Janapur		2.43	4.61	5.26
1621	Sultanpur	Kadipur		8.35	8.2	8.37
1622	Sultanpur	Sagardeh		11.85	11.8	12.12
1623	Sultanpur	Babuganj		1.42	3.02	2.96
1624	Sultanpur	Kurebhar1		1.28	2.24	2.72
1625	Sultanpur	Kurwar		4.96	4.76	5.03
1626	Sultanpur	Maniari aliganj		1.1	1.55	
1627	Sultanpur	Mundawa		1.6	2.05	2.68
1628	Sultanpur	Lambua		3.55		3.9
1629	Sultanpur	Lambua pz-GWD			4.1	
1630	Sultanpur	Shivgarh		2.77	3.12	3.37
1631	Sultanpur	Gorha Bahadar				
1632	Sultanpur	Piparpur		4.53	5.32	5.81
1633	Sultanpur	Trisundi		2.05	2.75	3.05
1634	Sultanpur	Musafirkhana		1.35	2.22	2.95
1635	Sultanpur	Chanda				
1636	Sultanpur	Chanda Pz-GWD				
1637	Sultanpur	Kotra Khurd		5.38	5.45	5.6
1638	Sultanpur	Pratap pur Kamaicha Pz		7.77	7.67	7.97
1639	Sultanpur	Badgaon		10.35	9.8	9.7
1640	Sultanpur	Bargadiha Ka Purwa		2.1	2.65	3.2
1641	Sultanpur	Bazar Sukul 1				
1642	Sultanpur	Mahona		2.05	3.7	4.24
1643	Sultanpur	Mardanpur		1.57	3.12	3.62

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
1644	Sultanpur	Sathin		13.95	12.48	12.81
1645	Sultanpur	Bahurawa		0.95	2.27	2.6
1646	Sultanpur	Haliapur				
1647	Sultanpur	Haliapur-New				
1648	Sultanpur	Sikrabad (para)				
1649	Sultanpur	Dostpur New Pz		3.35	4.2	5.3
1650	Sultanpur	Shukul Bazar		11.23	10.73	10.83
1651	Unnao	Kanchanpur				
1652	Unnao	Kantha				
1653	Unnao	Auras		3.4	5.1	4.73
1654	Unnao	Baba Khera				
1655	Unnao	Bichhia				
1656	Unnao	Murtaza Nagar				
1657	Unnao	Thaura			1.17	1.8
1658	Unnao	Bara2				
1659	Unnao	Bighapur				
1660	Unnao	Kali Mitti				
1661	Unnao	Bangarmau(new)				
1662	Unnao	Behta Majawar				
1663	Unnao	Ganj Moradabad		11.6	11.87	11.78
1664	Unnao	Hasanganj1				
1665	Unnao	Hasewan		1.45	2.25	2.73
1666	Unnao	Newalganj				
1667	Unnao	Tonda		0.2	0.84	1.06
1668	Unnao	Hilauli				
1669	Unnao	Maurawan		8.64	8.16	8.28
1670	Unnao	Azmatnagar		8.5	8.42	8.35
1671	Unnao	Miyanganj				
1672	Unnao	Ajgain				
1673	Unnao	Makur		1.83	2.7	2.44
1674	Unnao	Pinjra			6.43	6.57
1675	Unnao	Purwa				
1676	Unnao	Unchagaon kila			0.55	0.75
1677	Unnao	Methi Tikur		2.32	2.92	3.57
1678	Unnao	Safipur1				
1679	Unnao	Achalganj				
1680	Unnao	Azad Nagar				
1681	Unnao	Bighapur				
1682	Unnao	Sikanderpur				
1683	Unnao	Chakalvanshi		1.05	1.36	1.95
1684	Unnao	Pariyar				8.68
1685	Unnao	Santakhera				2.98
1686	Unnao	Sikanderpur				
1687	Unnao	Sikanderpur1		13.93	15.58	14.81
1688	Unnao	Unnao				11.55
1689	Unnao	Baksar				

SL No	District	Well	May-2020	Aug-2020	Nov-2020	Jan-2021
1690	Unnao	Bhagwant Nagar				
1691	Unnao	Bihar				
1692	Unnao	Malauna			1.33	1.99
1693	Unnao	Sumerpur		2.73	10.75	10.97
1694	Unnao	Unchagaon I		2.71	3.99	5.26
1695	Unnao	Bhaisai		3.25	5.15	5.78
1696	Unnao	Raniganj-New			13.55	13.7
1697	Unnao	Sikandarpur				
1698	Varanasi	Jikhan(narsara)	4.9	2.8	7.01	8.4
1699	Varanasi	Rajatalab I		7.67	9.6	9.52
1700	Varanasi	Anai			2.66	3.95
1701	Varanasi	Babatpur				
1702	Varanasi	Babatpur Chaura				
1703	Varanasi	Siswa				
1704	Varanasi	Barwaon			3.895	5.285
1705	Varanasi	Rustampur	9.98	5.58	10.68	7.93
1706	Varanasi	Chobepur	5.6	1.48	6.3	4.72
1707	Varanasi	Cholapur I		8	9.9	9.4
1708	Varanasi	Tahipur	2.81	1.37		
1709	Varanasi	Varanasi	8.25	6	7.8	10.1
1710	Varanasi	Phulpur I				
1711	Varanasi	Sindhaura				
1712	Varanasi	kakrahwan				
1713	Varanasi	Thatra	16.56	13.9	15.6	

**TREND OF WATER LEVEL FROM 2011 TO 2020 OF GROUND WATER
MONITORING WELLS, U.P**

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
1	AGRA	Achhanera Pz-GWD		0.2911	0.2959	
2	AGRA	Bah Pz-GWD		0.3175		0.3844
3	AGRA	Dabar Pz-GWD		0.2355		0.1812
4	AGRA	Fatehabad Pz-GWD		0.502		0.4795
5	AGRA	Jagner Pz-GWD		1.1975		1.5855
6	AGRA	Kagraul		0.3407		0.6499
7	AGRA	Khundauli Pz-GWD		0.3091		0.2043
8	AGRA	Mewli (bhara)		0.5977		0.9325
9	AGRA	Saiyan Pz-GWD		1.5657		1.2507
10	AGRA	Undera		0.0108		0.0672
1	ALIGARH	Andla	0.0547			0.1573
2	ALIGARH	Gonda	0.1309			0.0041
3	ALIGARH	Harduaganj		0.0155	0.0351	
4	ALIGARH	Jawan	0.021		0.2133	
5	ALIGARH	Khair		0.227		0.2266
6	ALIGARH	Palachand		0.1752		0.2935
7	ALIGARH	Safedpur		0.1857		0.0844
8	ALIGARH	Sudiyal		0.2988		0.301
9	ALIGARH	Taquipur(new)		0.1736		0.0617
1	ALLAHABAD	Atrampur		0.4414		0.2338
2	ALLAHABAD	Bairi	0.0151		0.0194	
3	ALLAHABAD	Bara		0.0041	0.1077	
4	ALLAHABAD	Baraut1	0.0947			0.0185
5	ALLAHABAD	Barwarikalaan	0.1506		0.0677	
6	ALLAHABAD	Gadwa Fort	0.0063		0.0822	
7	ALLAHABAD	Gauhania	0.1615		0.5757	
8	ALLAHABAD	Handia		0.0007		0.0263
9	ALLAHABAD	Holagarh		0.2566		0.1718
10	ALLAHABAD	Iradat nagar	0.0549			0.3169
11	ALLAHABAD	Kasarua		0.0694		1.0575
12	ALLAHABAD	Khaptia kheri	0.1221			0.0227
13	ALLAHABAD	Koraon	0.0925		0.2346	
14	ALLAHABAD	Ladiri bazar	0.0033			0.0581
15	ALLAHABAD	Lalpur	0.0359		0.0508	
16	ALLAHABAD	Malka Harhar	0.7597			0.5092
17	ALLAHABAD	Mallhan	0.0137			0.1386
18	ALLAHABAD	Mau-Aima	0.1752			0.136
19	ALLAHABAD	Meja	0.1965		0.0662	
20	ALLAHABAD	Naini	0.0863			0.0703
21	ALLAHABAD	Pasna	0.1766		0.0119	

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
22	ALLAHABAD	Phulpur2		0.3444		0.3053
23	ALLAHABAD	Rampur tulapur	0.7143		0.158	
24	ALLAHABAD	Saraon		0.1541		0.298
25	ALLAHABAD	Sikandra1	0.0582			0.1482
1	AMBEDKAR NAGAR	Kesharpur		0.3167		0.1015
2	AMBEDKAR NAGAR	Katehari		0.2387		0.1049
1	AURAIYA	Achhalda		0.1559		0.1387
2	AURAIYA	Bandhamau		0.3614		0.3749
3	AURAIYA	Basundhara		0.0652		0.0654
4	AURAIYA	Dinamau		0.1466		0.3507
5	AURAIYA	Hasulia		0.6525		0.6965
6	AURAIYA	Phaphund		0.3987		0.3648
7	AURAIYA	Sahar		0.2231		0.0632
8	AURAIYA	Sahayal		0.1953		0.3965
1	AZAMGARH	Ahraula		0.1257	0.0332	
2	AZAMGARH	Badihari	0.195			0.0868
3	AZAMGARH	Bahrapur	0.0176		0.0536	
4	AZAMGARH	Bairadih		0.0374		0.0882
5	AZAMGARH	Belwana		0.0193		0.0526
6	AZAMGARH	Bibipur Khatauli	0.0467		0.0423	
7	AZAMGARH	Deogaon	0.0411		0.0275	
8	AZAMGARH	Kharihani	0.105		0.0165	
9	AZAMGARH	Lohra	0.1112		0.2658	
10	AZAMGARH	Madayan	0.3399		0.3166	
11	AZAMGARH	Nizamabad	0.198		0.1349	
12	AZAMGARH	Phulpur	0.0618			0.0035
13	AZAMGARH	Rahul nagar		0.1549	0.0062	
14	AZAMGARH	Sageri	0.013		0.1812	
15	AZAMGARH	Saraimir	0.0599			0.0395
16	AZAMGARH	Sidhauna	0.1293		0.0397	
1	BAHRAICH	Baisanpurwa	0.0527		0.068	
2	BAHRAICH	Bhakraulikapurw		0.161		0.1173
3	BAHRAICH	Bhopatpur		0.219		0.0788
4	BAHRAICH	Gaighat		0.0281	0.0184	
5	BAHRAICH	Kapurpur	0.0288		0.0118	
6	BAHRAICH	Katarniaghat		0.0969		0.0304
7	BAHRAICH	Nanpara		0.0927		0.0577
8	BAHRAICH	Razichauraha	0.0179		0.0373	
9	BAHRAICH	Sablapur		0.0329		0.044
10	BAHRAICH	Tapri godh		0.0131		0.0403
1	BALLIA	Babhnauli		0.0474	0.3749	
2	BALLIA	Bairia	0.0049		0.1704	
3	BALLIA	Ballia	0.0199		0.4183	
4	BALLIA	Chilkhar		0.0845	0.5886	

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
5	BALLIA	Chitbargaon		0.0199	0.1252	
6	BALLIA	Dalan chapra		0.0005	0.2132	
7	BALLIA	Garwar		0.1038	0.0857	
8	BALLIA	Haldi	0.0356		0.4488	
9	BALLIA	Jahangrapur	0.0612		0.1038	
10	BALLIA	Jaiprakashnagar		0.0674		0.0721
11	BALLIA	Kharsanda	0.1203		0.2359	
12	BALLIA	Manihar	0.0146		0.0613	
13	BALLIA	Nasirabad	0.0154		0.0934	
14	BALLIA	Pur		0.1539	0.0125	
15	BALLIA	Rasra		0.1546	0.3573	
16	BALLIA	Rewati		0.3219	0.252	
17	BALLIA	Ubhavan		0.1345	0.1686	
1	BALRAMPUR	Balrampur1	0.0614		0.123	
2	BALRAMPUR	Bankatwa		0.4094		0.134
3	BALRAMPUR	Deorial		0.0586	0.0422	
4	BALRAMPUR	Gainsari		0.0908	0.054	
5	BALRAMPUR	Gangnar		0.0516	0.0777	
6	BALRAMPUR	Gaura crossing		0.0867	0.1079	
7	BALRAMPUR	Harriaya bazar		0.0392	0.1348	
8	BALRAMPUR	Jarwa		0.8563		0.4673
9	BALRAMPUR	Pachperwa	0.0503		0.0491	
10	BALRAMPUR	Semri1		0.0798	0.0254	
11	BALRAMPUR	Sipahia village		0.0289		0.0138
12	BALRAMPUR	Sonpur		0.0588	0.0793	
13	BALRAMPUR	Sridutganj1		0.0371	0.0522	
14	BALRAMPUR	Tulsipur (Devipatan)	0.0338		0.1466	
15	BALRAMPUR	Utraula		0.1263	0.0275	
1	BANDA	Atarra		0.039		0.1391
2	BANDA	Badausa	0.7839		0.5198	
3	BANDA	Badehan		0.0377	0.0707	
4	BANDA	Banda		0.1933		0.6938
5	BANDA	Bisanda		0.4269		0.0151
6	BANDA	Jamnipurwa		0.0059		0.5115
7	BANDA	Khhurand	0.2205		0.0814	
8	BANDA	Pangara	0.2886		0.0438	
1	BARABANKI	Baba ki kuti		0.0376		0.0363
2	BARABANKI	Bhiwal	0.0775			0.0637
3	BARABANKI	Chaubisi		0.0941	0.0463	
4	BARABANKI	Datauli chanda		0.0963		0.0108
5	BARABANKI	Dewa		0.1056	0.0067	
6	BARABANKI	Fatehpur (new)	0.0679		0.0484	
7	BARABANKI	Gutauna		0.0309		0.032
8	BARABANKI	Kitlupur		0.0222		0.0476

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
9	BARABANKI	Kotwa sarai		0.0715		0.0987
10	BARABANKI	Masauli chaurah		0.1569		0.0435
11	BARABANKI	Purwa amarsingh	0.1053			0.006
12	BARABANKI	Rani katra	0.1174		0.0217	
13	BARABANKI	Rasauli		0.1054	0.0846	
14	BARABANKI	Sarai barai		0.0851		0.028
15	BARABANKI	Sidhaur		0.1096		0.0087
16	BARABANKI	Sundhia mau		0.0407		0.0641
17	BARABANKI	Tikaitnagar	0.1376		0.0026	
18	BARABANKI	Trivediganj		0.1156		0.0949
1	BAREILLY	Baheri	0.1579			0.1234
2	BAREILLY	Bareilly1		0.1837		0.159
3	BAREILLY	Bhitora Pz GWD	0.0792		0.1816	
4	BAREILLY	Bhojipura Pz GWD		0.0243	0.0311	
5	BAREILLY	Bhuta		0.0044		0.2397
6	BAREILLY	Itaura Sukhdevpur Pz GWD		0.02	0.0373	
7	BAREILLY	Kandharpur Pz GWD		0.0166	0.0271	
8	BAREILLY	Mirganj Pz GWD		0.1911		0.071
9	BAREILLY	Nawabganj1	0.0228			0.4237
10	BAREILLY	Shahi Pz GWD		0.0693	0.0222	
11	BAREILLY	Shishgarh	0.1593		0.0625	
1	BASTI	Basti		0.1339		0.0627
2	BASTI	Bhanpur		0.2206	0.0333	
3	BASTI	Bhikamjot		0.0982	0.056	
4	BASTI	Captainganj1		0.2439		0.2716
5	BASTI	Haraiya		0.0969	0.0625	
6	BASTI	Kalwari		0.1616	0.0417	
7	BASTI	Kharauan jat		0.1122		0.0146
1	BIJNOR	Bijnor Pz GWD		0.2049		0.04
2	BIJNOR	Chandok		0.238		0.1194
3	BIJNOR	Milak Beniram		0.0503	0.1112	
4	BIJNOR	Najibabad New	0.0255		0.096	
5	BIJNOR	Sarakthal	0.0307		0.0381	
6	BIJNOR	Sneh Rd.rly.stn.		0.2199	0.0729	
7	BIJNOR	Swaheri Khurd		0.2885		0.0336
1	BUDAUN	Asafpur Pz GWD		0.4738		0.5138
2	BUDAUN	Badaun Pz GWD		0.6728		0.6576
3	BUDAUN	Dabthara Shyam Pz GWD		0.2386		0.2257
4	BUDAUN	Kolhai Pz GWD		0.5032		0.4565
5	BUDAUN	Mansa Nagla Pz GWD		0.6368		0.7235
6	BUDAUN	Qadar Chowk Pz GWD		0.4157		0.5049
7	BUDAUN	Ujhani Pz GWD		0.7451		0.9211

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
1	BULANDSHAHR	Batli		0.3464		0.2094
2	BULANDSHAHR	Lakhaothi Pz		0.4612		0.3127
3	BULANDSHAHR	Sikandrabad 1		0.3448		0.1237
1	CHANDAULI	Chahania		0.6625		0.0542
2	CHANDAULI	Chakia		0.055		0.0489
3	CHANDAULI	Chandauli	0.1516		0.1347	
4	CHANDAULI	Dhanpur	0.1812		0.0537	
5	CHANDAULI	Kamalpur	0.4256		0.055	
6	CHANDAULI	Marufpur xing	0.6206		0.4234	
7	CHANDAULI	Mugal sarai		0.1506		0.011
8	CHANDAULI	Naugarh	0.103			0.0822
9	CHANDAULI	Sakaldiha		0.0716	0.0586	
1	CHITRAKOOT	Bhaunri		0.0927		0.1286
2	CHITRAKOOT	Jorwara		0.2942		0.2834
3	CHITRAKOOT	Karwi		0.1188		0.0848
4	CHITRAKOOT	Manikpur	0.0587			0.0133
5	CHITRAKOOT	Mau	0.6272			0.4719
6	CHITRAKOOT	Raipura		0.0684		0.1268
1	DEORIA	Baitalpur	0.0729			0.1102
2	DEORIA	Deoria2		0.1531		0.0172
3	DEORIA	Desai deoria	0.2452			0.028
4	DEORIA	Gauri bazar	0.1276		0.0334	
5	DEORIA	Pathardewa(Naraya npur		0.1133		0.266
6	DEORIA	Rampur karkhana	0.2581			0.0713
7	DEORIA	Rudrapur1		0.2069	0.0013	
1	ETAH	Amanpur Pz-GWD		0.3309		0.1635
2	ETAH	Daryaganj		0.3726		0.439
3	ETAH	Dhumri 1		0.0506		0.0419
4	ETAH	Etah Pz-GWD		0.8671		0.7052
5	ETAH	Jaithra Pz-GWD		0.5559		0.7471
6	ETAH	Jalesar Pz- GWD		0.6057	0.0458	
7	ETAH	Locha		0.3005		0.4266
8	ETAH	Marahchi Pz-GWD		0.5841		0.3439
9	ETAH	Sakit Pz-GWD		0.6973		0.4181
10	ETAH	Sidhpura Pz-GWD		0.2332		0.1802
1	ETAWAH	Bakewar		0.2502		0.4232
2	ETAWAH	Barecha	0.048		0.0003	
3	ETAWAH	Bharthana2		0.0894		0.3596
4	ETAWAH	Patya Chaturpur		0.762		0.6266
5	ETAWAH	Ujhayani		0.0814	0.0064	
1	FAIZABAD	Bakarganj		0.3039		0.1191
2	FAIZABAD	Chaure bazar	0.089			0.0771
3	FAIZABAD	Naokua		0.0759	0.0226	
4	FAIZABAD	Sakhupura		0.1302	0.0239	

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
1	FARRUKHABAD	Rajepur	0.3203		0.1865	
1	FATEHPUR	Asother		0.2165		0.1045
2	FATEHPUR	Barwa		1.6514		1.3926
3	FATEHPUR	Bela		0.1007		0.097
4	FATEHPUR	Bindki1	0.7444		0.6777	
5	FATEHPUR	Lalauli		0.0046	0.1039	
6	FATEHPUR	Musfha		0.7849		0.5266
7	FATEHPUR	Sarain bakewar		0.2972		0.2895
8	FATEHPUR	Umradipur		0.0802	0.1452	
1	FIROZABAD	Araon Pz GWD		0.5583		0.6947
2	FIROZABAD	Jasrana Pz GWD		0.6871		0.2977
3	FIROZABAD	Madanpur Pz-GWD		1.3623		1.0147
4	FIROZABAD	Mustafabad	0.2982		0.1493	
5	FIROZABAD	Shikohabad Pz-GWD		0.6101		0.5982
1	GAUTAM BUDDHA NAGAR	Chauki Pz		0.1419		0.1062
2	GAUTAM BUDDHA NAGAR	Dhankaur		0.0327		0.0771
3	GAUTAM BUDDHA NAGAR	Jewar- Pz		0.3622		0.4463
4	GAUTAM BUDDHA NAGAR	Sector- 62 A Pz		2.2084		2.2099
5	GAUTAM BUDDHA NAGAR	Sector-72 Pz		2.1426		2.2438
6	GAUTAM BUDDHA NAGAR	Sector-92 Pz		0.5197		0.6564
1	GHAZIABAD	Azad Nagar-Pz		0.8036		0.5218
2	GHAZIABAD	Bhojpur-Pz		0.5308		0.717
3	GHAZIABAD	Dhaulana-Pz		0.2463		0.4787
4	GHAZIABAD	Hapur-Pz		0.615		0.5989
5	GHAZIABAD	Modi Nagar-Pz I		0.2376		0.2295
6	GHAZIABAD	Modi Nagar-Pz II		0.3489		0.2541
7	GHAZIABAD	Morta Pz GWD		0.7268		0.2292
1	GHAZIPUR	Ajaipur	0.2745		0.5506	
2	GHAZIPUR	Baresar	0.3054		0.4571	
3	GHAZIPUR	Deoria	0.013			0.0491
4	GHAZIPUR	Dildar nagar	0.0404			0.0848
5	GHAZIPUR	Gahmar	0.4841		0.6073	
6	GHAZIPUR	Mohammadabad2	0.4084		0.4472	
7	GHAZIPUR	Orulari	0.0151			0.185
8	GHAZIPUR	Pyrepur	0.1438		0.2311	
9	GHAZIPUR	Sadikapur	0.3721		0.2641	
10	GHAZIPUR	Saidpur 1		0.2362		0.3094
1	GONDA	Bhauriganj		0.1974		0.0146
2	GONDA	Birpur katra		0.001	0.0495	

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
3	GONDA	Gonda (Urban)		0.3847		0.0091
4	GONDA	Mankapur		0.2747		0.1616
5	GONDA	Parsa gondri		0.1017		0.0558
1	GORAKHPUR	Kauriram		0.0765		0.0898
1	HAMIRPUR	Bewar		0.5643		0.5678
2	HAMIRPUR	Dhagwan		0.553		0.148
3	HAMIRPUR	Khanna		0.3211		0.4006
4	HAMIRPUR	Kunetha	0.4945		0.2337	
5	HAMIRPUR	Lalpura	0.0746		0.1149	
6	HAMIRPUR	Maudaha	0.2768		0.3386	
7	HAMIRPUR	Rath	0.233			0.4995
1	HARDOI	Ahrori		0.0375	0.2098	
2	HARDOI	Barganwar		0.2442		0.0288
3	HARDOI	Bhadaial		0.1698		0.0898
4	HARDOI	Dalel nagar rly		0.3601		0.1798
5	HARDOI	Del panderwa		0.2262	0.0399	
6	HARDOI	Dhobia		0.1004		0.1071
7	HARDOI	Gangau		0.0897		0.029
8	HARDOI	Gopamau		0.0843	0.0525	
9	HARDOI	Kachauna		0.002		0.0817
10	HARDOI	Manjila		0.0321		0.1282
11	HARDOI	Pihani		0.1788		0.115
12	HARDOI	Sahabadpur		0.4253	0.1475	
1	HATHRAS	Hasyan		0.1686		0.4294
2	HATHRAS	Iglas		0.2635		0.5926
3	HATHRAS	Rattika nagla		0.0482		0.244
4	HATHRAS	Thulai		0.2474		0.8881
1	JALAUN	Ata		0.7525		0.6768
2	JALAUN	Babina-New		0.09		0.0979
3	JALAUN	Chhota Rampur		0.7696		1.225
4	JALAUN	Churkhi		0.6349		0.7103
5	JALAUN	Damras		0.4209		0.9862
6	JALAUN	Dekor		0.1285		0.3073
7	JALAUN	Gohan		0.2474		0.3758
8	JALAUN	Gopalpural		0.0334	0.0835	
9	JALAUN	Hadrukh		0.8734		1.1862
10	JALAUN	Jagmanpur		0.0807	0.0806	
11	JALAUN	Jalaun		0.2063		0.6077
12	JALAUN	Kailaiya		0.237		0.0298
13	JALAUN	Kalpi		0.1607		0.5156
14	JALAUN	Kamsaira		0.2427	0.2734	
15	JALAUN	Kanasi		0.263	0.1313	
16	JALAUN	Keolari-New		0.0456	0.168	
17	JALAUN	Kishora mauza		0.3884		0.1912

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
18	JALAUN	Konch(New)	0.2175		0.0824	
19	JALAUN	Kusumilia		1.2456		0.0514
20	JALAUN	Madhogarh		0.0686	0.0155	
21	JALAUN	Mahewa		0.4421		0.3562
22	JALAUN	Marora		0.4259		0.1631
23	JALAUN	Musaria		1.073		1.6203
24	JALAUN	Orai		0.4253		0.3064
25	JALAUN	Rajpura		0.0884	0.0245	
26	JALAUN	Umri		0.2073	0.5859	
1	JAUNPUR	Honipur		0.0555		0.0708
2	JAUNPUR	Janghai	0.031			0.1705
3	JAUNPUR	Kheta sarai 1	0.2843		0.0564	
4	JAUNPUR	Machhalishahr		0.0525		0.0331
5	JAUNPUR	Maharajganj2	0.2611		0.0932	
6	JAUNPUR	Maheshganj		0.0638		0.2941
7	JAUNPUR	Marahun		0.0042		0.0333
8	JAUNPUR	Mehreon1	0.0943		0.0653	
9	JAUNPUR	Mungra Badshahpur		0.0162		0.3526
10	JAUNPUR	Narar(jamnipur)		0.04	0.0281	
11	JAUNPUR	Pisara	0.3427		0.0588	
12	JAUNPUR	Raja bazar		0.0824	0.04	
13	JAUNPUR	Rampur1	0.3434		0.4555	
14	JAUNPUR	Sarpatha	0.5841		0.2709	
15	JAUNPUR	Shahganj1	0.0906			0.0751
16	JAUNPUR	Sigra mau	0.1471		0.179	
17	JAUNPUR	Tarti		0.2226		0.249
1	JHANSI	Ajneri Madhopura		0.1735		0.205
2	JHANSI	Auldan-New		0.3598		0.2924
3	JHANSI	Babina1	0.1912		0.0806	
4	JHANSI	Eairach		0.0836		0.3395
5	JHANSI	Farida	0.0881			0.2205
6	JHANSI	Ghugawa	0.0997		0.5022	
7	JHANSI	Jhansi1		0.0981		0.383
8	JHANSI	Khailara		0.1326		0.1169
9	JHANSI	Khillawari		0.2648	0.0994	
10	JHANSI	Mauranipur Rajpaharia		0.0235		0.0894
11	JHANSI	Moth		0.0468		0.0657
12	JHANSI	Punch	0.2172			0.0917
13	JHANSI	Raksa		0.002	0.0869	
14	JHANSI	Rewan		0.2132		0.1009
15	JHANSI	Sakrar 1		0.4794		0.3249
16	JHANSI	Samthar		0.422		0.1973
17	JHANSI	Semri		0.2121	0.0271	
1	JYOTIBA PHULE	Amroha Pz CGWB		0.4827		0.5018

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
	NAGAR					
2	JYOTIBA PHULE NAGAR	Bagadpur Pz GWD		0.768		0.8392
3	JYOTIBA PHULE NAGAR	Daurala Pz GWD		0.3087		0.2056
4	JYOTIBA PHULE NAGAR	Dhanaura Pz CGWB		0.2367		0.0656
5	JYOTIBA PHULE NAGAR	Gajraula Pz GWD		0.4468		0.5774
6	JYOTIBA PHULE NAGAR	Hasanpur Pz GWD		0.461		0.5177
7	JYOTIBA PHULE NAGAR	Jogipura Pz GWD		0.3209		0.0776
8	JYOTIBA PHULE NAGAR	Joya Pz GWD		0.5739		0.5184
1	KANNAUJ	Chibramau Pz-GWD		0.8896		0.8358
2	KANNAUJ	Haseran Pz-GWD		0.0203	0.0289	
3	KANNAUJ	Jalalabad Pz-GWD		0.9259		0.6489
4	KANNAUJ	Kannauj1		0.0489		0.1688
5	KANNAUJ	Kharni Pz-GWD		0.5294		0.3805
6	KANNAUJ	Tirwaganj	0.4391		0.0574	
1	KANPUR DEHAT	Baghpur		0.3263		0.3325
2	KANPUR DEHAT	Kainjari		0.2439		0.2399
3	KANPUR DEHAT	Muhammadpur		0.5948		0.7181
4	KANPUR DEHAT	Roura		0.1875		0.2359
1	KANPUR NAGAR	Baradari		0.3867		0.1293
2	KANPUR NAGAR	Bhaisana		0.0479	0.1953	
3	KANPUR NAGAR	Bithoor-Nganj		0.0716	0.0278	
4	KANPUR NAGAR	Chaubepur1	0.0402			0.0573
5	KANPUR NAGAR	Motipura		0.3249		0.2496
6	KANPUR NAGAR	Narmau(new)		0.1223		0.1072
7	KANPUR NAGAR	Niwada dhamni		0.2775		0.5228
8	KANPUR NAGAR	Sachendi		0.238		0.0585
9	KANPUR NAGAR	Sarh		0.3607		0.0816
1	KAUSHAMBI	Kushambhi		0.076		0.0221
2	KAUSHAMBI	Lehdari		0.0588	0.0159	
3	KAUSHAMBI	Sallahpur	0.042			0.1748
4	KAUSHAMBI	Sarai akil		0.2218		0.8015
5	KAUSHAMBI	Usargaura	0.0321		0.3344	
1	KHERI	Asogapur	0.0199		0.0458	
2	KHERI	Chandan chowki		0.0037		0.0364
3	KHERI	Chauapur		0.0013		0.0669
4	KHERI	Dudhwa f.r.h.		0.0749		0.0948
5	KHERI	Jhandi Raj		0.0172		0.0152
6	KHERI	Mailani		0.0603		0.1801

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
1	KUSHINAGAR	Belwa		0.1609		0.1425
2	KUSHINAGAR	Chittauni	0.2287		0.0676	
3	KUSHINAGAR	Mansurganj		0.1283		0.0486
4	KUSHINAGAR	Naurangia	0.0389			0.0003
5	KUSHINAGAR	Rambar		0.0186		0.1718
1	LALITPUR	Amjhara ghati	0.093		0.3547	
2	LALITPUR	Bansi	0.3103		0.6344	
3	LALITPUR	Bar		0.5588		0.1025
4	LALITPUR	Digwar	0.0299		0.0357	
5	LALITPUR	Hisar kalan	0.0486		0.1704	
6	LALITPUR	Jakhaural		0.2869	0.1194	
7	LALITPUR	Jakhlaun		0.0718	0.239	
8	LALITPUR	Khitwans	0.1478		0.1272	
9	LALITPUR	Lalitpur	0.0358		0.5585	
10	LALITPUR	Talbhet-New		0.0899		0.0307
1	LUCKNOW	Aat Garhi Sonra		0.9388		0.5432
2	LUCKNOW	Arjunganj		0.2484		0.4055
3	LUCKNOW	Arya Nagar		0.1775		0.2179
4	LUCKNOW	Bakshi Ka Talab		0.4473		0.5411
5	LUCKNOW	Behta Bazar	0.3126			0.6323
6	LUCKNOW	Bhatoiya		0.4673		0.5381
7	LUCKNOW	Bijnor		0.4649		0.4389
8	LUCKNOW	Cantt		1.2841		1.7203
9	LUCKNOW	Fatehganj		0.8363		0.6564
10	LUCKNOW	Gosaiganj1		0.2497	0.0127	
11	LUCKNOW	Gulistan Colony		0.8375		0.9357
12	LUCKNOW	Itaunja		0.0561	0.0132	
13	LUCKNOW	ITAUNJA		0.2245		0.1377
14	LUCKNOW	Kathwara		0.3208		0.2902
15	LUCKNOW	Khawas khera	0.0296			0.0507
16	LUCKNOW	Kumrahawan		0.1437		0.0695
17	LUCKNOW	Lu New Campus		1.1037		1.1295
18	LUCKNOW	Mal		0.9012		0.6705
19	LUCKNOW	MALIHABAD		0.6699		0.5596
20	LUCKNOW	Mohanlalganj		0.1484	0.0524	
21	LUCKNOW	Mohanlalganj		0.1911	0.1972	
22	LUCKNOW	Munshiganj		0.1158		0.1928
23	LUCKNOW	Nagram		0.1935	0.0515	
24	LUCKNOW	New Hyderabad		1.2514		1.7724
25	LUCKNOW	RAHIMABAD		0.4333		0.3478
26	LUCKNOW	Rakabganj Crossing		0.5642		0.3772
27	LUCKNOW	Rehman Khera		0.2136		0.2085
28	LUCKNOW	Rehta		0.5915		0.6242
29	LUCKNOW	River Bank Colony		1.0756		1.111

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
30	LUCKNOW	Tejkishan Khera		0.4692	0.0169	
31	LUCKNOW	Vikasnagar		1.4399		1.5606
1	MAHOBA	Bela tal	0.0755			0.2604
2	MAHOBA	Charkhari		0.2907		0.1294
3	MAHOBA	Kashipura		0.0413		0.4768
4	MAHOBA	Kulpahar2		0.2527		0.2736
5	MAHOBA	Pipramauf		0.0972		0.6806
6	MAHOBA	Teiya1		0.0242		0.5588
1	MAHRAJGANJ	Ghughali		0.2719	0.0426	
2	MAHRAJGANJ	Koluhi	0.2341		0.2428	
3	MAHRAJGANJ	Maharajganj2		0.0914	0.0529	
4	MAHRAJGANJ	Siswa bazar	0.0858		0.1107	
1	MAINPURI	BewarPz-GWD		0.2442		0.2382
2	MAINPURI	Ghirore		0.049		0.0151
3	MAINPURI	Katra Saman		0.156		0.0827
4	MAINPURI	Kuraoli Pz-GWD		0.3844		0.2885
5	MAINPURI	Nagal bhujia		0.1412	0.0819	
6	MAINPURI	Sultanganj Pz-GWD		0.4573		0.4232
1	MATHURA	Baldeo	0.3242		0.1411	
2	MATHURA	Barsana		0.6551		0.5531
3	MATHURA	Chhata New	0.1887			0.081
4	MATHURA	Jachoda		0.0435		0.0737
5	MATHURA	Jamunapar Thana		0.283		0.264
6	MATHURA	Jhinga nagla		0.1447		0.1191
7	MATHURA	Kharab	0.0598			0.0581
8	MATHURA	Kosi		0.0375	0.0196	
9	MATHURA	Mat		0.2087		0.3842
10	MATHURA	Nagra Chhitar Singh		0.0468		0.0189
11	MATHURA	Paintha (Govardhan)		0.0327		0.043
12	MATHURA	Pirsua	0.0732			0.0952
13	MATHURA	Sahar1	0.0258			0.0287
14	MATHURA	Saunkh		0.0312	0.1129	
15	MATHURA	Surir (new)		0.2198		0.3594
1	MAU	Dhorighat	0.3193		0.0501	
2	MAU	Ghosi	0.167		0.0374	
3	MAU	Jejawali	0.0743			0.0751
4	MAU	Ratanpura	0.8155		0.3129	
1	MEERUT	Chota Mawana Pz		0.2816		0.5794
2	MEERUT	Hastinapur 1		0.0245	0.0658	
3	MEERUT	Kaili Pz		0.6696		0.9982
4	MEERUT	Machhara Shallowpz		0.3869		0.4391
5	MEERUT	Meerut Pz		0.5909		0.4527
6	MEERUT	Parikshat Garh Pz		0.423		0.3737
7	MEERUT	Sakoti Tanda Pz		0.1138		0.1128

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
1	MIRZAPUR	Adalhat	0.2184		0.0739	
2	MIRZAPUR	Ahraura	0.0049			0.0222
3	MIRZAPUR	Baghura	0.0808			0.0219
4	MIRZAPUR	Barhanchuan	0.1985		0.1118	
5	MIRZAPUR	Gaipura	0.4156		0.0853	
6	MIRZAPUR	Gopalpur	0.4826		0.1805	
7	MIRZAPUR	Halia	0.2711		0.2358	
8	MIRZAPUR	Lalganj	0.0644		0.0058	
9	MIRZAPUR	Lohangpur	0.5625		0.0507	
10	MIRZAPUR	Mirzapur		0.2198		0.4502
1	MORADABAD	Asmauli Pz GWD		0.7223		1.0425
2	MORADABAD	Bahjoi Pz GWD		0.3447		0.495
3	MORADABAD	Chandausi-PZ		0.5669		0.5375
4	MORADABAD	Dingarpur Pz GWD		0.446		0.368
5	MORADABAD	Fatehulla Ganj Pz GWD		0.5103		0.1585
6	MORADABAD	Fauladpur		0.3012	0.2238	
7	MORADABAD	Karanpur Pz GWD	0.1203			0.0763
8	MORADABAD	Mahmudpurmafi Pz GWD		0.4882		0.5134
9	MORADABAD	Maukather Pz GWD		0.6287		0.533
10	MORADABAD	Moradabad Pz GWD		0.2049		0.0645
11	MORADABAD	Painapur		0.0245	0.0968	
12	MORADABAD	Sahapura Sirpura-Pz		0.7769		0.4925
13	MORADABAD	Thakurdwara		0.039	0.0438	
1	MUZAFFARNAGAR	Baghra Pz		0.7363		0.328
2	MUZAFFARNAGAR	Chartawal		0.1963		0.191
3	MUZAFFARNAGAR	Khatauli PZ (GWD)		0.0208		0.1632
4	MUZAFFARNAGAR	Kukra-Sadar Pz		0.5666		0.3494
5	MUZAFFARNAGAR	Morna Pz		0.2708		0.6032
6	MUZAFFARNAGAR	Paldi Pz GWD		0.8631		0.4345
7	MUZAFFARNAGAR	Shamli PZ GWD		0.3707		0.3205
8	MUZAFFARNAGAR	Un Pz	1.624		1.5814	
1	PILIBHIT	Bargad chauraha		0.0928		0.1328
2	PILIBHIT	Bhamora		0.0705	0.0032	
3	PILIBHIT	Bilaspur Pz GWD		0.0176		0.0025
4	PILIBHIT	Faradia		0.0386		0.0165
5	PILIBHIT	Gajraula l		0.0729		0.0416
6	PILIBHIT	Jahanabad1		0.078		0.0312
7	PILIBHIT	Jeora kalyanpur		0.0003		0.1165
8	PILIBHIT	Madho Tanda Pz GWD		0.1035		0.0339
9	PILIBHIT	Pilibhit Pz GWD	0.0196			0.0112
10	PILIBHIT	Puranpur Pz GWD		0.0794		0.0892
1	PRATAPGARH	Bhusar	0.0461			0.0003
2	PRATAPGARH	Bishahia		0.1404		0.0478

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
3	PRATAPGARH	Delhupur		0.0127	0.0057	
4	PRATAPGARH	Dih balri		0.1517	0.0612	
5	PRATAPGARH	Gaura	0.0284		0.0308	
6	PRATAPGARH	Gutni	0.1414		0.0963	
7	PRATAPGARH	Jathwara	0.123			0.1495
8	PRATAPGARH	Kohdaur	0.1708			0.1205
9	PRATAPGARH	Kunda		0.1998		0.042
10	PRATAPGARH	Lalganj2		0.0289	0.1514	
11	PRATAPGARH	Lalgopalganj		0.081		0.0611
12	PRATAPGARH	Maddupur		0.0546		0.1829
13	PRATAPGARH	Mandhata		0.0876		0.0285
14	PRATAPGARH	Mohanganj		0.0892		0.0974
15	PRATAPGARH	Nanasukul purwa	0.0359			0.175
16	PRATAPGARH	Rampur batauli	0.0873		0.2463	
17	PRATAPGARH	Raniganj	0.1147		0.0219	
18	PRATAPGARH	Sangipur	0.1173			0.2558
19	PRATAPGARH	Sangramgarh	0.0246		0.0042	
1	RAE BARELI	Bhawanigarh		0.0858	0.0354	
2	RAE BARELI	Binjh		0.483		0.3194
3	RAE BARELI	Chauraha dusti	0.0563		0.0587	
4	RAE BARELI	Cheek daadar		0.7253		0.3999
5	RAE BARELI	Dhonda ka purwa		0.214		0.0699
6	RAE BARELI	Domapur		1.5027		0.9055
7	RAE BARELI	Fursatganj		0.2761		0.0738
8	RAE BARELI	Gopalipur	0.0782			0.2302
9	RAE BARELI	Jagatpur		0.0415		0.0073
10	RAE BARELI	Jais	0.0631		0.035	
11	RAE BARELI	Kachunda		0.138		0.0058
12	RAE BARELI	Katghar		0.1183	0.0231	
13	RAE BARELI	Kumbhi ka purwa		0.0991		0.0939
14	RAE BARELI	Laxmanganjbazar		0.0586	0.014	
15	RAE BARELI	Matrwa	0.1508		0.0204	
16	RAE BARELI	Mau garbi		0.0585	0.009	
17	RAE BARELI	Mazzamganj ngr	0.1288			0.169
18	RAE BARELI	Mohanganj1		0.2006	0.0414	
19	RAE BARELI	Nigohan1	0.0327			0.0187
20	RAE BARELI	Rawalpur		0.1097	0.0368	
21	RAE BARELI	Simrauta		0.0343		0.003
22	RAE BARELI	Simrauta(ii)		0.0352	0.0876	
23	RAE BARELI	Suchi		0.2483		0.5699
1	RAMPUR	Shahabad Pz GWD		0.4086		0.2951
1	SAHARANPUR	Babail Buzurg		0.109	0.0452	
2	SAHARANPUR	Bagh colony		0.5803		0.0853
3	SAHARANPUR	Ghuna		0.0569		0.1112

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
4	SAHARANPUR	Mainpura Pz GWD		0.3401	0.2274	
5	SAHARANPUR	Mohand		0.1051		0.119
6	SAHARANPUR	Nanauta Pz GWD	0.0391		0.1009	
7	SAHARANPUR	Rampur Pz GWD		0.2985		0.1554
8	SAHARANPUR	Shakhambari	0.1883		0.0162	
9	SAHARANPUR	Sunderpur1	0.5742		0.4131	
10	SAHARANPUR	Tikrol Pz GWD		0.2992		0.2883
11	SAHARANPUR	Tilhari Buzurg	0.0152		0.0373	
1	SANT KABIR NAGAR	Dhanghata		0.1401		0.0295
2	SANT KABIR NAGAR	Khalilabad	0.0682			0.0883
3	SANT KABIR NAGAR	Maidawal		0.1608		0.0594
4	SANT KABIR NAGAR	Nathnagar		0.0987		0.1192
1	SANT RAVIDAS NAGAR	Aurai	0.1839		0.2512	
2	SANT RAVIDAS NAGAR	Koirauna	0.1206			0.018
3	SANT RAVIDAS NAGAR	Pali1	0.1878		0.4131	
1	SHAHJAHANPUR	Sehramau		0.334	0.0215	
2	SHAHJAHANPUR	Shahjahanpur1	0.4273		0.1716	
1	SHRAWASTI	Bhagwanpur		0.0393	0.0142	
2	SHRAWASTI	Bhujanga	0.2621		0.1855	
3	SHRAWASTI	Dikauli		0.0379		0.0417
4	SHRAWASTI	Laxman nagar		0.0294	0.0159	
5	SHRAWASTI	Madora chowki		0.0088	0.0222	
6	SHRAWASTI	Pakaria		0.1193		0.0379
7	SHRAWASTI	Pratapur	0.0545			0.0097
8	SHRAWASTI	Ratanpur	0.057			0.0195
9	SHRAWASTI	Shrawasti		0.0752	0.014	
10	SHRAWASTI	Sirsia1		0.013	0.1302	
1	SIDDHARTH NAGAR	Badhni		0.1758		0.0279
2	SIDDHARTH NAGAR	Bansi1		0.0118	0.0354	
3	SIDDHARTH NAGAR	Belwa laghunahi		0.1015	0.033	
4	SIDDHARTH NAGAR	Birdpur	0.0402		0.0585	
5	SIDDHARTH NAGAR	Chilihia	0.078		0.0239	
6	SIDDHARTH NAGAR	Dumariaganj		0.0225	0.0624	
7	SIDDHARTH NAGAR	Kajhai	0.0536		0.093	
8	SIDDHARTH NAGAR	Parsa		0.2418		0.1121
9	SIDDHARTH NAGAR	Ramnagara	0.0557		0.0592	
10	SIDDHARTH NAGAR	Uska	0.0489		0.0179	
1	SITAPUR	Behta		0.0113	0.1155	
2	SITAPUR	Biswan2		0.142		0.1726
3	SITAPUR	Bhutmani		0.0604		0.1137
4	SITAPUR	Deokalia		0.2384		0.3263
5	SITAPUR	Dhouthi		0.0614		0.2717

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
6	SITAPUR	Hargaon		0.1456		0.1963
7	SITAPUR	Jahangirabad		0.018		0.0495
8	SITAPUR	Karauna		0.5992		0.5906
9	SITAPUR	Khamaria		0.2425		0.3079
10	SITAPUR	Laharpur Pz-GWD		0.1036		0.0054
11	SITAPUR	MachchretaPz-GW D		0.6077		0.4582
12	SITAPUR	Madnapur		0.0253		0.0197
13	SITAPUR	Maholi Pz-GWD		0.2416	0.5741	
14	SITAPUR	Manpur chowki		0.3464		0.2306
15	SITAPUR	Misrikh1		0.2413		0.2307
16	SITAPUR	Purwara gosai	0.0325		0.0195	
17	SITAPUR	Rampur Mathura Pz-GWD	0.055			0.2031
18	SITAPUR	Sanda		0.0425	0.0313	
19	SITAPUR	Sitapur		0.1155		0.3469
1	SONBHADRA	Anpara		0.042		0.2633
2	SONBHADRA	Babhani	0.1265			0.1265
3	SONBHADRA	Bairpan	0.7824		0.1295	
4	SONBHADRA	Bhagwan nagar	0.7092		0.3413	
5	SONBHADRA	Chopan	0.3696			0.0834
6	SONBHADRA	Dhrtidand1	0.1713			0.1304
7	SONBHADRA	Dudhi	0.1701		0.0279	
8	SONBHADRA	Gara	0.2934			0.1128
9	SONBHADRA	Hatinala		0.2553		0.5302
10	SONBHADRA	Jarha	0.1383			0.0284
11	SONBHADRA	Markundi	0.0283		0.0246	
12	SONBHADRA	Muirpur	0.159			0.0118
1	SULTANPUR	Badgaon		0.0832		0.3599
2	SULTANPUR	Bhadar		0.0367		0.0077
3	SULTANPUR	Bhim pashim		0.1067		0.0557
4	SULTANPUR	Dariyan ka purw		0.0854		0.083
5	SULTANPUR	Goriabad	0.2707		0.0631	
6	SULTANPUR	Jagdishpur2		0.1681		0.5274
7	SULTANPUR	Janapur		0.3921		0.1761
8	SULTANPUR	Kadipur		0.1605		0.0355
9	SULTANPUR	Khaluhat1		0.2714	0.0014	
10	SULTANPUR	Khutahna		0.1028		0.0396
11	SULTANPUR	Kotra Khurd		0.325	0.0363	
12	SULTANPUR	Kurebhar1		0.0862	0.0151	
13	SULTANPUR	Kurwar		0.1538		0.1621
14	SULTANPUR	Kusitali	0.0697			0.0087
15	SULTANPUR	Kutta		0.0342	0.0886	
16	SULTANPUR	Mahona		0.2801		0.0369
17	SULTANPUR	Mundawa		0.1367	0.0125	

S No.	District	Well	PreMonsoon		PostMonsoon	
			Rise (m/year)	Fall (m/year)	Rise (m/year)	Fall (m/year)
18	SULTANPUR	Munshiganj1		0.1496		0.0099
19	SULTANPUR	Musafirkhana		0.0695	0.0492	
20	SULTANPUR	Naghipur bajhan		0.1091		0.0248
21	SULTANPUR	Piparpur		0.1055		0.1167
22	SULTANPUR	Pratushmanik	0.0675		0.037	
23	SULTANPUR	Ramgarh1	0.0156		0.0546	
24	SULTANPUR	Sagardeh	0.0388			0.0357
25	SULTANPUR	Sathin		0.3471		0.3577
26	SULTANPUR	Shivgarh		0.214		0.1204
27	SULTANPUR	Sikrabad (Para)		0.3918		0.2291
28	SULTANPUR	Sultanpur2		0.082		0.0843
29	SULTANPUR	Trisundi		0.1173	0.0457	
1	UNNAO	Auras		0.0808		0.1065
2	UNNAO	Azmatnagar		0.1516		0.1494
3	UNNAO	Baksar		0.1672		0.0785
4	UNNAO	Bhagwant nagar		0.3734		0.7151
5	UNNAO	Bighapur		0.3351		0.597
6	UNNAO	Chakalvanshi	0.0711			0.0315
7	UNNAO	Hasewan	0.0266		0.0227	
8	UNNAO	Kantha		0.3078		0.7641
9	UNNAO	Makur		0.3		0.1188
10	UNNAO	Malauna		0.2442		0.094
11	UNNAO	Maurawan		0.0834		0.0965
12	UNNAO	Methi Tikur		0.0968	0.0252	
13	UNNAO	Pinjra		0.1548		0.1047
14	UNNAO	Purwa		0.0496		0.1331
15	UNNAO	Safipur1		0.1763		0.3415
16	UNNAO	Sumerpur		0.353		0.3058
17	UNNAO	Thaura		0.195		0.0196
18	UNNAO	Tonda		0.2142	0.017	
19	UNNAO	Unchagaon1		0.1501		0.2374
20	UNNAO	Unnao		0.5365		0.6152
1	VARANASI	Anai	0.1174		0.0126	
2	VARANASI	Barwaon	0.165		0.9809	
3	VARANASI	Chobepur	0.4638		0.1839	
4	VARANASI	Jikhan(narsara)	0.5568		0.4445	
5	VARANASI	Kakrahwan	0.2756		1.8386	
6	VARANASI	Rajatalab1	0.6229		0.6509	
7	VARANASI	Rustampur	0.2987		0.2749	
8	VARANASI	Tahipur	0.1108		0.1317	
9	VARANASI	Thatra	0.3673		0.1982	
10	VARANASI	Varanasi	0.2054		0.2549	

**CHEMICAL ANALYSIS DATA OF SAMPLES COLLECTED FROM GROUND WATER MONITORING WELLS IN
UTTAR PRADESH, 2020-21**

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
1	Allahabad	Bahadurpur	H.P.I.M.II.	Block Office	7.94	600	nil	317	50	0.24	BDL	9	310	80	27	13	2.0	47	nd
2	Allahabad	Baheria	H.P.I.M.II.	Block Office	7.98	720	nil	403	36	0.79	BDL	22	250	28	44	74	4.6	45	nd
3	Allahabad	Chaka	H.P.I.M.II.	Block Office	7.68	890	nil	427	57	0.56	37	20	360	76	41	60	3.1	45	nd
4	Allahabad	Dhanpur	H.P.I.M.II.	Block Office	7.69	690	nil	403	21	BDL	12	20	320	64	39	37	2.9	48	nd
5	Allahabad	Handia	H.P.I.M.II.	Block Office	7.89	1525	nil	525	199	BDL	5.2	100	340	40	58	230	5.5	43	nd
6	Allahabad	Holagarh	H.P.I.M.II.	Block Office	7.85	820	nil	451	43	1.05	17	25	260	40	39	91	6.3	45	nd
7	Allahabad	Jasra	H.P.I.M.II.	Block Office	7.78	1750	nil	647	206	0.45	BDL	90	400	60	61	250	3.6	41	nd
8	Allahabad	Karchana	H.P.I.M.II.	Block Office	7.61	632	nil	342	43	0.38	6.4	15	270	64	27	40	1.8	47	nd
9	Allahabad	Kaundhiyara	H.P.I.M.II.	Block Office	8.11	740	nil	415	35.5	0.49	5.4	12	320	52	46	45	2.2	44	nd
10	Allahabad	Kaurihar	H.P.I.M.II.	Block Office	7.98	880	nil	439	78	0.47	25	6	390	60	58	54	4.3	46	nd
11	Allahabad	Koran	H.P.I.M.II.	Block Office	7.92	725	nil	403	36	0.39	BDL	7	300	48	44	46	2.2	42	nd
12	Allahabad	Manda	H.P.I.M.II.	Block Office	7.65	1040	nil	317	107	0.27	60	70	430	112	36	55	1.7	48	nd
13	Allahabad	Mau-Aima	H.P.I.M.II.	Block Office	8.25	760	nil	464	14	0.45	BDL	15	150	40	12	130	2.1	38	nd
14	Allahabad	Meja	H.P.I.M.II.	Block Office	7.71	920	nil	232	142	0.26	40	46	300	76	27	85	1.0	39	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
15	Allahabad	Phoolpur	H.P.I.M.II.	Block Office	7.95	832	nil	476	36	0.83	BDL	19	300	36	51	78	3.4	43	nd
16	Allahabad	Pratanpur	H.P.I.M.II.	Block Office	7.84	900	nil	512	21	0.54	30	25	380	56	58	60	7.7	47	nd
17	Allahabad	Saidabad	H.P.I.M.II.	Block Office	7.71	880	nil	403	50	0.25	45	23	270	60	29	90	4.7	47	nd
18	Allahabad	Shankargarh	H.P.I.M.II.	Block Office	7.56	860	nil	268	99	0.49	25	55	300	76	27	70	BDL	36	nd
19	Allahabad	Soraon	H.P.I.M.II.	Block Office	8.06	760	nil	415	43	0.8	15	16	280	40	44	74	4.1	42	nd
20	Allahabad	Urwa	H.P.I.M.II.	Block Office	7.49	1135	nil	451	128	BDL	10	34	460	120	39	68	3.5	47	nd
21	Azamgarh	Tarwa	H.P.I.M.II.	Block Office	8.29	818	nil	512	14	0.44	BDL	5	250	44	34	90	3	28	nd
22	Azamgarh	Azamgarh	H.P.I.M.II.	Block Office	8.02	560	nil	268	35	0.49	BDL	8	180	36	22	44	2.3	29	nd
23	Azamgarh	Maharajganj	H.P.I.M.II.	Block Office	8.05	419	nil	232	7.1	BDL	BDL	5.3	150	48	7.2	23	2.6	27	nd
24	Azamgarh	Koyalsa	H.P.I.M.II.	Block Office	7.95	540	nil	305	14	BDL	BDL	7.5	150	40	12	56	3.7	30	nd
25	Azamgarh	Ataraulia	H.P.I.M.II.	Block Office	8.12	519	nil	317	14	BDL	BDL	5.9	140	32	14	65	3.8	26	nd
26	Azamgarh	Haraiya	H.P.I.M.II.	Block Office	8.09	511	nil	293	7.1	0.33	BDL	5.5	130	28	14	55	2.6	28	nd
27	Azamgarh	Palhna	H.P.I.M.II.	Block Office	8.09	1060	nil	647	14	1.1	5.0	10	60	20	2.4	240	BDL	23	nd
28	Azamgarh	Mehnagar	H.P.I.M.II.	Block Office	8.24	2669	nil	671	92	0.53	BDL	514	400	56	62	360	5.1	27	nd
29	Azamgarh	Jahanaganj	H.P.I.M.II.	Block Office	7.85	961	nil	390	85	0.39	27	23	360	56	53	50	4	25	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
30	Azamgarh	Palhani	H.P.I.M.II.	Block Office	7.99	721	nil	366	57	BDL	BDL	7	310	44	48	29	4.3	26	nd
31	Azamgarh	Tahbarpur	H.P.I.M.II.	Block Office	8.19	550	nil	305	14	BDL	5.0	6	210	40	26	28	2.5	24	nd
32	Bagpat	Chaprauli	H.P.I.M.II.	Block Office	7.63	1578	nil	512	135	BDL	66	128	450	56	74	144	8.4	35	nd
33	Bagpat	Baghpat	H.P.I.M.II.	Block Office	7.51	1383	nil	586	85	0.52	14	68	310	64	36	173	5.6	30	nd
34	Bagpat	Binauli	H.P.I.M.II.	Block Office	7.75	1185	nil	586	57	BDL	35	25	380	72	48	107	6.9	36	nd
35	Bagpat	Baraut	H.P.I.M.II.	Block Office	7.81	527	nil	207	35	0.72	14	11	200	48	19	17	4.0	25	nd
36	Bagpat	Pilana	H.P.I.M.II.	Block Office	7.91	1124	nil	549	50	BDL	13	34	180	32	24	175	17	32	nd
37	Bagpat	Khekra	H.P.I.M.II.	Block Office	7.94	1298	nil	451	78	0.29	19	168	280	60	31	162	18	30	nd
38	Banda	Bisanda	H.P.I.M.II.	Block Office	7.93	1050	nil	390	71	0.78	13.6	59	470	52	82	21	1.27	34	nd
39	Banda	Baberu	H.P.I.M.II.	Block Office	7.94	781	nil	415	28	0.29	6.0	11	280	56	34	57	1.51	34	nd
40	Banda	Kamasin	H.P.I.M.II.	Block Office	7.97	600	nil	329	21	0.27	6.8	10	250	44	34	34	1.69	35	nd
41	Banda	Tindwari	H.P.I.M.II.	Block Office	7.77	773	nil	366	43	0.27	18	13	240	48	29	73	1.40	36	nd
42	Banda	Jaspura	H.P.I.M.II.	Block Office	7.87	627	nil	390	28	BDL	BDL	6.0	230	48	26	67	2.70	32	nd
43	Banda	Banda(H Q)	H.P.I.M.II.	Block Office	8.04	1472	nil	549	113	0.91	49	52	350	40	60	172	BDL	30	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
44	Banda	Barokhar Khurd	H.P.I.M.II.	Block Office	8.20	2612	nil	1366	99	0.90	BDL	43	240	48	29	499	3.22	25	nd
45	Banda	Mahua	H.P.I.M.II.	Block Office	7.95	1050	nil	561	28	0.39	5.0	18	260	32	43	128	1.32	34	nd
46	Banda	Naraini	H.P.I.M.II.	Block Office	7.99	1149	nil	500	106	0.44	15	19	450	64	70	70	1.29	42	nd
47	Bhadohi	Bhadohi	H.P.I.M.II.	Block Office	8.22	691	nil	317	43	0.42	5.0	20	150	16	26	82	17.8	25	nd
48	Bhadohi	Suriyawa	H.P.I.M.II.	Block Office	7.83	878	nil	366	57	BDL	12	25	200	68	7.2	98	2.7	30	nd
49	Chandauli	Niyamtabad	H.P.I.M.II.	Block Office	8.15	936	nil	525	35	0.52	5.0	17	250	48	31	116	3.6	29	nd
50	Chandauli	Chandawali	H.P.I.M.II.	Block Office	8.04	683	nil	403	14	0.62	5.8	9	310	80	26	31	1.6	28	nd
51	Chandauli	Sakaldiha	H.P.I.M.II.	Block Office	8.07	639	nil	305	35	0.55	5.0	28	280	64	29	25	3.6	25	nd
52	Chandauli	Chahauia	H.P.I.M.II.	Block Office	7.79	973	nil	415	78	0.35	23	37	380	76	46	63	3.8	26	nd
53	Chandauli	Dhanapur	H.P.I.M.II.	Block Office	8.01	851	nil	500	28	0.51	BDL	6	260	32	43	94	3.6	28	nd
54	Chandauli	Chakia	H.P.I.M.II.	Block Office	8.08	697	nil	366	35	0.72	15	11	280	64	29	39	1	25	nd
55	Chandauli	Nawgarh	H.P.I.M.II.	Block Office	7.51	464	nil	110	64	BDL	10	22	110	28	10	45	1.9	10	nd
56	Chandauli	Sahebganj	H.P.I.M.II.	Block Office	7.93	570	nil	329	14	BDL	6.6	11	250	76	14	28	1	29	nd
57	Chitrakoot	Karvi	H.P.I.M.II.	Block Office	7.50	1890	nil	268	347	0.30	50	125	740	92	122	81	1.33	37	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
58	Chitrakoot	Pahari	H.P.I.M.II.	Block Office	7.54	2080	nil	305	355	0.78	51	150	750	216	50	107	6.02	73	nd
59	Chitrakoot	Manikpur	H.P.I.M.II.	Block Office	7.82	875	nil	134	134	0.39	41	53	260	76	17	61	18.0	26	nd
60	Chitrakoot	Mau	H.P.I.M.II.	Block Office	8.12	1199	nil	622	43	0.80	22	16	310	60	38	144	1.43	29	nd
61	Chitrakoot	Ram Nagar	H.P.I.M.II.	Block Office	7.91	596	nil	342	14	0.21	BDL	10	210	40	26	53	1.60	25	nd
62	Fatehpur	Bhithaura	H.P.I.M.II.	Block Office	8.15	644	nil	329	43	0.50	BDL	5.6	280	36	46	27	8.06	32	nd
63	Fatehpur	Teliyani	H.P.I.M.II.	Block Office	8.22	1000	nil	598	14	0.94	BDL	BDL	190	28	29	154	7.71	32	nd
64	Fatehpur	Malwan	H.P.I.M.II.	Block Office	8.24	2069	nil	573	177	1.61	11	240	270	24	50	332	5.77	28	nd
65	Fatehpur	Khuajuha	H.P.I.M.II.	Block Office	8.08	673	nil	293	43	0.69	12	10	300	48	43	8.0	5.01	34	nd
66	Fatehpur	Amauli	H.P.I.M.II.	Block Office	8.03	520	nil	281	14	0.28	8.6	5.0	230	32	36	15	3.24	41	nd
67	Fatehpur	Deomai	H.P.I.M.II.	Block Office	7.95	960	nil	378	78	0.84	BDL	56	340	52	50	81	2.32	33	nd
68	Fatehpur	Hathgaon	H.P.I.M.II.	Block Office	7.98	638	nil	317	28	0.81	15	15	290	40	46	12	28	35	nd
69	Fatehpur	Airyar	H.P.I.M.II.	Block Office	7.74	1559	nil	439	191	0.55	40	78	515	76	78	118	11.7	34	nd
70	Fatehpur	Vijayeeputr	H.P.I.M.II.	Block Office	7.91	659	nil	342	21	0.85	11	16	300	64	34	17	2.99	35	nd
71	Fatehpur	Dhata	H.P.I.M.II.	Block Office	8.17	767	nil	305	43	0.54	37	40	330	36	58	30	5.09	33	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
72	Fatehpur	Haswa	H.P.I.M.II.	Block Office	8.21	545	nil	305	21	0.79	BDL	5.0	270	52	34	9.0	7.04	32	nd
73	Fatehpur	Asother	H.P.I.M.II.	Block Office	8.15	657	nil	378	14	0.54	BDL	15	280	28	50	29	5.34	34	nd
74	Fatehpur	Bahua	H.P.I.M.II.	Block Office	7.91	1300	nil	427	106	0.46	50	76	530	48	98	55	4.81	37	nd
75	Ghaziabad	Loni	H.P.I.M.II.	Block Office	7.52	2220	nil	586	376	BDL	38	6.4	260	52	31	355	38	31	nd
76	Ghaziabad	Razapur	H.P.I.M.II.	Block Office	7.97	1102	nil	549	57	0.89	17	41	230	56	22	169	7.7	34	nd
77	Ghaziabad	Muradnagar	H.P.I.M.II.	Block Office	8.02	803	nil	439	43	0.24	7.7	11	250	64	22	80	7.1	36	nd
78	Ghaziabad	Bhojpur	H.P.I.M.II.	Block Office	8.13	771	nil	451	14	0.3	BDL	23	160	48	9.6	110	6.4	32	nd
79	Ghaziabad	Hapur	H.P.I.M.II.	Block Office	7.71	743	nil	451	7.1	0.23	8	17	270	64	26	65	5.6	36	nd
80	Ghaziabad	Dholana	H.P.I.M.II.	Block Office	8.01	1408	nil	634	99	0.37	14	33	290	64	31	199	8.8	34	nd
81	Ghaziabad	Simbholi	H.P.I.M.II.	Block Office	7.82	711	nil	329	35	BDL	15	39	280	76	22	35	6.3	33	nd
82	Ghaziabad	Garh	H.P.I.M.II.	Block Office	8.07	823	nil	476	7.1	BDL	21	35	370	80	41	35	4.6	31	nd
83	Ghazipur	Chiraigaw	H.P.I.M.II.	Block Office	7.4	572	nil	244	28	0.5	BDL	10	210	40	26	19	3.16	22	nd
84	Ghazipur	Saidpur	H.P.I.M.II.	Block Office	8.25	1342	nil	549	99	1.04	13	50	100	20	12	260	BDL	19	nd
85	Ghazipur	Dewkali	H.P.I.M.II.	Block Office	8.99	1164	96	512	7.1	1.3	BDL	5	40	8	4.8	253	BDL	18	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
86	Ghazipur	Mardah	H.P.I.M.II.	Block Office	8.21	665	nil	342	28	0.53	5.8	24	190	32	26	76	3.2	29	nd
87	Ghazipur	Sadat	H.P.I.M.II.	Block Office	8.08	702	nil	439	14	0.43	BDL	5	300	48	43	36	4.6	31	nd
88	Ghazipur	Karanda	H.P.I.M.II.	Block Office	8.06	768	nil	415	21	0.61	5.0	19	250	52	29	63	2.5	21	nd
89	Ghazipur	Jamania	H.P.I.M.II.	Block Office	8.11	789	nil	378	43	BDL	9.5	8	260	60	26	56	1.8	20	nd
90	Ghazipur	Bhadaura	H.P.I.M.II.	Block Office	8.12	769	nil	317	71	BDL	BDL	27	300	60	36	44	3	22	nd
91	Ghazipur	Rewatipur	H.P.I.M.II.	Block Office	8.14	565	nil	329	21	BDL	BDL	9	270	60	29	12	3.4	29	nd
92	Ghazipur	Ghazipur Sadar	H.P.I.M.II.	Block Office	8.06	2108	nil	695	177	0.37	10	93	480	44	89	214	4.1	16	nd
93	Hamirpur	Maudaha	H.P.I.M.II.	Block Office	7.98	1700	nil	634	128	0.44	6.6	95	270	32	46	256	1.64	34	nd
94	Hamirpur	Sumerpur	H.P.I.M.II.	Block Office	7.93	960	nil	378	99	0.20	BDL	28	260	40	38	110	1.78	32	nd
95	Jaunpur	Chandawak	H.P.I.M.II.	Block Office	8.07	637	nil	378	14	0.22	BDL	5	230	48	26	52	3	34	nd
96	Jaunpur	Kerakat	H.P.I.M.II.	Block Office	8.08	624	nil	354	14	0.55	5.8	5.2	240	44	31	40	2.5	33	nd
97	Jaunpur	Muftiganj	H.P.I.M.II.	Block Office	8.24	735	nil	451	21	0.46	BDL	5	260	36	41	63	3.3	2	nd
98	Jaunpur	Karanjailan	H.P.I.M.II.	Block Office	8.29	942	nil	488	35	0.99	BDL	27	250	48	31	112	2.8	23	nd
99	Jaunpur	Sodhi Khetasarai	H.P.I.M.II.	Block Office	8.22	715	nil	366	28	0.42	10	13	230	56	22	61	5.2	29	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
100	Jaunpur	Khutahan	H.P.I.M.II.	Block Office	8.15	694	nil	378	21	0.36	9.0	8	240	36	36	53	5.1	30	nd
101	Kanpur Nagar	Bhitar Gaon	H.P.I.M.II.	Block Office	7.47	1396	nil	549	78	0.60	26.0	57	500	72	77	75	4.74	21	nd
102	Kanpur Nagar	Bhitar Gaon	H.P.I.M.II.	Block Office	7.65	1366	nil	488	113	0.68	30.0	50	500	68	79	67	7.84	22	nd
103	Kanpur Nagar	Bidhnoo	H.P.I.M.II.	Block Office	7.63	800	nil	403	14	0.75	BDL	19	260	52	31	56	5.51	23	nd
104	Kanpur Nagar	Bidhnoo	H.P.I.M.II.	Block Office	7.73	968	nil	500	14	0.93	BDL	21	290	48	41	81	6.96	29	nd
105	Kanpur Nagar	Bilhaur	H.P.I.M.II.	Block Office	7.67	1020	nil	476	21	0.53	8.32	55	390	56	60	50	4.29	19	nd
106	Kanpur Nagar	Bilhaur	H.P.I.M.II.	Block Office	7.81	700	nil	317	14	1.50	BDL	41	230	40	31	47	7.49	31	nd
107	Kanpur Nagar	Chaubepu r	H.P.I.M.II.	Block Office	7.85	1211	nil	500	35	0.69	19.0	110	360	52	53	112	7.59	24	nd
108	Kanpur Nagar	Chaubepu r	H.P.I.M.II.	Block Office	7.60	1017	nil	451	21	0.82	13.0	53	310	40	50	78	4.97	27	nd
109	Kanpur Nagar	Ghatampu r	H.P.I.M.II.	Block Office	7.89	976	nil	439	28	1.18	19.0	48	310	40	50	81	5.29	18	nd
110	Kanpur Nagar	Ghatampu r	H.P.I.M.II.	Block Office	7.71	1100	nil	500	21	0.92	27.0	63	250	48	31	133	4.50	33	nd
111	Kanpur Nagar	Kakwan	H.P.I.M.II.	Block Office	7.63	1008	nil	451	28	0.66	15.0	51	320	52	46	76	4.97	27	nd
112	Kanpur Nagar	Kakwan	H.P.I.M.II.	Block Office	7.58	910	nil	476	14	0.34	BDL	21	360	60	50	38	7.40	20	nd
113	Kanpur Nagar	Kalyanpur	H.P.I.M.II.	Block Office	7.55	2043	nil	793	149	0.54	44.0	125	430	68	62	280	5.96	21	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
114	Kanpur Nagar	Kalyanpur	H.P.I.M.II.	Block Office	7.89	1100	nil	512	35	0.81	10.0	34	290	40	46	104	6.44	27	nd
115	Kanpur Nagar	Patara	H.P.I.M.II.	Block Office	7.80	850	nil	378	21	0.27	BDL	53	240	48	29	80	5.84	25	nd
116	Kanpur Nagar	Patara	H.P.I.M.II.	Block Office	7.71	1095	nil	525	35	0.47	BDL	28	340	56	48	83	4.80	27	nd
117	Kanpur Nagar	Sarsaul	H.P.I.M.II.	Block Office	7.73	1014	nil	451	28	0.41	27.0	51	390	56	60	47	6.71	19	nd
118	Kanpur Nagar	Sarsaul	H.P.I.M.II.	Block Office	7.91	1193	nil	488	57	0.99	BDL	27	360	48	58	71	8.79	29	nd
119	Kanpur Nagar	Shivrajpur	H.P.I.M.II.	Block Office	7.73	1720	nil	659	113	0.32	47.0	57	640	84	103	79	3.73	15	nd
120	Kanpur Nagar	Shivrajpur	H.P.I.M.II.	Block Office	7.88	767	nil	403	14	1.17	6.36	21	170	36	19	101	3.84	17	nd
121	Mahoba	Kabrai	H.P.I.M.II.	Block Office	7.65	1270	nil	244	184	0.53	51	70	470	116	43	59	BDL	61	nd
122	Mahoba	Jaitpur	H.P.I.M.II.	Block Office	7.98	655	nil	171	71	0.21	27	65	200	40	24	63	1.19	42	nd
123	Mahoba	Panwari	H.P.I.M.II.	Block Office	7.78	780	nil	390	28	0.64	9.0	26	270	64	26	60	BDL	33	nd
124	Mahoba	Charkhari	H.P.I.M.II.	Block Office	7.85	935	nil	390	85	1.04	22	36	300	60	36	101	BDL	39	nd
125	Mathura	Raya	H.P.I.M.II.	Raya Block Office	7.90	6583	nil	476	1492	1.0	43	720	900	100	156	1120	4.90	20	nd
126	Mathura	Manth	H.P.I.M.II.	Manth Block Office	7.81	3500	nil	586	468	0.48	BDL	530	460	56	77	580	40	19	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
127	Mathura	Naujhil	H.P.I.M.II.	Naujhil Block Office	7.70	8715	nil	610	922	0.68	52	2304	1900	220	324	730	700	19	nd
128	Mathura	Baldeo	H.P.I.M.II.	Baldeo Block Office	8.10	913	nil	464	14	1.58	23	40	50	8	7	198	1.24	19	nd
129	Mathura	Chhata	H.P.I.M.II.	Chhata Block Office	8.07	8500	nil	842	1170	1.43	29	1750	1150	120	204	1460	6.93	24	nd
130	Mathura	Nandgaon	H.P.I.M.II.	Nandgaon Nagar Panchayat Office	7.35	27200	nil	195	7871	1.45	55	1520	4100	1180	276	4200	260	22	nd
131	Mathura	Choumuh an	H.P.I.M.II.	Choumuh an Block Office	7.64	10460	nil	744	1844	0.69	59	1650	1950	140	384	1200	500	24	nd
132	Mathura	Goverdhan	H.P.I.M.II.	Goverdhan outside Shree Jee Flour Mil	8.10	4200	nil	720	766	1.49	45	337	740	64	184	640	4.46	28	nd
133	Mathura	Farah	H.P.I.M.II.	Farah Primary Health Centre	7.57	7580	nil	329	1950	0.33	33	580	2050	280	324	780	6.24	24	nd
134	Mathura	Mathura	H.P.I.M.II.	Mathura Primary Health Centre	7.82	1791	nil	378	241	0.39	24	150	340	48	53	235	4.26	27	nd
135	Mau	Ranipur	H.P.I.M.II.	Block Office	8.25	902	nil	512	21	0.66	5.0	17	220	36	31	118	2.3	24	nd
136	Mau	Mohamda bad	H.P.I.M.II.	Block Office	8.15	725	nil	390	28	0.77	5.0	5.2	250	40	36	61	2	24	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
137	Mau	Doharighat	H.P.I.M.II.	Block Office	8.03	579	nil	342	7.1	0.25	BDL	9	230	56	22	31	4.4	29	nd
138	Mau	Bararaw	H.P.I.M.II.	Block Office	7.91	779	nil	378	64	0.34	5.0	5	290	40	46	60	2.8	28	nd
139	Mau	Ghosi	H.P.I.M.II.	Block Office	8.08	769	nil	366	35	0.57	9.0	18	180	40	19	90	3.4	31	nd
140	Mau	Kopaganj	H.P.I.M.II.	Block Office	8.11	669	nil	354	28	0.21	5.7	7.2	250	60	24	44	2.9	31	nd
141	Meerut	Saroorpur	H.P.I.M.II.	Block Office	7.91	446	nil	159	14	BDL	BDL	50	190	52	14	3.8	4.1	29	nd
142	Meerut	Parichhatgarh	H.P.I.M.II.	Block Office	7.72	463	nil	146	28	BDL	BDL	65	180	48	14	16	7.1	30	nd
143	Meerut	Meerut	H.P.I.M.II.	Block Office	8.16	630	nil	305	50	0.24	BDL	25	190	16	36	67	9	33	nd
144	Meerut	Hastinapur	H.P.I.M.II.	Block Office	7.7	737	nil	293	43	BDL	66	5.3	250	64	22	46	11	34	nd
145	Meerut	Rohta	H.P.I.M.II.	Block Office	7.41	216	nil	98	7.1	BDL	5	19	100	36	2	2.8	3.0	13	nd
146	Meerut	Daurala	H.P.I.M.II.	Block Office	7.46	830	nil	342	78	0.45	10	33	270	64	26	75	9.4	24	nd
147	Meerut	Mawana	H.P.I.M.II.	Block Office	8.09	611	nil	342	14	0.44	BDL	34	260	60	26	29	6.2	32	nd
148	Meerut	Rajpura	H.P.I.M.II.	Block Office	8.21	785	nil	451	21	0.55	BDL	18	150	24	22	116	7.8	28	nd
149	Meerut	Kharkhoda	H.P.I.M.II.	Block Office	7.87	1304	nil	659	92	0.27	BDL	7.5	160	20	26	245	8.8	29	nd
150	Meerut	Sardhana	H.P.I.M.II.	Block Office	7.93	1700	nil	439	106	1.1	218	23	510	44	96	82	24	30	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
151	Meerut	Janikhurd	H.P.I.M.II.	Block Office	8.07	590	nil	329	21	BDL	13	13	300	36	50	4.6	13	27	nd
152	Meerut	Machhra	H.P.I.M.II.	Block Office	7.97	428	nil	183	21	0.42	BDL	33	160	32	19	7.3	33	31	nd
153	Mirzapur	Jamalpur	H.P.I.M.II.	Block Office	7.99	469	nil	281	7.1	0.33	BDL	5	180	64	4.8	27	2	23	nd
154	Mirzapur	Rajgarh	H.P.I.M.II.	Block Office	7.89	410	nil	159	35	BDL	BDL	25	120	32	10	36	4.4	13	nd
155	Mirzapur	Sikhar	H.P.I.M.II.	Block Office	7.99	562	nil	305	14	BDL	BDL	5.9	240	52	26	15	3.7	19	nd
156	Mirzapur	Karehua	H.P.I.M.II.	Block Office	7.88	685	nil	403	7.1	0.34	10	9.8	300	72	29	29	1.5	30	nd
157	Mirzapur	Kone	H.P.I.M.II.	Block Office	7.97	532	nil	329	7.1	BDL	BDL	5	230	52	24	24	2.4	28	nd
158	Mirzapur	Chhanbey	H.P.I.M.II.	Block Office	7.76	1607	nil	476	184	BDL	23	56	350	100	24	170	1.2	33	nd
159	Mirzapur	Lalganj	H.P.I.M.II.	Block Office	7.99	885	nil	390	78	0.33	BDL	24	280	68	26	80	BDL	22	nd
160	Mirzapur	Halia	H.P.I.M.II.	Block Office	7.69	974	nil	366	92	0.56	12	29	230	52	24	106	BDL	24	nd
161	Mirzapur	Mirzapur Sadar	H.P.I.M.II.	Block Office	8.12	1028	nil	512	43	1	24	27	290	40	46	100	1.6	22	nd
162	Muzaffarnagar	Kandhala	H.P.I.M.II.	Block Office	7.89	449	nil	244	14	0.5	BDL	22	170	40	17	31	4.4	28	nd
163	Muzaffarnagar	Kairana	H.P.I.M.II.	Block Office	7.84	696	nil	378	14	0.24	BDL	46	240	32	38	63	6.6	30	nd
164	Muzaffarnagar	Bhaghara	H.P.I.M.II.	Block Office	7.93	440	nil	220	7.1	BDL	BDL	48	210	48	22	12	4.7	31	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
165	Muzaffarnagar	Budhana	H.P.I.M.II.	Block Office	8.05	533	nil	293	28	0.55	BDL	6.7	140	28	17	64	6	31	nd
166	Muzaffarnagar	Charthawal	H.P.I.M.II.	Block Office	7.54	1754	nil	268	255	BDL	70	160	470	80	65	159	9.2	35	nd
167	Muzaffarnagar	Jansath	H.P.I.M.II.	Block Office	7.77	652	nil	268	35	BDL	5	33	250	48	31	27	4.2	39	nd
168	Muzaffarnagar	Khatauli	H.P.I.M.II.	Block Office	7.72	790	nil	256	78	BDL	5	45	250	48	31	50	7.4	32	nd
169	Muzaffarnagar	Morna	H.P.I.M.II.	Block Office	7.84	564	nil	195	21	BDL	23	67	260	56	29	10	4.0	30	nd
170	Muzaffarnagar	Muzaffarnagar	H.P.I.M.II.	Block Office	8.11	387	nil	207	14	0.61	BDL	18	180	36	22	12	4.2	27	nd
171	Muzaffarnagar	Purkaji	H.P.I.M.II.	Block Office	8.21	544	nil	317	7.1	BDL	BDL	18	260	48	34	9	5.4	28	nd
172	Muzaffarnagar	Shahpur	H.P.I.M.II.	Block Office	8.01	552	nil	317	14	0.34	BDL	23	230	40	31	30	5.3	29	nd
173	Muzaffarnagar	Shamli	H.P.I.M.II.	Block Office	7.9	544	nil	268	7.1	0.65	BDL	62	210	48	22	39	5.5	28	nd
174	Muzaffarnagar	Thana Bhawan	H.P.I.M.II.	Block Office	8.17	568	nil	317	14	0.45	BDL	25	200	44	22	47	5.9	30	nd
175	Muzaffarnagar	UN	H.P.I.M.II.	Block Office	7.88	501	nil	281	21	0.23	BDL	11	180	40	19	41	5.3	31	nd
176	Pratapgarh	Aspur-Deosara	H.P.I.M.II.	Block Office	8.01	780	nil	512	14	0.74	BDL	BDL	310	40	51	55	3.8	36	nd
177	Pratapgarh	Baba Bekhernath	H.P.I.M.II.	Block Office	8.24	1650	nil	830	57	1.74	BDL	80	220	20	41	300	4.4	33	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
178	Pratapgarh	Babaganj	H.P.I.M.II.	Block Office	8.19	810	nil	439	28	0.8	17	19	270	56	32	80	5.4	33	nd
179	Pratapgarh	Bihar	H.P.I.M.II.	Block Office	8.12	925	nil	512	28	0.98	BDL	45	270	40	41	100	6.1	34	nd
180	Pratapgarh	Gaura	H.P.I.M.II.	Block Office	8.06	740	nil	464	21	1.3	BDL	5	310	28	58	51	8.3	33	nd
181	Pratapgarh	Kalanker	H.P.I.M.II.	Block Office	8.16	700	nil	439	21	1.38	BDL	10	250	40	36	66	2.7	32	nd
182	Pratapgarh	Kunda	H.P.I.M.II.	Block Office	7.87	1215	nil	586	92	0.77	13	35	480	48	88	86	4.9	39	nd
183	Pratapgarh	Lakshmanpur	H.P.I.M.II.	Block Office	8.01	845	nil	537	14	0.82	BDL	BDL	340	48	54	60	5.8	38	nd
184	Pratapgarh	Lalganj	H.P.I.M.II.	Block Office	8.24	1050	nil	634	36	1.11	BDL	25	190	28	29	195	2.2	31	nd
185	Pratapgarh	Mandhata	H.P.I.M.II.	Block Office	8.02	670	nil	378	21	0.89	BDL	10	250	56	27	43	3.0	36	nd
186	Pratapgarh	Mangraura	H.P.I.M.II.	Block Office	8.04	630	nil	366	36	0.55	BDL	5	270	40	41	32	4.6	36	nd
187	Pratapgarh	Patti	H.P.I.M.II.	Block Office	7.93	635	nil	390	14	0.41	BDL	11	280	48	39	36	6.0	35	nd
188	Pratapgarh	Pratapgarh Sadar	H.P.I.M.II.	Block Office	8.07	1106	nil	586	43	1.11	8.6	20	410	72	56	78	7.9	36	nd
189	Pratapgarh	Rampur-Sangram	H.P.I.M.II.	Block Office	8.19	1250	nil	622	36	0.91	BDL	70	90	28	5	260	4.3	26	nd
190	Pratapgarh	Sandwa-Chandrik	H.P.I.M.II.	Block Office	7.99	750	nil	366	36	1.27	BDL	34	320	52	46	33	5.4	27	nd
191	Pratapgarh	Sangaipur	H.P.I.M.II.	Block Office	8.24	1900	nil	903	57	0.75	BDL	150	140	28	17	395	6.3	22	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
192	Pratapgarh	Shivgarh	H.P.I.M.II.	Block Office	8.14	740	nil	439	28	1.12	BDL	9	330	52	49	30	5.3	34	nd
193	Saharanpur	Nanauta	H.P.I.M.II.	Block Office	7.71	511	nil	281	14	0.23	BDL	20	230	36	34	6.4	20	27	nd
194	Saharanpur	Nakur	H.P.I.M.II.	Block Office	7.99	415	nil	195	14	BDL	BDL	33	160	32	19	4.4	33	31	nd
195	Saharanpur	Nagal	H.P.I.M.II.	Block Office	7.62	543	nil	293	21	BDL	BDL	21	240	24	43	7.5	21	29	nd
196	Saharanpur	Puwarka	H.P.I.M.II.	Block Office	7.93	474	nil	232	21	0.2	BDL	17	210	36	29	4.2	17	30	nd
197	Saharanpur	Rampur	H.P.I.M.II.	Block Office	7.69	514	nil	281	14	0.35	BDL	18	240	36	36	6.6	18	30	nd
198	Saharanpur	Sadauli Qudim	H.P.I.M.II.	Block Office	7.43	576	nil	268	14	BDL	15	25	240	60	22	12	10.7	24	nd
199	Saharanpur	Sarsawa	H.P.I.M.II.	Block Office	8.12	360	nil	116	21	0.27	BDL	44	110	20	14	26	5.9	21	nd
200	Saharanpur	Deoband	H.P.I.M.II.	Block Office	7.86	484	nil	268	14	0.44	BDL	16	210	48	22	11	16	27	nd
201	Saharanpur	Baliakheri	H.P.I.M.II.	Block Office	7.62	1107	nil	342	99	BDL	151	47	550	104	70	7.4	8.9	29	nd
202	Saharanpur	Gangoh	H.P.I.M.II.	Block Office	7.74	980	nil	329	78	BDL	108	23	360	84	36	61	6.3	34	nd
203	Saharanpur	Muzafara bad	H.P.I.M.II.	Block Office	7.93	1317	nil	366	99	BDL	8.1	223	480	108	50	86	3.7	25	nd
204	Sant Rabidas Nagar	Gyanpur	H.P.I.M.II.	Block Office	7.57	1762	nil	451	206	BDL	57	55	610	140	62	80	4.1	31	nd
205	Sant Rabidas Nagar	Deeh	H.P.I.M.II.	Block Office	8.21	681	nil	317	35	0.9	12.6	18	200	40	24	68	2	24	nd

S.No.	District	Block	Source	Location Details	pH	EC μS/cm at 25°C	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂	PO ₄
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
206	Sant Rabidas Nagar	Awrai	H.P.I.M.II.	Block Office	7.92	654	nil	317	35	BDL	7.0	11	240	76	12	45	1.6	26	nd
207	Sonbhadra	Ghorawal	H.P.I.M.II.	Block Office	7.82	592	nil	317	28	0.39	5.0	18	250	72	17	33	BDL	24	nd
208	Sonbhadra	Robertsganj	H.P.I.M.II.	Block Office	7.66	775	nil	305	78	0.29	BDL	24	190	60	10	93	BDL	18	nd
209	Sonbhadra	Chopan	H.P.I.M.II.	Block Office	8.31	1015	nil	256	135	0.2	41	81	180	28	26	160	2	30	nd
210	Sonbhadra	Bhabhani	H.P.I.M.II.	Block Office	7.84	635	nil	244	43	1.06	5.0	51	200	76	2.4	58	3.8	38	nd
211	Sonbhadra	Muripur	H.P.I.M.II.	Block Office	7.93	460	nil	159	35	0.99	BDL	67	180	44	17	34	1.1	11	nd
212	Sonbhadra	Dudhi	H.P.I.M.II.	Block Office	7.76	1151	nil	488	71	0.73	15	65	320	64	38	120	1.3	38	nd
213	Varanasi	Raja Talab	H.P.I.M.II.	Block Office	8.43	573	nil	329	28	0.25	BDL	5	100	16	14	94	3.9	16	nd
214	Varanasi	Sewapuri	H.P.I.M.II.	Block Office	7.75	653	nil	378	7.1	0.67	5.0	6.8	150	40	12	82	3.1	32	nd
215	Varanasi	Kashividyapeeth	H.P.I.M.II.	Block Office	8.01	1622	nil	561	113	0.42	110	73	450	40	84	145	34	30	nd
216	Varanasi	Harahua	H.P.I.M.II.	Block Office	8.18	583	nil	342	7.1	0.23	8.3	6	200	56	14	45	2.3	31	nd
217	Varanasi	Pindara	H.P.I.M.II.	Block Office	8.14	676	nil	390	7.1	0.25	7.0	9.6	220	36	31	54	3.9	32	nd
nd - Not Detectable																			
BDL - Below Detection Limit i. e. < 0.2 mg/l for F, PO ₄ and < 5.0 mg/l for NO ₃ , SO ₄ , SiO ₂ , < 2 mg/l for Na and < 1 mg/l for K																			

**CHEMICAL ANALYSIS DATA OF SAMPLES COLLECTED FROM GROUND WATER MONITORING WELLS
UTTAR PRADESH, 2019-20.**

**Annexure IV
IN**

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
1	Agra	Achhnera	Block Office	H/P-IM-II	7.89	6900	nil	232	2163	0.39	49	125	1500	120	288	395	860	17	nd	4.5	-25.9
2	Agra	Akola	Block Office	H/P-IM-II	7.83	9104	nil	207	2765	0.47	23	310	2500	180	492	900	30	8	nd	7.9	-46.1
3	Agra	Bah	Block Office	H/P-IM-II	8.49	1148	84	342	50	0.34	10	39	150	16	26	200	1.5	21	nd	7.2	5.5
4	Agra	Barauli Ahir	Block Office	H/P-IM-II	8.72	1344	96	232	121	1.05	14	80	220	32	34	200	1.6	9	nd	5.9	2.6
5	Agra	Bichpuri	Block Office	H/P-IM-II	8.06	2848	nil	281	674	0.43	10	200	650	60	120	350	7.4	13	nd	6.0	-8.3
6	Agra	Etmadpur	Block Office	H/P-IM-II	8.11	4790	nil	305	1312	1.48	BDL	235	650	100	96	815	6.3	9	nd	14.0	-7.9
7	Agra	Fatehabad	Block Office	H/P-IM-II	8.50	2477	96	342	425	1.32	19	135	200	60	12	467	2.0	16	nd	14.4	4.8
8	Agra	Fatehpur Sikari	Block Office	H/P-IM-II	7.69	9419	nil	134	3049	0.32	49	210	3050	460	456	780	39	23	nd	6.2	-58.3
9	Agra	Jagner	Block Office	H/P-IM-II	8.21	2076	nil	220	462	0.42	8	129	650	80	108	180	8.3	22	nd	3.1	-9.3
10	Agra	Jaitpur Kalan	Block Office	H/P-IM-II	7.98	598	nil	232	43	0.37	14	48	200	40	24	58	2.0	17	nd	1.8	-0.2
11	Agra	Kheragarh	Block Office	H/P-IM-II	8.11	1430	nil	281	241	0.61	BDL	94	410	32	79	140	3.9	10	nd	3.0	-3.5
12	Agra	Pinhat	Block Office	H/P-IM-II	8.16	635	nil	244	57	0.50	BDL	32	250	20	48	35	3.5	16	nd	1.0	-0.9
13	Agra	Saiyan	Block Office	H/P-IM-II	8.03	1900	nil	329	319	BDL	11	189	600	60	108	159	1.7	15	nd	2.8	-6.5
14	Agra	Shamsabad	Block Office	H/P-IM-II	8.27	1051	nil	439	78	0.47	5.4	54	320	12	70	101	6.4	13	nd	2.5	0.8
15	Aligarh	Akrabad	Block Office	H/P-IM-II	8.08	1036	nil	312	64	0.85	72	103	310	52	43	100	12	28	nd	2.5	-1.0
16	Aligarh	Iglas	Block Office	H/P-IM-II	8.07	1200	nil	512	92	0.50	6.0	59	340	52	50	127	4.0	30	nd	3.0	1.7
17	Aligarh	Gonda	Block Office	H/P-IM-II	8.14	3200	nil	573	496	0.90	10	375	950	100	168	290	20	25	nd	4.1	-9.4
18	Aligarh	Khair	Block Office	H/P-IM-II	7.69	1236	nil	403	142	0.50	109	29	240	32	38	180	16	30	nd	5.1	1.9
19	Aligarh	Lodha	Block Office	H/P-IM-II	8.09	1400	nil	573	92	0.40	13	125	450	32	89	120	30	30	nd	2.5	0.5
20	Aligarh	Atarauli	Block Office	H/P-IM-II	8.06	899	nil	439	57	1.00	5.0	57	390	44	67	50	10	25	nd	1.1	-0.5
21	Aligarh	Bijauli	Block Office	H/P-IM-II	7.94	1300	nil	415	135	0.50	22	141	260	68	22	200	9.0	37	nd	5.4	1.6
22	Aligarh	Gangiri	Block Office	H/P-IM-II	8.06	1106	nil	549	71	0.40	BDL	21	290	32	50	130	4.0	36	nd	3.3	3.3

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
23	Aligarh	Dhanipuri	Block Office	H/P-IM-II	7.98	1514	nil	525	17	0.40	30	65	330	40	55	200	6.0	30	nd	4.8	2.1
24	Aligarh	Jawan	Block Office	H/P-IM-II	8.20	630	nil	354	14	0.80	BDL	15	200	40	24	60	4.0	28	nd	1.9	1.8
25	Aligarh	Chandaus	Block Office	H/P-IM-II	7.98	688	nil	378	7.1	1.10	32	8.0	180	44	17	76	9.0	29	nd	2.5	2.6
26	Aligarh	Tappal	Block Office	H/P-IM-II	8.21	653	nil	390	14	1.10	13	16	170	52	10	80	21	33	nd	2.7	3.0
27	Allahabad	Bahadurpur	Block Office	H/P-IM-II	7.85	450	nil	232	28	0.24	BDL	9	225	40	30	9	1.8	35	nd	0.3	-0.7
28	Allahabad	Bahera	Block Office	H/P-IM-II	7.97	664	nil	342	28	0.77	BDL	17	205	20	37	68	4.5	31	nd	2.1	1.5
29	Allahabad	Chaka	Block Office	H/P-IM-II	7.89	671	nil	268	50	0.52	35	13	215	28	35	61	3.1	35	nd	1.8	0.1
30	Allahabad	Dhanupur	Block Office	H/P-IM-II	7.92	516	nil	281	14	0.17	7.0	8	200	24	34	36	2.8	38	nd	1.1	0.6
31	Allahabad	Handia	Block Office	H/P-IM-II	8.50	795	36	317	36	1.37	BDL	38	180	12	36	114	3.4	26	nd	3.7	2.8
32	Allahabad	Holagarh	Block Office	H/P-IM-II	8.09	605	nil	342	14	0.67	7.2	7	195	20	35	60	6.3	35	nd	1.9	1.7
33	Allahabad	Jasra	Block Office	H/P-IM-II	8.07	780	nil	281	99	0.70	BDL	24	285	28	52	64	1.9	33	nd	1.7	-1.0
34	Allahabad	Karchhana	Block Office	H/P-IM-II	7.92	672	nil	342	36	0.48	BDL	13	260	64	24	38	4.2	27	nd	1.0	0.4
35	Allahabad	Kaundhiyara	Block Office	H/P-IM-II	7.97	635	nil	329	32	0.43	BDL	11	245	24	44	47	2.3	33	nd	1.3	0.5
36	Allahabad	Kaurihar	Block Office	H/P-IM-II	8.02	627	nil	329	28	0.43	13	12	230	16	46	51	3.4	35	nd	1.5	0.9
37	Allahabad	Koraon	Block Office	H/P-IM-II	8.03	584	nil	305	28	0.26	BDL	8	225	24	40	40	2.1	33	nd	1.2	0.5
38	Allahabad	Manda	Block Office	H/P-IM-II	7.78	918	nil	183	107	0.17	155	21	360	68	46	51	1.7	35	nd	1.2	-4.2
39	Allahabad	Mau-Aima	Block Office	H/P-IM-II	8.23	693	nil	427	14	0.46	BDL	6	130	12	24	114	2.0	24	nd	4.4	4.4
40	Allahabad	Meja	Block Office	H/P-IM-II	7.74	908	nil	238	121	0.21	36	43	265	64	25	90	BDL	28	nd	2.4	-1.4
41	Allahabad	Phoolpur	Block Office	H/P-IM-II	8.04	742	nil	378	36	0.73	BDL	21	250	20	48	72	3.7	30	nd	2.0	1.3
42	Allahabad	Pratappur	Block Office	H/P-IM-II	8.17	736	nil	403	21	0.43	22	15	270	16	55	58	8.2	34	nd	1.6	1.3
43	Allahabad	Saidabad	Block Office	H/P-IM-II	8.17	695	nil	403	14	1.34	BDL	BDL	140	24	19	103	2.8	31	nd	3.8	3.8
44	Allahabad	Shankargarh	Block Office	H/P-IM-II	7.94	450	nil	183	50	0.36	BDL	18	145	40	11	44	6.1	20	nd	1.6	0.1
45	Allahabad	Soraon	Block Office	H/P-IM-II	8.20	652	nil	305	43	0.81	15	16	210	24	36	67	4.3	29	nd	2.0	0.8
46	Allahabad	Urwa	Block Office	H/P-IM-II	7.90	400	nil	207	14	0.33	9.4	7	120	32	10	43	2.3	33	nd	1.7	1.0
47	Ambedkarnagar	Akberpur	Block Office	H/P-IM-II	7.63	494	nil	281	21	0.22	BDL	7	180	24	29	40	2.4	27	nd	1.3	1.0

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
48	Ambedkarnagar	Baskhari	Block Office	H/P-IM-II	7.51	435	nil	244	7.1	0.31	18	11	190	44	19	19	2.5	31	nd	0.6	0.2
49	Ambedkarnagar	Bhiti	Block Office	H/P-IM-II	7.69	493	nil	293	14	0.32	BDI	5	200	12	41	30	3.7	27	nd	0.9	0.8
50	Ambedkarnagar	Bhियाon	Block Office	H/P-IM-II	7.76	573	nil	293	21	0.35	8.3	18	210	24	36	41	3.0	37	nd	1.2	0.6
51	Ambedkarnagar	Jahangirganj	Block Office	H/P-IM-II	7.62	484	nil	305	7.1	0.42	BDI	5	175	28	25	38	2.7	31	nd	1.3	1.5
52	Ambedkarnagar	Jalapur	Block Office	H/P-IM-II	7.76	888	nil	317	113	BDL	BDI	32	240	12	50	103	3.8	30	nd	2.9	0.5
53	Ambedkarnagar	Katehari	Block Office	H/P-IM-II	7.57	538	nil	281	35	BDL	BDI	10	220	32	34	32	3.1	31	nd	0.9	0.2
54	Ambedkarnagar	Ramnagar	Block Office	H/P-IM-II	7.65	322	nil	153	21	0.31	BDI	20	160	36	17	6	2.3	24	nd	0.2	-0.7
55	Ambedkarnagar	Tanda	Block Office	H/P-IM-II	7.66	511	nil	232	43	BDL	BDI	35	210	28	34	30	3.8	23	nd	0.9	-0.4
56	Auraiya	Achaldah	Block Office	H/P-IM-II	8.11	480	nil	268	7	1.31	BDL	9	135	12	25	53	2.8	22	nd	2.0	1.7
57	Auraiya	Airwa Katra	Block Office	H/P-IM-II	8.20	580	nil	220	57	0.47	BDL	34	185	12	37	57	6.0	29	nd	1.8	-0.1
58	Auraiya	Ajitmal	Block Office	H/P-IM-II	7.63	697	nil	354	28	0.92	8.2	14	150	28	19	102	3.7	30	nd	3.6	2.8
59	Auraiya	Auraiya	Near Tehsil office	H/P-IM-II	7.30	1486	nil	336	163	0.49	112	77	520	68	84	89	3.0	28	nd	1.7	-4.8
60	Auraiya	Bhagya Nagar	Block Office	H/P-IM-II	7.76	741	nil	378	28	0.43	7.6	12	260	24	48	57	4.3	29	nd	1.6	1.1
61	Auraiya	Bidhuna	Block Office	H/P-IM-II	8.58	796	66	256	43	0.71	7.5	22	265	12	56	85	9.4	25	nd	2.3	1.2
62	Auraiya	Sahar	Block Office	H/P-IM-II	8.55	804	63	329	28	1.03	BDL	10	205	8	44	107	7.2	24	nd	3.3	3.4
63	Azamgarh	Ahiraula	Block Office	H/P-IM-II	8.42	560	36	232	21	0.35	BDL	32	230	20	44	41	3.8	25	nd	1.2	0.4
64	Azamgarh	Atraulia	Block Office	H/P-IM-II	8.45	480	36	207	28	0.26	BDL	BDL	190	28	29	38	3.6	31	nd	1.2	0.8
65	Azamgarh	Azmatgarh	Block Office	H/P-IM-II	8.07	580	nil	293	50	0.61	BDL	14	250	28	44	31	2.4	30	nd	0.9	-0.2
66	Azamgarh	Bilariyaganj	Block Office	H/P-IM-II	8.41	500	24	244	28	0.41	BDL	5	210	24	36	31	4.0	32	nd	0.9	0.6
67	Azamgarh	Harraiya	Block Office	H/P-IM-II	8.12	570	nil	342	21	0.45	BDL	5	180	20	32	65	2.5	29	nd	2.1	2.0
68	Azamgarh	Jahanaganj	Block Office	H/P-IM-II	8.48	730	48	317	36	0.30	9.3	15	280	24	54	66	4.5	29	nd	1.7	1.2
69	Azamgarh	Koyalsa	Block Office	H/P-IM-II	8.13	590	nil	305	28	BDL	BDL	35	170	24	27	72	4.5	30	nd	2.4	1.6
70	Azamgarh	Lalaganj	Block Office	H/P-IM-II	8.24	760	nil	403	50	0.25	7.1	21	280	20	56	70	7.2	26	nd	1.8	1.0
71	Azamgarh	Maharaganj	Block Office	H/P-IM-II	8.24	400	nil	232	14	BDL	BDL	BDL	190	52	15	13	2.6	25	nd	0.4	0.0
72	Azamgarh	Marteenganj	Block Office	H/P-IM-II	8.44	640	60	268	21	0.51	BDL	19	190	28	29	80	5.4	25	nd	2.5	2.6

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
73	Azamgarh	Mehnagar	Block Office	H/P-IM-II	8.54	1300	48	488	57	0.49	17	120	180	24	29	245	3.4	22	nd	7.9	6.0
74	Azamgarh	Mirzapur	Block Office	H/P-IM-II	8.24	660	nil	366	36	0.26	BDL	12	250	28	44	56	4.2	27	nd	1.5	1.0
75	Azamgarh	Mohammadpur	Block Office	H/P-IM-II	8.54	620	60	268	14	1.35	BDL	6.4	170	24	27	84	2.1	24	nd	2.8	3.0
76	Azamgarh	Palhana	Block Office	H/P-IM-II	8.68	1005	72	512	14	3.52	BDL	12	60	12	7	250	BDL	20	0.24	14.0	9.6
77	Azamgarh	Palhani	Block Office	H/P-IM-II	8.08	620	nil	293	78	0.32	BDL	9	290	20	58	31	4.7	24	nd	0.8	-1.0
78	Azamgarh	Pawai	Block Office	H/P-IM-II	8.05	340	nil	207	14	0.26	BDL	BDL	150	44	10	16	3.2	28	nd	0.6	0.4
79	Azamgarh	Phoolpur	Block Office	H/P-IM-II	8.45	750	48	354	21	0.37	BDL	30	270	24	51	72	2.4	29	nd	1.9	2.0
80	Azamgarh	Rani Ki Sarai	Block Office	H/P-IM-II	8.42	480	36	220	14	0.31	BDL	BDL	190	20	34	32	5.4	27	nd	1.0	1.0
81	Azamgarh	Sathiaon	Block Office	H/P-IM-II	8.61	660	48	293	21	0.30	BDL	BDL	170	20	29	83	2.0	28	nd	2.8	3.0
82	Azamgarh	Tahabarpur	Block Office	H/P-IM-II	8.48	400	36	171	14	0.21	BDL	7	150	24	22	32	2.7	30	nd	1.1	1.0
83	Azamgarh	Tarwa	Block Office	H/P-IM-II	8.76	660	60	305	14	0.55	BDL	BDL	220	32	34	72	3.4	28	nd	2.1	2.6
84	Azamgarh	Thekma	Block Office	H/P-IM-II	8.26	590	nil	366	21	0.41	BDL	13	210	24	36	54	4.7	28	nd	1.6	1.8
85	Bagpat	Chaprauli	Block Office	H/P-IM-II	8.54	690	72	207	42	0.45	BDL	68	180	36	22	83	7.5	30	nd	2.7	2.2
86	Bagpat	Bagpat	Block Office	H/P-IM-II	8.49	1352	48	220	119	0.25	10	132	220	20	41	158	8.8	23	nd	4.6	0.8
87	Bagpat	Binauli	Block Office	H/P-IM-II	8.56	662	72	183	35	0.51	20	64	110	20	14	105	5.5	25	nd	4.4	3.2
88	Bagpat	Baraut	Block Office	H/P-IM-II	8.40	463	24	146	35	1.25	16	37	180	32	24	28	4.3	22	nd	0.9	-0.4
89	Bagpat	Pilana	Block Office	H/P-IM-II	8.76	1355	120	427	56	0.49	20	77	160	16	29	210	13	29	nd	7.2	7.8
90	Bagpat	Khekra	Block Office	H/P-IM-II	8.73	965	120	232	70	0.28	36	64	260	24	48	105	8.2	25	nd	2.8	2.7
91	Bahraich	Balha	Block Office	H/P-IM-II	8.15	505	nil	317	14	BDL	BDL	BDL	190	36	24	44	3.1	37	nd	1.4	1.4
92	Bahraich	Bisheshwarganj	Block Office	H/P-IM-II	8.42	440	36	183	21	BDL	BDL	10	220	52	22	10	2.6	34	nd	0.3	-0.2
93	Bahraich	Chittaura	Block Office	H/P-IM-II	8.24	475	nil	207	36	BDL	BDL	30	200	20	36	26	1.5	45	nd	0.8	-0.6
94	Bahraich	Fakharpur	Block Office	H/P-IM-II	8.53	400	24	195	21	BDL	BDL	BDL	190	32	27	15	3.3	40	nd	0.5	0.2
95	Bahraich	Huzurpur	Block Office	H/P-IM-II	8.12	570	nil	220	78	0.24	BDL	25	250	48	32	34	2.7	36	nd	0.9	-1.4
96	Bahraich	Jarwal	Block Office	H/P-IM-II	8.21	380	nil	232	14	BDL	BDL	7	190	36	24	11	2.4	40	nd	0.3	0.0
97	Bahraich	Kaisarganj	Block Office	H/P-IM-II	8.14	882	nil	195	149	BDL	31	71	230	52	24	112	6.2	29	nd	3.2	-1.4

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
98	Bahraich	Mahasi	Block Office	H/P-IM-II	8.05	440	nil	256	21	BDL	BDL	BDL	220	60	17	8	3.0	38	nd	0.2	-0.2
99	Bahraich	Mihirpurwa	Block Office	H/P-IM-II	7.84	755	nil	220	85	BDL	48	70	310	80	27	50	3.5	31	nd	1.2	-2.6
100	Bahraich	Nawabganj	Block Office	H/P-IM-II	7.98	532	nil	342	14	0.28	BDL	BDL	250	56	27	26	4.0	38	nd	0.7	0.6
101	Bahraich	Payagpur	Block Office	H/P-IM-II	8.42	715	24	207	85	BDL	BDL	65	250	32	41	70	4.5	38	nd	1.9	-0.8
102	Bahraich	Risiya	Block Office	H/P-IM-II	8.38	630	60	293	7	0.21	BDL	8	240	24	44	58	3.4	39	nd	1.6	2.0
103	Bahraich	Shivpur	Block Office	H/P-IM-II	8.11	510	nil	305	21	BDL	BDL	5	240	52	27	16	2.5	40	nd	0.4	0.2
104	Bahraich	Tejwapur	Block Office	H/P-IM-II	8.09	495	nil	293	21	BDL	BDL	5	230	68	15	17	3.2	30	nd	0.5	0.2
105	Ballia	Bairya	Block Office	H/P-IM-II	7.76	526	nil	281	36	BDL	BDL	9	210	52	19	33	3.7	23	nd	1.0	0.4
106	Ballia	Bansdeeh	Block Office	H/P-IM-II	8.42	1300	36	207	206	BDL	13	100	150	16	27	230	2.3	33	nd	8.2	1.6
107	Ballia	Belhari	Block Office	H/P-IM-II	7.85	790	nil	305	71	0.29	BDL	70	250	40	36	60	29	25	nd	1.6	0.0
108	Ballia	Chilkahar	Block Office	H/P-IM-II	8.18	640	nil	415	7	0.59	BDL	5	240	20	46	57	1.3	27	nd	1.6	2.0
109	Ballia	Dubahar	Block Office	H/P-IM-II	8.12	500	nil	293	28	0.31	BDL	BDL	200	28	36	38	4.4	28	nd	1.1	0.4
110	Ballia	Garwar	Block Office	H/P-IM-II	8.11	540	nil	342	21	0.34	BDL	BDL	220	20	36	42	4.1	29	nd	1.3	1.6
111	Ballia	Hanumanganj	Block Office	H/P-IM-II	8.24	435	nil	244	21	0.44	BDL	12	200	20	36	22	2.8	31	nd	0.7	0.0
112	Ballia	Maniyar	Block Office	H/P-IM-II	7.92	400	nil	232	21	BDL	BDL	7	150	36	24	33	3.6	29	nd	1.0	0.0
113	Ballia	Murali Chhapara	Block Office	H/P-IM-II	7.89	410	nil	268	11	BDL	BDL	BDL	195	48	26	14	3.8	24	nd	0.4	-0.1
114	Ballia	Nawa Nagar	Block Office	H/P-IM-II	7.97	330	nil	195	14	0.22	BDL	8	150	36	7	15	2.6	27	nd	0.6	0.8
115	Ballia	Negara	Block Office	H/P-IM-II	7.96	380	nil	220	21	BDL	BDL	BDL	170	24	19	22	3.5	27	nd	0.8	0.8
116	Ballia	Pandah	Block Office	H/P-IM-II	8.22	425	nil	244	28	BDL	BDL	8.6	180	24	29	29	3.8	30	nd	0.9	0.4
117	Ballia	Rasara	Block Office	H/P-IM-II	8.08	1525	nil	354	241	BDL	75	100	400	28	83	190	7.7	27	nd	4.1	-2.4
118	Ballia	Reoti	Block Office	H/P-IM-II	7.87	430	nil	244	21	0.20	BDL	BDL	220	64	36	9	2.9	27	nd	0.2	-2.2
119	Ballia	Siyar	Block Office	H/P-IM-II	7.98	400	nil	183	43	0.25	BDL	8.7	160	36	17	27	2.6	28	nd	0.9	-0.2
120	Ballia	Sohaon	Block Office	H/P-IM-II	8.02	500	nil	317	14	0.27	BDL	BDL	210	28	34	36	3.4	23	nd	1.1	1.0
121	Balrampur	Balrampur	Block Office	H/P-IM-II	7.92	498	nil	305	14	BDL	BDL	11	225	76	9	20	2.8	38	nd	0.6	0.5
122	Balrampur	Gaisadi	Block Office	H/P-IM-II	7.72	612	nil	244	64	0.21	BDL	55	270	76	19	40	BDL	30	nd	1.1	-1.4

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
123	Balrampur	Gaidas Buzurg	Block Office	H/P-IM-II	8.04	585	nil	342	36	0.25	BDL	BDL	270	44	39	25	3.3	41	nd	0.7	0.2
124	Balrampur	Harraiya Satgharwa	Block Office	H/P-IM-II	8.47	780	36	427	14	0.41	BDL	13	240	40	34	98	2.3	30	nd	2.8	3.4
125	Balrampur	Pachperva	Block Office	H/P-IM-II	8.47	765	36	427	14	0.53	BDL	BDL	250	32	41	90	1.0	30	nd	2.5	3.2
126	Balrampur	Rehra Bazar	Block Office	H/P-IM-II	7.89	510	nil	281	28	0.33	BDL	9.5	230	60	19	17	3.3	36	nd	0.5	0.0
127	Balrampur	Sriduttganj	Block Office	H/P-IM-II	8.01	645	nil	317	50	BDL	BDL	28	240	48	29	56	3.1	3	nd	1.6	0.4
128	Balrampur	Tulsipur	Block Office	H/P-IM-II	7.91	585	nil	342	28	BDL	BDL	18	290	76	24	24	1.4	36	nd	0.6	-0.2
129	Balrampur	Utraula	Block Office	H/P-IM-II	8.21	445	nil	268	14	BDL	BDL	8	190	40	22	28	4.5	37	nd	0.9	0.6
130	Banda	Naraini	Block Office	H/P-IM-II	8.23	1136	nil	427	121	0.50	16	23	400	20	84	85	1.5	35	nd	1.9	-0.9
131	Banda	Mahuwa	Block Office	H/P-IM-II	8.18	872	nil	476	28	0.63	9	21	160	16	29	146	1.5	31	nd	5.0	4.6
132	Banda	Badokhar Khurd	Block Office	H/P-IM-II	8.00	1260	nil	647	43	0.49	BDL	23	180	16	34	205	1.7	22	nd	6.6	7.0
133	Banda	Bisanda	Block Office	H/P-IM-II	8.05	1100	nil	329	142	1.08	14	81	370	24	74	100	1.3	25	nd	2.3	-1.9
134	Banda	Kamasin	Block Office	H/P-IM-II	8.25	990	nil	525	28	0.84	6	10	130	16	22	170	1.3	26	nd	6.5	6.0
135	Banda	Baberu	Block Office	H/P-IM-II	8.04	522	nil	329	14	0.46	8	7.45	180	20	31	63	1.6	30	nd	2.1	1.8
136	Banda	Tindwari	Block Office	H/P-IM-II	8.00	700	nil	329	43	0.36	18	11	170	24	26	93	1.5	32	nd	3.1	2.1
137	Banda	Jaspura	Block Office	H/P-IM-II	8.04	517	nil	305	21	0.45	7	30	190	24	31	63	2.3	29	nd	2.0	1.3
138	Banda	Banda	Block Office	H/P-IM-II	8	1311	nil	439	121	0.5	48	87	320	40	53	172	1.5	27	nd	4.2	0.8
139	Barabanki	Bani Kodar	Block Office	H/P-IM-II	7.82	480	nil	281	14.2	BDL	BDL	18	220	36	32	21	4.3	37	nd	0.6	0.2
140	Barabanki	Banki	Block Office	H/P-IM-II	7.96	580	nil	354	28	0.26	BDL	8.6	210	28	34	56	5.3	39	nd	1.7	1.6
141	Barabanki	Dariyabad	Block Office	H/P-IM-II	8.18	460	nil	256	21	0.27	6.8	20	200	24	34	28	2.3	30	nd	0.9	0.2
142	Barabanki	Dewa	Block Office	H/P-IM-II	8.25	450	nil	256	14	1.3	BDL	24	230	32	36	10	4.3	27	nd	0.3	-0.4
143	Barabanki	Fatehpur	Block Office	H/P-IM-II	7.96	460	nil	244	21	BDL	BDL	22	170	32	22	37	8.2	25	nd	1.2	0.6
144	Barabanki	Haidergarh	Block Office	H/P-IM-II	8.26	520	nil	317	21	0.42	BDL	BDL	220	28	36	34	5.6	5	nd	1.0	0.8
145	Barabanki	Harak	Block Office	H/P-IM-II	8.08	520	nil	329	14	0.51	BDL	BDL	220	24	39	33	6.0	32	nd	1.0	1.0
146	Barabanki	Masauli	Block Office	H/P-IM-II	8.02	430	nil	256	14	0.79	BDL	16	220	32	34	9	3.7	32	nd	0.3	-0.2
147	Barabanki	Mawai	Block Office	H/P-IM-II	7.68	480	nil	305	14	0.29	BDL	BDL	220	32	34	18	4.5	34	nd	0.5	0.6

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
148	Barabanki	Nindura	Block Office	H/P-IM-II	7.74	640	nil	390	14	0.36	BDL	20	290	36	49	34	6.0	36	nd	0.9	0.6
149	Barabanki	Puredalai	Block Office	H/P-IM-II	8.14	430	nil	256	14	0.47	BDL	BDL	210	32	32	12	2.6	32	nd	0.4	0.0
150	Barabanki	Ramnagar	Block Office	H/P-IM-II	7.95	540	nil	256	43	BDL	BDL	32	240	40	34	31	4.4	33	nd	0.9	-0.6
151	Barabanki	Rudauli	Block Office	H/P-IM-II	8.05	480	nil	268	21	0.37	BDL	19	220	28	29	18	4.0	33	nd	0.6	0.6
152	Barabanki	Siddapur	Block Office	H/P-IM-II	8.21	600	nil	354	28	BDL	BDL	15	255	28	45	25	23	29	nd	0.7	0.7
153	Barabanki	Sirauli Gauspur	Block Office	H/P-IM-II	8.26	340	nil	183	14	0.24	BDL	18	175	40	26	4	2.7	22	nd	0.1	-1.1
154	Barabanki	Suratganj	Block Office	H/P-IM-II	8.46	500	36	244	14	0.34	BDL	BDL	240	52	34	18	3.9	30	nd	0.5	-0.2
155	Barabanki	Trivediganj	Block Office	H/P-IM-II	8.19	680	nil	427	14	0.64	11	16	320	32	46	28	4.2	35	nd	0.7	1.6
156	Bareilly	Alampur	Block Office	H/P-IM-II	8.01	467	nil	232	28	BDL	BDL	BDL	60	12	7.2	75	8.7	49	nd	4.2	2.6
157	Bareilly	Baheri	Block Office	H/P-IM-II	8.22	302	nil	159	7.1	0.35	BDL	18	110	28	9.6	19	7.6	46	nd	0.8	0.4
158	Bareilly	Bhadpura	Block Office	H/P-IM-II	8.14	392	nil	207	14	BDL	BDL	6	130	16	22	21	15	50	nd	0.8	0.8
159	Bareilly	Bhojipura	Block Office	H/P-IM-II	7.82	512	nil	195	50	BDL	BDL	25	160	32	19	34	16	34	nd	1.2	0.0
160	Bareilly	Bhutah	Block Office	H/P-IM-II	7.97	403	nil	232	7.1	BDL	BDL	12	190	40	22	9	7.2	41	nd	0.3	0.0
161	Bareilly	Bithri	Block Office	H/P-IM-II	8.07	353	nil	195	14	BDL	BDL	13	90	24	7.2	26	31	49	nd	1.2	1.4
162	Bareilly	Faridpur	Block Office	H/P-IM-II	8.08	512	nil	244	35	0.25	BDL	29	230	48	26	15	10	55	nd	0.4	-0.6
163	Bareilly	Fatehanj	Block Office	H/P-IM-II	8.17	477	nil	256	14	BDL	BDL	8.6	100	32	4.8	57	6.3	48	nd	2.5	2.2
164	Bareilly	Kyara	Block Office	H/P-IM-II	7.92	358	nil	134	28	BDL	BDL	26	130	28	14	14	11	51	nd	0.5	-0.4
165	Bareilly	Majhgawa	Block Office	H/P-IM-II	8.13	630	nil	207	35	BDL	BDL	48	100	28	7.2	71	6.1	54	nd	3.1	1.4
166	Bareilly	Meerganj	Block Office	H/P-IM-II	8.35	345	30	110	7.1	BDL	BDL	14	110	12	19	23	8.4	42	nd	1.0	0.6
167	Bareilly	Nawabganj	Block Office	H/P-IM-II	8.38	389	36	122	14	0.35	BDL	20	130	32	12	27	6.9	49	nd	1.0	0.6
168	Bareilly	Ramnagar	Block Office	H/P-IM-II	7.95	320	nil	98	14	0.27	49	9	130	36	9.6	6	5.6	48	nd	0.2	-1.0
169	Bareilly	Richha	Block Office	H/P-IM-II	7.99	382	nil	195	7.1	0.39	BDL	24	120	28	12	29	6.4	31	nd	1.2	0.8
170	Bareilly	Shergarh	Block Office	H/P-IM-II	7.76	310	nil	159	7.1	0.33	BDL	22	130	32	12	7	12	49	nd	0.2	0.0
171	Basti	Bahadurpur	Block Office	H/P-IM-II	8.05	400	nil	232	14	0.37	BDL	15	205	32	30	10	4.7	36	nd	0.3	-0.3
172	Basti	Bankati	Block Office	H/P-IM-II	7.99	430	nil	268	14	BDL	BDL	BDL	220	44	27	12	2.5	38	nd	0.4	0.0

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
173	Basti	Basti Sadar	Block Office	H/P-IM-II	7.84	455	nil	256	14	BDL	BDL	23	240	44	32	9	3.6	37	nd	0.3	-0.6
174	Basti	Dubauliya	Block Office	H/P-IM-II	7.98	862	nil	390	107	BDL	BDL	9.5	320	52	46	53	46	24	nd	1.3	0.0
175	Basti	Gaur	Block Office	H/P-IM-II	7.73	600	nil	342	36	BDL	BDL	6	270	64	27	30	5.3	34	nd	0.8	0.2
176	Basti	Harraiya	Block Office	H/P-IM-II	7.68	1000	nil	317	128	BDL	BDL	115	380	72	49	70	34	24	nd	1.6	-2.4
177	Basti	Kaptanganj	Block Office	H/P-IM-II	7.81	520	nil	293	28	BDL	BDL	11	260	56	29	16	4.0	38	nd	0.4	-0.4
178	Basti	Kudraha	Block Office	H/P-IM-II	8.15	800	nil	476	43	BDL	BDL	BDL	310	112	7	47	21	29	nd	1.2	1.6
179	Basti	Parasrampur	Block Office	H/P-IM-II	7.99	520	nil	329	14	BDL	BDL	BDL	280	80	19	10	2.4	38	nd	0.3	-0.2
180	Basti	Ramnagar	Block Office	H/P-IM-II	7.92	480	nil	293	14	0.36	BDL	BDL	240	56	24	13	3.2	37	nd	0.4	0.0
181	Basti	Rudauli	Block Office	H/P-IM-II	7.74	500	nil	244	50	0.40	BDL	5	250	68	19	14	3.3	36	nd	0.4	-1.0
182	Basti	Saltaua	Block Office	H/P-IM-II	7.79	480	nil	207	28	BDL	BDL	35	220	52	22	14	3.3	36	nd	0.4	-1.0
183	Basti	Saunghat	Block Office	H/P-IM-II	7.78	510	nil	329	14	BDL	BDL	BDL	250	56	27	17	6.2	36	nd	0.5	0.4
184	Basti	Vikramjot	Block Office	H/P-IM-II	7.72	500	nil	317	14	BDL	BDL	BDL	230	60	19	21	5.6	37	nd	0.6	0.6
185	Bijnor	Afzalgarh	Block Office	H/P-IM-II	7.72	389	nil	232	14	0.32	BDL	BDL	190	60	10	10	1.3	24	nd	0.3	0.0
186	Bijnor	Aku (Nehtaur)	Block Office	H/P-IM-II	7.42	353	nil	183	21	0.22	BDL	6	150	36	14	19	4.2	30	nd	0.7	0.0
187	Bijnor	Alhepur (Dhampur)	Block Office	H/P-IM-II	7.80	519	nil	293	7.1	0.42	BDL	17	190	50	16	41	3.0	26	nd	1.3	1.0
188	Bijnor	Budhanpur (Seohara)	Block Office	H/P-IM-II	7.65	320	nil	171	21	0.23	BDL	BDL	125	24	16	25	3.6	27	nd	1.0	0.3
189	Bijnor	Jaleelpur	Block Office	H/P-IM-II	7.70	246	nil	110	14	0.38	BDL	29	110	24	12	13	4.3	24	nd	0.6	-0.4
190	Bijnor	Khari Jhalu (Haldaur)	Block Office	H/P-IM-II	7.40	384	nil	220	14	0.15	BDL	9	170	44	14	15	6.1	28	nd	0.5	0.2
191	Bijnor	Kiratpur	Block Office	H/P-IM-II	7.42	536	nil	183	43	BDL	BDL	53	225	48	25	19	10	21	nd	0.5	-1.5
192	Bijnor	Kotwali	Block Office	H/P-IM-II	7.57	473	nil	256	14	0.42	BDL	10	185	46	17	30	2.8	27	nd	1.0	0.5
193	Bijnor	Mohammadpur Deomal	Block Office	H/P-IM-II	7.50	665	nil	244	50	BDL	BDL	55	215	28	35	53	16	14	nd	1.6	-0.3
194	Bijnor	Najibabad	Block Office	H/P-IM-II	7.52	454	nil	232	21	0.52	BDL	12	150	28	19	44	1.7	22	nd	1.6	0.8
195	Bijnor	Noorpur	Block Office	H/P-IM-II	7.34	472	nil	232	28	BDL	BDL	17	200	28	31	24	7.0	32	nd	0.7	-0.2
196	Budaun	Ambiapur	Block Office	H/P-IM-II	7.62	507	nil	183	64	0.23	11	18	170	36	19	44	5.8	40	nd	1.5	-0.4
197	Budaun	Asafpur	Block Office	H/P-IM-II	7.67	560	nil	268	35	BDL	BDL	12	130	24	17	66	8.4	46	nd	2.5	1.8

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
198	Budaun	Bisouli	Block Office	H/P-IM-II	7.51	550	nil	220	50	BDL	BDL	28	175	32	23	45	10	54	nd	1.5	0.1
199	Budaun	Dahgawan	Block Office	H/P-IM-II	7.68	1263	nil	317	191	BDL	5	96	320	44	50	145	7.6	51	nd	3.5	-1.1
200	Budaun	Dataganj	Block Office	H/P-IM-II	7.71	439	nil	256	14	0.45	BDL	9.3	130	24	17	48	4.4	57	nd	1.8	1.6
201	Budaun	Gunnaur	Block Office	H/P-IM-II	7.74	874	nil	268	57	BDL	29	133	230	32	36	80	42	48	nd	2.3	-0.2
202	Budaun	Islamnagar	Block Office	H/P-IM-II	7.22	337	nil	183	21	0.26	BDL	5	130	32	12	23	4.9	43	nd	0.9	0.4
203	Budaun	Jagat	Block Office	H/P-IM-II	7.33	292	nil	146	14	0.24	BDL	5.1	100	32	4.8	18	4.9	52	nd	0.8	0.4
204	Budaun	Junawai	Block Office	H/P-IM-II	7.54	487	nil	256	21	BDL	BDL	28	200	32	29	30	5.5	58	nd	0.9	0.2
205	Budaun	Miaon	Block Office	H/P-IM-II	7.63	571	nil	195	57	BDL	BDL	33	155	36	16	45	22	51	nd	1.6	0.1
206	Budaun	Kadar Chowk	Block Office	H/P-IM-II	7.49	263	nil	122	14	BDL	5	7.5	100	28	7.2	14	3.2	41	nd	0.6	0.0
207	Budaun	Rajpura	Block Office	H/P-IM-II	7.67	358	nil	220	7.1	0.36	BDL	5.2	140	28	17	21	5.9	44	nd	0.8	0.8
208	Budaun	Sahaswan	Block Office	H/P-IM-II	8.02	319	nil	183	14	0.32	BDL	6	130	32	12	19	3.1	38	nd	0.7	0.4
209	Budaun	Salarpur	Block Office	H/P-IM-II	7.48	895	nil	110	184	BDL	5	74	310	12	67	55	10	44	nd	1.4	-4.3
210	Budaun	Samrer	Block Office	H/P-IM-II	7.77	537	nil	317	14	0.43	BDL	8.7	50	8	7.2	112	1.4	49	nd	6.9	4.2
211	Budaun	Ujhani	Block Office	H/P-IM-II	7.39	1184	nil	195	184	BDL	79	70	350	72	41	96	8.8	52	nd	2.2	-3.8
212	Budaun	Usawan	Block Office	H/P-IM-II	7.68	346	nil	183	14	0.27	8.8	8	150	48	7.2	12	3.9	57	nd	0.4	0.0
213	Budaun	Wajirganj	Block Office	H/P-IM-II	7.66	882	nil	366	64	BDL	BDL	42	110	16	17	148	9.4	41	nd	6.2	3.8
214	Bulandsahar	Pahau	Block Office	H/P-IM-II	7.88	590	nil	244	35	0.30	31	48	220	48	24	50	5.0	29	nd	1.5	-0.4
215	Bulandsahar	Dhanpur	Block Office	H/P-IM-II	8.11	777	nil	366	14	0.40	11	21	100	28	7	115	4.0	32	nd	5.0	4.0
216	Bulandsahar	Debai	Block Office	H/P-IM-II	7.91	600	nil	329	21	0.50	BDL	7	210	40	26	43	5.0	30	nd	1.3	1.3
217	Bulandsahar	Shikarpur	Block Office	H/P-IM-II	7.99	903	nil	451	43	0.60	BDL	25	240	44	31	81	6.6	30	nd	2.3	2.6
218	Bulandsahar	Anupsahar	Block Office	H/P-IM-II	7.89	685	nil	317	14	1.10	6	67	240	52	26	54	4.0	38	nd	1.5	0.5
219	Bulandsahar	Jahangirabad	Block Office	H/P-IM-II	8.04	799	nil	427	28	0.20	32	23	210	36	29	98	10	35	nd	2.9	2.8
220	Bulandsahar	Unchagaon	Block Office	H/P-IM-II	8.07	264	nil	159	14	0.40	BDL	7	140	48	5	9	2.0	15	nd	0.3	-0.2
221	Bulandsahar	Lakhaoti	Block Office	H/P-IM-II	7.94	478	nil	268	14	0.70	BDL	11	220	44	26	17	2.0	37	nd	0.5	0.1
222	Bulandsahar	Siyana	Block Office	H/P-IM-II	8.15	888	nil	293	99	0.20	34	41	270	36	43	79	10	36	nd	2.1	-0.5

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
223	Bulandsahar	B.B.Nagar	Block Office	H/P-IM-II	8.28	679	nil	403	7.1	0.50	BDL	17	230	28	38	58	6.0	32	nd	1.7	2.1
224	Bulandsahar	Agauta	Block Office	H/P-IM-II	8.03	581	nil	293	28	0.70	20	6	210	36	29	39	9.0	25	nd	1.2	0.6
225	Bulandsahar	Guloathi	Block Office	H/P-IM-II	8.20	710	nil	293	35	1.00	9	36	240	28	41	43	7.0	30	nd	1.2	0.0
226	Bulandsahar	Bulandshehar	Block Office	H/P-IM-II	8.24	439	nil	134	14	0.50	50	53	120	32	10	50	5.0	36	nd	2.0	-0.2
227	Bulandsahar	Arina Khurd	Block Office	H/P-IM-II	8.23	896	nil	342	35	0.40	7	80	180	24	29	110	6.0	29	nd	3.6	2.0
228	Bulandsahar	Khurja	Block Office	H/P-IM-II	8.19	1365	nil	451	43	0.70	7	230	170	24	26	230	10	30	nd	7.7	4.1
229	Bulandsahar	Sikanrabad	Block Office	H/P-IM-II	8.05	2296	nil	400	461	0.50	40	115	800	100	132	150	10	25	nd	2.3	-9.3
230	Chandauli	Barahani	Block Office	H/P-IM-II	7.65	483	nil	251	21	0.36	BDL	4	180	52	12	27	2.2	29	nd	0.9	0.5
231	Chandauli	Chahania	Block Office	H/P-IM-II	7.56	828	nil	307	78	0.51	24	31	299	57	37	51	3.9	27	nd	1.3	-0.9
232	Chandauli	Chakiya	Block Office	H/P-IM-II	7.96	697	nil	334	35	0.81	15	10	267	62	27	37	1.2	23	nd	1.0	0.2
233	Chandauli	Chandauli	Block Office	H/P-IM-II	7.84	511	nil	210	35	0.66	22	13	161	52	7	43	1.9	28	nd	1.5	0.2
234	Chandauli	Dhanapur	Block Office	H/P-IM-II	7.79	742	nil	407	21	0.7	BDL	5	182	33	24	85	3.8	27	nd	2.8	3.1
235	Chandauli	Naugarh	Block Office	H/P-IM-II	7.41	505	nil	131	85	0.11	BDL	21	179	48	14	33	2.1	11	nd	1.1	-1.4
236	Chandauli	Niyamatabad	Block Office	H/P-IM-II	7.66	762	nil	355	50	0.38	7	13	160	38	16	100	3.8	28	nd	3.4	2.6
237	Chandauli	Sakaldiha	Block Office	H/P-IM-II	7.70	568	nil	233	43	0.61	BDL	27	230	57	21	23	3.7	26	nd	0.7	-0.7
238	Chandauli	Shahabganj	Block Office	H/P-IM-II	7.74	428	nil	214	21	0.61	BDL	5	170	62	4	20	0.7	32	nd	0.7	0.1
239	Chitrakoot	Mau	Block Office	H/P-IM-II	7.87	710	nil	342	35	0.58	30	15	180	60	7	90	1.4	21	nd	2.9	2.0
240	Chitrakoot	Ram Nagar	Block Office	H/P-IM-II	8.27	550	nil	293	14	0.24	8	9	210	20	38	38	1.6	18	nd	1.2	0.7
241	Chitrakoot	Karvi	Block Office	H/P-IM-II	7.81	1552	nil	244	298	0.12	50	86	640	52	122	81	1.4	30	nd	1.4	-8.6
242	Chitrakoot	Pahari	Block Office	H/P-IM-II	7.91	1419	nil	220	220	2.00	49	120	570	164	38	65	4.3	21	nd	1.2	-7.7
243	Chitrakoot	Manikpur	Block Office	H/P-IM-II	7.80	617	nil	146	92	0.84	29	60	240	52	26	53	7.0	17	nd	1.5	-2.3
244	Deoria	Baitalpur	Block Office	H/P-IM-II	7.15	488	nil	146	57	0.12	BDL	44	180	46	16	33	5.8	42	0.26	1.1	-1.2
245	Deoria	Bankata	Block Office	H/P-IM-II	7.30	580	nil	183	14	0.22	BDL	133	255	52	30	31	3.7	36	0.28	0.9	-2.1
246	Deoria	Barhaj	Block Office	H/P-IM-II	7.21	596	nil	232	50	0.32	BDL	41	230	40	31	40	4.4	46	0.25	1.2	-0.8
247	Deoria	Bhagalpur	Block Office	H/P-IM-II	7.55	301	nil	171	14	0.14	BDL	BDL	110	20	14	26	3.8	39	0.23	1.1	0.6

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
248	Deoria	Bhaluwani	Block Office	H/P-IM-II	7.40	752	nil	214	114	0.19	BDL	36	245	48	30	65	6.7	38	0.26	1.8	-1.4
249	Deoria	Bhatani	Block Office	H/P-IM-II	7.50	433	nil	256	7.1	0.47	BDL	BDL	135	28	16	45	3.6	28	0.22	1.7	1.5
250	Deoria	Bhatparani	Block Office	H/P-IM-II	7.41	418	nil	244	7.1	0.33	BDL	BDL	185	32	25	17	3.7	24	0.39	0.5	0.3
251	Deoria	Deoria Sadar	Block Office	H/P-IM-II	7.22	568	nil	146	85	0.21	BDL	34	235	70	14	25	4.3	36	0.33	0.7	-2.3
252	Deoria	Desahi Deoria	Block Office	H/P-IM-II	7.52	361	nil	195	14	0.41	BDL	15	180	36	22	7	3.6	31	0.23	0.2	-0.4
253	Deoria	Gauri Bazar	Block Office	H/P-IM-II	7.60	294	nil	159	14	0.10	BDL	8	140	44	7	9	2.7	30	0.30	0.3	-0.2
254	Deoria	Lar	Block Office	H/P-IM-II	7.50	336	nil	207	14	0.29	BDL	BDL	160	44	12	9	2.7	33	0.30	0.3	0.2
255	Deoria	Pather Dewa	Block Office	H/P-IM-II	7.78	295	nil	159	14	0.23	BDL	11	150	40	12	9	2.4	30	0.24	0.3	-0.4
256	Deoria	Rampur Karkhana	Block Office	H/P-IM-II	7.40	330	nil	171	7.1	0.28	BDL	23	165	44	13	6	3.4	26	0.29	0.2	-0.5
257	Deoria	Rudrapur	Block Office	H/P-IM-II	7.38	373	nil	207	14	0.30	BDL	BDL	140	40	10	27	3.9	32	0.26	1.0	0.6
258	Deoria	Salempur	Block Office	H/P-IM-II	7.57	322	nil	183	14	0.45	BDL	BDL	150	32	17	15	2.4	32	0.43	0.5	0.0
259	Deoria	Tarkulwa	Block Office	H/P-IM-II	7.37	375	nil	159	28	0.26	BDL	20	150	40	12	18	4.4	27	BDL	0.7	-0.4
260	Etah	Aliganj	Block Office	H/P-IM-II	8.07	500	nil	281	7	1.25	BDL	8	160	2	22	47	4.7	22	nd	2.1	2.7
261	Etah	Awagarh	Block Office	H/P-IM-II	8.21	660	nil	354	14	1.11	6.3	12	190	24	31	71	2.9	20	nd	2.3	2.1
262	Etah	Jaithara	Block Office	H/P-IM-II	8.01	438	nil	232	14	0.52	BDL	10	190	36	24	19	2.9	25	nd	0.6	0.0
263	Etah	Jalesar	Block Office	H/P-IM-II	8.65	1691	96	207	269	BDL	40	91	190	16	36	300	7.0	17	nd	9.5	2.8
264	Etah	Marhara	Block Office	H/P-IM-II	7.87	735	nil	220	85	0.48	34	53	250	36	38	61	7.0	22	nd	1.7	-1.3
265	Etah	Nidholi Kalan	Block Office	H/P-IM-II	8.24	880	nil	354	57	BDL	7.5	52	210	12	43	105	6.6	20	nd	3.2	1.7
266	Etah	Sakeet	Block Office	H/P-IM-II	8.12	510	nil	305	21	0.59	BDL	25	160	24	24	72	4.3	21	nd	2.5	1.8
267	Etah	Sheetalpur	Block Office	H/P-IM-II	8.23	421	nil	220	14	0.40	BDL	13	160	24	24	27	4.6	26	nd	0.9	0.4
268	Etawah	Barhpura	Block Office	H/P-IM-II	7.82	849	nil	116	149	BDL	93	15	310	44	48	49	4.4	36	nd	1.2	-4.2
269	Etawah	Basrehar	Block Office	H/P-IM-II	8.09	567	nil	232	28	0.50	12	29	130	20	19	68	5.9	30	nd	2.6	1.2
270	Etawah	Bharthana	Block Office	H/P-IM-II	8.13	820	nil	464	25	0.80	BDL	7	235	18	46	93	7.4	25	nd	2.7	3.0
271	Etawah	Chakar Nagar	Block Office	H/P-IM-II	7.68	725	nil	415	14	0.55	24	6	155	24	23	112	3.5	30	nd	3.9	3.7
272	Etawah	Jashwant Nagar	Block Office	H/P-IM-II	8.04	676	nil	275	50	0.29	17	24	180	20	31	77	4.2	29	nd	2.5	0.9

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
273	Etawah	Mahewa	Block Office	H/P-IM-II	8.33	492	24	195	21	0.58	9.4	18	175	8	37	42	4.5	27	nd	1.4	0.5
274	Etawah	Saifai	Block Office	H/P-IM-II	7.82	596	nil	317	14	1.04	BDL	16	190	28	29	52	6.1	28	nd	1.7	1.4
275	Etawah	Takha	Block Office	H/P-IM-II	7.91	1383	nil	512	85	1.00	BDL	177	295	24	56	214	7.7	23	nd	5.4	2.6
276	Faizabad	Amaniganj	Block Office	H/P-IM-II	7.39	507	nil	281	14	0.48	5	8.8	190	32	26	29	4.3	31	nd	0.9	0.8
277	Faizabad	Bikapur	Block Office	H/P-IM-II	7.64	525	nil	293	21	0.56	BDI	18	220	44	26	29	3.9	38	nd	0.9	0.4
278	Faizabad	Haringtonganj	Block Office	H/P-IM-II	7.51	357	nil	159	28	BDL	BDI	22	150	40	12	17	2.3	33	nd	0.6	-0.4
279	Faizabad	Masodha	Faizabad	H/P-IM-II	7.83	342	nil	171	14	0.35	BDI	22	170	40	17	5	2.2	21	nd	0.2	-0.6
280	Faizabad	Maya Bazar	Block Office	H/P-IM-II	7.62	354	nil	195	7.1	0.37	BDI	20	160	32	19	14	3.6	29	nd	0.5	0.0
281	Faizabad	Milkipur	Block Office	H/P-IM-II	7.72	592	nil	305	35	0.39	7	10	240	28	41	30	4.6	32	nd	0.8	0.2
282	Faizabad	Pura Bazar	Block Office	H/P-IM-II	7.52	445	nil	244	14	0.23	6.3	6.7	190	28	29	20	3.3	29	nd	0.6	0.2
283	Faizabad	Sohawal	Block Office	H/P-IM-II	7.64	468	nil	256	14	0.3	3.8	9.9	210	28	34	14	3.9	30	nd	0.4	0.0
284	Faizabad	Tarun	Block Office	H/P-IM-II	7.63	565	nil	244	28	BDL	15	51	210	32	31	42	3.1	32	nd	1.3	-0.2
285	Faizabad	Mawai	Block Office	H/P-IM-II	7.79	450	nil	268	14	0.38	BDI	5	190	20	34	20	4.2	31	nd	0.6	0.6
286	Farrukhabad	Barhpur	Block Office	H/P-IM-II	7.49	750	nil	256	57	0.45	15	35	210	12	43	63	4.0	11	nd	1.9	0.1
287	Farrukhabad	Kayamganj	Block Office	H/P-IM-II	7.93	387	nil	195	21	0.61	6	15	140	36	12	33	4.0	40	nd	1.2	0.4
288	Farrukhabad	Mohammadabad	Block Office	H/P-IM-II	7.96	1434	nil	244	284	0.45	34	53	520	64	86	103	3.5	39	nd	2.0	-6.3
289	Farrukhabad	Nawabganj	Block Office	H/P-IM-II	8.07	530	nil	268	21	0.44	BDL	6	150	24	120	55	4.4	15	nd	1.0	-6.7
290	Farrukhabad	Rajepur	Block Office	H/P-IM-II	8.61	1498	108	281	149	1.65	BDL	104	240	12	50	235	1.7	25	nd	6.7	3.5
291	Farrukhabad	Samsabad	Block Office	H/P-IM-II	7.76	860	nil	244	244	0.5	22	83	240	48	29	96	4.9	13	nd	2.7	-0.8
292	Fatehpur	Deomai	Block Office	H/P-IM-II	7.84	689	nil	281	57	0.54	BDL	57	260	32	43	57	1.4	22	nd	1.5	-0.5
293	Fatehpur	Khajuha	Block Office	H/P-IM-II	7.87	507	nil	256	43	1.35	BDL	6	230	32	36	25	4.7	26	nd	0.7	-0.4
294	Fatehpur	Amouli	Block Office	H/P-IM-II	7.79	719	nil	232	64	2.1	43	53	290	40	46	41	4.4	35	nd	1.0	-2.0
295	Fatehpur	Bahuwa	Block Office	H/P-IM-II	7.60	811	nil	244	99	1.79	33	48	330	56	46	43	4.9	32	nd	1.0	-2.6
296	Fatehpur	Asother	Block Office	H/P-IM-II	7.90	620	nil	354	21	1.84	BDL	25	240	28	41	51	4.5	33	nd	1.4	1.0
297	Fatehpur	Dhata	Block Office	H/P-IM-II	8.00	609	nil	268	71	0.73	BDL	48	300	48	43	31	7.4	25	nd	0.8	-1.5

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
298	Fatehpur	Vijaynagar	Block Office	H/P-IM-II	7.80	491	nil	244	21	0.43	13	25	240	32	38	17	2.8	30	nd	0.5	-0.7
299	Fatehpur	Airayan	Block Office	H/P-IM-II	7.82	1199	nil	329	156	0.60	37	53	400	36	74	81	11	35	nd	1.8	-2.5
300	Fatehpur	Haswa	Block Office	H/P-IM-II	8.15	449	nil	244	21	0.66	BDL	6	160	16	29	36	6.8	29	nd	1.2	0.8
301	Fatehpur	Hathgaon	Block Office	H/P-IM-II	7.72	613	nil	305	28	0.73	16	23	270	36	43	17	20	28	nd	0.5	-0.3
302	Fatehpur	Bhitaura	Block Office	H/P-IM-II	7.99	517	nil	293	21	0.65	BDL	7	220	24	38	29	3.0	30	nd	0.9	0.5
303	Fatehpur	Teliyani	Block Office	H/P-IM-II	8.20	903	nil	549	21	1.04	BDL	6	150	12	29	155	7.0	25	nd	5.5	6.0
304	Fatehpur	Malwan	Block Office	H/P-IM-II	8.15	1832	nil	537	213	1.50	15	171	250	24	46	315	6.1	20	nd	8.7	3.8
305	Firozabad	Aron	Block Office	H/P-IM-II	7.63	1500	nil	378	149	1.04	46	175	480	28	98	125	4.6	12	nd	2.5	-3.3
306	Firozabad	Firozabad	Block Office	H/P-IM-II	8.21	712	nil	354	21	0.77	12	18	110	20	14	116	1.2	14	nd	4.9	3.7
307	Firozabad	Jasrana	Block Office	H/P-IM-II	8.20	819	nil	366	57	0.49	BDL	66	290	20	58	81	5.8	19	nd	2.1	0.2
308	Firozabad	Khairgarh	Block Office	H/P-IM-II	8.70	4065	120	317	1028	0.27	BDL	187	1050	60	216	490	3.8	8	nd	6.6	-11.6
309	Firozabad	Madanpur	Block Office	H/P-IM-II	8.56	782	60	207	50	BDL	5.2	36	300	16	62	41	5.2	21	nd	1.0	-0.5
310	Firozabad	Narkhi	Block Office	H/P-IM-II	7.81	6169	nil	305	1843	0.73	49	187	1700	120	336	585	100	16	nd	6.2	-28.6
311	Firozabad	Shikohabad	Block Office	H/P-IM-II	8.22	667	nil	329	7	0.81	41	16	140	12	26	94	3.8	20	nd	3.5	2.7
312	Firozabad	Tundla	Block Office	H/P-IM-II	8.72	1200	nil	378	121	0.77	34	49	280	8	62	132	3.6	16	nd	3.5	0.7
313	Gautam Budhha Nagar	Dadri	Block Office	H/P-IM-II	8.12	900	nil	317	28	0.70	36	119	360	32	36	100	9.0	27	nd	2.9	0.6
314	Gautam Budhha Nagar	Bisrakh	Block Office	H/P-IM-II	7.50	2610	nil	281	532	1.10	21	323	950	180	120	176	10	39	nd	2.5	-14.3
315	Gautam Budhha Nagar	Dhankour	Block Office	H/P-IM-II	8.21	2051	nil	720	16	2.90	16	133	150	40	12	400	19	27	nd	14.2	8.8
316	Gautam Budhha Nagar	Jewar	Block Office	H/P-IM-II	8.33	2300	60	403	390	1.40	21	140	300	80	24	410	7.0	30	nd	10.3	2.6
317	Ghaziabad	Loni	Block Office	H/P-IM-II	8.33	450	48	73	57	0.26	5.1	62	130	20	19	55	5.1	30	nd	2.1	0.2
318	Ghaziabad	Razapur	Block Office	H/P-IM-II	8.56	973	96	207	92	0.87	5.7	87	180	24	29	152	10	29	nd	4.9	3.0
319	Ghaziabad	Muradangar	Block Office	H/P-IM-II	8.38	530	48	146	50	0.70	BDL	29.9	190	36	24	35	5.7	27	nd	1.1	0.2
320	Ghaziabad	Bhojpur	Block Office	H/P-IM-II	8.60	676	96	232	28	0.51	14	31	160	24	24	89	8.0	31	nd	3.1	3.8
321	Ghaziabad	Hapur	Block Office	H/P-IM-II	8.46	618	48	207	35	0.22	24	88	200	32	29	78	7.1	32	nd	2.4	1.0
322	Ghaziabad	Dholana	Block Office	H/P-IM-II	8.63	1098	96	256	105	0.40	20	62	180	16	34	160	10	30	nd	5.2	3.8

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
323	Ghaziabad	Simbholi	Block Office	H/P-IM-II	8.34	604	48	98	42	BDL	34	88	230	40	31	30	7.9	30	nd	0.9	-1.3
324	Ghaziabad	Garh	Block Office	H/P-IM-II	8.40	455	48	146	21	BDL	16	36	180	36	22	29	5.4	36	nd	0.9	0.4
325	Ghazipur	Barachawar	Block Office	H/P-IM-II	7.91	500	nil	244	36	0.48	6	BDL	200	20	36	30	2.3	25	nd	0.9	0.0
326	Ghazipur	Bhadaura	Block Office	H/P-IM-II	7.94	570	nil	220	64	0.24	5.4	32	220	40	29	44	3.2	32	nd	1.3	-0.8
327	Ghazipur	Bhawarkol	Block Office	H/P-IM-II	8.24	500	nil	293	21	BDL	BDL	6	150	20	24	59	3.0	32	nd	2.1	1.8
328	Ghazipur	Birno	Block Office	H/P-IM-II	7.88	540	nil	317	21	0.36	BDL	6	240	40	34	30	2.4	29	nd	0.8	0.4
329	Ghazipur	Deokali	Block Office	H/P-IM-II	8.66	1120	108	500	14	5.05	BDL	10	90	20	10	260	1.0	18	nd	11.9	10.0
330	Ghazipur	Ghazipur	Block Office	H/P-IM-II	8.56	1680	60	207	341	0.36	8.6	61	360	20	75	220	3.8	26	nd	5.0	-1.8
331	Ghazipur	Jakhaniya	Block Office	H/P-IM-II	8.58	1030	84	476	21	4.05	BDL	8	100	8	19	230	BDL	19	nd	10.0	8.6
332	Ghazipur	Jamania	Block Office	H/P-IM-II	8.08	540	nil	317	28	0.51	BDL	BDL	190	28	29	53	2.3	32	nd	1.7	1.4
333	Ghazipur	Karanda	Block Office	H/P-IM-II	7.98	600	nil	342	28.4	0.79	BDL	12	190	28	29	70	2.5	31	nd	2.2	1.8
334	Ghazipur	Kasimabad	Block Office	H/P-IM-II	8.12	880	nil	512	50	1.45	BDL	15	180	20	32	145	1.5	24	nd	4.7	4.8
335	Ghazipur	Manihari	Block Office	H/P-IM-II	8.21	480	nil	281	28	0.23	5.3	7	180	20	32	44	2.9	31	nd	1.4	1.0
336	Ghazipur	Mardah	Block Office	H/P-IM-II	8.02	690	nil	342	43	0.45	BDL	47	240	28	41	72	3.9	29	nd	2.0	0.8
337	Ghazipur	Muhammadabad	Block Office	H/P-IM-II	7.98	945	nil	354	99	BDL	BDL	70	240	20	46	110	5.2	26	nd	3.1	1.0
338	Ghazipur	Reotipur	Block Office	H/P-IM-II	7.76	500	nil	207	43	BDL	BDL	33	220	48	24	15	3.5	23	nd	0.4	-1.0
339	Ghazipur	Sadat	Block Office	H/P-IM-II	8.05	720	nil	427	36	0.87	BDL	9	240	16	49	76	3.0	24	nd	2.1	2.2
340	Ghazipur	Saidpur	Block Office	H/P-IM-II	8.02	1510	nil	317	312	0.72	BDL	32	360	44	61	165	3.1	24	nd	3.8	-2.0
341	Gonda	Belsar	Block Office	H/P-IM-II	7.85	620	nil	403	21	0.50	BDL	BDL	290	52	39	27	4.9	39	nd	0.7	0.8
342	Gonda	Bhabhanjot	Block Office	H/P-IM-II	8.09	620	nil	378	21	0.20	BDL	BDL	300	56	41	21	3.6	36	nd	0.5	0.0
343	Gonda	Chhapiya	Block Office	H/P-IM-II	8.05	790	nil	354	85	0.20	BDL	24	290	68	36	68	4.3	37	nd	1.7	-0.6
344	Gonda	Colonelganj	Block Office	H/P-IM-II	7.72	1470	nil	537	178	2.30	BDL	70	420	64	61	150	11	27	nd	3.2	0.6
345	Gonda	Haldharmau	Block Office	H/P-IM-II	7.73	560	nil	342	21	0.90	BDL	BDL	270	52	27	20	5.5	26	nd	0.6	0.8
346	Gonda	Itiyathok	Block Office	H/P-IM-II	7.97	520	nil	336	14	BDL	BDL	BDL	230	60	24	24	3.2	33	nd	0.7	0.5
347	Gonda	Jhanjhari	Block Office	H/P-IM-II	7.95	710	nil	293	78	0.30	BDL	36	290	60	34	48	5.3	27	nd	1.2	-1.0

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
348	Gonda	Katra Bazar	Block Office	H/P-IM-II	7.92	640	nil	397	21	BDL	BDL	BDL	280	44	32	38	4.2	33	nd	1.1	1.7
349	Gonda	Mankapur	Block Office	H/P-IM-II	8.21	650	nil	390	28	BDL	BDL	BDL	280	64	41	34	3.5	36	nd	0.8	-0.2
350	Gonda	Mujehna	Block Office	H/P-IM-II	7.89	530	nil	317	28	BDL	BDL	BDL	220	40	15	34	3.6	34	nd	1.2	2.0
351	Gonda	Navab Ganj	Block Office	H/P-IM-II	8.11	580	nil	366	14	0.32	BDL	BDL	290	64	46	10	3.9	34	nd	0.2	-1.0
352	Gonda	Padri Kirpal	Block Office	H/P-IM-II	8.38	560	36	293	14	0.30	BDL	BDL	290	76	24	14	3.2	40	nd	0.4	0.2
353	Gonda	Paraspur	Block Office	H/P-IM-II	7.96	580	nil	354	14	BDL	BDL	8.8	250	56	27	35	4.7	41	nd	1.0	0.8
354	Gonda	Rupaideeh	Block Office	H/P-IM-II	7.88	470	nil	232	50	BDL	BDL	10	230	48	27	13	2.5	37	nd	0.4	-0.8
355	Gonda	Tarab Ganj	Block Office	H/P-IM-II	7.88	620	nil	342	14	BDL	BDL	40	295	72	28	24	6.8	33	nd	0.6	-0.3
356	Gonda	Wazir Ganj	Block Office	H/P-IM-II	8.19	400	nil	244	21	0.20	BDL	BDL	210	48	22	5	2.5	36	nd	0.2	-0.2
357	Gorakhpur	Belghat	Block Office	H/P-IM-II	8.01	421	nil	220	14	BDL	20	BDL	200	24	34	10	2.7	42	nd	0.3	-0.4
358	Gorakhpur	Golabazar	Block Office	H/P-IM-II	8.18	440	nil	232	7	0.42	BDL	19	210	52	19	6	2.0	41	nd	0.2	-0.4
359	Gorakhpur	Barhalganj	Block Office	H/P-IM-II	8.02	474	nil	244	21	0.34	BDL	15	210	28	34	19	4.8	40	nd	0.6	-0.2
360	Gorakhpur	Gagaha	Block Office	H/P-IM-II	7.95	321	nil	171	14	0.40	BDL	BDL	140	40	10	12	2.2	40	nd	0.4	0.0
361	Gorakhpur	Kauri Ram	Block Office	H/P-IM-II	8.21	390	nil	220	7	0.49	BDL	BDL	160	16	29	15	3.6	41	nd	0.5	0.4
362	Gorakhpur	Bansgaon	Block Office	H/P-IM-II	7.89	466	nil	207	28	BDL	BDL	25	200	36	26	19	3.4	39	nd	0.6	-0.5
363	Gorakhpur	Urwa Bazar	Block Office	H/P-IM-II	8.20	400	nil	244	14	BDL	BDL	6	160	8	31	30	4.3	41	nd	1.1	1.1
364	Gorakhpur	Khajni	Block Office	H/P-IM-II	8.19	495	nil	256	21	BDL	BDL	7	180	16	34	31	4.7	44	nd	1.0	0.6
365	Gorakhpur	Jungle Kauria	Block Office	H/P-IM-II	8.01	288	nil	146	14	BDL	BDL	BDL	110	28	10	17	2.2	42	nd	0.7	0.2
366	Gorakhpur	Compierganj	Block Office	H/P-IM-II	8.12	536	nil	268	35	BDL	BDL	BDL	210	16	41	29	5.0	30	nd	0.9	0.2
367	Gorakhpur	Bharohia	Block Office	H/P-IM-II	8.02	230	nil	85	21	BDL	BDL	14	100	28	7	9	2.6	47	nd	0.4	-0.6
368	Gorakhpur	Chargaon	Block Office	H/P-IM-II	7.78	367	nil	183	14	BDL	BDL	17	170	32	22	11	3.4	45	nd	0.4	-0.4
369	Gorakhpur	Bhathat	Block Office	H/P-IM-II	8.12	335	nil	159	21	0.20	BDL	6	150	40	12	8	2.8	40	nd	0.3	-0.4
370	Gorakhpur	Sahjanwa	Block Office	H/P-IM-II	7.98	295	nil	159	14	BDL	BDL	BDL	130	32	12	12	1.9	38	nd	0.5	0.0
371	Gorakhpur	Pali	Block Office	H/P-IM-II	8.13	328	nil	195	7	0.31	BDL	BDL	150	16	26	7	2.5	41	nd	0.3	0.3
372	Gorakhpur	Piprauli	Block Office	H/P-IM-II	7.87	620	nil	317	28	0.51	BDL	9	250	68	19	28	2.1	42	nd	0.8	0.2

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
373	Gorakhpur	Kharobar	Block Office	H/P-IM-II	7.90	388	nil	134	35	BDL	BDL	29	160	52	7	16	2.8	47	nd	0.6	-1.0
374	Gorakhpur	Bramhpur	Block Office	H/P-IM-II	8.90	285	nil	12	21	BDL	29	30	90	8	17	23	1.1	47	nd	1.1	-1.6
375	Gorakhpur	Sardar Nagar	Block Office	H/P-IM-II	7.99	328	nil	134	21	BDL	BDL	32	160	48	10	7	2.2	39	nd	0.2	-1.0
376	Gorakhpur	Pipraich	Block Office	H/P-IM-II	7.87	353	nil	195	7.1	BDL	BDL	BDL	140	40	10	17	3.7	41	nd	0.6	0.4
377	Hamirpur	Musakara	Block Office	H/P-IM-II	8.18	1334	nil	451	163	1.2	47	58	500	16	110	99	4.5	30	nd	1.9	-2.5
378	Hamirpur	Rath	Block Office	H/P-IM-II	7.87	2425	nil	305	503	0.45	49	181	370	48	60	385	1.8	32	nd	8.7	-2.3
379	Hamirpur	Gohand	Block Office	H/P-IM-II	7.75	635	nil	329	21	0.46	9	16	240	20	46	43	1.4	32	nd	1.2	0.6
380	Hamirpur	Sarila	Block Office	H/P-IM-II	7.58	1167	nil	256	220	1.59	BDL	44	390	44	67	84	1.3	23	nd	1.9	-3.5
381	Hamirpur	Maudaha	Block Office	H/P-IM-II	8.11	3768	nil	573	851	0.23	49	203	480	24	101	680	1.4	24	nd	13.6	-0.1
382	Hamirpur	Sumerpur	Block Office	H/P-IM-II	8.20	768	nil	342	64	0.55	14	27	170	12	34	113	1.5	28	nd	3.8	2.2
383	Hamirpur	Kurara	Block Office	H/P-IM-II	7.80	603	nil	342	21	BDL	6	17	190	24	31	71	1.8	24	nd	2.3	1.9
384	Hardoi	Bilgram	Block Office	H/P-IM-II	7.97	464	nil	256	14	0.80	BDL	8	170	30	23	34	5.8	31	0.25	1.1	0.8
385	Hardoi	Bavan	Block Office	H/P-IM-II	8.09	366	nil	207	7.1	0.44	BDL	20	180	48	14	6	2.6	26	0.25	0.2	-0.2
386	Hardoi	Behdar Khurd	Block Office	H/P-IM-II	8.37	676	nil	305	14	0.29	BDL	42	170	12	34	73	4.1	27	nd	2.4	1.6
387	Hardoi	Bharawan	Block Office	H/P-IM-II	7.87	484	nil	268	21	0.71	BDL	8	200	32	29	27	4.2	29	0.21	0.8	0.4
388	Hardoi	Bharkhani	Block Office	H/P-IM-II	7.73	525	nil	244	21	0.15	BDL	38	185	36	23	42	4.6	32	0.24	1.4	0.3
389	Hardoi	Harpalpur	Block Office	H/P-IM-II	7.98	1525	nil	317	114	0.39	BDL	367	180	28	26	304	3.9	25	nd	9.9	1.6
390	Hardoi	Hariyawan	Block Office	H/P-IM-II	7.69	783	nil	293	64	0.17	21	28	290	42	44	48	5.2	32	0.36	1.2	-1.0
391	Hardoi	Kachhauna	Block Office	H/P-IM-II	7.74	410	nil	244	7.1	0.16	5.5	BDL	170	40	17	16	6.0	29	0.40	0.5	0.6
392	Hardoi	Kothawan	Block Office	H/P-IM-II	8.06	389	nil	183	21	1.27	BDL	26	175	44	16	8	4.0	23	0.39	0.2	-0.5
393	Hardoi	Mallawan	Block Office	H/P-IM-II	8.18	653	nil	244	64	0.51	7.3	37	215	24	37	60	5.8	31	0.21	1.8	-0.3
394	Hardoi	Adhavganj	Block Office	H/P-IM-II	8.07	416	nil	244	14	0.67	BDL	6	155	28	20	34	4.1	24	0.24	1.2	0.9
395	Hardoi	Pihani	Block Office	H/P-IM-II	7.72	1042	nil	354	114	0.29	33	67	360	40	62	93	8.7	27	0.47	2.1	-1.3
396	Hardoi	Shahabad	Block Office	H/P-IM-II	8.06	463	nil	232	14	0.16	BDL	15	175	48	13	28	3.4	24	0.44	0.9	0.3
397	Hardoi	Sursa	Block Office	H/P-IM-II	7.94	428	nil	244	14	0.32	BDL	BDL	160	20	26	32	5.4	30	1.08	1.1	0.8

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
398	Hardoi	Sandi	Block Office	H/P-IM-II	7.96	570	nil	214	50	0.21	23	7	170	24	26	49	9.2	17	nd	1.6	0.1
399	Hardoi	Sandila	Block Office	H/P-IM-II	7.78	465	nil	256	14	0.67	BDL	BDL	170	28	24	32	4.2	300	0.22	1.1	0.8
400	Hardoi	Tadiyawan	Block Office	H/P-IM-II	7.69	548	nil	256	28	0.52	BDL	26	200	40	24	39	4.3	27	0.23	1.2	0.2
401	Hardoi	Todarpur	Block Office	H/P-IM-II	7.61	642	nil	256	64	0.41	BDL	20	240	44	31	41	6.2	29	0.27	1.2	-0.6
402	Hardoi	Ahrori	Block Office	H/P-IM-II	7.75	477	nil	256	14	0.48	BDL	17	210	40	26	19	5.0	30	0.20	0.6	0.0
403	Hathras	Mursan	Block Office	H/P-IM-II	7.80	2605	nil	537	248	1.50	25	370	800	300	12	250	3.5	27	nd	3.8	-7.2
404	Hathras	Sahpau	Block Office	H/P-IM-II	8.40	2352	60	244	284	0.50	53	425	800	80	144	160	2.0	30	nd	2.5	-9.8
405	Hathras	Sadabad	Block Office	H/P-IM-II	8.20	2500	nil	647	284	1.80	10	321	650	80	108	290	4.0	29	nd	5.0	-2.3
406	Hathras	Hathras	Block Office	H/P-IM-II	8.26	1414	nil	610	99	1.30	70	22	330	36	58	140	70	30	nd	3.4	3.4
407	Hathras	Hasayan	Block Office	H/P-IM-II	8.20	1116	nil	244	121	0.50	BDL	161	290	68	58	120	2.2	29	nd	2.6	-4.2
408	Hathras	Sikandra Rao	Block Office	H/P-IM-II	8.09	500	nil	232	14	1.00	BDL	70	190	36	24	43	5.0	24	nd	1.4	0.0
409	Hathras	Sasni	Block Office	H/P-IM-II	8.21	1830	nil	793	128	1.20	BDL	51	230	28	38	300	7.0	24	nd	8.7	8.5
410	J P Nagar	Amroha	Block Office	H/P-IM-II	7.29	928	nil	250	128	BDL	19	50	290	56	36	84	6.4	30	nd	2.2	-1.7
411	J P Nagar	Dhanaura	Block Office	H/P-IM-II	7.72	646	nil	146	107	0.12	BDL	43	275	82	17	24	5.6	24	nd	0.6	-3.1
412	J P Nagar	Gajraula	Block Office	H/P-IM-II	7.48	893	nil	134	99	BDL	25	177	300	52	41	78	7.3	27	nd	2.0	-3.8
413	J P Nagar	Gangeshwari	Block Office	H/P-IM-II	7.52	481	nil	293	7.1	0.25	BDL	BDL	110	28	10	68	3.8	24	nd	2.8	2.6
414	J P Nagar	Hasanpur	Block Office	H/P-IM-II	7.37	632	nil	171	57	0.11	71	33	225	46	26	47	4.5	31	nd	1.4	-1.7
415	J P Nagar	Joya	Block Office	H/P-IM-II	7.45	1056	nil	220	99	0.20	82	164	290	52	38	95	43	23	nd	2.4	-2.2
416	Jalaun	Dakore	Block Office	H/P-IM-II	8.16	1410	nil	345	227	0.64	77	37	580	53	108	58	0.9	11	nd	1.1	-5.8
417	Jalaun	Jalaun	Block Office	H/P-IM-II	8.27	617	nil	312	21	0.68	22	3	175	19	30	61	1.1	11	nd	2.0	1.7
418	Jalaun	Madho Garh	Block Office	H/P-IM-II	8.39	991	nil	375	28	0.71	7	12	281	50	37	98	1.7	8	nd	2.6	0.6
419	Jalaun	Rampura	Block Office	H/P-IM-II	8.05	868	nil	305	64	0.22	97	18	240	67	18	89	2.1	12	nd	2.5	0.2
420	Jalaun	Kuthond	Block Office	H/P-IM-II	8.10	714	nil	334	35	0.27	31	7	183	48	15	79	3.1	12	nd	2.5	1.8
421	Jalaun	Konch	Block Office	H/P-IM-II	8.03	733	nil	262	85	0.22	17	18	292	67	30	34	1.8	14	nd	0.9	-1.5
422	Jalaun	Nadigaon	Block Office	H/P-IM-II	8.30	916	nil	453	46	0.33	14	10	210	67	10	115	1.9	14	nd	3.5	3.2

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
423	Jalaun	Mahewa	Block Office	H/P-IM-II	8.14	697	nil	355	35	0.53	6	2	103	38	2	112	1.9	10	nd	4.8	3.8
424	Jalaun	Kadaura	Block Office	H/P-IM-II	8.07	735	nil	320	64	0.23	BDL	14	255	67	21	51	1.9	13	nd	1.4	0.2
425	Jaunpur	Badlapur	Block Office	H/P-IM-II	8.50	784	36	342	14	0.27	BDL	46	235	12	49	87	3.5	30	nd	2.5	2.2
426	Jaunpur	Buxa	Block Office	H/P-IM-II	8.02	516	nil	281	21	0.37	5.3	9	230	24	41	20	2.9	35	nd	0.6	0.0
427	Jaunpur	M. Badshahpur	Block Office	H/P-IM-II	7.98	685	nil	415	7.1	0.77	BDL	BDL	205	16	40	76	3.5	30	nd	2.3	2.7
428	Jaunpur	Machhali Shahar	Block Office	H/P-IM-II	8.38	1319	60	427	71	1.44	BDL	154	140	12	26	279	1.8	23	nd	10.3	6.2
429	Jaunpur	Maharajanj	Block Office	H/P-IM-II	8.14	545	nil	317	14	0.45	BDL	5	230	16	46	32	4.3	37	nd	0.9	0.7
430	Jaunpur	Sikrara	Block Office	H/P-IM-II	8.09	858	nil	512	14	0.34	BDL	13	320	16	67	74	2.0	33	nd	1.8	2.1
431	Jaunpur	Sujananj	Block Office	H/P-IM-II	8.21	673	nil	415	14	0.29	BDL	BDL	220	12	46	66	4.2	29	nd	1.9	2.5
432	Jaunpur	Jaunpur	Block Office	H/P-IM-II	8.12	1724	nil	388	284	0.18	62	65	509	67	82	160	4.7	27	nd	3.1	-3.7
433	Jaunpur	Barsathi	Block Office	H/P-IM-II	7.56	570	nil	284	28	0.67	6	6	170	48	12	51	3.5	27	nd	1.7	1.3
434	Jaunpur	Dharmapur	Block Office	H/P-IM-II	7.77	578	nil	292	28	0.58	BDL	7	188	52	14	43	5.9	26	nd	1.4	1.0
435	Jaunpur	Dobhi	Block Office	H/P-IM-II	7.99	565	nil	305	21	0.31	BDL	4	143	43	9	62	3.9	27	nd	2.3	2.1
436	Jaunpur	Jalapur	Block Office	H/P-IM-II	8.00	482	nil	264	7	0.20	8	8	150	28	19	40	3.1	29	nd	1.4	1.3
437	Jaunpur	Karanja Kalan	Block Office	H/P-IM-II	8.02	782	nil	382	28	1.04	BDL	34	139	33	13	115	1.7	19	nd	4.3	3.5
438	Jaunpur	Kerakat	Block Office	H/P-IM-II	8.12	531	nil	276	21	0.63	6	3	180	52	12	38	2.9	32	nd	1.2	0.9
439	Jaunpur	Khutahan	Block Office	H/P-IM-II	7.90	631	nil	329	21	0.49	8	7	180	33	23	59	5.7	30	nd	1.9	1.8
440	Jaunpur	Madiyahun	Block Office	H/P-IM-II	7.65	708	nil	317	50	0.80	5	18	201	52	17	68	4.3	20	nd	2.1	1.2
441	Jaunpur	Muftiganj	Block Office	H/P-IM-II	7.75	675	nil	365	21	0.54	BDL	7	182	33	24	70	2.7	25	nd	2.3	2.4
442	Jaunpur	Ramnagar	Block Office	H/P-IM-II	7.85	747	nil	401	28	0.47	BDL	4	169	33	21	91	5.6	30	nd	3.1	3.2
443	Jaunpur	Rampur	Block Office	H/P-IM-II	8.20	1050	nil	595	21	1.40	BDL	4	130	28	14	180	3.0	21	nd	6.9	7.2
444	Jaunpur	Shahganj	Block Office	H/P-IM-II	8.10	555	nil	248	43	0.38	BDL	12	133	19	21	63	6.1	28	nd	2.4	1.4
445	Jaunpur	Sirkoni	Block Office	H/P-IM-II	8.00	872	nil	305	85	1.36	BDL	60	270	53	33	76	1.2	24	nd	2.0	-0.4
446	Jaunpur	Suitha Kalan	Block Office	H/P-IM-II	7.66	461	nil	255	7	0.52	BDL	10	140	33	14	39	4.5	27	nd	1.4	1.4
447	Jhansi	Mauranipur	Block Office	H/P-IM-II	7.64	753	nil	179	78	0.40	100	37	300	100	12	35	1.0	17	nd	0.9	-3.1

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
448	Jhansi	Bangra	Block Office	H/P-IM-II	7.96	1078	nil	345	106	0.69	26	80	300	72	29	110	1.5	13	nd	2.8	-0.3
449	Jhansi	Baragaon	Block Office	H/P-IM-II	7.75	912	nil	195	142	0.28	63	43	370	129	11	41	0.6	16	nd	0.9	-4.2
450	Jhansi	Chirgaon	Block Office	H/P-IM-II	8.14	812	nil	284	71	0.35	31	46	321	120	5	34	10	28	nd	0.8	-1.8
451	Jhansi	Month	Block Office	H/P-IM-II	8.28	667	nil	336	28	0.83	6	14	115	38	5	100	1.7	8	nd	4.1	3.2
452	Jhansi	Bampur	Block Office	H/P-IM-II	7.99	3117	nil	342	603	0.43	246	223	690	101	105	400	3.9	16	nd	6.6	-8.1
453	Jhansi	Gursarai	Block Office	H/P-IM-II	7.96	565	nil	268	28	0.44	18	6	205	43	23	36	0.7	14	nd	1.1	0.3
454	Jhansi	Babina	Block Office	H/P-IM-II	8.1	1240	nil	368	156	0.17	36	66	200	53	16	192	3.3	12	nd	5.9	2.1
455	Kannauj	Chhibramau	Block Office	H/P-IM-II	7.64	560	nil	275	28	0.77	BDL	9	125	20	18	74	4.0	24	nd	2.9	2.0
456	Kannauj	Gugrapur	Inside Jal Nigam Campus	H/P-IM-II	7.52	795	nil	317	43	0.65	82	15	200	36	26	101	3.9	34	nd	3.1	1.2
457	Kannauj	Haseran	Block Office	H/P-IM-II	7.90	295	nil	159	7.1	1.35	BDL	12	125	36	8	14	3.0	23	nd	0.6	0.1
458	Kannauj	Jalalabad	Block Office	H/P-IM-II	7.66	590	nil	342	14	0.41	BDL	8	180	24	29	63	5.0	29	nd	2.1	2.0
459	Kannauj	Kannauj	Block Office	H/P-IM-II	7.55	798	nil	329	71	0.43	BDL	28	145	20	23	125	4.4	29	nd	4.5	2.5
460	Kannauj	Saurikh	Block Office	H/P-IM-II	7.82	393	nil	183	14	0.42	BDL	16	125	22	17	28	10	25	nd	1.1	0.5
461	Kannauj	Talgram	Inside Plice Chowki	H/P-IM-II	7.58	447	nil	268	7.1	0.79	BDL	BDL	130	36	10	48	4.6	29	nd	1.8	1.8
462	Kannauj	Umarda	Inside Block office, Tirwagan	H/P-IM-II	8.03	498	nil	195	43	0.38	BDL	23	140	16	24	51	6.1	30	nd	1.9	0.4
463	Kanpur Dehat	Akberpur	Block Office	H/P-IM-II	8.38	765	nil	415	21	0.32	11	13	300	74	28	50	4.0	34	nd	1.3	0.8
464	Kanpur Dehat	Amraudha	Block Office	H/P-IM-II	8.09	683	nil	390	14	0.24	BDL	11	310	58	40	26	4.7	32	nd	0.6	0.2
465	Kanpur Dehat	Derapur	Block Office	H/P-IM-II	8.15	1547	nil	512	99	0.35	88	193	400	52	65	208	4.9	33	nd	4.5	0.5
466	Kanpur Dehat	Jhinhak	Block Office	H/P-IM-II	8.24	737	nil	397	14	0.57	BDL	11	235	64	18	63	3.6	30	nd	1.8	1.8
467	Kanpur Dehat	Maitha	Block Office	H/P-IM-II	8.13	767	nil	378	36	0.48	BDL	26	240	50	28	70	21	27	nd	2.0	1.4
468	Kanpur Dehat	Malasa	Block Office	H/P-IM-II	8.10	826	nil	427	36	0.41	BDL	16	250	40	36	81	3.4	26	nd	2.2	2.0
469	Kanpur Dehat	Rajpur	Block Office	H/P-IM-II	8.55	651	24	256	36	0.38	16	13	230	20	43	49	5.7	31	nd	1.4	0.4
470	Kanpur Dehat	Rasoolabad	Block Office	H/P-IM-II	8.74	721	48	256	43	0.62	17	13	270	16	55	54	6.9	30	nd	1.4	0.5
471	Kanpur Dehat	Sandalpur	Block Office	H/P-IM-II	8.12	1292	nil	488	121	0.27	92	33	550	56	98	64	3.0	37	nd	1.2	-2.9

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
472	Kanpur Dehat	Sarvan Khera	Block Office	H/P-IM-II	8.20	470	nil	262	7.1	1.07	BDL	14	190	56	12	28	2.7	29	nd	0.9	0.5
473	Kanpur Nagar	Bhitar Gaon	Block Office	H/P-IM-II	8.41	757	24	415	14	0.94	BDL	BDL	190	36	24	108	1.6	24	nd	3.4	3.8
474	Kanpur Nagar	Bidhnoo	Block Office	H/P-IM-II	8.62	852	24	244	85	0.48	33	34	340	16	72	46	6.7	29	nd	1.1	-1.9
475	Kanpur Nagar	Bilhaur	Block Office	H/P-IM-II	8.08	599	nil	329	7.1	0.63	5.2	10	210	74	6	44	4.8	33	nd	1.3	1.2
476	Kanpur Nagar	Chaubepur	Block Office	H/P-IM-II	8.33	741	12	403	14	0.61	BDL	8	225	42	29	78	6.1	31	nd	2.3	2.5
477	Kanpur Nagar	Ghatampur	Block Office	H/P-IM-II	8.35	688	24	305	14	0.46	10	30	275	56	32	41	3.9	33	nd	1.1	0.3
478	Kanpur Nagar	Kakwan	Block Office	H/P-IM-II	8.39	642	24	281	14	1.87	BDL	25	195	50	17	62	5.9	26	nd	1.9	1.5
479	Kanpur Nagar	Kalyanpur	Block Office	H/P-IM-II	8.75	787	24	268	43	0.54	33	25	200	24	34	88	6.3	27	nd	2.7	1.2
480	Kanpur Nagar	Patara	Block Office	H/P-IM-II	8.15	929	nil	390	57	0.64	47	24	330	56	46	71	4.7	32	nd	1.7	-0.1
481	Kanpur Nagar	Sarsaul	Block Office	H/P-IM-II	8.44	819	24	415	21	1.04	9.3	12	235	36	35	100	3.0	25	nd	2.9	2.9
482	Kanpur Nagar	Shivrajpur	Block Office	H/P-IM-II	7.88	2352	nil	195	511	0.37	60	152	980	208	110	64	26	21	nd	0.9	-16.3
483	Kashiramnagar(Kasganj)	Amanpur	Block Office	H/P-IM-II	7.93	559	nil	122	78	0.44	BDL	54	220	48	24	22	5.9	25	nd	0.6	-2.4
484	Kashiramnagar(Kasganj)	Ganj Dundwara	Block Office	H/P-IM-II	8.03	400	nil	183	14	0.32	BDL	24	160	28	22	17	5.9	15	nd	0.6	-0.2
485	Kashiramnagar(Kasganj)	Kasganj	Block Office	H/P-IM-II	7.87	527	nil	207	28	1.28	41	22	220	52	22	23	4.5	23	nd	0.7	-1.0
486	Kashiramnagar(Kasganj)	Patiyali	Block Office	H/P-IM-II	7.72	753	nil	171	85	1.45	46	53	280	72	24	36	7.0	25	nd	0.9	-2.8
487	Kashiramnagar(Kasganj)	Sahawar	Block Office	H/P-IM-II	8.21	463	nil	207	14	0.41	BDL	22	180	56	10	17	5.4	25	nd	0.5	-0.2
488	Kashiramnagar(Kasganj)	Sidhpura	Block Office	H/P-IM-II	8.26	897	nil	232	142	1.07	BDL	48	220	28	36	95	20	22	nd	2.8	-0.6
489	Kashiramnagar(Kasganj)	Soron	Block Office	H/P-IM-II	8.23	601	nil	159	78	0.37	41	40	250	48	31	33	5.7	26	nd	0.9	-2.3
490	Kaushambi	Chail	Block Office	H/P-IM-II	7.83	496	nil	220	43	0.32	BDL	11	190	30	28	33	3.4	29	nd	1.0	-0.2
491	Kaushambi	Kara	Block Office	H/P-IM-II	7.91	798	nil	256	57	0.52	100	22	290	44	43	52	3.9	35	nd	1.3	-1.6
492	Kaushambi	Kaushambi	Block Office	H/P-IM-II	8.19	720	nil	390	28	0.52	8.8	7	225	20	42	77	3.1	37	nd	2.3	1.9
493	Kaushambi	Manjhanpur	Block Office	H/P-IM-II	8.40	636	36	268	28	0.66	7.3	9	190	16	36	72	4.6	33	nd	2.3	1.8
494	Kaushambi	Mooratganj	Block Office	H/P-IM-II	8.17	614	nil	317	21	0.85	15	9	210	24	36	55	1.7	33	nd	1.6	1.0
495	Kaushambi	Newada	Block Office	H/P-IM-II	7.93	536	nil	305	14	0.47	8.0	7	195	30	29	47	3.8	37	nd	1.5	1.1
496	Kaushambi	Sarsawan	Block Office	H/P-IM-II	8.01	625	nil	305	36	0.62	5.0	14	225	24	40	49	4.8	37	nd	1.4	0.5

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
497	Kaushambi	Sirathu	Block Office	H/P-IM-II	8.07	711	nil	256	78	0.62	30	8	255	24	47	53	2.1	36	nd	1.5	-0.8
498	Kushinagar	Dudhai	Block Office	H/P-IM-II	7.50	446	nil	244	28	0.10	BDL	BDL	220	44	26	7	8.3	34	0.31	0.2	-0.4
499	Kushinagar	Fazil Nagar	Block Office	H/P-IM-II	7.38	410	nil	146	57	BDL	BDL	9	180	56	10	11	2.8	33	0.45	0.3	-1.2
500	Kushinagar	Hata	Block Office	H/P-IM-II	7.90	320	nil	183	14	0.19	BDL	9	150	52	5	11	2.6	34	0.41	0.4	0.0
501	Kushinagar	Kaptan Ganj	Block Office	H/P-IM-II	7.38	398	nil	195	14	BDL	BDL	26	190	44	19	8	10	22	0.24	0.2	-0.6
502	Kushinagar	Kasiya	Block Office	H/P-IM-II	7.42	872	nil	378	64	BDL	BDL	69	370	52	58	45	26	25	0.24	1.0	-1.1
503	Kushinagar	Khadda	Block Office	H/P-IM-II	7.40	799	nil	122	121	BDL	BDL	126	345	72	40	34	6.1	35	0.31	0.8	-4.9
504	Kushinagar	Motichak	Block Office	H/P-IM-II	7.45	386	nil	220	14	0.31	BDL	15	190	40	22	8	4.6	28	0.32	0.2	-0.2
505	Kushinagar	Nebuwa Nauranga	Block Office	H/P-IM-II	7.84	499	nil	281	14	0.12	BDL	23	260	64	24	6	6.6	23	0.24	0.2	-0.6
506	Kushinagar	Padrauna	Block Office	H/P-IM-II	7.45	502	nil	146	71	0.52	BDL	27	210	56	17	21	4.7	32	0.28	0.6	-1.8
507	Kushinagar	Ramkola	Block Office	H/P-IM-II	8.00	326	nil	195	14	0.28	BDL	BDL	150	12	29	16	4.1	27	0.34	0.6	0.2
508	Kushinagar	Sewarhi	Block Office	H/P-IM-II	7.37	478	nil	256	21	BDL	BDL	10	230	56	22	10	8.5	26	0.26	0.3	-0.4
509	Lakhimpur Khiri	Bankeyganj	Block Office	H/P-IM-II	7.69	543	nil	195	36	0.22	6.7	60	200	44	22	33	8.3	24	nd	1.0	-0.8
510	Lakhimpur Khiri	Behjam	Block Office	H/P-IM-II	7.81	680	nil	329	43	0.36	BDL	22	230	28	38	59	6.7	32	nd	1.7	0.8
511	Lakhimpur Khiri	Bijua	Block Office	H/P-IM-II	8.50	165	nil	73	14	0.17	BDL	BDL	65	16	6	8	3.7	26	nd	0.4	-0.1
512	Lakhimpur Khiri	Dhaurahra	Block Office	H/P-IM-II	7.67	452	nil	275	14	BDL	BDL	BDL	210	44	24	9	4.6	31	nd	0.3	0.3
513	Lakhimpur Khiri	Gola	Block Office	H/P-IM-II	7.69	340	nil	195	7.1	0.27	BDL	BDL	165	32	20	7	3.1	27	nd	0.2	-0.1
514	Lakhimpur Khiri	Ishanagasr	Block Office	H/P-IM-II	7.65	432	nil	256	7.1	0.10	BDL	BDL	205	44	23	9	6.3	29	nd	0.3	0.1
515	Lakhimpur Khiri	Khiri	Block Office	H/P-IM-II	7.63	354	nil	183	21	0.10	BDL	12	160	32	19	7	5.2	22	nd	0.2	-0.2
516	Lakhimpur Khiri	Mohammadi	Block Office	H/P-IM-II	7.87	481	nil	256	21	0.38	BDL	6	195	16	37	29	5.4	32	nd	0.9	0.3
517	Lakhimpur Khiri	Mitauli	Block Office	H/P-IM-II	7.71	556	nil	293	28	0.51	BDL	22	190	28	29	57	5.2	32	nd	1.8	1.0
518	Lakhimpur Khiri	Nakaha	Block Office	H/P-IM-II	7.55	692	nil	268	50	0.13	BDL	61	285	52	37	39	6.0	28	0.25 6	1.0	-1.3
519	Lakhimpur Khiri	Nighasan	Block Office	H/P-IM-II	7.96	549	nil	305	14	0.12	BDL	BDL	235	64	18	7	5.7	21	0.24 6	0.2	0.3
520	Lakhimpur Khiri	Pasgawan	Block Office	H/P-IM-II	8.05	339	nil	195	7.1	0.27	BDL	20	170	42	16	4	2.3	25	nd	0.1	-0.2
521	Lakhimpur Khiri	Palia Kalan	Block Office	H/P-IM-II	8.00	566	nil	305	21	0.12	BDL	17	250	40	36	19	6.4	26	nd	0.5	0.0

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
522	Lakhimpur Khiri	Phoolbehar	Block Office	H/P-IM-II	8.25	452	nil	238	14	0.22	BDL	BDL	100	18	13	59	3.4	27	nd	2.6	1.9
523	Lakhimpur Khiri	Ramaiyabehar	Block Office	H/P-IM-II	7.95	382	nil	220	14	0.14	BDL	BDL	165	28	23	15	5.2	28	nd	0.5	0.3
524	Lalitpur	Talbehat	Block Office	H/P-IM-II	7.69	702	nil	165	71	0.19	57	67	277	96	9	34	0.7	19	nd	0.9	-2.8
525	Lalitpur	Jakhaura	Block Office	H/P-IM-II	8.35	762	nil	273	21	0.46	23	15	225	48	25	70	4.3	13	nd	2.0	0.0
526	Lalitpur	Bar	Block Office	H/P-IM-II	7.99	1017	nil	251	142	0.82	53	56	290	77	24	100	0.6	18	nd	2.6	-1.7
527	Lalitpur	Madaora	Opp Arihan Fasion Store	H/P-IM-II	8.08	1112	nil	349	113	0.74	66	54	255	58	27	140	0.8	20	nd	3.8	0.6
528	Lalitpur	Mehrauni	Tehsil Campus	H/P-IM-II	7.76	1422	nil	278	241	0.51	105	55	340	101	21	170	2.0	16	nd	4.0	-2.2
529	Lalitpur	Birdha	Block Office	H/P-IM-II	8.06	911	nil	254	149	1.4	BDL	32	290	91	15	76	0.8	9	nd	1.9	-1.6
530	Lucknow	Bakshi Ka Talab	Block Office	H/P-IM-II	8.08	550	nil	317	28	0.71	BDL	13	200	32	29	45	6.0	34	nd	1.4	1.2
531	Lucknow	Chinhat	Block Office	H/P-IM-II	7.92	900	nil	207	78	BDL	60	130	380	44	66	40	5.2	34	nd	0.9	-4.2
532	Lucknow	Gosaiganj	Block Office	H/P-IM-II	7.95	470	nil	256	14.2	0.38	BDL	30	240	36	36	13	2.6	33	nd	0.4	-0.6
533	Lucknow	Kakori	Block Office	H/P-IM-II	8.03	640	nil	305	57	0.74	18	18	290	44	44	35	4.2	33	nd	0.9	-0.8
534	Lucknow	Mal	Block Office	H/P-IM-II	7.85	570	nil	354	14	0.46	BDL	11	280	44	41	22	5.0	37	nd	0.6	0.2
535	Lucknow	Malihabad	Block Office	H/P-IM-II	8.18	500	nil	281	14	0.64	BDL	25	210	28	34	28	6.4	29	nd	0.8	0.4
536	Lucknow	Mohanlalganj	Block Office	H/P-IM-II	7.93	520	nil	281	43	0.32	BDL	13	220	40	29	32	5.0	37	nd	0.9	0.2
537	Lucknow	Sarojini Nagar	Block Office	H/P-IM-II	8.04	640	nil	378	21	0.33	5	12	220	36	32	63	5.1	35	nd	1.8	1.8
538	Maharajganj	Pharinda	Block Office	H/P-IM-II	7.93	338	nil	171	14	0.31	BDL	12	140	32	14	17	2.3	38	nd	0.6	0.1
539	Maharajganj	Dhani	Block Office	H/P-IM-II	8.09	352	nil	183	14	0.40	BDL	5	160	24	24	8	2.6	39	nd	0.3	-0.2
540	Maharajganj	Laxmipur	Block Office	H/P-IM-II	7.94	380	nil	220	7.1	0.72	BDL	BDL	160	32	19	16	1.7	40	nd	0.6	0.4
541	Maharajganj	Brijmanganj	Block Office	H/P-IM-II	7.87	460	nil	207	35	0.24	BDL	9	160	36	17	33	3.9	46	nd	1.1	0.2
542	Maharajganj	Nautanwa	Block Office	H/P-IM-II	8.04	388	nil	256	7.1	BDL	BDL	6	180	20	31	24	2.0	40	nd	0.8	0.6
543	Maharajganj	Partawal	Block Office	H/P-IM-II	7.95	290	nil	122	21	BDL	BDL	18	130	36	10	11	2.6	36	nd	0.4	-0.6
544	Maharajganj	Paniyara	Block Office	H/P-IM-II	7.96	341	nil	183	14	0.43	BDL	BDL	130	28	14	19	4.3	38	nd	0.7	0.4
545	Maharajganj	Ghughuli	Block Office	H/P-IM-II	8.03	500	nil	110	85	BDL	BDL	28	180	36	22	29	4.8	30	nd	0.9	-1.8
546	Maharajganj	Maharajganj	Block Office	H/P-IM-II	8.01	425	nil	134	57	BDL	BDL	13	170	36	19	17	3.9	36	nd	0.6	-1.2

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
547	Maharajganj	Nichlaul	Block Office	H/P-IM-II	8.13	421	nil	204	23	0.39	BDL	13	190	32	26	12	10	30	nd	0.4	-0.4
548	Maharajganj	Siswa	Block Office	H/P-IM-II	7.93	306	nil	171	7.1	BDL	BDL	BDL	130	36	10	11	3.9	37	nd	0.4	0.2
549	Mahoba	Kabrai	Block Office	H/P-IM-II	7.74	1007	nil	195	170	0.87	49	73	410	72	55	60	BDL	57	nd	1.3	-4.9
550	Mahoba	Jaitpur	Block Office	H/P-IM-II	7.78	979	nil	220	170	0.5	2	60	250	48	31	112	1.6	38	nd	3.1	-1.3
551	Mahoba	Panwari	Block Office	H/P-IM-II	7.93	649	nil	317	28	0.27	5	22	160	24	24	81	1.3	28	nd	2.8	2.0
552	Mahoba	Charkhari	Block Office	H/P-IM-II	7.97	1100	nil	329	170	0.68	BDL	34	340	32	62	100	0.6	32	nd	2.4	-1.3
553	Mainpuri	Barnahal	Block Office	H/P-IM-II	8.02	1302	nil	220	277	0.39	38	35	460	84	60	77	8.1	25	nd	1.6	-5.5
554	Mainpuri	Bewar	Block Office	H/P-IM-II	8.25	400	nil	195	14	0.34	BDL	16	150	44	10	23	4.4	25	nd	0.8	0.2
555	Mainpuri	Ghirore	Block Office	H/P-IM-II	8.20	400	nil	207	14	0.48	BDL	21	130	48	2	37	5.1	22	nd	1.4	0.8
556	Mainpuri	Jageer	Block Office	H/P-IM-II	8.21	397	nil	195	14	1.68	BDL	21	180	48	14	13	4.1	22	nd	0.4	-0.4
557	Mainpuri	Karhal	Block Office	H/P-IM-II	8.27	798	nil	342	50	0.48	30	47	170	24	26	118	7.0	23	nd	4.0	2.3
558	Mainpuri	Kishni	Block Office	H/P-IM-II	8.19	1499	nil	549	92	0.40	8.3	124	210	24	36	235	8.2	19	nd	7.1	4.8
559	Mainpuri	Kurawali	Block Office	H/P-IM-II	8.22	1245	nil	46	78	0.61	BDL	101	200	20	36	185	7.9	21	nd	5.7	-3.2
560	Mainpuri	Mainpuri	Block Office	H/P-IM-II	8.15	700	nil	281	35	0.49	BDL	34	200	28	31	57	5.7	20	nd	1.8	0.7
561	Mainpuri	Sultanganj	Block Office	H/P-IM-II	8.11	497	nil	256	21	0.48	BDL	14	150	36	14	49	7.6	24	nd	1.8	1.2
562	Mathura	Chaumuhan	Block Office	H/P-IM-II	7.86	3800	nil	610	780	1.50	BDL	230	1250	60	264	280	4.0	25	nd	3.5	-14.7
563	Mathura	Chhata	Block Office	H/P-IM-II	8.20	4400	nil	683	496	2.00	10	930	1200	120	216	500	5.0	23	nd	6.3	-12.6
564	Mathura	Nandgaon	Block Office	H/P-IM-II	7.82	21410	nil	305	5602	2.80	BDL	2240	7550	840	1308	1340	29	28	nd	6.7	-144.6
565	Mathura	Goverdhan	Block Office	H/P-IM-II	8.53	8038	40	537	1631	0.70	10	1160	1800	200	312	960	76	30	nd	9.9	-25.5
566	Mathura	Raya	Block Office	H/P-IM-II	8.36	5085	24	512	1205	0.70	70	341	1500	180	252	500	5.0	25	nd	5.6	-20.5
567	Mathura	Mathura	Block Office	H/P-IM-II	7.99	5282	nil	329	106	0.60	40	760	1500	180	252	520	4.0	31	nd	5.9	-24.3
568	Mathura	Nohjhil	Block Office	H/P-IM-II	8.07	4700	nil	281	1347	0.65	BDL	273	1550	280	204	360	68	20	nd	4.0	-26.2
569	Mathura	Mat	Block Office	H/P-IM-II	8.04	2400	nil	549	851	0.70	10	140	950	80	180	400	5.0	29	nd	5.7	-9.8
570	Mathura	Baldeo	Block Office	H/P-IM-II	8.55	992	72	256	14	5.9	8.0	102	400	80	48	30	5.0	21	nd	0.7	-1.4
571	Mathura	Farah	Block Office	H/P-IM-II	8.20	14550	nil	195	4148	0.50	19	1570	5500	560	982	1000	13	25	nd	5.9	-105.6

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
572	Maunath Bhanjan	Badraon	Block Office	H/P-IM-II	8.46	500	36	244	21	0.32	BDL	BDL	200	24	34	37	2.6	28	nd	1.1	1.2
573	Maunath Bhanjan	Dohari Ghat	Block Office	H/P-IM-II	8.02	450	nil	281	14	0.34	BDL	7	200	36	27	25	4.4	32	nd	0.8	0.6
574	Maunath Bhanjan	Fatehpur Madaon	Block Office	H/P-IM-II	7.96	445	nil	244	28	0.23	BDL	17	190	40	22	25	5.4	30	nd	0.8	0.2
575	Maunath Bhanjan	Ghosi	Block Office	H/P-IM-II	8.14	630	nil	329	43	0.69	BDL	27	230	28	39	60	3.6	25	nd	1.7	0.8
576	Maunath Bhanjan	Kopaganj	Block Office	H/P-IM-II	7.99	470	nil	244	21	0.20	10	13	180	44	17	33	3.1	30	nd	1.1	0.4
577	Maunath Bhanjan	Mohammadabad	Block Office	H/P-IM-II	8.21	620	nil	390	21	0.78	BDL	BDL	230	32	36	52	1.8	24	nd	1.5	1.8
578	Maunath Bhanjan	Pardaha	Block Office	H/P-IM-II	8.24	880	nil	549	21	0.67	6.5	27	250	24	46	113	2.0	23	nd	3.1	4.0
579	Maunath Bhanjan	Ranipur	Block Office	H/P-IM-II	8.41	800	48	403	21	0.64	BDL	24	220	20	41	109	2.2	26	nd	3.2	3.8
580	Maunath Bhanjan	Ratanpura	Block Office	H/P-IM-II	8.17	520	nil	317	21	0.53	BDL	BDL	230	24	41	33	3.1	28	nd	0.9	0.6
581	Meerut	Saroorpur	Block Office	H/P-IM-II	8.39	419	48	146	14	0.35	12	23	160	36	17	25	7.2	28	nd	0.9	0.8
582	Meerut	Parichhatgarh	Block Office	H/P-IM-II	8.36	306	48	61	14	BDL	BDL	38	120	24	14	12	6.5	28	nd	0.5	0.2
583	Meerut	Meerut	Block Office	H/P-IM-II	8.35	410	48	122	35	BDL	10	19	150	36	14	30	4.8	27	nd	1.1	0.6
584	Meerut	Hastinapur	Block Office	H/P-IM-II	8.32	630	24	146	49	0.34	44	49	220	44	26	34	8.7	26	nd	1.0	-1.1
585	Meerut	Rohta	Block Office	H/P-IM-II	8.31	2223	72	61	511	0.33	30	100	580	76	94	200	13	28	nd	3.6	-8.1
586	Meerut	Daurala	Block Office	H/P-IM-II	8.37	659	24	134	77	BDL	16	70	190	32	26	59	10	20	nd	1.9	-0.7
587	Meerut	Mawana	Block Office	H/P-IM-II	8.47	443	48	134	14	BDL	13	30	160	32	19	24	7.9	32	nd	0.8	0.6
588	Meerut	Rajpur	Block Office	H/P-IM-II	8.63	599	96	207	21	0.29	11	43	160	12	31	81	7.9	27	nd	2.8	3.4
589	Meerut	Kharkhoda	Block Office	H/P-IM-II	8.95	909	120	354	21	0.37	BDL	16	70	12	10	170	6.2	24	nd	8.8	8.4
590	Meerut	Sardhana	Block Office	H/P-IM-II	8.58	1490	144	134	210	0.81	12	77	280	24	53	154	10	30	nd	4.0	1.4
591	Meerut	Janikhurd	Block Office	H/P-IM-II	8.43	441	96	85	21	0.35	16	30	180	36	2	22	7.3	27	nd	1.0	2.6
592	Meerut	Machhra	Block Office	H/P-IM-II	8.03	396	nil	195	28	BDL	BDL	14	150	16	26	31	7.6	26	nd	1.1	0.3
593	Mirzapur	Mirzapur	Block Office	H/P-IM-II	7.87	765	nil	374	28	1.50	13	21	172	38	18	96	1.7	21	nd	3.2	2.7
594	Mirzapur	Chanbey	Block Office	H/P-IM-II	7.78	371	nil	183	21	0.30	BDL	4	144	43	9	19	0.5	23	nd	0.7	0.1
595	Mirzapur	City	Block Office	H/P-IM-II	7.57	900	nil	221	106	0.26	95	40	325	72	35	57	1.0	29	nd	1.4	-2.8
596	Mirzapur	Haliya	Block Office	H/P-IM-II	7.90	360	nil	145	28	0.41	10	12	125	48	1	25	1.2	25	nd	1.0	-0.1

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
597	Mirzapur	Jamalpur	Block Office	H/P-IM-II	7.71	636	nil	232	57	0.27	31	22	250	86	8	30	1.9	30	nd	0.8	-1.2
598	Mirzapur	Kon	Block Office	H/P-IM-II	7.93	384	nil	204	14	BDL	BDL	4	134	43	6	25	3.3	23	nd	0.9	0.7
599	Mirzapur	Lalganj	Block Office	H/P-IM-II	7.80	430	nil	226	14	0.59	BDL	7	76	18	8	64	BDL	22	nd	3.2	2.2
600	Mirzapur	Majhawan	Block Office	H/P-IM-II	7.91	370	nil	166	21	0.3	15	6	116	28	11	31	1.8	28	nd	1.3	0.4
601	Mirzapur	Marihan	Block Office	H/P-IM-II	7.90	280	nil	66	57	BDL	BDL	6	94	33	3	21	0.7	14	nd	0.9	-0.8
602	Mirzapur	Narainpur	Block Office	H/P-IM-II	7.62	440	nil	226	14	0.59	5	9	162	48	10	26	1.7	27	nd	0.9	0.5
603	Mirzapur	Pahari	Block Office	H/P-IM-II	7.55	1300	nil	160	262	BDL	150	27	451	99	49	91	1.2	31	nd	1.9	-6.3
604	Mirzapur	Rajgarh	Block Office	H/P-IM-II	7.86	280	nil	119	21	BDL	8	6	120	28	12	9	BDL	17	nd	0.4	-0.4
605	Mirzapur	Sikhar	Block Office	H/P-IM-II	7.55	508	nil	216	35	BDL	BDL	26	177	48	14	33	4.8	16	nd	1.1	0.0
606	Moradabad	Asmoli	Block Office	H/P-IM-II	7.40	458	nil	214	28	BDL	BDL	24	185	40	20	29	5.6	29	nd	0.9	-0.2
607	Moradabad	Bahjoi	Block Office	H/P-IM-II	7.31	652	nil	195	107	0.32	BDL	10	265	60	28	29	7.1	30	nd	0.8	-2.1
608	Moradabad	Baniakhera	Block Office	H/P-IM-II	7.85	572	nil	183	36	0.27	54	38	125	16	20	75	6.1	25	nd	2.9	0.5
609	Moradabad	Bhagatpur Tanda	Block Office	H/P-IM-II	7.62	458	nil	244	21	0.22	BDL	BDL	190	52	14	23	2.1	25	nd	0.7	0.2
610	Moradabad	Bilari	Block Office	H/P-IM-II	7.45	541	nil	177	57	0.31	BDL	26	175	36	20	40	6.7	29	nd	1.3	-0.6
611	Moradabad	Chhajlet	Block Office	H/P-IM-II	7.53	379	nil	226	14	0.15	BDL	5	170	40	17	14	3.0	27	nd	0.5	0.3
612	Moradabad	Deengarapur	Block Office	H/P-IM-II	7.20	752	nil	250	78	BDL	BDL	53	250	52	29	59	11	31	nd	1.6	-0.9
613	Moradabad	Dilari	Block Office	H/P-IM-II	7.49	437	nil	244	7.1	0.33	BDL	BDL	140	24	19	40	1.8	22	nd	1.5	1.2
614	Moradabad	Moodhapandey	Block Office	H/P-IM-II	7.34	397	nil	207	14	0.20	BDL	7	150	40	12	26	3.4	23	nd	0.9	0.4
615	Moradabad	Moradabad	Block Office	H/P-IM-II	7.69	374	nil	183	28	0.10	BDL	BDL	115	18	17	37	6.7	24	nd	1.5	0.7
616	Moradabad	Panwasa	Block Office	H/P-IM-II	7.51	328	nil	183	14	0.44	BDL	5	140	36	12	12	3.8	27	nd	0.5	0.2
617	Moradabad	Sambhal	Block Office	H/P-IM-II	7.75	547	nil	159	64	0.33	10	38	155	22	24	52	11	22	nd	1.8	-0.5
618	Moradabad	Thakurdwara	Block Office	H/P-IM-II	7.85	856	nil	378	50	0.38	25	34	280	74	23	73	17	34	nd	1.9	0.6
619	Muzaffarnagar	Kandhala	Block Office	H/P-IM-II	8.01	1088	nil	232	133	BDL	48	97	250	36	38	134	10	31	nd	3.7	-1.1
620	Muzaffarnagar	Kairana	Block Office	H/P-IM-II	7.82	2311	nil	390	378	BDL	50	111	430	64	62	290	11	31	nd	6.2	-1.9
621	Muzaffarnagar	Bhaghara	Block Office	H/P-IM-II	8.03	362	nil	183	14	BDL	BDL	20	140	24	19	24	5.2	27	nd	0.9	0.2

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
622	Muzaffarnagar	Budhana	Block Office	H/P-IM-II	8.58	582	72	122	70	0.38	BDL	74	190	16	36	65	7.7	27	nd	2.1	0.6
623	Muzaffarnagar	Charthawal	Block Office	H/P-IM-II	8.25	495	nil	268	21	0.52	BDL	24	200	36	26	34	6.2	22	nd	1.1	0.5
624	Muzaffarnagar	Jansath	Block Office	H/P-IM-II	8.47	299	48	98	14	0.45	BDL	19	140	16	24	11	7.7	28	nd	0.4	0.4
625	Muzaffarnagar	Khatauli	Block Office	H/P-IM-II	8.15	566	nil	183	63	BDL	BDL	39	180	28	26	47	8.6	25	nd	1.5	-0.5
626	Muzaffarnagar	Morna	Block Office	H/P-IM-II	7.94	434	nil	171	28	BDL	27	36	170	40	19	32	4.2	24	nd	1.0	-0.8
627	Muzaffarnagar	Muzaffarnagar	Block Office	H/P-IM-II	8.21	390	nil	207	14	0.73	BDL	23	180	40	19	14	4.7	26	nd	0.5	-0.2
628	Muzaffarnagar	Purkaji	Block Office	H/P-IM-II	8.05	372	nil	207	14	0.25	BDL	16	150	40	12	26	5.0	22	nd	0.9	0.4
629	Muzaffarnagar	Shapur	Block Office	H/P-IM-II	8.29	390	nil	220	14	0.53	BDL	13	150	32	17	30	4.4	26	nd	1.1	0.6
630	Muzaffarnagar	Shamli	Block Office	H/P-IM-II	8.52	356	48	134	21	0.45	BDL	16	110	16	17	40	6.4	23	nd	1.7	1.6
631	Muzaffarnagar	Thana Bhawan	Block Office	H/P-IM-II	8.37	374	72	110	7.1	0.37	BDL	20	130	24	17	25	6.2	25	nd	1.0	1.6
632	Muzaffarnagar	Un	Block Office	H/P-IM-II	8.25	344	nil	183	28	0.36	BDL	6	110	20	14	40	5.9	22	nd	1.7	0.8
633	Pilibhit	Amaria	Block Office	H/P-IM-II	8.04	361	nil	207	7.1	0.27	BDL	17	150	36	14	21	2.8	47	nd	0.7	0.4
634	Pilibhit	Bar Khera	Block Office	H/P-IM-II	7.87	395	nil	220	14	BDL	BDL	14	170	32	22	13	12	37	nd	0.4	0.2
635	Pilibhit	Bilsanda	Block Office	H/P-IM-II	7.93	385	nil	226	7.1	0.24	BDL	13	160	24	24	10	19	30	nd	0.3	0.5
636	Pilibhit	Bisalpur	Block Office	H/P-IM-II	8.03	350	nil	207	7.1	BDL	BDL	5	130	12	24	22	11	34	nd	0.8	0.8
637	Pilibhit	Lalauli Khera	Block Office	H/P-IM-II	8.38	446	24	207	7.1	BDL	BDL	20	160	12	31	26	17	48	nd	0.9	1.0
638	Pilibhit	Marauri	Block Office	H/P-IM-II	8.02	492	nil	268	21	0.2	BDL	5	190	36	24	21	11	52	nd	0.7	0.6
639	Pilibhit	Puranpur	Block Office	H/P-IM-II	8.10	325	nil	153	14	BDL	BDL	13	120	36	7.2	10	8.9	41	nd	0.4	0.1
640	Pratapgarh	Aspur-Deosara	Block Office	H/P-IM-II	8.09	595	nil	366	14	0.62	BDL	BDL	230	20	43	49	3.6	30	nd	1.4	1.4
641	Pratapgarh	Baba Bekhemath	Block Office	H/P-IM-II	8.40	1557	90	543	50	1.50	BDL	146	115	12	20	343	4.4	29	nd	14.0	9.6
642	Pratapgarh	Babaganj	Block Office	H/P-IM-II	8.20	676	nil	342	21	0.69	17	16	175	18	31	84	5.0	28	nd	2.8	2.1
643	Pratapgarh	Bihar	Block Office	H/P-IM-II	8.53	725	24	281	21	0.72	9.1	86	200	16	38	98	5.9	30	nd	3.0	1.4
644	Pratapgarh	Gaura	Block Office	H/P-IM-II	8.38	618	36	305	14	0.94	BDL	BDL	240	24	43	50	7.6	30	nd	1.4	1.4
645	Pratapgarh	Kalanker	Block Office	H/P-IM-II	8.15	583	nil	342	14	1.05	BDL	13	190	12	38	64	2.6	30	nd	2.0	1.8
646	Pratapgarh	Kunda	Block Office	H/P-IM-II	8.30	973	36	354	78	0.42	13.4	28	365	16	78	76	4.7	32	nd	1.7	-0.2

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
647	Pratapgarh	Lakshmanpur	Block Office	H/P-IM-II	8.46	658	48	305	7.1	0.81	BDL	BDL	250	16	50	52	5.0	32	nd	1.4	1.7
648	Pratapgarh	Lalganj	Block Office	H/P-IM-II	8.65	896	60	439	14	0.88	BDL	7	130	16	22	179	2.3	26	nd	6.9	6.6
649	Pratapgarh	Mandhata	Block Office	H/P-IM-II	8.10	674	nil	415	14	0.55	BDL	6	230	28	38	58	3.8	33	nd	1.7	2.2
650	Pratapgarh	Mangraura	Block Office	H/P-IM-II	8.03	511	nil	317	7.1	0.34	BDL	BDL	210	24	36	31	4.3	34	nd	0.9	1.0
651	Pratapgarh	Patti	Block Office	H/P-IM-II	8.08	471	nil	244	21	0.25	BDL	9	170	12	34	34	5.4	33	nd	1.1	0.6
652	Pratapgarh	Pratapgarh Sadar	Block Office	H/P-IM-II	8.21	807	nil	488	14	1.82	BDL	BDL	130	26	16	146	3.3	25	nd	5.6	5.4
653	Pratapgarh	Rampur Sangram	Block Office	H/P-IM-II	8.47	1199	60	531	21	0.82	BDL	34	50	12	5	271	2.3	22	nd	16.7	9.7
654	Pratapgarh	Sandwa-Chandrik	Block Office	H/P-IM-II	7.93	734	nil	329	28	0.79	20	34	305	32	54	35	4.7	30	nd	0.9	-0.6
655	Pratapgarh	Sangaipur	Block Office	H/P-IM-II	8.25	1986	nil	671	85	1.53	BDL	302	200	12	41	380	6.8	27	nd	11.8	7.0
656	Pratapgarh	Shivgarh	Block Office	H/P-IM-II	8.20	475	nil	281	14	0.67	BDL	7	230	16	46	16	5.0	33	nd	0.5	0.0
657	Raibareli	Amawan	Block Office	H/P-IM-II	8.24	620	nil	366	21	0.58	BDL	14	270	28	46	36	5.8	29	nd	1.0	0.8
658	Raibareli	Bachharawan	Block Office	H/P-IM-II	8.45	620	36	281	14	0.52	BDL	40	250	20	44	40	5.2	36	nd	1.1	1.2
659	Raibareli	Bahadurpur	Block Office	H/P-IM-II	8.53	900	60	451	21	1.3	BDL	12	160	12	27	155	4.3	30	nd	5.7	6.6
660	Raibareli	Chhatoh	Block Office	H/P-IM-II	8.95	1270	84	390	71	1.85	BDL	110	250	12	54	200	7.5	27	nd	5.5	4.2
661	Raibareli	Dalmau	Block Office	H/P-IM-II	8.26	550	nil	281	43	0.56	BDL	14	220	24	46	42	3.5	35	nd	1.2	-0.4
662	Raibareli	Deeh	Block Office	H/P-IM-II	8.18	1000	nil	390	99	0.44	6.2	65	360	48	58	81	8.6	37	nd	1.9	-0.8
663	Raibareli	Dinshahgaura	Block Office	H/P-IM-II	8.62	700	60	329	21	0.96	BDL	6	195	8	43	92	2.9	28	nd	2.9	3.5
664	Raibareli	Harichandpur	Block Office	H/P-IM-II	8.16	535	nil	256	50	0.3	17	BDL	230	48	27	28	3.6	34	nd	0.8	-0.4
665	Raibareli	Jagatpur	Block Office	H/P-IM-II	8.44	480	48	207	14	0.74	BDL	BDL	160	20	27	47	5.7	34	nd	1.6	1.8
666	Raibareli	Kheron	Block Office	H/P-IM-II	8.06	600	nil	317	36	0.54	BDL	25	260	40	39	38	4.9	31	nd	1.0	0.0
667	Raibareli	Lalganj	Block Office	H/P-IM-II	8.38	2340	60	549	312	0.89	5	190	500	32	102	330	10	28	nd	6.4	1.0
668	Raibareli	Maharajganj	Block Office	H/P-IM-II	8.18	830	nil	390	64	0.38	26	49	310	32	56	72	6.5	37	nd	1.8	0.2
669	Raibareli	Rahi	Block Office	H/P-IM-II	8.11	850	nil	366	71	0.25	18	65	360	48	58	60	4.3	32	nd	1.4	-1.2
670	Raibareli	Rohniya	Block Office	H/P-IM-II	8.41	650	48	305	14	1.21	BDL	BDL	240	24	44	52	3.7	26	nd	1.5	1.8
671	Raibareli	Salon	Block Office	H/P-IM-II	8.23	600	nil	342	28	0.74	BDL	10	250	32	41	40	4.6	34	nd	1.1	0.6

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
672	Raibareli	Sareni	Block Office	H/P-IM-II	8.12	1100	nil	610	43	0.67	BDL	36	330	20	68	120	4.8	37	nd	2.9	3.4
673	Raibareli	Sartawan	Block Office	H/P-IM-II	7.92	650	nil	329	36	0.31	18	31	260	32	44	43	5.0	45	nd	1.2	0.2
674	Raibareli	Sheogarh	Block Office	H/P-IM-II	8.58	650	36	317	28	0.41	BDL	9	210	12	44	67	6.0	42	nd	2.0	2.2
675	Raibareli	Shinghpur	Block Office	H/P-IM-II	8.25	502	nil	281	21	0.51	BDL	21	200	16	39	38	6.3	42	nd	1.2	0.6
676	Raibareli	Tiloe	Block Office	H/P-IM-II	8.05	680	nil	329	64	0.49	BDL	18	320	24	63	29	6.4	42	nd	0.7	-1.0
677	Raibareli	Unchahar	Block Office	H/P-IM-II	8.26	755	nil	342	78	0.41	7	29	240	12	51	78	7.0	46	nd	2.2	0.8
678	Rampur	Bilaspur	Block Office	H/P-IM-II	7.34	595	nil	244	28	0.31	BDL	51	225	36	32	38	2.0	27	nd	1.1	-0.5
679	Rampur	Chamraua	Block Office	H/P-IM-II	7.39	397	nil	153	21	0.11	BDL	33	150	32	17	21	3.6	27	nd	0.8	-0.5
680	Rampur	Milak	Block Office	H/P-IM-II	7.75	575	nil	305	21	0.14	BDL	31	185	16	35	55	21	22	nd	1.8	1.3
681	Rampur	Saidnagar	Block Office	H/P-IM-II	7.34	449	nil	146	36	0.11	BDL	46	165	44	13	28	2.5	27	nd	1.0	-0.9
682	Rampur	Shahbad	Block Office	H/P-IM-II	7.49	1376	nil	122	170	BDL	182	181	475	64	76	96	14	22	nd	1.9	-7.4
683	Rampur	Swar	Block Office	H/P-IM-II	7.50	488	nil	238	14	0.18	BDL	40	205	24	35	28	2.4	26	nd	0.9	-0.2
684	Saharanpur	Nanauta	Block Office	H/P-IM-II	8.36	352	48	122	21	0.54	10	22	150	20	24	22	6.8	21	nd	0.8	0.6
685	Saharanpur	Nakur	Block Office	H/P-IM-II	8.11	946	nil	244	112	BDL	43	65	200	16	38	117	10	25	nd	3.6	0.1
686	Saharanpur	Nagal	Block Office	H/P-IM-II	8.04	358	nil	195	14	BDL	BDL	8	130	20	19	26	6.0	25	nd	1.0	0.6
687	Saharanpur	Puwarka	Block Office	H/P-IM-II	8.08	370	nil	195	21	0.30	BDL	27	160	24	24	26	6.1	23	nd	0.9	0.0
688	Saharanpur	Rampur	Block Office	H/P-IM-II	8.06	372	nil	171	21	0.36	BDL	29	150	28	19	21	6.9	26	nd	0.8	-0.2
689	Saharanpur	Sadauliqudim	Block Office	H/P-IM-II	8.09	340	nil	195	14	BDL	12	12	150	20	24	24	1.9	23	nd	0.9	0.2
690	Saharanpur	Sarsawa	Block Office	H/P-IM-II	8.22	591	nil	256	49	BDL	21	99	260	8	58	63	8.8	25	nd	1.7	-1.0
691	Saharanpur	Deoband	Block Office	H/P-IM-II	8.37	347	48	73	21	BDL	10	50	170	20	29	9	5.0	26	nd	0.3	-0.6
692	Saharanpur	Balikhhera	Block Office	H/P-IM-II	8.27	395	0	122	35	BDL	29	43	170	24	26	21	6.1	26	nd	0.7	-1.3
693	Saharanpur	Gangoh	Block Office	H/P-IM-II	8.33	406	72	134	14	0.61	11	34	160	12	31	31	6.4	11	nd	1.1	1.4
694	Saharanpur	Muzafarabad	Block Office	H/P-IM-II	8.01	394	nil	207	14	0.24	BDL	18	150	20	24	31	2.6	22	nd	1.1	0.4
695	Sant Ravidas Nagar	Bhadohi	Block Office	H/P-IM-II	7.59	633	nil	300	21	0.62	9	31	142	43	8	77	6.1	28	nd	2.8	2.1
696	Sant Ravidas Nagar	Aurai	Block Office	H/P-IM-II	7.41	481	nil	167	57	0.17	14	12	176	62	5	29	1.6	30	nd	1.0	-0.8

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
697	Sant Ravidas Nagar	Abholi	Block Office	H/P-IM-II	7.49	837	nil	293	78	0.44	30	41	253	62	23	73	5.9	32	nd	2.0	-0.2
698	Sant Ravidas Nagar	Deegh	Block Office	H/P-IM-II	7.94	641	nil	306	28	1.22	10	18	218	57	18	46	2.1	22	nd	1.4	0.7
699	Sant Ravidas Nagar	Gyanpur	Block Office	H/P-IM-II	7.55	710	nil	236	99	0.35	8	14	256	67	21	43	4.6	27	nd	1.2	-1.2
700	Sant Ravidas Nagar	Suriyawan	Block Office	H/P-IM-II	7.54	720	nil	275	64	0.22	13	33	212	62	14	67	2.6	31	nd	2.0	0.3
701	Shahjahanpur	Banda	Block Office	H/P-IM-II	7.54	391	nil	146	43	BDL	BDL	31	160	12	31	17	5.9	44	nd	0.6	-0.8
702	Shahjahanpur	Bhawal Khera	Block Office	H/P-IM-II	7.64	416	nil	232	14	BDL	BDL	5	170	40	17	18	4.4	43	nd	0.6	0.4
703	Shahjahanpur	Dadraul	Block Office	H/P-IM-II	7.82	618	nil	366	7.1	0.25	BDL	14	120	40	4.8	96	3.1	36	nd	3.8	3.6
704	Shahjahanpur	Jaitpur	Block Office	H/P-IM-II	7.74	528	nil	207	57	BDL	BDL	22	130	28	14	63	8.5	49	nd	2.4	0.8
705	Shahjahanpur	Jalalabad	Block Office	H/P-IM-II	7.61	304	nil	183	7.1	BDL	BDL	5	120	36	7.2	18	3.4	53	nd	0.7	0.6
706	Shahjahanpur	Kalan	Block Office	H/P-IM-II	7.51	625	nil	207	64	BDL	BDL	59	140	32	14	85	5.4	42	nd	3.1	0.6
707	Shahjahanpur	Kanth	Block Office	H/P-IM-II	7.67	743	nil	134	121	BDL	BDL	116	290	64	31	44	5.1	36	nd	1.1	-3.6
708	Shahjahanpur	Katra	Block Office	H/P-IM-II	7.74	505	nil	256	21	BDL	5	32	230	56	22	19	3.3	43	nd	0.5	-0.4
709	Shahjahanpur	Khutar	Block Office	H/P-IM-II	8.12	408	nil	207	21	BDL	BDL	18	130	16	22	41	5.3	56	nd	1.6	0.8
710	Shahjahanpur	Madanapur	Block Office	H/P-IM-II	7.74	284	nil	122	21	BDL	BDL	13	110	36	4.8	12	2.8	30	nd	0.5	-0.2
711	Shahjahanpur	Mirzapur	Block Office	H/P-IM-II	8.17	636	nil	378	14	0.43	BDL	18	80	12	12	119	4.0	32	nd	5.8	4.6
712	Shahjahanpur	Nigohi	Block Office	H/P-IM-II	7.98	786	nil	329	57	0.2	61	28	230	24	41	29	111	39	nd	0.8	0.8
713	Shahjahanpur	Pogawan	Block Office	H/P-IM-II	7.95	514	nil	244	50	BDL	BDL	10	210	16	41	26	6.4	48	nd	0.8	-0.2
714	Shahjahanpur	Sindhauri	Block Office	H/P-IM-II	7.92	537	nil	183	50	BDL	46	15	210	36	29	24	6.2	52	nd	0.7	-1.2
715	Shahjahanpur	Tilhar	Block Office	H/P-IM-II	7.68	413	nil	244	7.1	BDL	BDL	11	190	48	17	13	3.2	46	nd	0.4	0.2
716	Shrawasti	Gilaula	Block Office	H/P-IM-II	7.78	365	nil	232	14	BDL	BDL	BDL	180	48	15	11	2.7	26	nd	0.4	0.2
717	Shrawasti	Hariharpur Rani	Block Office	H/P-IM-II	7.89	690	nil	451	14	0.29	BDL	BDL	290	72	27	50	2.4	25	nd	1.3	1.6
718	Shrawasti	Ikauna	Block Office	H/P-IM-II	7.69	1205	nil	561	121	BDL	BDL	46	460	68	71	89	6.5	28	nd	1.8	0.0
719	Shrawasti	Jamunaha	Block Office	H/P-IM-II	7.74	690	nil	451	21	0.26	BDL	BDL	290	52	39	50	2.7	25	nd	1.3	1.6
720	Shrawasti	Sirsiya	Block Office	H/P-IM-II	7.95	770	nil	512	14	0.43	BDL	8	310	52	44	57	BDL	25	nd	1.4	2.2
721	Siddharth Nagar	Bansi	Block Office	H/P-IM-II	7.62	920	nil	549	50	0.33	BDL	17	410	104	36	53	4.1	36	nd	1.1	0.8

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
722	Siddharth Nagar	Birdpur	Block Office	H/P-IM-II	7.58	910	nil	512	57	0.46	BDL	31	340	80	34	85	2.9	32	nd	2.0	1.6
723	Siddharth Nagar	Barhani	Block Office	H/P-IM-II	7.66	610	nil	409	7.1	0.87	BDL	BDL	270	64	27	40	BDL	22	nd	1.1	1.3
724	Siddharth Nagar	Bhanwapur	Block Office	H/P-IM-II	7.71	540	nil	317	28	0.47	BDL	8.1	270	68	24	18	3.3	31	nd	0.5	-0.2
725	Siddharth Nagar	Dumariyaganj	Block Office	H/P-IM-II	7.49	710	nil	366	50	0.43	29	21	360	116	17	24	BDL	38	nd	0.5	-1.2
726	Siddharth Nagar	Itwa	Block Office	H/P-IM-II	7.87	480	nil	305	14	0.33	BDL	BDL	230	56	22	21	2.2	31	nd	0.6	0.4
727	Siddharth Nagar	Jogiya	Block Office	H/P-IM-II	7.56	770	nil	506	14	0.34	BDL	BDL	370	64	51	36	2.8	3	nd	0.8	0.9
728	Siddharth Nagar	Khesraha	Block Office	H/P-IM-II	7.81	550	nil	342	21	0.31	BDL	BDL	270	60	29	22	2.9	32	nd	0.6	0.2
729	Siddharth Nagar	Khuniyaw	Block Office	H/P-IM-II	7.68	680	nil	427	14	0.35	BDL	BDL	330	64	41	24	3.2	32	nd	0.6	0.4
730	Siddharth Nagar	Lotan	Block Office	H/P-IM-II	7.78	620	nil	378	21	0.35	BDL	8.1	260	72	19	44	2.1	34	nd	1.2	1.0
731	Siddharth Nagar	Mithawal	Block Office	H/P-IM-II	8.08	420	nil	268	14	0.36	BDL	BDL	210	48	22	15	2.3	29	nd	0.5	0.2
732	Siddharth Nagar	Naugarh	Block Office	H/P-IM-II	7.68	770	nil	500	14	0.42	BDL	BDL	360	68	46	39	3.0	30	nd	0.9	1.0
733	Siddharth Nagar	Shoharatgarh	Block Office	H/P-IM-II	8.09	516	nil	268	43	BDL	BDL	7.2	220	64	15	25	2.5	27	nd	0.7	0.0
734	Siddharth Nagar	Uska Bazar	Block Office	H/P-IM-II	7.95	680	nil	451	14	0.32	BDL	7.3	310	80	27	38	4.1	34	nd	0.9	1.2
735	Sitapur	Aliya	Block Office	H/P-IM-II	8.12	610	nil	220	50	0.53	30	30	225	16	44	30	25	29	nd	0.9	-0.9
736	Sitapur	Behta	Block Office	H/P-IM-II	7.71	645	nil	220	50	BDL	BDL	65	255	48	32	35	7.0	23	nd	1.0	-1.5
737	Sitapur	Bisawan	Block Office	H/P-IM-II	7.81	457	nil	244	14	0.27	BDL	11	200	28	31	19	3.0	31	nd	0.6	0.0
738	Sitapur	Godalamau	Block Office	H/P-IM-II	7.83	541	nil	317	7.1	0.51	BDL	8	250	24	46	17	5.4	32	nd	0.5	0.3
739	Sitapur	Hargaon	Block Office	H/P-IM-II	7.72	753	nil	262	85	0.31	BDL	47	280	34	47	56	6.1	32	nd	1.5	-1.2
740	Sitapur	Kasmada	Block Office	H/P-IM-II	7.79	475	nil	244	14	0.32	BDL	32	230	32	36	6	4.8	27	nd	0.2	-0.6
741	Sitapur	Khairabad	Block Office	H/P-IM-II	7.88	448	nil	250	7.1	1.02	BDL	17	210	24	36	14	4.5	29	nd	0.4	-0.1
742	Sitapur	Laharpur	Block Office	H/P-IM-II	7.87	247	nil	128	14	0.16	BDL	8	110	20	14	6	3.8	28	nd	0.3	-0.1
743	Sitapur	Machharehta	Block Office	H/P-IM-II	8.15	607	nil	171	64	0.21	34	32	240	22	44	30	4.6	28	nd	0.8	-2.0
744	Sitapur	Mahmoodabad	Block Office	H/P-IM-II	7.79	381	nil	207	21	0.23	BDL	BDL	160	40	14	17	4.5	23	nd	0.6	0.2
745	Sitapur	Misrikh	Block Office	H/P-IM-II	8.43	727	60	183	64	0.24	BDL	36	210	12	43	84	6.6	28	nd	2.5	0.8
746	Sitapur	Moholi	Block Office	H/P-IM-II	7.88	451	nil	256	21	0.11	BDL	BDL	210	24	36	15	4.5	29	nd	0.5	0.0

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
747	Sitapur	Pahla	Block Office	H/P-IM-II	7.76	467	nil	256	14	0.78	11	5	190	28	29	29	4.8	31	nd	0.9	0.4
748	Sitapur	Parsendi	Block Office	H/P-IM-II	7.65	457	nil	268	7.1	0.49	BDL	BDL	185	32	25	26	4.4	31	nd	0.8	0.7
749	Sitapur	Pisawan	Block Office	H/P-IM-II	7.73	449	nil	232	21	0.16	BDL	18	180	32	24	26	5.1	27	nd	0.9	0.2
750	Sitapur	Rampur Mathura	Block Office	H/P-IM-II	7.92	397	nil	220	7.1	0.25	BDL	16	160	40	14	26	2.8	24	0.308	0.9	0.4
751	Sitapur	Rewsa	Block Office	H/P-IM-II	7.71	505	nil	305	14	0.24	BDL	6	185	36	23	46	4.1	26	nd	1.5	1.3
752	Sitapur	Sakaran	Block Office	H/P-IM-II	8.10	470	nil	244	21	0.31	BDL	17	155	16	28	43	6.0	30	nd	1.5	0.9
753	Sitapur	Sidhauli	Block Office	H/P-IM-II	8.05	793	nil	281	92	0.11	35	35	330	12	72	50	6.3	33	nd	1.2	-1.9
754	Sonbhadra	Babhani	Block Office	H/P-IM-II	7.85	618	nil	233	43	1.14	BDL	48	225	62	17	37	2.2	23	nd	1.1	-0.7
755	Sonbhadra	Chatara	Block Office	H/P-IM-II	7.84	590	nil	174	71	0.87	9	41	137	28	16	72	1.7	39	nd	2.7	0.1
756	Sonbhadra	Chopan	Block Office	H/P-IM-II	7.76	602	nil	151	71	0.32	7	68	155	52	6	66	2.1	37	nd	2.3	-0.6
757	Sonbhadra	Dudhi	Block Office	H/P-IM-II	7.98	474	nil	233	21	0.40	11	6	167	57	6	32	1.0	31	nd	1.1	0.5
758	Sonbhadra	Ghorawal	Block Office	H/P-IM-II	8.10	397	nil	193	14	0.26	0	19	131	38	9	31	0.6	21	nd	1.2	0.6
759	Sonbhadra	Myorpur	Block Office	H/P-IM-II	8.02	550	nil	305	7	1.14	13	3	185	60	8	41	2.6	24	nd	1.3	1.3
760	Sonbhadra	Nagawa	Block Office	H/P-IM-II	7.64	440	nil	134	71	0.31	8	3	187	60	9	15	0.5	24	nd	0.5	-1.5
761	Sonbhadra	Roberts ganj	Block Office	H/P-IM-II	8.40	642	nil	320	14	0.33	BDL	22	168	52	9	70	1.0	17	nd	2.4	1.9
762	St. Kabir Nagar	Semeriaon	Block Office	H/P-IM-II	7.90	539	nil	244	42	0.56	BDL	9	200	28	31	34	3.5	39	nd	1.1	0.1
763	St. Kabir Nagar	Santha	Block Office	H/P-IM-II	8.10	350	nil	171	14	0.23	BDL	16	170	36	19	7	2.3	36	nd	0.2	-0.6
764	St. Kabir Nagar	Belhar	Block Office	H/P-IM-II	8.15	325	nil	183	7	0.28	BDL	BDL	140	20	22	13	3.5	40	nd	0.5	0.2
765	St. Kabir Nagar	Maindawal	Block Office	H/P-IM-II	7.90	436	nil	183	42	BDL	BDL	17	200	40	24	15	4.5	43	nd	0.5	-1.0
766	St. Kabir Nagar	Baghauli	Block Office	H/P-IM-II	7.96	310	nil	183	7	0.23	BDL	9	140	32	14	16	2.2	48	nd	0.6	0.2
767	St. Kabir Nagar	Khalilabad	Block Office	H/P-IM-II	7.99	1200	nil	244	177	BDL	49	73	390	36	72	86	6.8	36	nd	1.9	-3.7
768	St. Kabir Nagar	Nathnagar	Block Office	H/P-IM-II	8.20	445	nil	232	14	BDL	BDL	8	130	16	22	43	4.2	36	nd	1.6	1.2
769	St. Kabir Nagar	Pauli	Block Office	H/P-IM-II	8.13	428	nil	268	14	BDL	BDL	BDL	220	52	22	11	4.0	34	nd	0.3	0.0
770	St. Kabir Nagar	Haiinsar Bazar	Block Office	H/P-IM-II	7.92	381	nil	158	14	BDL	24	19	180	36	22	7	3.6	32	nd	0.2	-1.0
771	Sultanpur	Akhand Nagar	Block Office	H/P-IM-II	7.66	497	nil	293	14	0.77	7.9	6.2	200	20	36	33	3.0	34	nd	1.0	0.8

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
772	Sultanpur	Amethi	Block Office	H/P-IM-II	7.71	485	nil	299	14	0.35	BDI	2.4	190	24	31	30	4.0	31	nd	1.0	1.1
773	Sultanpur	Baldirai	Block Office	H/P-IM-II	7.79	1057	nil	427	92	0.47	22	57	260	16	53	129	6.6	30	nd	3.5	1.9
774	Sultanpur	Bhadaiyu	Block Office	H/P-IM-II	7.9	320	nil	146	7.1	0.42	BDI	21	140	32	14	4	3.0	22	nd	0.2	-0.4
775	Sultanpur	Bhadar	Block Office	H/P-IM-II	7.65	537	nil	281	7.1	0.72	5	17	240	48	29	6	3.6	28	nd	0.2	-0.2
776	Sultanpur	Bhetya	Block Office	H/P-IM-II	7.45	3992	nil	195	844	0.28	BDI	450	1000	100	180	399	7.0	23	nd	5.5	-16.6
777	Sultanpur	Dhanpatganj	Block Office	H/P-IM-II	7.68	424	nil	207	21	0.55	BDI	20	170	32	22	21	3.7	38	nd	0.7	0.0
778	Sultanpur	Dostpur	Block Office	H/P-IM-II	7.72	527	nil	305	7.1	0.5	5	5	200	28	31	27	3.3	30	nd	0.8	1.0
779	Sultanpur	Dubeypur	Block Office	H/P-IM-II	8.06	795	nil	390	43	0.25	5	22	230	32	36	75	3.6	40	nd	2.2	1.8
780	Sultanpur	Gauriganj	Block Office	H/P-IM-II	7.91	555	nil	317	18	0.52	5.9	14	220	24	38	37	3.7	34	nd	1.1	0.8
781	Sultanpur	Jagdishpur	Block Office	H/P-IM-II	7.62	595	nil	329	21	0.46	5	17	230	28	38	36	6.3	33	nd	1.0	0.8
782	Sultanpur	Jaisinghpur	Block Office	H/P-IM-II	7.82	1319	nil	415	142	0.38	13	67	270	32	46	150	6.1	33	nd	4.0	1.5
783	Sultanpur	Jamo	Block Office	H/P-IM-II	7.65	478	nil	268	14	0.53	BDI	13	190	32	26	25	2.4	30	nd	0.8	0.6
784	Sultanpur	Kadipur	Block Office	H/P-IM-II	7.71	571	nil	317	21	0.32	5.4	16	210	24	36	35	14	23	nd	1.1	1.0
785	Sultanpur	Kurebhar	Block Office	H/P-IM-II	7.69	508	nil	281	21	0.27	5	11	215	36	30	23	4.2	31	nd	0.7	0.3
786	Sultanpur	Kurwar	Block Office	H/P-IM-II	7.75	492	nil	268	14	0.73	BDI	5	190	28	29	22	3.2	32	nd	0.7	0.6
787	Sultanpur	Lambhau	Block Office	H/P-IM-II	7.77	603	nil	348	21	0.38	8	10	250	16	50	36	5.0	35	nd	1.0	0.8
788	Sultanpur	Motigarpur	Block Office	H/P-IM-II	7.71	410	nil	256	7.1	0.35	BDI	5	160	24	24	27	4.8	29	nd	0.9	1.0
789	Sultanpur	Musafirkhana	Block Office	H/P-IM-II	7.79	563	nil	293	14	0.74	12	14	220	56	19	26	3.3	24	nd	0.8	0.4
790	Sultanpur	Pp Kannaicha	Block Office	H/P-IM-II	7.63	1035	nil	342	128	0.30	54	43	390	28	77	71	7.0	34	nd	1.6	-2.1
791	Sultanpur	Sagrampur	Block Office	H/P-IM-II	7.93	411	nil	244	7.1	0.23	BDI	9	160	16	29	22	3.4	35	nd	0.8	0.8
792	Sultanpur	Shahgarh	Block Office	H/P-IM-II	7.79	543	nil	268	21	0.80	BDI	37	180	24	29	47	4.5	25	nd	1.5	0.8
793	Sultanpur	Shukul Bazar	Block Office	H/P-IM-II	7.69	612	nil	336	35	0.70	BDI	9	250	20	48	33	8.6	26	nd	0.9	0.6
794	Unnao	Asoha	Block Office	H/P-IM-II	7.96	3785	nil	293	611	0.23	BDL	710	620	52	119	580	20	41	nd	10.1	-7.6
795	Unnao	Auras	Block Office	H/P-IM-II	8.11	780	nil	342	43	0.49	BDL	70	220	16	44	91	4.2	38	nd	2.7	1.2
796	Unnao	Bangar Mau	Block Office	H/P-IM-II	8.05	440	nil	220	21	BDL	8.2	18	140	24	19	45	4.3	43	nd	1.7	0.8

Sl. No.	District	Block	Sample Location	Source	pH	Conductivity	CO ₃	HCO ₃	Cl	F	NO ₃	SO ₄	Hardness as CaCO ₃	Ca Hardness	Mg Hardness	Na	K	SiO ₂	PO ₄	SAR	RSC	
						µmho/cm at 25°C	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
797	Unnao	Bigha Pur	Block Office	H/P-IM-II	8.37	516	36	220	28	1.16	BDL	BDL	180	12	36	42	5.0	41	nd	1.4	1.2	
798	Unnao	Bichia	Block Office	H/P-IM-II	8.14	580	nil	317	36	0.59	BDL	5	230	20	44	38	7.8	44	nd	1.1	0.6	
799	Unnao	Fatehpur Chaurasi	Block Office	H/P-IM-II	7.81	1035	nil	134	142	0.28	BDL	270	360	76	41	95	5.0	42	nd	2.2	-5.0	
800	Unnao	Ganj Muradabad	Block Office	H/P-IM-II	8.25	360	nil	171	28	0.25	7	14	140	24	19	24	3.3	43	nd	0.9	0.0	
801	Unnao	Hasanganj	Block Office	H/P-IM-II	7.97	590	nil	281	43	0.76	BDL	36	240	28	41	42	4.9	41	nd	1.2	-0.2	
802	Unnao	Hilauli	Block Office	H/P-IM-II	8.02	685	nil	317	64	0.38	BDL	40	200	16	39	87	7.5	42	nd	2.7	1.2	
803	Unnao	Miyaganj	Block Office	H/P-IM-II	7.99	470	nil	244	21	0.39	BDL	19	180	24	29	32	6.5	41	nd	1.0	0.4	
804	Unnao	Nawabganj	Block Office	H/P-IM-II	8.08	1562	nil	427	170	0.38	1.2	250	310	16	66	230	10	41	nd	5.7	0.8	
805	Unnao	Purwa	Block Office	H/P-IM-II	8.05	880	nil	427	50	0.97	26	34	260	28	46	92	2.8	45	nd	2.5	1.8	
806	Unnao	Safipur	Block Office	H/P-IM-II	7.92	690	nil	220	85	0.68	55	32	320	40	54	30	6.0	41	nd	0.7	-2.8	
807	Unnao	Sikandrapur Karan	Block Office	H/P-IM-II	8.02	540	nil	305	14	0.36	BDL	22	200	24	34	45	5.5	45	nd	1.4	1.0	
808	Unnao	Sikandar Sirausi	Block Office	H/P-IM-II	8.11	780	nil	342	28	0.9	BDL	95	280	20	56	70	4.3	44	nd	1.8	0.0	
809	Unnao	Sumerpur	Block Office	H/P-IM-II	8.68	1140	96	451	43	1.38	BDL	45	180	20	32	200	5.0	36	nd	6.5	7.0	
810	Varanasi	Arajilne	Block Office	H/P-IM-II	7.93	518	nil	252	28	0.28	BDL	9	135	48	4	55	4.0	29	nd	2.1	1.4	
811	Varanasi	Baragaon	Block Office	H/P-IM-II	7.70	800	nil	294	64	0.65	9	58	200	48	19	90	6.0	29	nd	2.8	0.8	
812	Varanasi	Chiragaon	CHC Gate. Side of Block Office	H/P-IM-II	7.51	600	nil	270	35	0.55	14	16	240	57	23	26	2.5	34	nd	0.7	-0.4	
813	Varanasi	Cholapur	Block Office	H/P-IM-II	7.85	729	nil	356	28	0.43	BDL	29	200	38	25	75	2.9	26	nd	2.3	1.9	
814	Varanasi	Harhuwa	Block Office	H/P-IM-II	7.71	471	nil	253	14	0.27	6	3	168	49	11	30	2.2	29	nd	1.0	0.8	
815	Varanasi	Kashvidyapeeth	Block Office	H/P-IM-II	7.61	1033	nil	390	78	0.6	43	49	295	52	39	85	29	25	nd	2.2	0.5	
816	Varanasi	Pindra	Block Office	H/P-IM-II	7.63	714	nil	383	21	0.32	BDL	11	144	35	14	96	4.1	26	nd	3.5	3.4	
817	Varanasi	Sewapuri	Block Office	H/P-IM-II	7.40	600	nil	339	7.1	0.59	6	6	166	62	3	60	3.1	30	nd	2.0	2.2	
nd-Not Detectable																						
BDL - Below Detection Limit i. e. < 0.2 mg/l for F, PO ₄ and < 5.0 mg/l for NO ₃ , SO ₄ , SiO ₂ , < 2 mg/l for Na and < 1 mg/l for K																						