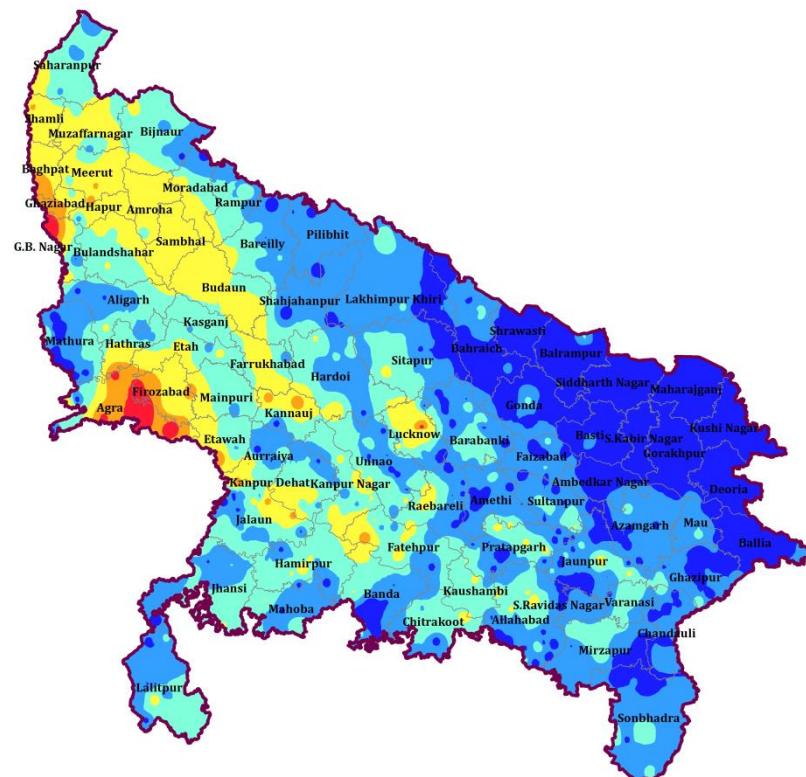




**CENTRAL GROUND WATER BOARD
MINISTRY OF WATER RESOURCES, RIVER DEVELOMENT
AND GANGA REJUVINATION
GOVERNMENT OF INDIA**



**GROUND WATER YEAR BOOK
UTTAR PRADESH
(2021 -2022)**

September, 2022

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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 incontrollable, 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 1007 Ground Water Monitoring Wells all over the state to maintain a regular database. The behaviour 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 2021 - 22, is the outcome of efforts made by Dr. R.K.Prasad, Scientist 'C' (HM) and Smt. Kiran Singh, Scientist 'C' (Chemist). Their efforts in compilation of report are praise worthy. The input data is generated by the untiring efforts of technical personnel in the field, chemical lab and Young Professional.

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 groundwater resources in the state.


(S.G.Bhartariya)

Regional Director

GROUND WATER YEAR BOOK
UTTAR PRADESH
(2021 - 22)
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EXECUTIVE SUMMARY

- ❖ The state of Uttar Pradesh covering an area of 2,40,928 Sq.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 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 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 groundwater 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 2021 is 972.06mm. The amount of average monsoonal rainfall of 848.92mm received during 2021. 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 analyzed and reported annually. The present report is one in the series. There are 1007 Ground Water Monitoring Wells as on 31.3.22 out of which 210 are piezometers and 797 open dug wells.

Depth to Water Level during 2021 - 22

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 2021 - 22 is summarized below:

DEPTH RANGE (m)	No. and Percentage of wells			
	May'21	Aug'21	Nov'21	Jan'22
0-2	73 (11.04%)	275(38.30%)	248 (34.20%)	115(15.33%)
2-5	245(37.06%)	182 (25.34%)	229 (31.58%)	345 (46%)
5-10	211(31.92%)	150 (20.89%)	136 (18.75%)	167 (22%)
10-20	104 (15.73%)	86(11.97%)	89(12.27%)	98 (13.06%)
>20	28 (4.12%)	25 (3.47%)	23(3.16%)	25(3.33%)

Pre monsoon Depth to Water Level (May – 21)

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. 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 73 wells.

- ❖ Water level in the range of 2 - 5 mbgl is observed in 245 Monitoring Wells (about 37.06%). It is usually observed along the Terai belt, extending from parts of

Moradabad to Kushi Nagar and upto Ballia in eastern U.P. As per available data, the given range of water level is found in the district of Ambedkar Nagar, Bahraich, Gonda, Azamgarh, Ghazipur, Mirzapur and Sonbhadra.

- ❖ About 31.92 % of wells (211 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, Miuzaffarnagr, Bijnaur, Moradabad, Rampur, Bareilly, Shahjahnpur, Lakhimpur Khiri, 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 104 wells (15.73%) mainly in Sharapur, Shamli, Muzaffarnagar, Meerut, Ghaziabad, Hapur, Sambhal, Badaun, Farukhabad, Kannauj, Unnao, Hamirpur, Jalaun, Itawah, Mainpuri, Etah, Hathras and Aligarh. There were few wells (25) where was water level recorded between 20 to 40mbgl mainly in Agra, Auraiya, Baghpat, Budaun, Etawah, Firozabad etc. whereas 3 wells in the state where water level are found to be more than 40m namely Agra, G.B.Nagar and Lucknow having water level 44.20, 45.21 and 41.82m respectively.

Depth to Water Level –August 2021

- ❖ 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. Out of 718 analyzed well 275 (38.30%) falls in the range of 0 to 2mbgl and 182 wells (25.32%) 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 20.89% and 11.97% respectively. As per record, the water level between 10 – 20 are observed mainly western UP such as Saharanpur, Shamli, Muzaffarnagar, Amroha, Sambhal, Budaun, Baghpat, Meerut, Hapur and some parts of Kannauj and Lucknow Districts.

Post Monsoon Depth to Water Level (November 2021)

- ❖ 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.
- ❖ Water logged area showing DWL 0-2 mbgl has been found in 248 wells (34.20%) and are located in patches like LakhimpurKhiri, Banda, Bahraich, Shrawasti, Balrampur, SiddharthNagar,Maharajganj, KushiNagar, Sultanpur, Azamgarh, Ghazipur,Mau, Ballia,Chandauli and Allahabad district.

- ❖ The depth to water level from 2 to 5mbgl is found in 229 monitored wells (31.58%) 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 136 wells (18.75%). 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 interfluve area.
- ❖ The depth to water levels from 5 to 10 mbgl are observed 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 89 wells (12.27%), 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. Shamli, Meerut, Hapur, Amorha, Sambhal Bulandshahar, Baghpat, Ghaziabad, G.B.Nagar, J.P.Nagar, Moradabad, show water level in this range. Few patches are seen in Agra, Bijnor, Chitrakoot, Fatehpur, 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 - 30 mbgl are found in 23wells along Agra, Baghpat, Meerut, Firozabad, and Lucknow districts. In Lucknow city DWL in this range is found only in 7 wells (7.8%).Only 20 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, G.B.Nagar and Lucknow.

Depth to Water Level – January 2022

- ❖ 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 2022.
- ❖ The water logged area showing depth to water level in the range of 0-2 mbgl has been reduced to 15.33%. The water level in the range of 0 - 2 mbgl is observed as isolated patches in Bijnour, Moradabad, Bareilly, Bahraich, Balrampur , Amethi, Banda and Ballia district.
- ❖ Water levels in the range of 2–5 and 5-10 mbgl are predominant during this period as reflected at 46% and 22.26% of monitored wells respectively. The moderate water level zone remains at 15.08%. The very deep water level occurs in 3.83% wells. Thus there seems to be a balance between the input and output in these areas.
- ❖ 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, Baghpat, 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 along Yamuna river in isolated patches. It is seen mostly in Bagpat, Agra, Etawah, Fatehpur, Hamirpur and Muzaffarnagar districts. This is due to effluent nature of river Yamuna and also due to higher elevations in the area. In the central parts of Lucknow, water level of more than 20 mbgl is observed.
- ❖ In Gandak and Saryu canal commands water level predominately ranges from 2 to 5 mbgl. ShardaSahayak canal command shows predominance of depth to water level between 2 and 10 mbgl while Ram Ganga canal command shows predominance of 5 - 10 mbgl water level range.

Seasonal Fluctuation during 2021-22

May 2021 – November 2021

- ❖ 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 district wise data indicate a rise in water level in almost 86.29% of the wells indicating monsoon recharge to ground water. There is a general rise in water levels from 0 to 2 m as noticed at 262 (42.73%) wells. This rise is seen in almost all the districts of the state except north Central part of the state.
- ❖ The rise in water levels in the range of 2 - 4 m is observed in 193 wells (31.48%).This range is observed mostly in eastern and parts of central and southern U.P. But their spatial extent is limited to patches and are confined in Jalaun, Hamirpur, Banda, Chitrakoot of Bundelkhand region and Faizabad,Basti, S.Kabir Nagar, Kushi Nagar and Pratapgarh districts of Poorvanchal.
- ❖ The rise of more than 4 m is observed in 74 wells (12%), covering few parts of hard rock areas of Lalitpur, Chitrakoot, Kaushambi, Hamirpur, Jalaun, Jhansi, Kaushambi and Pratapgarh districts.

May 2021 – January 2022

- ❖ 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'21 and that of January'2022 have been analyzed to estimate the change in water levels.
- ❖ There is a rise of water level in 486 no. of analyzed wells (78.13%) and a fall in 133 no. (21.38%) of analyzed wells. The rise in water levels in the range of 0–2 m is seen in 48.55% wells covering almost all the districts of the state. Rise of 2 – 4 m is observed in 22.5% wells spread throughout the state. Rise of more than 4 m is observed in 44 analyzed wells (7.0%). About 19.4% of analyzed wells (121) show fall of 0-2m patches, in few districts and 0.96% of wells (6 no.) show fall of 2-4m and 6 wells show fall of >4m.

Fluctuation Change of Groundwater Storage in U.P. (2021-22)

Magnitude of Change (m)	May'21 – Nov'21		May'21 – Jan'22	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	262 (42.73%)	72 (11.74%)	302 (48.55%)	121 (19.4%)
2-4	193 (31.48%)	8 (1.30%)	140 (22.5%)	6 (0.96%)
>4	74 (12%)	4 (0.65%)	44 (7.0%)	6 (0.96%)

- ❖ 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'2021 to November'2021 and it has further increases while comparing with May'2021 to January'2022 from 42.73% to 48.55% respectively.
- ❖ The rise of water level in the range of 2-4 m has been decrease from 31.48 % to 22.5% while compared with May 2021 –November 2021 to May 2021 to January 2022 respectively and number of wells showing rise of water level of more than 4 m has also been reduced from 12% to 7%.

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 2020-21

- ❖ The water level data collected during May'2021 has been compared with May'2020 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.
- ❖ Due to covid -19 pandemic, only 189 well have been monitored in 23 districts. It is found that 54 no. (28.57%) monitoring wells show rise and 89 no. (47.08%) show fall in water level in range of 0 – 2m. Out of the total monitoring well, 35.97% and 64.02% shows rise and fall in the water level respectively.

Fluctuation during August 2021 -21

- ❖ The water level data collected during August'2020 has been compared with Aug'2021 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 198 wells (48.41%) and fall in 211 wells (51.58%). The fall in water level is due to scanty monsoonal rainfall in some of the area.
- ❖ A rise of 0 -2 m is observed at 166 monitoring stations (40.58% of the monitored wells) scattered in the patches. A rise of 2-4 m is seen in 23 wells (5.62%) and rise of more than 4 m is seen in only 9 wells (2.20%), mainly concentrated in Shamli, Hamirpur, Mahoba, Chitrakoot, Shravasti and Sonbhadra districts of the State.
- ❖ The fall of 0 -2 water levels is observed in 177 wells (43.27%) of the monitored wells covering some patches in the western, southern and central districts of U.P.
- ❖ A fall of 2 - 4m is observed in 31 wells (7.57%) found in Sitapur, Kannauj, Hamirpur, Fatehpur, Raebareli and Mau.

Fluctuation during November 2020 -21:

- ❖ The water level data collected during November'2020 has been compared with November'2021 data to evaluate the rise and fall in water levels since last one year. It is observed that 542 wells (82.87%) show rise and 110 wells (16.81%) show fall in water level. The 82.87% rise in water level is mainly because the area has received very good amount of monsoonal rainfall.
- ❖ A rise of 0 -2m, water levels, is observed at 432 wells (66.05%) covering all parts of UP except Sambhal ,Firozabad and some parts of Amroha, Hapur, Bulandshahar, Rampur, Ghaziabad districts. Rise of 2 - 4 m is observed in 88 wells (13.45%) and rise of more than 4m is observed only at 22 wells covering in very small patches.
- ❖ The fall of 0-2m water levels is observed in 94 wells (14.37%) mostly in districts of Sambhal, Amroha, Bulandshahar, Hapur, Firozabad Hardoi, Jalaun , Jhansi, Banda and Chitrakoot.
- ❖ A fall of 2 - 4m is observed in 10wells (1.95%) and fall in water level > 4 m is found in 6 wells (0.45%) mainly in Sambhal and Jhansi District.

Fluctuation during January 2021 -22

- ❖ To evaluate the rise and fall in water level in January'2021 with respect to January'2022, water level data of wells have been analysed. The fluctuation data shows rise of water level in 572 nos (83.5%) and fall in 113 nos (16.45%) of the analysed wells.
- ❖ The fluctuation data of the state shows a fall of 0 to 2 m in 104 no. of analysed wells (15.18%) in mainly Amroha, Sambhal, Bulandshahar, Aligarh, Budaun, Hardoi, Siatpur, Jaaun, lalitpur, Banda, Chitrakoot and Chandaulli districts.
- ❖ A fall of 2 to 4m is observed only in 7 no. wells and rise of > 4 m in 2 wells (0.28%) of G.B.Nagar and Chandauli.A rise of 0-2 m in water level is noticed in 490 no. of analysed wells (71.53%). Districts showing in all parts of Uttar Pradesh except Amroha, Sambhal, Bulandshahar, Aligarh, Budaun and parts of Hardoi, Siatpur, Jalaun, lalitpur, Banda, Chitrakoot and Chandaulli districts. and rise of 2 to 4 m is seen only in 87nos(12.41%) and rise of > 4m are mainly seen in Shamli, Bhagpat, Kanpur Dehat, Hamirpur, Fatehpur, Allahabad, S.Ravidas Nagar, Mirzapur and Varanasi.

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

Annual Fluctuation in Water Level during 2021 –22, U.P.

FLUCTUATION RANGE	May 20 – 21		August 20 - 21		November 20 -21		January 21 – 22	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	54 (28.57%)	89 (47.08%)	166 (40.58%)	177 (43.27%)	432 (66.05%)	94 (14.37%)	490 (71.53%)	104 (15.18%)
2-4	6 (3.17%)	27 (14.28%)	23 (5.62%)	31 (7.57%)	88 (13.45%)	10 (1.52%)	66 (9.63%)	7 (1.02%)
>4	8 (4.23%)	5 (2.64)	9 (2.20%)	3 (0.73%)	22 (3.36%)	6 (0.91%)	104 (15.18%)	09 (0.28%)
TOTAL	68 (35.97%)	121 (64.02%)	198 (48.41%)	211 (51.58%)	542 (82.87%)	110 (16.81%)	572 (83.5%)	113 (16.45%)

From the analysis of table it is evident that the water level has shown maximum decline in August 21 as compared to the May'21 but the decline percentage has gradually decrease and increase in rise of water level percentage in November'21 and January'22 due to monsoonal recharge as compared to the previous year.

Fluctuation form the Decadal Mean during 2021 -22

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 (2011-2020) - May 2021

- ❖ The pre-monsoon water level data for 2021 has been compared to decadal mean (2011-2020) for pre-monsoon periods, and district-wise analysis of Ground Water The analyzed data shows that rise in water level for 395 (60%) wells and fall in **263no.**(39.96%).
- ❖ It is observed that 395no. Monitoring wells (60 %) shows rise and 39.96% fall in water level. A fall in water level of 0-2 m is observed in 191(26.02%) wells. Fall of higher magnitude is found along Yamuna river.
- ❖ A fall in water levels between 2- 4m is observed in 47Monitoring wells (6.86%) found in small patches Like Agra, Hapur, Meerut, Bhagpat, Muzaffarnagar, Firozabad, Farukhabad, Fatehpur, Mahoba, Jalaun Chitrakoot, and Lucknow.
- ❖ There is a rise in water level from 0 to 2 m with respect to decadal mean of May in 258 (39.10%) monitoring wells and rise of 2 - 4 m is observed in 100 monitoring wells and rise of more than 4 m is observed in 37 monitoring wells.

Mean November (2011-20) – November 2021:

- ❖ The average water level of last 10 years (2011-20) for each hydrograph station for the month of November has been evaluated and compared with water level data of November'21.
- ❖ There is a rise in water level in 542 nos. wells (75.06%) and fall in DWL is observed in 180 Nos. of wells(24.93%). Rise in DWL is mostly occurs in South eastern U.P Mirzapur, Varanasi, Chandauli, Jaunpur and some isolated patches in western U.P. such as Saharanpur, Shamli, Muzaffarnagar, Bijnour, Mathura District.
- ❖ Rise of 2 - 4 m is observed only at 117 wells (16.20%) and rise of more than 4m is noticed only at 22wells.Fall is observed mostly in Sambhal, Amroha, baghpator, Ghaziabad, Badaun, Firozabad etc.

The status for the State as a whole is summarized as under:

DECADAL FLUCTUATION 2021 – 22, U.P.

FLUCTUATION RANGE	Mean May (2011-20) to May 21		Mean August (2011-20) to August 21		Mean Nov(2011-20) to November 21		Mean Jan(2012-21) to January 22	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	258 (39.20%)	191 (29.02%)	307 (42.81%)	209 (29.14%)	403 (55.81%)	126 (17.45%)	420 (56.14%)	178 (23.79%)
2-4	100 (14.59%)	47 (6.86%)	86 (11.99%)	61 (8.50%)	117 (16.20%)	38 (5.26%)	92 (12.29%)	31 (4.14%)
>4	37 (5.40%)	25 (3.79%)	28 (3.90%)	26 (3.62%)	22 (3.04%)	16 (2.2%)	16 (2.13%)	11 (1.47%)
Total	395 (60%)	263 (39.96%)	421 (58.71%)	296 (41.28%)	542 (75.06%)	180 (24.93%)	528 (70.58%)	220 (29.41%)

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 2012 to 2021 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 2012-2021 are summarized as follows:

Percentage of wells showing Pre-monsoon DWL Trend (cm/year) from 2012 -2021								
Total Well Analyzed	Rise (cm/year)			Fall (cm/Year)			Total	
	0 -20	20-40	>40	0 -20	20 -40	>40	Rise	Fall
834	185 (22.18%)	64 (7.67%)	29 (5.87%)	213 (25.53%)	85 (10.19%)	95 (11.39%)	278 (33.33%)	556 (66.66%)

- ❖ The declining trend is observed in 66.66 % of the monitoring wells (556) covering over 10 year's period. Decline of 0 – 20 cm/yr is commonly observed in 25.53% wells followed by 20 – 40 cm/yr in 10.19% wells and >40 cm/yr in 11.39%.
- ❖ The low decline is spread all over the state but dominant in north and south western parts of the State.
- ❖ Higher decline occurs in Shamli, Muzaffarnagar, Baghpat, Meerut, Ghaziabad, Hapur, Amroha, G.B.Nagar, Sambhal, Etah, Firozabad, Auriya, Unnao, Kanpur Nagar, Kanpur Dehat, Hamirpur, Lucknow, and Sitapur.
- ❖ There is a rising trend observed in 278 wells (33.33%), out of which 22.18 % and 7.67% of analysed wells shows rising trend in the range of 0-20cm/year and 20-40cm/year respectively and very few wells of 5.87% shows rising trend of more than 40cm/year. The rises in wells are mostly located in North and South Eastern parts of the State.

The results of Water Level trend data during Post-monsoon for the period 2012-2021 are summarized as follows:

Percentage of wells showing Post-monsoon DWL Trend (cm/year) from 2009 -2019								
Total Well Analyzed	Rise (cm/year)			Fall (cm/Year)			Total	
	0 -20	20-40	>40	0 -20	20 -40	>40	Rise	Fall
836	338 (40.43%)	61 (7.29%)	46 (5.5%)	200 (23.92%)	87 (10.40%)	104 (12.44%)	445 (53.22%)	391 (46.77%)

- ❖ There is a declining trend in 46.77% of the monitoring wells over 10 years period. Decline of 0 – 20 cm/yr is mostly observed in 23.93% (200) wells followed by 20 – 40 cm/yr in 10.40% wells and more than 40 cm/yr is found in 12.44% wells.

- ❖ The low decline is spread in North and South Western parts of the state. There is a rise in trend in 53.22% of the monitoring wells over 10 years period.
- ❖ Rise of 0 – 20cm/year is found in 40.43% followed by 20-40cm/year in 7.29% and very few wells of 5.5% 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. 2019-20). Generally the monitoring stations are Hand pumps IM-II tapping phreatic aquifer. All the samples were analyzed 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 analyzed parameters

Hydro-Chemical Data of Ground Water in Uttar Pradesh (2021 - 2022)

S. No.	Constituents	Minimum	Maximum	Average
1	pH	7.14	8.81	7.99
2	EC $\mu\text{S}/\text{cm}$ at 25 °C	234	37230	875
3	CO ₃ mg/l	0	84	3
4	HCO ₃ mg/l	49	1257	312
5	Cl mg/l	7	9018	77
6	F mg/l	0	6.8	1
7	NO ₃ mg/l	0	1177	15
8	SO ₄ mg/l	0	5600	51
9	PO ₄ mg/l	0	0.65	0.002
10	TH (as CaCO ₃) mg/l	15	4620	267
11	Ca mg/l	4	548	38
12	Mg mg/l	0	780	38
13	Na mg/l	0	6763	91
14	K mg/l	0	165	6
15	SiO ₂ mg/l	3	68	28

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. 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. Sodium Adsorption Ratio (SAR) & Residual Sodium Carbonate (RSC). The potential hazards to crop growth are salinity, sodicity, alkalinity & toxicity.

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 given in table below –

Frequency distribution of Electrical Conductivity (2021-2022)

EC ranges in $\mu\text{S}/\text{cm}$ at 25°C	0-500	501-2000	>2000
No. of samples	256	542	42
%	30.48	64.52	5.00

The the Residual Sodium Carbonate value are less than 1.25 in 0.95% of samples, no samples found in RSC range of 1.25-2.5 and 99.05% of samples found in RSC range of more than 2.5 which are tabulated.

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

RSC range (meq/l)	No. of samples	Percentage
<1.25 (Very safe water)	8	0.95
1.25-2.5 (Marginally safe water)	0	0.00
>2.5 (Unsuitable water)	832	99.05

Heavy Metals:

- ❖ Heavy metals normally occurring in nature are not harmful to our environment, because they are only present in very small amounts. However, if the levels of these metals are higher than the levels of healthy life, the roles of these metals change to a negative dimension.
- ❖ A total number of 912 representative ground water samples were collected for Fe, Mn, Cr, Pb, Cu, Zn, As and U analysis treated with Supra pure HNO_3 from pre defined water quality stations of U.P during May- 2021. The samples were collected

in polyethylene bottles of 125 ml capacity. They were immediately closed, labeled and stored properly for laboratory analysis.

- ❖ The chemical analysis for iron (Fe), manganese (Mn), Chromium (Cr), Lead (Pb), Copper (Cu), Zinc (Zn), Arsenic (As) and Uranium (U) was carried on inductively coupled plasma- Mass spectrometry (Thermo iCAP Q) at Regional Chemical Laboratory CGWB, NR, Lucknow as per the standard methods.
- ❖ Copper concentration was found within the permissible limit of 1.5 mg/l. Zinc concentration is found above permissible limit 15 mg/l in two locations, with value 16.744 mg/l in Jalesar block of Etah district and 16.442 mg/l at Gonda block of Aligarh district as per BIS Drinking Water Specification IS 10500: 2012 in ground water samples.
- ❖ The concentration of lead was found more than 0.01 mg/l in 5 ground water samples. The value of maximum concentration of lead was found to be 0.03 mg/l at Dilari block of Moradabad district. Chromium was not found in any sample to be more than 0.05 mg/l/.
- ❖ The value of maximum concentration of chromium was found to be 0.034 mg/l at Karchana block, Prayagraj district.
- ❖ Arsenic concentration was found more than 0.01 mg/l in 52 samples (5.70%). Iron concentration was found more than 1.0 mg/l in 260 samples (28.51%).
- ❖ The concentration of Manganese was found more than 0.3 mg/l at 63 water quality stations and its maximum concentration was found 1.857 mg/l at Rajepur block of Farrukhabad district.
- ❖ Iron is the main pollutant in shallow ground water of the studied area. Its concentration was found more than 1.0 mg/l at 293 block locations (H/P IM-II) of 63 districts of Uttar Pradesh. The concentration of iron in shallow ground water of Uttar Pradesh is shown in Figure-2. The maximum concentration of iron is found to be 21.705 mg/l at Myorpur block of Sonbhadra district.
- ❖ The concentration of Arsenic was found above the permissible limit of BIS 2012 at 52 water quality stations in 26 districts

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 come 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.

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 analyzed 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 YEAR BOOK

UTTAR PRADESH (2021 – 22)

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°52'12" & 30°24'30" and East longitude 77°05'38" & 84°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 829 persons per sq. km and a high rate of population growth (20%) 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 1007 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 31.3.2022 are shown in Table-1 and location of wells are shown in Plate -1

Plate -1

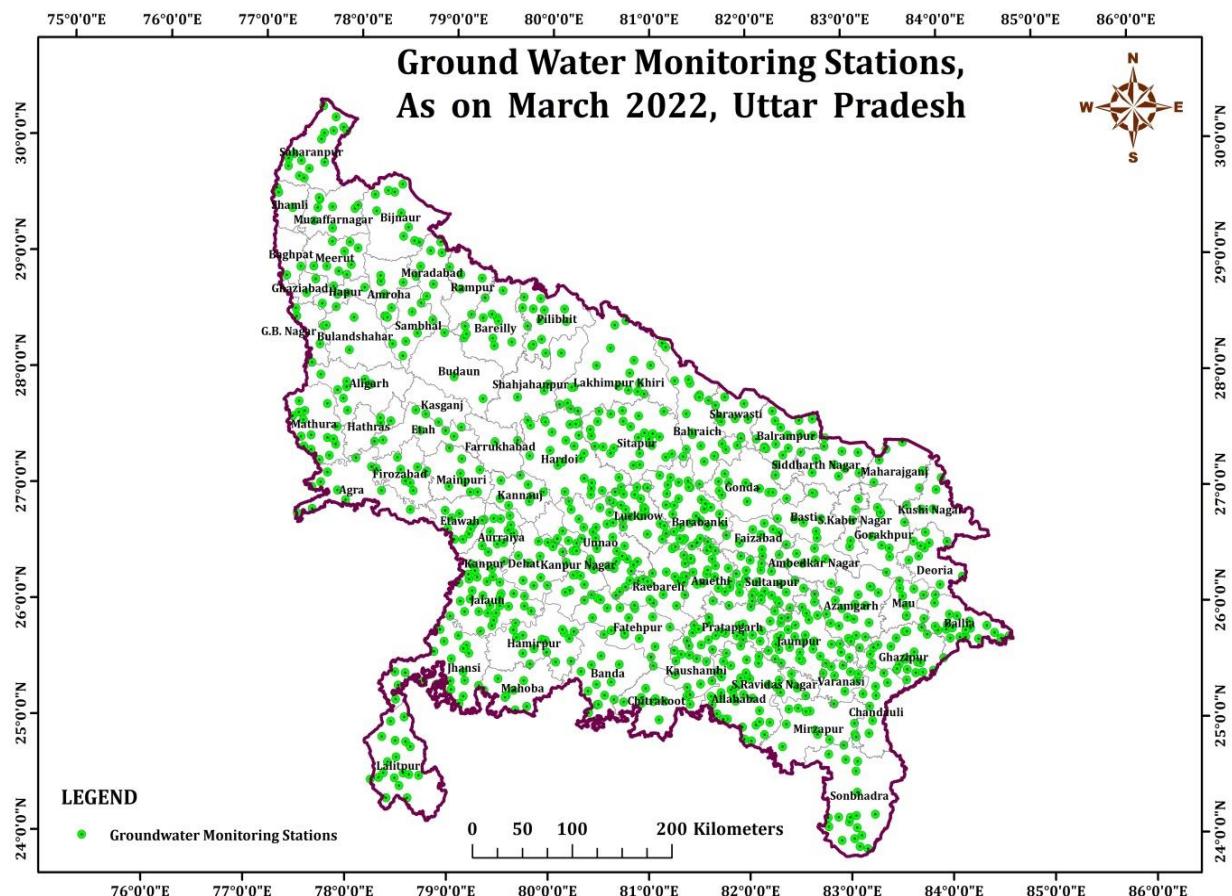


Table: 1

**STATUS OF GROUND WATER MONITORING WELLS (G.W.M.W.), UTTAR
PRADESH AS ON 31.3.22**

S.No.	Name Of The District	No. of G.W.M.W. as on 31.03.2022		
		DW	PZ	Total
1	Agra	4	7	11
2	Aligarh	10	0	10
3	Allahabad	37	0	37
4	Ambedkar Nagar	6	3	9
5	Amethi	14	1	15
6	Auraiya	12	2	14
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	5	11
17	Budaun	0	7	7
18	Bulanshahar	1	2	3
19	Chandauli	9	0	9
20	Chitrakoot	9	0	9
21	Deoria	11	0	11
22	Etah	3	4	7
23	Etawah	8	3	11
24	Faizabad	11	2	13
25	Farrukhabad	1	1	2
26	Fatehpur	15	3	18
27	Ferozabad	1	7	8
28	G.B.Nagar	0	5	5
29	Ghaziabad	0	8	8
30	Ghazipur	24	0	24
31	Gonda	7	4	11
32	Gorakhpur	8	0	8
33	Hamirpur	14	1	15
34	Hapur	0	2	2
35	Hardoi	16	9	25
36	J.P.Nagar	0	11	11
37	Jalaun	31	0	31

S.No.	Name Of The District	No. of G.W.M.W. as on 31.03.2022		
		DW	PZ	Total
38	Jaunpur	33	0	33
39	Jhansi	21	1	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	12	1	13
45	Kushinagar	5	0	5
46	Lakhimpur	13	2	15
47	Lalitpur	20	1	21
48	Lucknow	7	18	25
49	Mahamaya Nagar	3	0	3
50	Maharajganj	6	1	7
51	Mahoba	8	1	9
52	Mainpuri	5	5	10
53	Mathura	16	0	16
54	Maunathbhanjan	9	0	9
55	Meerut	1	13	14
56	Mirzapur	15	0	15
57	Moradabad	3	8	11
58	Muzaffarnagar	2	4	6
59	Pilibhit	8	4	12
60	Pratapgarh	28	0	28
61	Rae Bareli	23	4	27
62	Rampur	3	2	5
63	Saharanpur	7	7	14
64	Sambhal	0	2	2
65	SantRavidas Nagar	5	0	5
66	Santkabir Nagar	5	0	5
67	Shahjahanpur	3	0	3
68	Shamli	0	6	6
69	Shrawasti	11	1	12
70	Siddharth Nagar	10	2	12
71	Sitapur	23	5	28
72	Sonbhadra	19	0	19
73	Sultanpur	20	5	25
74	Unnao	30	0	30
75	Varanasi	9	0	9
Grand Total		797	210	1007

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 subdivisions – 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 m amsl 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.

Chapter3

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 1436.90 to minimum of 595.60 mm at Maharajganj and Mathura district respectively. The normal rainfall of the State is 955 mm and the average annual rainfall for the year 2021 is 972.06 mm. The amount of average monsoonal rainfall of 848.92 mm. The monthly Rainfall of the state along with monsoonal and non-monsoonal rainfall has been shown in table 2. Isohyetal map of the area shown in plate II, suggest that North and South eastern part of the has received very good amount of Rainfall.

Table 2: Monthly and Annual Rainfall (mm) for the Year – 2021

S.No.	DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Total	Monsoon	Non-Monsoon
1	AGRA	16.5	10.3	8.1	4.9	11.5	52.5	232.3	272	136	26.9	4	4	779	692.8	86.2
2	ALIGARH	16.5	14.2	10.1	5.1	14.7	41.3	207.1	237.3	138	36.3	3.6	6.4	730.6	623.7	106.9
3	AMBEDKAR NAGAR	16.6	13.9	9	6.9	19.6	101.7	317	279.3	208	44.9	3.1	5.9	1025.9	906	119.9
4	AURAIYA	15.5	17.4	8.2	4	11.2	57.2	235.7	276.9	155.8	46.7	3.3	5.4	837.3	725.6	111.7
5	AYODHYA	17.7	13.1	9	4.9	15.9	94.8	308.9	277	179.7	40.4	2.8	6.7	970.9	860.4	110.5
6	AZAMGARH	15.7	13.2	8.8	5.7	15.1	97.6	334.1	294	220.9	46.1	5.6	4.9	1061.7	946.6	115.1
7	BAGHPAT	19.5	17.2	13.1	6.2	13.4	41.9	200.2	209.4	99.6	18.9	3.8	5.8	649	551.1	97.9
8	BAHRAICH	24.3	15.1	12.1	7.9	27.6	145	337.4	286	216.2	62.9	1.7	7.5	1143.7	984.6	159.1
9	BALLIA	15.1	9.6	6.9	4.5	18.5	118.2	315.4	280.5	180.7	43.8	4.1	2.2	999.5	894.8	104.7
10	BALRAMPUR	19.7	15.2	9.5	9.6	40.9	145.9	389.9	332.5	208.5	71.7	1.2	8.5	1253.1	1076.8	176.3
11	BANDA	18.6	12.6	7.5	3.7	7.3	80.5	286.8	342.6	160.7	37.5	7.5	7.3	972.6	870.6	102
12	BARABANKI	19.5	14.1	7.7	5	14.2	96	324.4	286.7	223.7	61.3	1.2	6.7	1060.5	930.8	129.7
13	BAREILLY	23.9	19.5	12.8	5.9	17.2	91.8	319	324.6	169.4	58.9	1.8	5.7	1050.5	904.8	145.7
14	BASTI	16.8	13.2	11.1	7.2	24.6	130	348.9	291.8	216.4	52.4	1.5	7.2	1121.1	987.1	134
15	BIJNOR	33.2	27	20	7.8	17.8	84.5	348.7	329	167.7	42	4.4	11.4	1093.5	929.9	163.6
16	BADAUN	17.6	16.7	11.7	3.9	13.6	63	270.3	280.5	140.4	53.4	2.3	5.3	878.7	754.2	124.5
17	BULANDSHAHAR	19.6	15.1	12.4	5	11.4	47.5	236.5	247.7	143.5	36.6	3.8	5.4	784.5	675.2	109.3
18	CHANDAULI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	CHITRAKOOT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	DEORIA	15.7	19.2	10.5	11.4	29.5	132.4	324.7	311.2	205.3	63.4	3.6	5.2	1132.1	973.6	158.5
21	ETAH	16.7	11.7	11	4.3	12.4	50	217.4	254.6	132.3	40.2	2.2	4.9	757.7	654.3	103.4
22	ETAWAH	15.5	13.2	9.5	4.4	11	60.7	235.2	301.7	157.5	40.3	3.1	5.4	857.5	755.1	102.4
23	FARRUKHABAD	17.8	11.3	8.8	4.5	13.5	69.5	261.1	300.9	146.2	50	2.5	3.2	889.3	777.7	111.6
24	FATEHPUR	22.6	14.9	9.3	4.4	6.2	72.1	279.3	318.8	183.3	43.5	3.5	8.2	966.1	853.5	112.6

S.No.	DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Total	Monsoon	Non-Monsoon
25	FIROZABAD	15.2	11.4	6.8	4.6	9.8	58.1	238	250.6	146.1	33.1	2.7	3.9	780.3	692.8	87.5
26	GAUTAM BUDDHA NAGAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
27	GHAZIABAD	20.5	20.6	17.5	5.8	13	43.8	221.6	234.7	127.6	33.9	4.3	7	750.3	627.7	122.6
28	GHAZIPUR	18.7	14.2	6.7	4.4	14.3	114.5	288.2	310.8	214.7	54.2	8.8	3.2	1052.7	928.2	124.5
29	GONDA	18.5	10.5	8.6	7	22	136.7	346.2	307.4	239.5	60.7	1.3	8.4	1166.8	1029.8	137
30	GORAKHPUR	19.2	12.8	12.4	13.3	34.6	156.6	352.7	337.8	232	75.7	4.7	7.5	1259.3	1079.1	180.2
31	HAMIRPUR	16.8	12.7	5.4	2.2	6	58.5	244.5	294.1	146.8	28.4	4.6	5.6	825.6	743.9	81.7
32	HARDOI	20.4	13.3	9.5	5.7	15.5	82.6	279.8	270	172.5	57.9	2	6	935.2	804.9	130.3
33	JALAUN	16	12.2	6.2	2.5	8.4	62.7	248	316.6	155.7	42.2	3.8	5.3	879.6	783	96.6
34	JAUNPUR	16.9	13.7	7.5	4.3	11.3	91	325.1	268	220.2	34.9	7.2	5.4	1005.5	904.3	101.2
35	JHANSI	15.3	12.5	6.5	3.3	7.2	88.1	283.9	303.7	171.3	34	6.2	6.1	938.1	847	91.1
36	JYOTIBA PHULE NAGAR	24.7	20.5	15	5.6	13.8	60.5	301.2	295.5	157.4	45.9	4.3	7.7	952.1	814.6	137.5
37	KANNAUJ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
38	KANPUR DEHAT	15.7	14.3	7.1	4.8	7.4	76.3	228.5	271.7	150.3	39	2.5	5.7	823.3	726.8	96.5
39	KANPUR NAGAR	19	12.9	6.9	2.7	7.5	58.8	241.1	283.7	157.5	48	2	6.4	846.5	741.1	105.4
40	KANSIRAM NAGAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
41	KAUSHAMBI	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
42	KHERI	23.7	16.4	13.1	7.3	29.4	132.2	318.9	310.1	198.8	65.6	1.9	7.3	1124.7	960	164.7
43	KUSHINAGAR	18.6	12.7	11.1	15.8	41.9	173.2	372.4	354.6	238.5	74.6	3.3	7	1323.7	1138.7	185
44	LALITPUR	24.3	12.1	7.8	3.3	6.7	93	346	341.7	173.3	31.2	14.1	8.6	1062.1	954	108.1
45	LUCKNOW	20.3	13.3	7.9	5	12.4	81.7	276.2	278.8	175.9	47.9	1.4	6.2	927	812.6	114.4
46	MAHAMAYA NAGAR	13.3	11.9	8.8	3.7	10.2	46.8	212.4	249.8	132.1	25.7	2.1	4.5	721.3	641.1	80.2
47	MAHARAJGANJ	20.1	14.2	15.1	17.2	42.6	180.7	431.7	371	251.6	85.2	2.2	5.3	1436.9	1235	201.9
48	MAHOBA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
49	MAINPURI	13.6	10.2	8.7	4	10.7	59.1	218	253.2	140.5	35.5	3.1	5.9	762.5	670.8	91.7

S.No.	DISTRICT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	Total	Monsoon	Non-Monsoon
50	MATHURA	10.8	9.3	7.3	2.7	7.5	30.2	188.3	215.7	99.8	18.9	2.4	2.7	595.6	534	61.6
51	MAU	18.5	11.2	9.3	5.3	19	117.3	336.6	312.5	226.4	50.2	6.4	4.6	1117.3	992.8	124.5
52	MEERUT	24.1	20.6	15.9	9.3	14.2	61.6	271.8	279.8	153.2	39.3	4.5	10.4	904.7	766.4	138.3
53	MIRZAPUR	18.3	13.5	7.1	2.5	8	83.2	268.6	295.5	192.1	33.7	8.4	2.6	933.5	839.4	94.1
54	MORADABAD	23	20.2	13.6	6.3	15.9	79.7	306.7	302.8	158	47.7	3.4	8.9	986.2	847.2	139
55	MUZAFFARNAGAR	25	20.8	13.9	5.3	11.5	54.2	257.4	257.4	142.6	31.2	4.5	9.9	833.7	711.6	122.1
56	PILIBHIT	25	18	13.6	5.2	20	116	333.8	334.8	186.9	65.6	3.6	7	1129.5	971.5	158
57	PRATAPGARH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
58	PRAYAGRAJ	19.8	14.4	8.2	3.6	6.7	80.1	269.1	303.1	170.8	31.4	7.9	4.8	919.9	823.1	96.8
59	RAE BARELI	18.9	13.1	7.6	3.5	7.5	69.3	287.5	292.6	179.7	60	1.4	8	949.1	829.1	120
60	RAMPUR	22	21.8	19.1	8.7	25.3	116.4	364.2	330.1	154.4	39	4.9	11.2	1117.1	965.1	152
61	SAHARANPUR	31	26.2	20.3	5.5	15.6	79.9	268.9	282.1	133.1	32	5.4	12.2	912.2	764	148.2
62	SANT KABIR NAGAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
63	SANT RAVI DAS NAGAR(BHADOHI)	19.3	14.9	9.6	5.7	9.8	86.2	299.7	301.4	187.3	37	9.3	3.2	983.4	874.6	108.8
64	SHAHJAHANPUR	19	15.7	12	5.1	18.6	92.3	294.2	306.9	158.1	63	2.6	6.5	994	851.5	142.5
65	SHRAWASTI	24.3	15.1	12.1	7.9	27.6	145	337.4	286	216.2	62.9	1.7	7.5	1143.7	984.6	159.1
66	SIDDHARTH NAGAR	17.7	13.8	11.5	9.8	30.6	150.7	391.8	316.9	205.1	67.6	1	7.3	1223.8	1064.5	159.3
67	SITAPUR	21.3	10.9	12.3	5.6	15.1	101.9	270.5	283.4	190.3	62.3	2	5.9	981.5	846.1	135.4
68	SONBHADRA	23.4	19.3	13	5.8	13.2	121.9	308.2	318.1	205.1	40.2	8.7	5.9	1082.8	953.3	129.5
69	SULTANPUR	16	12.7	8.1	5.4	13.9	81.1	324.6	298.1	198.7	41.2	2.6	6.2	1008.6	902.5	106.1
70	UNNAO	16.5	15.4	7	2.8	10.6	75.4	264.5	289.1	176.8	51.1	1.7	7.1	918	805.8	112.2
71	VARANASI	17.8	13.8	9	5.2	10.5	81.9	291.4	263.6	204.9	33.4	9.6	4	945.1	841.8	103.3

Plate II

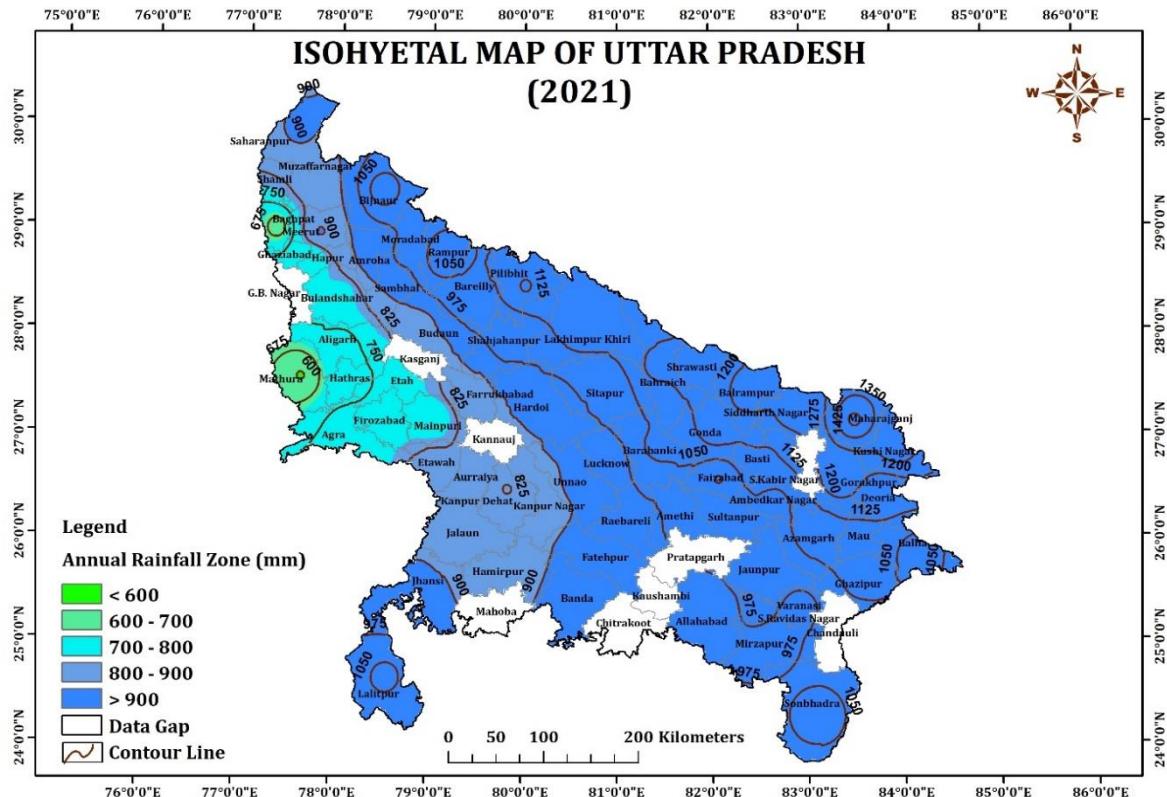
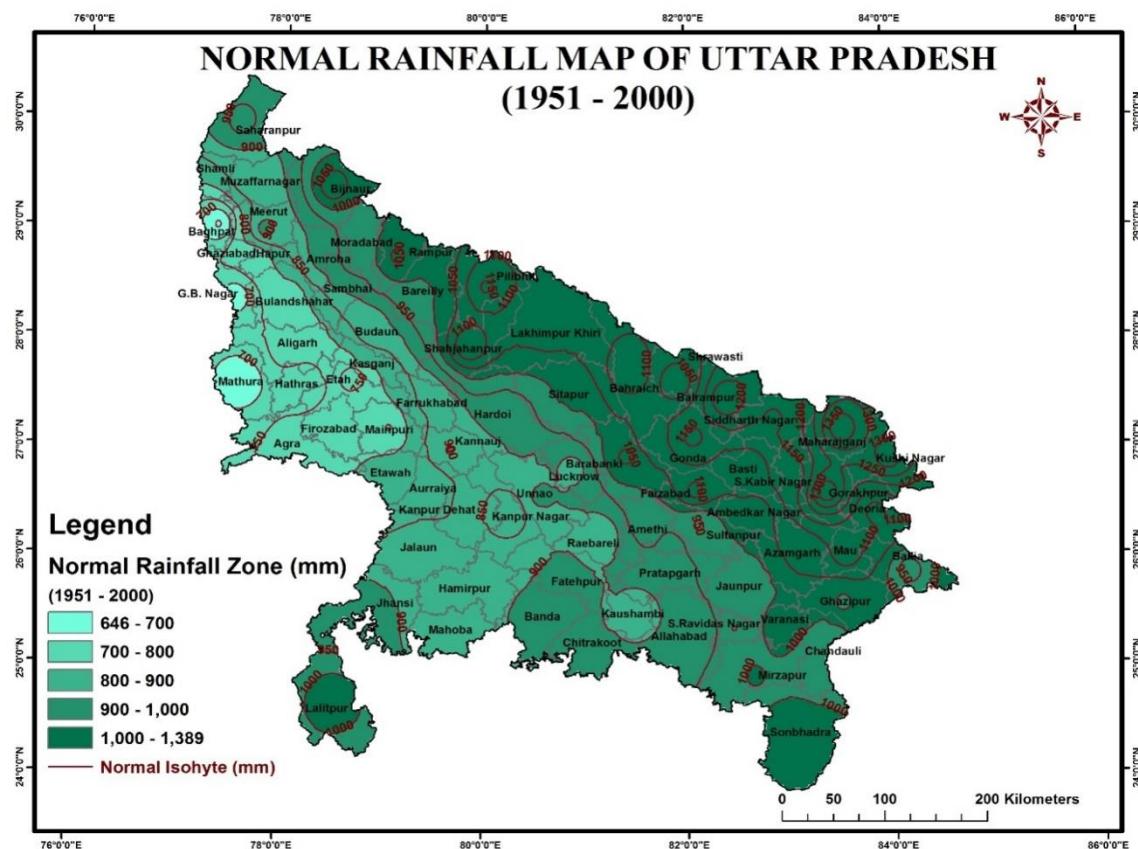


Plate-III



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 Bhaber 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 a 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 2021-22 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 2021 - 22

The depth to ground water level in the state is highly variable throughout the year ranging from ground level to 45.21 m bgl. 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 2021:

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. The analyses of 661 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 73 wells.

Water level in the range of 2 - 5 mbgl is observed in 245 Monitoring Wells (about 37.06%). It is usually observed along the Terai belt, extending from parts of Moradabad to Kushi Nagar and upto Ballia in eastern U.P. As per available data, the given range of water level is found in the district of Ambedkar Nagar, Bahraich, Gonda, Azamgarh, Ghazipur, Mirzapur and Sonbhadra.

About 31.92 % of wells (211 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, Miuzaffarnagr, Bijnaur, Moradabad, Rampur, Bareilly, Shahjahanpur, Lakhimpur Khiri, Sitapur, Barabanki, Hamirpur, Mahoba,Banda, Chitrakoot, Fatehpur, Pratapgarh, Jaunpur, Jaunpur, Allahabad, Mirzapur, Varanasi, Sonbhadra and Ghazipur. Water level in the range of 10 – 20m have been observe in 104 wells (15.73%) mainly in Sharapur, Shamli, Muzaffarnagar, Meeut, Ghaziabad, Hapur, Sambhal, Badaun, Farukhabad, Kannauj, Unnao, Hamirpur, Jalaun, Itawah, Mainpuri, Etah, Hathras and Aligarh. There were few wells (25) where was water level recorded between 20 to 40mbgl mainly in Agra, Auraiya, Baghpat, Budaun, Etawah, Firozabad etc. whereas 3 wells in the state where water level are found to be more than 40m namely Agra, G.B.Nagar and Lucknow having water level 44.20,45.21 and 41.82mrespectively.

Table-3

DISTRICT- WISE DEPTH TO WATER LEVEL, U.P.
May, 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	9	1.78	44.20	1 11.11%	1 11.11%	1 11.11%	2 22.22 %	3 33.33%	1 11.11%	
ALIGARH	5	3.62	15.88	0	1 20.00%	2 40.00%	2 40.00 %	0	0	
ALLAHABAD	30	1.81	19.14	1 3.33%	13 43.33%	9 30.00%	7 23.33 %	0	0	
AMBEDKAR NAGA	7	1.99	5.50	1 14.29%	5 71.43%	1 14.29%	0	0	0	
AURAIYA	6	4.06	22.66	0	1 16.67%	3 50.00%	1 16.67 %	1 16.67%	0	
AZAMGARH	13	1.56	7.87	3 23.08%	5 38.46%	5 38.46%	0	0	0	
BAGHPAT	2	27.80	28.83	0	0	0	0	2 100.00%	0	
BAHRAICH	10	1.79	9.50	3 30.00%	5 50.00%	2 20.00%	0	0	0	
BALLIA	18	0.70	8.83	7 38.89%	7 38.89%	4 22.22%	0	0	0	
BALRAMPUR	17	0.10	9.90	6 35.29%	9 52.94%	2 11.76%	0	0	0	
BANDA	10	1.15	15.90	1 10.00%	4 40.00%	3 30.00%	2 20.00 %	0	0	

BARABANKI	15	3.63	8.21	0	7 46.67%	8 53.33%	0	0	0
BAREILLY	8	0.80	12.30	1 12.50%	3 37.50%	3 37.50%	1 12.50 %	0	0
BASTI	7	1.20	3.82	2 28.57%	5 71.43%	0	0	0	0
BIJNOR	6	2.29	19.37	0	3 50.00%	0	3 50.00 %	0	0
BUDAUN	4	7.24	21.14	0	0 25.00%	1 25.00%	2 50.00 %	1 25.00%	0
BULANDSHAHAR	3	5.82	11.67	0	0 33.33%	1 33.33%	2 66.67 %	0	0
CHANDAULI	4	2.40	8.64	0	3 75.00%	1 25.00%	0	0	0
CHITRAKOOT	7	2.45	19.20	0	1 14.29%	2 28.57%	4 57.14 %	0	0
DEORIA	8	0.76	5.05	3 37.50%	4 50.00%	1 12.50%	0	0	0
ETAH	6	3.49	14.90	0	1 16.67%	3 50.00%	2 33.33 %	0	0
ETAWAH	4	6.93	37.60	0	0 50.00%	2 50.00%	1 25.00 %	1 25.00%	0
FAIZABAD	11	1.65	8.05	1 9.09%	3 27.27%	7 63.64%	0	0	0
FARRUKHABAD	2	5.11	15.98	0	0 50.00%	1 50.00 %	1 50.00 %	0	0
FATEHPUR	7	2.60	14.00	0	4 57.14%	1 14.29%	2 28.57 %	0	0
FIROZABAD	4	10.70	28.67	0	0 50.00 %	0 50.00 %	2 50.00 %	2 50.00%	0

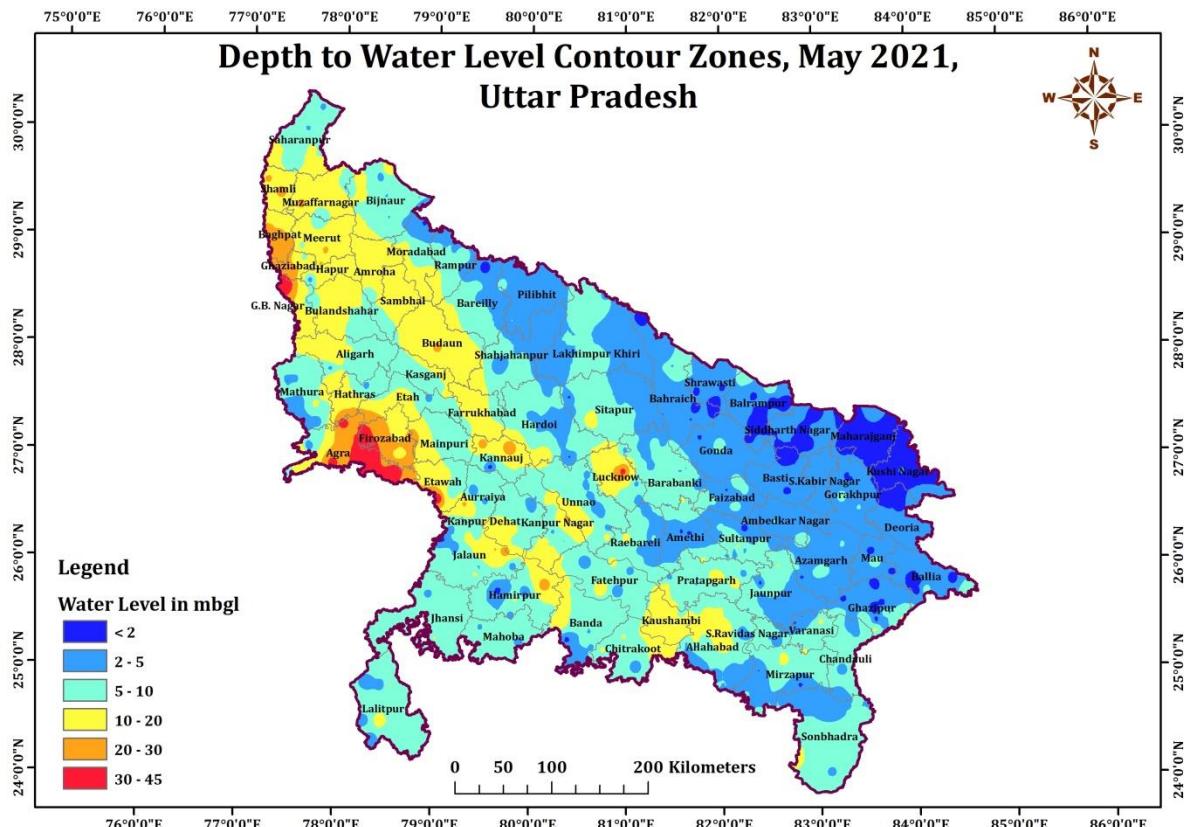
GAUTAM BUDDHA NAGAR	2	20.55	45.21	0	0	0	0	1 50.00%	1 50.00%
GHAZIABAD	6	3.67	21.71	0	1 16.67%	2 33.33%	2 33.33 %	1 16.67%	0
GHAZIPUR	16	0.35	11.60	8 50.00%	3 18.75%	3 18.75%	2 12.50 %	0	0
GONDA	7	1.63	7.25	1 14.29%	5 71.43%	1 14.29%	0	0	0
GORAKHPUR	3	3.72	5.36	0	2 66.67%	1 33.33%	0	0	0
HAMIRPUR	7	0.84	24.70	1 14.29%	2 28.57%	3 42.86%	0	1 14.29%	0
HARDOI	18	1.62	9.42	2 11.11%	10 55.56%	6 33.33%	0	0	0
HATHRAS	3	4.23	15.32	0	1 33.33%	1 33.33%	1 33.33 %	0	0
JALAUN	21	0.85	25.89	1 4.76%	7 33.33%	7 33.33%	4 19.05 %	2 9.52%	0
JAUNPUR	17	1.76	8.35	1 5.88%	7 41.18%	9 52.94%	0	0	0
JHANSI	15	3.10	9.57	0	1 6.67%	14 93.33%	0	0	0
JYOTIBA PHULE N	6	11.89	19.81	0	0	0	6 100.00 %	0	0
KANNAUJ	4	0.71	25.77	1 25.00%	0	1 25.00%	0	2 50.00%	0
KANPUR DEHAT	4	5.89	18.00	0	0	3 75.00%	1 25.00 %	0	0
KANPUR NAGAR	12	3.76	39.55	0	4 33.33%	4 33.33%	3 25.00 %	1 8.33%	0

KAUSHAMBI	7	7.58	20.59	0	0	1 14.29%	5 71.43 %	1 14.29%	0
KHERI	7	2.31	9.83	0	6 85.71%	1 14.29%	0	0	0
KUSHINAGAR	4	0.60	2.37	3 75.00%	1 25.00%	0	0	0	0
LALITPUR	14	2.32	16.14	0	6 42.86%	6 42.86%	2 14.29 %	0	0
LUCKNOW	17	2.69	41.82	0	4 23.53%	3 17.65%	7 41.18 %	2 11.76%	1 5.88%
MAHOBA	9	4.55	14.70	0	2 22.22%	6 66.67%	1 11.11 %	0	0
MAHRAJGANJ	6	0.41	2.85	5 83.33%	1 16.67%	0	0	0	0
MAINPURI	4	4.92	7.68	0	1 25.00%	3 75.00%	0	0	0
MATHURA	12	2.39	11.78	0	6 50.00%	3 25.00%	3 25.00 %	0	0
MAU	6	0.63	7.85	2 33.33%	3 50.00%	1 16.67%	0	0	0
MEERUT	10	8.16	23.17	0	0	4 40.00%	4 40.00 %	2 20.00%	0
MIRZAPUR	4	1.74	14.71	2 50.00%	1 25.00%	0	1 25.00 %	0	0
MORADABAD	11	1.51	18.41	1 9.09%	3 27.27%	1 9.09%	6 54.55 %	0	0
MUZAFFARNAGA	9	2.15	21.79	0	2 22.22%	1 11.11%	4 44.44 %	2 22.22%	0
PILIBHIT	9	2.66	5.67	0	7 77.78%	2 22.22%	0	0	0

PRATAPGARH	23	2.05	15.79	0	4 17.39%	15 65.22%	4 17.39 %	0	0
RAE BARELI	25	2.23	12.85	0	14 56.00%	9 36.00%	2 8.00 %	0	0
RAMPUR	2	5.62	10.78	0	0 50.00%	1 50.00%	1 50.00 %	0	0
SAHARANPUR	9	4.17	10.34	0	2 22.22%	6 66.67%	1 11.11 %	0	0
SANT KABIR NAGA	4	2.05	3.10	0	4 100.00%	0	0	0	0
SANT RAVIDAS NA	4	3.50	8.88	0	1 25.00%	3 75.00%	0	0	0
SHRAWASTI	11	0.62	4.48	5 45.45%	6 54.55%	0	0	0	0
SIDDHARTHNAGA	10	0.83	5.42	4 40.00%	5 50.00%	1 10.00%	0	0	0
SITAPUR	19	2.50	12.99	0 52.63%	10 36.84%	7 10.53 %	2	0	0
SONBHADRA	8	2.98	14.92	0 37.50%	3 50.00%	4 12.50 %	1	0	0
SULTANPUR	34	0.65	11.95	3 8.82%	19 55.88%	9 26.47%	3 8.82 %	0	0
UNNAO	13	0.47	15.57	2 15.38%	5 38.46%	4 30.77%	2 15.38 %	0	0
VARANASI	6	1.78	11.88	1 16.67%	1 16.67%	2 33.33%	2 33.33 %	0	0
Total	661	0.10	45.21	73	245	211	104	25	3

The district wise categorization table of water level during May 2021 is presented in table-3 and the pictorial view is shown in Plate –IV.

Plate IV



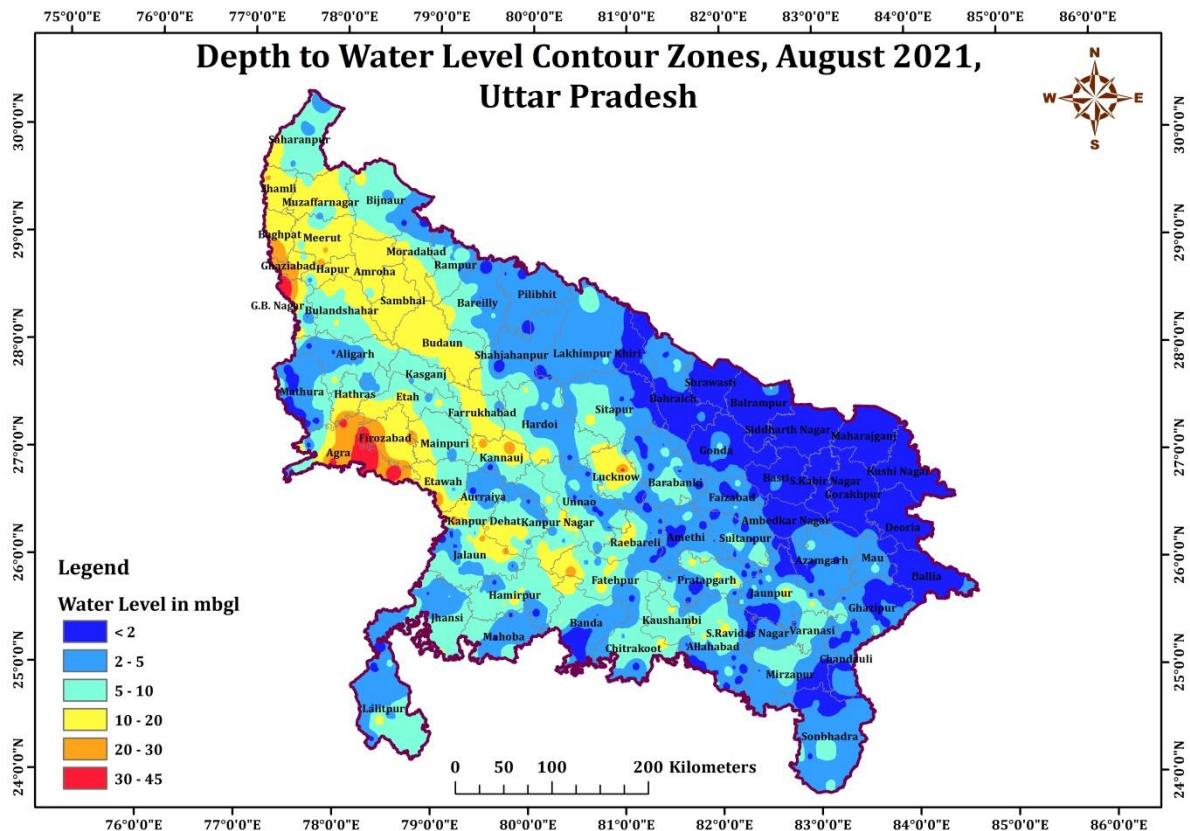
August 2021:

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. Out of 718 analyzed well 275 (38.30%) falls in the range of 0 to 2mbgl and 182 wells (25.32%) 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 20.89% and 11.97% respectively. As per record, the water level between 10 – 20 are observed mainly western UP such as Saharanpur, Shamli, Muzaffarnagar, Amroha, Sambhal, Budaun, Baghpat, Meerut, Hapur and some parts of Kannauj and Lucknow Districts.

The district wise categorization table of water level during August 2021 is presented in table-4 and the pictorial view is shown in Plate-V.

Plate-V



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

Table-4

August, 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	9	0.47	43.97	2 22.22%	0	2 22.22%	1 11.11 %	3 33.33%	1 11.11%		
ALIGARH	6	1.33	5.11	2 33.33%	2 33.33%	2 33.33%	0	0	0		
ALLAHABAD	26	0.15	18.46	14 53.85%	4 15.38%	6 23.08%	2 7.69 %	0	0		
AMBEDKAR NAGA	7	0.80	3.50	4 57.14%	3 42.86%	0	0	0	0		
AURAIYA	7	1.50	21.40	1 14.29%	3 42.86%	2 28.57%	0	1 14.29%	0		
AZAMGARH	14	0.85	7.00	6 42.86%	6 42.86%	2 14.29%	0	0	0		
BAGHPAT	2	25.51	28.69	0	0	0	0	2 100.00%	0		
BAHRAICH	11	0.02	8.75	9 81.82%	0	2 18.18%	0	0	0		
BALLIA	17	0.15	3.90	12 70.59%	5 29.41%	0	0	0	0		
BALRAMPUR	15	0.02	5.50	14 93.33%	0	1 6.67%	0	0	0		
BANDA	13	0.05	10.50	7 53.85%	2 15.38%	3 23.08%	1 7.69 %	0	0		

BARABANKI	18	0.53	10.49	8 44.44%	5 27.78%	3 16.67%	2 11.11 %	0	0
BAREILLY	9	0.85	13.22	1 11.11%	3 33.33%	4 44.44%	1 11.11 %	0	0
BASTI	7	0.70	3.18	6 85.71%	1 14.29%	0	0	0	0
BIJNOR	5	1.27	18.50	1 20.00%	1 20.00%	1 20.00%	2 40.00 %	0	0
BUDAUN	3	15.92	19.87	0	0	0	3 100.00 %	0	0
BULANDSHAHAR	3	4.33	10.56	0	1 33.33%	1 33.33%	1 33.33 %	0	0
CHANDAULI	8	0.42	9.21	5 62.50%	2 25.00%	1 12.50%	0	0	0
CHITRAKOOT	9	0.70	13.35	1 11.11%	2 22.22%	5 55.56%	1 11.11 %	0	0
DEORIA	9	0.19	0.93	9 100.00%	0	0	0	0	0
ETAH	7	2.68	14.36	0	2 28.57%	2 28.57%	3 42.86 %	0	0
ETAWAH	6	3.87	30.14	0	1 16.67%	3 50.00%	1 16.67 %	1 16.67%	0
FAIZABAD	11	0.25	6.55	4 36.36%	5 45.45%	2 18.18%	0	0	0
FARRUKHABAD	2	3.02	13.13	0	1 50.00%	0	1 50.00 %	0	0
FATEHPUR	12	2.25	27.70	0	4 33.33%	3 25.00%	4 33.33 %	1 8.33%	0

FIROZABAD	4	10.11	26.78	0	0	0	3	75.00 %	1	25.00%	0
GAUTAM BUDDHA	4	2.07	39.79	0	1	0	1	25.00 %	2	50.00%	0
GHAZIABAD	6	3.48	22.40	0	1	2	2	33.33%	1	16.67%	0
GHAZIPUR	13	0.32	8.30	8	3	2	0	15.38%	0	0	0
GONDA	6	0.20	6.00	5	0	1	0	16.67%	0	0	0
GORAKHPUR	4	0.27	1.01	4	0	0	0	0	0	0	0
HAMIRPUR	6	0.80	13.56	3	2	0	1	16.67 %	0	0	0
HARDOI	17	1.48	9.32	3	9	5	0	29.41%	0	0	0
HATHRAS	3	2.63	11.08	0	2	0	1	33.33 %	0	0	0
JALAUN	25	0.22	32.69	5	7	7	3	12.00 %	3	12.00%	0
JAUNPUR	23	0.19	8.01	15	4	4	0	17.39%	0	0	0
JHANSI	17	0.98	11.27	2	6	8	1	5.88 %	0	0	0
JYOTIBA PHULE N	6	11.50	20.17	0	0	0	5	83.33 %	1	16.67%	0
KANNAUJ	4	0.42	25.10	1	0	1	0	25.00%	2	50.00%	0
KANPUR DEHAT	8	2.95	18.80	0	3	3	2	37.50%	0	25.00 %	0

KANPUR NAGAR	13	1.65	41.52	1	7.69%	4	30.77%	6	46.15%	1	7.69 %	0	1	7.69%
KAUSHAMBI	6	2.16	12.37	0		1	16.67%	2	33.33%	3	50.00 %	0	0	
KHERI	7	0.83	7.98	4	57.14%	2	28.57%	1	14.29%	0		0	0	
KUSHINAGAR	5	0.17	1.00	5	100.00%	0		0		0		0	0	
LALITPUR	17	1.16	15.08	4	23.53%	8	47.06%	4	23.53%	1	5.88 %	0	0	
LUCKNOW	18	0.60	42.19	2	11.11%	5	27.78%	0		9	50.00 %	1	1	5.56%
MAHOBA	9	1.10	10.36	2	22.22%	3	33.33%	3	33.33%	1	11.11 %	0	0	
MAHRAJGANJ	6	0.14	0.95	6	100.00%	0		0		0		0	0	
MAINPURI	5	2.42	8.37	0		2	40.00%	3	60.00%	0		0	0	
MATHURA	12	0.20	10.45	7	58.33%	2	16.67%	2	16.67%	1	8.33 %	0	0	
MAU	6	1.04	5.17	3	50.00%	2	33.33%	1	16.67%	0		0	0	
MEERUT	9	7.91	22.69	0		0		4	44.44%	2	22.22 %	3	0	
MIRZAPUR	10	0.43	10.57	5	50.00%	1	10.00%	3	30.00%	1	10.00 %	0	0	
MORADABAD	6	0.32	18.20	2	33.33%	1	16.67%	0		3	50.00 %	0	0	
MUZAFFARNAGA	9	1.82	17.76	1	11.11%	1	11.11%	2	22.22%	5	55.56 %	0	0	

PILIBHIT	9	1.26	3.74	3 33.33%	6 66.67%	0	0	0	0	0
PRATAPGARH	26	0.41	15.78	11 42.31%	5 19.23%	8 30.77%	2 7.69 %	0	0	0
RAE BARELI	25	0.50	18.00	11 44.00%	7 28.00%	4 16.00%	3 12.00 %	0	0	0
RAMPUR	3	4.78	10.72	0 33.33%	1 33.33%	1 33.33%	1 33.33 %	0	0	0
SAHARANPUR	12	1.26	14.28	2 16.67%	1 8.33%	7 58.33%	2 16.67 %	0	0	0
SANT KABIR NAGA	4	0.23	0.46	4 100.00%	0	0	0	0	0	0
SANT RAVIDAS NA	4	2.42	4.00	0 100.00%	4 100.00%	0	0	0	0	0
SHRAWASTI	8	0.10	1.85	8 100.00%	0	0	0	0	0	0
SIDDHARTHNA	10	0.20	0.95	10 100.00%	0	0	0	0	0	0
SITAPUR	19	0.39	12.59	6 31.58%	6 31.58%	6 31.58%	1 5.26 %	0	0	0
SONBHADRA	17	0.58	9.64	4 23.53%	8 47.06%	5 29.41%	0	0	0	0
SULTANPUR	36	0.50	11.90	15 41.67%	12 33.33%	5 13.89%	4 11.11 %	0	0	0
UNNAO	18	0.18	14.22	6 33.33%	6 33.33%	3 16.67%	3 16.67 %	0	0	0
VARANASI	7	1.04	10.22	1 14.29%	3 42.86%	2 28.57%	1 14.29 %	0	0	0
Total	718	0.23	43.97	275	182	150	86	22	3	

November 2021:

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 248 wells (34.20%) and are located in patches like LakhimpurKhiri, Banda, Bahraich, Shrawasti, Balrampur, SiddharthNagar,Maharajganj, KushiNagar, Sultanpur, Azamgarh, Ghazipur,Mau, Ballia,Chandauli and Allahabad district.

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The depth to water level from 2 to 5mbgl is found in 229 monitored wells (31.58%) 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 136 wells (18.75%). 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 interfluve 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 89 wells (12.27%), 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. Shamli, Meerut, Hapur, Amorha, Sambhal Bulandshahar, Baghpat, Ghaziabad, G.B.Nagar, J.P.Nagar, Moradabad, show water level in this range. Few patches are seen in Agra, Bijnor, Chitrakoot, Fatehpur, 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 - 30 mbgl are found in 23 wells along Agra, Baghpat, Meerut, Firozabad, and Lucknow districts. In Lucknow city DWL in this range is found only in 7 wells (7.8%). Only 20 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, G.B.Nagar and Lucknow.

Table-5

DISTRICT-WISE DEPTH TO WATER LEVEL, U.P.
November, 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	9	0.85	43.95	2 22.22%	0	2 22.22%	1 11.11 %	3 33.33%	1 11.11%	
ALIGARH	8	1.87	10.90	1 12.50%	2 25.00%	3 37.50%	2 25.00 %	0	0	
ALLAHABAD	33	0.42	13.93	13 39.39%	12 36.36%	6 18.18%	2 6.06 %	0	0	
AMBEDKAR NAGA	7	1.59	3.40	4 57.14%	3 42.86%	0	0	0	0	
AURAIYA	9	1.40	19.58	2 22.22%	4 44.44%	1 11.11%	2 22.22 %	0	0	
AZAMGARH	15	0.50	3.83	11 73.33%	4 26.67%	0	0	0	0	
BAGHPAT	2	25.79	30.55	0	0	0	0	2 100.00%	0	
BAHRAICH	11	0.97	8.85	5 45.45%	4 36.36%	2 18.18%	0	0	0	
BALLIA	15	0.54	4.83	11 73.33%	4 26.67%	0	0	0	0	
BALRAMPUR	17	0.20	7.30	9 52.94%	6 35.29%	2 11.76%	0	0	0	
BANDA	12	0.68	13.86	3 25.00%	6 50.00%	1 8.33%	2 16.67 %	0	0	

BARABANKI	19	0.78	9.78	9 47.37%	6 31.58%	4 21.05%	0	0	0	0
BAREILLY	8	1.07	12.10	1 12.50%	4 50.00%	2 25.00%	1 12.50 %	0	0	0
BASTI	7	1.15	4.27	6 85.71%	1 14.29%	0	0	0	0	0
BIJNOR	6	0.51	17.47	2 33.33%	1 16.67%	2 33.33%	1 16.67 %	0	0	0
BUDAUN	4	15.67	19.57	0	0	0	4 100.00 %	0	0	0
BULANDSHAHAR	2	7.33	11.34	0	0	1 50.00%	1 50.00 %	0	0	0
CHANDAULI	8	0.48	8.09	4 50.00%	2 25.00%	2 25.00%	0	0	0	0
CHITRAKOOT	8	2.93	14.10	0	3 37.50%	2 25.00%	3 37.50 %	0	0	0
DEORIA	9	0.61	3.32	5 55.56%	4 44.44%	0	0	0	0	0
ETAH	8	2.35	14.10	0	2 25.00%	2 25.00%	4 50.00 %	0	0	0
ETAWAH	7	3.50	34.89	0	2 28.57%	2 28.57%	1 14.29 %	2 28.57%	0	0
FAIZABAD	11	0.74	4.95	4 36.36%	7 63.64%	0	0	0	0	0
FARRUKHABAD	2	1.30	16.05	1 50.00%	0	0	1 50.00 %	0	0	0
FATEHPUR	11	0.89	18.53	1 9.09%	3 27.27%	2 18.18%	5 45.45 %	0	0	0

FIROZABAD	4	8.15	26.70	0	0	1	25.00%	2	50.00 %	1	25.00%	0
GAUTAM BUDDHA	3	14.00	39.37	0	0	0		1		2		0
GHAZIABAD	5	6.56	20.52	0	0	2	40.00%	1	20.00 %	2	40.00%	0
GHAZIPUR	15	0.06	8.60	12	0	3	20.00%	0		0		0
GONDA	7	1.10	5.23	5	1	1	14.29%	0		0		0
GORAKHPUR	4	1.43	3.55	1	3	0		0		0		0
HAMIRPUR	6	1.08	12.99	2	3	0		1	16.67 %	0		0
HARDOI	16	1.33	7.49	4	8	4	25.00%	0		0		0
HATHRAS	3	1.80	10.82	1	1	0		1	33.33 %	0		0
JALAUN	27	0.31	29.75	4	7	11	40.74%	2		3		0
JAUNPUR	22	0.16	15.07	12	7	2	9.09%	1	7.41 %	0	4.55 %	0
JHANSI	16	1.63	9.95	2	4	10	62.50%	0		0		0
JYOTIBA PHULE N	7	10.79	19.47	0	0	0		7	100.00 %	0		0
KANNAUJ	4	0.31	23.90	1	1	0		0		2	50.00%	0

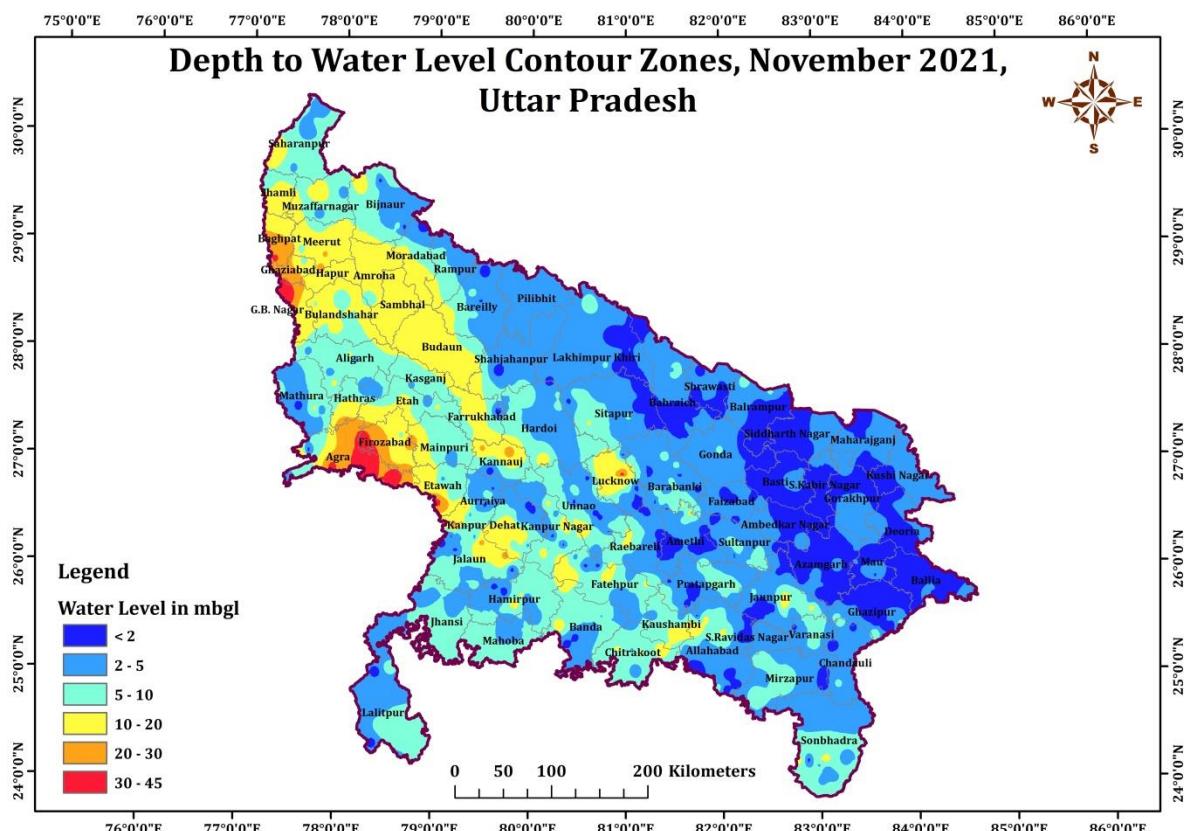
KANPUR DEHAT	7	2.69	18.85	0	5 71.43%	0	2	28.57 %	0	0
KANPUR NAGAR	13	1.21	41.25	4 30.77%	3 23.08%	4 30.77%	1 7.69 %	0 0	1 7.69%	
KAUSHAMBI	9	2.04	18.13	0 11.11%	1 22.22%	2 66.67 %	6 0	0 0	0 0	
KHERI	7	0.96	7.49	3 42.86%	3 42.86%	1 14.29%	0 0	0 0	0 0	
KUSHINAGAR	5	1.39	3.54	3 60.00%	2 40.00%	0 0	0 0	0 0	0 0	
LALITPUR	15	1.40	7.40	3 20.00%	6 40.00%	6 40.00%	0 0	0 0	0 0	
LUCKNOW	15	1.00	42.80	5 33.33%	1 6.67%	0 0	7 46.67 %	1 6.67%	1 6.67%	
MAHOBA	9	2.33	9.75	0 11.11%	1 88.89%	8 0	0 0	0 0	0 0	
MAHRAJGANJ	6	1.54	3.81	2 33.33%	4 66.67%	0 0	0 0	0 0	0 0	
MAINPURI	5	2.20	7.25	0 40.00%	2 60.00%	3 0	0 0	0 0	0 0	
MATHURA	14	0.94	11.90	3 21.43%	6 42.86%	3 21.43%	2 14.29 %	0 0	0 0	
MAU	7	0.35	2.60	6 85.71%	1 14.29%	0 0	0 0	0 0	0 0	
MEERUT	10	6.73	22.28	0 33.33%	0 33.33%	5 50.00%	3 30.00 %	2 20.00%	0 0	
MIRZAPUR	9	1.42	10.27	3 33.33%	3 33.33%	2 22.22%	1 11.11 %	0 0	0 0	

MORADABAD	7	0.40	18.66	3 42.86%	0	0	4	57.14 %	0	0
MUZAFFARNAGA	5	2.08	17.11	0 40.00%	2	1	2	20.00% 40.00 %	0	0
PILIBHIT	11	1.54	3.99	3 27.27%	8 72.73%	0	0	0	0	0
PRATAPGARH	25	0.51	12.31	6 24.00%	13 52.00%	5	1	20.00% 4.00 %	0	0
RAE BARELI	27	1.15	15.34	13 48.15%	9 33.33%	3	2	11.11% 7.41 %	0	0
RAMPUR	3	3.84	10.07	0 66.67%	2 0	0	1	33.33 %	0	0
SAHARANPUR	11	1.94	14.68	1 9.09%	3 27.27%	5 45.45%	2	18.18 %	0	0
SANT KABIR NAGA	4	0.79	2.14	3 75.00%	1 25.00%	0	0	0	0	0
SANT RAVIDAS NA	4	2.55	4.21	0 100.00%	4 100.00%	0	0	0	0	0
SHAHJAHANPUR	1	5.03	5.03	0 72.73%	0 27.27%	1 100.00%	0	0	0	0
SHRAWASTI	11	0.65	4.10	8 72.73%	3 27.27%	0 0	0	0	0	0
SIDDHARTHNAGA	10	1.10	5.25	8 80.00%	1 10.00%	1 10.00%	0	0	0	0
SITAPUR	19	0.33	11.14	5 26.32%	7 36.84%	6 31.58%	1 5.26 %	0	0	0
SONBHADRA	16	1.44	13.01	4 25.00%	8 50.00%	1 6.25%	3 18.75 %	0	0	0

SULTANPUR	33	0.75	11.68	16 48.48%	9 27.27%	5 15.15%	3 9.09 %	0	0
UNNAO	15	0.56	13.18	6 40.00%	6 40.00%	1 6.67%	2 13.33 %	0	0
VARANASI	5	1.31	8.80	2 40.00%	0	3 60.00%	0	0	0
Total	725	0.06	43.95	248	229	136	89	20	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 2022:

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 2022.

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 15.33%. Water levels in the range of 2-5 and 5-10 mbgl are predominant during this period as reflected at 46% and 22.26% of monitored wells respectively. The moderate water level zone remains at 15.08%. The very deep water level occurs in 3.83% 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, Bareilly, Bahraich, Balrampur , Amethi, Banda and Ballia 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, Baghpat, 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 along Yamuna river in isolated patches. It is seen mostly in Bagpat, Agra, Etawah, Fatehpur, Hamirpur and Muzaffarnagar districts. This is due to effluent nature of river Yamuna and also due to higher elevations in the area. In the central parts of Lucknow, water level of more than 20 mbgl is observed.

In Gandak and Saryu canal commands water level predominately ranges from 2 to 5 mbgl. ShardaSahayak canal command shows predominance of depth to water level between 2 and 10 mbgl while Ram Ganga canal command shows predominance of 5 - 10 mbgl 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.

Table -6**DISTRICT- WISE DEPTH TO WATER LEVEL, U.P.****January, 2022**

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	9	0.50	44.13	2 22.22%	0	2 22.22%	1 11.11 %	3 33.33%	1 11.11%	
ALIGARH	7	2.00	10.98	1 14.29%	1 14.29%	4 57.14%	1 14.29 %	0	0	
ALLAHABAD	32	0.61	15.13	6 18.75%	16 50.00%	9 28.13%	1 3.13 %	0	0	
AMBEDKAR NAGA	7	2.20	4.67	0	7 100.00%	0	0	0	0	
AURAIYA	7	1.75	19.14	2 28.57%	2 28.57%	2 28.57%	1 14.29 %	0	0	
AZAMGARH	19	1.10	5.57	5 26.32%	13 68.42%	1 5.26%	0	0	0	
BAGHPAT	2	20.16	23.09	0	0	0	0	2 100.00%	0	
BAHRAICH	11	1.32	8.95	3 27.27%	6 54.55%	2 18.18%	0	0	0	
BALLIA	21	0.91	8.28	8 38.10%	9 42.86%	4 19.05%	0	0	0	
BALRAMPUR	17	0.13	7.60	5 29.41%	10 58.82%	2 11.76%	0	0	0	
BANDA	10	2.28	15.02	0	5 50.00%	1 10.00%	4 40.00 %	0	0	

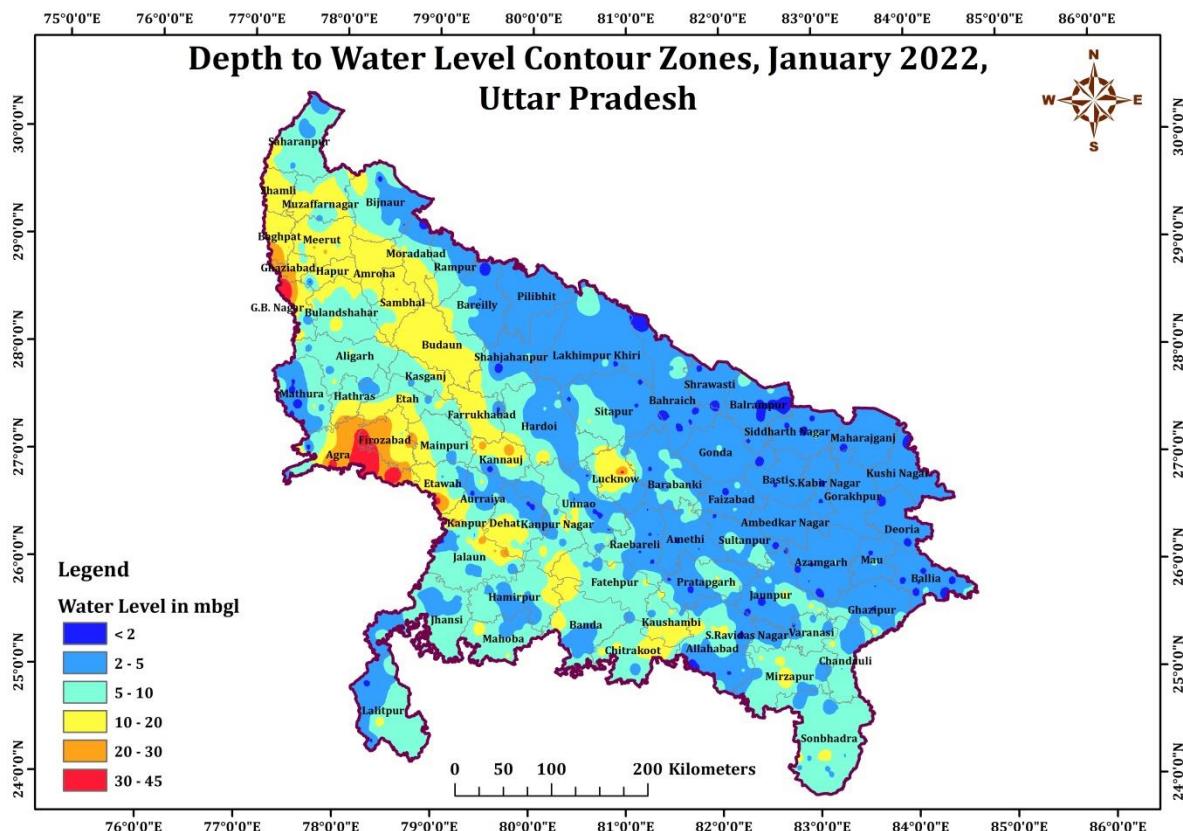
BARABANKI	17	1.58	10.05	1 5.88%	12 70.59%	3	17.65%	1 5.88 %	0	0
BAREILLY	9	0.80	11.75	1 11.11%	4 44.44%	3	33.33%	1 11.11 %	0	0
BASTI	7	1.83	4.80	1 14.29%	6 85.71%	0		0	0	0
BIJNOR	6	0.20	17.47	2 33.33%	1 16.67%	1	16.67%	2 33.33 %	0	0
BUDAUN	3	16.46	19.48	0	0	0		3 100.00 %	0	0
BULANDSHAHAR	3	7.73	12.38	0	0	1	33.33%	2 66.67 %	0	0
CHANDAULI	8	0.60	8.68	2 25.00%	3 37.50%	3	37.50%	0	0	0
CHITRAKOOT	7	2.78	16.90	0	1 14.29%	3	42.86%	3 42.86 %	0	0
DEORIA	9	1.15	4.75	2 22.22%	7 77.78%	0		0	0	0
ETAH	7	2.85	13.72	0	2 28.57%	1	14.29%	4 57.14 %	0	0
ETAWAH	6	4.20	35.76	0	2 33.33%	1	16.67%	1 16.67 %	2 33.33%	0
FAIZABAD	10	1.35	6.18	2 20.00%	5 50.00%	3	30.00%	0	0	0
FARRUKHABAD	2	1.40	15.70	1 50.00%	0	0		1 50.00 %	0	0
FATEHPUR	8	3.50	20.27	0	3 37.50%	1	12.50%	2 25.00 %	2 25.00%	0
FIROZABAD	4	8.57	26.65	0	0	1	25.00%	2 50.00 %	1 25.00%	0

GAUTAM BUDDHA	4	2.49	38.90	0	1 25.00%	0	1 25.00 %	2 50.00%	0
GHAZIABAD	7	1.68	20.37	1 14.29%	0	3 42.86%	2 28.57 %	1 14.29%	0
GHAZIPUR	17	0.10	12.58	2 11.76%	12 70.59%	1 5.88%	2 11.76 %	0	0
GONDA	7	1.70	5.60	1 14.29%	5 71.43%	1 14.29%	0	0	0
GORAKHPUR	4	2.27	4.31	0	4 100.00%	0	0	0	0
HAMIRPUR	7	2.87	15.89	0	3 42.86%	2 28.57%	2 28.57 %	0	0
HARDOI	17	1.87	8.97	2 11.76%	10 58.82%	5 29.41%	0	0	0
HATHRAS	4	2.63	10.73	0	3 75.00%	0	1 25.00 %	0	0
JALAUN	27	0.96	30.75	3 11.11%	8 29.63%	11 40.74%	1 3.70 %	4 14.81%	0
JAUNPUR	27	0.63	12.96	6 22.22%	14 51.85%	5 18.52%	2 7.41 %	0	0
JHANSI	16	2.13	9.95	0	6 37.50%	10 62.50%	0	0	0
JYOTIBA PHULE N	7	10.41	19.24	0	0	0	7 100.00 %	0	0
KANNAUJ	4	0.16	24.19	1 25.00%	1 25.00%	0	0	2 50.00%	0
KANPUR DEHAT	7	2.86	19.51	0	4 57.14%	1 14.29%	2 28.57 %	0	0

KANPUR NAGAR	13	1.25	40.98	3	23.08%	4	30.77%	4	30.77%	1	7.69 %	0	1	7.69%
KAUSHAMBI	9	3.37	18.14	0		1	11.11%	1	11.11%	7	77.78 %	0	0	
KHERI	6	1.46	7.88	2	33.33%	3	50.00%	1	16.67%	0		0	0	
KUSHINAGAR	5	1.18	3.59	1	20.00%	4	80.00%	0		0		0	0	
LALITPUR	16	1.45	13.40	4	25.00%	5	31.25%	6	37.50%	1	6.25 %	0	0	
LUCKNOW	18	2.19	41.37	0		7	38.89%	1	5.56%	8	44.44 %	1	1	5.56%
MAHOBA	7	3.34	13.24	0		2	28.57%	3	42.86%	2	28.57 %	0	0	
MAHRAJGANJ	6	1.59	3.85	1	16.67%	5	83.33%	0		0		0	0	
MAINPURI	5	2.90	7.40	0		1	20.00%	4	80.00%	0		0	0	
MATHURA	14	0.99	11.82	5	35.71%	4	28.57%	3	21.43%	2	14.29 %	0	0	
MAU	8	1.30	6.13	1	12.50%	6	75.00%	1	12.50%	0		0	0	
MEERUT	10	5.65	21.58	0		0		5	50.00%	3	30.00 %	2	0	20.00%
MIRZAPUR	10	2.38	12.54	0		4	40.00%	3	30.00%	3	30.00 %	0	0	
MORADABAD	7	0.35	18.75	2	28.57%	1	14.29%	0		4	57.14 %	0	0	
MUZAFFARNAGA	10	2.38	17.50	0		2	20.00%	3	30.00%	5	50.00 %	0	0	

PILIBHIT	11	2.03	4.18	0	11	100.00%	0	0	0	0	0
PRATAPGARH	24	0.65	12.13	3 12.50%	15	62.50%	5	20.83%	1 4.17 %	0	0
RAE BARELI	23	1.39	9.90	8 34.78%	13	56.52%	2	8.70%	0	0	0
RAMPUR	3	3.92	10.20	0	2	66.67%	0	1 33.33 %	0	0	0
SAHARANPUR	10	1.69	12.00	1 10.00%	2	20.00%	6	60.00%	1 10.00 %	0	0
SANT KABIR NAGA	4	1.32	3.18	2 50.00%	2	50.00%	0	0	0	0	0
SANT RAVIDAS NA	4	3.72	7.76	0	3 75.00%	1	25.00%	0	0	0	0
SHAHJAHANPUR	1	5.17	5.17	0	0	1 100.00%	0	0	0	0	0
SHRAWASTI	11	1.31	4.44	4 36.36%	7	63.64%	0	0	0	0	0
SIDDHARTHNAAGA	10	1.35	6.27	2 20.00%	7 70.00%	1 10.00%	0	0	0	0	0
SITAPUR	19	1.15	10.59	3 15.79%	11 57.89%	4 21.05%	1 5.26 %	0	0	0	0
SONBHADRA	17	2.88	14.16	0	8 47.06%	6 35.29%	3 17.65 %	0	0	0	0
SULTANPUR	34	1.34	11.32	7 20.59%	17 50.00%	8 23.53%	2 5.88 %	0	0	0	0
UNNAO	25	0.56	13.21	5 20.00%	9 36.00%	8 32.00%	3 12.00 %	0	0	0	0
VARANASI	7	1.27	6.51	1 14.29%	3 42.86%	3 42.86%	0 0	0	0	0	0
Total	750	0.10	44.13		115		345		167		98
											22
											3

Plate VII



A summarized status of water level over the state during different seasons of the year 2021–22 is as follows:

DEPTH RANGE (M)	No. and Percentage of wells			
	May'21	Aug'21	Nov'21	Jan'22
0-2	73 (11.04%)	275(38.30%)	248 (34.20%)	115(15.33%)
2-5	245(37.06%)	182 (25.34%)	229 (31.58%)	345 (46%)
5-10	211(31.92%)	150 (20.89%)	136 (18.75%)	167 (22%)
10-20	104 (15.73%)	86(11.97%)	89(12.27%)	98 (13.06%)
>20	28 (4.12%)	25 (3.47%)	23(3.16%)	25(3.33%)

From the table it is seen that:-

1. There is a large variation in water logged area, water logging being maximum during August'21, reducing in Nov'21 and in Jan'22.
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 maximum in May'21, reducing considerably in August'21, November'21 and January'22.
4. The deep water level conditions (above 10 mbgl) are reaches maximum in May 21 and gradually decreases in August 21, November 21 and January 22.
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'21, Aug'21, Nov'21 & Jan'22 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 is analyzed as follows.

6.1 Seasonal Fluctuation during 2021 -22

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'2021 and January'2022.

May2021 – November 2021

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 2021 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' 2021 – November' 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	9	0.10	8.82	-	-	6 66.67%	2 22.22 %	1 11.11%	0	0	0	9	0
ALIGARH	5	0.28	5.56	0.72	0.72	2 40.00%	1 20.00 %	1 20.00%	1 20.00%	0	0	4	1
ALLAHABAD	30	0.22	10.00	-	-	8 26.67%	9 30.00 %	13 43.33%	0	0	0	30	0
AMBEDKAR NAGAR	7	0.40	2.69	0.07	0.07	4 57.14%	2 28.57 %	0	1 14.29%	0	0	6	1
AURAIYA	6	2.64	6.96	-	-	0	4 66.67 %	2 33.33%	0	0	0	6	0
AZAMGARH	11	0.41	4.64	-	-	2 18.18%	5 45.45 %	4 36.36%	0	0	0	11	0
BAGHPAT	2	2.01	2.01	1.72	1.72	0	1 50.00 %	0	1 50.00%	0	0	1	1
BAHRAICH	10	0.53	1.51	0.05	0.05	9 90.00%	0	0	1 10.00%	0	0	9	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		
BALLIA	14	0.30	4.82	0.35	0.43	6 42.86%	3 21.43 %	2 14.29%	3 21.43%	0	0	11	3
BALRAMPUR	16	0.15	3.65	0.01	0.43	8 50.00%	2 12.50 %	0	6 37.50%	0	0	10	6
BANDA	10	0.47	4.23	0.15	0.37	5 50.00%	2 20.00 %	1 10.00%	2 20.00%	0	0	8	2
BARABANKI	15	1.21	5.40	-	-	2 13.33%	11 73.33 %	2 13.33%	0	0	0	15	0
BAREILLY	6	0.20	1.09	0.27	1.68	4 66.67%	0	0	2 33.33%	0	0	4	2
BASTI	7	0.03	2.33	0.23	0.57	3 42.86%	2 28.57 %	0	2 28.57%	0	0	5	2
BIJNOR	6	0.96	4.33	-	-	4 66.67%	1 16.67 %	1 16.67%	0	0	0	6	0
BUDAUN	4	0.21	2.25	9.60	9.60	2 50.00%	1 25.00 %	0	0	0	1 25.00%	3	1
BULANDSH AHR	2	0.33	3.08	-	-	1 50.00%	1 50.00 %	0	0	0	0	2	0
CHANDAULI	4	1.24	4.82	-	-	2 50.00%	1 25.00 %	1 25.00%	0	0	0	4	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		
CHITRAKOOT	6	0.23	5.84	0.48	3.44	1 16.67%	0	3 50.00%	1 16.67%	1 16.67%	0	4	2
DEORIA	8	0.58	2.08	0.13	1.77	4 50.00%	1 12.50 %	0	3 37.50%	0	0	5	3
ETAH	6	0.20	1.47	-	-	6 100.00%	0	0	0	0	0	6	0
ETAWAH	4	1.16	2.71	0.19	0.20	1 25.00%	1 25.00 %	0	2 50.00%	0	0	2	2
FAIZABAD	11	0.91	3.63	-	-	6 54.55%	5 45.45 %	0	0	0	0	11	0
FARRUKHABAD	2	3.81	3.81	0.07	0.07	0	1 50.00 %	0	1 50.00%	0	0	1	1
FATEHPUR	6	0.30	1.72	0.52	9.92	4 66.67%	0	0	1 16.67%	0	1 16.67%	4	2
FIROZABAD	4	1.77	2.55	-	-	3 75.00%	1 25.00 %	0	0	0	0	4	0
GAUTAM BUDDHA NAGAR	2	6.01	6.55	-	-	0	0	2 100.00%	0	0	0	2	0
GHAZIABAD	5	0.34	1.29	0.67	0.67	4 80.00%	0	0	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		
GHAZIPUR	13	0.09	5.83	0.43	1.07	5 38.46%	2 15.38 %	3 23.08%	3 23.08%	0	0	10	3
GONDA	7	1.47	2.10	0.14	0.14	4 57.14%	2 28.57 %	0	1 14.29%	0	0	6	1
GORAKHPU R	3	0.17	3.05	-	-	2 66.67%	1 33.33 %	0	0	0	0	3	0
HAMIRPUR	5	1.70	5.03	3.34	3.34	1 20.00%	2 40.00 %	1 20.00%	0	1 20.00%	0	4	1
HARDOI	16	0.21	2.76	0.88	1.00	10 62.50%	4 25.00 %	0	2 12.50%	0	0	14	2
HATHRAS	3	2.43	4.50	-	-	0	2 66.67 %	1 33.33%	0	0	0	3	0
JALAUN	21	0.54	7.51	1.32	1.63	9 42.86%	8 38.10 %	2 9.52%	2 9.52%	0	0	19	2
JAUNPUR	14	0.32	5.77	0.44	0.44	3 21.43%	6 42.86 %	4 28.57%	1 7.14%	0	0	13	1
JHANSI	15	0.52	5.51	0.71	0.88	6 40.00%	4 26.67 %	3 20.00%	2 13.33%	0	0	13	2

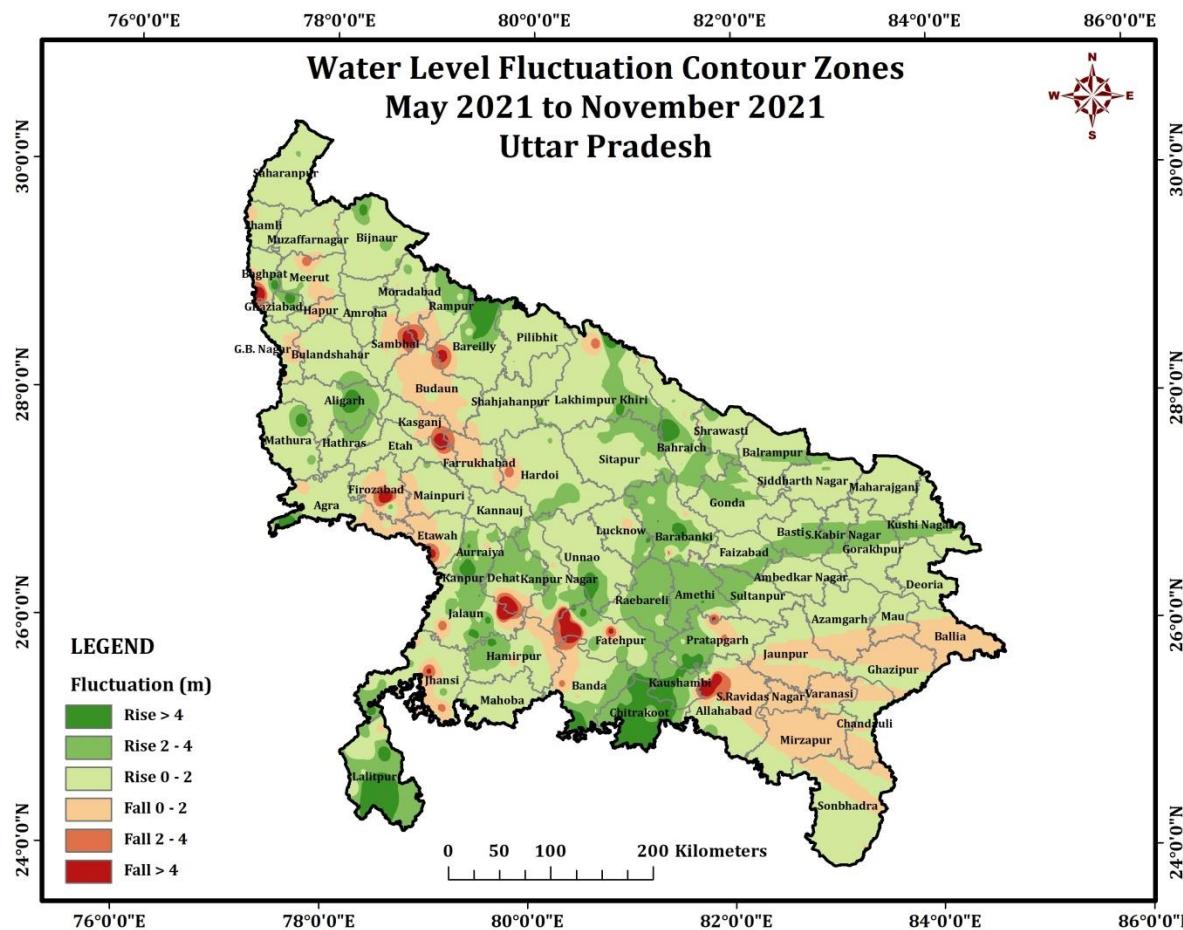
District Name	No. of Wells	Range of Fluctuation (m)				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise		Fall		Rise			Fall			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
JYOTIBA PHULE NAGAR	6	0.21	1.60	-	-	6 100.00%	0	0	0	0	0	6	0
KANNAUJ	4	0.40	1.87	-	-	4 100.00%	0	0	0	0	0	4	0
KANPUR DEHAT	4	1.88	2.80	-	-	1 25.00%	3 75.00 %	0	0	0	0	4	0
KANPUR NAGAR	12	1.14	4.68	1.70	1.70	5 41.67%	4 33.33 %	2 16.67%	1 8.33%	0	0	11	1
KAUSHAMBI	7	1.98	5.54	-	-	1 14.29%	3 42.86 %	3 42.86%	0	0	0	7	0
KHERI	7	1.26	2.96	-	-	3 42.86%	4 57.14 %	0	0	0	0	7	0
KUSHINAGA R	4	-	-	0.46	2.94	0	0	0	3 75.00%	1 25.00%	0	0	4
LALITPUR	12	0.53	8.74	0.02	0.02	5 41.67%	3 25.00 %	3 25.00%	1 8.33%	0	0	11	1
LUCKNOW	14	1.06	5.38	0.98	1.94	6 42.86%	4 28.57 %	2 14.29%	2 14.29%	0	0	12	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		
MAHOBA	7	0.08	4.95	2.14	2.14	3 42.86%	1 14.29 %	2 28.57%	0	1 14.29%	0	6	1
MAHRAJGA NJ	6	0.98	0.98	0.77	2.51	1 16.67%	0	0	4 66.67%	1 16.67%	0	1	5
MAINPURI	4	2.38	2.93	0.83	0.83	0	3 75.00 %	0	1 25.00%	0	0	3	1
MATHURA	12	0.27	4.96	0.16	0.48	4 33.33%	4 33.33 %	2 16.67%	2 16.67%	0	0	10	2
MAU	5	0.07	2.72	0.37	0.49	2 40.00%	1 20.00 %	0	2 40.00%	0	0	3	2
MEERUT	10	0.55	1.43	0.80	7.01	8 80.00%	0	0	1 10.00%	0	1 10.00%	8	2
MIRZAPUR	3	1.72	1.72	0.44	0.77	1 33.33%	0	0	2 66.67%	0	0	1	2
MORADABA D	7	0.25	1.65	0.25	3.96	5 71.43%	0	0	1 14.29%	1 14.29%	0	5	2
MUZAFFAR NAGAR	5	0.31	4.37	0.17	0.99	2 40.00%	0	1 20.00%	2 40.00%	0	0	3	2
PILIBHIT	9	0.85	2.86	-	-	7 77.78%	2 22.22 %	0	0	0	0	9	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		
PRATAPGARH	23	1.54	6.36	-	-	1 4.35%	14 60.87 %	8 34.78%	0	0	0	23	0
RAE BARELI	25	0.24	4.57	4.89	4.89	7 28.00%	16 64.00 %	1 4.00%	0	0	1 4.00%	24	1
RAMPUR	2	0.71	1.78	-	-	2 100.00%	0	0	0	0	0	2	0
SAHARANPUR	8	0.82	3.55	-	-	3 37.50%	5 62.50 %	0	0	0	0	8	0
SANT KABIR NAGAR	4	0.80	2.31	-	-	3 75.00%	1 25.00 %	0	0	0	0	4	0
SANT RAVIDAS NAGAR	4	0.95	4.67	-	-	1 25.00%	2 50.00 %	1 25.00%	0	0	0	4	0
SHRAWASTI	11	0.20	2.29	0.20	0.66	6 54.55%	2 18.18 %	0	3 27.27%	0	0	8	3
SIDDHARTH NAGAR	10	0.02	1.82	0.20	0.67	6 60.00%	0	0	4 40.00%	0	0	6	4
SITAPUR	18	0.28	2.80	0.05	0.05	11 61.11%	6 33.33 %	0	1 5.56%	0	0	17	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		
SONBHADRA	8	0.12	3.88	-	-	4 50.00%	4 50.00 %	0	0	0	0	8	0
SULTANPUR	31	0.55	4.10	0.58	3.37	10 32.26%	16 51.61 %	1 3.23%	2 6.45%	2 6.45%	0	27	4
UNNAO	11	1.11	2.45	0.28	0.28	6 54.55%	4 36.36 %	0	1 9.09%	0	0	10	1
VARANASI	5	0.47	5.31	-	-	1 20.00%	3 60.00 %	1 20.00%	0	0	0	5	0
Total	613	6.01	0.98			262	193	74	72	8	4	529	84

Plate-VIII



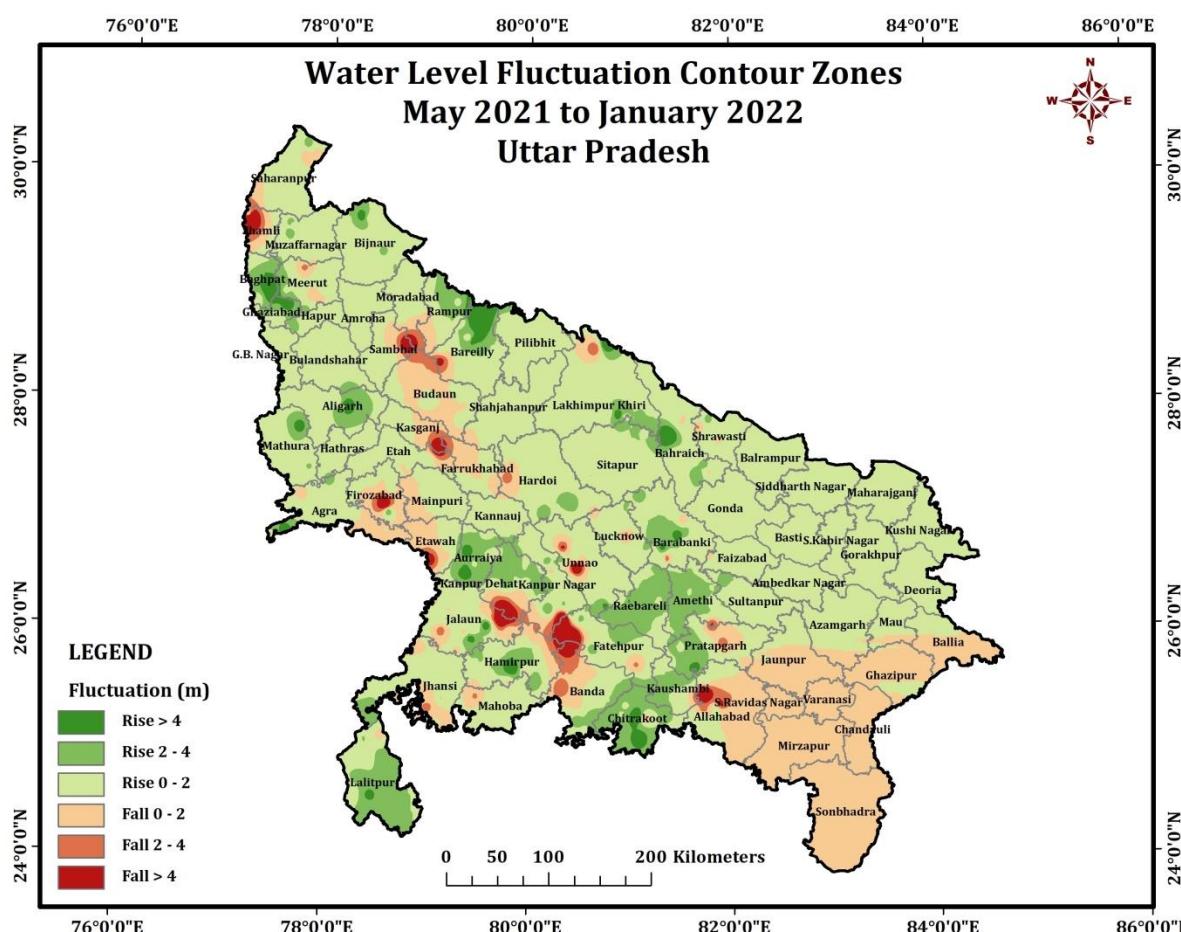
The district wise data indicate a rise in water level in almost 86.29% of the wells indicating monsoon recharge to ground water. There is a general rise in water levels from 0 to 2 m as noticed at 262 (42.73%) wells. This rise is seen in almost all the districts of the state except north Central part of the state. The rise in water levels in the range of 2 - 4 m is observed in 193 wells (31.48%). This range is observed mostly in eastern and parts of central and southern U.P. But their spatial extent is limited to patches and are confined in Jalaun, Hamirpur, Banda, Chitrakoot of Bundelkhand region and Faizabad, Basti, S.Kabir Nagar, Kushi Nagar and Pratapgarh districts of Poorvanchal. The rise of more than 4 m is observed in 74 wells (12%), covering few parts of hard rock areas of Lalitpur, Chitrakoot, Kaushambi, Hamirpur, Jalaun, Jhansi, Kaushambi and Pratapgarh districts.

May 2021 – January 2022:

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'21 and that

of January'2022 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.

Plate - IX



There is a rise of water level in 486 no. of analyzed wells (78.13%) and a fall in 133 no. (21.38%) of analyzed wells. The rise in water levels in the range of 0–2 m is seen in 48.55% wells covering almost all the districts of the state. Rise of 2 – 4 m is observed in 22.5% wells spread throughout the state. Rise of more than 4 m is observed in 44 analyzed wells (7.0%). About 19.4% of analyzed wells (121) show fall of 0-2m patches, in few districts and 0.96% of wells (6 no.) show fall of 2-4m and 6 wells show fall of >4m.

The overall picture of change of ground water storage over the entire state during 2021 -22 which emerged from the analysis of pre and post monsoon water level observation and water level fluctuation during May'21 and January'22 has been summarized as follows.

Fluctuation Change of Groundwater Storage in U.P. (2021-22)

Magnitude of Change (m)	May'21 – Nov'21		May'21 – Jan'22	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	262 (42.73%)	72 (11.74%)	302 (48.55%)	121 (19.4%)

Magnitude of Change (m)	May'21 – Nov'21		May'21 – Jan'22	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)
2-4	193 (31.48%)	8 (1.30%)	140 (22.5%)	6 (0.96%)
>4	74 (12%)	4 (0.65%)	44 (7.0%)	6 (0.96)%

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'2021 to November'2021 and it has further increases while comparing with May'2021 to January'2022 from 42.73% to 48.55% respectively. The rise of water level in the range of 2-4 m has been decrease from 31.48 % to 22.5% while compared with May 2021 –November 2021 to May 2021 to January 2022 respectively and number of wells showing rise of water level of more than 4 m has also been reduced from 12% to 7%.

Table- 8

DISTRICT WISE – SEASONAL WATER LEVEL FLUCTUATION, U.P.
May' 2021 – January' 2022

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	9	0.03	6.87	-	-	5 55.56%	1 11.11 %	2 22.22%	0	0	0	8	0
ALIGARH	4	0.20	5.97	1.37	1.37	2 50.00%	0	1 25.00%	1 25.00%	0	0	3	1
ALLAHABAD	29	0.15	7.04	0.30	0.30	9 31.03%	12 41.38 %	7 24.14%	1 3.45%	0	0	28	1
AMBEDKAR NAGAR	7	0.82	1.15	0.70	1.07	3 42.86%	0	0	4 57.14%	0	0	3	4
AURAIYA	6	2.06	4.87	-	-	0	5 83.33 %	1 16.67%	0	0	0	6	0
AZAMGARH	13	0.09	3.70	0.25	0.64	4 30.77%	6 46.15 %	0	3 23.08%	0	0	10	3
BAGHPAT	2	5.74	7.64	-	-	0	0	2 100.00%	0	0	0	2	0
BAHRAICH	10	0.33	1.17	-	-	10 100.00%	0	0	0	0	0	10	0
BALLIA	18	0.04	2.61	0.05	1.51	9 50.00%	2 11.11 %	0	7 38.89%	0	0	11	7

BALRAMPUR	16	0.02	3.10	0.03	1.26	3 18.75%	2 12.50 %	0	11 68.75%	0	0	5	11
BANDA	8	0.88	3.03	0.92	6.87	3 37.50%	1 12.50 %	0	2 25.00%	1 12.50%	1 12.50%	4	4
BARABANKI	15	0.81	2.93	-	-	9 60.00%	6 40.00 %	0	0	0	0	15	0
BAREILLY	7	0.52	1.14	1.62	1.62	5 71.43%	0	0	1 14.29%	0	0	5	1
BASTI	7	0.98	1.37	0.15	1.10	2 28.57%	0	0	5 71.43%	0	0	2	5
BIJNOR	6	0.71	4.13	-	-	3 50.00%	2 33.33 %	1 16.67%	0	0	0	6	0
BUDAUN	3	0.41	2.56	9.22	9.22	1 33.33%	1 33.33 %	0	0	0	1 33.3%	2	1
BULANDSHAHAR	3	0.46	2.68	6.56	6.56	1 33.33%	1 33.33 %	0	0	0	1 33.3%	2	1
CHANDAULI	4	0.48	1.80	0.58	0.58	3 75.00%	0	0	1 25.00%	0	0	3	1
CHITRAKOOT	6	2.30	4.02	0.33	5.60	0	3 50.00 %	1 16.67%	1 16.67%	0	1 16.6%	4	2
DEORIA	8	0.04	0.57	0.79	1.32	4 50.00%	0	0	4 50.00%	0	0	4	4
ETAH	5	0.64	1.25	-	-	4 80.00%	0	0	0	0	0	4	0

ETAWAH	4	1.84	2.04	0.15	0.27	1 25.00%	1 25.00 %	0	2 50.00%	0	0	2	2
FAIZABAD	10	0.30	2.37	0.18	0.18	8 80.00%	1 10.00 %	0	1 10.00%	0	0	9	1
FARRUKHABAD	2	0.28	3.71	-	-	1 50.00%	1 50.00 %	0	0	0	0	2	0
FATEHPUR	3	0.57	0.57	0.97	1.12	1 33.33%	0	0	2 66.67%	0	0	1	2
FIROZABAD	4	1.42	2.29	-	-	1 25.00%	3 75.00 %	0	0	0	0	4	0
GAUTAM BUDDHA NAGAR	2	6.45	7.50	-	-	0	0	2 100.00%	0	0	0	2	0
GHAZIABAD	6	0.20	1.99	-	-	6 100.00%	0	0	0	0	0	6	0
GHAZIPUR	15	0.25	5.03	0.48	1.59	3 20.00%	2 13.33 %	1 6.67%	9 60.00%	0	0	6	9
GONDA	7	0.49	1.65	0.60	0.60	6 85.71%	0	0	1 14.29%	0	0	6	1
GORAKHPUR	3	0.31	1.05	-	-	3 100.00%	0	0	0	0	0	3	0
HAMIRPUR	5	3.78	5.03	0.28	4.33	0	1 20.00 %	1 20.00%	2 40.00%	0	1 20.00%	2	3
HARDOI	17	0.17	3.06	0.22	0.30	13 76.47%	2 11.76 %	0	2 11.76%	0	0	15	2

HATHRAS	3	1.60	4.59	-	-	1 33.33%	1 33.33 %	1 33.33%	0	0	0	3	0
JALAUN	21	0.83	6.36	0.06	1.72	9 42.86%	5 23.81 %	2 9.52%	5 23.81%	0	0	16	5
JAUNPUR	15	0.01	4.51	0.38	0.38	4 26.67%	8 53.33 %	2 13.33%	1 6.67%	0	0	14	1
JHANSI	15	0.55	4.41	0.33	0.58	4 26.67%	7 46.67 %	2 13.33%	2 13.33%	0	0	13	2
JYOTIBA PHULE NAGAR	6	0.50	1.97	-	-	6 100.00%	0	0	0	0	0	6	0
KANNAUJ	4	0.51	1.58	-	-	4 100.00%	0	0	0	0	0	4	0
KANPUR DEHAT	4	1.15	1.94	-	-	4 100.00%	0	0	0	0	0	4	0
KANPUR NAGAR	12	1.02	4.41	1.43	1.43	4 33.33%	5 41.67 %	2 16.67%	1 8.33%	0	0	11	1
KAUSHAMBI	7	0.87	4.40	-	-	3 42.86%	2 28.57 %	2 28.57%	0	0	0	7	0
KHERI	6	0.85	1.95	-	-	6 100.00%	0	0	0	0	0	6	0
KUSHINAGAR	4	-	-	0.58	1.26	0	0	0	4 100.0 %	0	0	0	4
LALITPUR	13	0.13	5.31	0.92	0.92	8 61.54%	2 15.38 %	2 15.38%	1 7.69%	0	0	12	1

LUCKNOW	16	0.45	4.33	0.13	1.24	9 56.25%	3 18.75 %	2 12.50%	2 12.50%	0	0	14	2
MAHOBA	6	0.50	3.41	0.67	2.13	3 50.00%	1 16.67 %	0	1 16.67%	1 16.67%	0	4	2
MAHRAJGANJ	6	-	-	0.04	2.41	0	0	0	4 66.67%	2 33.33%	0	0	6
MAINPURI	4	1.85	2.02	0.98	0.98	1 25.00%	2 50.00 %	0	1 25.00%	0	0	3	1
MATHURA	12	0.32	5.80	0.40	0.40	6 50.00%	3 25.00 %	2 16.67%	1 8.33%	0	0	11	1
MAU	6	1.72	1.72	0.19	2.05	1 16.67%	0	0	4 66.67%	1 16.67%	0	1	5
MEERUT	10	0.38	2.77	8.58	8.58	8 80.00%	1 10.00 %	0	0	0	1 10.00%	9	1
MIRZAPUR	4	4.09	4.09	1.36	1.97	0	0	1 25.00%	3 75.00%	0	0	1	3
MORADABAD	7	0.35	1.39	0.34	0.34	6 85.71%	0	0	1 14.29%	0	0	6	1
MUZAFFAR NAGAR	8	0.77	7.20	0.23	0.23	3 37.50%	1 12.50 %	3 37.50%	1 12.50%	0	0	7	1
PILIBHIT	9	0.58	2.30	-	-	8 88.89%	1 11.11 %	0	0	0	0	9	0
PRATAPGARH	23	1.40	5.09	-	-	1 4.35%	19 82.61 %	3 13.04%	0	0	0	23	0

RAE BARELI	23	0.23	3.93	0.52	0.52	12 52.17%	10 43.48 %	0	1 4.35%	0	0	22	1
RAMPUR	2	0.58	1.70	-	-	2 100.00%	0	0	0	0	0	2	0
SAHARANPUR	8	1.93	2.53	0.11	0.11	3 37.50%	4 50.00 %	0	1 12.50%	0	0	7	1
SANT KABIR NAGAR	4	0.22	1.78	0.24	0.24	3 75.00%	0	0	1 25.00%	0	0	3	1
SANT RAVIDAS NAGAR	4	1.06	2.56	0.22	0.22	2 50.00%	1 25.00 %	0	1 25.00%	0	0	3	1
SHRAWASTI	11	0.34	1.59	0.11	1.58	4 36.36%	0	0	7 63.64%	0	0	4	7
SIDDHARTH NAGAR	10	0.57	0.57	0.15	1.75	1 10.00%	0	0	9 90.00%	0	0	1	9
SITAPUR	17	0.28	2.40	0.13	0.13	15 88.24%	1 5.88 %	0	1 5.88%	0	0	16	1
SONBHADRA	8	0.10	1.77	0.03	0.50	6 75.00%	0	0	2 25.00%	0	0	6	2
SULTANPUR	32	0.15	3.18	0.05	3.65	20 62.50%	8 25.00 %	0	3 9.38%	1 3.13%	0	28	4
UNNAO	13	0.48	2.36	0.15	0.28	9 69.23%	2 15.38 %	0	2 15.38%	0	0	11	2
VARANASI	5	0.51	4.55	0.68	0.68	3 60.00%	0	1 20.00%	1 20.00%	0	0	4	1
Total	622	6.45	0.57	0.00	9.22	302	140	44	121	6	6	486	133

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 2021-22 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 2020 –21:

The water level data collected during May'2021 has been compared with May'2020 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.

Due to covid -19 pandemic, only 189 well have been monitored in 23 districts. It is found that 54 no. (28.57%) monitoring wells show rise and 89 no. (47.08%) show fall in water level in range of 0 – 2m. Out of the total monitoring well, 35.97% and 64.02% shows rise and fall in the water level respectively.

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

Plate – X

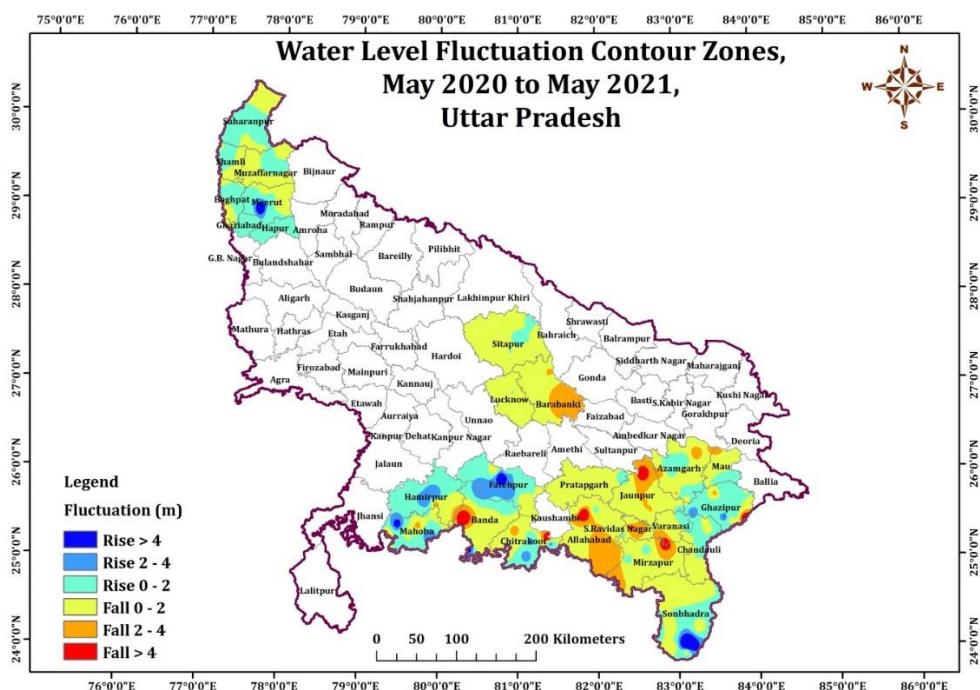


Table -9

DISTRICT WISE – ANNUAL WATER LEVEL FLUCTUATION, U.P.
May' 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		
ALLAHABAD	26	0.23	0.74	0.24	10.77	2 7.69%	0	0	15 57.69%	7 26.92%	2 7.6%	2	24
AZAMGARH	11	0.31	2.35	0.05	3.52	4 36.36%	1 9.09 %	0	3 27.27%	3 27.27%	0	5	6
BAGHPAT	2	1.11	1.11	2.44	2.44	1 50.00%	0	0	0	1 50.00%	0	1	1
BANDA	7	0.17	5.12	0.86	2.35	1 14.29%	0	2 28.57%	3 42.86%	1 14.29%	0	3	4
BARABANKI	8	-	-	0.11	2.78	0	0	0	5 62.50%	3 37.50%	0	0	8
CHANDAULI	3	-	-	0.06	1.24	0	0	0	3 100.0 %	0	0	0	3
CHITRAKOOT	7	2.55	3.03	0.62	6.86	0	3 42.86 %	0	2 28.57%	1 14.29%	1 14.2%	3	4
FATEHPUR	4	0.73	4.47	-	-	1 25.00%	2 50.00 %	1 25.00%	0	0	0	4	0
GHAZIABAD	6	0.03	1.32	0.25	0.25	5 83.33%	0	0	1 16.67%	0	0	5	1

GHAZIPUR	14	0.14	4.70	0.20	6.88	7 50.00%	0	2 14.29%	3 21.43%	1 7.14%	1 7.14%	9	5
HAMIRPUR	3	-	-	1.71	2.77	0	0	0	2 66.67%	1 33.33%	0	0	3
LUCKNOW	7	0.92	0.92	0.17	2.07	1 14.29%	0	0	5 71.43%	1 14.29%	0	1	6
MAHOBA	9	0.20	4.22	0.14	3.86	3 33.33%	0	1 11.11%	2 22.22%	3 33.33%	0	4	5
MAU	4	0.09	0.09	0.05	3.77	1 25.00%	0	0	2 50.00%	1 25.00%	0	1	3
MEERUT	9	0.22	9.41	0.10	0.65	4 44.44%	0	1 11.11%	4 44.44%	0	0	5	4
MIRZAPUR	3	0.52	1.38	1.66	1.66	2 66.67%	0	0	1 33.33%	0	0	2	1
MUZAFFAR NAGAR	7	0.16	0.20	0.39	2.16	2 28.57%	0	0	4 57.14%	1 14.29%	0	2	5
PRATAPGARH	18	0.19	1.25	0.15	1.82	4 22.22%	0	0	14 77.78%	0	0	4	14
SAHARANPUR	8	0.22	0.82	0.40	0.85	4 50.00%	0	0	4 50.00%	0	0	4	4
SANT RAVIDAS NAGAR	3	1.12	1.12	0.12	2.44	1 33.33%	0	0	1 33.33%	1 33.33%	0	1	2

SITAPUR	19	0.03	0.55	0.05	0.74	8 42.11%	0	0	11 57.89%	0	0	8	11
SONBHADRA	8	0.58	13.13	0.78	2.15	1 12.50%	0	1 12.50%	4 50.00%	2 25.00%	0	2	6
VARANASI	3	0.13	0.28	5.55	5.55	2 66.67%	0	0	0	0	1 33.33%	2	1
Total	189	2.55	0.09	0.00	10.77	54	6	8	89	27	5	68	121

August 2020-21:

The water level data collected during August'2020 has been compared with Aug'2021 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 198 wells (48.41%) and fall in 211 wells (51.58%). The fall in water level is due to scanty monsoonal rainfall in some of the area. A rise of 0 -2 m is observed at 166 monitoring stations (40.58% of the monitored wells) scattered in the patches. A rise of 2-4 m is seen in 23 wells (5.62%) and rise of more than 4 m is seen in only 9 wells (2.20%), mainly concentrated in Shamli, Hamirpur, Mahoba, Chitrakoot, Shrawasti and Sonbhadra districts of the State.

The fall of 0 -2 water levels is observed in 177 wells (43.27%) of the monitored wells covering some patches in the western, southern and central districts of U.P. A fall of 2 - 4m is observed in 31 wells (7.57%) found in Sitapur, Kannauj, Hamirpur, Fatehpur, Raebareli and Mau.

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

Plate-XI

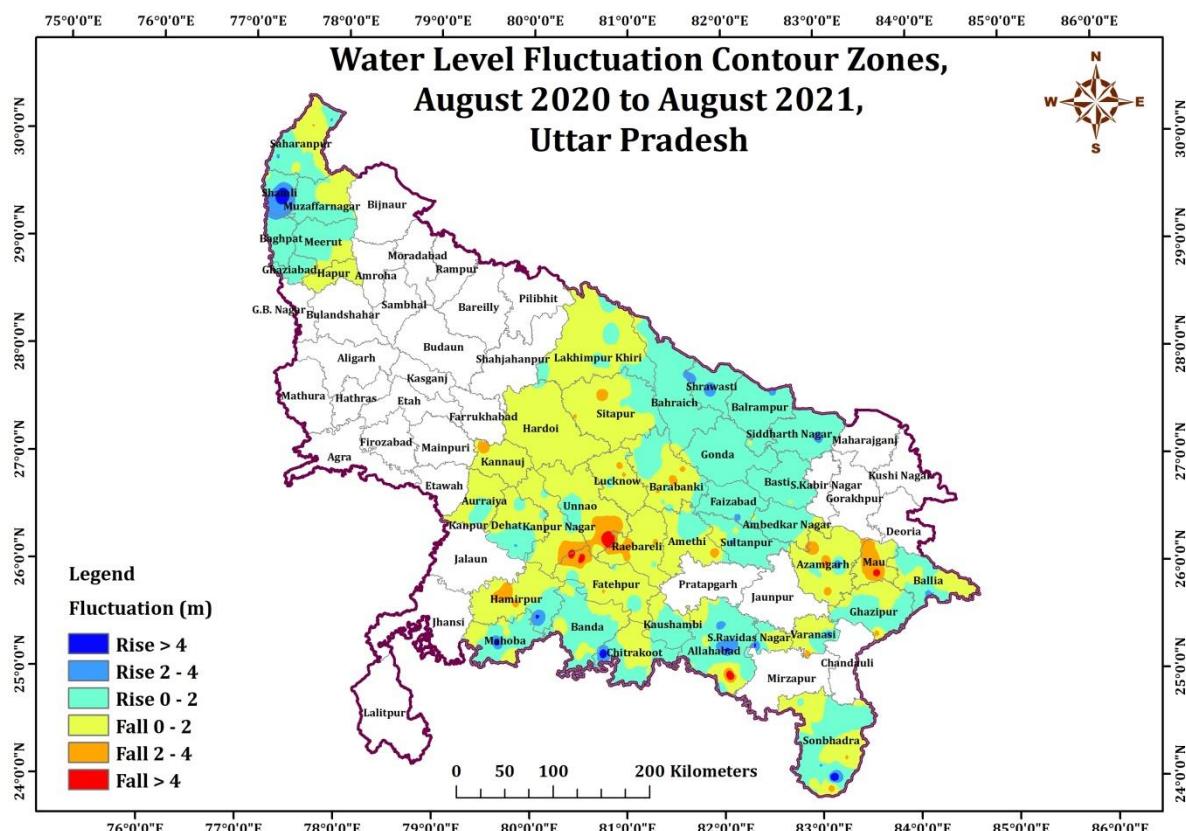


Table-10

DISTRICTWISE– ANNUAL WATER LEVEL FLUCTUATION, U.P
August' 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		
ALLAHABAD	26	0.14	4.86	0.06	3.07	9 34.62%	4 15.38 %	1 3.85%	11 42.31%	1 3.85%	0	14	12
AMBEDKAR NAGAR	7	0.40	1.84	0.13	0.27	5 71.43%	0	0	2 28.57%	0	0	5	2
AURAIYA	7	0.37	0.61	0.02	1.71	3 42.86%	0	0	4 57.14%	0	0	3	4
AZAMGARH	13	0.20	4.10	0.01	4.74	2 15.38%	0	1 7.69%	7 53.85%	2 15.38%	1 7.6%	3	10
BAGHPAT	2	1.78	3.69	-	-	1 50.00%	1 50.00 %	0	0	0	0	2	0
BAHRAICH	10	0.25	1.10	0.17	0.35	7 70.00%	0	0	3 30.00%	0	0	7	3
BALLIA	13	0.06	2.90	0.02	1.98	4 30.77%	2 15.38 %	0	7 53.85%	0	0	6	7
BALRAMPUR	13	0.40	2.50	0.02	0.23	9 69.23%	2 15.38 %	0	2 15.38%	0	0	11	2
BANDA	12	0.16	6.13	0.05	1.46	2 16.67%	1 8.33 %	2 16.67%	7 58.33%	0	0	5	7

BARABANKI	17	0.20	1.64	0.01	3.89	8 47.06%	0	0	7 41.18%	2 11.76%	0	8	9
BASTI	7	0.15	1.70	0.07	0.30	5 71.43%	0	0	2 28.57%	0	0	5	2
CHITRAKOO T	9	0.04	0.89	0.48	2.34	6 66.67%	0	0	2 22.22%	1 11.11%	0	6	3
FAIZABAD	11	0.20	3.20	-	-	10 90.91%	1 9.09 %	0	0	0	0	11	0
FATEHPUR	11	1.22	2.06	0.21	5.40	1 9.09%	1 9.09 %	0	6 54.55%	2 18.18%	1 9.0%	2	9
GHAZIABAD	6	0.18	0.30	0.31	0.83	3 50.00%	0	0	3 50.00%	0	0	3	3
GHAZIPUR	9	0.40	2.64	0.10	3.00	3 33.33%	1 11.11 %	0	4 44.44%	1 11.11%	0	4	5
GONDA	6	0.35	1.55	-	-	6 100.00%	0	0	0	0	0	6	0
HAMIRPUR	6	0.24	4.44	0.04	3.53	2 33.33%	0	1 16.67%	2 33.33%	1 16.67%	0	3	3
HARDOI	15	0.02	0.06	0.50	2.60	2 13.33%	0	0	11 73.33%	2 13.33%	0	2	13
KANNAUJ	4	-	-	0.06	2.66	0	0	0	3 75.00%	1 25.00%	0	0	4
KANPUR DEHAT	7	0.48	2.16	0.28	1.49	4 57.14%	1 14.29 %	0	2 28.57%	0	0	5	2

KANPUR NAGAR	12	0.06	1.25	0.03	2.75	3 25.00%	0	0	6 50.00%	3 25.00%	0	3	9
KHERI	6	0.26	0.71	0.22	1.49	3 50.00%	0	0	3 50.00%	0	0	3	3
LUCKNOW	15	1.45	1.45	0.12	2.80	1 6.67%	0	0	12 80.00%	2 13.33%	0	1	14
MAHOBIA	8	0.10	5.64	0.40	1.67	3 37.50%	0	1 12.50%	4 50.00%	0	0	4	4
MAU	4	0.25	0.25	0.06	3.40	1 25.00%	0	0	1 25.00%	2 50.00%	0	1	3
MEERUT	8	0.30	1.17	0.09	0.53	5 62.50%	0	0	3 37.50%	0	0	5	3
MUZAFFAR NAGAR	7	0.44	6.49	0.09	0.70	2 28.57%	1 14.29 %	1 14.29%	3 42.86%	0	0	4	3
RAE BARELI	24	0.20	0.20	0.12	3.15	2 8.33%	0	0	17 70.83%	5 20.83%	0	2	22
SAHARANPUR	10	0.04	2.67	0.21	2.28	4 40.00%	2 20.00 %	0	3 30.00%	1 10.00%	0	6	4
SANT RAVIDAS NAGAR	4	2.06	4.83	1.06	1.87	0	1 25.00 %	1 25.00%	2 50.00%	0	0	2	2
SHRAWASTI	8	0.15	3.15	-	-	7 87.50%	1 12.50 %	0	0	0	0	8	0

SIDDHARTH NAGAR	10	0.22	3.89	0.01	0.01	8 80.00%	1 10.00 %	0	1 10.00%	0	0	9	1
SITAPUR	19	0.15	0.50	0.15	3.46	6 31.58%	0	0	12 63.16%	1 5.26%	0	6	13
SONBHADRA	14	0.02	8.48	0.10	3.47	4 28.57%	1 7.14 %	1 7.14%	6 42.86%	2 14.29%	0	6	8
SULTANPUR	35	0.05	3.00	0.03	4.40	20 57.14%	1 2.86 %	0	12 34.29%	1 2.86%	1 2.86%	21	14
UNNAO	9	0.03	0.30	0.17	1.28	4 44.44%	0	0	5 55.56%	0	0	4	5
VARANASI	5	1.20	3.48	1.22	2.94	1 20.00%	1 20.00 %	0	2 40.00%	1 20.00%	0	2	3
Total	409	2.06	0.06	0.00	5.40	166	23	9	177	31	3	198	211

November 2020 – 21:

The water level data collected during November'2020 has been compared with November'2021 data to evaluate the rise and fall in water levels since last one year. It is observed that 542 wells (82.87%) show rise and 110 wells (16.81%) show fall in water level. The 82.87% rise in water level is mainly because the area has received very good amount of monsoonal rainfall.

A rise of 0 -2m, water levels, is observed at 432 wells (66.05%) covering all parts of UP except Sambhal ,Firozabad and some parts of Amroha, Hapur, Bulandshahar, Rampur, Ghaziabad districts. Rise of 2 - 4 m is observed in 88 wells (13.45%) and rise of more than 4m is observed only at 22 wells covering in very small patches.

The fall of 0-2m water levels is observed in 94 wells (14.37%) mostly in districts of Sambhal, Amroha, Bulandshahar, Hapur, Firozabad Hardoi, Jalaun , Jhansi, Banda and Chitrakoot. A fall of 2 - 4m is observed in 10wells (1.95%) and fall in water level > 4 m is found in 6 wells (0.45%) mainly in Sambhal and Jhansi District.

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

Plate-XII.

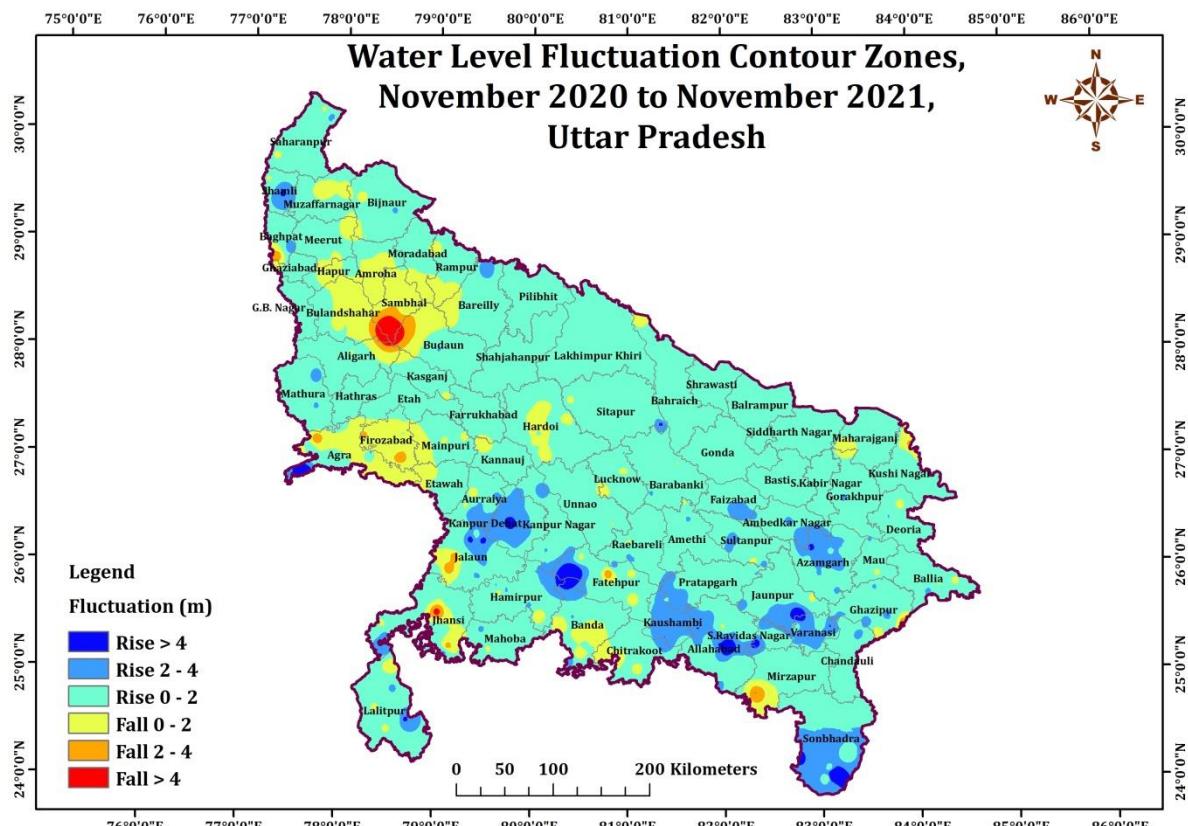


Table – 11

DISTRICTWISE– ANNUAL WATER LEVEL FLUCTUATION, U.P
November' 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	9	0.12	9.24	0.30	4.14	4 44.44%	1 11.11 %	1 11.11%	2 22.22%	0 0	1 11.11%	6	3
ALIGARH	7	0.25	1.14	0.19	0.25	5 71.43%	0	0	2 28.57%	0	0	5	2
ALLAHABAD	31	0.03	8.43	0.07	0.64	23 74.19%	4 12.90 %	2 6.45%	2 6.45%	0	0	29	2
AMBEDKAR NAGAR	7	1.16	2.54	-	-	6 85.71%	1 14.29 %	0	0	0	0	7	0
AURAIYA	7	0.32	4.27	-	-	3 42.86%	3 42.86 %	1 14.29%	0	0	0	7	0
AZAMGARH	15	0.17	4.23	-	-	9 60.00%	5 33.33 %	1 6.67%	0	0	0	15	0
BAGHPAT	2	3.09	3.09	2.98	2.98	0	1 50.00 %	0	0	1 50.00%	0	1	1
BAHRAICH	11	0.05	0.97	0.12	0.44	9 81.82%	0	0	2 18.18%	0	0	9	2
BALLIA	14	0.23	3.38	0.08	0.79	9 64.29%	1 7.14 %	0	3 21.43%	0	0	10	3

BALRAMPUR	17	0.10	1.95	-	-	16 94.12%	0	0	0	0	0	16	0
BANDA	12	0.11	4.55	0.04	1.23	2 16.67%	2 16.67 %	1 8.33%	7 58.33%	0	0	5	7
BARABANKI	18	0.42	2.51	0.30	0.30	15 83.33%	2 11.11 %	0	1 5.56%	0	0	17	1
BAREILLY	8	0.12	6.90	0.12	2.11	4 50.00%	1 12.50 %	1 12.50%	1 12.50%	1 12.50%	0	6	2
BASTI	7	0.23	1.68	0.06	0.06	6 85.71%	0	0	1 14.29%	0	0	6	1
BIJNOR	6	0.20	1.45	0.10	0.25	4 66.67%	0	0	2 33.33%	0	0	4	2
BUDAUN	3	0.23	2.11	10.34	10.34	1 33.33%	1 33.33 %	0	0	0	1 33.3%	2	1
BULANDSHAHR	2	-	-	0.30	0.31	0	0	0	2 100.0%	0	0	0	2
CHANDAULI	6	0.12	2.57	-	-	5 83.33%	1 16.67 %	0	0	0	0	6	0
CHITRAKOOT	8	0.18	2.18	0.56	2.38	4 50.00%	2 25.00 %	0	1 12.50%	1 12.50%	0	6	2
DEORIA	9	0.33	1.18	0.09	1.07	7 77.78%	0	0	2 22.22%	0	0	7	2
ETAH	7	0.43	0.93	0.04	0.32	5 71.43%	0	0	2 28.57%	0	0	5	2

FAIZABAD	11	0.97	4.23	-	-	9 81.82%	1 9.09 %	1 9.09%	0	0	0	11	0
FARRUKHABAD	2	1.89	1.89	0.06	0.06	1 50.00%	0	0	1 50.00%	0	0	1	1
FATEHPUR	10	0.12	12.96	0.61	4.48	4 40.00%	3 30.00 %	1 10.00%	1 10.00%	0	1 10.00%	8	2
FIROZABAD	4	-	-	0.05	3.54	0	0	0	3 75.00%	1 25.00%	0	0	4
GHAZIABAD	5	0.30	1.52	0.93	0.93	4 80.00%	0	0	1 20.00%	0	0	4	1
GHAZIPUR	12	0.65	4.90	0.25	3.39	3 25.00%	3 25.00 %	1 8.33%	4 33.33%	1 8.33%	0	7	5
GONDA	6	0.33	1.36	-	-	6 100.00%	0	0	0	0	0	6	0
GORAKHPU R	4	0.17	1.55	0.12	0.12	3 75.00%	0	0	1 25.00%	0	0	3	1
HAMIRPUR	6	0.65	2.42	0.90	1.00	2 33.33%	2 33.33 %	0	2 33.33%	0	0	4	2
HARDOI	15	0.06	1.11	0.02	1.21	10 66.67%	0	0	5 33.33%	0	0	10	5
HATHRAS	3	0.52	2.03	-	-	2 66.67%	1 33.33 %	0	0	0	0	3	0
JALAUN	25	0.25	5.40	0.35	4.15	14 56.00%	4 16.00 %	2 8.00%	3 12.00%	1 4.00%	1 4.00%	20	5

JAUNPUR	16	0.12	7.58	1.10	1.10	12 75.00%	2 12.50 %	1 6.25%	1 6.25%	0	0	15	1
JHANSI	14	0.55	2.85	1.30	5.10	7 50.00%	4 28.57 %	0	1 7.14%	1 7.14%	1 7.14%	11	3
JYOTIBA PHULE NAGAR	7	0.52	0.62	0.35	1.20	3 42.86%	0	0	4 57.14%	0	0	3	4
KANNAUJ	4	0.04	1.38	0.98	0.98	3 75.00%	0	0	1 25.00%	0	0	3	1
KANPUR DEHAT	5	1.10	2.79	-	-	2 40.00%	3 60.00 %	0	0	0	0	5	0
KANPUR NAGAR	12	0.32	3.91	0.05	0.24	9 75.00%	1 8.33 %	0	2 16.67%	0	0	10	2
KAUSHAMBI	6	1.84	4.05	-	-	1 16.67%	4 66.67 %	1 16.67%	0	0	0	6	0
KHERI	6	0.77	2.12	0.27	0.27	4 66.67%	1 16.67 %	0	1 16.67%	0	0	5	1
KUSHINAGA R	5	0.26	0.72	2.49	2.49	4 80.00%	0	0	0	1 20.00%	0	4	1
LALITPUR	13	0.02	4.35	0.30	1.19	6 46.15%	3 23.08 %	1 7.69%	3 23.08%	0	0	10	3
LUCKNOW	13	0.74	2.82	0.36	1.88	9 69.23%	1 7.69 %	0	3 23.08%	0	0	10	3

MAHOBIA	8	0.27	2.36	0.76	1.30	4 50.00%	2 25.00 %	0	2 25.00%	0	0	6	2
MAHRAJGANJ	6	0.21	1.03	2.46	2.46	5 83.33%	0	0	0	1 16.67%	0	5	1
MAINPURI	5	0.25	0.87	0.22	0.22	4 80.00%	0	0	1 20.00%	0	0	4	1
MATHURA	14	0.35	2.93	0.13	0.13	11 78.57%	2 14.29 %	0	1 7.14%	0	0	13	1
MAU	6	0.02	2.25	-	-	5 83.33%	1 16.67 %	0	0	0	0	6	0
MEERUT	8	0.70	1.69	0.61	0.93	6 75.00%	0	0	2 25.00%	0	0	6	2
MIRZAPUR	8	0.12	2.13	4.12	4.12	5 62.50%	2 25.00 %	0	0	0	1 12.50%	7	1
MORADABAD	5	0.09	0.75	0.51	1.76	3 60.00%	0	0	2 40.00%	0	0	3	2
MUZAFFARNAGAR	5	1.51	4.35	0.24	1.09	1 20.00%	0	1 20.00%	3 60.00%	0	0	2	3
PILIBHIT	10	0.63	1.53	-	-	10 100.00%	0	0	0	0	0	10	0
PRATAPGARH	22	0.24	3.48	0.03	0.03	14 63.64%	7 31.82 %	0	1 4.55%	0	0	21	1
RAE BARELI	22	0.07	2.39	0.10	0.89	17 77.27%	1 4.55 %	0	4 18.18%	0	0	18	4

RAMPUR	2	-	-	0.05	0.45	0	0	0	2 100.0 %	0	0	0	2
SAHARANPUR	11	0.15	3.15	0.13	0.50	6 54.55%	2 18.18 %	0	3 27.27%	0	0	8	3
SANT KABIR NAGAR	4	0.40	1.31	-	-	4 100.00%	0	0	0	0	0	4	0
SANT RAVIDAS NAGAR	4	0.02	7.49	-	-	2 50.00%	1 25.00 %	1 25.00%	0	0	0	4	0
SHAHJAHANPUR	1	0.74	0.74	-	-	1 100.00%	0	0	0	0	0	1	0
SHRAWASTI	11	0.35	1.32	-	-	11 100.00%	0	0	0	0	0	11	0
SIDDHARTH NAGAR	9	0.02	1.15	-	-	9 100.00%	0	0	0	0	0	9	0
SITAPUR	17	0.01	4.79	0.06	0.36	12 70.59%	0	1 5.88%	4 23.53%	0	0	13	4
SONBHADRA	15	0.24	13.84	1.14	1.14	6 40.00%	6 40.00 %	2 13.33%	1 6.67%	0	0	14	1
SULTANPUR	33	0.02	4.14	2.55	2.55	27 81.82%	4 12.12 %	1 3.03%	0	1 3.03%	0	32	1
UNNAO	13	0.02	2.20	0.07	0.07	11 84.62%	1 7.69 %	0	1 7.69%	0	0	12	1
VARANASI	5	1.10	4.39	-	-	3 60.00%	1 20.00 %	1 20.00%	0	0	0	5	0
Total	654	3.09	0.62			432	88	22	94	10	6	542	110

January 2021 –22

To evaluate the rise and fall in water level in January'2021 with respect to January'2022, water level data of wells have been analysed. The fluctuation data shows rise of water level in 572 nos (83.5%) and fall in 113 nos (16.45%) of the analysed wells.

The fluctuation data of the state shows a fall of 0 to 2 m in 104 no. of analysed wells (15.18%) in mainly Amroha, Sambhal, Bulandshahar, Aligarh, Budaun, Hardoi, Siatpur, Jalaun, Lalitpur, Banda, Chitrakoot and Chandaulli districts.

A fall of 2 to 4m is observed only in 7 no. wells and rise of > 4 m in 2 wells (0.28%) of G.B.Nagar and Chandauli

A rise of 0-2 m in water level is noticed in 490 no. of analysed wells (71.53%). Districts showing in all parts of Uttar Pradesh except Amroha, Sambhal, Bulandshahar, Aligarh, Budaun and parts of Hardoi, Siatpur, Jalaun, Lalitpur, Banda, Chitrakoot and Chandaulli districts. and rise of 2 to 4 m is seen only in 87nos(12.41%) and rise of >4m are mainly seen in Shamli, Bhagpat, Kanpur Dehat, Hamirpur, Fatehpur, Allahabad, S.Ravidas Nagar, Mirzapur and Varanasi. The district wise changes has been shown in Table-12 and depicted in the Plate-XIII.

Plate –XIII

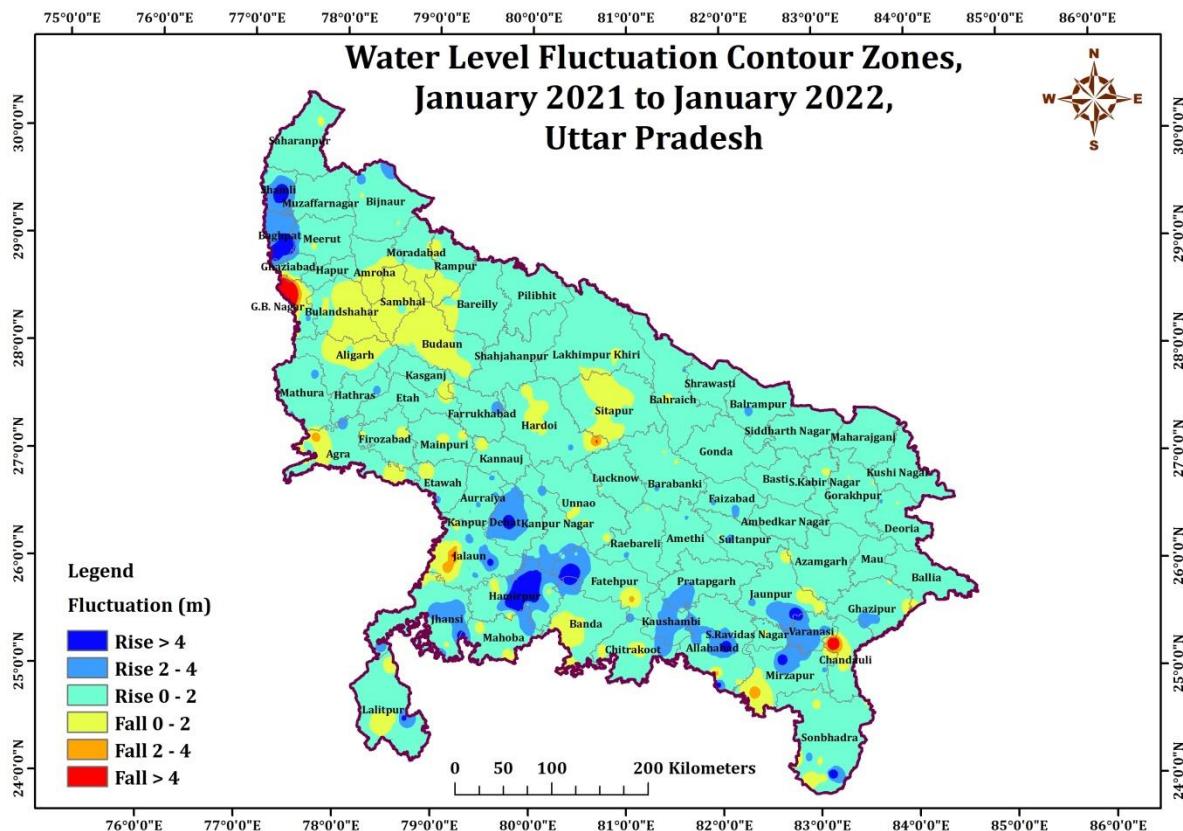


Table -12

DISTRICTWISE – ANNUAL WATER LEVEL FLUCTUATION, U.P
January' 2021 – 2022

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	9	0.12	9.24	0.30	4.14	4 44.44%	1 11.11 %	1 11.11%	2 22.22%	0	1 11.11%	6	3
ALIGARH	7	0.25	1.14	0.19	0.25	5 71.43%	0	0	2 28.57%	0	0	5	2
ALLAHABAD	31	0.03	8.43	0.07	0.64	23 74.19%	4 12.90 %	2 6.45%	2 6.45%	0	0	29	2
AMBEDKAR NAGAR	7	1.16	2.54	-	-	6 85.71%	1 14.29 %	0	0	0	0	7	0
AURAIYA	7	0.32	4.27	-	-	3 42.86%	3 42.86 %	1 14.29%	0	0	0	7	0
AZAMGARH	15	0.17	4.23	-	-	9 60.00%	5 33.33 %	1 6.67%	0	0	0	15	0
BAGHPAT	2	3.09	3.09	2.98	2.98	0	1 50.00 %	0	0	1 50.00%	0	1	1
BAHRAICH	11	0.05	0.97	0.12	0.44	9 81.82%	0	0	2 18.18%	0	0	9	2

BALLIA	14	0.23	3.38	0.08	0.79	9 64.29%	1 7.14 %	0	3 21.43%	0	0	10	3
BALRAMPUR	17	0.10	1.95	-	-	16 94.12%	0	0	0	0	0	16	0
BANDA	12	0.11	4.55	0.04	1.23	2 16.67%	2 16.67 %	1 8.33%	7 58.33%	0	0	5	7
BARABANKI	18	0.42	2.51	0.30	0.30	15 83.33%	2 11.11 %	0	1 5.56%	0	0	17	1
BAREILLY	8	0.12	6.90	0.12	2.11	4 50.00%	1 12.50 %	1 12.50%	1 12.50%	1 12.50%	0	6	2
BASTI	7	0.23	1.68	0.06	0.06	6 85.71%	0	0	1 14.29%	0	0	6	1
BIJNOR	6	0.20	1.45	0.10	0.25	4 66.67%	0	0	2 33.33%	0	0	4	2
BUDAUN	3	0.23	2.11	10.34	10.34	1 33.33%	1 33.33 %	0	0	0	1 33.33%	2	1
BULANDSHAHAR	2	-	-	0.30	0.31	0	0	0	2 100.0 %	0	0	0	2
CHANDAULI	6	0.12	2.57	-	-	5 83.33%	1 16.67 %	0	0	0	0	6	0
CHITRAKOOT	8	0.18	2.18	0.56	2.38	4 50.00%	2 25.00 %	0	1 12.50%	1 12.50%	0	6	2

DEORIA	9	0.33	1.18	0.09	1.07	7 77.78%	0	0	2 22.22%	0	0	7	2
ETAH	7	0.43	0.93	0.04	0.32	5 71.43%	0	0	2 28.57%	0	0	5	2
FAIZABAD	11	0.97	4.23	-	-	9 81.82%	1 9.09 %	1 9.09%	0	0	0	11	0
FARRUKHABAD	2	1.89	1.89	0.06	0.06	1 50.00%	0	0	1 50.00%	0	0	1	1
FATEHPUR	10	0.12	12.96	0.61	4.48	4 40.00%	3 30.00 %	1 10.00%	1 10.00%	0	1 10.0%	8	2
FIROZABAD	4	-	-	0.05	3.54	0	0	0	3 75.00%	1 25.00%	0	0	4
GHAZIABAD	5	0.30	1.52	0.93	0.93	4 80.00%	0	0	1 20.00%	0	0	4	1
GHAZIPUR	12	0.65	4.90	0.25	3.39	3 25.00%	3 25.00 %	1 8.33%	4 33.33%	1 8.33%	0	7	5
GONDA	6	0.33	1.36	-	-	6 100.00%	0	0	0	0	0	6	0
GORAKHPU R	4	0.17	1.55	0.12	0.12	3 75.00%	0	0	1 25.00%	0	0	3	1
HAMIRPUR	6	0.65	2.42	0.90	1.00	2 33.33%	2 33.33 %	0	2 33.33%	0	0	4	2

HARDOI	15	0.06	1.11	0.02	1.21	10 66.67%	0	0	5 33.33%	0	0	10	5
HATHRAS	3	0.52	2.03	-	-	2 66.67%	1 33.33 %	0	0	0	0	3	0
JALAUN	25	0.25	5.40	0.35	4.15	14 56.00%	4 16.00 %	2 8.00%	3 12.00%	1 4.00%	1 4.00%	20	5
JAUNPUR	16	0.12	7.58	1.10	1.10	12 75.00%	2 12.50 %	1 6.25%	1 6.25%	0	0	15	1
JHANSI	14	0.55	2.85	1.30	5.10	7 50.00%	4 28.57 %	0	1 7.14%	1 7.14%	1 7.14%	11	3
JYOTIBA PHULE NAGAR	7	0.52	0.62	0.35	1.20	3 42.86%	0	0	4 57.14%	0	0	3	4
KANNAUJ	4	0.04	1.38	0.98	0.98	3 75.00%	0	0	1 25.00%	0	0	3	1
KANPUR DEHAT	5	1.10	2.79	-	-	2 40.00%	3 60.00 %	0	0	0	0	5	0
KANPUR NAGAR	12	0.32	3.91	0.05	0.24	9 75.00%	1 8.33 %	0	2 16.67%	0	0	10	2
KAUSHAMBI	6	1.84	4.05	-	-	1 16.67%	4 66.67 %	1 16.67%	0	0	0	6	0
KHERI	6	0.77	2.12	0.27	0.27	4 66.67%	1 16.67 %	0	1 16.67%	0	0	5	1

KUSHINAGA R	5	0.26	0.72	2.49	2.49	4 80.00%	0	0	0	1 20.00%	0	4	1
LALITPUR	13	0.02	4.35	0.30	1.19	6 46.15%	3 23.08 %	1 7.69%	3 23.08%	0	0	10	3
LUCKNOW	13	0.74	2.82	0.36	1.88	9 69.23%	1 7.69 %	0	3 23.08%	0	0	10	3
MAHOBIA	8	0.27	2.36	0.76	1.30	4 50.00%	2 25.00 %	0	2 25.00%	0	0	6	2
MAHRAJGANJ	6	0.21	1.03	2.46	2.46	5 83.33%	0	0	0	1 16.67%	0	5	1
MAINPURI	5	0.25	0.87	0.22	0.22	4 80.00%	0	0	1 20.00%	0	0	4	1
MATHURA	14	0.35	2.93	0.13	0.13	11 78.57%	2 14.29 %	0	1 7.14%	0	0	13	1
MAU	6	0.02	2.25	-	-	5 83.33%	1 16.67 %	0	0	0	0	6	0
MEERUT	8	0.70	1.69	0.61	0.93	6 75.00%	0	0	2 25.00%	0	0	6	2
MIRZAPUR	8	0.12	2.13	4.12	4.12	5 62.50%	2 25.00 %	0	0	0	1 12.50%	7	1
MORADABAD	5	0.09	0.75	0.51	1.76	3 60.00%	0	0	2 40.00%	0	0	3	2

MUZAFFAR NAGAR	5	1.51	4.35	0.24	1.09	1 20.00%	0	1 20.00%	3 60.00%	0	0	2	3
PILIBHIT	10	0.63	1.53	-	-	10 100.00%	0	0	0	0	0	10	0
PRATAPGAR H	22	0.24	3.48	0.03	0.03	14 63.64%	7 31.82 %	0	1 4.55%	0	0	21	1
RAE BARELI	22	0.07	2.39	0.10	0.89	17 77.27%	1 4.55 %	0	4 18.18%	0	0	18	4
RAMPUR	2	-	-	0.05	0.45	0	0	0	2 100.0%	0	0	0	2
SAHARAN PUR	11	0.15	3.15	0.13	0.50	6 54.55%	2 18.18 %	0	3 27.27%	0	0	8	3
SANT KABIR NAGAR	4	0.40	1.31	-	-	4 100.00%	0	0	0	0	0	4	0
SANT RAVIDA SNAGAR	4	0.02	7.49	-	-	2 50.00%	1 25.00 %	1 25.00%	0	0	0	4	0
SHAHJAHANPUR	1	0.74	0.74	-	-	1 100.00%	0	0	0	0	0	1	0
SHRAWASTI	11	0.35	1.32	-	-	11 100.00%	0	0	0	0	0	11	0
SIDDHARTHNAGAR	9	0.02	1.15	-	-	9 100.00%	0	0	0	0	0	9	0

SITAPUR	17	0.01	4.79	0.06	0.36	12 70.59%	0	1 5.88%	4 23.53%	0	0	13	4
SONBHAD RA	15	0.24	13.84	1.14	1.14	6 40.00%	6 40.00 %	2 13.33%	1 6.67%	0	0	14	1
SULTANPUR	33	0.02	4.14	2.55	2.55	27 81.82%	4 12.12 %	1 3.03%	0	1 3.03%	0	32	1
UNNAO	13	0.02	2.20	0.07	0.07	11 84.62%	1 7.69 %	0	1 7.69%	0	0	12	1
VARANASI	5	1.10	4.39	-	-	3 60.00%	1 20.00 %	1 20.00%	0	0	0	5	0
Total	654	3.09	0.62			432	88	22	94	10	6	542	110

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

Annual Fluctuation in Water Level During 2021 –22, U.P.

FLUCTUATION RANGE	May 20 – 21		August 20 - 21		November 20 - 21		January 21 – 22	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	54 (28.57%)	89 (47.08%)	166 (40.58%)	177 (43.27%)	432 (66.05%)	94 (14.37%)	490 (71.53%)	104 (15.18%)
2-4	6 (3.17%)	27 (14.28%)	23 (5.62%)	31 (7.57%)	88 (13.45%)	10 (1.52%)	66 (9.63%)	7 (1.02%)
>4	8 (4.23%)	5 (2.64)	9 (2.20%)	3 (0.73%)	22 (3.36%)	6 (0.91%)	104 (15.18%)	09 (0.28%)
TOTAL	68 (35.97%)	121 (64.02%)	198 (48.41%)	211 (51.58%)	542 (82.87%)	110 (16.81%)	572 (83.5%)	113 (16.45%)

From the analysis of table it is evident that the water level has shown maximum decline in August 21 as compared to the May'21 but the decline percentage has gradually decrease and increase in rise of water level percentage in November'21 and January'22 due to monsoonal recharge as compared to the previous year.

6.3 Fluctuation from the Decadal Mean during 2021 – 22

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 2021-22 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 (2011- 2020) – May 2021

The pre-monsoon water level data for 2021 has been compared to decadal mean (2011-2020) 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 shows that rise in water level for 395 (60%) wells and fall in 263no. (39.96%).

Table-13

DISTRICT WISE – DECADAL WATER LEVEL FLUCTUATION, U.P.
Mean May (2011 – 2020) – May, 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	9	0.18	0.18	0.07	5.03	1 11.11 %	0	0	3 33.33%	4 44.44 %	1 11.11%	1	8
ALIGARH	5	2.23	2.23	0.75	6.40	0 20.00%	1 60.00%	0	3 60.00%	0 20.00%	1 20.00%	1	4
ALLAHABAD	30	0.12	1.78	0.08	3.99	13 43.33 %	0	0	13 43.33%	4 13.33 %	0 0	13	17
AMBEDKAR NAGAR	7	1.21	4.56	-	-	3 42.86 %	2 28.57%	2 28.57%	0	0	0	7	0
AURAIYA	6	-	-	0.29	5.69	0 0	0 0	0 0	3 50.00%	2 33.33 %	1 16.67%	0	6
AZAMGARH	13	0.64	4.67	0.37	1.31	6 46.15 %	2 15.38%	2 15.38%	3 23.08%	0 0	0 0	10	3
BAGHPAT	2	-	-	1.51	5.61	0 0	0 0	0 0	1 50.00%	0 50.00%	1 50.00%	0	2
BAHRAICH	10	0.40	1.13	0.44	1.03	7 70.00 %	0 0	0 0	3 30.00%	0 0	0 0	7	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		
BALLIA	18	0.32	5.58	-	-	7 38.89 %	7 38.89%	4 22.22%	0	0	0	18	0
BALRAMPU R	17	0.91	3.42	0.77	1.52	6 35.29 %	9 52.94%	0	2 11.76%	0	0	15	2
BANDA	10	0.44	6.06	0.07	7.37	3 30.00 %	0	3 30.00%	3 30.00%	0	1 10.00%	6	4
BARABANKI	15	0.31	1.15	0.09	1.26	9 60.00 %	0	0	6 40.00%	0	0	9	6
BAREILLY	7	0.09	2.00	0.24	3.68	3 42.86 %	0	0	3 42.86%	1 14.29 %	0	3	4
BASTI	7	0.39	3.84	-	-	3 42.86 %	4 57.14%	0	0	0	0	7	0
BIJNOR	6	0.01	1.38	0.08	4.08	3 50.00 %	0	0	2 33.33%	0	1 16.67%	3	3
BUDAUN	4	-	-	1.58	6.23	0	0	0	1 25.00%	0	3 75.00%	0	4
BULANDSH AHR	3	4.33	4.33	2.44	3.11	0	0	1 33.33%	0	2 66.67 %	0	1	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		
CHANDAULI	4	1.13	2.81	-	-	1 25.00 %	3 75.00%	0	0	0	0	4	0
CHITRAKOOT	7	0.10	6.62	0.26	2.76	2 28.57 %	1 14.29%	1 14.29%	2 28.57%	1 14.29 %	0	4	3
DEORIA	8	1.48	2.69	-	-	3 37.50 %	5 62.50%	0	0	0	0	8	0
ETAH	6	-	-	0.78	3.03	0	0	0	4 66.67%	2 33.33 %	0	0	6
ETAWAH	4	0.26	0.92	1.29	4.14	2 50.00 %	0	0	1 25.00%	0	1 25.00%	2	2
FAIZABAD	11	0.06	4.18	0.21	0.30	6 54.55 %	2 18.18%	1 9.09%	2 18.18%	0	0	9	2
FARRUKHABAD	2	-	-	0.75	3.44	0	0	0	1 50.00%	1 50.00 %	0	0	2
FATEHPUR	7	0.75	7.86	0.45	0.45	3 42.86 %	1 14.29%	2 28.57%	1 14.29%	0	0	6	1
FIROZABAD	4	-	-	1.49	6.08	0	0	0	1 25.00%	1 25.00 %	2 50.00%	0	4

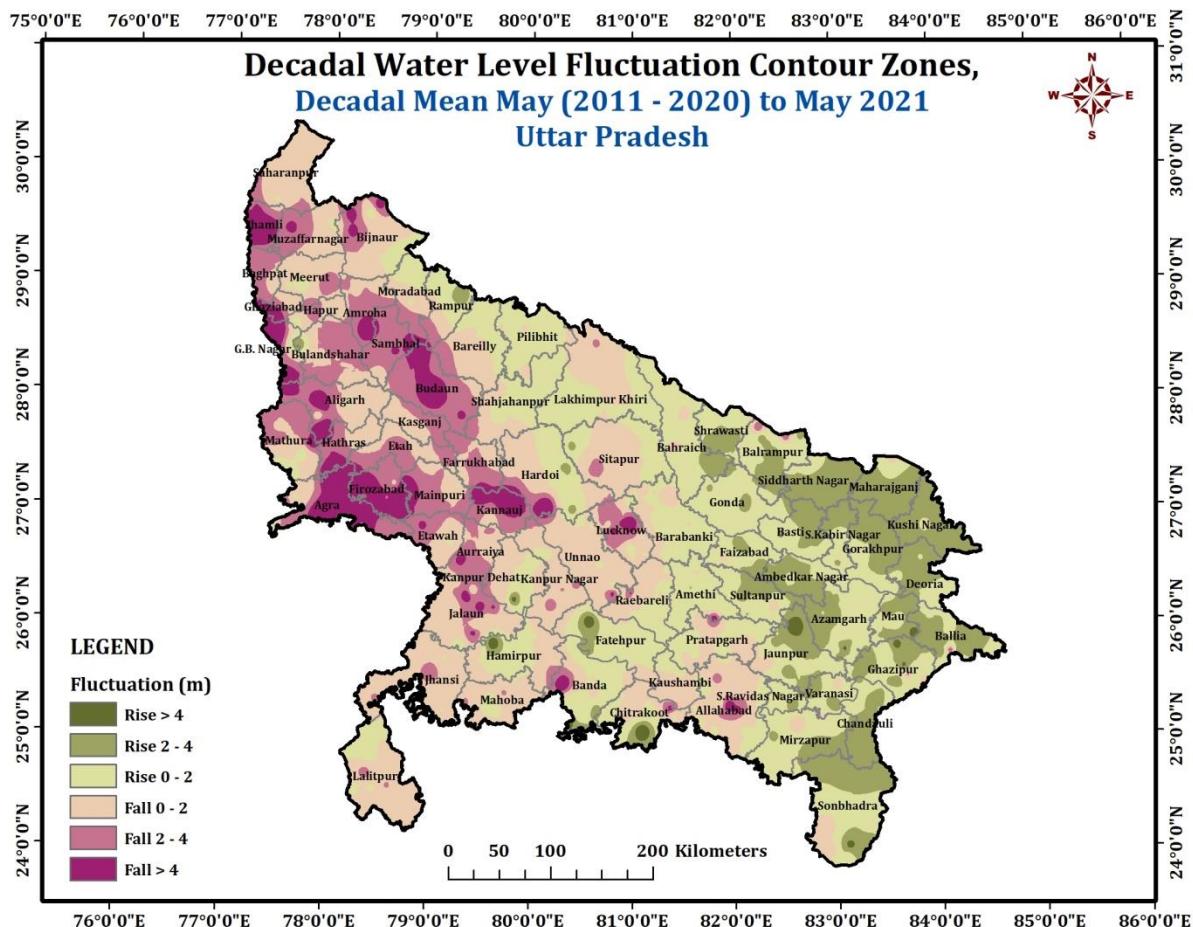
District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
GAUTAM BUDDHA NAGAR	2	-	-	6.43	20.83	0	0	0	0	0	2	0	2
GHAZIABAD	6	0.57	0.57	0.62	2.75	1 16.67 %	0	0	4 66.67%	1 16.67 %	0	1	5
GHAZIPUR	16	0.37	4.94	0.11	0.43	4 25.00 %	5 31.25%	5 31.25%	2 12.50%	0	0	14	2
GONDA	7	0.36	2.94	-	-	5 71.43 %	2 28.57%	0	0	0	0	7	0
GORAKHPU R	3	0.91	2.10	-	-	2 66.67 %	1 33.33%	0	0	0	0	3	0
HAMIRPUR	7	1.07	7.26	0.16	1.74	2 28.57 %	0	1 14.29%	4 57.14%	0	0	3	4
HARDOI	18	0.05	3.57	0.06	1.72	10 55.56 %	2 11.11%	0	6 33.33%	0	0	12	6
HATHRAS	3	-	-	0.44	6.61	0	0	0	2 66.67%	0	1 33.33%	0	3
JALAUN	21	0.07	1.02	0.08	6.92	4 19.05 %	0	0	11 52.38%	4 19.05 %	2 9.52%	4	17

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		
JAUNPUR	16	0.04	6.29	0.20	1.78	7 43.75 %	3 18.75%	2 12.50%	4 25.00%	0	0	12	4
JHANSI	15	0.02	1.29	0.29	3.81	7 46.67 %	0	0	7 46.67%	1 6.67 %	0	7	8
JYOTIBA PHULE NAGAR	6	0.19	0.19	1.74	5.45	1 16.67 %	0	0	1 16.67%	3 50.00 %	1 16.67%	1	5
KANNAUJ	4	0.19	0.19	2.81	6.76	1 25.00 %	0	0	0	2 50.00 %	1 25.00%	1	3
KANPUR DEHAT	4	0.12	4.73	0.45	0.97	1 25.00 %	0	1 25.00%	2 50.00%	0	0	2	2
KANPUR NAGAR	12	0.18	1.64	0.06	1.12	7 58.33 %	0	0	5 41.67%	0	0	7	5
KAUSHAMB I	7	0.01	1.61	1.97	1.97	6 85.71 %	0	0	1 14.29%	0	0	6	1
KHERI	7	0.12	0.98	0.07	0.74	4 57.14 %	0	0	3 42.86%	0	0	4	3
KUSHINAGA R	4	1.57	2.77	-	-	1 25.00 %	3 75.00%	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		
LALITPUR	14	0.06	2.98	0.33	3.14	6 42.86 %	1 7.14%	0	5 35.71 %	2 14.29 %	0	7	7
LUCKNOW	17	0.02	2.12	0.11	7.85	6 35.29 %	1 5.88%	0	5 29.41 %	4 23.53 %	1 5.88%	7	10
MAHOBA	9	0.23	4.88	1.95	2.93	4 44.44 %	0	1 11.11%	1 11.11%	3 33.33 %	0	5	4
MAHRAJGA NJ	6	2.82	3.52	0.35	0.35	0	5 83.33%	0	1 16.67%	0	0	5	1
MAINPURI	4	0.18	0.18	0.60	2.04	1 25.00 %	0	0	2 50.00%	1 25.00 %	0	1	3
MATHURA	12	0.59	1.65	0.28	4.37	4 33.33 %	0	0	5 41.67%	2 16.67 %	1 8.33%	4	8
MAU	6	0.08	4.75	-	-	2 33.33 %	2 33.33%	2 33.33%	0	0	0	6	0
MEERUT	10	.00	6.56	0.20	3.13	3 30.00 %	0	1 10.00%	4 40.00%	2 20.00 %	0	4	6
MIRZAPUR	4	3.43	4.52	0.54	0.54	0	2 50.00%	1 25.00%	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		
MORADABAD	11	0.51	1.29	0.04	4.23	4 36.36 %	0	0	2 18.18%	3 27.27 %	2 18.18%	4	7
MUZAFFAR NAGAR	9	0.73	10.93	0.38	4.33	2 22.22 %	0	1 11.11%	4 44.44%	1 11.11 %	1 11.11%	3	6
PILIBHIT	9	0.07	0.62	0.09	0.24	6 66.67 %	0	0	3 33.33%	0	0	6	3
PRATAPGARH	23	0.03	3.59	0.05	1.53	13 56.52 %	1 4.35%	0	9 39.13%	0	0	14	9
RAE BARELI	25	0.10	1.84	0.04	4.50	16 64.00 %	0	0	8 32.00%	0	1 4.00%	16	9
RAMPUR	2	2.79	2.79	1.18	1.18	0	1 50.00%	0	1 50.00%	0	0	1	1
SAHARANPUR	9	0.17	1.04	0.03	1.29	2 22.22 %	0	0	7 77.78%	0	0	2	7
SANT KABIR NAGAR	4	1.24	2.51	-	-	1 25.00 %	3 75.00%	0	0	0	0	4	0
SANT RAVIDAS NAGAR	4	2.58	4.63	-	-	0	2 50.00%	2 50.00%	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		
SHRAWASTI	11	0.26	2.79	-	-	5 45.45 %	6 54.55%	0	0	0	0	11	0
SIDDHARTH NAGAR	10	1.32	4.06	-	-	3 30.00 %	6 60.00%	1 10.00%	0	0	0	10	0
SITAPUR	19	0.07	2.38	0.01	1.50	9 47.37 %	1 5.26%	0	9 47.37%	0	0	10	9
SONBHADRA	8	0.86	6.97	0.02	0.02	3 37.50 %	3 37.50%	1 12.50%	1 12.50%	0	0	7	1
SULTANPUR	34	0.17	4.22	0.30	1.58	20 58.82 %	9 26.47%	2 5.88%	3 8.82%	0	0	31	3
UNNAO	13	0.38	2.33	0.01	1.30	3 23.08 %	1 7.69%	0	9 69.23%	0	0	4	9
VARANASI	5	0.65	3.94	1.48	1.48	1 20.00 %	3 60.00%	0	1 20.00%	0	0	4	1
Total	658	0.18	4.33	0.00	20.83	258	100	37	191	47	25	395	263



It is observed that 395 no. Monitoring wells (60 %) shows rise and 39.96% fall in water level. A fall in water level of 0-2 m is observed in 191(26.02%) wells. Fall of higher magnitude is found along Yamuna river. A fall in water levels between 2- 4m is observed in 47Monitoring wells (6.86%) found in small patches Like Agra, Hapur, Meerut, Bhagpat, Muzaffarnagar, Firozabad, Farukhabad, Fatehpur, Mahoba, Jalaun Chitrakoot, and Lucknow.

There is a rise in water level from 0 to 2 m with respect to decadal mean of May in 258 (39.10%) monitoring wells and rise of 2 - 4 m is observed in 100 monitoring wells and rise of more than 4 m is observed in 37 monitoring wells.

Mean August (2011 - 2020) – August 2021

The average water level of last 10 years (2011to 2020) for each well for the month of August has been evaluated and compared with water level data for August'2021. 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 (2011 – 2020) – August, 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	9	0.27	0.79	0.07	5.20	2 22.22 %	0	0	4 44.44%	1 11.11 %	2 22.22%	2	7
ALIGARH	6	0.97	6.77	0.37	2.13	1 16.67 %	0	2 33.33%	2 33.33%	1 16.67 %	0	3	3
ALLAHABAD	26	0.04	4.44	1.09	2.65	14 53.85 %	6 23.08%	2 7.69%	3 11.54%	1 3.85 %	0	22	4
AMBEDKAR NAGAR	7	0.22	2.59	-	-	3 42.86 %	4 57.14%	0	0	0	0	7	0
AURAIYA	7	0.40	0.40	0.91	3.55	1 14.29 %	0	0	3 42.86%	3 42.86 %	0	1	6
AZAMGARH	14	0.27	6.89	0.05	1.16	7 50.00 %	3 21.43%	1 7.14%	3 21.43%	0	0	11	3
BAGHPAT	2	-	-	1.38	2.82	0	0	0	1 50.00%	1 50.00 %	0	0	2
BAHRAICH	11	0.21	1.00	0.11	0.34	7 63.64 %	0	0	4 36.36%	0	0	7	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		
BALLIA	17	0.42	4.16	0.11	0.72	9 52.94 %	3 17.65%	2 11.76%	3 17.65%	0	0	14	3
BALRAMPUR	15	0.11	2.33	-	-	11 73.33 %	4 26.67%	0	0	0	0	15	0
BANDA	13	0.07	6.47	0.02	2.82	5 38.46 %	1 7.69%	1 7.69%	4 30.77%	2 15.38 %	0	7	6
BARABANKI	18	0.14	1.01	0.17	0.86	12 66.67 %	0	0	6 33.33%	0	0	12	6
BAREILLY	9	0.32	0.65	0.50	3.96	2 22.22 %	0	0	6 66.67%	1 11.11 %	0	2	7
BASTI	7	0.15	2.87	-	-	6 85.71 %	1 14.29%	0	0	0	0	7	0
BIJNOR	5	0.41	0.99	0.02	1.90	2 40.00 %	0	0	3 60.00%	0	0	2	3
BUDAUN	3	-	-	4.24	12.13	0	0	0	0	0	3 100.0 %	0	3
BULANDSH AHR	3	5.44	5.44	1.29	4.08	0	0	1 33.33%	1 33.33%	0	1 33.33 %	1	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		
CHANDAULI	8	0.11	2.75	0.03	0.03	4 50.00 %	3 37.50%	0	1 12.50%	0	0	7	1
CHITRAKOOT	9	0.03	3.66	0.33	3.74	5 55.56 %	1 11.11%	0	2 22.22%	1 11.11 %	0	6	3
DEORIA	9	0.56	4.18	-	-	5 55.56 %	3 33.33%	1 11.11%	0	0	0	9	0
ETAH	7	-	-	0.79	3.66	0	0	0	4 57.14%	3 42.86 %	0	0	7
ETAWAH	6	1.26	6.00	0.87	5.69	1 16.67 %	0	1 16.67%	2 33.33%	1 16.67 %	1 16.67%	2	4
FAIZABAD	11	0.20	3.32	0.15	0.15	9 81.82 %	1 9.09%	0	1 9.09%	0	0	10	1
FARRUKHABAD	2	1.22	1.22	0.21	0.21	1 50.00 %	0	0	1 50.00%	0	0	1	1
FATEHPUR	12	0.55	2.52	0.43	6.47	3 25.00 %	1 8.33%	0	5 41.67%	2 16.67 %	1 8.33%	4	8
FIROZABAD	4	5.75	5.75	3.67	5.81	0	0	1 25.00%	0	2 50.00 %	1 25.00%	1	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		
GAUTAM BUDDHA NAGAR	4	2.95	2.95	1.16	14.98	0	1 25.00%	0	1 25.00%	0	2 50.00%	1	3
GHAZIABAD	6	-	-	0.50	3.28	0	0	0	4 66.67%	2 33.33 %	0	0	6
GHAZIPUR	13	0.29	3.53	0.32	1.21	2 15.38 %	7 53.85%	0	4 30.77%	0	0	9	4
GONDA	6	1.27	2.87	-	-	3 50.00 %	3 50.00%	0	0	0	0	6	0
GORAKHPU R	4	1.09	3.91	-	-	2 50.00 %	2 50.00%	0	0	0	0	4	0
HAMIRPUR	6	0.48	3.94	1.49	1.76	1 16.67 %	3 50.00%	0	2 33.33%	0	0	4	2
HARDOI	17	0.17	1.96	0.19	1.94	6 35.29 %	0	0	11 64.71%	0	0	6	11
HATHRAS	3	0.40	0.40	1.22	3.30	1 33.33 %	0	0	1 33.33%	1 33.33 %	0	1	2
JALAUN	25	.00	1.29	0.11	3.86	8 32.00 %	0	0	12 48.00%	5 20.00 %	0	8	17

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		
JAUNPUR	22	0.24	4.85	0.22	6.06	10 45.45 %	5 22.73%	3 13.64%	3 13.64%	0 0	1 4.55%	18	4
JHANSI	17	0.06	1.38	0.15	2.52	9 52.94 %	0 0	0 0	5 29.41%	3 17.65 %	0 0	9	8
JYOTIBA PHULE NAGAR	6	0.14	0.14	1.72	6.48	1 16.67 %	0 0	0 0	1 16.67%	3 50.00 %	1 16.67%	1	5
KANNAUJ	4	-	-	0.07	6.21	0 25.00 %	0 0	0 0	2 50.00%	1 25.00 %	1 25.00%	0	4
KANPUR DEHAT	8	1.66	4.11	0.37	1.76	2 25.00 %	0 0	1 12.50%	5 62.50%	0 0	0 0	3	5
KANPUR NAGAR	13	.00	0.87	0.22	2.69	5 38.46 %	0 0	0 0	7 53.85%	1 7.69 %	0 0	5	8
KAUSHAMB I	6	0.83	4.66	-	-	3 50.00 %	2 33.33%	1 16.67%	0 0	0 0	0 0	6	0
KHERI	7	0.17	1.65	0.35	1.51	4 57.14 %	0 0	0 0	3 42.86%	0 0	0 0	4	3
KUSHINAGA R	5	0.09	0.73	0.48	0.48	4 80.00 %	0 0	0 0	1 20.00%	0 0	0 0	4	1

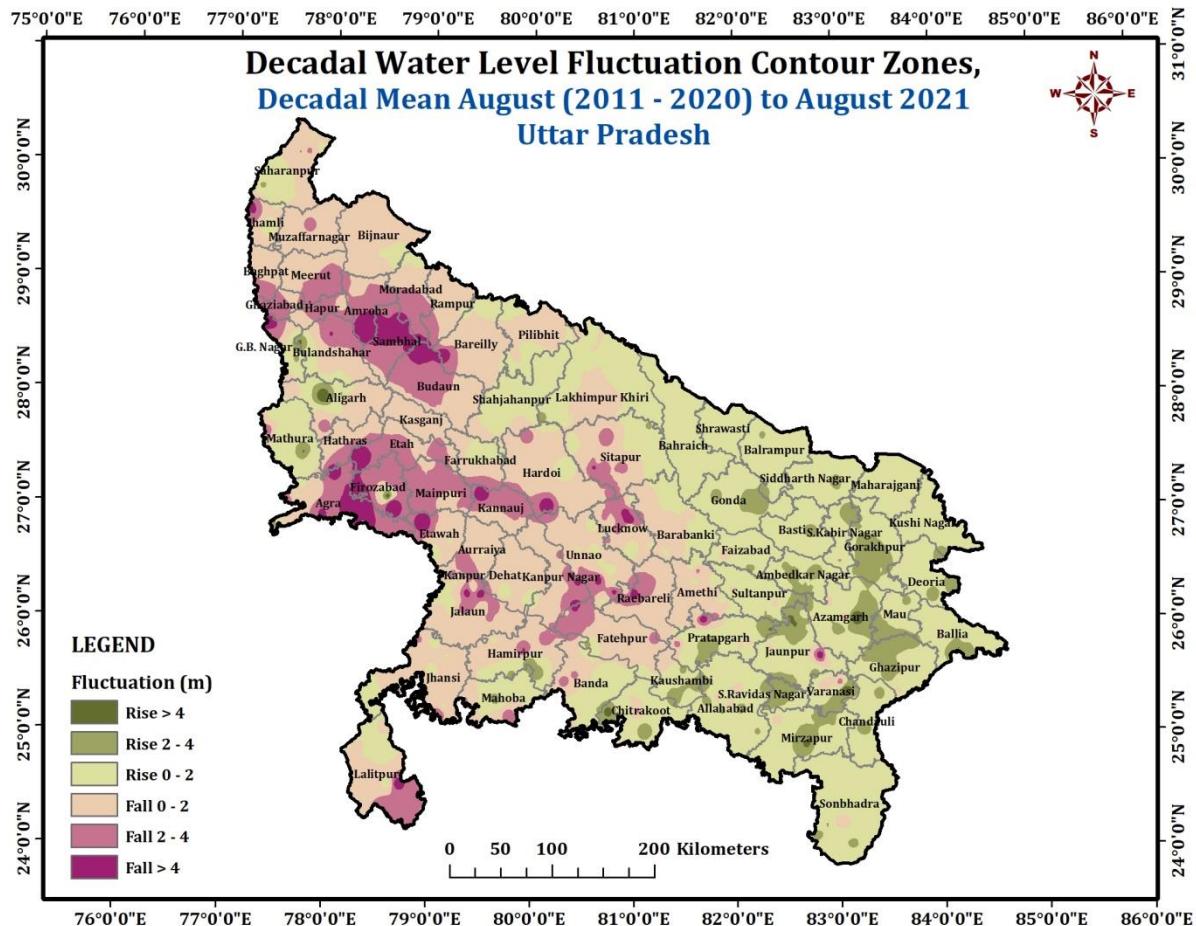
District Name	No. of Wells	Range of Fluctuation				No. of Wells/Percentage Showing Fluctuation						Total No. of Wells	
		Rise (m)		Fall (m)		Rise (m)			Fall (m)			Rise	Fall
		Min	Max	Min	Max	0 to 2	2 to 4	>4	0 to 2	2 to 4	>4		
LALITPUR	17	0.57	1.61	0.17	4.42	4 23.53 %	0	0	9 52.94%	2 11.76 %	2 11.76%	4	13
LUCKNOW	18	0.02	1.72	0.05	8.75	5 27.78 %	0	0	8 44.44%	3 16.67 %	2 11.11%	5	13
MAHOBIA	9	0.35	3.87	0.02	3.61	2 22.22 %	1 11.11%	0	4 44.44%	2 22.22 %	0	3	6
MAHRAJGANJ	6	0.55	2.15	0.05	0.05	4 66.67 %	1 16.67%	0	1 16.67%	0	0	5	1
MAINPURI	5	-	-	1.21	2.48	0	0	0	2 40.00%	3 60.00 %	0	0	5
MATHURA	12	0.18	5.97	2.58	3.35	9 75.00 %	0	1 8.33%	0	2 16.67 %	0	10	2
MAU	6	1.18	4.01	0.25	1.92	2 33.33 %	1 16.67%	1 16.67%	2 33.33%	0	0	4	2
MEERUT	9	0.07	0.96	0.77	4.23	3 33.33 %	0	0	3 33.33%	2 22.22 %	1 11.11%	3	6
MIRZAPUR	10	0.11	5.99	-	-	6 60.00 %	2 20.00%	2 20.00%	0	0	0	10	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		
MORADABA D	6	0.56	0.66	0.35	5.00	2 33.33 %	0	0	1 16.67%	1 16.67 %	2 33.33%	2	4
MUZAFFAR NAGAR	9	0.04	4.94	0.46	1.82	4 44.44 %	0	1 11.11%	4 44.44%	0	0	5	4
PILIBHIT	9	0.71	1.63	0.21	0.67	4 44.44 %	0	0	5 55.56%	0	0	4	5
PRATAPGAR H	26	0.22	4.63	0.00	5.46	11 42.31 %	9 34.62%	1 3.85%	3 11.54%	0	2 7.69%	21	5
RAE BARELI	25	0.09	0.72	0.08	5.76	3 12.00 %	0	0	19 76.00%	1 4.00 %	2 3.00%	3	22
RAMPUR	3	0.95	0.95	0.82	2.10	1 33.33 %	0	0	1 33.33%	1 33.33 %	0	1	2
SAHARANP UR	12	0.17	2.76	0.01	2.52	8 66.67 %	1 8.33%	0	1 8.33%	2 16.67 %	0	9	3
SANT KABIR NAGAR	4	0.77	2.59	-	-	1 25.00 %	3 75.00%	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	4	0.84	5.35	-	-	1 25.00 %	1 25.00%	2 50.00%	0	0	0	4	0
SHRAWASTI	8	0.21	3.03	-	-	7 87.50 %	1 12.50%	0	0	0	0	8	0
SIDDHARTH NAGAR	10	0.47	3.48	-	-	9 90.00 %	1 10.00%	0	0	0	0	10	0
SITAPUR	19	0.03	2.23	0.22	3.22	10 52.63 %	1 5.26%	0	4 21.05%	4 21.05 %	0	11	8
SONBHADRA	17	0.17	3.79	0.12	1.56	10 58.82 %	3 17.65%	0	4 23.53%	0	0	13	4
SULTANPUR	36	0.08	3.29	0.02	2.29	20 55.56 %	6 16.67%	0	9 25.00%	1 2.78 %	0	26	10
UNNAO	18	0.06	1.20	0.18	6.66	9 50.00 %	0	0	8 44.44%	0	1 5.56%	9	9
VARANASI	7	1.57	9.70	2.01	3.90	1 14.29 %	1 14.29%	3 42.86%	0	2 28.57 %	0	5	2
Total	717	0.14	5.75	0.00	14.98	307	86	28	209	61	26	421	296

There is rise in water level in 421 wells (58.71%) and fall in 296 (41.28%) wells. However, a rise of 0 to 2 m water level occurs in patches for 307 wells (42.81% of the monitored wells). It is found in eastern U.P with a few exceptions in the western U.P. Most of the Rise of 2 - 4m and more than 4 m are observed in 86 (11.99%) and 28 wells (3.90%) wells respectively.

Plate-XV

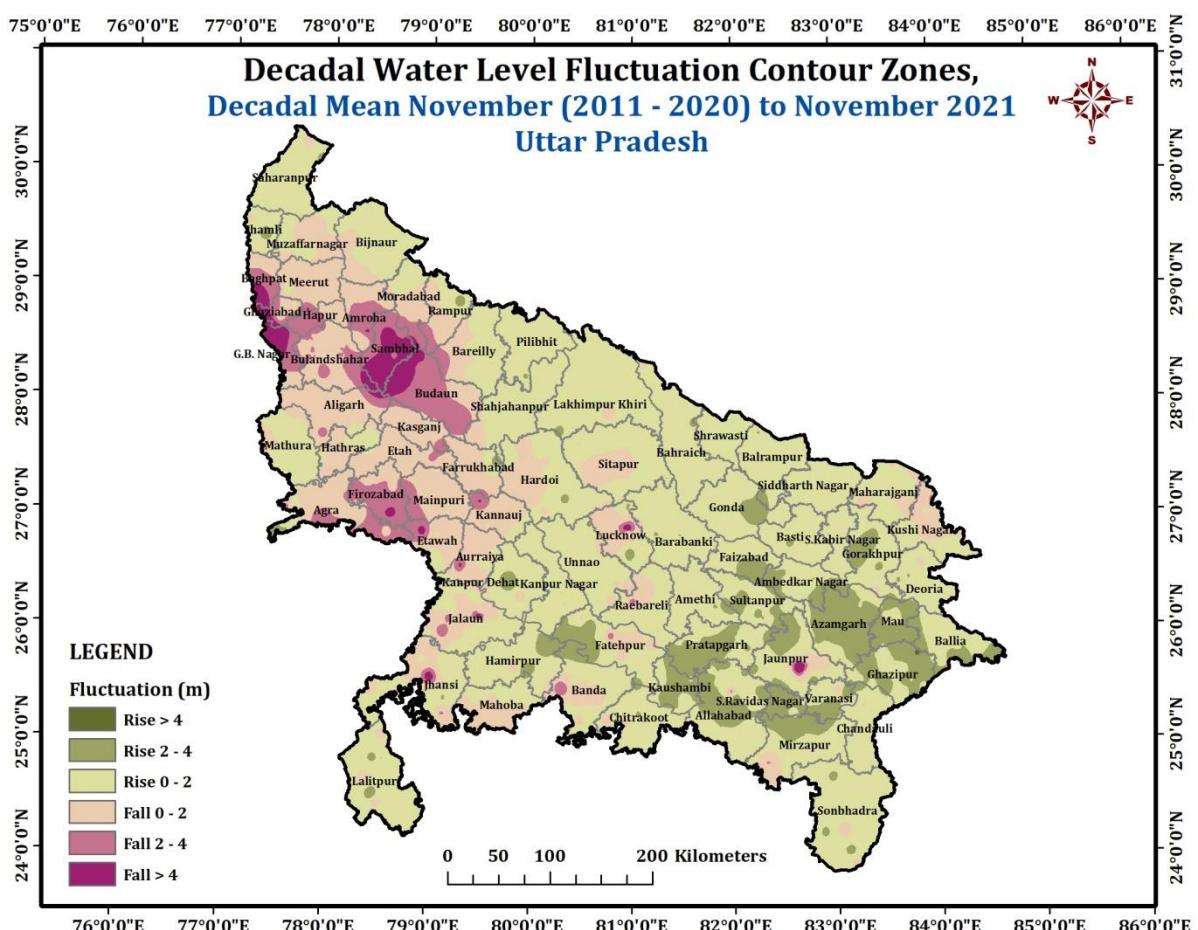


The fall in water level are noticed in 296 wells (41.20% of the monitored wells). Most of the districts of western parts of the state and few in south eastern U.P. show a fall in the range of 0 - 2 m at 209 wells (29.14%). Districts showing major parts under fall in water level of 0-2 m are Saharanpur, Shamli, Bijnour, Baghpat, Muza�arnagar, Hardoi, Sitapur, Lucknow etc. The fall of 2 - 4 m is observed in 61 wells (8.50%). Fall of >4m is observed only in 26 no. wells (3.62%).

Mean November (2011- 20) – November 2021:

The average water level of last 10 years (2011-20) for each hydrograph station for the month of November has been evaluated and compared with water level data of November'21. 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 a rise in water level in 542 nos. wells (75.06%) and fall in DWL is observed in 180 Nos. of wells (24.93%). Rise in DWL is mostly occurs in South eastern U.P Mirzapur, Varanasi, Chandauli, Jaunpur and some isolated patches in western U.P. such as Saharanpur, Shamli, Muzaffarnagar, Bijnour, Mathura District. Rise of 2 - 4 m is observed only at 117 wells (16.20%) and rise of more than 4m is noticed only at 22wells.Fall is observed mostly in Sambhal, Amroha, baghpat, Ghaziabad, Badaun, Firozabad etc.

Table-15

DISTRICT WISE – DECADAL WATER LEVEL FLUCTUATION, U.P.
Mean November (2011 – 2020) – November, 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	9	0.35	2.05	0.27	3.46	2 22.22 %	1 11.11%	0	4 44.44%	2 22.22 %	0	3	6
ALIGARH	8	0.15	0.79	0.84	1.56	3 37.50 %	0	0	5 62.50%	0	0	3	5
ALLAHABAD	33	0.02	5.63	0.12	3.28	20 60.61 %	9 27.27%	2 6.06%	1 3.03%	1 3.03 %	0	31	2
AMBEDKAR NAGAR	7	0.97	4.11	-	-	1 14.29 %	5 71.43%	1 14.29%	0	0	0	7	0
AURAIYA	9	0.02	0.85	0.43	3.78	4 44.44 %	0	0	3 33.33%	2 22.22 %	0	4	5
AZAMGARH	15	0.42	5.24	-	-	4 26.67 %	9 60.00%	2 13.33%	0	0	0	15	0
BAGHPAT	2	-	-	3.71	6.38	0	0	0	0	1 50.00 %	1 50.00%	0	2
BAHRAICH	11	0.01	0.95	0.15	0.52	9 81.82 %	0	0	2 18.18%	0	0	9	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		
BALLIA	14	0.30	3.34	-	-	9 64.29 %	5 35.71%	0	0	0	0	14	0
BALRAMPU R	17	0.37	2.70	-	-	15 88.24 %	2 11.76%	0	0	0	0	17	0
BANDA	12	0.21	2.78	0.30	3.95	5 41.67 %	1 8.33%	0	5 41.67%	1 8.33 %	0	6	6
BARABANKI	19	0.25	2.17	-	-	17 89.47 %	2 10.53%	0	0	0	0	19	0
BAREILLY	8	0.81	0.97	0.36	2.98	4 50.00 %	0	0	3 37.50%	1 12.50 %	0	4	4
BASTI	7	0.73	2.34	-	-	6 85.71 %	1 14.29%	0	0	0	0	7	0
BIJNOR	6	0.10	1.54	0.50	0.50	5 83.33 %	0	0	1 16.67%	0	0	5	1
BUDAUN	4	-	-	3.13	11.29	0	0	0	0	2 50.00 %	2 50.00%	0	4
BULANDSH AHR	2	-	-	1.51	2.01	0	0	0	1 50.00%	1 50.00 %	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		
CHANDAULI	8	0.30	2.92	0.01	0.32	5 62.50 %	1 12.50%	0	2 25.00%	0	0	6	2
CHITRAKOOT	8	0.11	2.81	1.88	1.88	5 62.50 %	2 25.00%	0	1 12.50%	0	0	7	1
DEORIA	9	0.19	2.11	0.99	0.99	6 66.67 %	2 22.22%	0	1 11.11%	0	0	8	1
ETAH	8	-	-	0.15	2.57	0	0	0	6 75.00%	2 25.00 %	0	0	8
ETAWAH	7	0.19	1.70	0.43	4.79	4 57.14 %	0	0	1 14.29%	1 14.29 %	1 14.29%	4	3
FAIZABAD	11	0.60	4.06	-	-	8 72.73 %	2 18.18%	1 9.09%	0	0	0	11	0
FARRUKHABAD	2	2.69	2.69	3.60	3.60	0	1 50.00%	0	0	1 50.00 %	0	1	1
FATEHPUR	11	0.18	6.08	0.24	3.20	1 9.09 %	2 18.18%	2 18.18%	5 45.45%	1 9.09 %	0	5	6
FIROZABAD	4	-	-	1.70	4.89	0	0	0	1 25.00%	2 50.00 %	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		
GAUTAM BUDDHA NAGAR	3	-	-	0.83	11.87	0	0	0	1 33.33%	0	2 66.67%	0	3
GHAZIABAD	5	-	-	0.39	3.32	0	0	0	4 80.00%	1 20.00 %	0	0	5
GHAZIPUR	15	0.36	6.18	-	-	9 60.00 %	3 20.00%	3 20.00%	0	0	0	15	0
GONDA	7	0.75	2.76	-	-	4 57.14 %	3 42.86%	0	0	0	0	7	0
GORAKHPU R	4	0.31	2.98	0.26	0.26	2 50.00 %	1 25.00%	0	1 25.00%	0	0	3	1
HAMIRPUR	6	0.26	5.47	0.10	0.10	3 50.00 %	1 16.67%	1 16.67%	1 16.67%	0	0	5	1
HARDOI	16	0.01	2.55	0.31	0.83	8 50.00 %	3 18.75%	0	5 31.25%	0	0	11	5
HATHRAS	3	0.71	1.57	2.68	2.68	2 66.67 %	0	0	1 33.33 %	0	2	1	
JALAUN	27	0.17	1.75	0.28	4.02	17 62.96 %	0	0	7 25.93%	2 7.41 %	1 3.70%	17	10

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		
JAUNPUR	22	0.28	5.30	0.35	10.91	10 45.45 %	6 27.27%	2 9.09%	3 13.64%	0 1	1 4.55%	18	4
JHANSI	16	0.19	2.38	0.87	5.92	10 62.50 %	2 12.50%	0 0	2 12.50%	1 6.25 %	1 6.25%	12	4
JYOTIBA PHULE NAGAR	7	0.11	0.11	0.84	4.40	1 14.29 %	0 0	0 0	1 14.29%	4 57.14 %	1 14.29%	1	6
KANNAUJ	4	0.16	0.16	0.84	4.22	1 25.00 %	0 0	0 0	2 50.00%	0 0	1 25.00%	1	3
KANPUR DEHAT	7	0.59	2.56	1.43	1.43	5 71.43 %	1 14.29%	0 0	1 14.29%	0 0	0 0	6	1
KANPUR NAGAR	13	0.26	1.93	0.11	0.11	12 92.31 %	0 0	0 0	1 7.69%	0 0	0 0	12	1
KAUSHAMB I	8	0.91	4.50	-	-	2 25.00 %	5 62.50%	1 12.50%	0 0	0 0	0 0	8	0
KHERI	7	0.47	2.12	0.01	0.75	4 57.14 %	1 14.29%	0 0	2 28.57%	0 0	0 0	5	2
KUSHINAGA R	5	0.21	0.26	1.04	2.29	3 60.00 %	0 0	0 0	1 20.00%	1 20.00 %	0 0	3	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		
LALITPUR	15	0.15	2.45	1.14	1.14	12 80.00 %	2 13.33%	0	1 6.67%	0	0	14	1
LUCKNOW	15	0.08	3.70	0.31	7.79	7 46.67 %	2 13.33%	0	3 20.00%	1 6.67 %	2 13.33%	9	6
MAHOBA	9	0.22	1.87	0.09	2.27	3 33.33 %	0	0	4 44.44%	2 22.22 %	0	3	6
MAHRAJGA NJ	6	0.54	0.58	0.06	2.46	2 33.33 %	0	0	3 50.00%	1 16.67 %	0	2	4
MAINPURI	5	0.15	0.15	0.26	1.36	1 20.00 %	0	0	4 80.00%	0	0	1	4
MATHURA	14	0.25	1.61	0.07	1.50	11 78.57 %	0	0	3 21.43%	0	0	11	3
MAU	7	0.91	3.45	-	-	2 28.57 %	5 71.43%	0	0	0	0	7	0
MEERUT	10	1.02	3.45	0.06	4.41	2 20.00 %	1 10.00%	0	6 60.00%	0	1 10.00%	3	7
MIRZAPUR	9	0.62	6.00	0.02	2.17	4 44.44 %	2 22.22%	1 11.11%	1 11.11%	1 11.11 %	0	7	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		
MORADABA D	7	0.98	1.69	2.15	4.77	3 42.86 %	0	0	0	3 42.86 %	1 14.29%	3	4
MUZAFFAR NAGAR	5	0.06	10.56	1.46	1.46	2 40.00 %	1 20.00%	1 20.00%	1 20.00%	0	0	4	1
PILIBHIT	11	0.29	2.21	-	-	10 90.91 %	1 9.09%	0	0	0	0	11	0
PRATAPGAR H	25	0.27	4.28	-	-	11 44.00 %	13 52.00%	1 4.00%	0	0	0	25	0
RAE BARELI	26	0.01	1.87	0.06	3.67	20 76.92 %	0	0	5 19.23%	1 3.85 %	0	20	6
RAMPUR	3	2.08	2.08	0.64	0.89	0	1 33.33%	0	2 66.67%	0	0	1	2
SAHARANP UR	11	0.24	2.89	0.35	0.66	8 72.73 %	1 9.09%	0	2 18.18%	0	0	9	2
SANT KABIR NAGAR	4	0.92	2.21	-	-	3 75.00 %	1 25.00%	0	0	0	0	4	0
SANT RAVIDAS NAGAR	4	1.06	5.77	-	-	1 25.00 %	1 25.00%	2 50.00%	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		
SHAHJAHAN PUR	1	0.06	0.06	-	-	1 100.0 %	0	0	0	0	0	1	0
SHRAWASTI	11	0.57	1.62	-	-	11 100.0 %	0	0	0	0	0	11	0
SIDDHARTH NAGAR	10	0.32	1.30	-	-	10 100.0 %	0	0	0	0	0	10	0
SITAPUR	19	0.05	2.16	0.12	1.73	10 52.63 %	1 5.26%	0	8 42.11%	0	0	11	8
SONBHADR A	16	0.10	4.19	0.28	2.69	10 62.50 %	2 12.50%	1 6.25%	2 12.50%	1 6.25 %	0	13	3
SULTANPUR	33	0.09	3.86	0.01	1.02	19 57.58 %	10 30.30%	0	4 12.12%	0	0	29	4
UNNAO	15	0.10	1.71	0.28	0.84	13 86.67 %	0	0	2 13.33%	0	0	13	2
VARANASI	5	0.51	4.49	1.39	1.39	1 20.00 %	2 40.00%	1 20.00%	1 20.00%	0	0	4	1
Total	722	0.06	2.69	0.00	11.87	403	117	22	126	38	16	542	180

The fall of 0 - 2m in water levels are noticed in 126 wells (17.45%). Districts showing major parts as decline of 0-2 m are Agra, Aligarh, Hathras, Etah, Kasganj, Etah, Farrukhabad, Mainpuri, Kasganj, Jalaun, Jhansi, Mahoba, Lucknow, Sitapur jaunpur and Raebareli. The fall of 2 - 4 m is observed in 38 wells (5.26%) mainly in Amroha, Sambhal, Budaun, FirozabadMeerut, Ghaziabad, Agra, Firozabad, Hapur, Baghpat and Agra. Fall of > 4 m in water level is observed in 25 wells (2.2%) mainly in Sambhal, Baghpat, Ghaziabad, Firozabad, Lucknow, Jhansi and Jaunpur.

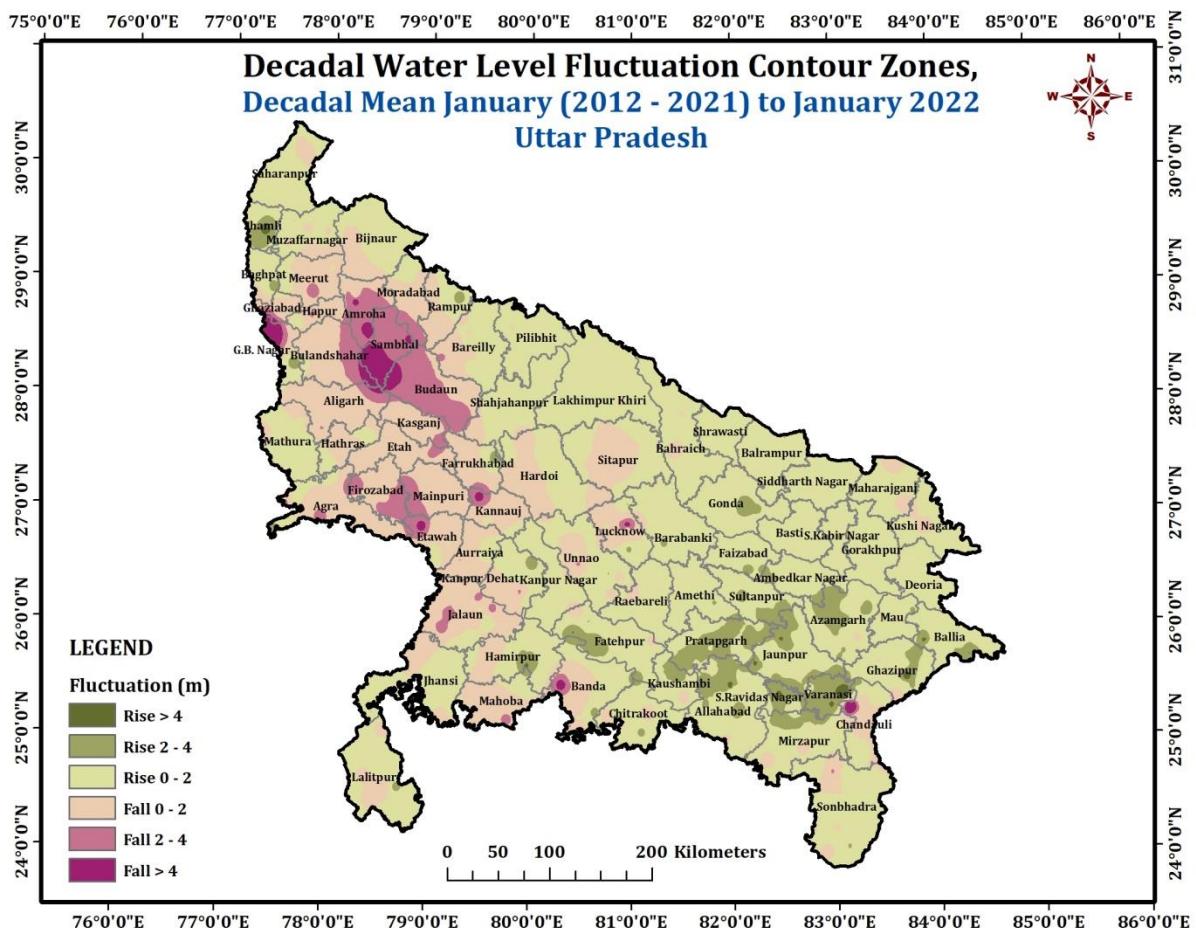
Mean January (2012- 21) – January 2022:

Monitoring station for the month of January has been evaluated and compared with water level data for January'2022. 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 528 analyzed wells (70.58%) and 220 wells (29.41%) showing fall. About 56.14% of analyzed wells (420) shows rise of 0 to 2 m in water levels. This rise is observed mainly in south eastern parts of districts such as Amethi, Sultanpur, Ambedkar Nagar, Sonbhadra, Chandauli, Varanasi, Jaunpur, Gahzipur, Fatehpur and Hamirpur as well as Saharanpur, Shamli, Bijnour, Mathura. A rise of 2 to 4 m is noticed only in 92 (12.29%) wells and rise of > 4 mbgl is observed only in 16 wells (2.13%)mainly Shamli, Gonda, Fatehpur, Pratapgarh, Kaushambi, Jaunpur, Varanasi, Azamgarh, Gazipur and Ballia.

A fall of 0 to 2 m is observed in 178 no. wells (about 23.79%) in major parts of the districts in eastern, central and few districts of western U.P. Districts with major parts showing decline of 0-2 m are Agra, Aligarh, Bareilly, Bijnor, Budaun, Bulandshar, Chandauli, Etawah, Farrukhabad, Firozabad, G.B.Nagar, Ghaziabad, Hamirpur, Hardoi, Hathras, Jalaun, Jhansi, Kanpur Dehat, Lucknow, Mainpuri, Mathura, Moradabad, Sonbhadra and Unnao. Fall of 2 to 4 m is observed in 31 wells (5.29%) in parts of Amroha, Sambhal, Budaun, Kannauj, Mainpuri, Ghaziabad, Kanpur Dehat, Lucknow, Mirzapur, Sitapur, Sonbhadra, Unnao and Chandaulli districts. Fall of more than 4 m fall is encountered in 11 wells (1.47%).

Plate-XVII



DECADAL FLUCTUATION 2021 – 22, U.P.

FLUCTUATION RANGE	Mean May (2011-20) to May 21		Mean August (2011-20) to August 21		Mean Nov(2011-20) to November 21		Mean Jan(2012-21) to January 22	
	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)	Rise (%)	Fall (%)
0-2	258 (39.20%)	191 (29.02%)	307 (42.81%)	209 (29.14%)	403 (55.81%)	126 (17.45%)	420 (56.14%)	178 (23.79%)
2-4	100 (14.59%)	47 (6.86%)	86 (11.99%)	61 (8.50%)	117 (16.20%)	38 (5.26%)	92 (12.29%)	31 (4.14%)
>4	37 (5.40%)	25 (3.79%)	28 (3.90%)	26 (3.62%)	22 (3.04%)	16 (2.2%)	16 (2.13%)	11 (1.47%)
Total	395 (60%)	263 (39.96%)	421 (58.71%)	296 (41.28%)	542 (75.06%)	180 (24.93%)	528 (70.58%)	220 (29.41%)

Table -16

DISTRICT WISE – DECADAL WATER LEVEL FLUCTUATION, U.P.
Mean January (2012 – 2021) – January, 2022

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	9	0.28	1.18	0.01	2.82	4 44.44 %	0	0	3 33.33 %	2 22.22 %	0	4	5
ALIGARH	7	0.07	0.07	0.24	1.64	1 14.29 %	0	0	6 85.71 %	0	0	1	6
ALLAHABAD	32	0.03	8.35	0.06	3.07	21 65.63 %	5 15.63 %	2 6.25 %	3 9.38 %	1 3.13 %	0	28	4
AMBEDKAR NAGAR	7	0.83	2.66	-	-	5 71.43 %	2 28.57 %	0	0	0	0	7	0
AURAIYA	7	0.22	0.59	0.25	2.17	3 42.86 %	0	0	3 42.86 %	1 14.29 %	0	3	4
AZAMGARH	19	0.23	3.55	0.85	0.85	10 52.63 %	8 42.11 %	0	1 5.26 %	0	0	18	1
BAGHPAT	2	3.20	3.20	0.02	0.02	0	1 50.00 %	0	1 50.00 %	0	0	1	1

BAHRAICH	11	0.33	0.69	0.01	0.69	7 63.64 %	0	0	4 36.36%	0	0	7	4
BALLIA	20	0.24	5.13	-	-	17 85.00 %	1 5.00%	2 10.00%	0	0	0	20	0
BALRAMPUR	17	0.32	2.29	-	-	15 88.24 %	2 11.76%	0	0	0	0	17	0
BANDA	10	0.11	3.33	0.82	5.51	3 30.00 %	1 10.00%	0	4 40.00%	1 10.00 %	1 10.00%	4	6
BARABANKI	17	0.18	1.48	-	-	17 100.0 %	0	0	0	0	0	17	0
BAREILLY	9	0.21	0.97	0.09	2.42	4 44.44 %	0	0	4 44.44%	1 11.11 %	0	4	5
BASTI	7	0.09	1.79	-	-	7 100.0 %	0	0	0	0	0	7	0
BIJNOR	6	0.40	1.72	0.08	0.73	4 66.67 %	0	0	2 33.33%	0	0	4	2
BUDAUN	3	-	-	3.23	9.79	0	0	0	2 66.67 %	1 33.33%	0	0	3

BULANDSH AHR	3	-	-	1.36	1.92	0	0	0	3 100.0 %	0	0	0	3
CHANDAULI	8	0.45	3.40	0.13	0.56	4 50.00 %	1 12.50%	0	3 37.50%	0	0	5	3
CHITRAKOO T	7	0.20	2.34	1.39	1.39	4 57.14 %	2 28.57%	0	1 14.29%	0	0	6	1
DEORIA	9	0.07	1.77	0.08	0.08	8 88.89 %	0	0	1 11.11 %	0	0	8	1
ETAH	7	-	-	0.20	2.67	0	0	0	5 71.43%	2 28.57 %	0	0	7
ETAWAH	6	0.13	1.75	0.05	3.60	2 33.33 %	0	0	3 50.00%	1 16.67 %	0	2	4
FAIZABAD	10	0.45	2.79	-	-	8 80.00 %	2 20.00%	0	0	0	0	10	0
FARRUKHA BAD	2	2.84	2.84	2.68	2.68	0	1 50.00%	0	0	1 50.00 %	0	1	1
FATEHPUR	8	0.36	4.19	0.12	1.55	2 25.00 %	0	1 12.50%	5 62.50%	0	0	3	5

FIROZABAD	4	-	-	1.37	3.66	0	0	0	2 50.00%	2 50.00 %	0	0	4
GAUTAM BUDDHA NAGAR	4	2.70	2.70	0.14	11.60	0	1 25.00%	0	1 25.00%	0	2 50.00%	1	3
GHAZIABAD	7	1.69	1.69	0.02	2.48	1 14.29 %	0	0	5 71.43%	1 14.29 %	0	1	6
GHAZIPUR	17	0.30	6.58	0.34	2.22	9 52.94 %	4 23.53%	1 5.88%	2 11.76%	1 5.88 %	0	14	3
GONDA	7	0.44	2.91	-	-	5 71.43 %	2 28.57%	0	0	0	0	7	0
GORAKHPU R	4	0.88	1.69	0.00	0.00	3 75.00 %	0	0	1 25.00%	0	0	3	1
HAMIRPUR	7	0.50	4.46	0.53	2.00	2 28.57 %	1 14.29%	1 14.29%	2 28.57%	1 14.29 %	0	4	3
HARDOI	17	0.22	2.83	0.18	0.80	9 52.94 %	2 11.76%	0	6 35.29%	0	0	11	6
HATHRAS	4	0.23	0.98	0.23	2.27	2 50.00 %	0	0	1 25.00%	1 25.00 %	0	2	2

JALAUN	27	0.10	2.12	0.08	4.52	7 25.93 %	1 3.70%	0	15 55.56%	3 11.11 %	1 3.70%	8		19
JAUNPUR	26	0.30	4.24	0.11	0.31	15 57.69 %	6 23.08%	3 11.54%	2 7.69%	0	0	24		2
JHANSI	16	0.21	1.91	0.09	1.65	10 62.50 %	0 0	0	6 37.50%	0	0	10		6
JYOTIBA PHULE NAGAR	7	0.57	0.57	1.05	4.48	1 14.29 %	0 0	0	2 28.57%	3 42.86 %	1 14.29%	1		6
KANNAUJ	4	0.58	0.58	1.04	5.14	1 25.00 %	0 0	0	2 50.00%	0 0	1 25.00%	1		3
KANPUR DEHAT	7	0.96	1.56	0.57	2.39	5 71.43 %	0 0	0	1 14.29%	1 14.29 %	0 0	5		2
KANPUR NAGAR	13	0.02	1.98	0.10	0.10	12 92.31 %	0 0	0	1 7.69%	0 0	0 0	12		1
KAUSHAMB I	9	0.86	3.98	1.43	1.63	2 22.22 %	5 55.56%	0	2 22.22%	0 0	0 0	7		2
KHERI	6	0.18	1.39	0.24	0.24	5 83.33 %	0 0	0	1 16.67%	0 0	0 0	5		1

KUSHINAGA R	5	0.04	0.59	0.27	0.48	3 60.00 %	0	0	2 40.00%	0	0	3	2
LALITPUR	16	0.08	2.82	0.04	1.90	8 50.00 %	2 12.50%	0	6 37.50%	0	0	10	6
LUCKNOW	18	0.05	2.79	0.07	7.44	6 33.33 %	3 16.67%	0	7 38.89%	0	2 11.11%	9	9
MAHOBA	7	0.14	0.14	0.11	4.73	1 14.29 %	0	0	5 71.43%	0	1 14.29%	1	6
MAHRAJGA NJ	6	0.51	0.78	0.03	0.68	3 50.00 %	0	0	3 50.00%	0	0	3	3
MAINPURI	5	-	-	0.12	1.18	0	0	0	5 100.0 %	0	0	0	5
MATHURA	14	0.16	1.75	1.32	1.32	13 92.86 %	0	0	1 7.14%	0	0	13	1
MAU	8	0.34	2.24	-	-	7 87.50 %	1 12.50%	0	0 0.00%	0	0	8	0
MEERUT	10	0.14	3.36	0.42	1.94	2 20.00 %	2 20.00%	0	6 60.00%	0	0	4	6

MIRZAPUR	10	0.11	3.19	0.02	1.04	4 40.00 %	3 30.00%	0	3 30.00%	0	0	7	3
MORADABA D	7	0.47	1.24	0.55	4.08	3 42.86 %	0	0	1 14.29%	2 28.57 %	1 14.29%	3	4
MUZAFFAR NAGAR	10	0.26	5.22	0.32	0.39	4 40.00 %	2 20.00%	1 10.00%	3 30.00%	0	0	7	3
PILIBHIT	11	0.19	1.62	-	-	11 100.0 %	0	0	0	0	0	11	0
PRATAPGAR H	24	0.39	3.76	0.29	0.29	9 37.50 %	14 58.33%	0	1 4.17%	0	0	23	1
RAE BARELI	23	0.11	2.04	0.01	1.76	18 78.26 %	1 4.35%	0	4 17.39%	0	0	19	4
RAMPUR	3	2.88	2.88	0.58	1.36	0	1 33.33%	0	2 66.67%	0	0	1	2
SAHARANP UR	10	0.06	1.92	2.01	2.01	9 90.00 %	0	0	0	1 10.00 %	0	9	1
SANT KABIR NAGAR	4	0.98	2.40	-	-	3 75.00 %	1 25.00%	0	0	0	0	4	0

SANT RAVIDAS NAGAR	4	0.69	5.11	-	-	2 50.00 %	0	2 50.00%	0	0	0	4	0
SHAHJAHAN PUR	1	0.06	0.06	-	-	1 100.0 %	0	0	0	0	0	1	0
SHRAWASTI	11	0.49	1.37	-	-	11 100.0 %	0	0	0	0	0	11	0
SIDDHARTH NAGAR	10	0.47	1.37	-	-	10 100.0 %	0	0	0	0	0	10	0
SITAPUR	19	0.31	1.59	0.00	1.32	8 42.11 %	0	0	11 57.89%	0	0	8	11
SONBHADR A	17	-	2.46	0.02	2.32	8 47.06 %	2 11.76%	0	6 35.29%	1 5.88 %	0	10	7
SULTANPUR	34	0.12	3.56	0.23	0.23	25 73.53 %	8 23.53%	0	1 2.94%	0	0	33	1
UNNAO	25	0.09	2.33	0.08	2.61	15 60.00 %	1 4.00%	0	7 28.00%	2 8.00 %	0	16	9
VARANASI	7	1.49	8.15	-	-	1 14.29 %	3 42.86%	3 42.86%	0	0	0	7	0
Total	748	0.06	3.20		11.60	420	92	16	178	31	11	528	220

From the analysis of table, it is evident that the water level has shown a maximum rise in Nov 21 and Jan 22 as compare to May and August 21. The fall percentage decreases in November 21 and January 22. 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 2012 to 2021 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 2012-2021 are summarized as follows:

Percentage of wells showing Pre-monsoon DWL Trend (cm/year) from 2012 -2021								
Total Well Analyzed	Rise (cm/year)			Fall (cm/Year)			Total	
	0 -20	20-40	>40	0 -20	20 -40	>40	Rise	Fall
834	185 (22.18%)	64 (7.67%)	29 (5.87%)	213 (25.53%)	85 (10.19%)	95 (11.39%)	278 (33.33%)	556 (66.66%)

The declining trend is observed in 66.66 % of the monitoring wells (556) covering over 10 year's period. Decline of 0 – 20 cm/yr is commonly observed in 25.53% wells followed by 20 – 40 cm/yr in 10.19% wells and >40 cm/yr in 11.39%. The low decline is spread all over the state but dominant in north and south western parts of the state. Higher decline occurs in Shamli, Muzaffarnagar, Baghpat, Meerut, Ghaziabad, Hapur, Amroha, G.B.Nagar, Sambhal, Etah, Firozabad, Auriya, Unnao, Kanpur Nagar, Kanpur Dehat, Hamirpur, Lucknow, and Sitapur. There is a rising trend observed in 278 wells (33.33%), out of which 22.18 % and 7.67% of analysed wells shows rising trend in the range of 0-20cm/year and 20-40cm/year respectively and very few wells of 5.87% shows rising trend of more than 40cm/year. The rise in wells are mostly located in North and South Eastern parts of the State.

The results of Water Level trend data during Post-monsoon for the period 2012-2021 are summarized as follows:

Percentage of wells showing Post-monsoon DWL Trend (cm/year) from 2012 -2021								
Total Well Analysed	Rise (cm/year)			Fall (cm/Year)			Total	
	0 -20	20-40	>40	0 -20	20 -40	>40	Rise	Fall
836	338 (40.43%)	61 (7.29%)	46 (5.5%)	200 (23.92%)	87 (10.40%)	104 (12.44%)	445 (53.22%)	391 (46.77%)

There is a declining trend in 46.77% of the monitoring wells over 10 years period. Decline of 0 – 20 cm/yr is mostly observed in 23.93% (200) wells followed by 20 – 40 cm/yr in 10.40% wells and more than 40 cm/yr is found in 12.44% wells. The low decline is spread in North and South Western parts of the state. There is a rise in trend in 53.22% of the monitoring wells over 10 years period. Rise of 0 – 20cm/year is found in 40.43% followed by 20-40cm/year in 7.29% and very few wells of 5.5% showing water level trend of more than 40cm/year.

Plate-XVIII

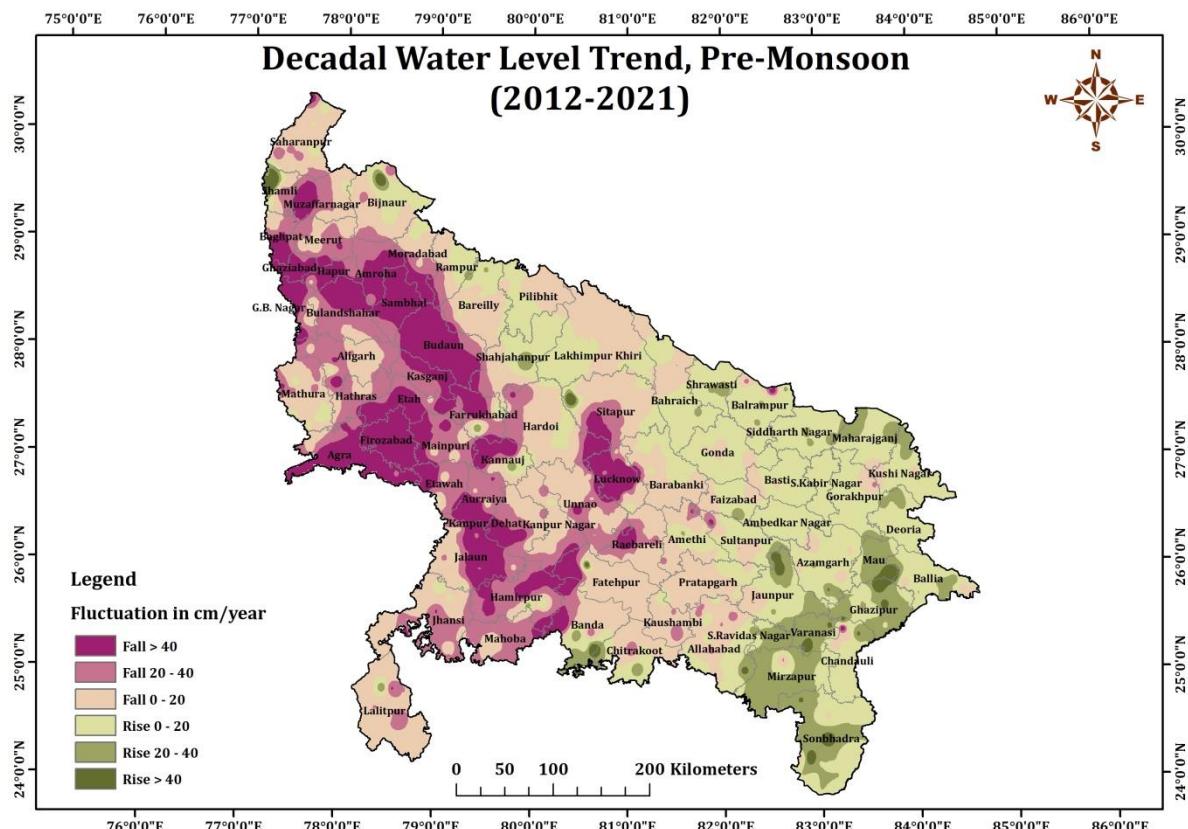
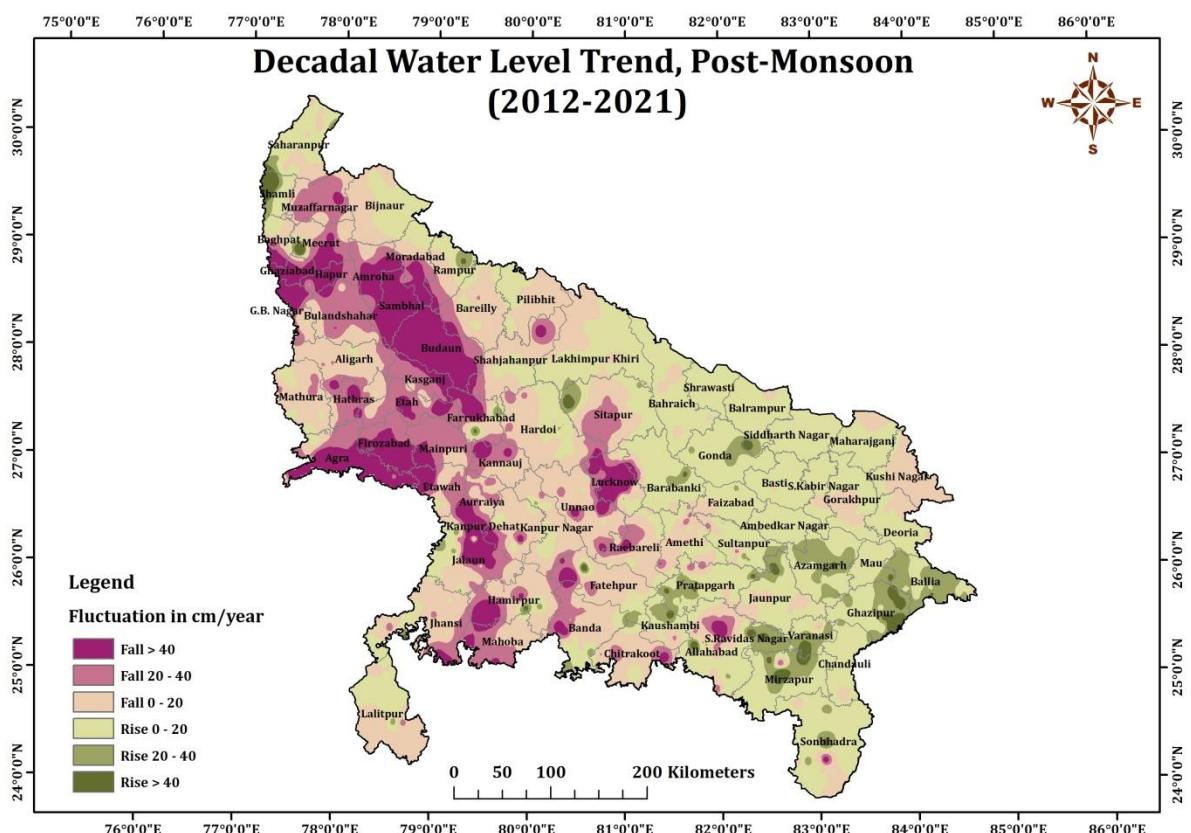


Plate-XIX



Chapter 7

CHEMICAL QUALITY OF GROUND WATER OF U.P.

INTRODUCTION

Groundwater is the most important source of fresh water on the earth surface. Now a day, due to pollution in environment, surface water can't be used directly for drinking purpose. Groundwater has become the only reliable resource for drinking purpose. Due to increasing population and industrialisation greater amounts of domestic and industrial effluents are discharged that lead to pollution of ground water. 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. Human activities are the main important factor which effect ground water quality of any region.

Water has two dimensions that are closely linked-quantity and quality. Water quality is commonly defined by its physical, chemical biological and aesthetic characteristics. Human life can be seriously affected by water. The quality of groundwater reflects inputs from the atmosphere, from soil and water rock reactions-weathering as well as from pollutant sources such as land clearance, agriculture, acid precipitation, domestic and industrial wastes. The relatively slow movement of water through the ground means that residence times in ground waters are generally longer than in surface waters. 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 CO_2 , SO_2 and NO_2 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

To evaluate the chemical quality of ground water in phreatic zones, **841** water samples were collected from Ground Water Monitoring Stations (GWMS) established by CGWB, Lucknow during the Pre monsoon period. (A.A.P. 2020-21). Out of 841 samples, one sample was found leaked and no data is generated, 840 samples were analysed. 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, TH, 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 (Acid- base titration)
4.	Bi-carbonate	Titrimetric method (Acid- base titration)
5.	Chloride	Mohr's method
6.	Fluoride	Spectrophotometric method (ECR-Method)
7.	Nitrate	UV- Spectrophotometric Screening method
8.	Sulphate	USGS- Gelatine Spectrophotometric method
9.	Phosphate	Ascorbic Acid method
10.	Silica	Molybdate-silicate method
11.	Total Hardness	EDTA (Titrimetric method)
12.	Calcium	EDTA (Titrimetric method)
13.	Magnesium	Evaluation from TH and Ca
14.	Sodium	Flame Emission Photometric method
15.	Potassium	Flame Emission Photometric method

The chemical analysis results for 840 nos. of water samples collected from GW monitoring Stations spread in entire Uttar Pradesh have been tabulated in Annexure 3.

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
1	pH	7.14	8.81	7.99
2	EC $\mu\text{S}/\text{cm}$ at 25 °C	234	37230	875
3	$\text{CO}_3 \text{ mg/l}$	0	84	3
4	$\text{HCO}_3 \text{ mg/l}$	49	1257	312
5	Cl mg/l	7	9018	77
6	F mg/l	0	6.8	1
7	$\text{NO}_3 \text{ mg/l}$	0	1177	15
8	$\text{SO}_4 \text{ mg/l}$	0	5600	51
9	$\text{PO}_4 \text{ mg/l}$	0	0.65	0.002
10	TH (as CaCO_3) mg/l	15	4620	267
11	Ca mg/l	4	548	38
12	Mg mg/l	0	780	38
13	Na mg/l	0	6763	91
14	K mg/l	0	165	6
15	$\text{SiO}_2 \text{ mg/l}$	3	68	28

Hydrogen Ion Concentration (pH):

The pH value of ground water in the state of U.P. varies from 7.14 to 8.81 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 7.99.

Carbonate & Bicarbonate (CO_3 & HCO_3):

The Carbonate concentration has been observed to be nil in most of the cases however it has been found upto 84 mg/l with an average value of 3mg/l & Bicarbonate concentration has been observed in the range of 49 to 1257 mg/l with an average value of 312 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 state of Uttar-Pradesh, E.C. value varied from 234 to 37230 $\mu\text{Siemens}/\text{cm}$ at 25°C with an average value of 875 $\mu\text{Siemens}/\text{cm}$ at 25°C . The E.C. value was observed in the range of 0-500 in 256 samples, 501-2000 in 542 samples and >2000 in 42 samples. In 30.48% of samples E.C. ranges between 0 to 500 $\mu\text{S}/\text{cm}$, 64.52% of samples E.C. ranges between 501 to 2000 $\mu\text{S}/\text{cm}$ whereas 5% samples are found to have E.C. value more than 2000 $\mu\text{S}/\text{cm}$ at 25°C . The highest value of E.C. 37230 $\mu\text{S}/\text{cm}$ at 25°C was observed in ground water from Nandgaon (Mathura district). The frequency distribution is shown in the following Table-19 Fig 1.depicts the range of Electrical Conductivity in shallow ground water of U.P

TABLE -19 Frequency distribution of Electrical Conductivity (BIS- 2012)

EC ranges in $\mu\text{S}/\text{cm}$ at 25°C	0-500	501-2000	>2000
No. of samples	256	542	42
%	30.48	64.52	5.00

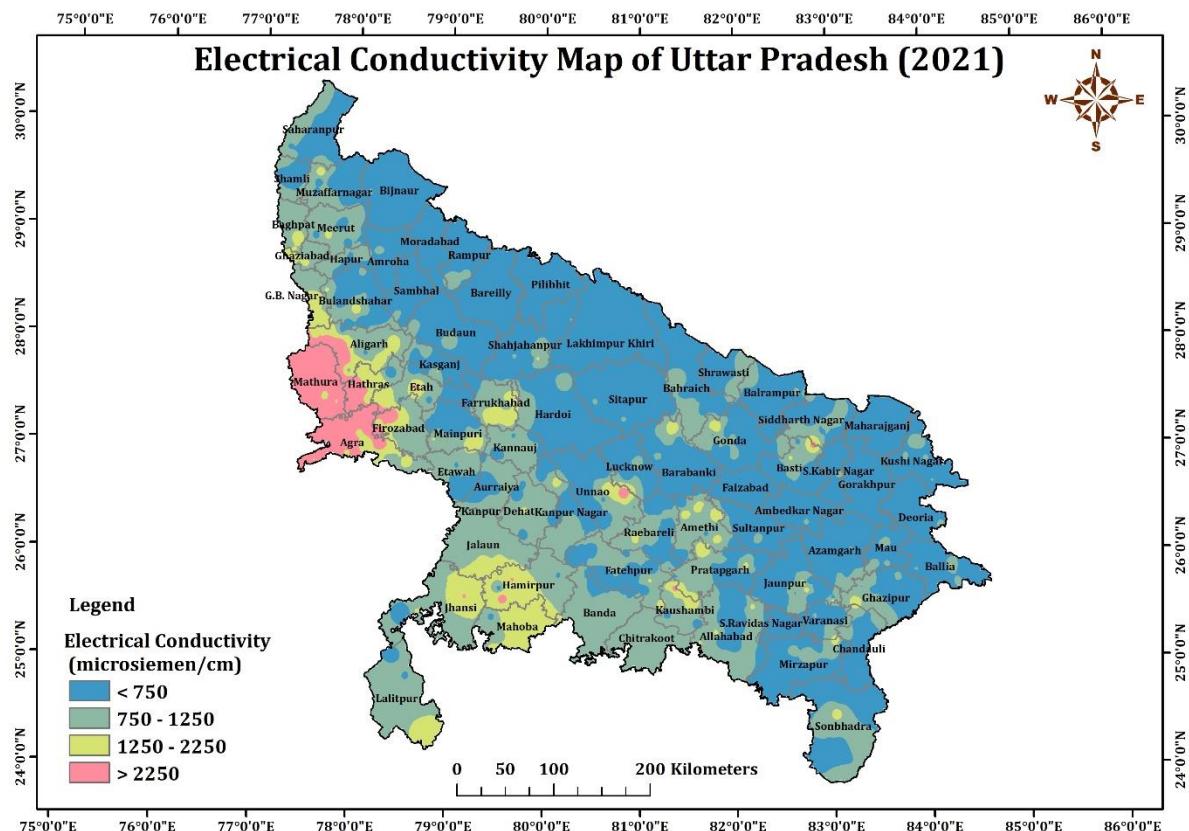


Fig. 1 EC Range in shallow ground water of U.P. (2021)

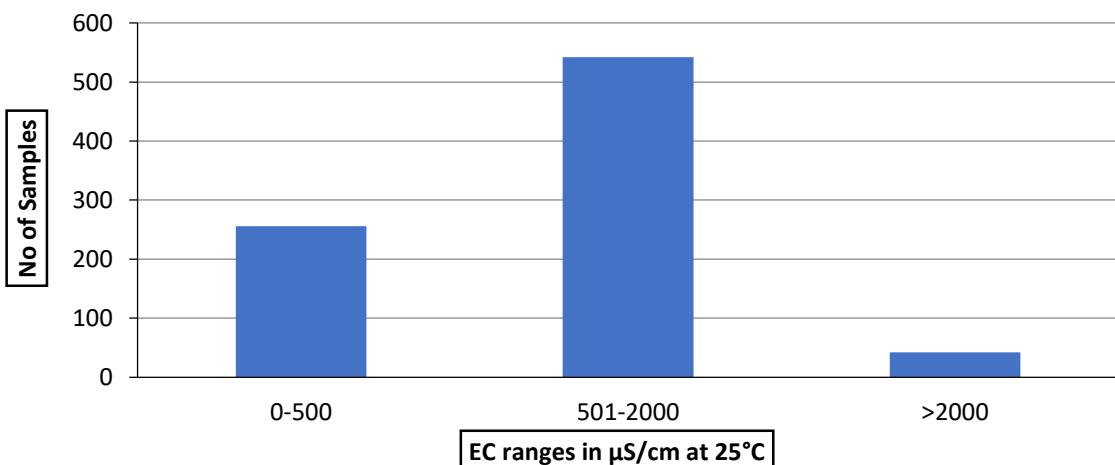


Fig 1. Depicts the range of Electrical Conductivity in shallow ground water of U.P

The various blocks exhibiting high values of E.C. (>2000 $\mu\text{S}/\text{cm}$ at 25°C) are tabulated in following Table-20.

TABLE -20: The blocks exhibiting high values of E.C. (>2000 $\mu\text{S}/\text{cm}$ at 25°C $\mu\text{S}/\text{cm}$)

Sl. No.	District	Block	EC $\mu\text{S}/\text{cm}$ at 25°C
1	Unnao	Nawabganj	2003
2	Ferrukabad	Shamsabad	2007
3	Meerut	Sardhana	2016
4	Pratapgarh	Sangaipur	2029
5	Mahamaya Nagar	Sasni	2062
6	Ferrukabad	Mohammadabad	2091
7	Firozabad	Khairagarh/ Hathwant	2103
8	Mathura	Baldeo	2110
9	Sultanpur	Jagdishpur	2147
10	Agra	Jagner	2192
11	Mathura	Farah	2259
12	Gonda	Katra Bazar H.Q.	2281
13	Mahamaya Nagar	Hathras	2286
14	Jhansi	Gursarai	2300
15	Hamirpur	Sareela	2330
16	Mainpuri	Kishni	2488
17	Agra	Fatehpur Sikri	2509
18	Raibareli	Lalganj	2517
19	Etah	Sheetalpur	2621
20	Mathura	Chhata	2650
21	Hamirpur	Rath	2735
22	Basti	Rudauli H.Q.	2840
23	Agra	Fatehabad	2856
24	Kaushambi	Kara	2907
25	Agra	Bichpuri	2946
26	Aligarh	Khair	3188
27	Agra	Khandauli	3226
28	Mathura	Manth	3298
29	Unnao	Asoha	3303
30	Firozabad	Narkhi	3321
31	Mahamaya Nagar	Sadabad	3360
32	Aligarh	Gonda	3790
33	Mathura	Goverdhan	3957
34	Mahamaya Nagar	Mursan	4296
35	Mathura	Chaumuhan	4819
36	Mathura	Raya	4946

37	Agra	Etmadpur	4955
38	Agra	Kheragarh	6507
39	Agra	Akola	8194
40	Mathura	Naujhil	8349
41	Agra	Achhnera	9048
42	Mathura	Nandgaon	37230

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. TDS of total 769 no. of samples found in range of 0-1000 mg/l, 63 no. of samples found in range of 1001-3000 mg/l, 4 no. of samples found in range of 3001-5000 and 4 no. of samples found more than 5000 mg/l which are tabulated in Table-21.

Table -21 Frequency Distribution of T.D.S. in NH Stations of U.P.

Salinity as per T.D.S range in mg/l	No. of Samples	Percentage
Fresh, non-saline (0-1000)	769	91.55
Slightly saline (1001-3000)	63	7.5
Moderately saline (3001-5000)	4	0.48
Highly saline (>5000)	4	0.48

Fig. 2 TDS range in shallow ground water of U.P. (2021)

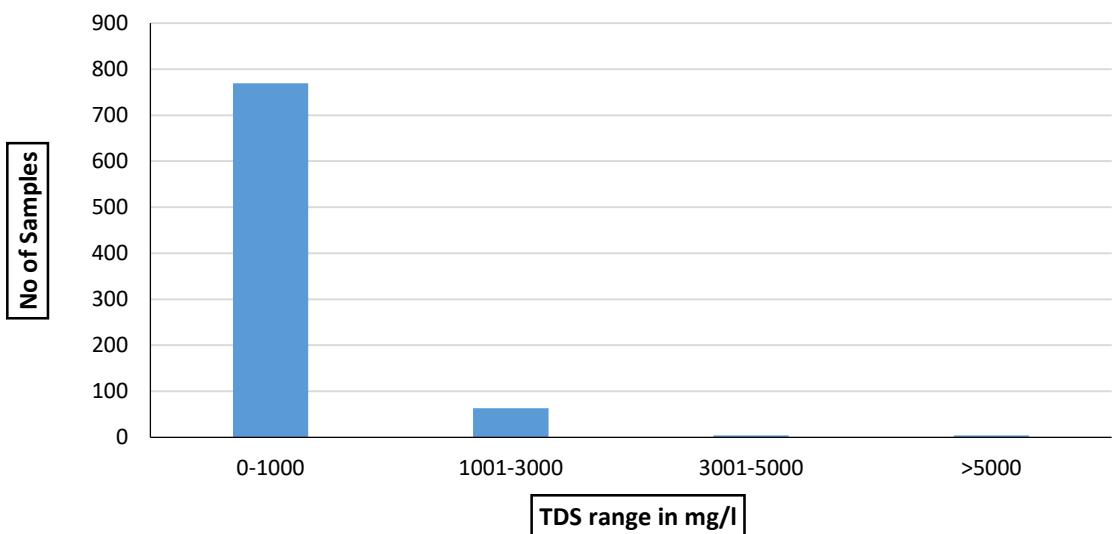


Figure-2 Depicts the T.D.S. range in shallow ground water of U.P.

Chloride (Cl):

The chemical data reveals that concentration of chloride ion ranges from 7.0 to 9018 mg/l in Nandgaon old Aganwadi, block Nandgaon, district Mathura with an average value of 77 mg/l. From Table-22, it reveals that 99.52% water samples fall within the acceptable limit prescribed by BIS (2012) and only 0.48% samples exhibit Chloride values > 1000 mg/l.

TABLE-22: Frequency distribution of Chloride (2020-21)

Range of Chloride in mg/l	0-250	251-1000	>1000
No. of samples	804	32	4
%	95.71	3.81	0.48

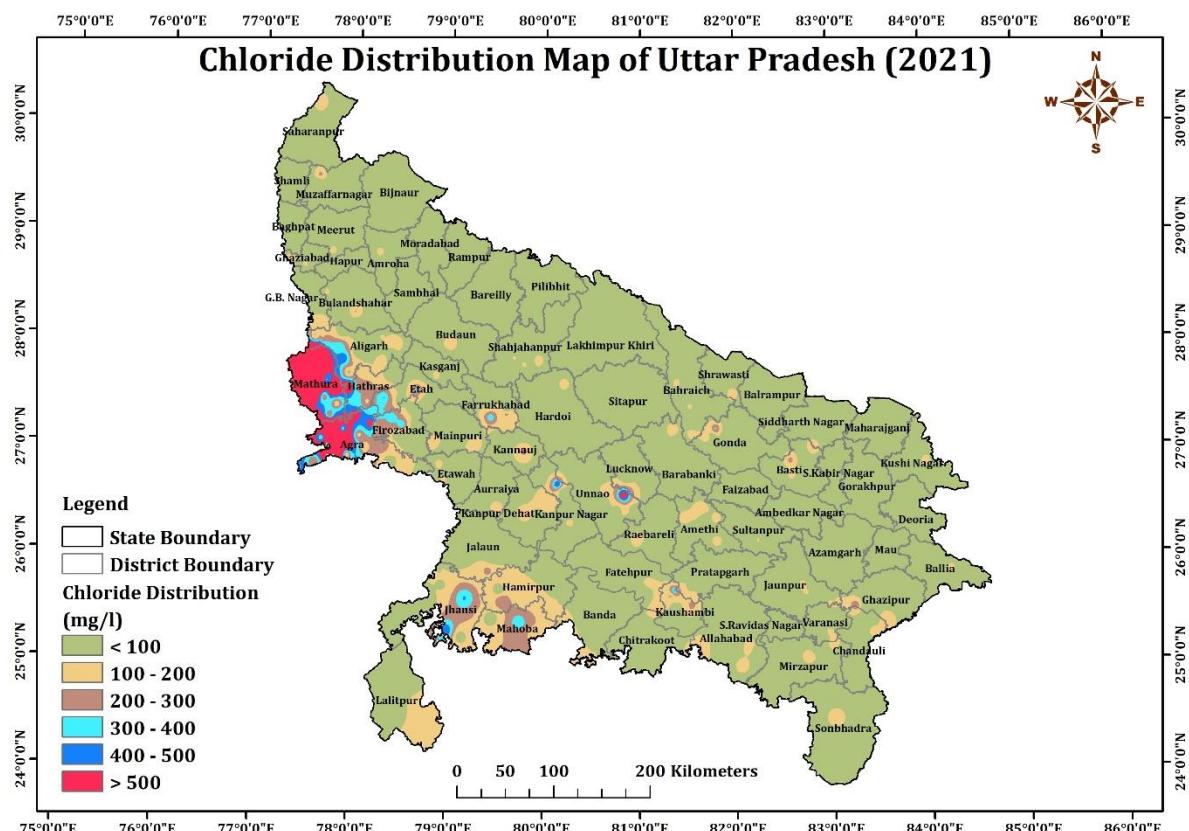


Fig. 3- Chloride Range in shallow ground water of U.P. (2021)

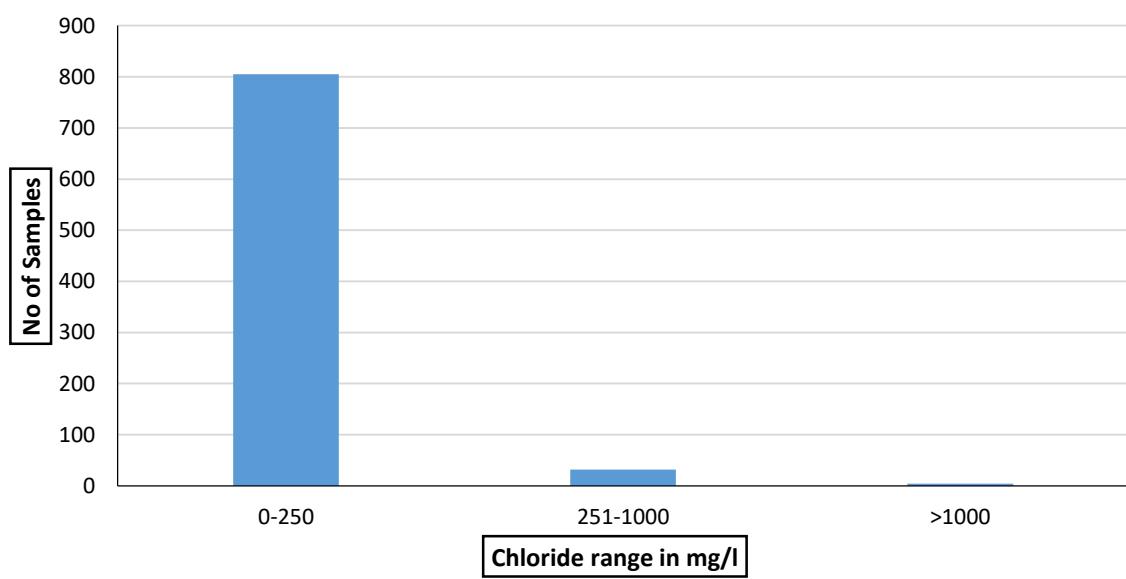


Fig. 3 Depicts the range of Chloride in shallow ground water of U.P.

The various blocks exhibiting high values of Cl (>1000 mg/l) are tabulated in following table 23 below-

TABLE-23: Blocks exhibiting high values of Cl (>1000 mg/l)

Sl. No.	District	Block	Cl (mg/l)
1	Mathura	Nandgaon	9018
2	Agra	Achhnera	1917
3	Agra	Akola	1704
4	Agra	Kheragarh	1299

Nitrate (NO₃):

The concentration of Nitrate has been found varying widely. It ranges between not detectable to 1177 mg/l with an average value of 15 mg/l. Total 91.55% of water samples fall within the permissible limit of 45 mg/l (BIS 2012) and 8.45% samples have higher level of Nitrate concentration with the highest value 1177 mg/l recorded at Naujhil, block Naujhil, district Mathura. High Nitrate is found all over the state and does not follow any definite pattern of distribution. The distribution of samples in different concentration ranges are given in Table-24.

TABLE-24 Frequency Distribution of Nitrate

Range of Nitrate in mg/l	0-45	> 45
No. of Samples	769	71
%	91.55	8.45

Fig. 4 Nitrate Range in shallow ground water of U.P. 2021

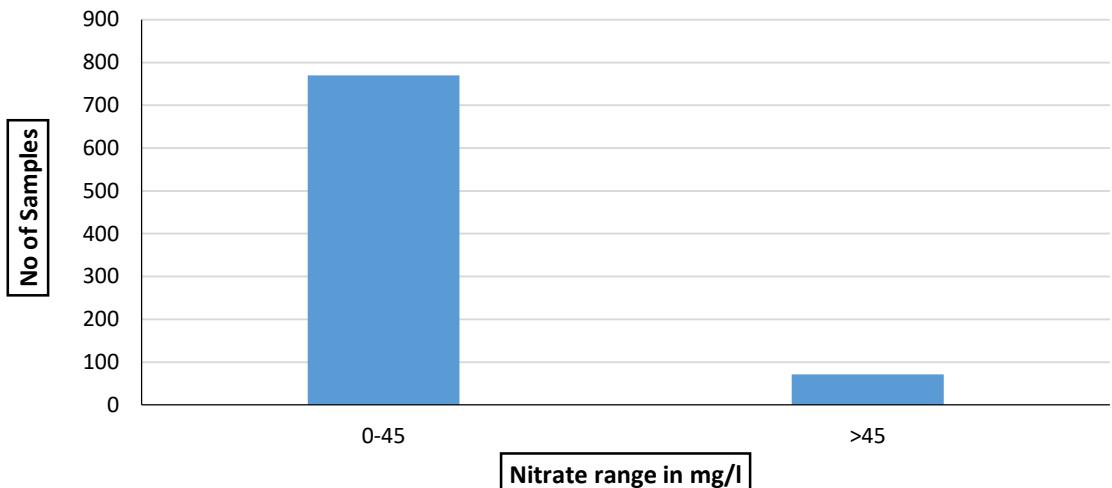


Fig. 4 Depicts the nitrate range in shallow ground water of U.P.

The various blocks exhibiting high values of nitrate concentration ($>45 \text{ mg/l}$) are tabulated in following Table25:

TABLE -25 Blocks associated with high values of nitrate ($>45 \text{ mg/l}$) (2020-21)

Sl. No.	District	Block	NO_3
1	Varanasi	Kashi Vidya Peeth	46
2	Prayagraj	Meja	46
3	Agra	Shamsabad	47
4	Ghazipur	Saidpur	47
5	Lucknow	Chinhat	48
6	Kanpur Dehat	Sandalpur	48
7	Gonda	Tarabganj H.Q.	49
8	Budaun	Usawan	52
9	Banda	Baberu	52
10	Bulandshahr	Unchagaon	52
11	Budaun	Gunnaur	53
12	Muzaffarnagar	Charthawal	54
13	Ferrukabad	Mohammadabad	55

Sl. No.	District	Block	NO₃
14	Muzaffarnagar	Budhana	57
15	Moradabad	Baniakhera	57
16	Jaunpur	Jaunpur H.Q.	59
17	Mathura	Nandgaon	59
18	Kasganj	Sidhpura	60
19	Meerut	Hastinapur	60
20	Kanpur Dehat	Amraudha	61
21	Jalaun	Konch	63
22	Sultanpur	Amethi	64
23	Kanpur Nagar	Shivrajpur	65
24	Kanpur Dehat	Derapur	65
25	Fatehpur	Dhata	65
26	Kasganj	Soron	65
27	Hardoi	Sandila	66
28	Budaun	Salarpur	68
29	Etah	Sheetalpur	68
30	Unnao	Safipur	69
31	Jalaun	Dakore	70
32	Sultanpur	Musafir Khana	71
33	Meerut	Meerut	71
34	Firozabad	Narkhi	73
35	Saharanpur	Nakur	73
36	Mathura	Chaumuhan	74
37	Mahamaya Nagar	Hasayan	76
38	J.P. Nagar	Hasanpur	77
39	Ghazipur	Jamania	81
40	Baghpat	Baraut	85

Sl. No.	District	Block	NO₃
41	J.P. Nagar	Gajraula	86
42	Saharanpur	Sadauli Qudim	89
43	Aligarh	Khair	92
44	Mahamaya Nagar	Sahpau	92
45	Mirzapur	Narainpur	94
46	Mahamaya Nagar	Sasni	94
47	Prayagraj	Manda	96
48	Meerut	Sardhana	97
49	Mathura	Baldeo	98
50	Mirzapur	Pahari	102
51	Auraiya	Auraiya	103
52	Gautam Buddha Nagar	Jewar	104
53	Ferrukabad	Kamalganj	108
54	Agra	Bah	108
55	Budaun	Ujhani	109
56	Mahoba	Jaitpur	110
57	Agra	Khandauli	111
58	Firozabad	Khairagarh/ Hathwant	112
59	Mahoba	Kabrai	130
60	Sultanpur	Jagdishpur	134
61	Sonbhadra	Chopan	134
62	Mirzapur	Mirzapur H.Q.	134
63	Sonbhadra	Babhani	163
64	Mahamaya Nagar	Hathras	184
65	Ferrukabad	Shamsabad	201
66	Aligarh	Akrabad	217
67	Banda	Barokhar	280

Sl. No.	District	Block	NO₃
68	Kaushambi	Kara	361
69	Hamirpur	Rath	410
70	Kaushambi	Moorat Ganj	476
71	Mathura	Naujhil	1177

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 0 to 6.8 mg/l with an average value of 1mg/l. Total 95.95% samples falling within the permissible limit prescribed by BIS (2012). The highest value of 6.8 mg/l has been recorded in block Palhana of Azamgarh district. The distribution of samples in different Fluoride ranges has been tabulated in Table-26.

TABLE -26 Frequency Distribution of Fluoride

Range of Fluoride in mg/l	0-1.0	1.0-1.5	>1.5
No. of Samples	741	65	34
%	88.21	7.74	4.05

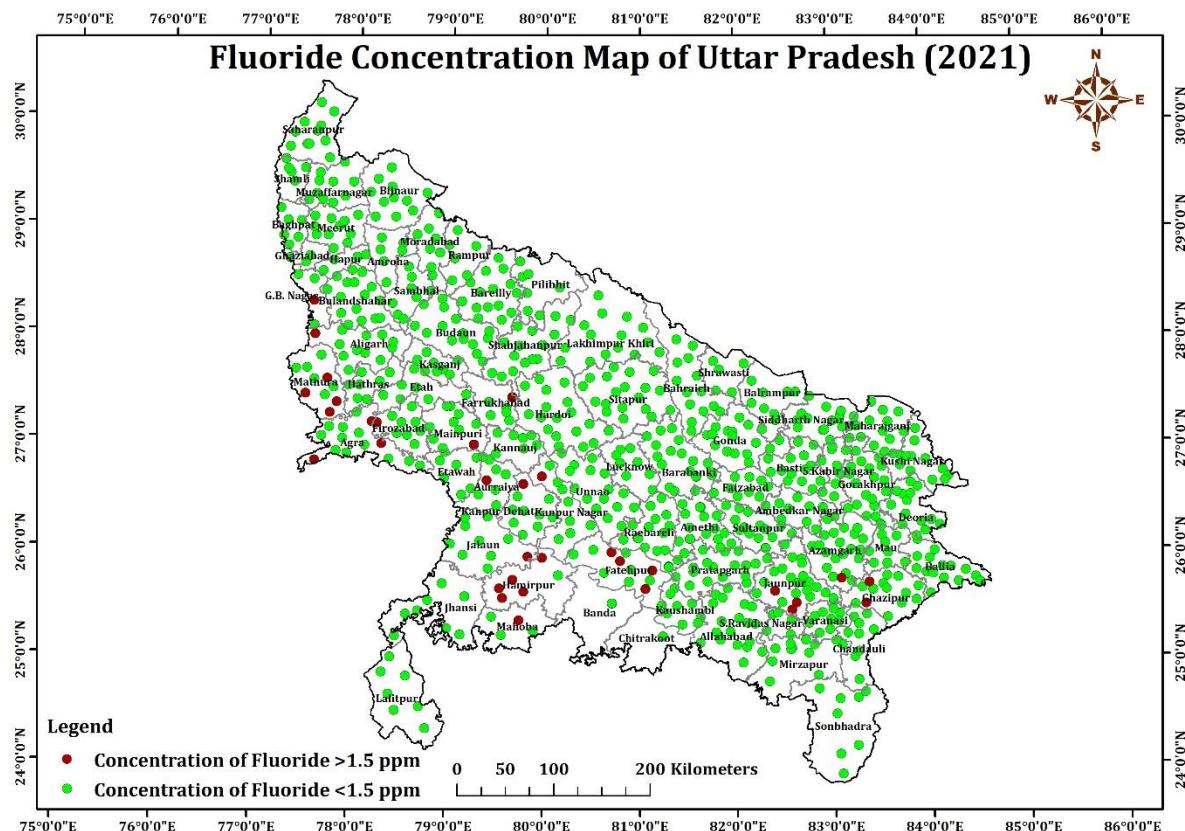


Fig. 5 Fluoride Range in shallow ground water of U.P.

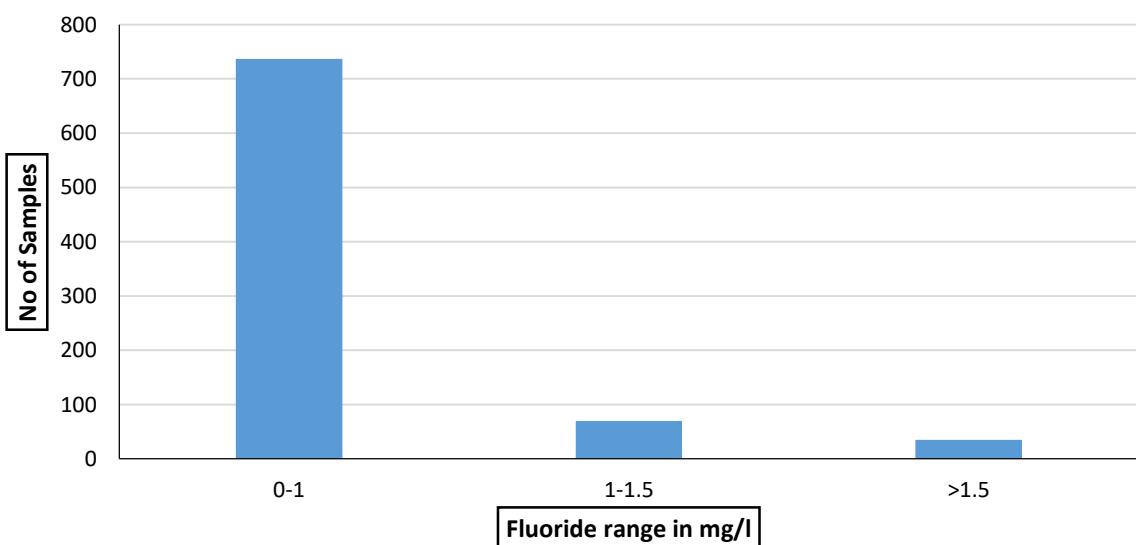


Figure-5 Depicts the Fluoride range in shallow ground water of U.P.

The various Blocks exhibiting high values of Fluoride concentration (>1.5 mg/l) are tabulated in Table-27.

TABLE -27 Blocks associated with high values of Fluoride (>1.5 mg/l) (2020-21)

Sl. No.	District	Block	F (mg/l)
1	Agra	Fatehabad	1.6
2	Mainpuri	Kishni	1.6
3	Hamirpur	Gohand	1.6
4	Hamirpur	Maudaha	1.6
5	Hamirpur	Muskara	1.6
6	Hamirpur	Kurara	1.6
7	Mahoba	Charkhari	1.7
8	Mainpuri	Kishni	1.7
9	Mathura	Manth	1.7
10	Auraiya	Achhalda	1.8
11	Jaunpur	RamNagar	1.8
12	Jaunpur	Rampur	1.8
13	Kanpur Nagar	Kakwan	1.9
14	Aligarh	Tappal	1.9
15	Agra	Etmadpur	2.0
16	Mainpuri	Kishni	2.0
17	Fatehpur	Hathgaon	2.0
18	Fatehpur	Vijayepur	2.0
19	Jaunpur	Machhali Shahar	2.1
20	Ferrukabad	Rajepur	2.1
21	Fatehpur	Teliyani	2.2
22	Gautam Buddha Nagar	Dankaur	2.3
23	Hamirpur	Sareela	2.4
24	Agra	Jagner	2.5
25	Ferrukabad	Rajepur	2.6

Sl. No.	District	Block	F (mg/l)
26	Ferrukabad	Rajepur	3.0
27	Fatehpur	Malwan	3.2
28	Firozabad	Tundla	3.2
29	Mathura	Farah	3.3
30	Mathura	Baldeo	3.5
31	Mathura	Goverdhan	4.3
32	Ghazipur	Jakhaniya	5.3
33	Ghazipur	Deokali	6.4
34	Azamgarh	Palhana	6.8

Total Hardness (TH):

The concentration of Total Hardness has been found to vary widely It ranges between 15 to 4620 mg/l with an average value of 267 mg/l. Total 96.19% of water samples falling within the permissible limit of 600 mg/l (BIS- 2012) and 3.81% samples have higher value of Total Hardness concentration with the highest value 4620 mg/l recorded at Nandgaon old Aganwadi, block Nandgaon, district Mathura. The distribution of samples in different concentration ranges are given in table-28.

TABLE -28 Frequency Distribution of Total Hardness (2021-22)

Range of T.H. in mg/l	0-200	>200-600	>600
No. of Samples	366	442	32
%	43.57	52.62	3.81

**Fig. 6 Total Hardness Range in shallow ground water of U.P.
2021**

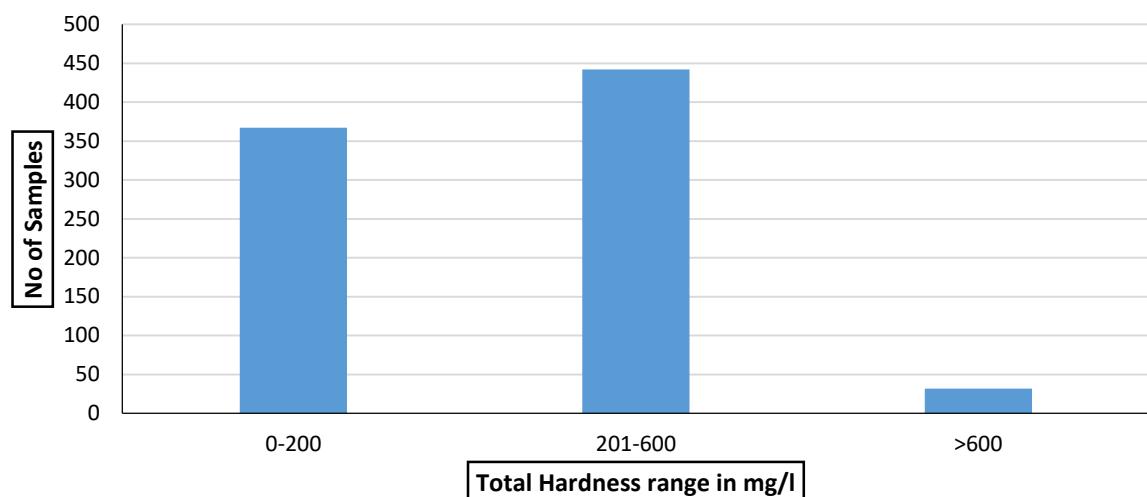


Figure 6- Depicts the TH range in shallow ground water of U.P.

The various Blocks exhibiting high values of TH concentration ($>600 \text{ mg/l}$) are tabulated in table-29.

TABLE -29 Blocks exhibiting high values of Total Hardness ($>600 \text{ mg/l}$)

Sl. No.	District	Block	Hardness as CaCO_3
1	Mathura	Chhata	620
2	Ferrukabad	Shamsabad	630
3	Jalaun	Dakore	630
4	Agra	Bichpuri	640
5	Meerut	Sardhana	655
6	Barabanki	Dewa	672
7	Agra	Khandauli	680
8	Barabanki	Haidergarh	687
9	Jhansi	Gursarai	700
10	Ferrukabad	Mohammadabad	720
11	Lalitpur	Maadawara	730
12	Kaushambi	Moorat Ganj	740
13	Barabanki	Rudauli	750
14	Mathura	Chaumuhan	760
15	Barabanki	Banki	788

Sl. No.	District	Block	Hardness as CaCO₃
16	Jhansi	Bangra	790
17	Mathura	Raya	790
18	Kanpur Nagar	Shivrajpur	850
19	Firozabad	Khairagarh/ Hathwant	910
20	Raibareli	Lalganj	1005
21	Kaushambi	Kara	1020
22	Barabanki	Siddharthnagar	1153
23	Barabanki	Sirauli Gauspur	1221
24	Barabanki	Masauli	1432
25	Barabanki	Fatehpur	1600
26	Agra	Akola	1650
27	Mathura	Naujhil	1780
28	Agra	Kheragarh	1880
29	Barabanki	Ramnagar	1936
30	Barabanki	Suratganj	2050
31	Agra	Achhnera	2350
32	Mathura	Nandgaon	4620

Calcium (Ca):

The concentration of Calcium has been found varying widely. It ranges between 4 mg/l to 548 mg/l with an average value of 38 mg/l. Total 94.17% of water samples falling within the acceptable limit of 75 mg/l (BIS- 2012) and 5.36% samples have higher level of calcium concentration but within permissible limit of 200 mg/l. Only 0.48% water samples exhibited calcium values >200 mg/l with a maximum value of 548 mg/l recorded at Nandgaon old Aganwadi, block Nandgaon, district Mathura. The distribution of samples in different concentration ranges are given in Table-30.

TABLE -30 Frequency Distribution of Calcium

Range of Calcium in mg/l	0-75	75-200	>200
No. of Samples	791	45	4
%	94.17	5.36	0.48

Fig. 7 Calcium Range in shallow ground water of U.P. 2021

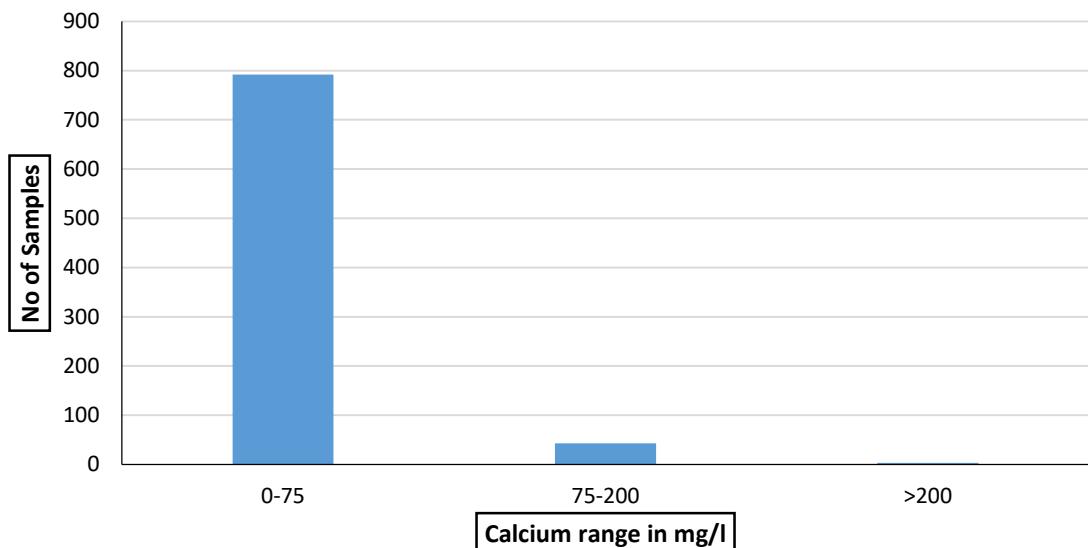


Figure-7 Depicts the Calcium range in shallow ground water of U.P.

The various Blocks exhibiting high values of Calcium concentration (>200 mg/l) are tabulated in Table 31.

TABLE -31 Blocks exhibiting high values of Calcium (>200 mg/l)

Sl. No.	District	Block	Ca Hardness (mg/l)
1	Jhansi	Bangra	244
2	Agra	Kheragarh	264
3	Agra	Achhnera	348
4	Mathura	Nandgaon	548

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 0 to 780 mg/l with an average value of 38 mg/l. Total 44.76% of

water samples falling within the acceptable limit of 30 mg/l (BIS- 2012) and 52.26% samples have higher level of Mg concentration but within maximum permissible limit of 100 mg/l. Only 2.98% water samples exhibited Mg values >100 mg/l with a maximum value of 780 mg/l recorded at Nandgaon old Aganwadi, block Nandgaon, district Mathura. The distribution of samples in different concentration ranges are given in Table-32:

TABLE-32 Frequency Distribution of Magnesium

Range of Magnesium in mg/l	0-30	>30-100	>100
No. of Samples	376	439	25
%	44.76	52.26	2.98

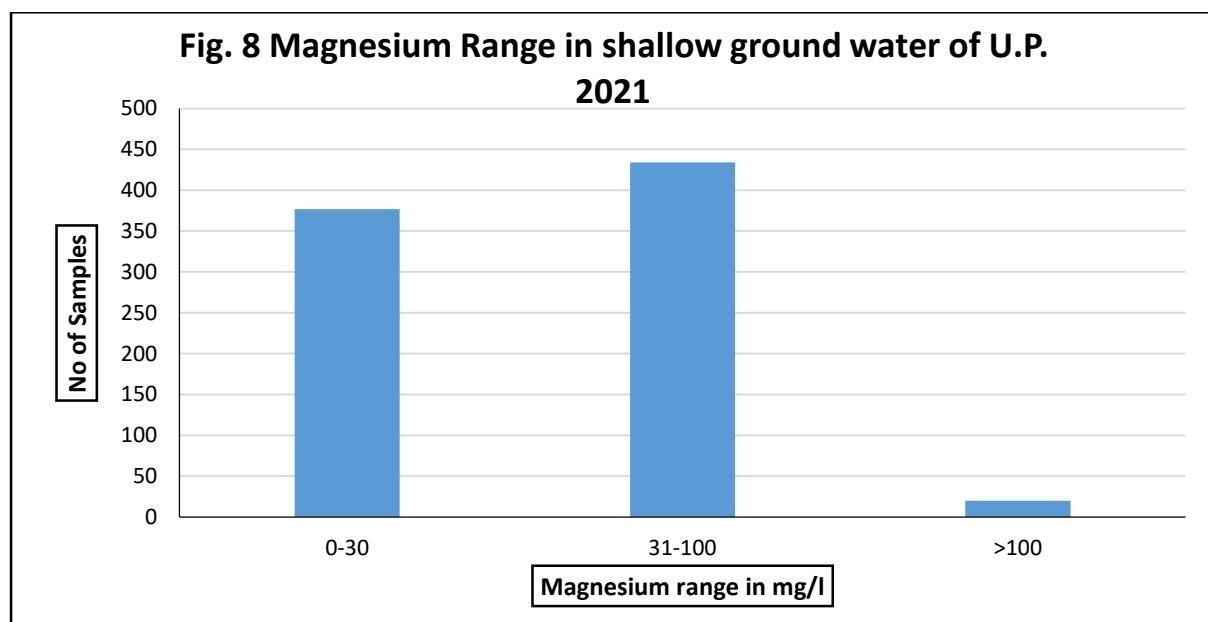


Figure-8 Depicts the Magnesium range in shallow ground water of U.P.

The various Blocks exhibiting high values of Magnesium concentration (>100 mg/l) are tabulated in Table-33.

TABLE-33 Blocks exhibiting high values of Magnesium (>100 mg/l) (2020-21)

Sl. No.	District	Block	Mg Hardness in mg/l
1	Jalaun	Dakore	101
2	Meerut	Sardhana	102

Sl. No.	District	Block	Mg Hardness in mg/l
3	Raibareli	Lalganj	106
4	Ferrukabad	Shamsabad	110
5	Agra	Bichpuri	113
6	Kanpur Nagar	Shivrajpur	113
7	Jaunpur	Jaunpur H.Q.	113
8	Mahoba	Charkhari	113
9	Mahamaya Nagar	Mursan	122
10	Agra	Khandauli	125
11	Raibareli	Chhatoh	125
12	Lalitpur	Maadawara	127
13	Firozabad	Khairagarh/ Hathwant	132
14	Sultanpur	Musafir Khana	132
15	Ferrukabad	Mohammadabad	146
16	Kaushambi	Moorat Ganj	146
17	Mathura	Chaumuhan	151
18	Mathura	Raya	168
19	Kaushambi	Kara	192
20	Raibareli	Lalganj	222
21	Agra	Kheragarh	293
22	Agra	Akola	298
23	Agra	Achhnera	355
24	Mathura	Naujhil	384
25	Mathura	Nandgaon	780

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 0 to 6763 mg/l with an average value of 91 mg/l. Out of total samples analysed, 80.83 % of water samples exhibit sodium concentration up to 100 mg/l, 9.76 % of samples exhibit concentration up to 200 mg/l, 7.14% of samples exhibit concentration up to 500 mg/l and 2.26% samples were found to be associated with extremely high levels of Na concentration >500 mg/l with a maximum value of 6763 mg/l recorded at Nandgaon old Aganwadi, block Nandgaon, district Mathura. The distribution of samples in different concentration ranges are given in table-34. No guidelines have been issued by BIS, however for the sake of representation the various range has been taken in Table-34.

TABLE-34 Frequency Distribution of Sodium

Range of Sodium in mg/l	0-100	>100-200	>200-500	>500
No. of Samples	679	82	60	19
%	80.83	9.76	7.14	2.26

Fig. 9 Sodium Range in shallow ground water of U.P. (2021)

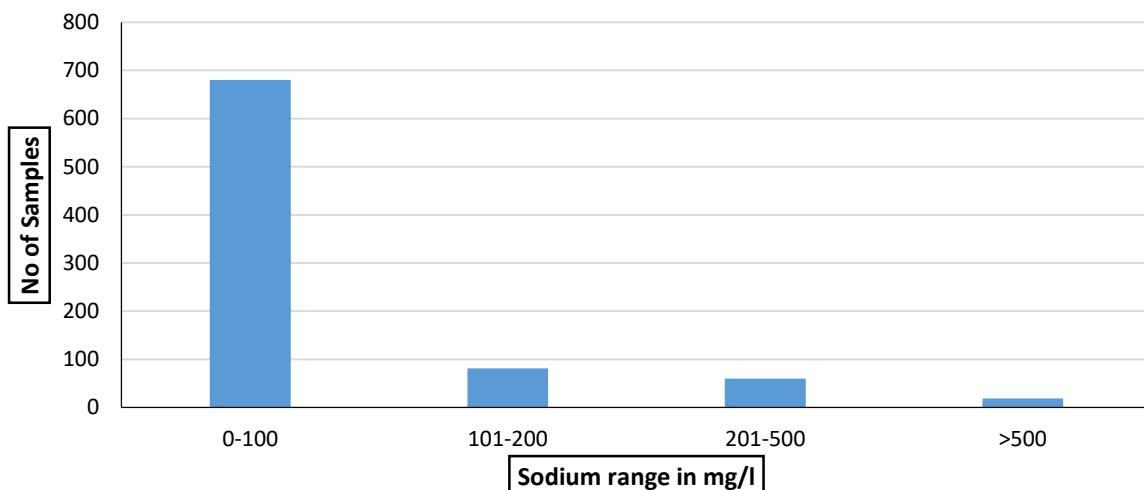


Figure-9 Depicts the Sodium range in shallow ground water of U.P.

The various Blocks exhibiting high values of Sodium concentration ($>500 \text{ mg/l}$) are tabulated in Table-35.

TABLE-35 Blocks exhibiting high values of Sodium ($>500 \text{ mg/l}$)

Sl. No.	District	Block	Na in mg/l
1	Firozabad	Narkhi	544
2	Mathura	Farah	562
3	Mathura	Baldeo	562
4	Mahamaya Nagar	Sadabad	631
5	Aligarh	Khair	708
6	Unnao	Asoha	725
7	Aligarh	Gonda	729
8	Mathura	Manth	730
9	Mahamaya Nagar	Mursan	763
10	Agra	Kheragarh	795
11	Mathura	Raya	887

12	Agra	Achhnera	900
13	Mathura	Chaumuhan	967
14	Mathura	Goverdhan	1020
15	Agra	Etmadpur	1064
16	Fatehpur	Dhata	1108
17	Agra	Akola	1125
18	Mathura	Naujhil	1129
19	Mathura	Nandgaon	6763

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 165 mg/l with an average value of 6 mg/l. Out of total samples analysed; 93.93% of water samples exhibit Potassium concentration up to 10 mg/l, 2.14% samples were found concentration up to 20 mg/l, 2.14% samples were found concentration up to 30 mg/l and 1.79% samples were found to be associated with extremely high level of K concentration >30 mg/l with a maximum value of 165 mg/l recorded at Nandgaon old Aganwadi, block Nandgaon, district Mathura. The distribution of samples in different concentration ranges are given in Table-36.

TABLE-36 Frequency Distribution of Potassium

Range of Potassium in mg/l	0-10	>10-20	>20-30	>30
No. of Samples	789	18	18	15
%	93.93	2.14	2.14	1.79

**Fig. 10 Potassium Range in shallow ground water of U.P.
(2021)**

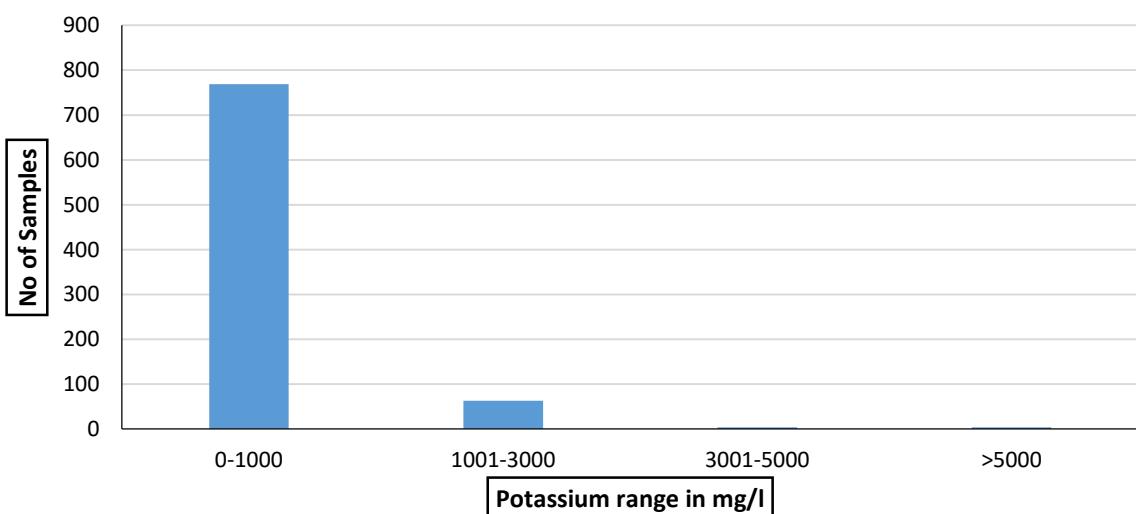


Figure-10 Depicts the Potassium range in shallow ground water of U.P

The various Blocks exhibiting high values of Potassium concentration (>30 mg/l) are tabulated in Table-37.

TABLE-37 Blocks exhibiting high values of Potassium (>30 mg/l) (2020-21)

Sl. No.	District	Block	K in mg/l
1	Mirzapur	Narainpur	31
2	Meerut	Hastinapur	32
3	Ballia	Belhari	35
4	Sultanpur	Jamo	42
5	Bahraich	Fakarpur H.Q.	45
6	Kushinagar	Nebuwa Naurangia	46

7	Mahamaya Nagar	Hathras	49
8	Budaun	Gunnaur	53
9	Barabanki	Suratganj	65
10	Bareilly	Shergarh	77
11	Firozabad	Aron	94
12	Meerut	Sardhana	96
13	Mahamaya Nagar	Sahpau	97
14	Mahamaya Nagar	Hasayan	98
15	Mathura	Nandgaon	165

SUITABILITY OF GROUND WATER FOR IRRIGATION PURPOSE

The chemical quality of water is an important factor to be considered in evaluating its use 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 total dissolved solids (TDS), certain constituents in irrigation water are especially undesirable and some may be damaging even when present in small concentrations viz. Sodium Adsorption Ratio (SAR) & 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 shown in table 38 reveals that the majority of the samples belong to C2 and C3 class as per USSL classification.

TABLE -38 Frequency distribution of Electrical Conductivity

EC ranges in μS/cm at 25°C	0-250	251 – 750	751-2250	>2250
	C1	C2	C3	C4
No. of samples	1	542	265	32
Percentage	0.12	64.52	31.55	3.81

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 0.95% of samples, no samples found in RSC range of 1.25-2.5 and 99.05% of samples found in RSC range of more than 2.5 which are tabulated in Table-39.

Table -39: Frequency Distribution of R.S.C. in NH Stations of U.P

RSC range (meq/l)	No. of samples	Percentage
<1.25	8	0.95
1.25-2.5	0	0.00
>2.5	832	99.05

Fig. 11 RSC range in shallow ground water of U.P. 2021

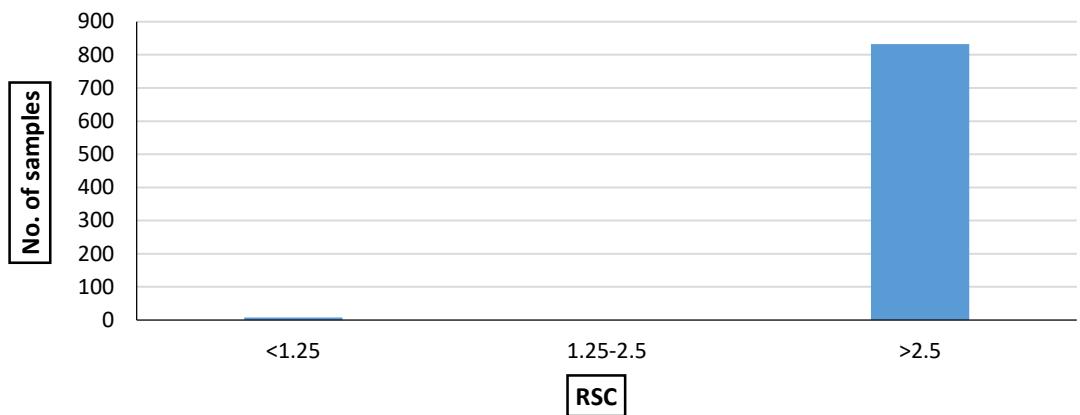


Figure-11 Depicts the R.S.C. range in shallow ground water of U.P

Sodium Adsorption Ratio:

Sodium Adsorption Ratio (SAR) is an estimate of the degree to which Sodium will be absorbed by soil from water. Sodium in irrigation waters adversely affects soil structure and permissibility by replacing Ca and Mg ions.

$$\text{SAR} = \frac{\text{Na}^+}{[\text{Ca}^{+2} + \text{Mg}^{+2}/2]^{\frac{1}{2}}}$$

where Na^+ , Ca^{+2} and Mg^{+2} are expressed in meq/l

Table-40 shows that the quality of water samples as per SAR is good in 63.93% samples have SAR value less than 10.

Table-40 : Quality of water on the basis of SAR values

S. No.	Range of SAR	No. of Samples	% of Samples	Quality of Water
1	≤ 10	537	63.93	Low Na hazard (good quality)
2	>10-18	149	17.74	Medium Na hazard (medium quality)
3	>18	154	18.33	High Na hazard (low quality)

HEAVY METALS

Heavy metals normally occurring in nature are not harmful to our environment, because they are only present in very small amounts shown in Table 41. However, if the levels of these metals are higher than the levels of healthy life, the roles of these metals change to a negative dimension.

A total number of 912 representative ground water samples were collected for Fe, Mn, Cr, Pb, Cu, Zn, As and U analysis treated with Supra pure HNO₃ from pre-defined water quality stations of U.P during May- 2021. The samples were collected in polyethylene bottles of 125 ml capacity. They were immediately closed, labeled and stored properly for laboratory analysis. The hand pumps were continuously pumped for at least 10 minutes prior to the sampling, to ensure that ground water to be sampled is representative of ground water aquifer.

The chemical analysis for iron (Fe), manganese (Mn), Chromium (Cr), Lead (Pb), Copper (Cu), Zinc (Zn), Arsenic (As) and Uranium (U) was carried on inductively coupled plasma- Mass spectrometry (Thermo iCAP Q) at Regional Chemical Laboratory CGWB, NR, Lucknow as per the standard methods. The chemical lab of CGWB, NR, Lucknow is NABL accredited. The chemical analysis results for 912 nos. of water samples collected from GW monitoring Stations spread in entire Uttar Pradesh have been tabulated in Annexure 3.

Results and Discussion-

Copper concentration was found within the permissible limit of 1.5 mg/l. Zinc concentration is found above permissible limit 15 mg/l in two locations, with value 16.744 mg/l in Jalesar block of Etah district and 16.442 mg/l at Gonda block of Aligarh district as per BIS Drinking Water Specification IS 10500: 2012 in ground water samples. The concentration of lead was found more than 0.01 mg/l in 5 ground water samples. The value of maximum concentration of lead was found to be 0.03 mg/l at Dilari block of Moradabad district. Chromium was not found in any sample to be more than 0.05 mg/l. The value of maximum concentration of chromium was found to be 0.034 mg/l at Karchana block, Prayagraj district. Arsenic concentration was found more than 0.01 mg/l in 52 samples (5.70%). Iron concentration was found more than 1.0 mg/l in 260 samples (28.51%). The concentration of Manganese was found more than 0.3 mg/l at 63 water quality stations and its maximum concentration was found 1.857 mg/l at Rajepur block of Farrukhabad district. Iron is the main pollutant in shallow ground water of the studied area. Its concentration was found

more than 1.0 mg/l at 293 block locations (H/P IM-II) of 63 districts of Uttar Pradesh. The concentration of iron in shallow ground water of Uttar Pradesh is shown in Plate XXIII. The maximum concentration of iron is found to be 21.705 mg/l at Myorpur block of Sonbhadra district. The concentration of Arsenic was found above the permissible limit of BIS 2012 at 52 water quality stations in 26 districts. The concentration of Arsenic in ground water of Uttar Pradesh is shown in Table 42.

Table-41: Statistical distribution of Heavy Metals in Uttar Pradesh 2021

Heavy Metal	Minimum (mg/l)	Maximum (mg/l)	Average (mg/l)	No of Districts affected partly
Chromium	0	0.034	0	Nil
Iron	0	21.705	1.342	63
Manganese	0	1.857	0.111	33
Copper	0	0.047	0	Nil
Zinc	0	16.744	0.7	2
Arsenic	0	0.144	0.003	26
Lead	0	0.030	0.001	5
Uranium	0	0.239	0.012	32

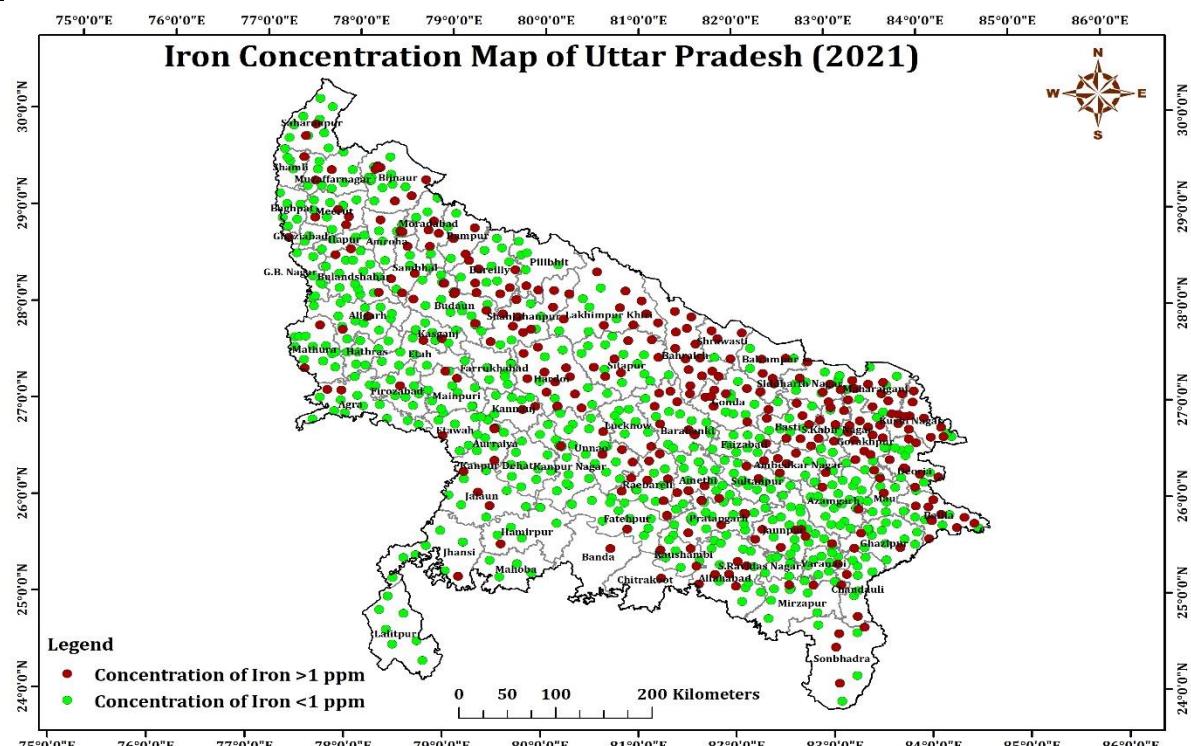


Plate: XXIII

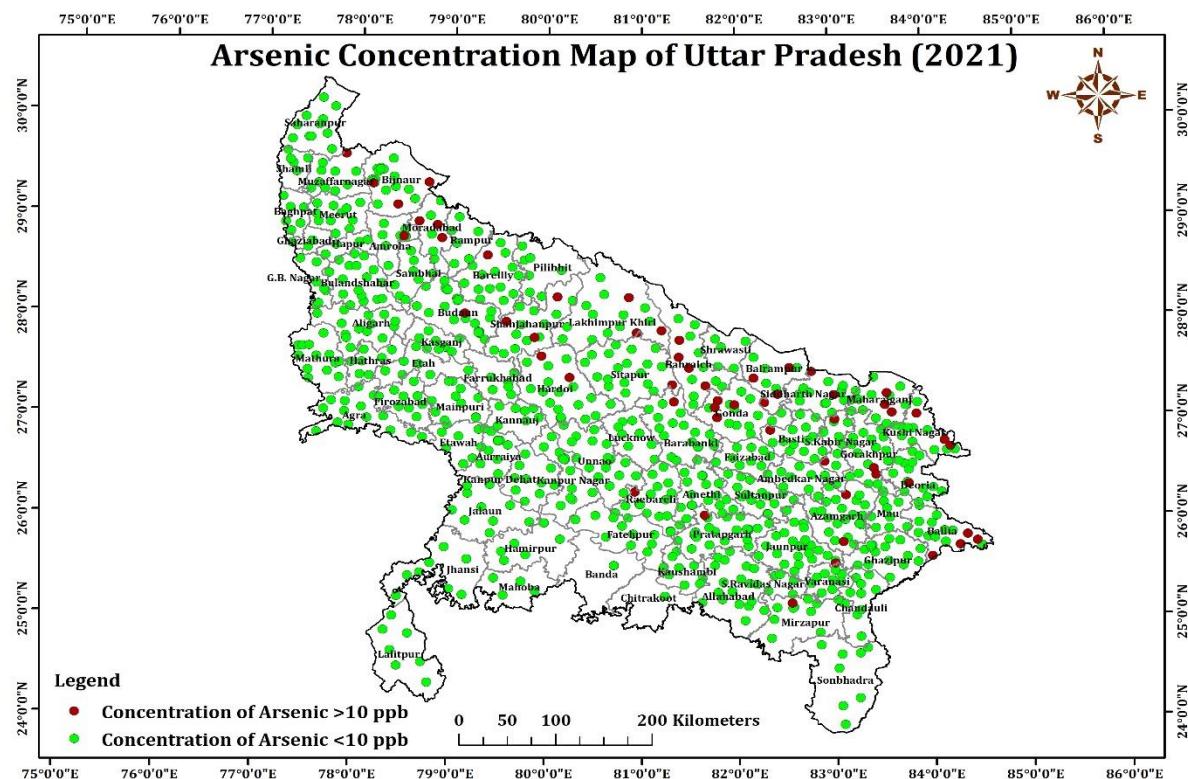


Plate: XXIV

Table-42 : Locations of high concentration of Arsenic in shallow ground water of U.P

Sl. No.	District	Block	Latitude	Longitude	As in mg/l
1	Barabanki	Suratganj	27.19320	81.33440	0.144
2	Bahraich	Huzurpur	27.35278	81.66583	0.110
3	Ghazipur	Ghazipur	25.5684	83.0008	0.047
4	Bahraich	Mahasi H.Q.	27.63972	81.38750	0.046
5	Ballia	Dubahar	27.4450	84.2393	0.041
6	Ballia	Reoti	25.8418	84.3718	0.041
7	Ballia	Bairyा	25.7769	84.4734	0.040
8	Bijnor	AFZALGARH	29.37965	78.73171	0.040
9	Lakhimpur Kheri	NAKAHA	27.88518	80.94799	0.038
10	Lakhimpur Kheri	NIGHASAN	28.23961	80.86365	0.034
11	Raibareli	Kheron	26.29173	80.92759	0.034

Sl. No.	District	Block	Latitude	Longitude	As in mg/l
12	Bahraich	Shivpur H.Q.	27.81083	81.39333	0.034
13	Kushi Nagar	Sewarhi	26.7244	84.2164	0.033
14	Ballia	Sohaon	25.6293	84.0040	0.027
15	Gonda	Haldharmau H.Q.	27.13917	81.76111	0.026
16	Azamgarh	Palhana	25.7832	83.0859	0.026
17	Siddharth Nagar	Badhni H.Q.	27.48917	82.77694	0.024
18	Lakhimpur Kheri	ISHANAGASR	27.90759	81.20733	0.024
19	Gonda	Paraspur H.Q.	27.03472	81.78639	0.023
20	Gorakhpur	Kauriram	26.5161	83.4152	0.022
21	Kushi Nagar	Dudhai	26.7847	84.1556	0.022
22	Hardoi	SHAHABAD	27.64863	79.94333	0.021
23	Bahraich	Fejawapur H.Q.	27.53139	81.49583	0.021
24	Bijnor	NOORPUR	29.15190	78.40275	0.021
25	Mirzapur	Kon	25.17056	82.55111	0.021
26	Moradabad	MOONDHA PANDEY	28.82314	78.87967	0.021
27	Moradabad	CHHAJLET	28.9867	78.6333	0.019
28	Gonda	Katra Bazar H.Q.	27.20556	81.79361	0.019
29	Sant Kabir Nagar	Poli	26.5858	82.9019	0.018
30	Deoria	Bhaluwani	26.3581	83.7757	0.018
31	Azamgarh	Maharajganj	26.2511	83.1201	0.017
32	Maharajganj	Ghughuli	27.0715	83.6129	0.017
33	Shahjahanpur	DADRAUL	27.83672	79.87013	0.016
34	Balrampur	Rehra Bazar H.Q.	27.18167	82.27861	0.016
35	Bareilly	SHERGARH	28.65410	79.36506	0.014
36	Balrampur	Gainsari H.Q.	27.52944	82.54750	0.014

Sl. No.	District	Block	Latitude	Longitude	As in mg/l
37	Siddharth Nagar	Jogiya H.Q.	27.25278	83.00806	0.013
38	Sant Kabir Nagar	Santha	27.0086	83.0110	0.013
39	Gorakhpur	Gagaha	26.4493	83.4376	0.012
40	Ballia	Belhari	25.7363	84.2934	0.012
41	Balrampur	Balrampur H.Q.	27.42861	82.17111	0.012
42	J.P. Nagar	JOYA	28.83557	78.47319	0.012
43	Moradabad	BHAGATPUR TANDA	28.95141	78.82683	0.012
44	Muzaffarnagar	Purkaji	29.64917	77.83889	0.012
45	Bijnor	Mohammadpur Deomal	29.35865	78.13419	0.011
46	Budaun	SALARPUR	28.07057	79.13302	0.011
47	Shahjahanpur	JAITIPUR	27.99392	79.57051	0.011
48	Kushi Nagar	Nebuwa Naurangia	27.0542	83.8688	0.011
49	Gonda	Padri Kripal H.Q.	27.16278	81.96833	0.011
50	Maharajganj	Maharajganj	27.1456	83.5421	0.011
51	Pratapgarh	Sangaipur	26.05730	81.65130	0.011
52	Basti	Parasurampur H.Q.	26.90500	82.34000	0.011

On perusal of chemical analysis results it was found that Uranium concentrations showed a wide range from 0 to 239 µg/L with an average value of 12 µg/L. The concentration of Uranium was found less than 2 µg/L in 194 samples (21.27%). Its concentration was mainly found in the range of 2 to 30 µg / L in nearly 637 ground water samples (69.84%). The concentration of Uranium in 81 samples (8.88%) was found more than 30 µg/L in ground water samples collected from 70 blocks of 32 districts of U.P. Thus concentration of uranium in most ground water samples was found below the drinking water health standard shown in Table 43. The maximum concentration of Uranium (239 µg/L) was found in Mohammadpur Deomal block of Bijnor district.

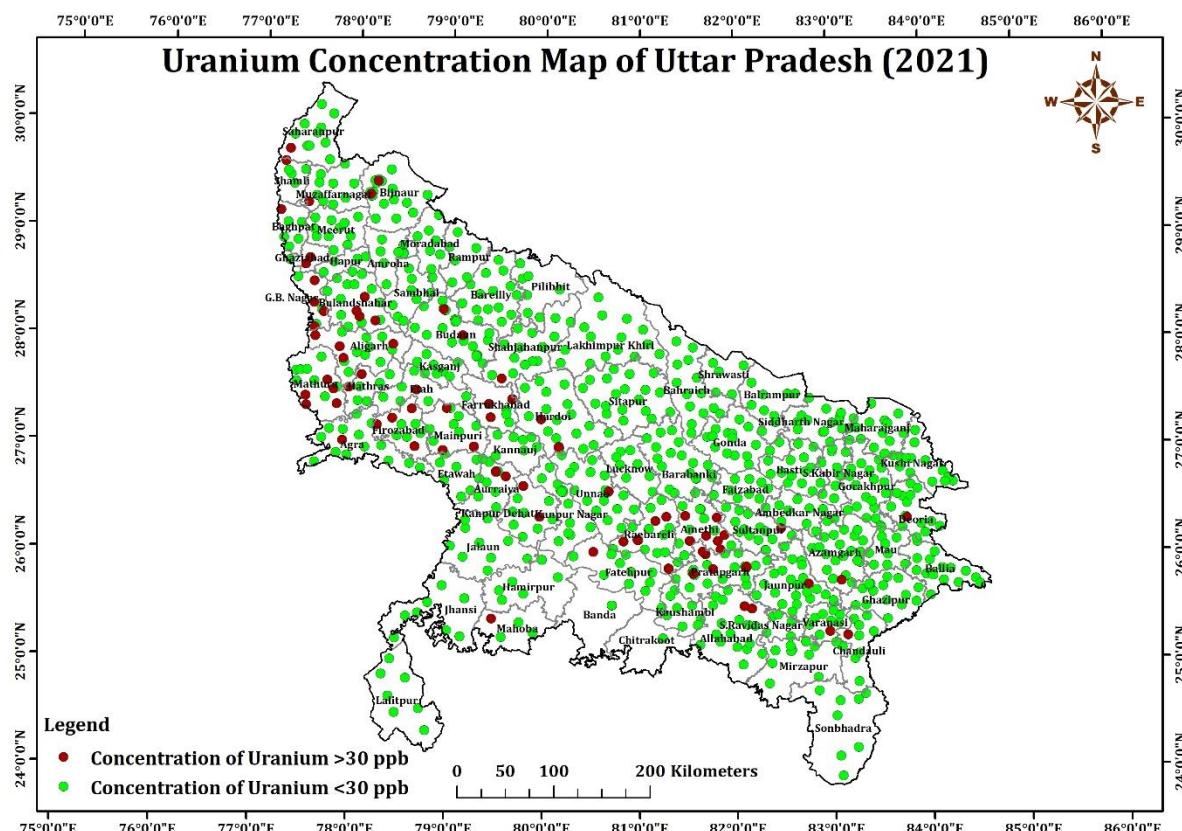


Table-43 Locations of high concentration of Uranium (U) in ground water of Uttar Pradesh

Sl. No.	District	Block	Latitude	Longitude	U in $\mu\text{g/L}$ (>30)
1	Bijnor	MOHAMMADPUR DEOMAL	29.37647	78.13236	239
2	Aligarh	Khair	27.94351	77.83641	126
3	Fatehpur	Khuajuha	26.05617	80.51662	110
4	Bulandshahr	Jahangirabad	28.41387	78.08847	98
5	Pratapgarh	Sangaipur	26.05730	81.65130	86
6	Mainpuri	Kishni	27.03160	79.26555	83

Sl. No.	District	Block	Latitude	Longitude	U in µg/L (>30)
7	Gautam Buddha Nagar	Dankaur	28.26954	77.65958	82
8	Raibareli	Chhatoh	26.15952	81.52078	80
9	Raibareli	Lalganj	26.16737	80.97911	70
10	Raibareli	Lalganj	26.17053	80.97584	65
11	Pratapgarh	Sangaipur	26.05210	81.65780	64
12	Pratapgarh	Babaganj	25.85220	81.55440	64
13	Mathura	Baldeo	27.41141	77.81998	62
14	Sultanpur	Musafir Khana	26.37627	81.79961	56
15	Azamgarh	Palhana	25.7832	83.0859	55
16	Firozabad	Tundla	27.22545	78.24661	54
17	Sultanpur	Bhetya	26.21060	81.87524	50
18	Ferrukabad	Rajepur	27.47727	79.66173	49
19	Raibareli	Tilooee	26.39286	81.47077	49
20	Firozabad	Narkhi	27.29036	78.40702	49
21	Budaun	SALARPUR	28.07057	79.13302	49
22	Mathura	Manth	27.63071	77.71605	48
23	Etah	Sheetalpur	27.55593	78.65479	48
24	Kanpur Dehat	Akbarpur	26.38202	79.95627	47
25	Auraiya	Bidhuna	26.80250	79.50242	47
26	Mathura	Goverdhan	27.48276	77.49056	46
27	Sultanpur	Dostpur	26.27003	82.46646	45
28	Bulandshahr	Danpur	28.19229	78.20595	45
29	Ferrukabad	Rajepur	27.48043	79.66195	45
30	Hardoi	SANDI	27.29246	79.96401	44

Sl. No.	District	Block	Latitude	Longitude	U in µg/L (>30)
31	Hardoi	MALLAWAN	27.02579	80.15472	44
32	Pratapgarh	Baba Bekhernath	25.91590	82.10480	44
33	Aligarh	Bijauli	27.97887	78.39968	43
34	Ferrukabad	Mohammadabad	27.30800	79.43679	42
35	Varanasi	Kashi Vidya Peeth	25.30639	82.96278	42
36	Ferrukabad	Rajepur	27.48084	79.66325	41
37	Mahamaya Nagar	Sasni	27.69113	78.07405	40
38	Unnao	Nawabganj	26.62105	80.67590	40
39	Deoria	Bhaluwani	26.3581	83.7757	40
40	Raibareli	Chhatoh	26.15970	81.51837	39
41	Mainpuri	Karhal	26.99648	78.94045	39
42	Bulandshahr	Shikarpur	28.22744	78.03990	39
43	Mathura	Goverdhan	27.39449	77.50056	38
44	Prayagraj	Phoolpur	25.54600	82.08100	38
45	Bijnor	KIRTAPUR	29.49962	78.20781	38
46	Saharanpur	Gangoh	29.78417	77.26028	37
47	Hardoi	MALLAWAN	27.03459	80.15240	37
48	Raibareli	Unchahar	25.89875	81.29765	37
49	Pratapgarh	Lakshmanpur	25.89590	81.75900	37
50	Mahoba	Panwari	25.42656	79.46497	36
51	Prayagraj	Pratappur	25.52150	82.16020	36
52	Chandauli	Niyamatabad	25.27194	83.14444	36
53	Sultanpur	Gauriganj	26.20620	81.68693	36
54	Ghaziabad	Muradnagar	28.77000	77.50333	35

Sl. No.	District	Block	Latitude	Longitude	U in µg/L (>30)
55	Muzaffarnagar	Kairana	29.66833	77.21654	35
56	Gautam Buddha Nagar	Dankaur	28.35329	77.55594	35
57	Raibareli	Sareni	26.15461	80.82822	35
58	Budaun	BISOULI	28.31259	78.92968	34
59	Baghpat	Chapruli	29.20778	77.17917	34
60	Shahjahanpur	MIRZAPUR	27.67052	79.54801	34
61	Mathura	Raya	27.54948	77.78480	34
62	Sultanpur	Sangrampur	26.07727	81.83799	34
63	Pratapgarh	Babaganj	25.85170	81.55300	34
64	Raibareli	Maharajganj	26.38467	81.27440	34
65	Ghaziabad	Razapur	28.71000	77.45639	33
66	Jaunpur	Dharampur	25.75250	82.74750	33
67	Aligarh	Tappal	28.04280	77.57917	33
68	Sultanpur	Amethi	26.15671	81.80836	33
69	Raibareli	Harichandpur	26.34467	81.16182	32
70	Pratapgarh	Baba Bekhernath	25.90720	82.09990	32
71	Firozabad	Eka	27.37907	78.60743	32
72	Mahamaya Nagar	Mursan	27.56838	77.94111	32
73	Pratapgarh	Sangaipur	26.03190	81.68050	32
74	Aligarh	Gonda	27.83668	77.87962	32
75	Gautam Buddha Nagar	Jewar	28.12498	77.56721	32
76	Gautam Buddha Nagar	Dadri	28.55452	77.55351	31
77	Agra	Akola	27.07154	77.88569	31
78	Muzaffarnagar	Budhana	29.28972	77.47222	31

Sl. No.	District	Block	Latitude	Longitude	U in µg/L (>30)
79	Firozabad	Madanpur	27.02711	78.64422	31
80	Kanpur Dehat	Rasoolabad	26.66804	79.78387	31
81	Auraiya	Sahar	26.75847	79.60017	31

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 suitable 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.

**DEPTH TO WATER LEVEL OF GROUND WATER MONITORING WELLS
(GWMW), U.P.**

Sl.No .	District	Well	May- 2021	Aug- 2021	Nov- 2021	Jan- 2022
1	Agra	Acchanera PZ-GWD	7.08	6.3	6	5.93
2		Bah Pz-GWD	35.8	35.62	35.7	35.8
3		Fatehabad Pz-GWD	44.2	43.97	43.95	44.13
4		Dabar Pz-GWD	17.95	17.96	17.65	17.92
5		Undera	1.58	0.27	0.65	0.3
6		Gangapur Basai	4.58	1.52	1.7	1.7
7		Mewli (Bhara)	13.93	5.7	5.11	7.06
8		Khundauli Pz-GWD	33.59	33.05	29.95	28.49
9		Saiyan Pz-GWD	32.48	31.7	31.55	32.23
10		Etmadpur	29.63	29.75	29.85	30.19
1	Aligarh	Hardanaganj	5.72	4.91	3.93	5.05
2		Safedpur	5.03	3.63	5.75	6.4
3		Gonda	3.62	2.37	1.87	2
4		Sudiyal	11.18	5.01	10.9	10.98
5		Andla	15.88		10.32	9.91
6		Khair		1.68	9.95	9.8
7		Palachand			5.99	6.01
8		Taquipur(new)		1.33	3.7	4.23
1	Allahabad	Aandwa	18.39	16.13	14.39	14.38
2		Allahabad		5.72	7.13	9.99
3		Kasarua		11.9		8.48
4		Mau-Aima	6.39	3.1	1.76	2.04
5		Naini	13.77	9.02	8.19	9.97
6		Imamganj	7.03	1.36	2.07	3.48
7		Baraut1	1.81	0.97	1.15	1.25
8		Handia	2.18		0.42	0.77
9		Holagarh	5.12	2.2	2.04	3.36
10		Bara	4	1.05	1.63	1.97
11		Chilla	12.52	7.01	5.82	7.79
12		Gauhania	5.84	1.34	1.82	2.13
13		Lalpur	4.23	1.48	2.59	2.72
14		Barokhar		5.75	6.68	8.09
15		Koraon	4.52	9.8	0.98	1.48
16		Ladiri Bazar	4.43	1.49	1.98	3.02

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
17		Pasna	4.47	0.98	1.09	2.37
18		Karchanna	12.32	7.48	4.88	7.41
19		Meja Road	15.25	8.14	5.12	8.08
20		Akodha	9.46	2.28	2.2	4
21		Saraon	6.92	2.54	2.37	3.09
22		Atrampur	7.46	3.83	1.19	2.86
23		Bawarikalaan	4.41	1.13	1.29	2.39
24		Rampur tulapur	4.94	1.08	4.72	5.24
25		Meja	4.94	1.35	3.86	3.69
26		Mallhan	6.61	3.29	2.06	2.64
27		Phulpur2	5.94	2.22	2.53	3.21
28		Sikandra1	11.06	10.32	9.26	9.01
29		Bairi	2.65	0.15	0.95	1.12
30		Gadwa Fort	3.59	2.69	3.22	3.44
31		Khaptia Kheri	4.06	1.31	1.73	2.38
32		Jail Road (Power House)			9.63	10.7
33		Naribari	3.59		0.52	1.56
34		Zari Bazar			2.36	2.1
1	Ambedkar Nagar	Akbarpur Pz GWD NEW	5.5	3.05	3.4	4.67
2		Baskhari Pz-GWD	3.35	1.02	1.61	2.2
3		Bhiti New	2.45	2.95	1.81	3.52
4		Mahrua gola-New	3	3.5	3.07	3.85
5		Kesharpur	1.99	0.89	1.59	2.69
6		Akbarpur1	4.5	0.8	1.81	3.68
7		Katehari	3	1.15	2.06	3.7
8		Bhiyaon New Pz	6.28	3.43	2.71	3.99
9		Surapur	3.2	0.45	1.16	2.18
1	Auraiya	Pz GWD Ajitmal	22.66	21.4	20.58	19.14
2		Hasulia	10.67	7.6	3.71	5.8
3		Basundhara	4.06	1.5	1.42	2
4		Phaphund		4.8	4.2	4.32
5		Bandhamau	7.1	4.68	3.6	4.16
6		Sahar	5.65	2.74	1.4	1.75
7		Sahayal	8.36	7.08	4.46	5.67
8		Premnagar-Bajera	2.3	0.14	1.98	0.6
9		Gadhalot			1.76	2.48
10		Bidhuna Pz			13.29	11.76

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
1	Azamgarh	Ahraula		7	2.02	4.13
2		Sageri		2.95	1.65	2.69
3		Badihari	5.53		2.4	3.21
4		Langerpur	4.5		1	1.76
5		Kanauna		1.06		1.89
6		Rahul Nagar				3.97
7		Rampur	0.13	2.27	0.27	1.9
8		Deogaon	3.36		0.65	1.1
9		Madayan	1.92	4.1		2.43
10		Belwana	1.56	2	1.15	2.2
11		Saraimir	1.8	1		1.71
12		Bahrapur	5.66		1.02	2.1
13		Bairadih	7.87	3.04	3.83	4.62
14		Azamgarh		1.35	3.15	5.57
15		Phulpur	4.23	3.5	0.82	2.38
16		Bibipur Khatauli	2.65	3.3	1.4	2.9
17		Nizamabad		5.3	0.2	2.36
18		Kharihani	5.15	4.2	1.1	4.258
19		Sidhauna	4.13	1.9	0.77	2.48
20		Kharsahan Kalan	5.27	0.85	0.77	1.57
1	Baghpat	Khekhra Pz	28.83	25.51	30.55	23.09
2		Pilana Pz	27.8		25.79	20.21
3		Huzurpur	0.8	0.6	1	1.2
4		Parpatganj	5.27	1.47	2.77	4.5
5		Jarwal1		1.95	1.95	2.35
6		BhakrauliKapurw	2.25	0.55	1.42	1.83
7		Sablapur	3.08	1.28	2.16	2.38
8		Gaighat	3.03	0.9	1.62	2.7
9		Katarniaghata	1.8	1.15	2.35	1.3
10		Tapri godh	3.58		2.67	3.16
11		Razichauroha	1.82	0.57	0.97	1.42
12		Bhopatpur	8.3	7.67	7.77	7.87
13		Lachmanpur	8.52	4.97	4.62	6.17
14		Nanpara	9.55	8.75	8.85	8.95
15		Baisanpurwa	2.42	1.25	1.65	1.95
16		Kapurpur	3.73	1.08	2.22	2.56
17		Baba Kutir	1.9	0.15	1.05	1.45
18		Kolhuwa	5.02	2.2	2.6	2.83
19		Mihirpurwa(Kudwa	4.94	2.85	2.82	3.56

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
)				
20		Mote Baba	1.5	0.45	1.35	1.35
21		Pyagpur – I	4.98	3.3	4.52	4.68
1	Ballia	Babhnauli	1.89	1.77	1.47	2.48
2		Bansdih New	2.47		1.18	1.92
3		Balesara	1.09	2.42	1.47	2.6
4		Haldi	2.78			0.95
5		Chilkahar New	0.71	0.4	1.14	2.04
6		Jahangrapur		0.6		2.33
7		Ballia	3.52	0.52	1.07	1.82
8		Chitbargaon	0.95		0.65	0.91
9		Garwar	1.35	0.5	0.54	1.72
10		Manihar	4.8		3.45	4.85
11		Nasirabad	8.83	1.2	4.83	8.28
12		Kharsanda	4.3	0.76		1.69
13		Dalan Chapra	7.74	3.15	2.92	5.38
14		Jaiprakashnagar	7.25	3.9		5.37
15		Jamuan	3.95	0.55		2.42
16		Sikanderpur	4.65	0.2	1.25	2.69
17		Pur	1.98	1.75	1.21	2.04
18		Rasra				1.37
19		Rewati	0.7	0.58	1.05	1.64
20		Ubhavan	3.57	0.15	0.9	2.39
21		Narhi		3.03	3.73	6.57
22		Sikandarpur2	5.4	2.65	1.07	3.8
1	Balrampur	Balrampur PZ(GWD)	2.88	0.8	2.6	3.15
2		Balrampur1	2.6	1	3.02	3.55
3		Deorial	2.91		2.18	2.83
4		Utraula	2.7	0.56	1.85	2.57
5		Sonpur		0.07	1.35	2.05
6		Sridutganj1	0.87	0.1	1.3	2.13
7		Gainsari	1.03	0.45	1.17	1.4
8		Gaura Crossing	1.01		1.02	1.5
9		Jarwa	9.4	5.5	5.75	6.3
10		Semri1	2.84	1.04	2.08	3.34
11		Bankatwa	9.9		7.3	7.6
12		Chandanpur	2.97	0.9	2.38	2.95
13		Pachperwa	0.1	0.02	0.2	0.13

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
14		Rehrabazar PZ(GWD)	1.42	1.4	1.18	1.92
15		Gangnar	2.4	0.8	2.25	2.85
16		Harriaya bazar	2.22	0.4	1.77	2.6
17		Sipahia Village	1.33	0.8	1.62	1.97
18		Tulsipur (Devipatan)	2.12	1	1.3	1.4
1	Banda	Banda	15.9	10.5	13.86	15.02
2		Bargaini		7	6.6	8.82
3		Bisanda	4.9	1.9	3.73	2.92
4		Girwan	1.15	0.2	0.68	3.09
5		Khhurand		0.05	1.25	2.28
6		Naraini New	5.9	0.93	1.67	2.87
7		Badausa	4.55	3.1	4.92	3.45
8		Badehan	6.3	5.2	4.97	10.24
9		Mukera	3.23	5.85	2.47	10.1
10		Roli Kalyanpur	10.9	2.7	10.12	11.82
1	Barabanki	Bhitaria	8.97			7.96
2		Baba ki Kuti	5.24	1.69	1.74	2.42
3		Fatehpur(new)	4.8	2.18	2.18	3.28
4		Kitlupur	3.47	1.19	1.52	2.28
5		Chaubisi	4.83	2.09	0.9	2.78
6		Datauli Chanda		10.49	9.78	10.05
7		Dewa	4.48	1.3	1.83	2.74
8		Rasauli	3.82	0.53	0.78	1.58
9		Kotwa Sarai	8.21	7.58	5.59	6.44
10		Daryabad	4.31	0.81	1.3	1.95
11		Rani Katra	6.83	6.33	5.62	6.02
12		Sarai Barai		3.4	3.1	4.3
13		Tikaitnagar	7.27	5.87	4.6	5.6
14		Purwa amarsingh	3.97	1.43	1.57	2.09
15		Sundhia mau	6.21	4.69	3.55	4.88
16		Kaisarganj		9.78	7.57	5.26
17		Sidhaur	6.17	4.3	2.66	3.24
18		Bhiwal	7.49		2.09	4.73
19		Gutauna	4.96	1.81	1.75	3.4
20		Trivediganj	6.63	1.65	1.33	3.78
21		Harakh	6.27	2.05	1.62	2.97
22		Pure Dalai (Pz Gwd)	4.81	3.19	2.35	3.43

Sl.No .	District	Well	May- 2021	Aug- 2021	Nov- 2021	Jan- 2022
23		Ramnagar	8.58	8.13	7.8	8.25
1	Bareilly	Baheri	0.8	0.85	1.07	0.8
2		Nawabganj1	4.57	3.72	3.5	3.52
3		Bhuta		5.18	4.02	4.11
4		Bareilly1	6.65	6.4	6.12	6.13
5		Kandharpur Pz GWD		3.66	2.15	2.51
6		Mirganj Pz GWD	7.48	7	6.39	6.34
7		Ramnagar2	12.3	14.1	12.98	12.63
8		Siroli Pz GWD	9.7	8.25		8.63
9		Shishgarh	2.7	3.42	4.38	4.32
10		Deorania		1.52	1.4	1.42
11		Nakati Narayan			2.77	2.95
1	Basti	Kalwari	2.75	1.55	1.3	2.5
2		Kharauan jat	1.22	1.1	1.45	2.22
3		Basti	3.7	1.4	4.27	4.8
4		Haraiya	2.05	1.2	1.75	2.85
5		Captaignanj1	3.2	3.18	1.15	1.83
6		Bhanpur	1.2	0.7	1.17	2.05
7		Rudauli	1.53	0.8	1.86	2.83
8		Bhikamjot	3.82	1.09	1.49	2.84
1	Bijnor	Dhampur	7.34		4.45	4.82
2		Milak Beniram	3.79	1.27	1.42	1.52
3		Chandok	19.95	18.38	17.35	17.35
4		Nagina	4.73	3.5	2.93	3.13
5		Swaheri Khurd	11.09	9.35	9.9	10.05
6		Najibabad New	2.29		0.51	0.2
7		Sneh Rd.rly.stn.	13.6	9.75	9.27	9.47
8		Sarakthal	4.73	3.9	3.77	4.02
9		Chandpur	11.97	11.65	10.96	10.88
10		Motamahadev (Vijaypur)	8.16	6.68	5.78	6
11		Seohara	7.17		6.2	6.4
1	Budaun	Dabthara Shyam Pz GWD	17.24	17.4	16.84	16.46
2		Mansa Nagla Pz GWD	19.89	19.87	19.57	19.48
3		Ujhani Pz GWD	21.14		18.89	18.58

Sl.No .	District	Well	May- 2021	Aug- 2021	Nov- 2021	Jan- 2022
4		Dhanari				5.52
5		Sihawali	6.18			4.67
1	Bulandshahar	Daulatpur Khurd EW/Pz	11.63	10.52	11.3	11.17
2		Lakhaothi Pz	10.5	9.31	7.42	7.82
1	Chandauli	Kamalpur	4.71	1.48	1.57	2.97
2		Marufpur xing		9.21	8.09	8.68
3		Chakia	4.34	1.36	3.1	4.92
4		Baburi	8.65	3.26	3.825	6.84
5		Dhanpur	2.41	0.43	1.015	1.93
6		Chandraprabha		4.5	6.43	6.97
7		Mugal Sarai		0.54	0.48	12.08
8		Sakaldiha		1.12	1.82	3.17
9		Chandauli New				2.9
1	Chitrakoot	Chakrajafar		9.7	11.89	14.12
2		Karwi	8.3	5.7	8.07	5.61
3		Jorwara	10.15	4.5	4.31	7.48
4		Manikpur	2.45	0.7	2.93	2.78
5		Mau	19.2	13.35	14.1	16.9
6		Pahari Buzurg New	10.25	4.65	4.87	6.23
7		Raipura	7.6	7.15	11.04	13.2
1	Deoria	Ratasia Kothi	3.7	0.42	3.12	3.22
2		Baitalpur		0.27	1.82	2.26
3		Deoria2	2.04	0.93	1.42	2.95
4		Desai Deoria	0.76	0.19	0.89	2.08
5		Gauri Bazar	1.19	0.84	0.61	1.15
6		Lar road	2.3	0.21	1.14	1.73
7		Pathardewa (Narayanpur Kothi)	3.15	0.33	3.32	3.95
8		Rampur Karkhana	1	0.45	2.77	2.23
9		Rudrapur1	5.05	0.39	2.97	4.75
10		Baitalpur	1.15	0.27	1.82	2.11
11		Usra Bazaar	3.78	0.56	1.67	3.75
1	Etah	Amanpur Pz-GWD	5.07	4.2	3.6	3.82
2		Jaithra Pz-GWd		11.96	11.2	11.6

Sl.No .	District	Well	May- 2021	Aug- 2021	Nov- 2021	Jan- 2022
3		Jalesar Pz-GWD		11.82	10.9	11.3
4		Marahchi Pz-GWD	9.75	9.37	8.65	8.54
5		Daryaganj	10.43		10.23	10.43
6		Etah Pz-GWD	14.9	14.36	14.1	13.72
7		Dhumri1	3.49	2.68	2.35	2.85
1	Etawah	Barecha	37.6	30.14	34.89	35.7
2		Pz GWD Jaswant Nagar	16.38	16.43	16.57	16.65
3		Ujhayani		5.05	3.5	4.2
4		Bakewar	6.93	5.57	4.77	4.89
5		Patya Chaturpur	7.03	3.87	7.29	7.24
6		Sabdalpur			27.42	28.14
7		Pakkatal			4.48	4.4
8		Govt ITI Parisar			10.27	10.38
9		Bharthana Pz		6.4	3.71	3.82
1	Faizabad	Amaniganj	6.1	3.2	4.29	4.71
2		Choure bazar	2.85	1.4	1.37	3.03
3		Khajurahat	7.55	6.05	3.92	5.68
4		Faizabad Pz-CGWB	7.8	6.4	5.45	5.92
5		Madhopur	3.05	0.3	1.08	1.9
6		Naokua	1.65	0.3	0.74	1.35
7		Bakarganj	3.15	0.15	1.46	2.04
8		Gosaiganj new	5.15	2.3	2.66	3.8
9		Milkipur	5.4	4.55	3.4	3.03
10		Sarai Rasi	6.3	4.75	4.16	5.29
11		Rudauli 1	3.64	0.64	1.32	2.06
12		Ramdin Purwa	6.75	5.4	4.9	5.4
1	Farrukhabad	Rajepur	5.31	3.02	1.3	1.4
2		Shamshabad	15.98	13.13	16.05	15.7
1	Fatehpur	Naubasta	10.14	8.71	10.66	11.11
2		Bahua		8.68	6	6.52
3		Bela	4.07	3.5	3.77	3.5
4		Bhitaura PZ Gwd	12.55	13.9	12.47	12.3
5		Barwa		27.7	18.53	20.27
6		Jahanabad		18.97	16.86	19.87
7		Musfha		12.14	6.74	8.98
8		Sarain Bakewar		5.81	2.62	4.82

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
9		Bindki1	2.6	3.65	0.89	3.72
10		Baba Kuwan		10.95	6.73	9.28
11		Bahua			6	12.87
12		Malwan	5.55	2.95	1.22	2.2
13		Sadhuwapur	4.94	1.15	2.73	5.48
1	Firozabad	Araon Pz GWD	28.67	26.78	26.7	26.65
2		Jasrana Pz GWD	10.7	10.11	8.15	8.57
3		Madanpur Pz-GWD	16.68	16.3	14.7	14.39
4		Shikohabad Pz-GWD	20.77	11.06	19	19.35
5		Tundla	33.68	33.83	33.95	33.98
6		Gangini				26.9
1	Gautam Buddha Nagar	Sector-62 A Pz		37	39.22	38.75
2		Sector-72 Pz	44.54	39.12	38.53	38.09
3		Chauki Pz		1.65		2.07
4		Jewar Pz	20.1	13.76	13.55	12.6
1	Ghaziabad	Dhaulana-Pz	3.12	2.93		1.13
2		Garhmukteshwar-Pz	14.58	15.35	14.24	14.16
3		Hapur-Pz	19.45	19.67	20.12	19.25
4		Upheda-Pz				8.7
5		Modi Nagar-Pz 1	7.85	7.06	6.56	6.2
6		Modi Nagar-Pz II	8.03	7.31	6.83	6.51
7		Morta Pz GWD	21.71	22.4	20.52	20.37
1	Ghazipur	Dildar nagar	1.95	0.45	1.33	3.35
2		Gahmar	11.4		6.75	10.56
3		Ghazipur (Urban)	0.35	0.5	0.06	0.1
4		Ghazipur Church	2.39	0.32		2.87
5		Ghazipur Sadar new	0.78	0.95	1.85	2.37
6		Orulari	4.82		1.05	2.49
7		Sidhagarghat	4.83	2.16		4.58
8		Manihari				4.23
9		Mardah	1.37	0.55	0.9	1.86
10		Sadikapur	1.36	2.24	1.79	2.62
11		Ajaipur	5.85		0.19	2.02
12		Nandganj	7.3		1.47	2.27
13		Reotipur	4.73	3.4	3.55	5.61

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
14		Pyrepur	1.16	1.26		2.28
15		Tanda Bairakh		1.94	1.31	3.23
16		Saidpur1	6.68	5.4	6.05	7.58
17		Kasimabad			0.22	4.26
18		Baresar	11.6	8.3	8.6	12.58
19		Deoria	0.62	1.56	1.11	2.19
20		Karnda	9.77	5.35	4.25	6.98
21		Naudar (Chotti)	6.16	4.44		5.64
1	Gonda	Chapiya	2.9	0.35	1.1	1.7
2		Parsa gondri	3.52	0.2	2	2.83
3		Gonda (Urban)	7.25	6	5.83	5.6
4		Kazi Dewar	3.14	0.76	1.65	2.65
5		Birpur Katra	1.63		1.77	2.23
6		Mankapur	3.6	1.45	1.5	2.55
7		Bhauriganj	3.68	0.58	2.21	2.83
8		Karanailganj	3.38	1.1	1.92	2.18
9		Mankapur	3.6	1.45	1.5	2.46
10		Mankapur – I	4.58	1.74	1.92	2.64
11		Tarabganj	2.63	1.6	1.79	2.35
1	Gorakhpur	Geruababa	3.72	0.37	3.55	3.41
2		Dubauli	4.14	0.76	3.36	3.25
3		Kauriram	5.36	1.01	2.31	4.31
4		Jagdishpur1		0.71	1.77	2.61
5		Bharohia	6.26	1.13	1.77	4.37
6		Maniram	3.51	0.8		4.18
7		Mehra	3.92	1.31	3.43	3.35
8		Tola Bhawan Bari	2.24	0.15	3.37	3.9
1	Hamirpur	Khanna	7.9	0.8	4.31	2.87
2		Kunetha	6.78	2.56	1.75	3
3		Bewar		13.56	12.99	12.34
4		Kharela A	4.55	0.85	2.85	4.83
5		Dhagwan	4.71	0.94	1.08	5.17
6		Sarila NEW DW	0.84	4.95	4.18	5.17
7		Pachkura				15.89
8		Bibhuni	1.65	2.15	1.1	1.52
9		Mamna	2.3	4.7	0.41	2.93

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
1	Hardoi	Ahrori	3.94	1.97	1.59	2.24
2		Bawan Pz-GWD	4.2	2.9	3.29	3.54
3		Behdar(GWD PZ)	3.83			1.87
4		Quasimpur	1.62	1.21	2.62	1.92
5		Dhobia	6.19	6	5.52	5.73
6		Gopamau	7.56	7.39	6.61	6.58
7		Harpalpur PZ-GWD	8	7.95	7.49	7.58
8		Kachauna	3.32	2.65	1.37	2.04
9		Kachauna (GWD PZ)	4.36	2.65	1.6	2.05
10		Mallawan	15.06	14.82	13.4	13.44
11		Del Panderwa	2.74	1.55	1.33	2.67
12		Pihani	4.5	3.6	1.77	2.5
13		Manjila	4.81	3.36	3.84	3.94
14		Sursa (GWD PZ)	4.86	3.6	4.65	4.69
15		Barganwan	5.78	5.53	5.43	5.23
16		Tediaon (GWD PZ)	4.13	3.1	2.28	2.5
17		Bharawan	9.1	7.75	8.22	8.45
18		Bharkhani	9.42	9.32		8.97
19		Dalel Nagar Rly	6.01	4.8	3.63	2.95
20		Budhagaon			1.56	3.56
21		Saidpur			2.1	2.97
1	Hathras	Hasyan				4.35
2		Rattika Nagla	4.23	2.63	1.8	2.63
3		Iglas	15.32	11.08	10.82	10.73
4		Sikandara Rao	5.95	4.19	3.1	3.9
1	Jalaun	Ait2			5.26	6.06
2		Dekor	9.07	6.78	6.4	5.9
3		Hardoi Gujar			5.45	5.65
4		Kishora Mauza	7.13	5.68	5.35	5.75
5		Kusumilia	11.26	4.61	3.75	4.9
6		Marora		3.69	3.45	3.9
7		Orai	3.97	2.24	2.35	3.12
8		Jalaun		6.93	6.1	6.7
9		Ata	10.39	8.87	8.55	7.3
10		Babina-new	3.29	1.37	0.93	1.63
11		Keolari-New	4.8	3.67	6.12	6.52
12		Konch(new)	7.76	6.13	9.39	8.69
13		Hadrukhh	16.66	12.07	9.85	11.7

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
14		Sirsakalar	4.97	3.46	3	3.3
15		Madhogarh	5.15	1.09	2.25	2.85
16		Churkhi	13.51	11.79	10.85	9.73
17		Damras		25.08	23.8	27.8
18		Kalpi	25.89	24.09	24.3	25.95
19		Mahewa	20.67	17.83	17.58	20.9
20		Gopalpura1	0.85	0.22	0.31	0.96
21		Kailaiya	7.9	7.69	5.37	6.27
22		Kamsaira	3.61	1.14	0.75	4.08
23		Kanasi	7.41	7.01	6.27	6.17
24		Gohan	7.54	4.01	3.95	4.6
25		Jagmanpur		32.69	29.75	30.75
26		Rajpura	3.04	0.73	1.35	1.75
27		Umri	4.98	3.73	3.95	4.15
1	Jaunpur	Badlapur	8.03	6.76	5.14	5.958
2		Sigra mau	5.05	0.98	1.66	2.26
3		Barsathi		0.19		3.54
4		Marihun	2.75	1.01	1.62	2.74
5		Horipur		8.01	7.73	7.68
6		Chandwak				11.43
7		Mehreon1	2.34	1.72	2.78	2.72
8		Tarti		2.75	3.62	4.54
9		Kirakat1		12.61	12.68	12.82
10		Dhitauli Pratappur		0.34	1.05	1.69
11		Kheta Sarai1		1.32	2.04	2.68
12		Shahganj1		1.34	0.345	2.6
13		Janghai	5.34	0.9	1.74	2.39
14		Machhalishahr	2.9		0.15	0.628
15		Maheshganj	7.61	2.66	1.99	3.109
16		Maharajganj2	5.77		1.31	2.3
17		Raja Bazar	4.64	1.59	2.39	2.68
		Mungra				
18		Badshahpur1	8.35	6.13	3.03	3.49
19		Narar(jammipur)	4.72	1.04	0.92	1.25
20		Itaili(muftiganj)		7.96	7.89	8.48
21		Pisara		0.66	1.88	1.71
22		Barai par	7.88	3.21	2.11	3.91
23		Jaunpur1		15.37	13.16	12.96
24		Dhiuraha		3.42	4.08	5.46
25		Hasanpur		0.91		4.81

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
26		Rampur1	1.76	0.37	1.14	1.73
27		Barji Kalan	4.62	0.64	1.79	2.01
28		Belwa Tarpatti		0.79	1.56	1.66
1	Jhansi	Babina1	7.46	0.98	1.95	3.05
2		Khailara	9.36	3.02	5.3	6.6
3		Raksa	6.19	3.31	5.2	4.2
4		Ghugawa	7.79	5.64	4.85	5.3
5		Jhansi1	5.73	3.43	3.11	3.55
6		Ajneri Madhopura	6.08	3.52	3.2	3.05
7		Bamaur	6.87	5.1	5.05	5.5
8		Auldan-New	9.22	7.11	8.5	9.55
9		Bangra Pz	10.18	6.23	5.4	7.55
10		Sakrar1	9.79	5.84	5.9	6
11		Khillawari	8.59	2.3	9	4.05
12		Semri	6.85	5.64	4.55	5.8
13		Rewan	9.57	7.91	5.25	6.15
14		Kuangaon		11.27	9.95	9.95
15		Mauranipur Rajpaharia	7.87	5.15	8.75	6.1
16		Moth	3.82	1.57	1.65	2.15
17		Samthar	7.82	7.09	5.63	6.73
18		Phutera			4.2	4.7
1	Jyotiba Phule nagar	Amroha Pz CGWB	16.13	15.76	14.91	14.73
2		Gajraula Pz CGWB	14.86	14.93	14.65	14.35
3		Jogipura Pz GWD	15.55	15.09	13.95	13.58
4		Bagadpur Pz GWD	19.81	20.17	19.47	19.24
5		Hasanpur Pz GWD			17.2	16.9
6		Joya Pz GWD	17.1	17.23	16.8	16.6
7		Dariyal	6.99	6.87	6.27	6.15
8		Rehra	8.27		7.85	7.92
1	Kannauj	Chibramau Pz- GWD	23.9	24.07	22.21	23.39
2		Haseran Pz-GWD	0.71	0.42	0.31	0.16
3		Jalalabad Pz-GWD	25.77	25.1	23.9	24.19
4		Kharni Pz-GWD	6.08	5.82	4.52	4.82
1	Kanpur Dehat	Raura		6.13	3.25	4.47
2		Baghpur		4.4	2.69	2.86

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
3		Kadari	5.89	2.95	3.65	4.41
4		Muhammadpur		18.8	18.85	19.51
5		Shahjahanpur	18	14	15.2	16.85
6		Kainjari	5.94	5.29	3.53	4
7		Derapur			17.97	17.46
8		Pukhanraya	6.65	4.79	4.77	5.5
9		Sahtawanpurwa	4.63	1.15	1.22	1.52
10		Shivli			1.52	2.02
1	Kanpur Nagar	sarh	4.52	3.28	1.33	1.83
2		Niwada Dhamni		7.19	3.52	4.3
3		Chaubepur1	13.65	13.5	12.51	11.42
4		Bithoor-Nganj	10.68	9.56	9.25	9.35
5		Defence Colony Pz	39.5	41.47	41.2	40.93
6		Motipura	4.8	2.2	2.51	3.78
7		Narmau(new)	7.55	6.57	6.15	6.23
8		sachendi	6.15	4.07	1.7	1.99
9		Ramsari	9.1	6.32	4.42	4.69
10		Kulgaon	10.2	9.5	8.54	8.48
11		Bhaisana	4.76	3.5	1.54	2.3
12		Baradari	8.15	7.82	6.34	6.1
13		Bidhnu	3.76	4	1.21	1.25
14		Bhadras	18.7	17.33	13.75	14.05
15		Moyaiya	9.4	9	8.2	8.26
16		Sambarpur			1.53	1.32
17		Bidhnu Pz	3.76	4	3.14	2.95
1	Kaushambi	Mandari	20.96		18.13	18.14
2		Sallahpur	15.88	12.37	13.87	14.52
3		Lehdari	14.69	10.56	11.07	13.14
4		Pulia Sandalpur		9.04	6.8	10.39
5		Usargaura	7.58	2.61	2.04	3.37
6		Perai			14.68	12.02
7		Sarai Akil	17.44		14.01	16.57
8		Kushambhi	12.39	8.72	6.97	9.5
9		Kasia	15.52	12.26	10.12	11.12
10		Ajrauli Pz			8.22	10.51
1	Kheri	Asogapur	3.91	0.86	0.95	1.99
2		Chamlapur	2.75	1.27	1.05	1.46
3		Chauapur	3.57	1.87	2.08	2.5

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
4		Jhandi raj	4.05	2.26	1.25	2.5
5		Chandan Chowki	4.53	1.92	2.45	3.18
6		Dudhwa f.r.h.	10.02	7.98	7.49	7.88
7		Gomti_West Bank	3.4	3.02	2.38	2.78
8		Khajanchi Purwa	5.15	4.02	3.54	3.64
9		Khiri Pz	7.18	6.23	6.27	6.41
10		Ramia Behar	3.67	1.82	2.33	3.33
11		Phool Behar			1.88	2.7
1	Kushinagar	Mansurganj		0.29	1.27	2.32
2		Chittauni	0.6	1	3.54	1.18
3		Mathauli	0.93	0.27	1.39	2.15
4		Naurangia	1.2	0.43	1.83	2.46
5		Rambar	2.18	0.51	3.15	3.4
1	Lalitpur	Bar	10.31	1.99	3.4	5
2		Amjhari Ghati	2.82	1.4	1.47	1.62
3		Betna	9.23	9.07	7.05	9.1
4		Birdha Pz-GWD	16.14	15.08	7.4	13.4
5		Jakhlaun	3.34	2.22	2.76	2.55
6		Bansi	3.08	2.02	2.55	2.95
7		Jakhaura1	3.24	2.36	2	1.5
8		Lalitpur	5.62	1.71	2.65	2
9		Mahroni1		9.37	6.2	6.45
10		Saidpur		4.62	4.5	7.2
11		Silawan	9.67	4.46	7.05	8.7
12		Digwar		6.93	5.14	5.29
13		Hisar kalan	6.2	5.89	6.92	7.12
14		Talbhet-III	7.44	2.32	2.6	3.4
15		Talbhet-IV	4.87			3.6
16		Talbhet-New	2.32	1.29	1.45	1.3
17		Deogarh			3.3	3.9
18		Buragaon			5.85	6.2
19		Burari			4.35	4.7
1	Lucknow	Bakshi ka talab	15	14.7	12.98	12.91
2		Itaunja	12.88	11.47	10.15	10.9
3		Itaunja Pz	12.85	12.3	11.1	11.16
4		Kumrahawan	6.53	3.58	1.15	2.2
5		Lu New Campus	21.26	23.57	23.2	22.15
6		Vikasnagar	41.82	42.19	42.8	41.37

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
7		Gosaiganj1	3.19		1	2.6
8		Khawas Khera	4.97	0.6	1.8	2.19
9		Munshiganj	7.66	3.71	2.7	4.23
10		Fatehganj	17.73	14.97	13.5	13.4
11		Aat Garhi Sonra		14.31		12.62
12		Mal	14.23	14.03	13.17	12.83
13		Rehta New			8.1	8.26
14		Malihabad	13.84	13.37	12.4	12.58
15		Rehman Khera	10.56			9.63
16		Mohanlalganj	5.6	4.1	2	3.15
17		Nagram	4.41	1.26	1.16	2.26
18		Bijnor		12.53	11.9	11.9
19		Mohanlalganj	5.6	4.1	2	3.49
1	Mahoba	Charkhari	6.75	1.95	2.33	3.34
2		Bela Tal	5.27	4.07	5.19	4.77
3		Jaitpur New		4.15	6.79	6.78
4		Kulpahar2	5.9	1.1	5.48	6.57
5		Chatesar pz GWD	14.7	10.36	9.75	13.24
6		Srinagar		7.45	7.7	10.35
7		Kashipura	7.08	5.43	5.89	6.39
1	Mahrajganj	Koluhi	1.2	0.57	1.97	2.45
2		Ghughali	1.59	0.68	2.73	3.85
3		Maharajganj2	0.41	0.95	2.29	2.82
4		Kukesar	2.85	0.27	1.87	2.89
5		Pharenda pz Gwd	1.3	0.75	2.81	1.59
6		Siswa Bazar	1.93	0.45	2.98	3.84
7		Munila Tola	1.41	0.5	1.07	2.93
1	Mainpuri	Bewar Pz-GWD	6.42	8.37	7.25	7.4
2		Katra Saman	4.92	2.42	2.2	2.9
3		Kishni Pz-GWD		7.28	6.35	6.67
4		Kuraoli Pz-GWD	7.6	4.93	4.67	5.58
5		Sultanganj Pz-GWD	7.68	6.67	5.3	5.83
6		Ajitganj	6.41	6.35	5.75	6.05
1	Mathura	Baldeo	6.93	4.92	5.3	5.62
2		Jamunapar Thana	11.42	5.54	11.9	11.82
3		Sahar1	6.82	0.79	1.86	1.02
4		Chhata New	4.41	1.36	1.66	1.66

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
5		Nagra Chhitar Singh	3.46	1.42	2.32	2.28
6		Jhinga Nagla	3.19	0.2	2.92	2.43
7		Paintha (Govardhan)	4.66	0.79	2.23	2
8		Saunkh	2.39	1.12	2.18	1.75
9		Surir (new)			7.52	7.96
10		Jachoda	3.91	4.1	0.94	0.99
11		Barsana	10.22	10.45	10.38	9.9
12		Kosi	6.17	1.3	2.06	2.05
13		Kharab			2.22	2.49
14		pirsua	11.78	9.9	9.38	10.07
15		Auwa Nagla	2.43	0.89	2.46	2.64
1	Mau	Ghosi	0.63	3.4	1	1.3
2		Amila			1.58	2.24
3		Dhorighat	4.67	3.2	1.95	4.86
4		Jejawali	2.95	0.92	2.18	3.56
5		Paharipur- NEW	2.01	1.04	1.94	2.86
6		Kapaganj	7.85	5.17		6.13
7		Mau (Urban)			0.79	3.89
8		Ratanpura	1.21	1.61	1.7	3.26
9		Bhiti		6.37	4.52	4.38
1	Meerut	Sakoti Tanda Pz	8.74	8	7.69	7.67
2		Hastinapur 1	10.77	9.96	10.22	10.39
3		Timkia Kothi Pz I	8.16	7.91	6.73	6.57
4		Timkia Kothi Pz II	8.42	8.38	7	5.65
5		Timkia Kothi Pz III	8.31		6.89	7.22
6		Kaili Pz	20.91	22.69	21.71	19.33
7		Meerut Pz	12.67	20.17	19.38	20.95
8		Parikshat garh Pz	11.43	10.11	9.56	9.21
9		Sisauli	23.17	21.83	22.28	21.58
10		Machhra-Pz I-8" (Shallow-45M)	11.12	13.71	12.96	10.96
11		Machhra-Pzii-6" (Deep-274M)	11.23	13.64	13.05	11.85
12		Machhra-Pziii-2.5" (Shallow-35M)	11.12	13.71	12.96	12.67
13		Mawana Khurd/Chota Mawana	12.07	11.49	11.08	10.79

Sl.No .	District	Well	May- 2021	Aug- 2021	Nov- 2021	Jan- 2022
1	Mirzapur	Gaipura		10.57	10.27	11.03
2		Halia		2.74	6.71	6.42
3		Lalganj	1.85	1.79	2.62	3.21
4		Lohangpur	3.41	0.84	1.69	5.38
5		Baghura	1.74	0.43	2.18	3.29
6		Marihan		6.82	9.14	12.54
7		Goplapur		5.53	4.98	8.38
8		Mirzapur	14.71	9.03	7.87	10.62
9		Ahraura		0.59	1.42	2.38
10		Barhanchuan		0.52	1.46	2.54
11		Kotwa			4	12.43
12		Mirzapur New	6.9	9.03	7.87	10.78
13		Sukrit			6.36	10.94
1	Moradabad	Bahjoi Pz GWD	16.6	16.42	16.3	16.17
2		Chandausi-PZ	18.41		18.66	18.75
3		Fauladpur	2.74	3.85	3.15	3.35
4		Dingarpur Pz GWD	14.22		13.97	13.87
5		Moradabad Pz GWD	6.56	10.18	10.22	10.55
6		Sambhal Pz			20	20.4
7		Painapur	3.82	2.42	1.67	2.41
8		Thakurdwara	1.51	0.32	0.4	0.35
9		Matlabpur	11.89	11.5	10.79	10.41
1	Muzaffarnagar	Baghra Pz	18.09	12.41		10.89
2		Chartawal		8.41		5.48
3		Chartawal Pz				7.21
4		Khatauli	3.75	1.86	2.12	2.5
5		Morna Pz	17.94	17.76		17.17
6		Sukratal	2.15	2.78	3.14	2.38
7		Kukra-Sadar Pz	13.97	13.91	13.66	12.56
8		Paldi Pz GWD	21.79	17.17		17.5
9		Shamli PZ GWD	21.58	14.69	17.21	14.6
10		Kamalpur Pz	10.49	9.49		7.8
11		Un Pz	23.58	23.63		21.41
1	Pilibhit	Faradia		1.9	3.74	4.15
2		Baldeopur			3.99	4.18

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
3		Bilsanda1	4.4	1.45	1.54	2.1
4		Bilaspur Pz GWD	5.08		2.82	3.42
5		Jeora Kalyanpur	4.5	3.82	2.8	3.92
6		Bargad Chauraha	4.08		2.4	2.8
7		Bhamora	3.81	1.69	2.14	2.46
8		Gajraula1	3.27	2.63	2.18	2.69
9		Jahanabad1	5.71	3.43	3.5	3.7
10		Pilibhit Pz GWD	3.69	3	2.77	3.26
11		Puranpur Pz GWD	2.66	2.17	1.81	2.05
1	Pratapgarh	Bhusar	4.98	0.92	2.28	2.45
2		Udai Shahpur	6.44	1.75	2.16	3.22
3		Nanasukul purwa	6.01	4.16	2.51	2.73
4		Maddupur	3.47	1	0.87	0.85
5		Belhupur	6.42	4.35	3.73	3.14
6		Gaura	5.73	1.34	2.58	3.01
7		Sangramgarh	5.98	5.34	3.58	3.76
8		Sishahia	7.27	2.63	2.41	3.72
9		Garhi Manikpur	11.09	7.41	6.69	8.18
10		Gutni	11.14	9.72	8.33	8.02
11		Kunda	8.88	3.41	2.52	3.79
12		Lalgopalganj	6.61	1.02	1.49	2.51
13		Narainpur	4.61	1.09	1.32	2.02
14		Kohdaur	6.38	3.21	2.78	3.38
15		Patti 1	3.87	0.89	2.41	2.32
16		Mohanganj	11.4	8.77	7.06	7.89
17		Pratapgarh Sadar	15.04	12.92	11.07	11.89
18		Lalganj2	2.05	0.41	0.51	0.65
19		Rampur Batauli	5.63	1.77	2.41	2.985
20		Mandhata	6.23	5.08	3.34	3.95
21		Ateha	7.16	5.9	3.77	4.36
22		Gorai1		7.92	7.57	7.39
23		Jamtoli	15.79	15.78	12.31	12.13
24		Raniganj	8.94	7.94	6.65	6.86
25		Dih Balri	5.42	1.44	1.26	1.4
26		Jathwara	5.56	0.66	1.54	2.08
27		Kohola			7.47	7.62
1	Rae Bareli	Chauraha Dusti	2.98		1.42	1.58
2		Cheek dadar	5.85	6	3.48	3.8
3		Dhonda ka Purwa	4.48	2.55	1.84	2.75

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
4		Fursatganj	4.12	2.62	1.4	2.11
5		Kachunda	3.7	1.65	1.66	1.72
6		Jais	2.6	1.8	1.29	1.6
7		Nigohan1	3.27	1.92	1.15	1.39
8		Dalmau Pz(GWD)	6.25	3.3	3.28	3.89
9		Gopalipur	7.05	5.55	2.48	3.12
10		Katghar	3.86	1.96	1.66	1.76
11		Mohanganj1	2.23	1.4	1.85	2.75
12		Jagatpur	2.85	1.5	1.6	1.74
13		Ketanpurwa	5.99		3.86	3.96
14		Kheron PZ (GWD)	6.9	6.9	6.66	6.67
15		Mau garbi	3.92	1.5	1.86	1.95
16		Laxmanganjbazar	4.15	1.65	2.18	2.82
17		Hunsepur	12.9	14.85	9.64	9.95
18		Ahrauri bhawani	5.2	2.1	1.78	2.37
19		Bhawanigarh	3.65	0.5	1.45	1.66
20		Kumbhi ka purwa	5.85	2.85	3.04	3.11
21		Simrauta(ii)	5.35	3.85	2.55	2.88
22		Matrwa	3.95	1.25	1.64	2.03
23		Simrauta	5.63	4.65	2.77	3.1
1	Rampur	Bilaspur Pz GWD	5.62		3.84	3.92
2		Shahabad Pz GWD	10.78		10.07	10.2
3		Tanda		4.95	4.82	5.02
4		Dhaneli Purwi	6.52	6	6.1	6.15
1	Saharanpur	Babail Buzurg	7.77	7.09	4.66	5.55
2		Dhaura Kuan	8.18	7.09	5.8	8.29
3		Mohand	9.94	6.15	6.39	7.73
4		Shakhambari	4.17	1.94	3.35	2.19
5		Tilhari Buzurg	10.64	9.21	8.82	8.31
6		Lundi Pz GWD		6.75		7.67
7		Siriska Pz GWD		11.72	12.79	12
8		Nanauta Pz GWD	5.63	3.35	2.95	3.7
9		Tikrol Pz GWD	8.47	6.85	6.79	6.53
10		Ghuna	4.22	1.6	1.94	1.69
1	Sant Kabir Nagar	Dhanghata	3.2	0.22	1.27	2.5
2		Nathnagar	2.05	0.31	1.04	1.83
3		Khalilabad	3.48	0.18	1.17	1.7

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
4		Maidawal	2.94	0.46	2.14	3.18
5		Tighra	2.13	0.43	2.08	3.06
1	Sant Ravidas Nagar	Aurai	3.5	2.42	2.55	3.72
2		Koirauna	8.88	3.77	4.21	7.76
3		Pali1	6.81	4	3.03	4.25
4		Suriyawan	6.01	2.53	2.78	4.95
5		Gyanpur New	4.74	1.86	1.8	2.91
1	Shahjahanpur	Sidhaulি			5.03	5.17
1	Shrawasti	Bhagwanpur	1.14	0.44	0.94	1.54
2		Madora chowki	2.15	0.1	1.05	1.62
3		Dikauli	0.62		1.28	2.2
4		Tulsipur2	4.45	1.51	2.36	3.38
5		Laxman Nagar	3.7	1.85	4.1	4.44
6		Pakaria	1.85		1.65	2.3
7		Pratapur	2.94	0.2	0.65	1.35
8		Shrawasti	0.71	0.71	0.91	1.31
9		Bhujanga	1.69	0.59	1.19	2.09
10		Ratanpur	2.4		1.62	2.51
11		Sirsial	3.44	0.18	2.25	3.1
12		Sirsiya	4.1		2.4	3.41
1	Siddharthnagar	Bansi1	0.83	0.56	1.33	1.92
2		Kajhai	5.42	0.9	5.25	6.27
3		Badhni	2.1	0.45	1.9	2.25
4		Parsa	1.25	0.65	1.5	2.3
5		Ramnagara	3.87	0.3	2.05	3.3
6		Birdpur	2.02	0.95	1.75	2.5
7		Dumariyaganj	2.11	0.16	1.68	2.36
8		Uska	2.5	0.83	2.08	3.75
9		Belwa Laghunahi	1.25	0.6	1.92	3
10		Chilihiia	0.9	0.35	1.1	1.35
11		Itwa	2.45	1.1	1.88	1.9
12		Shohratgarh	1.15	0.75	1.54	1.8
1	Sitapur	Behta	3.67	0.88	1.15	1.9
2		Shekhwapur	5	2.65	2.55	3.74

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
3		Khamaria	6.08	4.75	4.2	4.07
4		Karauna	13.68	12.59	11.14	10.59
5		MachchretaPz-GWD	10.33	10	9.19	9.9
6		Bahoranpur	3.8	2.2	1.49	2.3
7		Purwara Gosai	3.54	2.57	3.06	2.74
8		Maholi Pz-GWD	9.5	8.9	8.2	8.51
9		Misrikh1	7.33	6.12	5.25	5.67
10		Naimisharanya-1	1.35	1.85	1.4	1.07
11		Sikandrabad			8.2	8.5
12		Dhoudhi	5.24	2.54	3.52	4.29
13		Hargaon	5.6	7.12	3.55	4.37
14		Madnapur	3.01	0.63	1.17	1.15
15		Rampur Mathura Pz-GWD	4.3	1.87	1.5	3.04
16		Biswan2	5.7	4.68	5.03	4.65
17		Biutmani	3.84	1.39	3.56	3.14
18		Jahangirabad	2.92	0.39	0.33	1.61
19		Sanda	4	1.8	2.17	4.13
20		Bada Gaon	5.18	2.85	3.28	4.31
21		Ramdana Crossing	7.6	6.2	4.5	8.09
1	Sonbhadra	Asandih	8.55	4.77	4.58	7.82
2		Babhani	9.78	6.66	6.89	8.46
3		Chopan		2.87	4.5	6
4		Hatinala	3.67	2.88	3.55	4.17
5		Ghorawal1	2.98	1.44	1.76	2.88
6		Son Barsa		1.42	2.27	3.92
7		Dudhi	5.24	2.54	3.52	4.82
8		Anpara	14.92	9.64	12.17	14.16
9		Bairpan	5.32	0.58	1.44	3.55
10		Dhrtidand1		2.19	4.2	6.63
11		Gara		8.94	10.53	12.28
12		Jarha	7.9	3.83	4.92	7.33
13		Muirpur		2.11	2.85	3.63
14		Renukoot		9.14	13.01	14.04
15		Robertsganj1	3.43	0.86	1.87	3.46
16		Shahganj		2.16	1.66	8.34
17		Telgudwa			3.64	7.06
18		Kohraul New		2.84	2.35	3.84

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
1	Sultanpur	Akhand Nagar	2.25	0.9	0.84	1.17
2		Kusitali	4.95	2.3	1.42	1.8
3		Munshiganj1	4.55	4.05	1.49	2.37
4		Bhadayian Pz-GWD	12	11.95	11.38	11.1
5		Ramgarh1	3.9	0.75	1.13	1.7
6		Sultanpur2	9.5	8.5	8.16	9.12
7		Pratushmanik (Partosh)	4.35	1.5	0.75	1.99
8		Kutta	4.75	2.4	2.16	2.9
9		Khaluhat1	3.34	1.39	1.79	2.38
10		Bhada	6.53	3.98	2.43	5.93
11		Gauriganj new-2	4.67	2.27	1.37	2.42
12		Jagdishpur2	10.3	9.5	7.25	7.12
13		Khutahna	3.75	1.75	2.09	2.6
14		Naghipur Bajhan	0.75	0.9	1.54	1.84
15		Bhatgaon	1.25	3.8	4.62	4.9
16		Goriabad	1	0.85	1.58	1.69
17		Janapur	3.95	1.4	3.1	3.8
18		Kadipur	8.85	7.7	6.97	7.5
19		Sagardeh		11.65	8.89	10.1
20		Kurebhar1	2.25	1.4	1.7	2.3
21		Kurwar	5.51	4.91	3.8	4.27
22		Mundawa	4.2	4.05	1.62	3.07
23		Lambua pz-GWD	4.18	3.05	1.99	2.8
24		Shivgarh	4.37	1.37	2	2.52
25		Piparpur	5.81	4.17	4.03	4.51
26		Trisundi	4.3	1.6	2.23	1.8
27		Musafirkhana	4.05	1.3	1.44	2.13
28		Kotra Khurd	6.48	5.3	4.28	4.94
29		Pratap pur Kamaicha Pz	8.15	6.32	10.22	6.5
30		Badgaon	11.15	11.6	9.1	8.8
31		Dariyan ka purwa (Soraon)	3.7	1.9	1.56	2.27
32		Mahona	5.47	1.92	2.62	3.59
33		Sathin			11.68	11.32
34		Bahurawa	2.85	0.5	1.22	1.69
35		Dostpur New Pz	4.75	2.5	2.51	3.12
36		Shukul Bazar	11.93	11.63	11.24	9.82
1	Unnao	Kantha		4.05		3.5
2		Auras	5.88	4.68	3.93	4.42

Sl.No .	District	Well	May-2021	Aug-2021	Nov-2021	Jan-2022
3		Thaura	2.69	0.42	1.1	1.05
4		Hasanganj1				7.37
5		Hasewan	3.78	2.53	1.62	2.19
6		Tonda	3.43	0.18	0.56	0.96
7		Maurawan	8.51			8.03
8		Azmatnagar	9.45	8.7	7.63	7.7
9		Makur	4.24	1.8	2.42	2.17
10		Pinjra	7.65	6.85	6.66	6.65
11		Purwa		2.35	2.35	2.33
12		Unchagaon kila	2.41	0.19	0.63	0.57
13		Methi Tikur	5.13	2.24	2.57	3.62
14		Safipur1				9.55
15		Bighapur		11.61		3.3
16		Chakalvanshi		0.76	0.96	1.06
17		Pariyar				7.9
18		Santakhera		3.71	3.44	4.08
19		Sikanderpur1	15.07	14.22	13.18	13.21
20		Unnao				11.85
21		Baksar				6.42
22		Bhagwant Nagar				4.44
23		Malauna	1.1	0.68	0.75	0.62
24		Sumerpur	12.7	11.38	10.73	12.21
25		Unchagaon1	7.65	2.88	3.38	3.86
26		Bhaisai	6.75	6.5	3.45	5.09
27		Raniganj-New	14.24	14.04	13.44	15.04
1	Varanasi	Jikhan(narsara)	10.45	5.74	5.14	5.9
2		Anai	1.78	1.04	1.38	1.27
3		Babatpur Chaura		10.22		5.8
4		Rustampur		2.1		3.88
5		Chobepur	5.32	2.7	1.91	3.39
6		Varanasi	8.12	4.8	5.51	6.51
7		Phulpur1	1.91	5.26	4.97	5.56
8		Sindhaura	3			3.7

**DEPTH TO WATER LEVEL TREND OF GROUND WATER MONITORING WELLS
(GWMW) FOR THE PERIOD 2012 – 2021, U.P.**

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
1	Agra	Khundauli Pz-Gwd	8		0.4307	8		0.2754
2	Agra	Saiyan Pz-Gwd	8		1.3140	8		1.0799
3	Agra	Jagner Pz-Gwd	7		1.1975	8		1.5855
4	Agra	Achhanera Pz-Gwd	8		0.1694	9	0.1902	
5	Agra	Fatehabad Pz-Gwd	7		0.4309	8		0.4020
6	Agra	Bah Pz-Gwd	8		0.3634	8		0.3823
7	Agra	Gangapur Basai New	3			6		0.0747
8	Agra	Undera	7		0.0220	10		0.0303
9	Agra	Dabar Pz-Gwd	8		0.3997	9		0.3183
10	Agra	Kagraul	6		0.5477	8		0.7680
11	Agra	Mewli (Bhara)	8		0.6644	10		0.6445
12	Aligarh	Harduaganj	7		0.1268	8	0.0783	
13	Aligarh	Taquipur(New)	8		0.1550	8		0.0951
14	Aligarh	Khair	8		0.2894	9		0.1089
15	Aligarh	Safedpur	8	0.0705		9		0.0035
16	Aligarh	Andla	9		0.5218	9		0.2312
17	Aligarh	Gonda	9	0.1703		9	0.0309	
18	Aligarh	Jawan	7		0.0439	6	0.2225	
19	Aligarh	Sudiyal	9		0.2934	9		0.2666
20	Aligarh	Palachand	5			8		0.2129
21	Allahabad	Meja	10	0.1013		10	0.0485	
22	Allahabad	Pasna	10	0.1180		10	0.0596	
23	Allahabad	Barwarikalaan	10	0.1312		9	0.0912	
24	Allahabad	Rampur Tulapur	6	0.5449		9	0.1760	
25	Allahabad	Naribari	4			6	0.1072	
26	Allahabad	Khaptia Kheri	10	0.0553		10	0.0129	
27	Allahabad	Ladiri Bazar	9		0.1179	10		0.0342
28	Allahabad	Akodha	6		0.2669	9	0.0515	
29	Allahabad	Koraon	10	0.0897		10	0.3098	
30	Allahabad	Barokhar	3			9		0.4142
31	Allahabad	Ghoose	2			7	0.0589	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
32	Allahabad	Meja Road	5			9	0.0936	
33	Allahabad	Bairi	10	0.1159		9	0.0593	
34	Allahabad	Mau-Aima	8	0.1344		9	0.0531	
35	Allahabad	Holagarh	10		0.2445	9	0.0510	
36	Allahabad	Lalpur	8	0.0371		7	0.0638	
37	Allahabad	Gauhania	7	0.1729		7	0.5692	
38	Allahabad	Gadwa Fort	8	0.0137		7	0.0847	
39	Allahabad	Baraut1	10	0.0720		10		0.0197
40	Allahabad	Malka Harhar	7	0.2333		10		0.2816
41	Allahabad	Aandwa	5			6		0.4829
42	Allahabad	Atrampur	9		0.3144	9	0.0567	
43	Allahabad	Sikandra1	10		0.1398	9		0.1593
44	Allahabad	Mallhan	9		0.1377	10		0.0002
45	Allahabad	Imamganj	6	0.3519		9	0.7439	
46	Allahabad	Phulpur2	8		0.3354	10		0.3079
47	Allahabad	Handia	9	0.0845		10	0.0163	
48	Allahabad	Kasarua	7		0.2204	8		1.0575
49	Allahabad	Chilla	5			7	0.9412	
50	Allahabad	Saraon	10		0.2444	10		0.0713
51	Allahabad	Karchhana	4			6		0.3713
52	Allahabad	Iradat Nagar	5			9		0.4401
53	Allahabad	Bara	10		0.0495	10	0.2160	
54	Allahabad	Naini	9		0.0055	9	0.0169	
55	Ambedkar Nagar	Kesharpur	9	0.0464		10		0.0153
56	Ambedkar Nagar	Akbarpur1	4			10	0.0641	
57	Ambedkar Nagar	Mahrua Gola-New	5			10	0.1695	
58	Ambedkar Nagar	Katehari	9	0.0808		10	0.0798	
59	Ambedkar Nagar	Baskhari Pz-Gwd	6	0.0053		7	0.1903	
60	Ambedkar Nagar	Akbarpur Pz-Gwd New	4			6	0.4912	
61	Ambedkar Nagar	Bhiti-New	5			12	0.1523	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
62	Auraiya	Bandhamau	9		0.4486	10		0.3092
63	Auraiya	Pz Gwd Ajitmal	6		1.4557	10		1.1347
64	Auraiya	Hasulia	9		0.5962	10		0.5329
65	Auraiya	Basundhara	7		0.0313	9	0.0180	
66	Auraiya	Sahar	9		0.2403	10		0.0546
67	Auraiya	Achhalda	8		0.1520	9		0.1161
68	Auraiya	Sahayal	9		0.2650	10		0.3289
69	Auraiya	Dinamau	5			8		0.2401
70	Auraiya	Phaphund	8		0.4888	10		0.2108
71	Azamgarh	Badihari	10	0.1775		10		0.0346
72	Azamgarh	Langerpur	4			7	0.0154	
73	Azamgarh	Sageri	8		0.0491	10	0.3943	
74	Azamgarh	Phulpur	8	0.1353		9	0.2970	
75	Azamgarh	Azamgarh	2			8	0.4853	
76	Azamgarh	Bairadih	8	0.0293		10	0.3416	
77	Azamgarh	Sidhauna	10	0.1125		10	0.0803	
78	Azamgarh	Karsandia Kalan	10		0.1251	10	0.0799	
79	Azamgarh	Nizamabad	5			8	0.3881	
80	Azamgarh	Deogaon	10	0.0214		10	0.0553	
81	Azamgarh	Ahraula	6		0.2180	10	0.3178	
82	Azamgarh	Bahrapur	10		0.0169	10	0.1621	
83	Azamgarh	Belwana	9	0.1012		10	0.1388	
84	Azamgarh	Madayan	10	0.4824		9	0.3279	
85	Azamgarh	Bibipur Khatauli	7	0.1283		10	0.2468	
86	Azamgarh	Saraimir	10	0.2826		9	0.0388	
87	Azamgarh	Rahul Nagar	8		0.1516	7		0.0254
88	Azamgarh	Kharihani	7	0.2763		9	0.2730	
89	Bahraich	Nanpara	8		0.0857	10		0.0417
90	Bahraich	Tapri Godh	9	0.0378		10		0.0091
91	Bahraich	Katarniaghpat	9		0.0105	10	0.0458	
92	Bahraich	Baisanpurwa	9	0.1084		10	0.0899	
93	Bahraich	Razichauraha	9	0.0431		10	0.0132	
94	Bahraich	Gaighat	9	0.1030		10	0.0514	
95	Bahraich	Bhopatpur	9		0.2470	10		0.0263
96	Bahraich	Sablapur	9		0.0579	10		0.0255
97	Bahraich	Kapurpur	9		0.0372	10		0.0501

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
98	Bahraich	Bhakraulikapurw	9	0.0275		10		0.0623
99	Bahraich	Jarwal1	2			8	0.0840	
100	Bahraich	Mihipurwa	3			6	0.1977	
101	Bahraich	Huzurpur Pz (Gwd)	5			6	0.0947	
102	Ballia	Ballia	9	0.1807		10	0.4851	
103	Ballia	Kharsanda	6	0.0459		9	0.2474	
104	Ballia	Ubhavan	8	0.0042		10	0.2843	
105	Ballia	Pur	9	0.0436		10	0.1012	
106	Ballia	Chitbargaon	9	0.2221		10	0.1602	
107	Ballia	Haldi	8	0.4101		8	0.3926	
108	Ballia	Manihar	9	0.1782		10	0.1186	
109	Ballia	Garwar	9	0.1682		10	0.1059	
110	Ballia	Nasirabad	9	0.0579		10	0.2333	
111	Ballia	Jahangrapur	6		0.0082	8	0.1038	
112	Ballia	Babhnauli	8	0.2570		10	0.3465	
113	Ballia	Rasra	7		0.1489	9	0.4266	
114	Ballia	Bairia	6		0.0721	7	0.1590	
115	Ballia	Jaiprakashnagar	8		0.0197	9		0.1548
116	Ballia	Dalan Chapra	9		0.0322	10	0.2605	
117	Ballia	Rewati	7	0.2770		9	0.2762	
118	Balrampur	Utraula	9	0.0720		10	0.0433	
119	Balrampur	Jarwa	9		0.5977	10		0.1764
120	Balrampur	Pachperwa	9	0.1050		10	0.0581	
121	Balrampur	Sridutganj1	8	0.2706		10	0.0437	
122	Balrampur	Harriaya Bazar	8	0.1660		10	0.1341	
123	Balrampur	Sonpur	7		0.0785	10	0.0995	
124	Balrampur	Deoria1	9	0.0578		10	0.0181	
125	Balrampur	Gangnar	9	0.0837		10	0.0684	
126	Balrampur	Gaura Crossing	8	0.1455		10	0.1310	
127	Balrampur	Semri1	9	0.0416		10	0.0654	
128	Balrampur	Gainsari	9	0.1479		10	0.0896	
129	Balrampur	Bankatwa	9		0.2655	9	0.1096	
130	Balrampur	Sipahia Village	9	0.1631		10	0.0219	
131	Balrampur	Chandanpur	6	0.2482		9	0.0672	
132	Balrampur	Tulsipur (Devipatan)	7	0.2765		7	0.1466	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
133	Balrampur	Balrampur1	7	0.2580		8	0.1347	
134	Balrampur	Balrampur Pz(Gwd)	5			6	0.1484	
135	Balrampur	Rehrabazar Pz(Gwd)	4			6	0.6919	
136	Banda	Naraini New	5			6	0.0550	
137	Banda	Mukera	5			6	0.4671	
138	Banda	Jamnipurwa	5			6		0.5709
139	Banda	Badausa	9	0.7563		10	0.3733	
140	Banda	Mataundh	7		0.9299	4		
141	Banda	Atarra	10	0.0062		10		0.0483
142	Banda	Girwan	5			10	0.0295	
143	Banda	Bisanda	8		0.3321	9		0.0634
144	Banda	Badehan	10	0.3576		9	0.2329	
145	Banda	Banda	9		0.7766	10		0.6115
146	Banda	Khurand	9	0.3726		10	0.0535	
147	Banda	Roli Kalyanpur	5			10		0.2231
148	Banda	Pangara	7	0.2537		10	0.0444	
149	Banda	Bargaini	3			8		0.1936
150	Barabanki	Fatehpur (New)	9	0.0971		9	0.0970	
151	Barabanki	Tikaitnagar	9	0.1317		9	0.1357	
152	Barabanki	Bhanmau	2			6	0.1359	
153	Barabanki	Sundhia Mau	10		0.0384	10		0.0047
154	Barabanki	Sarai Barai	8		0.0393	10	0.0208	
155	Barabanki	Purwa Amarsingh	10	0.0637		10	0.0504	
156	Barabanki	Rani Katra	10	0.1043		10	0.0675	
157	Barabanki	Gutauna	10	0.0515		12	0.0652	
158	Barabanki	Dewa	10		0.0343	10	0.0388	
159	Barabanki	Kalkeshwar Temp	4			10		0.1133
160	Barabanki	Baba Ki Kuti	10		0.0027	10	0.0645	
161	Barabanki	Kitlupur	10	0.0165		10	0.0077	
162	Barabanki	Masauli Chaurah	8		0.1793	10		0.0054
163	Barabanki	Rasauli	8	0.0537		10	0.1363	
164	Barabanki	Sidhaur	9		0.0638	10	0.0630	
165	Barabanki	Kotwa Sarai	8	0.0497		6	0.3244	
166	Barabanki	Datauli Chanda	7		0.1425	10	0.0531	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
167	Barabanki	Chaubisi	7		0.0189	10	0.1980	
168	Barabanki	Trivediganj	9		0.0281	10	0.0838	
169	Barabanki	Bhiwal	9		0.1127	10	0.0105	
170	Barabanki	Kaisarganj Pz (Gwd)	4			6	0.1236	
171	Barabanki	Puredalai Pz (Gwd)	5			6	0.5365	
172	Bareilly	Nawabganj1	9	0.0433		9		0.2837
173	Bareilly	Bareilly1	9		0.1307	10		0.0859
174	Bareilly	Aliganj	6	0.0598		4		
175	Bareilly	Shishgarh	8	0.2957		10	0.0861	
176	Bareilly	Bhuta	5			10		0.1007
177	Bareilly	Baheri	9	0.2280		10		0.0453
178	Bareilly	Ramnagar2	6		0.3577	9		0.2516
179	Bareilly	Shahi Pz Gwd	7		0.0693	9	0.0222	
180	Bareilly	Mirganj Pz Gwd	9		0.1574	10		0.0746
181	Bareilly	Bhitora Pz Gwd	6	0.0792		7	0.1816	
182	Bareilly	Itaura Sukhdevpur Pz Gwd	6		0.0200	7	0.0373	
183	Bareilly	Kandharpur Pz Gwd	6		0.0166	10	0.0634	
184	Bareilly	Siroli Pz Gwd	1			7		0.3993
185	Bareilly	Bhojipura Pz Gwd	9		0.0313	8	0.0311	
186	Basti	Basti	9	0.0468		10	0.0024	
187	Basti	Haraiya	9	0.0198		10	0.0953	
188	Basti	Bhanpur	9	0.1996		10	0.0623	
189	Basti	Captainganj1	7		0.0164	10		0.0252
190	Basti	Kharauan Jat	9	0.1182		10	0.0540	
191	Basti	Kalwari	7	0.0069		10	0.1102	
192	Basti	Bhikamjot	9		0.0238	8	0.0872	
193	Basti	Rudauli Pz (Gwd}	5			6	0.1684	
194	Bijnor	Swaheri Khurd	9		0.2765	10		0.0300
195	Bijnor	Chandok	8		0.0855	10		0.0174
196	Bijnor	Bijnor Pz Gwd	7		0.2049	6		0.0400
197	Bijnor	Sneh Rd.Rly.Stn.	7		0.4122	6		0.2080
198	Bijnor	Sarakthal	9	0.0581		10	0.1320	
199	Bijnor	Milak Beniram	8	0.0809		10	0.2035	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
200	Bijnor	Najibabad New	9	0.0801		10	0.1980	
201	Budaun	Qadar Chowk Pz Gwd	7		0.4157	6		0.5049
202	Budaun	Ujhani Pz Gwd	9		0.8899	10		0.8408
203	Budaun	Kolhai Pz Gwd	6		0.5032	6		0.4565
204	Budaun	Dabthara Shyam Pz Gwd	8		0.2549	8		0.9140
205	Budaun	Mansa Nagla Pz Gwd	9		0.6856	10		0.7104
206	Budaun	Wazirganj Pz Gwd	5			7		0.6864
207	Budaun	Sarauriya Pz Gwd	5			6		0.7808
208	Budaun	Asafpur Pz Gwd	9		0.5769	9		0.6049
209	Budaun	Daharpur Pz Gwd	5			6		0.3768
210	Budaun	Badaun Pz Gwd	8		0.6728	7		0.6576
211	Bulandshahr	Nandpur	4			7		0.0783
212	Bulandshahr	Batli	5			6		0.0904
213	Bulandshahr	Daulatpur Khurd Ew/Pz	3			8		0.4120
214	Bulandshahr	Lakhaothi Pz	8		0.4925	9		0.2262
215	Bulandshahr	Sikandrabad 1	8	0.0281		8	0.0201	
216	Chandauli	Chandauli	7	0.1292		8	0.1536	
217	Chandauli	Naugarh	7	0.1030		7		0.0822
218	Chandauli	Dhanpur	9	0.1993		10	0.1320	
219	Chandauli	Sakaldiha	7		0.1519	9	0.0215	
220	Chandauli	Kamalpur	8	0.4749		10	0.1571	
221	Chandauli	Chahania	6		0.6625	7		0.0360
222	Chandauli	Mugal Sarai	8		0.2027	8		0.0067
223	Chandauli	Marufpur Xing	8	0.5696		10	0.5281	
224	Chandauli	Chakia	8	0.0990		10	0.0108	
225	Chandauli	Baburi	3			8	0.1004	
226	Chandauli	Chandraprabha	5			8		0.0105
227	Chitrakoot	Pahari Buzurg New	4			6		0.0240
228	Chitrakoot	Karwi	9		0.1004	10		0.2530
229	Chitrakoot	Mau	7	0.0375		10		0.3595
230	Chitrakoot	Manikpur	10	0.3704		10	0.1902	
231	Chitrakoot	Raipura	10	0.1038		10		0.0938
232	Chitrakoot	Chiwalaha	5			8		0.6208

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
233	Chitrakoot	Bhaunri	9		0.3248	9		0.2369
234	Chitrakoot	Jorwara	10		0.3147	10	0.0108	
235	Chitrakoot	Chakrajafar	5			10		0.3916
236	Deoria	Deoria2	9	0.0578		10	0.1007	
237	Deoria	Gauri Bazar	6	0.3109		10	0.1600	
238	Deoria	Desai Deoria	9	0.3102		9	0.0060	
239	Deoria	Baitalpur	5			10		0.0851
240	Deoria	Rampur Karkhana	8	0.3121		10		0.1188
241	Deoria	Pathardewa(Naraya Npur	6	0.1443		10		0.1620
242	Deoria	Rudrapur1	7	0.0530		7	0.1342	
243	Deoria	Ratasia Kothi	5			9		0.0144
244	Deoria	Lar Road	5			9	0.1030	
245	Etah	Jalesar Pz- Gwd	6		0.6057	7		0.0295
246	Etah	Sakit Pz-Gwd	6		0.6973	7		0.4181
247	Etah	Etah Pz-Gwd	7		0.7398	8		0.6266
248	Etah	Jaithra Pz-Gwd	6		0.5559	8		0.7108
249	Etah	Marahchi Pz-Gwd	7		0.3863	8		0.2695
250	Etah	Sidhpura Pz-Gwd	7		0.2399	8		0.1394
251	Etah	Amanpur Pz-Gwd	7		0.2932	8		0.1217
252	Etah	Daryaganj	9		0.4150	9		0.3926
253	Etah	Dhumri1	7		0.0966	9		0.0492
254	Etah	Locha	8		0.4625	8		0.5335
255	Etawah	Barecha	9	0.0461		9	0.0740	
256	Etawah	Pz Gwd Jaswant Nagar	6		1.0970	8		1.1618
257	Etawah	Sabdalpur	2			6	0.0584	
258	Etawah	Patya Chaturpur	7		0.2822	7		0.3642
259	Etawah	Ujhayani	6		0.0814	7	0.0242	
260	Etawah	Bharthana2	5			8		0.1601
261	Etawah	Bakewar	9		0.2284	9		0.3604
262	Faizabad	Naokua	8	0.1601		9	0.1392	
263	Faizabad	Bakarganj	9		0.1460	9		0.0206
264	Faizabad	Sakhupura	5			8	0.0774	
265	Faizabad	Milkipur	5			7		0.1007
266	Faizabad	Choure Bazar	6	0.4249		9	0.1590	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
267	Faizabad	Madhopur	5			9	0.1182	
268	Faizabad	Faizabad Pz-Cgwb	4			7	0.2516	
269	Faizabad	Gosaiganj Pz-Gwd	6	0.0017		8	0.0877	
270	Faizabad	Amaniganj	7		0.0212	6	0.0140	
271	Faizabad	Khajurahat	3			6	0.0838	
272	Faizabad	Sarai Rasi	2			6	0.1076	
273	Faizabad	Gosaiganj-New	3			7	0.1795	
274	Farrukhabad	Rajepur	9	0.2283		10	0.4045	
275	Farrukhabad	Pz Gwd Shamshabad	6		0.8511	9		0.8326
276	Fatehpur	Jahanabad	4			7		0.4821
277	Fatehpur	Bindki1	9	0.6660		10	0.7840	
278	Fatehpur	Umradipur	8		0.1706	7		0.0344
279	Fatehpur	Bela	10		0.0987	10		0.0684
280	Fatehpur	Sarain Bakewar	9		0.3560	9		0.1598
281	Fatehpur	Musfha	8		0.8674	10		0.3304
282	Fatehpur	Naubasta	4			8		0.1985
283	Fatehpur	Barwa	9		1.6514	9		1.0847
284	Fatehpur	Bahua	4			9		0.4167
285	Fatehpur	Lalauli	10	0.0409		10	0.0918	
286	Fatehpur	Asother	10		0.1465	10		0.0829
287	Firozabad	Madanpur Pz-Gwd	8		1.2902	8		1.0206
288	Firozabad	Shikohabad Pz-Gwd	7		0.6504	9		0.5553
289	Firozabad	Araon Pz Gwd	8		0.7746	9		0.6997
290	Firozabad	Jasrana Pz Gwd	8		0.5142	10		0.3086
291	Gautam Buddha Nagar	Sector-72 Pz	7		2.6725	8		2.1386
292	Gautam Buddha Nagar	Sector-92 Pz	7		0.5197	7		0.6150
293	Gautam Buddha Nagar	Sector- 62 A Pz	7		2.2084	9		1.9874
294	Gautam Buddha Nagar	Chauki Pz	8		0.0609	7	0.0489	
295	Gautam Buddha Nagar	Jewar- Pz	9		0.6576	9		0.2900
296	Gautam Buddha Nagar	Dhankaur	5			7		0.1331

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
297	Ghaziabad	Modi Nagar-Pz I	9		0.2402	8		0.2010
298	Ghaziabad	Modi Nagar-Pz II	10		0.3245	10		0.1603
299	Ghaziabad	Hapur-Pz	10		0.5929	10		0.5826
300	Ghaziabad	Garhmukteshwar-Pz	10		0.1898	10		0.2227
301	Ghaziabad	Badauli-Hapur-Pz	4			6		0.7009
302	Ghaziabad	Bhojpur-Pz	6		0.6080	7		0.5238
303	Ghaziabad	Azad Nagar-Pz	7		0.9082	7		0.6547
304	Ghaziabad	Upheda-Pz	8		0.6495	8		0.4770
305	Ghaziabad	Dhaulana-Pz	10		0.1305	6		0.1701
306	Ghaziabad	Morta Pz Gwd	7		0.6262	8		0.6749
307	Ghazipur	Baresar	9	0.2097		9	0.3176	
308	Ghazipur	Ajaipur	8	0.2880		8	0.6421	
309	Ghazipur	Nandganj	6	0.4165		8	0.5150	
310	Ghazipur	Deoria	9	0.2629		9		0.0110
311	Ghazipur	Gahmar	10	0.3791		9	0.4981	
312	Ghazipur	Dildar Nagar	10	0.1644		9	0.0205	
313	Ghazipur	Mohammadabad2	7	0.4084		8	0.4896	
314	Ghazipur	Kasimabad	3			6	0.5253	
315	Ghazipur	Karimuddinpur	4			8	0.4828	
316	Ghazipur	Sadikapur	9	0.5255		9	0.1605	
317	Ghazipur	Pyrepur	10	0.2375		8	0.1091	
318	Ghazipur	Orulari	10	0.0360		9		0.0010
319	Ghazipur	Ghazipur (Urban)	8		0.0302	5		
320	Ghazipur	Saidpur 1	8	0.2482		8		0.0489
321	Ghazipur	Mardah	6	0.5791		4		
322	Ghazipur	Tanda Bairakh	5			7	0.3462	
323	Gonda	Mankapur	9		0.0667	10	0.0724	
324	Gonda	Birpur Katra	9	0.1908		10	0.0789	
325	Gonda	Parsa Gondri	9		0.0366	10	0.0053	
326	Gonda	Chapiya	5			9	0.1604	
327	Gonda	Bhauriganj	6	0.0598		9		0.0003
328	Gonda	Gonda (Urban)	7		0.1219	8	0.1730	
329	Gonda	Kazi Dewar	6	0.1771		8	0.2739	
330	Gonda	Karnailganj Pz (Gwd)	5			6	0.2807	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
331	Gorakhpur	Kauriram	9	0.0498		10	0.0271	
332	Gorakhpur	Jagdishpur1	8		0.2425	10	0.0253	
333	Gorakhpur	Geruababu	4			9		0.1092
334	Gorakhpur	Dubauli	6	0.0361		9		0.0844
335	Hamirpur	Rath	6		0.4700	6		1.2395
336	Hamirpur	Dhagwan	7		0.3267	10	0.0034	
337	Hamirpur	Bewar	9		0.7207	8		0.4799
338	Hamirpur	Lalpura	6		0.5474	5		
339	Hamirpur	Maudaha	6	0.2132		6	0.2845	
340	Hamirpur	Kharela	6		0.1377	3		
341	Hamirpur	Khanna	10		0.3634	9		0.1284
342	Hamirpur	Kapsa	5			9		0.1869
343	Hamirpur	Kunetha	9	0.3376		9	0.5225	
344	Hardoi	Pihani	7		0.0946	10	0.0078	
345	Hardoi	Sahabadpur	6	0.2136		9	0.2250	
346	Hardoi	Del Panderwa	8	0.0715		8	0.1759	
347	Hardoi	Kachauna	7	0.0804		10	0.1260	
348	Hardoi	Gopamau	6		0.0652	10	0.0926	
349	Hardoi	Dhobia	9		0.0515	10	0.0550	
350	Hardoi	Barganwar	6		0.0826	8	0.0393	
351	Hardoi	Mohammadpur	4			6		0.0759
352	Hardoi	Marhia	4			6		0.1602
353	Hardoi	Dalel Nagar Rly	7		0.0198	8	0.1459	
354	Hardoi	Gangau	8		0.1159	9		0.0427
355	Hardoi	Bhadaial	7		0.2035	7		0.0947
356	Hardoi	Ahrori	7	0.1199		7	0.2406	
357	Hardoi	Harpalpur Pz-Gwd	6		0.4009	8		0.2336
358	Hardoi	Bawan Pz-Gwd	6		0.1244	7		0.0443
359	Hardoi	Barkhani Pz-Gwd	6		0.4454	6		0.3145
360	Hardoi	Sursa (Gwd Pz)	3			6	0.1122	
361	Hardoi	Kachauna (Gwd Pz)	4			6	0.9572	
362	Hardoi	Panch Deora	3			8		0.2109
363	Hardoi	Gokul Behta	3			7		0.0534
364	Hardoi	Manjila	8		0.0887	8		0.1312
365	Hathras	Purdil Nagar	6		0.3385	4		

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
366	Hathras	Sikandara Rao	4			8	0.0648	
367	Hathras	Thulai	7		0.1328	7		0.7065
368	Hathras	Iglas	9		0.6851	10		0.5665
369	Hathras	Rattika Nagla	8		0.0718	8		0.0988
370	Hathras	Hasyan	6		0.1686	7		0.4083
371	Jalaun	Konch(New)	9	0.0003		10		0.0756
372	Jalaun	Babina-New	9		0.1578	9		0.0171
373	Jalaun	Keolari-New	8	0.0670		10	0.0369	
374	Jalaun	Madhogarh	7		0.1118	8	0.0958	
375	Jalaun	Marora	7		0.4259	9		0.0875
376	Jalaun	Kusumilia	7		1.0530	8	0.1001	
377	Jalaun	Sirsakalar	6		0.1839	8	0.1342	
378	Jalaun	Umri	7		0.0961	8	0.4956	
379	Jalaun	Kamsaira	7		0.1600	7	0.3304	
380	Jalaun	Hardoi Gujar	4			8		0.0419
381	Jalaun	Ait2	4			9		0.0819
382	Jalaun	Kalpi	9		0.2583	10		0.3444
383	Jalaun	Jalaun	6		0.3613	10		0.5622
384	Jalaun	Orai	14		0.3144	13		0.2057
385	Jalaun	Gohan	9		0.4059	10		0.3143
386	Jalaun	Chhota Rampur	7		0.9184	6		1.6356
387	Jalaun	Ata	9		0.4759	10		0.2587
388	Jalaun	Hadrukhh	9		1.2018	9		0.7916
389	Jalaun	Damras	7		0.5776	10		0.7261
390	Jalaun	Musaria	8		1.3720	6		2.1464
391	Jalaun	Churkhi	8		0.6704	10		0.4787
392	Jalaun	Rajpura	14		0.0867	10	0.0880	
393	Jalaun	Kanasi	8		0.2534	10	0.1406	
394	Jalaun	Dekor	9		0.4350	10		0.3650
395	Jalaun	Kailaiya	9		0.1704	10	0.1100	
396	Jalaun	Mahewa	7		0.7054	8		0.3336
397	Jalaun	Jagmanpur	5			7	0.0946	
398	Jalaun	Kishora Mauza	8	0.1000		9	0.0883	
399	Jalaun	Gopalpura1	8		0.0271	7	0.4322	
400	Jaunpur	Machhalishahr	7		0.0450	9	0.0172	
401	Jaunpur	Shahganj1	5			7	0.0540	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
402	Jaunpur	Maharajganj2	8	0.0514		8	0.0096	
403	Jaunpur	Honipur	7		0.0138	7		0.0636
404	Jaunpur	Itaili (Muftiganj)	5			6		0.1771
405	Jaunpur	Rampur1	7	0.6422		9	0.5572	
406	Jaunpur	Kheta Sarai1	6	0.2942		7	0.1017	
407	Jaunpur	Chandwak	4			7	0.1954	
408	Jaunpur	Mehreon1	6	0.0863		6		0.0214
409	Jaunpur	Raja Bazar	8	0.1478		9	0.0820	
410	Jaunpur	Sigra Mau	8	0.1755		9	0.2181	
411	Jaunpur	Barai Par	4			6		0.1296
412	Jaunpur	Dhiuraha	2			6	0.5796	
413	Jaunpur	Hasanpur	4			8	0.1205	
414	Jaunpur	Tarti	5			9	0.1386	
415	Jaunpur	Pisara	6	0.3456		7		0.0174
416	Jaunpur	Sarpatha	7	0.5841		6	0.3499	
417	Jaunpur	Barji Kalan	5			7	0.1208	
418	Jaunpur	Marihun	7	0.2396		8	0.1288	
419	Jaunpur	Mungra Badshahpur	7		0.0799	7		0.1212
420	Jaunpur	Narar(Jamnipur)	8		0.1096	9	0.0063	
421	Jaunpur	Janghai	6	0.0380		9		0.1305
422	Jaunpur	Maheshganj	7		0.2311	8		0.0996
423	Jhansi	Bamaur	6	0.0683		8	0.0660	
424	Jhansi	Khillawari	9		0.4281	10		0.2460
425	Jhansi	Sakrar 1	7		0.3690	9		0.2169
426	Jhansi	Auldan-New	8		0.2248	10		0.1445
427	Jhansi	Ajneri Madhopura	9		0.1891	9		0.0659
428	Jhansi	Kuangaon	3			6		0.7843
429	Jhansi	Mauranipur Rajpaharia	8		0.1570	9		0.2047
430	Jhansi	Ghugawa	7	0.1544		8	0.5086	
431	Jhansi	Moth	9		0.0312	10		0.0062
432	Jhansi	Samthar	9		0.1591	10		0.1569
433	Jhansi	Semri	9		0.0319	10	0.0633	
434	Jhansi	Barua Sagar	7		0.8424	4		
435	Jhansi	Punch	6	0.1647		7		0.0346

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
436	Jhansi	Farida	5			7		0.1815
437	Jhansi	Rewan	7		0.3163	9	0.0444	
438	Jhansi	Babina1	8		0.0468	10	0.1186	
439	Jhansi	Khailara	9		0.1877	10		0.0019
440	Jhansi	Jhansi1	14		0.1734	11		0.2898
441	Jhansi	Raksa	9		0.0389	10	0.0174	
442	Jyotiba Phule Nagar	Dhanaura Pz Cgwb	7		0.2168	7	0.0225	
443	Jyotiba Phule Nagar	Matlabpur Pz Gwd	8		0.0529	9		0.0019
444	Jyotiba Phule Nagar	Gajraula Pz Gwd	9		0.4303	10		0.5693
445	Jyotiba Phule Nagar	Jogipura Pz Gwd	9		0.3174	9		0.1098
446	Jyotiba Phule Nagar	Daurala Pz Gwd	7		0.3087	6		0.2056
447	Jyotiba Phule Nagar	Hasanpur Pz Gwd	8		0.4610	9		0.6040
448	Jyotiba Phule Nagar	Bagadpur Pz Gwd	9		0.8493	9		0.8790
449	Jyotiba Phule Nagar	Joya Pz Gwd	7		0.5350	8		0.5090
450	Jyotiba Phule Nagar	Amroha Pz Cgwb	7		0.5301	8		0.4320
451	Kannauj	Chibramau Pz-Gwd	7		1.1837	8		0.9072
452	Kannauj	Haseran Pz-Gwd	7	0.0105		7	0.0401	
453	Kannauj	Jalalabad Pz-Gwd	7		0.8171	8		0.5033
454	Kannauj	Kharni Pz-Gwd	7		0.5726	8		0.3339
455	Kannauj	Tirwaganj	7	0.4391		8	0.0574	
456	Kannauj	Kannauj1	6	0.1363		7		0.0417
457	Kanpur Dehat	Pukhrayan1	5			8	0.2364	
458	Kanpur Dehat	Baghpur	6		0.3227	9		0.0628
459	Kanpur Dehat	Kadari	6	0.0052		8	0.0320	
460	Kanpur Dehat	Roura	5			10		0.0791
461	Kanpur Dehat	Muhammadpur	7		0.5948	10		0.6005
462	Kanpur Dehat	Jaunra	2			6	0.1643	
463	Kanpur Dehat	Kainjari	8		0.1603	9		0.1092
464	Kanpur Nagar	Ramsari	6		0.0900	7	0.2201	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
465	Kanpur Nagar	Sachendi	9		0.1954	9	0.0184	
466	Kanpur Nagar	Niwada Dhamni	6		0.3828	8		0.3294
467	Kanpur Nagar	Sarh	9		0.2704	9		0.0650
468	Kanpur Nagar	Narmau(New)	8		0.1190	9	0.0030	
469	Kanpur Nagar	Motipura	9		0.1686	9		0.1689
470	Kanpur Nagar	Bhaisana	7		0.0044	7	0.2927	
471	Kanpur Nagar	Baradari	7		0.1234	8		0.0200
472	Kanpur Nagar	Chaubepur1	9	0.1271		9	0.0401	
473	Kanpur Nagar	Bithoor-Nganj	9	0.0374		9	0.0012	
474	Kanpur Nagar	Bidhnu	9		0.0352	9	0.0944	
475	Kaushambi	Kasia	6		0.2296	7	0.5765	
476	Kaushambi	Sallahpur	6	0.0115		8	0.0733	
477	Kaushambi	Mandari	4			7		0.3204
478	Kaushambi	Lehdari	9	0.0209		8	0.1459	
479	Kaushambi	Sarai Akil	7		0.3904	6		0.2478
480	Kaushambi	Usargaura	8		0.0215	8	0.4047	
481	Kaushambi	Kushambhi	8		0.1411	8	0.1060	
482	Kheri	Chandan Chowki	8		0.0177	10	0.0252	
483	Kheri	Mailani	5			7		0.1818
484	Kheri	Chamlapur	5			9	0.0100	
485	Kheri	Asogapur	9	0.0475		10	0.1440	
486	Kheri	Chauapur	6		0.0587	10		0.0669
487	Kheri	Dudhwa F.R.H.	9		0.0646	10		0.0416
488	Kheri	Bijua	3			6	0.0204	
489	Kheri	Jhandi Raj	7		0.0157	8	0.1149	
490	Kushinagar	Naurangia	6	0.2868		10		0.0020
491	Kushinagar	Belwa	6		0.0743	5		
492	Kushinagar	Chittauni	8	0.2428		10		0.0654
493	Kushinagar	Rambar	9	0.1200		10		0.1976
494	Kushinagar	Mathauli	5			10	0.0113	
495	Kushinagar	Mansurganj	7		0.1413	10	0.0280	
496	Lalitpur	Talbhet-New	9		0.0514	9		0.0475
497	Lalitpur	Jakhaura1	8		0.1019	9	0.1427	
498	Lalitpur	Bar	7		0.4387	10	0.0342	
499	Lalitpur	Betna	4			9		0.0901
500	Lalitpur	Saidpur	4			9	0.0238	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
501	Lalitpur	Mahroni 1	3			8		0.2751
502	Lalitpur	Talbhet-Iii	4			6		0.0787
503	Lalitpur	Silawan	6		0.3318	8	0.3685	
504	Lalitpur	Lalitpur	9		0.2125	10		0.0432
505	Lalitpur	Amjhara Ghati	9		0.0292	9		0.0305
506	Lalitpur	Bansi	9	0.4097		10	0.1820	
507	Lalitpur	Hisar Kalan	9	0.0040		10		0.0061
508	Lalitpur	Digwar	5			10		0.0870
509	Lalitpur	Jakhlaun	9		0.0286	10		0.0853
510	Lalitpur	Khitwans	10		0.1243	10		0.0604
511	Lucknow	Mohanlalganj	8		0.0249	10	0.2625	
512	Lucknow	Itaunja	11		0.0630	12	0.0832	
513	Lucknow	Gosaiganj1	9		0.0918	10	0.0580	
514	Lucknow	Rakabganj Crossing	7		0.6871	8		0.3772
515	Lucknow	Nagram	8		0.0211	10	0.0796	
516	Lucknow	Arjunganj	5			6		0.6174
517	Lucknow	Bakshi Ka Talab	9		0.9638	4		
518	Lucknow	Khawas Khera	7		0.0198	9		0.0258
519	Lucknow	Munshiganj	9		0.0523	10		0.0684
520	Lucknow	Bijnor	8		0.5768	10		0.4030
521	Lucknow	Fatehganj	9		0.8823	10		0.5206
522	Lucknow	Kathwara	7		0.3650	6		0.2402
523	Lucknow	Mohanlalganj	9		0.0323	8	0.3176	
524	Lucknow	Rehman Khera	10		0.1882	6		0.1685
525	Lucknow	Behta Bazar	6	0.3126		7		0.6042
526	Lucknow	Nigohan1	7	0.0813		3		
527	Lucknow	Cantt	8		1.4620	6		1.7203
528	Lucknow	River Bank Colony	8		1.2279	8		1.1110
529	Lucknow	Rehta	8		0.7138	9		0.5095
530	Lucknow	Arya Nagar	8		0.3098	9		0.2179
531	Lucknow	Tejkishan Khera	8		0.4692	8	0.0169	
532	Lucknow	Kumrahawan	10		0.1302	9	0.2658	
533	Lucknow	Malihabad	9		0.5890	10		0.4034
534	Lucknow	Gulistan Colony	9		0.9004	8		1.0596
535	Lucknow	New Hyderabad	6		1.4244	5		
536	Lucknow	Itaunja	10		0.1340	10	0.0211	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
537	Lucknow	Bakshi Ka Talab	10		0.4167	10		0.3737
538	Lucknow	Lu New Campus	10		1.0466	10		1.0867
539	Lucknow	Rahimabad	6		0.5276	8		0.2235
540	Lucknow	Bhatoiya	6		0.6975	6		0.6544
541	Lucknow	Mal	9		0.8123	9		0.5113
542	Lucknow	Lu Old Campus	6		1.7268	4		
543	Lucknow	Aat Garhi Sonra	6		1.2284	9		0.5331
544	Lucknow	Vikasnagar	10		1.5324	9		1.6666
545	Mahoba	Kulpahar2	10		0.1441	9		0.1728
546	Mahoba	Teiya1	7		0.4475	10		0.5200
547	Mahoba	Bela Tal	8		0.0635	10		0.3175
548	Mahoba	Kashipura	10		0.0682	10		0.3666
549	Mahoba	Charkhari	9		0.3751	10		0.0612
550	Mahoba	Pipramauf	6		0.2382	6		0.4357
551	Mahrajganj	Maharajganj2	8	0.2006		10	0.0258	
552	Mahrajganj	Siswa Bazar	9	0.3000		10	0.0869	
553	Mahrajganj	Ghughali	9	0.0435		10	0.0191	
554	Mahrajganj	Kukesar	5			10		0.1514
555	Mahrajganj	Koluhi	8	0.3026		10	0.1346	
556	Mainpuri	Kuraoli Pz-Gwd	7		0.3379	8		0.2143
557	Mainpuri	Sultanganj Pz-Gwd	7		0.4517	8		0.3567
558	Mainpuri	Kishni Pz-Gwd	5			8		0.1245
559	Mainpuri	Bewarpz-Gwd	7		0.1035	8		0.2719
560	Mainpuri	Nagal Bhujia	6		0.1140	5		
561	Mainpuri	Katra Saman	8		0.1422	10		0.0750
562	Mainpuri	Ghirore	5			8		0.0067
563	Mathura	Jamunapar Thana	7		0.0575	9		0.1278
564	Mathura	Pirsua	7		0.0447	9	0.0121	
565	Mathura	Kharab	6	0.0598		9	0.0148	
566	Mathura	Chhata New	9	0.1926		10	0.0467	
567	Mathura	Nagra Chhitar Singh	9	0.0245		10	0.0298	
568	Mathura	Mat	6		0.2526	7		0.3031
569	Mathura	Baldeo	9	0.1780		10	0.0249	
570	Mathura	Surir (New)	8		0.2205	10		0.2245
571	Mathura	Paintha	9		0.1577	10		0.0443

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
		(Govardhan)						
572	Mathura	Barsana	8		0.4691	8		0.2545
573	Mathura	Jhinga Nagla	9		0.0454	10		0.1177
574	Mathura	Kosi	9		0.1896	9	0.1401	
575	Mathura	Jachoda	9		0.1188	9		0.0001
576	Mathura	Sahar1	9		0.2644	9		0.0336
577	Mathura	Saunkh	9	0.1640		9	0.2216	
578	Mau	Dhorighat	10	0.3708		10	0.2136	
579	Mau	Jejawali	9	0.2096		10	0.1082	
580	Mau	Amila	5			7	0.1508	
581	Mau	Ghosi	10	0.2714		10	0.0850	
582	Mau	Kapaganj	5			7	0.0841	
583	Mau	Ratanpura	7	0.9029		7	0.4344	
584	Meerut	Timikia Kothi Pz I	7		0.0980	6	1.0535	
585	Meerut	Sakoti Tanda Pz	10		0.1302	8		0.1238
586	Meerut	Parikshat Garh Pz	8		0.4459	8		0.3387
587	Meerut	Chota Mawana Pz	7		0.3481	8		0.4874
588	Meerut	Kaili Pz	9		0.6276	10		1.0992
589	Meerut	Machhara Shallowpz	9		0.2627	10		0.4263
590	Meerut	Hastinapur 1	8		0.0253	9	0.0525	
591	Meerut	Sisauli	5			6		0.7751
592	Meerut	Meerut Pz	8	0.0092		9		0.3265
593	Mirzapur	Mirzapur	7		0.2372	9		0.4262
594	Mirzapur	Marihan	2			9		0.0049
595	Mirzapur	Ahraura	7	0.0212		10	0.0585	
596	Mirzapur	Lalganj	9	0.2305		10	0.0137	
597	Mirzapur	Halia	8	0.3502		10	0.1481	
598	Mirzapur	Lohangpur	6	0.5611		9	0.2029	
599	Mirzapur	Adalhat	8	0.2121		9	0.1714	
600	Mirzapur	Kunabimar	4			7	1.1602	
601	Mirzapur	Gaipura	6	0.4156		9	0.0365	
602	Mirzapur	Barhanchuan	8	0.1811		10	0.1724	
603	Mirzapur	Gopalpur	5			10	0.5290	
604	Mirzapur	Baghura	8	0.3008		10	0.0777	
605	Moradabad	Asmauli Pz Gwd	6		0.7223	6		1.0425

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
606	Moradabad	Bahjoi Pz Gwd	9		0.5019	10		0.5721
607	Moradabad	Maukather Pz Gwd	6		0.6287	6		0.5330
608	Moradabad	Sahapura Sirpura-Pz	6		0.8360	5		
609	Moradabad	Chandausi-Pz	9		0.6844	8		0.6159
610	Moradabad	Moradabad-Pz	6		0.4378	6		0.5757
611	Moradabad	Thakurdwara	8	0.1151		10	0.1327	
612	Moradabad	Fauladpur	8		0.0576	9	0.2115	
613	Moradabad	Painapur	7	0.0356		10	0.1824	
614	Moradabad	Karanpur Pz Gwd	7	0.0942		6		0.0763
615	Moradabad	Dingarpur Pz Gwd	9		0.4689	10		0.3840
616	Moradabad	Mahmudpurmafi Pz Gwd	9		0.5385	9		0.5134
617	Moradabad	Moradabad Pz Gwd	9		0.1344	9		0.0645
618	Moradabad	Fatehulla Ganj Pz Gwd	7		0.5329	6		0.1585
619	Muzaffarnagar	Sukratal	6	0.2689		9	0.0263	
620	Muzaffarnagar	Inchauli(Ratanpuri) Pz Gwd	5			6		0.2373
621	Muzaffarnagar	Paldi Pz Gwd	8		0.8121	7		0.4345
622	Muzaffarnagar	Khatauli Pz (Gwd)	8		0.0448	7		0.0241
623	Muzaffarnagar	Shamli Pz Gwd	8		0.3801	7	0.0110	
624	Muzaffarnagar	Kukra-Sadar Pz	8		0.3707	9		0.2783
625	Muzaffarnagar	Un Pz	8	2.0040		9	1.9856	
626	Muzaffarnagar	Kamalpur Pz	8	0.0683		4		
627	Muzaffarnagar	Baghra Pz	9		0.7003	8		0.3083
628	Muzaffarnagar	Morna Pz	10		0.2280	8		0.8160
629	Muzaffarnagar	Chartawal	5			7		0.1936
630	Pilibhit	Madho Tanda Pz Gwd	7		0.1035	8		0.0339
631	Pilibhit	Puranpur Pz Gwd	9		0.0076	10		0.0353
632	Pilibhit	Jeora Kalyanpur	8	0.0616		10		0.0076
633	Pilibhit	Faradia	5			10	0.0634	
634	Pilibhit	Gajraula1	6	0.0659		10	0.0166	
635	Pilibhit	Bhamora	9	0.0037		10	0.0669	
636	Pilibhit	Baldeopur	4			7		0.0494
637	Pilibhit	Bargad Chauraha	8		0.0580	8		0.0307

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
638	Pilibhit	Jahanabad1	8		0.0322	10	0.0298	
639	Pilibhit	Bilsanda1	5			9		0.0858
640	Pilibhit	Pilibhit Pz Gwd	9	0.0342		10	0.0216	
641	Pilibhit	Bilaspur Pz Gwd	8		0.0042	9	0.0804	
642	Pratapgarh	Raniganj	8		0.1503	7		0.0885
643	Pratapgarh	Sangramgarh	9		0.0222	8	0.1581	
644	Pratapgarh	Ateha	6		0.0525	8	0.1953	
645	Pratapgarh	Sangipur	8		0.1450	7		0.4409
646	Pratapgarh	Dih Balri	7		0.0989	7	0.2013	
647	Pratapgarh	Mandhata	10		0.0646	8	0.1116	
648	Pratapgarh	Delhupur	10		0.0747	7	0.1278	
649	Pratapgarh	Mohanganj	8		0.0137	8	0.2034	
650	Pratapgarh	Gaura	9	0.1027		6	0.0809	
651	Pratapgarh	Nanasukul Purwa	9		0.0307	8	0.1966	
652	Pratapgarh	Rampur Batauli	8	0.0164		7	0.4415	
653	Pratapgarh	Maddupur	6		0.0355	7		0.0401
654	Pratapgarh	Jathwara	6		0.0352	8	0.1054	
655	Pratapgarh	Kohdaur	9	0.1757		8	0.2129	
656	Pratapgarh	Bhusar	8		0.0642	8	0.0213	
657	Pratapgarh	Lalganj2	9	0.1860		8	0.2562	
658	Pratapgarh	Udai Shahpur	5			6	0.6480	
659	Pratapgarh	Lalgopalganj	10		0.1855	8	0.1493	
660	Pratapgarh	Narainpur	5			6	0.5840	
661	Pratapgarh	Garhi Manikpur	2			7	0.5899	
662	Pratapgarh	Bishahia	10		0.1594	8	0.0657	
663	Pratapgarh	Kunda	10		0.2130	8	0.1749	
664	Pratapgarh	Gutni	10	0.1421		8	0.2079	
665	Pratapgarh	Gaura 1	4			6	0.0704	
666	Rae Bareli	Mohanganj1	9		0.0337	10	0.0886	
667	Rae Bareli	Jagatpur	8		0.0291	10	0.0101	
668	Rae Bareli	Jais	9	0.0242		9	0.0612	
669	Rae Bareli	Harchandpur	6		0.1762	8		0.3096
670	Rae Bareli	Fursatganj	9		0.2106	10	0.0090	
671	Rae Bareli	Simrauta	8		0.0579	9	0.0315	
672	Rae Bareli	Bhawanigarh	8		0.2092	9	0.0192	
673	Rae Bareli	Simrauta(Ii)	9		0.0085	10	0.1365	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
674	Rae Bareli	Chauraha Dusti	9	0.0042		10	0.0361	
675	Rae Bareli	Kachunda	8		0.0584	10	0.0128	
676	Rae Bareli	Nigohan1	9		0.0488	10	0.0136	
677	Rae Bareli	Laxmanganj bazar	7	0.0397		10	0.0188	
678	Rae Bareli	Katghar	8		0.0375	10	0.0284	
679	Rae Bareli	Suchi	6		0.2902	6		0.4491
680	Rae Bareli	Dhonda Ka Purwa	8		0.0740	10		0.0132
681	Rae Bareli	Ahraura Bhawani	5			9	0.0804	
682	Rae Bareli	Cheek Daadar	8		0.5108	8		0.1336
683	Rae Bareli	Mazzamganj Ngr	6		0.0324	6		0.3653
684	Rae Bareli	Matrwa	9	0.1039		10	0.0266	
685	Rae Bareli	Mau Garbi	9		0.1343	10	0.0081	
686	Rae Bareli	Kumbhi Ka Purwa	8		0.1361	10		0.0830
687	Rae Bareli	Domapur	7		0.5534	9		0.8770
688	Rae Bareli	Hunsepur	6		0.9768	9		0.4463
689	Rae Bareli	Binjh	6		0.4830	9		0.2683
690	Rae Bareli	Dalmau-1	4			8	0.1609	
691	Rae Bareli	Kheron Pz (Gwd)	4			6	0.0895	
692	Rae Bareli	Gopalipur	9		0.1115	10		0.0311
693	Rae Bareli	Rawalpur	6		0.1049	6	0.0368	
694	Rampur	Pahari Dis	3			6		0.1777
695	Rampur	Bilaspur Pz Cgwb	5			7	0.4555	
696	Rampur	Shahabad Pz Gwd	7		0.3248	10		0.2632
697	Rampur	Tanda	3			9		0.0021
698	Saharanpur	Sunderpur1	5			9	0.5083	
699	Saharanpur	Ghuna	8		0.0460	8		0.0294
700	Saharanpur	Mainpura Pz Gwd	6		0.3401	7	0.2418	
701	Saharanpur	Lundi Pz Gwd	6		0.2349	5		
702	Saharanpur	Siriska Pz Gwd	3			6	0.1126	
703	Saharanpur	Dhaura Kuan	6		0.1502	8		0.1389
704	Saharanpur	Tilhari Buzurg	7	0.1193		7	0.1266	
705	Saharanpur	Nanauta Pz Gwd	8	0.0399		8	0.1609	
706	Saharanpur	Rampur Pz Gwd	7		0.2985	6		0.1554
707	Saharanpur	Tikrol Pz Gwd	7		0.2037	7		0.1626
708	Saharanpur	Babail Buzurg	8	0.0330		8	0.1185	
709	Saharanpur	Shakhambari	7	0.1443		9		0.0190

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
710	Saharanpur	Mohand	7		0.1413	7	0.0292	
711	Saharanpur	Bagh Colony	9		0.4910	7		0.0120
712	Sant Kabir Nagar	Khalilabad	8	0.2069		9	0.0376	
713	Sant Kabir Nagar	Nathnagar	8	0.0667		9		0.1003
714	Sant Kabir Nagar	Dhanghata	9	0.0762		8	0.0825	
715	Sant Kabir Nagar	Maidawal	9	0.0554		9	0.0423	
716	Sant Ravidas Nagar	Aurai	9	0.2961		10	0.2377	
717	Sant Ravidas Nagar	Suriyawan	5			7	0.2195	
718	Sant Ravidas Nagar	Koirauna	9	0.1744		10	0.2205	
719	Sant Ravidas Nagar	Pali1	7	0.2606		10	0.5906	
720	Shahjahanpur	Banda2(Pasyapur)	4			6		0.5838
721	Shahjahanpur	Sidhaul	3			9		0.0852
722	Shahjahanpur	Sehramau	5			6	0.0704	
723	Shahjahanpur	Shahjahanpur1	6	0.4137		9	0.1751	
724	Shrawasti	Sirsia1	8	0.1090		10	0.1597	
725	Shrawasti	Shrawasti	7	0.2507		9	0.0459	
726	Shrawasti	Laxman Nagar	7	0.2416		9	0.0450	
727	Shrawasti	Pratapur	9	0.0808		10	0.0634	
728	Shrawasti	Pakaria	9	0.0826		10	0.0246	
729	Shrawasti	Ratanpur	9	0.1594		10	0.0001	
730	Shrawasti	Bhujanga	9	0.3501		10	0.1251	
731	Shrawasti	Tulsipur2	9		0.0475	10	0.0211	
732	Shrawasti	Bhagwanpur	8	0.1575		10	0.0472	
733	Shrawasti	Madora Chowki	7	0.1261		10	0.0381	
734	Shrawasti	Dikauli	9	0.1871		9	0.0131	
735	Shrawasti	Lachmanpur	6		0.0516	4		
736	Shrawasti	Sirsia Pz(Gwd)	5			6	0.1943	
737	Siddharthnagar	Bansi1	9	0.2232		10	0.0513	
738	Siddharthnagar	Dumariaganj	8	0.1731		10	0.0434	
739	Siddharthnagar	Parsa	9	0.0604		10		0.0272

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
740	Siddharthnagar	Birdpur	9	0.1506		10	0.0971	
741	Siddharthnagar	Badhni	9	0.0276		10	0.0034	
742	Siddharthnagar	Uska	9	0.2365		10	0.0883	
743	Siddharthnagar	Ramnagara	9	0.1269		10	0.0735	
744	Siddharthnagar	Kajhai	8	0.1516		9	0.0416	
745	Siddharthnagar	Chilihia	9	0.2344		10	0.0376	
746	Siddharthnagar	Belwa Laghunahi	9	0.1278		10	0.0579	
747	Siddharthnagar	Itwa Pz (Gwd)	5			6	0.0727	
748	Sitapur	Purwara Gosai	9	0.0479		10	0.0160	
749	Sitapur	Jahangirabad	10	0.0091		10	0.0847	
750	Sitapur	Madnapur	10	0.0062		10	0.0787	
751	Sitapur	Hargaon	7		0.0895	10		0.1150
752	Sitapur	Karauna	10		0.5444	9		0.4131
753	Sitapur	Deokalia	8		0.2274	9		0.1854
754	Sitapur	Biutmani	9		0.1007	10		0.1345
755	Sitapur	Kutub Nagar	7		0.1701	4		
756	Sitapur	Manpur Chowki	6		0.3300	7		0.2862
757	Sitapur	Khamaria	10		0.2978	10		0.3376
758	Sitapur	Dhoudhi	5			8		0.2544
759	Sitapur	Biswan2	10		0.1429	11		0.1653
760	Sitapur	Misrikh1	10		0.2125	10		0.1812
761	Sitapur	Sanda	7	0.0144		7	0.1317	
762	Sitapur	Behta	8	0.0452		7	0.2421	
763	Sitapur	Naimisharanya-1	6	1.0863		6	0.9270	
764	Sitapur	Rampur Mathura Pz-Gwd	7	0.0365		8	0.0419	
765	Sitapur	Laharpur Pz-Gwd	6		0.1036	7		0.0054
766	Sitapur	Maholi Pz-Gwd	7		0.1586	7	0.2715	
767	Sitapur	Machchretapz-Gw D	7		0.5126	8		0.3450
768	Sonbhadra	Bhagwan Nagar	8	0.5717		9	0.5319	
769	Sonbhadra	Dudhi	9	0.0770		10	0.1543	
770	Sonbhadra	Muirpur	8	0.1104		10	0.0182	
771	Sonbhadra	Babhani	9	0.1025		10		0.0423
772	Sonbhadra	Markundi	6		0.0264	6	0.0884	
773	Sonbhadra	Bairpan	7	0.7505		10	0.3576	

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
774	Sonbhadra	Jarha	9	0.0908		10	0.0423	
775	Sonbhadra	Dhrtidand1	6	0.1660		10	0.0682	
776	Sonbhadra	Anpara	7		0.0704	10		0.0518
777	Sonbhadra	Gara	6	0.2654		10		0.1023
778	Sonbhadra	Hatinala	8	0.2109		10		0.0600
779	Sonbhadra	Chopan	8	0.4228		9	0.0777	
780	Sonbhadra	Renukoot	2			6		0.6715
781	Sonbhadra	Ghorawal1	6	0.4264		10		0.0956
782	Sonbhadra	Shahganj	4			8	0.1994	
783	Sonbhadra	Son Barsa	4			10	0.0165	
784	Sonbhadra	Kakrahi	5			7	0.1732	
785	Sonbhadra	Robertsganj1	4			10	0.3021	
786	Sultanpur	Musafirkhana	9	0.0573		10	0.0770	
787	Sultanpur	Kadipur	9		0.0282	10	0.1125	
788	Sultanpur	Sultanpur2	9	0.2396		10	0.1179	
789	Sultanpur	Kurebhar1	9	0.1064		10	0.0894	
790	Sultanpur	Jagdishpur2	6		0.2589	8		0.3643
791	Sultanpur	Trisundi	9	0.0443		9	0.0410	
792	Sultanpur	Maniari Aliganj	4			7	0.1103	
793	Sultanpur	Pratushmanik	8	0.0836		10	0.1707	
794	Sultanpur	Khaluhat1	9		0.0311	10	0.1128	
795	Sultanpur	Naghipur Bajhan	8	0.1941		10		0.0159
796	Sultanpur	Kutta	7	0.1310		10	0.2301	
797	Sultanpur	Khutahna	9		0.0035	10	0.0921	
798	Sultanpur	Bhatgaon	3			10		0.1292
799	Sultanpur	Babuganj	7		0.0000	9	0.1539	
800	Sultanpur	Munshiganj1	8	0.0241		10	0.1254	
801	Sultanpur	Mundawa	9	0.0153		9	0.0669	
802	Sultanpur	Bhim Pashim	9		0.0396	9		0.1188
803	Sultanpur	Mahona	8		0.0202	10	0.1455	
804	Sultanpur	Mardanpur	5			9	0.0356	
805	Sultanpur	Sathin	6		0.4841	8		0.2683
806	Sultanpur	Janapur	8		0.0189	10		0.1161
807	Sultanpur	Sikrabad (Para)	6		0.5939	7		0.3627
808	Sultanpur	Bahurawa	2			9	0.0555	
809	Sultanpur	Kurwar	7		0.1182	10		0.1044

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
810	Sultanpur	Ramgarh1	8	0.0747		10	0.0848	
811	Sultanpur	Shivgarh	8		0.0128	10		0.1180
812	Sultanpur	Sagardeh	8	0.0394		9	0.0283	
813	Sultanpur	Badgaon	8		0.1921	10		0.3400
814	Sultanpur	Dariyan Ka Purw	8	0.0802		9		0.1023
815	Sultanpur	Bhadar	8	0.0730		10	0.1712	
816	Sultanpur	Kusitali	8	0.0280		10	0.0046	
817	Sultanpur	Goriabad	8	0.3590		10	0.0103	
818	Sultanpur	Piparpur	9		0.0037	10		0.0351
819	Sultanpur	Lambua Pz-Gwd	5			8	0.3345	
820	Sultanpur	Bhadayian Pz-Gwd	6		0.2430	8		0.3653
821	Sultanpur	Kotra Khurd	7		0.0148	7	0.2600	
822	Sultanpur	Pratap Pur Kamaicha (Pz Gwd)	4			6	0.0658	
823	Sultanpur	Gauriganj New -2	3			6	0.1839	
824	Unnao	Auras	6		0.0630	10		0.0215
825	Unnao	Maurawan	9		0.1164	9		0.1569
826	Unnao	Tonda	8		0.0759	9	0.0383	
827	Unnao	Kantha	5			6		0.8923
828	Unnao	Makur	7		0.1750	9		0.0598
829	Unnao	Hasewan	6		0.0290	9	0.0664	
830	Unnao	Safipur1	5			8		0.3274
831	Unnao	Unnao	6		0.6474	7		0.7072
832	Unnao	Purwa	5			7	0.1182	
833	Unnao	Unchagaon1	8		0.3298	10		0.1915
834	Unnao	Sumerpur	9		0.3795	10		0.3150
835	Unnao	Thaura	9		0.0883	10		0.0071
836	Unnao	Ganj Moradabad	3			8		0.0943
837	Unnao	Chakalvanshi	6		0.0276	9		0.0309
838	Unnao	Azmatnagar	9		0.1597	10		0.0262
839	Unnao	Methi Tikur	9		0.0555	10	0.0419	
840	Unnao	Sikanderpur1	4			9		0.0300
841	Unnao	Unchagaon Kila	5			9	0.0880	
842	Unnao	Pinjra	8		0.1832	8		0.1395
843	Unnao	Malauna	8		0.0159	10		0.0351

Sl No.	District	Location	Pre-Monsoon			Post-Monsoon		
			Data Points	Pre Rise (m/year)	Pre Fall (m/year)	Data Points	Post Rise (m/year)	Post Fall (m/year)
844	Unnao	Bhagwant Nagar	5			6		0.6842
845	Unnao	Baksar	8		0.1083	8		0.0217
846	Unnao	Santakhera	4			7		0.0408
847	Varanasi	Cholapur1	5			6		0.2537
848	Varanasi	Chobepur	9	0.5206		10	0.4295	
849	Varanasi	Varanasi	9	0.3664		10	0.4093	
850	Varanasi	Thatra	6	0.3673		8	0.1773	
851	Varanasi	Tahipur	8	0.1373		6	0.0846	
852	Varanasi	Kakrahwani	6	0.2756		5		
853	Varanasi	Rajatalab1	7	0.6229		9	0.6509	
854	Varanasi	Anai	7	0.2941		10	0.0593	
855	Varanasi	Jikhan(Narsara)	9	0.4076		10	0.6284	
856	Varanasi	Rustampur	8	0.2987		9	0.3180	

**CHEMICAL ANALYSIS DATA OF SAMPLES COLLECTED FROM GROUND WATER
MONITORING WELLS IN UTTAR PRADESH, 2021-22**

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
1	Agra	Achhnera	7.62	9048	0	458	1917	0.86	0	1000	2350	348	355	900	6.1	22
2	Agra	Akola	7.64	8194	0	445	1704	0.78	39	921	1650	164	298	1125	19	22
3	Agra	Bah	7.83	1426	0	366	170	0.51	108	29	440	60	70	109	3.0	33
4	Agra	Barauli Ahir	7.89	1725	0	537	156	0.66	0	232	340	48	53	281	4.6	19
5	Agra	Bichpuri	7.76	2946	0	439	320	0.54	0	747	640	68	113	449	6.7	21
6	Agra	Etmadpur	8.12	4955	0	390	639	2.0	0	1312	420	80	53	1064	5.6	16
7	Agra	Fatehabad	8.08	2856	0	610	305	1.6	12	481	295	40	47	463	2.0	21
8	Agra	Fatehpur Sikri	7.73	2509	0	415	312	0.24	23	444	320	56	43	432	2.1	39
9	Agra	Jagner	8.23	2192	0	830	213	2.5	12	192	190	32	26	431	2.3	23
10	Agra	Jaitpur Kalan	8.09	760	0	268	57	0.99	0	47	240	48	29	59	2.5	17
11	Agra	Khandauli	7.68	3226	0	500	596	0.73	111	219	680	64	125	449	3.8	23
12	Agra	Kheragarh	7.62	6507	0	390	1299	0.40	14	1363	1880	264	293	795	3.8	30
13	Agra	Pinhat	7.89	969	0	390	57	0.70	16	35	295	56	37	64	4.4	29

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
14	Agra	Saiyan	8.20	1566	0	549	99	0.60	8.1	229	300	48	43	254	1.3	25
15	Agra	Shamsabad	7.87	1204	0	439	107	0.94	47	16	410	44	72	95	2.9	30
16	Aligarh	Akrabad	7.66	1515	0	305	128	0.33	217	102	380	52	60	135	16.3	25
17	Aligarh	Dhanipur	7.95	622	0	366	14	0.79	3.2	21	190	24	31	67	6.7	22
18	Aligarh	Jawan	7.77	750	0	342	21	0.57	4.4	96	230	32	36	79	6.2	26
19	Aligarh	Atrauli	8.51	968	18	317	106	0.40	11	37	340	8.0	77	69	9.9	27
20	Aligarh	Gangiri	8.10	1382	0	634	71	0.52	36	30	160	12	31	255	5.7	28
21	Aligarh	Bijauli	8.34	1620	12	329	191	0.21	38	135	210	8.0	46	266	6.6	31
22	Aligarh	Chandaus	8.36	531	18	232	21	0.61	19	12	120	4.0	26	73	4.8	25
23	Aligarh	Tappal	7.89	1173	0	390	71	1.9	30	116	210	28	34	172	4.3	24
24	Aligarh	Khair	8.45	3188	42	659	383	1.1	92	219	240	8.0	53	708	13.6	25
25	Aligarh	Lodha	8.54	869	30	366	35	0.42	13	32	140	8.0	29	155	10.6	26
26	Aligarh	Gonda	8.12	3790	0	525	503	0.62	16	521	380	12	84	729	14.6	24
27	Aligarh	Iglas	7.76	960	0	403	50	0.47	9.9	73	240	32	38	114	4.1	22
28	Ambedkar Nagar	Akberpur	8.13	436	0	244	14	0.13	0	4.8	150	13	29	32	3.4	28

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
29	Ambedkar Nagar	Baskhari	7.94	351	0	183	14	0.15	19	8.8	160	25	24	16	2.0	28
30	Ambedkar Nagar	Bhiti	7.72	518	0	317	14	0.36	0	3.9	230	29	38	25	3.5	28
31	Ambedkar Nagar	Bhiyaon	8.16	450	0	244	21	0.30	9.3	17	190	21	34	29	2.8	29
32	Ambedkar Nagar	Jahangirganj	8.23	366	0	244	14	0.27	0	1.3	150	13	29	30	2.6	31
33	Ambedkar Nagar	Jalalpur	7.93	833	0	329	99	0.03	17	13	240	17	48	87	4.6	30
34	Ambedkar Nagar	Katehari	8.23	474	0	220	35	0.10	0	11	170	13	34	32	3.0	27
35	Ambedkar Nagar	Ramnagar	8.27	418	0	244	14	0.58	0	21	220	46	26	6.7	2.5	25
36	Ambedkar Nagar	Tanda	8.14	420	0	220	21	0.05	0	13	180	25	29	20	3.0	30
37	Auraiya	Achhalda	8.46	482	36	207	14	1.8	0	6.3	140	16	24	55	2.3	28
38	Auraiya	Airwa Katra	8.12	964	0	488	35	0.57	0	67	250	40	36	120	12	27
39	Auraiya	Ajitmal	8.53	674	48	244	35	0.71	6.9	23	150	16	26	96	2.9	36
40	Auraiya	Auraiya	7.83	1019	0	146	163	0.00	103	47	310	52	43	80	3.4	39
41	Auraiya	Bhagya Nagar	8.52	685	36	317	21	0.28	11	19	250	16	50	54	3.4	35
42	Auraiya	Bidhuna	8.62	887	48	378	43	0.56	5.0	33	260	12	55	99	8.2	32
43	Auraiya	Sahar	8.21	1136	0	586	57	0.98	7.0	46	360	72	43	114	6.1	32

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
44	Azamgarh	Ahiraula	8.23	406	0	238	7.1	0.47	3.2	2.3	155	6.0	34	25	2.6	27
45	Azamgarh	Atraulia	7.86	482	0	287	7.1	0.22	0.06	2.4	180	20	31	37	3.2	28
46	Azamgarh	Azmatgarh	7.81	525	0	268	21	0.47	1.9	8.0	215	16	42	24	2.0	29
47	Azamgarh	Bilariyaganj	7.95	700	0	305	50	0.35	1.4	17	215	6.0	48	62	4.2	27
48	Azamgarh	Harraiya	7.92	510	0	293	11	0.40	6.2	3.4	215	42	26	37	2.7	31
49	Azamgarh	Jahanaganj	7.87	644	0	378	14	0.21	4.3	1.9	260	16	53	39	2.4	29
50	Azamgarh	Koyalsa	8.26	395	0	195	14	0.03	0.29	12	90	6.0	18	51	3.5	29
51	Azamgarh	Lalganj	8.44	617	18	287	21	0.28	9.6	19	170	4.0	38	72	6.5	25
52	Azamgarh	Maharajganj	8.01	372	0	220	7.1	0.07	1.3	1.1	160	46	11	11	2.3	25
53	Azamgarh	Mehnagar	7.94	434	0	244	7.1	0.77	0.47	14	165	24	25	29	2.9	23
54	Azamgarh	Mirzapur H.Q.	7.88	641	0	354	35	0.23	0.09	6.3	240	16	48	46	3.6	25
55	Azamgarh	Mohammadpur	8.33	617	21	329	11	1.2	0.72	4.7	160	6.0	35	81	1.9	25
56	Azamgarh	Palhana	8.26	1116	0	628	7.1	6.8	3.1	5.5	15	4.0	1	293	0.40	15
57	Azamgarh	Palhani	7.72	806	0	360	50	0.28	2.5	43	320	30	59	44	3.9	23
58	Azamgarh	Pawai	8.21	489	0	293	11	0.33	0.11	2.3	165	6.0	36	44	2.7	25

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
59	Azamgarh	Phoolpur	8.02	448	0	262	7.1	0.28	1.7	1.9	190	14	37	25	2.6	27
60	Azamgarh	Rani Ki Sarai	7.91	551	0	329	7.1	0.53	0.12	5.8	225	22	41	37	1.8	27
61	Azamgarh	Sathiaon	7.94	688	0	390	18	0.48	0.18	4.2	180	16	34	88	1.6	25
62	Azamgarh	Tahabarpur	7.90	426	0	214	11	0.31	1.7	6.0	180	24	29	17	1.9	25
63	Azamgarh	Tarwa	8.72	1062	27	586	14	1.4	0.90	2.9	60	4.0	12	228	1.1	20
64	Azamgarh	Thekma	7.97	498	0	287	11	0.37	0.07	6.5	180	16	34	40	4.4	27
65	Baghpat	Chapruli	7.87	1225	0	451	92	0.38	20	66	330	64	41	104	6.4	32
66	Baghpat	Baghpat	8.24	1154	0	458	32	0.57	0	76	200	40	24	152	4.0	27
67	Baghpat	Binauli	8.23	1140	0	342	107	0.32	36	90	195	52	16	188	4.7	33
68	Baghpat	Baraut	8.17	898	0	238	64	1.5	85	51	270	32	46	75	2.9	23
69	Baghpat	Pilana	8.24	1492	0	622	64	0.42	22	110	325	56	44	209	7.3	30
70	Baghpat	Khekra	8.23	1206	0	439	60	0.47	12	74	380	48	62	91	6.1	28
71	Bahraich	Jarwal H.Q.	8.03	998	0	262	128	1.3	0	76	350	40	60	70	13	16
72	Bahraich	Kaisarganj H.Q.	8.06	1065	0	512	43	0	0	15	500	120	48	10	3.7	27
73	Bahraich	Fakarpur H.Q.	8.43	990	18	287	114	0.11	0	24	245	20	47	68	45	21

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
74	Bahraich	Fejawapur H.Q.	8.22	535	0	250	25	0	0	0	210	24	36	15	4.8	26
75	Bahraich	Mahasi H.Q.	7.80	1174	0	342	121	0.10	0	91	390	84	43	67	26	20
76	Bahraich	Shivpur H.Q.	7.73	716	0	372	14	0	0	0	300	56	38	14	5.2	28
77	Bahraich	Balha H.Q.	7.78	678	0	329	21	0.15	0	10	290	64	31	10	4.2	27
78	Bahraich	Nawabganj	8.31	547	0	232	36	0.40	0	8.5	230	24	41	12	2.6	30
79	Bahraich	Mihipurwa	8.16	725	0	378	14	0.87	0	0	310	76	29	9.0	1.8	30
80	Bahraich	Risia H.Q.	7.98	558	0	226	28	0.15	0	28	245	48	30	12	2.7	27
81	Bahraich	Huzurpur	7.82	603	0	311	14	0	0	0	250	52	29	15	3.5	27
82	Bahraich	Bisheshwarganj H.Q.	8.09	587	0	299	14	0.21	0	0	250	52	29	10	1.9	31
83	Bahraich	Payagpur H.Q.	7.97	578	0	275	28	0.12	0	11	270	48	36	15	2.7	30
84	Bahraich	Chittaura H.Q.	7.98	574	0	293	14	0.39	0	5.9	240	56	24	10	3.1	29
85	Ballia	Bairya	7.74	585	0	293	14	0.03	1.9	11	180	56	10	15	2.8	20
86	Ballia	Bansdeeh	8.38	1371	18	293	156	0.04	22	70	120	4.0	26	283	1.8	25
87	Ballia	Belhari	7.96	866	0	244	78	0.21	1.6	72	250	36	38	66	35	20

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
88	Ballia	Beruwarbari	7.78	422	0	232	7.1	0.14	0.10	9.9	190	8.0	41	12	2.5	22
89	Ballia	Chilkahar	7.74	598	0	366	7.1	0.58	2.6	1.5	245	20	47	37	2.5	27
90	Ballia	dubahar	7.93	521	0	287	18	0.33	2.0	0.58	195	24	32	40	4.0	27
91	Ballia	Garwar	8.33	484	21	244	14	0.24	0.23	2.2	175	6.0	38	43	3.6	25
92	Ballia	Hanumanganj	8.27	346	0	201	7.1	0.43	1.3	1.5	145	16	25	22	2.5	27
93	Ballia	Maniyar	8.05	327	0	177	7.1	0.06	0.46	4.8	95	14	14	33	7.2	25
94	Ballia	Murali Chhapara	8.13	302	0	177	7.1	0.00	0.69	1.5	125	10	24	18	2.8	22
95	Ballia	Nawa Nagar	8.05	266	0	140	7.1	0.13	0.09	8.1	110	18	16	13	2.4	24
96	Ballia	Negara	8.01	292	0	159	11	0.08	0.34	3.1	100	12	17	24	3.4	25
97	Ballia	Pandah	7.87	400	0	220	14	0.09	0.10	3.8	165	18	29	25	3.3	26
98	Ballia	Rasara	8.47	802	24	409	14	0.57	0.43	19	130	4.0	29	202	1.6	22
99	Ballia	Reoti	7.92	278	0	159	7.1	0.23	2.3	0.87	115	28	11	11	0.9	22
100	Ballia	Siyar	8.15	315	0	171	11	0.13	0.12	5.7	110	14	18	34	2.7	27
101	Ballia	Sohaon	8.01	380	0	220	7.1	0.15	1.3	1.0	130	18	20	41	3.1	19

S.No.	District	Block	pH	EC μS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
102	Balrampur	Harraiya Satgharwa H.Q.	8.46	894	24	409	14	0	0	10	250	24	46	72	1.8	22
103	Balrampur	Tulsipur	7.89	448	0	268	14	0.52	0	7.6	200	28	31	19	1.2	27
104	Balrampur	Balrampur H.Q.	7.61	536	0	305	21	0.25	0	7.8	250	68	19	14	2.7	32
105	Balrampur	Utraula	8.04	487	0	256	21	0	0	0	190	40	22	14	4.2	29
106	Balrampur	Gaidas Buzurg H.Q.	8.19	522	0	305	14	0.12	0	0	220	32	34	16	3.0	33
107	Balrampur	Rehra Bazar H.Q.	8.13	651	0	220	71	0.26	0	22	280	40	43	21	3.5	27
108	Balrampur	Sriduttaganj H.Q.	8.15	523	0	250	21	0	0	9.0	210	32	31	25	2.5	30
109	Balrampur	Pachperwa H.Q.	8.30	797	0	500	14	0	0	0	280	20	55	74	0	24
110	Balrampur	Gainsari H.Q.	8.13	544	0	171	71	0.58	0	11	220	44	26	16	2.3	23
111	Banda	Baberu	8.04	1635	0	671	113	0.79	52	80	440	48	77	172	22	31
112	Banda	Barokhar	7.83	1915	0	342	177	0.60	280	120	520	52	94	176	6.3	30
113	Banda	Bisanda	7.97	1407	0	573	128	0.45	8.0	44	430	20	91	134	1.6	33
114	Banda	Jaspura	7.88	562	0	317	21	0.18	5.0	6.0	160	24	24	70	2.3	34
115	Banda	Kamasin	8.21	835	0	464	28	0.55	13	15	130	12	24	152	1.1	31

S.No.	District	Block	pH	EC μS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
116	Banda	Mahua	8.10	925	0	512	28	0.66	14	17	140	12	26	172	1.3	34
117	Banda	Naraini	8.18	771	0	244	78	0.39	14	62	300	24	58	44	1.2	28
118	Banda	Tindwari	7.82	689	0	342	43	0.25	13	11	200	32	29	80	1.6	29
119	Barabanki	Trivediganj	8.04	524	0	305	14	0.76	10	20	250	16	51	23	3.9	31
120	Barabanki	Banki	8.32	800	36	329	14	0.57	0	16	788	36	24	82	4.3	27
121	Barabanki	Dewa	8.07	610	0	281	14	0.67	0	13	672	48	24	19	5.7	24
122	Barabanki	Fatehpur	7.99	847	0	366	35	0.15	0	32	1600	80	26	32	5.5	21
123	Barabanki	Ramnagar	7.98	610	0	207	35	0.21	0	39	1936	44	24	25	3.3	27
124	Barabanki	Suratganj	7.89	2000	0	793	175	0.28	12	41	2050	40	46	272	65	37
125	Barabanki	Sirauli Gauspur	8.24	391	0	146	14	0.25	0	24	1221	32	17	8.0	2.1	17
126	Barabanki	Daraiyabad	8.13	620	0	317	14	0.87	0	8.9	443	32	31	38	2.8	29
127	Barabanki	Puredalai	8.15	485	0	220	14	0.27	0	2.9	145	28	24	17	1.9	27
128	Barabanki	Banikodar	7.92	609	0	293	14	0.24	0	12	600	36	29	33	3.2	30
129	Barabanki	Masauli	7.96	700	0	317	14	0.77	0	29	1432	44	34	30	3.6	28
130	Barabanki	Harak	8.07	706	0	342	14	0.59	0	6.0	299	28	41	29	5.1	27

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
131	Barabanki	Siddharthnagar	7.98	760	0	342	35	0.07	0	23	1153	48	36	33	18	23
132	Barabanki	Haidergarh	8.05	700	0	354	7.0	0.61	0	14	687	28	46	29	4.2	30
133	Barabanki	Nindura	8.16	531	0	256	14	0.55	0	12	578	24	34	21	4.3	29
134	Barabanki	Mawai	8.08	610	0	317	14	0.56	0	2.6	129	32	38	21	2.4	25
135	Barabanki	Rudauli	8.01	615	0	281	28	0.56	0	15	750	36	34	25	4.2	30
136	Bareilly	Alampur Jafarabad	8.10	528	0	256	21	0.42	0	38	110	24	12	77	2.8	25
137	Bareilly	Baheri	7.90	312	0	159	7.1	0.62	0	15	105	36	3.6	23	2.6	23
138	Bareilly	Bhadpura	7.80	420	0	207	14	0.39	0.51	4.2	140	20	22	23	4.7	26
139	Bareilly	Bhojipura	8.10	261	0	134	7.1	0.39	0	14	120	40	4.8	6.4	2.8	24
140	Bareilly	Bhutah	7.60	356	0	195	7.1	0.41	0	9.0	165	40	16	7.2	2.8	27
141	Bareilly	Bithri Chainpur	7.70	401	0	195	21	0.42	0	16	135	40	8.4	28	9.7	27
142	Bareilly	Faridpur	8.09	357	0	146	21	0.42	1.5	21	135	48	3.6	17	3.1	24
143	Bareilly	Fatehganj West	8.20	394	0	220	14	0.36	0	7.1	65	20	3.6	65	2.0	25
144	Bareilly	Kiyara	7.70	414	0	220	21	0.28	0	21	180	40	19	23	3.7	28
145	Bareilly	Majhgawan	8.01	656	0	293	28	0.42	0.53	46	120	28	12	96	1.9	26

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
146	Bareilly	Meerganj	7.90	551	0	299	21	0.36	0.67	14	190	44	19	43	2.7	22
147	Bareilly	Nawabganj	8.13	408	0	207	7.1	0.51	0	21	110	24	12	43	2.2	27
148	Bareilly	Ram Nagar	7.60	408	0	183	14	0.29	29	27	190	72	2.4	13	2.6	38
149	Bareilly	Richha	8.01	398	0	195	14	0.59	0	22	70	12	10	62	2.5	25
150	Bareilly	Shergarh	8.04	566	0	281	35	0.32	0.87	17	185	52	13	7.5	77	27
151	Basti	Rudauli H.Q.	7.93	2840	0	952	227	1.5	0	271	340	28	65	456	0	26
152	Basti	Saunghat H.Q.	7.87	670	0	329	21	0.59	0	10	290	48	41	7.7	2.0	32
153	Basti	Basti Sadar H.Q.	7.70	666	0	329	28	0.50	0	10	290	60	34	29	0	49
154	Basti	Saltauwa Gopalpur H.Q.	7.90	860	0	488	14	0.78	0	0	360	36	65	26	2.6	31
155	Basti	Ramnagar H.Q.	8.19	650	0	329	14	0.66	0	5.9	230	28	38	30	3.0	32
156	Basti	Gaur H.Q.	7.80	1345	0	262	241	0.35	0	63	490	80	70	68	1.3	29
157	Basti	Bahadurpur H.Q.	8.00	685	0	342	21	0.63	0	0	240	44	31	33	2.6	30
158	Basti	Dubauliya H.Q.	8.19	570	0	293	14	0.50	0	0	250	32	41	4.9	2.6	33
159	Basti	Kudraha H.Q.	8.03	598	0	299	18	0.54	0	0	280	44	41	0	2.3	30

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
160	Basti	Bankati H.Q.	8.24	434	0	220	7.1	0.38	0	10	200	44	22	2	1.9	30
161	Basti	Kaptanganj H.Q.	7.99	1175	0	329	149	0.39	0	69	245	40	35	131	5.3	24
162	Basti	Harraiya Satgharwa H.Q.	8.26	447	0	232	14	0.67	0	5.1	200	28	31	2.9	0	27
163	Basti	Vikramjot H.Q.	8.18	529	0	268	14	0.64	0	0	240	48	29	3.8	2.4	31
164	Basti	Parasurampur H.Q.	8.26	597	0	262	36	0.68	0	7.6	230	24	41	24	1.8	26
165	Bijnor	Budhanpur (Seohara)	7.99	337	0	201	11	0.26	0	0	140	28	17	20	2.7	18
166	Bijnor	Alhepur	7.79	410	0	207	28	1.2	0	5.1	160	48	10	30	2.3	30
167	Bijnor	Afzalgarh	7.78	374	0	207	14	1.0	0	0	180	56	10	10	1.1	27
168	Bijnor	Aku (Nehtaur)	7.62	319	0	165	14	0.84	0	0	135	32	13	17	3.6	33
169	Bijnor	Kotwali	7.68	384	0	207	14	1.1	0	5.4	150	32	17	28	2.3	30
170	Bijnor	Najibabad	7.76	569	0	281	21	1.3	0	11	225	36	32	32	1.6	27
171	Bijnor	Kirtapur	7.61	723	0	232	71	0.68	0	55	300	56	38	31	10	24
172	Bijnor	Mohammadpur Deomal	7.78	787	0	281	53	0.72	0	70	285	36	47	47	21	18

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
173	Bijnor	Khari jhalu	7.80	304	0	159	11	0.88	0	0	130	32	12	13	4.7	31
174	Bijnor	Noorpur	7.69	550	0	238	43	0.71	0	20	240	44	31	24	6.5	36
175	Bijnor	Jaleelpur	7.90	482	0	195	18	1.0	0	53	220	68	12	18	4.3	29
176	Budaun	Rajpura	8.06	338	0	177	14	1.1	0	8.7	130	32	12	23	5.5	31
177	Budaun	Gunnaur	8.07	928	0	220	64	0.78	53	148	250	20	48	89	53	31
178	Budaun	Junawahi	8.07	470	0	220	21	0.80	0	36	190	20	34	29	5.7	28
179	Budaun	Dahigawaan	8.20	917	0	201	99	0.85	15	133	210	28	34	126	5.2	27
180	Budaun	Sahswan	8.02	357	0	183	21	0.98	0	10	150	36	14	19	2.9	28
181	Budaun	Badaun(hq)	7.92	494	0	134	64	0.75	0	47	175	20	30	42	6.2	35
182	Budaun	Jagat	8.12	371	0	207	14	1.1	0	6.1	170	48	12	13	4.2	30
183	Budaun	Dataganj	7.80	419	0	220	7.1	0.92	0	11	150	56	2.4	30	4.1	33
184	Budaun	Samrer	8.23	486	0	293	14	1.1	0	6.2	40	12	2.4	98	0	25
185	Budaun	Miaon	7.65	463	0	207	28	0.81	0	23	175	40	18	31	5.3	32
186	Budaun	Usawan	7.59	456	0	134	43	0.91	52	29	200	56	14	21	4.7	29
187	Budaun	Quadar Chowk	7.73	285	0	146	14	0.90	0	8.5	130	36	10	11	3.0	30

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
188	Budaun	Ujhani	7.53	1235	0	183	185	0.76	109	100	440	84	55	81	7.6	35
189	Budaun	Ambiapur	7.72	642	0	183	71	0.82	24	28	240	44	31	36	5.4	29
190	Budaun	Islamnagar	8.17	380	0	220	7.1	1.1	0	0	125	48	1.2	22	4.0	33
191	Budaun	Asafpur	7.79	653	0	244	50	0.76	26	40	230	36	34	56	4.8	31
192	Budaun	Bisouli	7.75	594	0	232	43	0.81	5.5	34	230	36	34	36	8.7	30
193	Budaun	Wajirganj	7.76	508	0	256	28	0.87	0	7.9	150	28	19	56	5.5	32
194	Budaun	Salarpur	8.11	567	0	122	28	0.80	68	89	260	28	46	18	7.3	25
195	Bulandshahr	Danpur	7.90	688	0	354	21	0.03	9.8	23	150	20	24	107	4.7	31
196	Bulandshahr	Debai	8.27	618	0	293	14	0.58	0.63	43	120	12	22	103	4.7	25
197	Bulandshahr	Anupshahr	8.09	438	0	268	7.1	0.64	2.0	11	180	24	29	26	4.7	32
198	Bulandshahr	Jahangirabad	8.22	779	0	366	28	0.14	30	24	150	16	26	134	6.8	30
199	Bulandshahr	Unchagaon	8.12	422	0	134	14	0.00	52	37	190	24	31	7	4.7	20
200	Bulandshahr	Siyana	7.85	859	0	256	92	0.00	29	30	220	28	36	89	6.4	31
201	Bulandshahr	Bhagwan Bahadur Nagar	7.87	542	0	317	14	0.43	0.45	6.5	200	28	31	41	6.6	25

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
202	Bulandshahr	Agauta	8.12	335	0	183	21	0.83	0.19	18	130	20	19	28	4.2	20
203	Bulandshahr	Gulaothi	7.84	621	0	293	28	0.67	0.37	43	270	32	46	26	3.7	21
204	Bulandshahr	Sikandrabad	8.68	1321	36	403	113	0.22	31	39	120	20	17	305	5.9	31
205	Bulandshahr	Khurja	8.27	777	0	329	35	0.39	9	53	150	12	29	108	5.7	27
206	Bulandshahr	Pahasu	7.70	533	0	171	43	0.04	36	35	220	40	29	14	4.8	29
207	Bulandshahr	Shikarpur	7.84	1777	0	378	213	0.55	43	127	270	36	43	235	7.4	30
208	Bulandshahr	Lakhaoti	8.34	560	12	232	21	0.75	13	49	170	8.0	36	59	6.3	23
209	Bulandshahr	Bulanshahr	7.98	259	0	146	7.1	0.17	0.79	21	110	28	10	7	2.0	16
210	Bulandshahr	Arnia	8.35	513	12	220	21	0.04	13	26	110	8.0	22	79	4.8	25
211	Chandauli	Barahani	7.91	747	0	110	128	0.43	32	59	230	48	26	86	1.6	22
212	Chandauli	Chahania	7.72	843	0	293	99	0.43	27	39	340	16	72	77	3.4	25
213	Chandauli	Chakiya	8.09	458	0	207	35	0.70	19	10	200	16	38	48	1.0	22
214	Chandauli	Chandauli	8.14	337	0	183	21	0.65	7.0	10	140	12	26	34	1.4	28
215	Chandauli	Dhanapur	8.32	674	18	403	14	0.69	0.21	4.7	220	8.0	48	111	2.9	27
216	Chandauli	Naugarh	8.04	340	0	122	35	0.05	6.8	14	130	24	17	38	1.4	11

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
217	Chandauli	Niyamatabad	8.67	1133	48	488	64	0.72	0.96	67	370	8.0	84	215	7.7	21
218	Chandauli	Sakaldiha	8.12	426	0	171	35	0.62	7.8	27	180	20	31	33	3.3	28
219	Chandauli	Shahabganj	7.92	361	0	183	14	0.14	11	10	150	36	14	35	0.9	28
220	Chitrakoot	Karvi	8.18	998	0	476	50	0.84	38	24	440	16	96	44	0.0	30
221	Chitrakoot	Manikpur	7.93	706	0	159	85	0.37	26	56	180	40	19	63	20	19
222	Chitrakoot	Mau	7.79	660	0	256	57	0.37	40	5.0	220	40	29	55	1.3	23
223	Chitrakoot	Pahari	8.05	875	0	159	128	0.96	40	48	170	36	19	106	1.4	68
224	Chitrakoot	Ram Nagar	8.45	817	0	305	78	0.60	31	15	180	12	36	103	4.9	23
225	Deoria	Baitalpur	7.56	520	0	207	57	0.00	0	41	210	52	19	36	5.3	32
226	Deoria	Bankara	7.62	880	0	281	21	0.00	0	230	340	80	34	78	3.4	27
227	Deoria	Barhaj	7.67	620	0	293	28	0.30	0	65	290	68	29	30	3.5	30
228	Deoria	Bhagalpur	8.11	380	0	195	14	0.00	0	35	180	36	22	17	3.2	25
229	Deoria	Bhaluwani	8.06	520	0	232	50	0.00	0	38	240	24	44	26	6.4	26
230	Deoria	Bhatani	8.15	430	0	268	14	0.39	0	0	160	28	22	38	3.0	35
231	Deoria	Bhatparani	7.76	480	0	293	21	0.14	0	0	250	52	29	13	3.1	36

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
232	Deoria	Deoria Sadar	7.92	440	0	122	71	0.00	0	23	180	60	7.3	17	3.4	36
233	Deoria	Desahi Deoria	8.16	480	0	232	21	0.17	12	35	230	28	39	18	3.2	38
234	Deoria	Gauri Bazar	8.15	380	0	183	21	0.00	0	25	190	44	19	8.2	2.3	33
235	Deoria	Lar	8.12	385	0	220	14	0.00	0	15	200	60	12	8.6	2.2	34
236	Deoria	Pather Dewa	8.09	340	0	171	21	0.00	0	21	170	36	19	8.4	1.6	32
237	Deoria	Rampur Karkhana	7.94	350	0	183	14	0.12	0	20	170	40	17	6.0	3.1	34
238	Deoria	Rudrapur	7.72	485	0	244	43	0.69	0	17	130	40	7.3	64	2.6	34
239	Deoria	Salempur	7.95	360	0	195	21	0.56	0	0	160	32	19	14	2.0	36
240	Deoria	Tarkulwa	7.99	380	0	195	28	0.11	0	12	170	32	22	15	3.6	30
241	Etah	Aliganj	7.89	570	0	305	21	0.94	7.6	6.4	185	36	23	56	4.7	25
242	Etah	Awagarh	8.35	630	36	299	14	1.2	5.9	7.5	170	36	19	79	3.0	24
243	Etah	Jaithara	8.03	480	0	232	21	0.59	5.7	0	215	44	25	15	2.8	31
244	Etah	Jalesar	8.40	1801	48	226	412	0.61	0	29	270	12	58	318	4.5	5.0
245	Etah	Marhara	8.06	537	0	293	21	0.77	0	0	195	24	32	44	5.7	28
246	Etah	Nidholi Kalan	8.21	768	0	403	28	0.94	0	21	200	32	29	99	5.5	21

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
247	Etah	Sakeet	7.82	680	0	378	28	0.42	0	10	180	32	24	88	4.4	24
248	Etah	Sheetalpur	7.68	2621	0	512	337	0.56	68	482	410	56	65	453	7.2	34
249	Etawah	Barhpura	8.11	757	0	207	106	0.00	16	42	280	32	48	47	3.7	24
250	Etawah	Basrehar	7.44	721	0	329	35	0.35	22	44	250	52	29	60	5.1	34
251	Etawah	Bharthana	8.12	915	0	549	21	0.62	0	11	230	36	34	111	4.0	30
252	Etawah	Chakkar Nagar	8.51	740	60	281	28	0.26	18	15	150	16	26	111	2.9	33
253	Etawah	Jaswant Nagar	7.91	878	0	317	121	0.00	19	36	300	56	38	79	3.3	33
254	Etawah	Mahewa	8.26	520	48	146	21	0.00	11	29	200	40	24	28	3.1	31
255	Etawah	Saifai	8.14	714	0	378	7.1	0.90	0	32	230	44	29	57	5.4	33
256	Etawah	Takha	8.16	898	0	525	21	0.77	5.1	30	350	48	55	58	6.0	33
257	Faizabad	Amaniganj	8.07	454	0	268	21	0.52	4.4	5.0	200	25	34	26	4.1	31
258	Faizabad	Bikapur	8.16	634	0	244	50	0.32	19	43	210	21	38	53	6.8	27
259	Faizabad	Haringtonganj	7.88	356	0	183	14	0.11	0	13	150	34	17	13	2.2	29
260	Faizabad	Masodha	7.91	337	0	183	7.1	0.30	0	21	160	42	14	8.2	2.0	24
261	Faizabad	Maya Bazar	8.05	298	0	171	21	0.11	0	18	160	21	26	10	3.3	24

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
262	Faizabad	Milkipur	8.09	650	0	305	43	0.36	28	21	270	17	55	36	4.4	29
263	Faizabad	Pura Bazar	8.09	410	0	244	14	0.05	0	10	190	17	36	17	3.4	28
264	Faizabad	Sohawal	7.88	480	0	268	21	0.20	3.0	10	220	29	36	16	4.1	27
265	Faizabad	Tarun	8.05	565	0	171	21	0.00	19	103	210	25	36	37	3.4	29
266	Faizabad	Mawai	8.14	433	0	329	14	0.54	0	2.1	260	17	53	14	2.8	26
267	Faizabad	Rudauli	8.01	361	0	171	14	0.12	0	12	150	25	22	10	3.6	30
268	Fatehpur	Airayan	7.72	1350	0	342	184	0.43	36	58	400	44	70	105	9.2	28
269	Fatehpur	Amauli	7.91	600	0	281	35	0.16	15	9.0	220	24	38	38	3.4	31
270	Fatehpur	Asother	7.98	673	0	378	35	0.86	0	15	300	20	60	37	4.0	31
271	Fatehpur	Bahua	7.80	645	0	220	64	0.26	24	25	240	40	34	35	5.6	32
272	Fatehpur	Bhitaura	7.95	585	0	329	28	0.79	0	0	230	24	41	37	7.2	29
273	Fatehpur	Dhata	7.76	1469	0	329	184	0.32	65	130	470	40	89	1108	3.6	32
274	Fatehpur	Haswa	7.98	498	0	281	14	0.78	20	0	190	48	17	36	6.2	28
275	Fatehpur	Hathgaon	7.64	581	0	305	21	2.0	0	15	240	36	36	15	25	29
276	Fatehpur	Khuajuha	8.17	696	0	390	28	1.5	8.2	10	250	8.0	55	60	3.6	33

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
277	Fatehpur	Malwan	8.09	1250	0	683	43	3.2	5.0	13	100	20	12	250	4.8	23
278	Fatehpur	Teliyani	8.01	976	0	561	7.0	2.2	0	47	140	12	26	178	6.3	28
279	Fatehpur	Vijayeepur	7.70	526	0	256	28	2.0	10	29	250	32	41	22	2.7	33
280	Ferrukabad	Barhpur	7.56	676	0	342	36	0.61	18	13	275	40	42	44	3.4	29
281	Ferrukabad	Kamalganj	8.04	1450	0	232	192	0.20	108	117	210	20	38	232	6.0	31
282	Ferrukabad	Kayamganj	7.73	591	0	305	21	0.86	14	8.5	215	40	28	25	4.1	30
283	Ferrukabad	Mohammadabad	7.42	2091	0	366	376	0.41	55	161	720	44	146	114	3.7	34
284	Ferrukabad	Nawabganj	7.60	780	0	427	21	0.69	7.6	9.4	250	36	38	47	5.7	30
285	Ferrukabad	Rajepur	8.21	1397	0	622	43	3.0	0	146	60	12	7.2	328	1.4	23
286	Ferrukabad	Shamsabad	7.38	2007	0	220	241	0.36	201	247	630	68	110	154	6.6	32
287	Ferrukabad	Rajepur	7.60	1348	0	427	99	0.38	6.1	168	360	28	70	107	22	23
288	Ferrukabad	Rajepur	8.19	1434	0	586	50	2.6	0	189	200	72	4.8	271	1.5	23
289	Ferrukabad	Rajepur	8.17	1280	0	537	36	2.1	0	137	85	24	6.0	280	1.9	23
290	Firozabad	Aron	8.01	1026	0	439	50	0.85	10	30	190	36	24	91	94	24
291	Firozabad	Eka	8.20	897	0	427	43	1.5	36	26	250	40	36	111	5.1	23

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
292	Firozabad	Firozabad	8.03	707	0	390	21	0.67	12	0	210	36	29	69	21	9.4
293	Firozabad	Jasrana	8.17	873	0	439	43	0.98	5.9	14	305	44	47	78	4.9	26
294	Firozabad	Khairagarh/ Hathwant	7.60	2103	0	342	398	0.29	112	68	910	144	132	58	7.7	30
295	Firozabad	Madanpur	7.99	895	0	421	43	0.84	13	14	365	40	64	47	4.9	28
296	Firozabad	Narkhi	8.04	3321	0	915	369	1.2	73	404	420	24	86	544	4.3	26
297	Firozabad	Shikohabad	7.90	791	0	372	21	0.42	36	10	245	40	35	74	3.9	27
298	Firozabad	Tundla	8.20	1628	0	561	178	3.2	39	30	230	28	38	284	2.4	17
299	Gautam Buddha Nagar	Dadri	8.28	816	0	293	43	0.46	32	59	180	12	36	101	6.3	25
300	Gautam Buddha Nagar	Bisrakh	7.90	865	0	207	57	0.2	2.7	143	300	36	50	57	5.5	17
301	Gautam Buddha Nagar	Jewar	8.70	1964	48	525	163	0.36	104	79	130	8.0	26	405	4.3	29
302	Gautam Buddha Nagar	Dankaur	8.44	1712	54	549	78	2.3	12	147	140	8.0	29	390	6.2	23
303	Ghaziabad	Loni	7.68	1550	0	415	138	0.46	27	146	405	96	40	169	5.5	32

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
304	Ghaziabad	Razapur	8.07	1420	0	458	110	1.0	29	74	200	32	29	216	7.0	32
305	Ghaziabad	Muradnagar	7.82	916	0	317	60	0.48	22	37	360	72	43	31	6.4	31
306	Ghaziabad	Bhojpur	7.87	1066	0	549	21	0.79	0	31	230	40	31	117	6.0	31
307	Ghaziabad	Hapur	8.08	872	0	427	14	0.36	6.6	15	300	72	29	46	4.7	34
308	Ghaziabad	Dholana	8.02	964	0	390	36	0.18	27	36	310	52	43	62	5.8	33
309	Ghaziabad	Simbholi	7.68	770	0	293	14	0.18	5.3	77	330	72	36	16	5.7	32
310	Ghaziabad	Garh	7.67	825	0	366	21	0.24	0	35	330	56	46	16	5.2	21
311	Ghazipur	Barachawar	8.24	439	0	244	7.1	0.65	6.4	3.5	130	8.0	26	29	3.6	24
312	Ghazipur	Bhadaura	7.90	493	0	171	57	0.28	6.4	23	220	24	38	32	3.7	29
313	Ghazipur	Bhawarkol	8.06	575	0	317	14	0.39	20	6.3	200	16	38	59	2.6	27
314	Ghazipur	Birno	8.27	430	0	244	7.1	0.40	6.2	5.1	160	8.0	34	31	2.2	27
315	Ghazipur	Deokali	8.52	1269	48	610	14	6.4	0.90	7.8	60	4.0	12	316	0.80	17
316	Ghazipur	Ghazipur	7.78	1991	0	378	312	0.31	9.5	80	380	28	74	229	3.4	25
317	Ghazipur	Jakhaniya	8.56	1144	36	561	7.1	5.3	0.90	3.5	20	8.0	0	313	0.64	15
318	Ghazipur	Jamania	7.86	994	0	110	170	0.13	81	22	280	28	50	71	1.6	30

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
319	Ghazipur	Karanda	7.59	443	0	183	21	0.34	14	15	150	40	12	26	0.68	27
320	Ghazipur	Kasimabad	8.32	828	24	342	43	0.95	3.9	24	180	4.0	41	148	1.3	22
321	Ghazipur	Manihari	7.74	586	0	317	21	0.13	2.8	7.0	230	28	38	41	2.9	28
322	Ghazipur	Mardah	8.03	626	0	293	21	0.48	7.0	27	160	8.0	34	83	2.9	25
323	Ghazipur	Muhammadabad	8.22	685	0	220	57	0.04	0.42	51	200	4.0	46	69	6.2	26
324	Ghazipur	Reotipur	7.88	383	0	159	28	0.09	0.18	17	150	36	14	13	3.2	22
325	Ghazipur	Sadat	7.99	725	0	390	21	0.77	0.26	6.8	230	16	46	77	3.0	22
326	Ghazipur	Saidpur	7.77	1800	0	244	305	0.28	47	80	430	32	84	162	4.1	27
327	Gonda	Katra Bazar H.Q.	7.58	2281	0	622	341	0.24	5.9	95	560	88	82	224	28	20
328	Gonda	Karnailganj H.Q.	8.03	1269	0	354	142	0	0	97	320	44	50	114	9.0	23
329	Gonda	Haldharmau H.Q.	7.76	650	0	342	14	0	0	0	260	60	26	14	4.4	25
330	Gonda	Rupaideeh H.Q.	8.13	424	0	220	14	0	0	0	165	24	25	12	2.0	28
331	Gonda	Itigathok H.Q.	8.14	477	0	244	14	0.20	0	0	180	36	22	16	2.5	30
332	Gonda	Padri Kripal H.Q.	8.19	646	0	378	7.1	0.20	0	0	300	80	24	12	2.7	32
333	Gonda	Jhanjhari H.Q.	8.32	837	0	268	57	0.31	21	94	370	28	72	25	0	44

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
334	Gonda	Mankapur H.Q.	8.19	555	0	281	14	0.24	0	6.9	190	28	29	28	2.9	36
335	Gonda	Chhapia H.Q.	8.05	737	0	329	50	0.17	0	7.9	270	48	36	29	3.6	34
336	Gonda	Babhanjot H.Q.	8.21	763	0	403	21	0	0	5.6	315	72	32	15	2.8	32
337	Gonda	Mujehna H.Q.	8.29	474	0	232	18	0.43	0	0	170	20	29	24	2.8	32
338	Gonda	Nawabganj H.Q.	8.31	459	0	226	21	0	0	0	215	28	35	9.5	3.4	32
339	Gonda	Wazirganj H.Q.	8.15	380	0	232	7.1	0.56	0	0	195	36	25	4.0	2.0	29
340	Gonda	Tarabganj H.Q.	7.64	985	0	342	64	0.38	49	39	380	72	48	42	9.8	27
341	Gonda	Belsar H.Q.	8.06	648	0	329	21	0.51	0	0	255	36	40	16	3.8	34
342	Gonda	Paraspur H.Q.	7.75	695	0	366	21	0.44	0	0	270	44	38	21	3.5	28
343	Gorakhpur	Bansgaon	7.73	600	0	317	36	0.00	0	28	300	72	29	20	2.9	31
344	Gorakhpur	Barahalganj	8.37	520	24	244	14	0.00	20	18	250	36	39	20	3.6	28
345	Gorakhpur	Belghat	7.99	480	0	220	36	0.00	26	15	250	48	32	6.0	7.4	33
346	Gorakhpur	Bhatahat	8.18	360	0	207	21	0.00	0	5.0	190	36	24	7.2	2.8	32
347	Gorakhpur	Brahmpur	8.26	365	0	207	21	0.00	0	0	195	52	16	7.6	2.3	36
348	Gorakhpur	Campierganj	7.76	665	0	366	36	0.16	0	26	340	56	49	20	3.7	35

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
349	Gorakhpur	Chargawan	8.13	492	0	232	43	0.13	0	28	240	36	36	20	3.4	33
350	Gorakhpur	Gagaha	8.11	510	0	317	14	0.19	0	12	270	48	36	12	2.8	31
351	Gorakhpur	Gola	8.05	555	0	317	14	0.23	5.2	26	300	56	39	9.0	1.4	28
352	Gorakhpur	Jangal Kuriya	7.76	295	0	146	7.1	0.22	0.19	2.1	120	20	17	15	2.5	35
353	Gorakhpur	Kauriram	8.06	294	0	171	7.1	0.40	0.19	5.2	150	20	24	10	3.8	24
354	Gorakhpur	Khajani	7.77	497	0	305	14	0.22	0.52	2.2	190	20	34	48	3.5	31
355	Gorakhpur	Khorabar	7.59	447	0	207	28	0.07	0.28	25	200	48	19	16	3.1	37
356	Gorakhpur	Pali	7.99	328	0	207	14	0.32	0.22	2.5	140	12	26	22	2.5	28
357	Gorakhpur	Pipraich	8.04	257	0	159	7.1	0.30	0.23	1.1	120	16	19	19	3.4	30
358	Gorakhpur	Piprauli	8.12	573	0	342	21	0.60	0.29	6.5	280	48	38	22	2.1	31
359	Gorakhpur	Sahjanwa	7.71	372	0	232	14	0.11	0.35	2.3	170	36	19	10	1.9	27
360	Gorakhpur	Sardar Nagar	8.06	302	0	146	14	0.46	0.29	21	200	36	26	7.7	2.5	28
361	Gorakhpur	Uruwa	7.67	484	0	293	14	0.24	0.28	1.2	160	20	26	31	3.5	30
362	Hamirpur	Gohand	7.94	540	0	305	21	1.6	6.4	15	180	24	29	60	1.4	42
363	Hamirpur	Kurara	7.84	654	0	354	21	1.6	6.0	13	160	28	22	86	1.5	28

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
364	Hamirpur	Maudaha	7.94	1447	0	622	106	1.6	17	72	220	16	43	250	1.9	28
365	Hamirpur	Muskara	7.72	1267	0	512	113	1.6	44	23	430	28	86	100	3.1	30
366	Hamirpur	Rath	7.57	2735	0	329	298	1.5	410	340	430	64	65	450	1.5	36
367	Hamirpur	Sareela	8.07	2330	0	683	199	2.4	0	262	200	12	41	430	1.8	22
368	Hamirpur	Sumerpur	7.99	734	0	415	28	1.1	9.0	6.0	200	28	31	93	1.3	34
369	Hardoi	Ahirori	7.75	393	0	195	14	0.44	0	15	150	28	19	18	6.4	32
370	Hardoi	Bilgram	7.78	443	0	244	14	0.91	0	8.3	160	32	19	29	6.7	29
371	Hardoi	Bavan	7.89	466	0	226	21	0.36	1.5	21	195	48	18	18	5.5	20
372	Hardoi	Bahendra Khurd	8.43	633	0	293	28	0.39	0.79	50	170	8.0	36	72	4.4	28
373	Hardoi	Bharawan	8.18	362	0	195	14	0.66	4.9	11	140	16	24	21	5.0	30
374	Hardoi	Bharkhani	7.70	488	0	268	14	0.30	0	30	190	52	14	34	5.0	31
375	Hardoi	Harpalpur	7.85	1167	0	512	50	0.43	0	66	260	36	41	136	4.1	26
376	Hardoi	Hariyawan	7.70	650	0	226	113	0.62	14	13	305	36	52	23	4.4	30
377	Hardoi	Kachhauna	8.17	390	0	232	14	0.90	3.0	1.7	150	24	22	27	4.6	22
378	Hardoi	Kothawan	8.30	635	0	250	64	0.93	6.3	29	205	24	35	52	5.8	23

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
379	Hardoi	Madhavganj	7.98	425	0	232	14	0.20	1.6	11	180	36	22	21	6.0	31
380	Hardoi	Mallawan	8.20	377	0	146	21	1.1	0	27	160	28	22	8	5.0	22
381	Hardoi	Pihani	7.80	1198	0	415	142	0.42	44	48	430	52	72	70	8.0	27
382	Hardoi	Shahabad	8.20	336	0	159	14	0.20	0	12	110	28	10	23	3.7	22
383	Hardoi	Sursa	8.00	428	0	268	7.1	0.45	0.67	0.9	165	28	23	25	9.8	28
384	Hardoi	Sandi	8.20	511	0	195	28	0.25	22	38	160	24	24	47	9.8	16
385	Hardoi	Sandila	7.80	668	0	305	28	0.41	66	21	230	44	29	37	4.6	25
386	Hardoi	Tadiyawan	7.90	560	0	281	21	0.56	0	26	220	52	22	30	4.4	24
387	Hardoi	Todarpur	7.84	457	0	256	7.1	0.51	0	10	210	48	22	13	5.6	29
388	J.P. Nagar	Dhanaura	7.92	348	0	110	43	0.81	0	12	140	40	10	15	4.0	20
389	J.P. Nagar	Amroha	7.68	659	0	244	50	0.85	17	29	240	60	22	45	5.6	28
390	J.P. Nagar	Joya	8.14	603	0	159	78	0.85	0	41	180	32	24	55	7.2	29
391	J.P. Nagar	Gajraula	7.92	855	0	134	128	0.73	86	107	260	40	38	90	6.3	36
392	J.P. Nagar	Hasanpur	7.93	603	0	146	50	0.79	77	35	200	48	19	47	4.6	36
393	J.P. Nagar	Gangeshwari	8.12	389	0	207	14	0.92	0	5.3	100	16	14	49	3.4	27

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
394	Jalaun	Kadaura	7.89	930	0	524	35	1.5	5.6	1.8	290	48	41	91	8.6	17
395	Jalaun	Mahewa	7.71	1090	0	586	28	0.42	10	13	170	52	10	177	8.5	32
396	Jalaun	Kuthond	7.82	1035	0	512	42	0.54	36	15	410	64	60	56	7.6	28
397	Jalaun	Jalaun	7.90	990	0	549	28	0.84	3.5	11	180	24	29.0	146	8.6	14
398	Jalaun	Konch	7.85	1030	0	403	64	0.56	63	38	350	72	41	75	8.4	29
399	Jalaun	Nadigaon	7.86	970	0	427	28	1.2	8.9	29	230	40	31	97	8.7	26
400	Jalaun	Madhogarh	7.90	810	0	403	28	0.87	4.4	17	250	44	34	61	9.1	30
401	Jalaun	Rampura	7.60	1007	0	451	43	0.32	1.3	14	360	60	50	46	8.6	31
402	Jalaun	Orai (HQ)	7.84	1220	0	549	28	0.37	1.0	59	230	40	31	154	8.2	14
403	Jalaun	Dakore	7.99	1770	0	561	227	1.3	70	60	630	60	101	120	9.3	26
404	Jaunpur	M Badshahpur	8.24	665	0	409	14	0.80	0.70	2.4	200	8.0	43	72	3.3	23
405	Jaunpur	Machhali Shahar	8.15	368	12	85	64	2.1	2.3	16	100	20	12	46	2.0	16
406	Jaunpur	Sikrara	8.40	718	36	317	21	0.32	0.80	9.1	170	16	31	103	1.9	27
407	Jaunpur	Buxa	8.61	574	0	323	21	0.32	6.8	8.4	210	24	36	43	2.6	29
408	Jaunpur	Badlapur	8.64	716	12	256	7.1	0.38	0.70	38	155	20	25	46	4.6	22

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
409	Jaunpur	Maharajganj	7.99	483	0	305	7.1	0.60	2.9	2.2	180	20	31	37	2.1	28
410	Jaunpur	Sujanganj	8.58	586	18	299	14	0.40	0.64	1.1	190	12	38	47	4.3	23
411	Jaunpur	Jaunpur H.Q.	7.63	1754	0	342	241	0.15	59	159	550	32	113	117	3.9	28
412	Jaunpur	Barsathi	8.29	525	0	268	14	0.23	0.50	1.9	180	16	34	50	3.5	25
413	Jaunpur	Dharampur	8.08	522	0	317	14	0.60	5.0	8.1	230	12	48	39	4.8	28
414	Jaunpur	Dobhi	7.98	476	0	293	21	0.13	0.26	1.5	170	8.0	36	50	2.8	32
415	Jaunpur	Jalalpur	7.93	446	0	128	7.1	0.15	14	4.6	210	16	41	25	2.9	30
416	Jaunpur	Karanja Kalan	8.52	833	6	329	64	1.4	0.56	30	200	4.0	46	151	2.6	23
417	Jaunpur	Kerakat	8.19	441	0	268	7.1	0.62	7.6	2.2	170	8.0	36	38	2.4	32
418	Jaunpur	Khutahan	7.99	527	0	317	21	0.53	12	6.0	230	24	41	49	4.6	30
419	Jaunpur	Madiyahun	8.35	717	18	293	57	0.79	7.3	29	230	4.0	53	86	3.7	24
420	Jaunpur	Muftiganj	8.15	523	0	342	7.1	0.47	0.32	2.8	190	8.0	41	58	3.2	24
421	Jaunpur	RamNagar	8.46	865	36	488	14	1.8	0.73	2.7	70	12	10	230	1.8	23
422	Jaunpur	Rampur	8.53	1032	42	537	14	1.8	0.82	15	100	4.0	22	301	2.4	21
423	Jaunpur	Shahganj	8.08	469	0	256	28	0.42	4.9	12	130	12	24	73	4.8	27

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
424	Jaunpur	Sirkoni	8.54	1590	54	451	128	1.2	0.78	193	390	16	84	276	1.5	24
425	Jaunpur	Suitha Kalan	8.26	436	0	281	7.1	0.41	0.36	8.6	170	8.0	36	40	4.5	27
426	Jhansi	Bamaur	8.00	1529	0	622	85	0.95	10	170	440	80	58	182	8.4	32
427	Jhansi	Gursarai	7.90	2300	0	647	411	0.77	32	17	700	124	94	215	4.1	30
428	Jhansi	Mauranipur	7.50	810	0	403	50	0.42	0	12	280	52	36	57	12	34
429	Jhansi	Bangra	7.14	890	0	268	482	0.22	29	19	790	244	43	72	7.2	38
430	Jhansi	Jhansi (HQ)	7.75	431	0	183	50	0.65	0	5.0	120	28	12	47	5.4	31
431	Jhansi	Babina	7.93	800	0	317	50	0.54	21	11	250	80	12	51	4.7	42
432	Jhansi	Badagaon	7.69	1297	0	354	78	0.60	3.3	21	350	104	22	35	7.6	52
433	Jhansi	Chirgaon	7.86	842	0	317	35	0.44	2.0	58	260	32	43	55	7.2	21
434	Jhansi	Moth	7.64	1230	0	549	92	0.22	3.1	9.0	320	32	58	129	2.3	27
435	Kannauj	Chhibramau	8.03	790	0	415	35	0.70	13	1.0	210	44	24	82	3.5	33
436	Kannauj	Gugrapur	8.09	607	0	293	35	0.24	0	21	200	60	12	49	2.8	31
437	Kannauj	Haseran	8.12	358	0	183	14	1.4	0	17	160	36	17	15	2.4	28
438	Kannauj	Jalalabad	7.89	788	0	354	85	0.22	0	12	240	48	29	85	4.4	21

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
439	Kannauj	Kannauj	7.86	762	0	329	78	0.00	0	5.0	250	64	22	58	4.0	32
440	Kannauj	Saurikh	8.11	481	0	232	14	0.30	0	29	150	20	24	38	11	30
441	Kannauj	Talgram	8.35	690	24	342	7.1	0.70	11	20	240	16	48	56	5.5	32
442	Kannauj	Umarda	7.59	1350	0	305	255	0.00	0	5.0	370	128	12	117	6.3	32
443	Kanpur Dehat	Akbarpur	8.81	1260	84	390	71	1.4	19	51	270	20	53	156	1.7	25
444	Kanpur Dehat	Amraudha	8.14	619	0	268	21	0.00	61	10	250	32	41	21	4.7	38
445	Kanpur Dehat	Derapur	8.11	1430	0	281	213	0.00	65	117	510	48	94	90	4.5	36
446	Kanpur Dehat	Jhinjhak	8.35	566	36	134	14	0.27	11	15	110	20	14	49	3.3	33
447	Kanpur Dehat	Maitha	8.32	975	30	171	184	0.54	9.3	32	180	16	34	135	4.3	32
448	Kanpur Dehat	Malasa	8.45	760	36	305	28	0.22	5.0	27	200	4.0	46	83	2.8	35
449	Kanpur Dehat	Rajpur	7.95	749	0	390	28	0.20	16	13	300	48	43	39	4.8	37
450	Kanpur Dehat	Rasoolabad	8.37	725	48	293	28	1.5	15	22	280	12	60	51	6.7	34
451	Kanpur Dehat	Sandalpur	8.45	798	48	244	71	0.54	48	18	360	16	77	34	1.6	38
452	Kanpur Dehat	Sarvan Khera	8.42	511	42	122	71	0.30	0	5.9	230	20	43	21	1.7	34
453	Kanpur Nagar	Bhitar Gaon	8.55	972	72	317	50	0.86	11	48	300	24	58	88	2.2	29

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
454	Kanpur Nagar	Bidhnoo	7.92	981	0	366	121	0.30	27	50	450	60	72	38	6.3	34
455	Kanpur Nagar	Bilhaur	8.37	577	72	146	14	0.42	6.2	10	200	28	31	35	4.5	38
456	Kanpur Nagar	Chaubeypur	8.39	750	72	293	21	0.75	0	5.0	230	44	29	69	5.8	32
457	Kanpur Nagar	Ghatampur	8.03	768	0	415	21	0.34	10	34	330	52	48	32	3.1	38
458	Kanpur Nagar	Kakwan	8.04	643	0	281	14	1.9	0	36	180	32	24	51	5.9	32
459	Kanpur Nagar	Kalyanpur	leaked	0	0	0	0	0	0	0	0	0	0	0	0	0
460	Kanpur Nagar	Sarsaul	8.51	734	60	293	21	1.4	7.6	12	180	20	31	100	2.8	31
461	Kanpur Nagar	Shivrajpur	7.91	1784	0	98	532	0.00	65	90	850	152	113	50	23	28
462	Kasganj	Amanpur	8.08	620	0	281	21	0.63	14	12	240	48	29	20	6.0	32
463	Kasganj	Ganj dundwara	8.15	429	0	244	14	0.31	0	11	215	52	20	7	6.2	20
464	Kasganj	Kasganj	7.82	554	0	268	21	0.54	26	8.7	240	52	26	27	4.6	30
465	Kasganj	Patiyali	7.90	583	0	293	28	0.76	7.3	16	235	48	28	36	5.5	29
466	Kasganj	Sahawar	8.09	363	0	195	21	0.57	0	7.7	170	48	12	10	4.2	28
467	Kasganj	Sidhpura	7.68	1339	0	354	156	0.34	60	150	400	64	58	120	3.2	28
468	Kasganj	Soron	7.50	936	0	256	99	0.94	65	27	350	64	46	55	5.1	30

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
469	Kaushambi	Chail	7.65	834	0	317	99	0.36	12	25	260	36	41	79	3.5	34
470	Kaushambi	Kara	7.32	2907	0	586	432	0.11	361	85	1020	88	192	204	5.7	32
471	Kaushambi	Kaushambi	7.74	805	0	439	35	0.58	5.8	5.0	230	28	38	87	2.6	31
472	Kaushambi	Manjhanpur	7.98	718	0	378	35	0.48	17	16	175	12	35	95	7.0	29
473	Kaushambi	Moorat Ganj	7.62	1882	0	232	241	0.30	476	14	740	52	146	85	3.8	29
474	Kaushambi	Newada	7.67	546	0	305	14	0.51	11	7.5	170	20	29	53	3.4	26
475	Kaushambi	Sarsawan	7.70	566	0	317	14	0.91	25	7.0	245	56	25	25	4.2	29
476	Kaushambi	Sirathu	8.02	848	0	403	71	0.64	2.0	28	275	20	54	84	3.0	11
477	Kushinagar	Dudhai	7.92	450	0	244	36	0.00	0	0	240	36	36	6.2	7.2	36
478	Kushinagar	Fazil Nagar	7.45	780	0	305	99	0.00	0	31	390	132	15	19	3.3	36
479	Kushinagar	Hata	7.89	470	0	281	21	0.25	0	6.1	200	36	27	25	4.0	36
480	Kushinagar	Kaptan Ganj	7.56	640	0	256	78	0.00	0	45	320	80	29	24	4.6	30
481	Kushinagar	Kasiya	7.65	550	0	220	50	0.00	0	46	270	56	32	16	3.4	37
482	Kushinagar	Khadda	7.66	570	0	293	21	0.00	0	46	300	60	36	7	9.1	24
483	Kushinagar	Motichak	7.99	380	0	207	21	0.33	0	18	200	32	29	8.5	2.8	33

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
484	Kushinagar	Nebuwa Naurangia	7.92	1130	0	476	92	0.00	0	110	480	72	73	50	46	26
485	Kushinagar	Padrauna	7.99	780	0	134	128	0.00	0	140	370	44	63	31	5.5	34
486	Kushinagar	Ramkola	7.97	480	0	232	28	0.30	0	42	260	36	41	7.2	3.7	31
487	Kushinagar	Sewarhi	8.02	530	0	305	14	0.00	0	28	290	48	41	5.6	6.0	30
488	Kushinagar	Sukrauli	7.76	640	0	256	50	0.38	0	81	330	60	44	17	4.1	35
489	Kushinagar	Tamkuhi	8.23	400	0	207	21	0.26	0	25	200	36	27	12	3.9	33
490	Kushinagar	Vishunpurwa	7.82	980	0	512	64	0.00	0	38	410	76	54	57	27	31
491	Lakhimpur Kheri	Bankeyganj	7.77	567	0	207	35	0.40	8.7	42	240	48	29	29	8.6	22
492	Lakhimpur Kheri	Behjam	7.91	565	0	336	21	0.44	0.57	1.9	230	28	38	34	5.9	27
493	Lakhimpur Kheri	Bijua	8.13	316	0	183	14	0.26	0	0.90	150	40	12	9	4.2	25
494	Lakhimpur Kheri	Dhaurahra	8.17	337	0	207	7.1	0.08	0.70	1.3	160	24	24	9	4.6	28
495	Lakhimpur Kheri	Gola	7.90	375	0	220	14	0.32	0	1.1	180	40	19	6	3.3	25
496	Lakhimpur Kheri	Ishanagarsr	7.80	427	0	281	14	0.15	1.5	0.68	205	36	28	10	6.5	26
497	Lakhimpur Kheri	Lakhimpur Khiri	7.88	445	0	232	21	0.15	0	12	210	28	34	10	6.0	22
498	Lakhimpur Kheri	Mohammadi	7.64	551	0	378	14	0.47	0.57	3.4	280	28	50	23	5.4	29

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
499	Lakhimpur Kheri	Mitauli	8.00	549	0	268	28	0.64	0	21	170	32	22	48	4.7	28
500	Lakhimpur Kheri	Nakaha	7.85	605	0	317	21	0.24	2.6	20	270	68	24	27	4.6	23
501	Lakhimpur Kheri	Nighasan	7.80	520	0	317	14	0.18	1.0	1.9	260	72	19	6	6.8	20
502	Lakhimpur Kheri	Pasgawan	8.00	300	0	159	7.1	0.33	0	18	150	40	12	4	2.4	23
503	Lakhimpur Kheri	Palia Kalan	8.01	532	0	323	7.1	0.35	0.68	8.0	170	32	22	55	4.3	24
504	Lakhimpur Kheri	Phoolbehar	8.05	551	0	220	50	0.10	0	40	140	32	14	65	6.1	22
505	Lakhimpur Kheri	Ramaiyabehar	7.79	452	0	281	14	0.19	1.2	0.90	220	44	26	13	5.5	26
506	Lalitpur	Talbehat	7.75	610	0	256	50	1.4	14	7.0	220	76	7	41	3.1	34
507	Lalitpur	Jakhaura	7.96	1200	0	561	71	1.1	21	9.0	380	64	53	97	4.6	48
508	Lalitpur	Bar	7.79	730	0	305	49	0.57	21	11	300	92	17	25	2.9	47
509	Lalitpur	Lalitpur (HQ)	7.34	790	0	268	92	0.40	21	21	290	64	31	50	3.5	31
510	Lalitpur	Mahroni	7.27	1020	0	366	128	0.52	18	5.0	370	68	48	59	6.6	40
511	Lalitpur	Maadawara	7.66	1620	0	610	184	0.09	28	23	730	80	127	39	4.1	55
512	Lalitpur	Birdha	7.92	990	0	500	50	0.50	2.6	10	360	56	53	65	2.3	26
513	Lucknow	Chinhat	7.60	944	0	207	78	0.35	48	120	380	72	48	33	4.5	34

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
514	Lucknow	Bakshi Ka Talab	8.10	522	0	293	7.0	0.78	0	31	210	16	41	35	5.4	34
515	Lucknow	Mal	7.79	500	0	281	14	0.67	0	6.0	200	32	29	25	4.2	35
516	Lucknow	Malihabad	8.20	442	0	244	14	0.64	0	6.0	160	8.0	34	29	6.2	36
517	Lucknow	Kakori	7.93	557	0	195	50	0.94	10	33	220	24	39	28	3.9	36
518	Lucknow	Gosaiganj	7.72	409	0	232	7.0	0.49	0	21	200	36	27	12	2.4	24
519	Lucknow	Mohanlalganj	7.81	498	0	256	14	0.50	0	25	200	24	34	28	4.2	30
520	Lucknow	Sarojini Nagar	7.89	395	0	207	7.0	1.1	0	15	160	28	22	17	3.5	24
521	Mahamaya Nagar	Sikandra Rao	8.14	312	0	171	7.1	1.3	0.25	12	110	16	17	25	4.1	20
522	Mahamaya Nagar	Sasni	8.04	2062	0	125 7	156	0.97	94	153	230	12	48	448	4.6	24
523	Mahamaya Nagar	Hathras	8.47	2286	30	525	213	0.89	184	107	220	4.0	50	380	49	24
524	Mahamaya Nagar	Hasayan	8.25	1464	0	268	177	0.39	76	88	270	20	53	147	98	24
525	Mahamaya Nagar	Sahpau	8.48	1805	18	317	170	0.32	92	156	220	8.0	48	313	97	25
526	Mahamaya Nagar	Sadabad	8.11	3360	0	378	312	1.3	7.1	51	320	28	60	631	4.4	16
527	Mahamaya Nagar	Mursan	7.91	4296	0	573	773	0.24	29	345	590	32	122	763	8.1	24

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
528	Maharajganj	Brijman Ganj	7.97	460	0	268	21	0.00	15	7.2	220	64	15	20	1.6	35
529	Maharajganj	Dhani	8.06	370	0	207	21	0.15	0	10	180	52	12	12	0.0	30
530	Maharajganj	ghughuli	8.04	564	0	195	85	0.00	0	28	210	56	17	40	3.6	37
531	Maharajganj	Laxmipur	8.27	400	0	244	21	0.54	0	0	180	48	15	23	0.0	34
532	Maharajganj	Maharaj Ganj	8.03	580	0	226	92	0.00	0	14	290	84	19	20	3.1	36
533	Maharajganj	Mithaura	8.28	330	0	134	21	0.00	0	29	160	52	7	5.4	1.3	26
534	Maharajganj	Nautanwa	8.38	440	24	226	14	0.00	0	0	200	44	22	25	1.0	33
535	Maharajganj	Nichlaul	8.24	380	0	195	36	0.18	0	6.2	190	52	15	13	1.5	28
536	Maharajganj	Paniyara	8.13	367	0	232	14	0.28	0	0	180	52	12	11	2.9	34
537	Maharajganj	Partawal	8.21	340	0	183	21	0.00	0	14	180	52	12	7.9	1.5	28
538	Maharajganj	Pharenda	7.82	490	0	305	14	0.00	0	14	235	64	18	18	1.3	30
539	Maharajganj	Siswa	7.87	280	0	159	21	0.00	0	3.4	130	20	19	11	3.5	39
540	Mahoba	Charkhari	7.76	1900	0	439	376	1.7	0	24	550	32	113	174	0.0	35
541	Mahoba	Jaitpur	7.44	1200	0	195	199	1.2	110	10	350	84	34	93	1.4	42
542	Mahoba	Kabrai	7.48	1283	0	195	184	1.2	130	19	450	96	50	49	0.0	62

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
543	Mahoba	Panwari	7.78	633	0	317	28	1.4	15	9.0	200	28	31	61	1.2	36
544	Mainpuri	Barnahal	7.61	1327	0	336	206	0.47	37	11	505	56	88	71	6.1	30
545	Mainpuri	Bewar	7.94	446	0	262	14	0.70	0	7.1	180	36	22	24	3.6	30
546	Mainpuri	Ghirore	7.93	424	0	232	14	0.84	0	8.3	185	44	18	20	4.1	25
547	Mainpuri	Jageer	7.87	453	0	268	7.1	0.50	0	10	215	40	28	13	3.1	27
548	Mainpuri	Karhal	7.68	910	0	439	64	0.94	36	24	210	32	31	117	5.4	28
549	Mainpuri	Kishni	8.00	1955	0	561	124	2.0	10	425	270	20	53	342	7.1	24
550	Mainpuri	Kishni	8.24	2488	0	641	245	1.6	32	258	270	28	48	464	2.7	19
551	Mainpuri	Kishni	7.97	1492	0	561	78	1.7	0	117	230	16	46	231	6.9	24
552	Mainpuri	Kurawali	7.71	737	0	366	21	0.75	0	25	240	32	38	57	5.2	26
553	Mainpuri	Mainpuri	7.76	433	0	256	14	0.54	0	6.7	190	68	5	20	2.8	29
554	Mainpuri	Sultanganj	7.82	591	0	354	14	0.61	0	6.4	250	28	43	32	5.1	26
555	Mathura	Raya	8.01	4946	0	390	993	1.2	31	287	790	36	168	887	3.8	20
556	Mathura	Manth	7.97	3298	0	634	383	1.7	24	345	240	20	46	730	30	24
557	Mathura	Baldeo	8.38	2110	84	683	113	3.5	98	74	130	12	24	562	7.0	21

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
558	Mathura	Farah	8.18	2259	0	671	199	3.3	12	212	270	16	55	562	2.1	22
559	Mathura	Mathura	7.95	1466	0	207	227	0.26	11	94	250	36	38	241	3.1	25
560	Mathura	Goverdhan	8.31	3957	42	549	510	4.3	3.5	471	270	20	53	1020	3.2	24
561	Mathura	Nandgaon	7.31	37230	0	49	9018	1.2	59	5600	4620	548	780	6763	165	5
562	Mathura	Chhata	7.58	2650	0	244	411	0.05	7.1	365	620	112	82	290	3.3	25
563	Mathura	Naujhil	7.65	8349	0	293	908	0.63	117 ₇	42	1780	72	384	1129	20	19
564	Mathura	Chaumuhan	7.80	4819	0	329	922	0.1	74	411	760	52	151	967	4.7	25
565	Maunath Bhanjan	Badraon	8.27	594	0	232	57	0.34	5.9	5.6	225	8.0	49	44	2.5	27
566	Maunath Bhanjan	Dohari Ghat	8.21	325	0	165	14	0.29	0.22	7.3	130	10	25	25	3.9	25
567	Maunath Bhanjan	Fatehpur Madaon	8.16	282	0	153	7.1	0.18	0.31	7.0	105	12	18	21	4.3	24
568	Maunath Bhanjan	Ghosi	7.84	1162	0	427	103	0.42	15	29	355	28	68	112	12	25
569	Maunath Bhanjan	Kopaganj	8.16	472	0	232	32	0.18	0.18	6.7	160	10	32	50	2.9	24
570	Maunath Bhanjan	Mohammadabad	8.46	550	21	250	25	0.78	5.6	1.5	200	4.0	46	60	1.6	22
571	Maunath Bhanjan	Pardaha	8.08	789	0	433	25	0.46	1.2	16	255	10	55	107	2.0	21

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
572	Maunath Bhanjan	Ranipur	7.87	813	0	451	14	0.69	3.3	20	200	18	37	101	1.8	24
573	Maunath Bhanjan	Ratanpura	8.32	584	9	232	21	0.19	0.12	68	180	4.0	41	58	1.6	27
574	Meerut	Saroorpur	8.22	830	0	390	21	0.55	5.3	20	300	52	41	45	4.8	31
575	Meerut	Parichhatgarh	8.23	790	0	372	7.1	0	0	35	340	68	41	19	5.7	31
576	Meerut	Meerut	8.21	1540	0	683	64	0.19	71	56	430	44	77	118	6.7	33
577	Meerut	Hastinapur	8.21	980	0	342	50	0.30	60	45	340	80	34	43	32	30
578	Meerut	Rohta	8.27	786	0	281	28	0.54	7.8	74	270	28	48	36	15	30
579	Meerut	Daurala	8.27	834	0	195	71	0	11	95	240	40	34	57	7.7	24
580	Meerut	Mawana	8.20	713	0	378	7.1	0	7.0	28	330	72	36	25	6.4	33
581	Meerut	Rajpura	8.21	622	0	323	14	0.56	0	7.7	240	32	38	35	5.0	31
582	Meerut	Kharkhoda	8.22	1035	0	244	135	0	28	64	230	20	43	113	8.5	33
583	Meerut	Sardhana	8.24	2016	0	702	163	0.35	97	32	655	92	102	90	96	35
584	Meerut	Janikhurd	8.24	591	0	293	7.1	0.61	0	27	250	56	26	8	4.5	26
585	Meerut	Machhra	8.23	673	0	329	28	0	0	11	240	52	26	26	6.0	27
586	Mirzapur	Mirzapur H.Q.	7.67	1069	0	256	106	0.36	134	48	400	56	62	77	1.6	30

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
587	Mirzapur	Chanbey	7.97	234	0	122	7.1	0.32	4.0	3.0	80	24	5	28	0.38	23
588	Mirzapur	City	8.55	788	30	342	50	1.5	23	32	240	8.0	53	162	1.4	20
589	Mirzapur	Haliya	7.72	252	0	98	7.1	0.42	11	24	100	24	10	5	11	12
590	Mirzapur	Jamalpur	7.52	364	0	232	7.1	0.22	0.10	2.2	160	48	10	15	1.2	21
591	Mirzapur	Kon	7.58	397	0	256	7.1	0.09	0.25	2.0	180	40	19	18	2.3	26
592	Mirzapur	Lalganj	7.64	600	0	244	57	0.66	8.9	22	160	32	19	85	0.29	21
593	Mirzapur	Majhawan	7.62	467	0	268	14	0.39	11	8.9	210	44	24	19	1.4	29
594	Mirzapur	Marihan	7.70	254	0	98	21	0.04	19	6.8	100	28	7	8	0.84	22
595	Mirzapur	Narainpur	7.79	1816	0	512	199	1.1	94	154	500	40	96	260	31	20
596	Mirzapur	Pahari	7.45	1136	0	183	184	0.12	102	4.1	420	100	41	47	0.68	33
597	Mirzapur	Rajgarh	7.77	352	0	146	28	0.00	2.5	15	130	24	17	25	3.7	9
598	Mirzapur	Sikhar/ Shikhad	7.64	452	0	244	14	0.10	0	14	200	44	22	18	4.0	12
599	Moradabad	Bhagatpur Tanda	7.98	445	0	268	14	0.33	0	0	190	56	12	21	1.6	24
600	Moradabad	Thakurdwara	7.93	425	0	244	14	0.32	0	11	160	32	19	34	1.2	28
601	Moradabad	Dilari	7.89	440	0	256	14	0.41	0	0	140	44	7	46	1.3	23

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
602	Moradabad	Moondha Pandey	7.90	465	0	244	28	0.17	0	10	200	40	24	24	2.6	24
603	Moradabad	Sambhal	7.82	550	0	262	11	0.34	14	30	230	44	29	28	5.0	29
604	Moradabad	Panwasa	7.96	463	0	232	28	0.55	0	5.1	180	40	19	14	3.1	29
605	Moradabad	Bahjoi	7.92	480	0	201	32	0.38	0	8.5	175	36	20	24	5.1	31
606	Moradabad	Baniakhera	7.93	690	0	256	57	0.30	57	43	190	52	14	79	4.7	26
607	Moradabad	Bilari	7.94	723	0	262	43	0.38	27	40	185	64	6	81	6.8	26
608	Moradabad	Deengarpur	7.94	582	0	220	25	0	0	51	175	44	16	49	9.0	27
609	Moradabad	Moradabad	8.00	398	0	207	14	0.20	0	0	135	20	20	32	5.4	25
611	Moradabad	Asmoli	7.98	394	0	159	14	0	0	62	160	32	19	23	4.5	28
610	Moradabad	Chhajlet	7.87	340	0	177	18	0.18	0	8.7	130	48	2	20	2.7	29
612	Muzaffarnagar	Kandhala	8.06	505	0	207	14	1.1	0	31	200	36	26	4	24	24
613	Muzaffarnagar	Kairana	7.84	958	0	415	50	0.61	23	38	380	36	70	5	29	29
614	Muzaffarnagar	Bhaghara	8.11	596	0	268	14	0.18	0	27	230	40	31	4	30	30
615	Muzaffarnagar	Budhana	8.08	1010	0	427	78	0.44	57	34	385	84	42	46	5.9	32
616	Muzaffarnagar	Charthawal	7.63	1701	0	378	234	0	54	169	590	116	72	83	7.4	32

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
617	Muzaffarnagar	Jansath	7.87	598	0	305	7.1	0.29	0	18	240	52	26	12	5.6	31
618	Muzaffarnagar	Khatauli	7.74	876	0	342	71	0	0	38	330	56	46	32	6.5	29
619	Muzaffarnagar	Morna	7.86	610	0	244	21	0	22	35	255	60	25	9	3.4	29
620	Muzaffarnagar	Muzaffarnagar	8.45	525	24	201	14	0.81	0	19	230	40	31	10	3.7	27
621	Muzaffarnagar	Purkaji	8.47	612	48	195	14	0.17	0	23	250	76	14	9	4.1	27
622	Muzaffarnagar	Shahpur	7.92	654	0	342	7.1	0.59	0	12	250	48	31	17	4.2	28
623	Muzaffarnagar	Shamli	8.12	604	0	220	28	0.98	0	45	250	52	29	14	4.1	23
624	Muzaffarnagar	Thana Bhawan	7.94	609	0	299	14	0.73	0	0	225	32	35	5	28	28
625	Muzaffarnagar	UN	8.00	755	0	354	43	0.72	0	14	295	72	28	4	29	29
626	Pilibhit	Amaria	8.12	388	0	195	14	0.55	0	15	125	36	8	31	3.1	23
627	Pilibhit	Bar khera	7.81	451	0	232	21	0.39	0.65	13	185	48	16	21	4.0	27
628	Pilibhit	Bilsanda	7.90	434	0	244	14	0.48	0	3.7	190	52	14	14	4.7	31
629	Pilibhit	Bisalpur	7.95	386	0	195	14	0.35	0	34	145	40	11	28	4.0	22
630	Pilibhit	Lalauri Khera	8.20	429	0	207	43	0.33	0	3.5	180	20	31	24	4.6	3
631	Pilibhit	Marori	8.17	456	0	268	21	0.37	0	2.0	180	44	17	30	3.9	31

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
632	Pilibhit	Puranpur	7.95	304	0	189	7.1	0.40	0	2.1	140	36	12	11	2.9	28
633	Pratapgarh	Aspur- Deosara	8.19	546	0	329	7.1	0.66	0.60	2.7	160	12	31	56	3.6	26
634	Pratapgarh	Baba Bekhernath	8.57	1526	42	708	57	1.3	6.1	87	160	8.0	34	271	3.6	22
635	Pratapgarh	Babaganj	8.10	773	0	403	28	0.70	20	16	190	36	24	96	4.9	23
636	Pratapgarh	Bihar	8.10	800	0	403	21	0.93	3.7	64	310	32	55	53	7.4	23
637	Pratapgarh	Gaura	7.98	596	0	378	14	1.1	0.91	1.6	220	16	43	49	5.2	24
638	Pratapgarh	Kalanker	7.90	658	0	390	7.1	0.96	2.1	26	200	32	29	72	2.8	16
639	Pratapgarh	Kunda	7.80	1135	0	512	92	0.48	1.5	30	320	12	70	118	4.7	23
640	Pratapgarh	Lakshmanpur	8.20	611	0	390	7.1	0.77	0.70	1.6	180	12	36	65	5.0	24
641	Pratapgarh	Lalganj	8.20	892	0	561	14	0.94	1.0	5.4	150	12	29	154	1.8	21
642	Pratapgarh	Mandhata	8.58	492	84	110	7.1	0.73	0.50	10	150	16	26	46	2.8	25
643	Pratapgarh	Mangraura	8.45	437	78	134	7.1	0.37	2.5	3.2	175	12	35	35	4.4	28
644	Pratapgarh	Patti	8.14	710	0	354	43	0.28	5.4	18	250	40	36	54	5.8	29
645	Pratapgarh	Pratapgarh Sadar	8.42	670	12	305	50	1.2	5.0	7.7	290	12	62	58	8.0	25
646	Pratapgarh	Rampur- Sangramg	7.87	1270	0	586	28	0.83	1.4	36	90	8.0	17	216	2.0	17

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
647	Pratapgarh	Sandwa- Chandrik	8.41	616	12	220	21	0.96	17	33	230	20	31	42	4.8	23
648	Pratapgarh	Sangaipur	8.62	2029	24	106 1	43	0.57	2.0	70	160	20	26	404	5.3	20
649	Pratapgarh	Shivgarh	8.15	544	0	317	14	0.76	4.0	4.4	230	20	43	24	4.7	27
650	Prayagraj	Bahadurpur	7.64	396	0	159	43	0.82	0	10	170	40	17	12	2.2	31
651	Prayagraj	Bahera	7.89	612	0	329	35	0.76	0	18	180	20	31	70	4.1	26
652	Prayagraj	Chaka	7.80	646	0	293	50	0.51	23	12	210	36	29	57.5	2.9	29
653	Prayagraj	Dhanpur	7.52	580	0	329	14	0.14	8.2	5.7	225	44	28	34	2.7	33
654	Prayagraj	Handa	7.80	1034	0	512	50	1.5	6.6	64	370	56	55	87	3.1	21
655	Prayagraj	Holagarh	7.69	809	0	390	35	0.91	20	31	220	40	29	86	6.0	27
656	Prayagraj	Jasra	7.87	1419	0	598	99	0.51	6.1	78	230	20	43	224	2.2	21
657	Prayagraj	Karchana	7.57	565	0	281	35	0.76	9.0	12	225	40	30	34	1.5	27
658	Prayagraj	Kaundhiyara	7.82	544	0	299	28	0.48	6.4	10	200	32	29	44	2.0	25
659	Prayagraj	Kaurihar	7.74	803	0	342	64	0.60	36	7.0	280	36	46	56	4.0	28
660	Prayagraj	Koran	7.68	1069	0	390	128	0.51	2.0	37	280	36	46	100	1.6	33

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
661	Prayagraj	Manda	7.56	700	0	232	57	0.16	96	22	155	56	4	98	2.0	26
662	Prayagraj	Mau-Aima	7.90	659	0	403	14	0.50	0	5.2	160	16	29	91	2.0	19
663	Prayagraj	Meja	7.80	882	0	268	121	0.22	46	50	225	12	47	118	0.62	22
664	Prayagraj	Phoolpur	7.77	626	0	329	28	0.77	2.0	14	160	24	24	76	3.2	24
665	Prayagraj	Pratappur	7.71	1438	0	769	71	0.50	2.4	29	220	16	43	247	7.0	29
666	Prayagraj	Saidabad	7.98	745	0	451	21	1.1	0	5.1	230	44	29	80	2.3	23
667	Prayagraj	Shankargarh	7.50	1289	0	311	206	0.28	34	64	380	56	58	110	17	13
668	Prayagraj	Soraon	7.97	705	0	342	43	0.88	18	17	205	28	32	76	3.9	24
669	Prayagraj	Urwa	7.49	871	0	293	135	0.02	8.0	27	295	64	32	77	3.2	33
670	Raibareli	Amawan	8.21	463	0	317	21	0.43	0.50	2.5	200	13	41	39	5.7	23
671	Raibareli	Bachharawan	8.38	451	0	256	14	0.40	1.2	3.8	160	13	31	33	4.7	28
672	Raibareli	Bahadurpur	7.74	745	0	366	57	0.62	7.5	3.8	320	55	46	30	4.2	29
673	Raibareli	Chhatoh	7.82	1380	0	464	50	0.79	1.5	253	530	59	94	84	5.7	26
674	Raibareli	Chhatoh	8.12	1428	0	561	53	1.3	0	207	590	29	125	72	6.1	22
675	Raibareli	Chhatoh	7.64	794	0	378	28	0.36	2.5	78	340	55	50	42	3.4	27

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
676	Raibareli	Dalmau	8.03	569	0	293	50	0.36	0.90	14	240	29	41	38	3.0	29
677	Raibareli	Deeh	7.84	949	0	342	78	0.25	5.8	101	350	34	65	64	6.9	28
678	Raibareli	Dinshahgaura	7.83	616	0	268	43	0.39	11	21	230	38	34	35	5.1	30
679	Raibareli	Harichandpur	8.04	798	0	195	85	0.00	43	83	280	21	55	53	4.1	30
680	Raibareli	Jagatpur	8.26	431	0	268	14	0.57	0	2.3	160	13	31	35	4.8	26
681	Raibareli	Kheron	7.66	696	0	317	57	0.11	4.4	9.0	240	46	31	46	7.9	20
682	Raibareli	Lalganj	8.05	2517	0	878	220	1.4	3.5	210	1005	34	222	111	4.6	21
683	Raibareli	Lalganj	7.96	1345	0	378	170	0.72	26	72	490	21	106	69	5.6	23
684	Raibareli	Lalganj	8.03	430	0	244	14	1.3	1.0	25	230	38	34	6	2.8	23
685	Raibareli	Maharajganj	7.76	818	0	403	35	0.36	7.5	52	280	42	43	71	5.2	30
686	Raibareli	Rahi	8.25	662	0	268	57	0.17	7.9	34	210	13	43	57	3.4	29
687	Raibareli	Rohnia	7.85	406	0	232	14	0.08	0	15	180	34	24	20	4.1	30
688	Raibareli	Salon	8.22	492	0	281	28	0.52	12	14	200	17	38	39	4.7	29
689	Raibareli	Sareni	8.68	900	0	427	35	0.26	0	35	350	46	58	37	4.2	24
690	Raibareli	Sartawan	7.75	1029	0	451	60	0.83	0.90	43	340	25	67	70	6.5	23

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
691	Raibareli	Sheogarh	8.01	626	0	390	21	0.85	0	6.4	220	42	29	61	5.2	26
692	Raibareli	Singhpur	7.91	464	0	256	14	0.96	0	10	190	29	29	19	5.7	29
693	Raibareli	Tiloee	7.93	1572	0	427	191	0.97	18	115	380	38	70	169	7.9	28
694	Raibareli	Unchahar	8.47	901	12	323	78	0.87	6.5	50	230	8.4	50	99	6.2	26
695	Raibareli	Unchahar	8.55	1001	30	378	85	0.79	3.4	40	230	8.4	50	109	6.0	28
696	Raibareli	Unchahar	8.28	449	0	244	28	1.0	0.94	6.9	160	8.4	34	37	4.3	28
697	Rampur	Milak	7.85	890	0	403	36	0.26	5.0	72	310	40	50	74	15	21
698	Rampur	Shahbad	7.87	1047	0	293	85	0.29	34	87	350	88	31	73	6.2	23
699	Rampur	Chamraua	7.85	465	0	207	21	0.18	0	43	205	44	23	22	2.9	26
700	Rampur	Bilaspur	7.95	582	0	305	14	0.32	0	34	235	36	35	38	1.4	25
701	Rampur	Swar	7.97	558	0	293	14	0.21	0	43	235	52	25	26	1.8	27
702	Rampur	Saidnagar	7.92	352	0	201	14	0.14	0	6.0	155	52	6	11	1.5	28
703	Saharanpur	Nanauta	8.22	597	0	281	7.1	0.54	0	25	220	36	31	18	5.5	25
704	Saharanpur	Nakur	8.21	1232	0	390	85	0	73	68	410	80	50	80	6.8	28
705	Saharanpur	Nagal	8.22	582	0	293	11	0.33	0	0	220	56	19	18	3.2	29

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
706	Saharanpur	Puwarka	8.23	662	0	342	7.1	0.16	0	5.4	240	44	31	31	4.2	27
707	Saharanpur	Rampur	7.79	555	0	256	14	0.47	0	29	220	40	29	12	5.7	28
708	Saharanpur	Sadauli Qudim	7.70	967	0	110	156	0.10	89	38	380	84	41	21	2.2	26
709	Saharanpur	Sarsawa	7.69	927	0	378	43	0	0	37	340	36	60	35	7.4	26
710	Saharanpur	Deoband	7.83	727	0	317	21	0.53	0	30	300	60	36	9	15	28
711	Saharanpur	Baliakheri	8.00	590	0	281	28	0.55	0	28	230	40	31	19	5.4	22
712	Saharanpur	Gangoh	7.99	729	0	305	43	0.42	0	23	280	44	41	5	28	28
713	Saharanpur	Muzafarabad	8.13	530	0	244	14	0	11	12	230	36	34	0	23	23
714	Sant Kabir Nagar	Bagholi	7.98	600	0	323	28	0.00	7.3	7.1	290	64	32	15	1.2	27
715	Sant Kabir Nagar	Belhar Kalan	8.13	320	0	195	11	0.00	0	0	130	36	10	18	2.2	32
716	Sant Kabir Nagar	Hessar Bazar	7.89	500	0	281	25	0.12	0	15	270	36	44	7.7	2.1	29
717	Sant Kabir Nagar	Khalilabad	7.69	1000	0	451	99	0.00	20	45	470	84	63	48	2.8	36
718	Sant Kabir Nagar	Mehdawal	8.16	500	0	232	50	0.00	0	18	210	20	39	35	2.6	35
719	Sant Kabir Nagar	Nnath Nagar	7.89	550	0	354	14	0.00	0	0	200	48	19	56	1.2	31
720	Sant Kabir Nagar	Poli	8.39	530	36	232	36	0.00	0	0	290	92	15	7.5	2.6	26

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
721	Sant Kabir Nagar	Santha	7.91	415	0	220	28	0.00	0	12	210	52	19	6.7	1.2	26
722	Sant Kabir Nagar	Semariyawan	7.62	300	0	159	21	0.00	0	7.2	150	44	10	7.6	4.4	11
723	Sant Ravidas Nagar	Abholi	8.32	532	18	244	14	0.46	12	31	160	12	31	80	5.8	31
724	Sant Ravidas Nagar	Aurai	7.94	321	0	122	35	0.19	11	12	110	24	12	29	1.4	27
725	Sant Ravidas Nagar	Bhadohi	7.93	510	0	220	35	0.68	4.1	38	150	32	17	61	3.7	14
726	Sant Ravidas Nagar	Deegh	7.81	636	0	378	21	1.1	17	21	300	32	53	41	1.0	22
727	Sant Ravidas Nagar	Gyanpur	7.81	667	0	403	28	0.59	0.41	5.3	270	28	48	63	5.1	26
728	Sant Ravidas Nagar	Suriyawan	8.22	585	0	220	57	0.14	16	37	180	12	36	71	2.4	32
729	Shahjahanpur	Banda	7.81	454	0	207	35	0.17	0	27	200	80	0	20	5.7	33
730	Shahjahanpur	Bhawal Khera	7.63	1420	0	464	163	0.02	19	79	490	36	96	100	3.0	36
731	Shahjahanpur	Dadraul	8.20	595	0	268	28	0.30	0.53	32	115	36	6	82	3.0	32

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
732	Shahjahanpur	Jaitipur	8.20	344	0	214	7.1	0.34	0	4.0	110	8.0	22	35	3.2	33
733	Shahjahanpur	Jalalabad	7.90	342	0	207	7.1	0.37	0	4.8	140	52	2	18	3.3	33
734	Shahjahanpur	Kalan	7.87	718	0	305	43	0.33	0.65	55	170	56	7	87	3.8	35
735	Shahjahanpur	Kanth	7.90	535	0	214	28	0.34	0	74	230	32	36	27	4.8	29
736	Shahjahanpur	Katra	8.33	500	0	214	35	0.33	0	41	130	28	14	60	5.8	33
737	Shahjahanpur	Khutar	7.75	767	0	317	78	0.27	0.86	31	270	20	53	57	7.9	28
738	Shahjahanpur	Madanapur	8.30	795	0	244	110	0.44	0.62	61	170	20	29	109	7.8	28
739	Shahjahanpur	Mirzapur	8.08	679	0	390	21	1.2	2.5	22	115	24	13	117	4.0	29
740	Shahjahanpur	Nigohi	8.06	503	0	275	14	0.31	6.9	12	230	16	46	12	8.6	32
741	Shahjahanpur	Puyawan	7.55	519	0	244	43	0.22	0	8.6	210	32	31	23	7.0	34
742	Shahjahanpur	Sindhuli	7.70	999	0	451	92	0.26	6.0	13	315	24	61	92	3.6	37
743	Shahjahanpur	Tilhar	7.93	375	0	183	18	0.27	0	18	120	20	17	29	8.5	32
744	Shrawasti	Jamunaha H.Q.	8.12	708	0	390	14	0.22	0	0	230	32	36	42	2.1	25
745	Shrawasti	Hariharpur Rani H.Q.	8.35	605	18	262	21	0.15	0	0	200	20	36	34	1.9	26

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
746	Shrawasti	Sirsuya H.Q.	8.31	825	0	451	14	0.21	0	0	280	16	58	45	0	22
747	Shrawasti	Ikauna H.Q.	8.28	1044	0	342	149	0.48	0	6.7	260	24	48	99	4.6	13
748	Shrawasti	Gilaula H.Q.	8.08	485	0	232	18	0	0	6.8	220	44	26	6	1.8	25
749	Siddharth Nagar	Bhanwapur H.Q.	8.15	690	0	329	28	0.80	0	9.0	300	76	26	11	2.6	30
750	Siddharth Nagar	Dumariyaganj H.Q.	7.79	1192	0	488	71	0.65	28	63	390	56	60	69	2.5	21
751	Siddharth Nagar	Itwa H.Q.	7.97	610	0	317	14	0.55	0	6.5	245	44	32	16	1.7	29
752	Siddharth Nagar	Badhni H.Q.	8.40	847	24	384	21	0.81	0	0	340	76	36	34	0	18
753	Siddharth Nagar	Shohratgarh H.Q.	8.28	454	0	226	14	0.77	0	5.9	200	20	36	10	1.7	27
754	Siddharth Nagar	Naugarh H.Q.	7.89	827	0	415	36	0.75	0	5.4	320	36	55	25	2.2	28
755	Siddharth Nagar	Lotan H.Q.	8.13	672	0	342	18	0.79	0	0	240	44	31	33	1.5	31
756	Siddharth Nagar	Uska bazar H.Q.	7.80	757	0	390	14	0.51	0	7.0	310	60	38	27	3.4	36
757	Siddharth Nagar	Birdpur H.Q.	8.01	996	0	525	14	0.93	0	37	330	48	50	94	1.1	25
758	Siddharth Nagar	Jogiya H.Q.	7.82	946	0	500	21	0.77	0	0	380	48	62	23	2.0	29
759	Siddharth Nagar	Khuniyaw H.Q.	7.72	279	0	128	7.1	0.80	0	11	110	20	14	3	9.5	16
760	Siddharth Nagar	Mithawal H.Q.	7.95	560	0	293	14	0.49	0	0	235	56	23	8	1.4	26

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
761	Siddharth Nagar	Bansi H.Q.	7.80	900	0	378	64	0.53	0	14	340	52	50	32	2.9	32
762	Siddharth Nagar	Khesraha H.Q.	7.65	628	0	323	14	0.70	0	0	260	40	38	16	2.1	32
763	Sitapur	Mahmudabad	8.05	404	0	220	21	0.24	0	5.4	170	48	12	17	4.8	28
764	Sitapur	Rampur Mathura	7.97	496	0	281	14	0.00	0	14	200	60	12	25	2.7	19
765	Sitapur	Rewsa	7.76	588	0	317	21	0.21	0	9.2	190	44	19	51	3.7	28
766	Sitapur	Behta	7.48	725	0	317	50	0.00	0	56	280	60	31	42	10	26
767	Sitapur	Sakran	7.79	651	0	317	35	0.22	0	22	200	44	22	59	5.8	34
768	Sitapur	Biswan	7.77	386	0	232	7.1	0.00	0	5.0	170	32	22	15	3.1	39
769	Sitapur	Pahala	7.84	327	0	183	14	0.00	0	6.6	150	32	17	10	3.0	39
770	Sitapur	Sidhaul	7.39	813	0	366	71	0.00	14	35	350	40	60	42	5.5	38
771	Sitapur	Gondlamau	7.85	581	0	305	21	0.60	0	11	250	40	36	15	5.1	36
772	Sitapur	Machhreta	8.36	521	36	122	64	0.00	5	26	160	16	29	52	4.6	32
773	Sitapur	Misrikh	7.83	810	0	329	78	0.00	0	22	170	24	26	98	6.1	29
774	Sitapur	Pisawan	7.81	441	0	232	14	0.00	0	25	190	28	29	22	4.9	30
775	Sitapur	Mohol	8.39	411	48	134	14	0.29	0	5.0	180	16	34	14	4.3	33

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
776	Sitapur	Aliya	8.09	680	0	268	50	0.30	25	43	250	16	50	36	30	33
777	Sitapur	Hargaon	7.62	632	0	268	64	0.38	0	32	290	44	43	23	5.1	33
778	Sitapur	Laharpur	7.54	479	0	207	43	0.00	0	23	220	52	22	9	4.9	34
779	Sitapur	Khairabad	8.14	396	0	220	14	0.97	0	9.4	180	60	7	13	4.3	34
780	Sitapur	Parsendi	7.73	498	0	281	14	0.52	0	5.0	200	16	38	19	4.3	34
781	Sitapur	Kasmanda	7.97	436	0	207	14	0.39	0	26	200	40	24	5	3.8	28
782	Sonbhadra	Babhani	7.85	938	0	232	78	0.97	163	91	280	44	41	80	1.2	60
783	Sonbhadra	Chatara	7.86	506	0	183	43	0.25	22	17	190	28	29	34	1.1	32
784	Sonbhadra	Chopan	7.41	1459	0	256	142	0.14	134	161	440	72	62	103	2.0	34
785	Sonbhadra	Dudhi	7.66	1052	0	403	50	0.56	33	56	250	28	43	117	0.52	36
786	Sonbhadra	Ghorwal	7.57	498	0	268	14	0.38	8.4	8.2	210	24	36	32	0.77	22
787	Sonbhadra	Myorpur	8.04	398	0	171	28	1.3	0.36	27	130	24	17	44	0.33	35
788	Sonbhadra	Nagawa	7.54	420	0	207	28	0.32	3.7	1.0	180	36	22	16	1.9	11
789	Sonbhadra	Robertsganj	8.00	589	0	183	71	0.16	4.8	29	150	28	19	71	0.78	18
790	Sultanpur	Sultanpur	8.19	417	0	244	21	1.1	8.5	5.3	170	17	31	31	2.9	28

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
791	Sultanpur	Akhand Nagar	8.11	471	0	305	7.1	0.82	0	1.2	190	21	34	32	4.0	28
792	Sultanpur	Amethi	8.11	1712	0	464	177	0.81	64	144	330	17	70	237	6.6	28
793	Sultanpur	Baldirai	8.17	391	0	220	7.1	1.1	2.5	20	190	55	14	15	4.2	23
794	Sultanpur	Bhadaiyau	7.94	456	0	244	14	1.2	6.3	17	220	13	46	8	3.5	26
795	Sultanpur	Bhadar	8.49	664	30	305	21	1.1	0.69	26	90	13	14	93	4.0	28
796	Sultanpur	Bhetya	8.60	1055	36	470	57	0.76	8.7	39	130	8.4	26	185	7.8	31
797	Sultanpur	Dhanpatganj	7.95	511	0	305	14	0.87	2.9	4.2	205	25	41	31	3.7	28
798	Sultanpur	Dostpur	8.34	575	24	293	14	0.79	2.5	19	130	13	24	68	4.1	32
799	Sultanpur	Dubeypur	8.40	488	30	220	14	1.0	8.5	14	105	8.4	20	52	4.1	27
800	Sultanpur	Gauriganj	7.84	607	0	268	60	0.74	0	25	215	34	32	51	6.8	29
801	Sultanpur	Jagdishpur	7.85	1341	0	403	142	0.74	16	104	270	38	43	176	5.6	31
802	Sultanpur	Jagdishpur	7.86	686	0	329	21	1.1	0	37	180	38	22	71	4.2	30
803	Sultanpur	Jagdishpur	7.76	2147	0	403	255	0.93	134	204	300	76	29	322	6.6	29
804	Sultanpur	Jaisinghpur	7.81	622	0	329	18	0.87	3.3	14	210	25	36	45	4.0	28
805	Sultanpur	Jamo	7.90	845	0	415	43	0.92	6.3	34	190	21	34	91	42	25

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
806	Sultanpur	Kadipur	7.83	565	0	305	21	0.67	5.0	16	220	42	29	34	4.6	29
807	Sultanpur	Kurebhar	8.21	414	0	232	14	1.2	0.00	3.0	150	17	26	27	4.0	24
808	Sultanpur	Kurwar	7.91	607	0	354	21	0.91	7.1	6.4	260	29	46	29	4.1	28
809	Sultanpur	Lambhua	7.63	1114	0	354	121	0.55	16	38	280	38	46	101	10	28
810	Sultanpur	Motigarpur	8.15	466	0	244	28	1.1	9.1	14	210	17	41	21	3.6	25
811	Sultanpur	Musafir Khana	8.17	1987	0	793	135	1.1	71	100	580	13	132	191	5.9	29
812	Sultanpur	P.P. kannaicha	7.99	509	0	317	14	0.79	5.2	2.2	240	42	34	17	3.5	30
813	Sultanpur	P.P. kannaicha	7.84	551	0	268	35	0.86	8.0	18	240	38	36	24	4.3	30
814	Sultanpur	P.P. kannaicha	8.04	487	0	305	14	1.1	0	2.9	230	42	31	18	4.8	26
815	Sultanpur	Sangrampur	8.42	945	30	384	64	1.1	0.60	52	270	13	58	104	9.1	26
816	Sultanpur	Shahgarh	7.84	646	0	293	64	0.96	0.55	12	270	25	50	28	8.6	30
817	Sultanpur	Shukul Bazar	7.79	443	0	232	14	0.46	11	11	200	42	24	11	3.2	30
818	Unnao	Auras	7.87	737	0	354	43	0.74	0	54	200	40	24	92	3.3	27
819	Unnao	Ganj Moradabad	8.05	353	0	195	14	0.30	5.0	5.0	120	20	17	29	3.0	39
820	Unnao	Bangarmau	7.63	613	0	329	14	0.37	18	16	200	56	14	51	3.5	39

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
821	Unnao	Fatehpur Chaurasi	7.73	395	0	207	21	0.47	0	13	170	48	12	16	2.4	40
823	Unnao	Hasanganj	8.01	531	0	207	43	0.76	5.0	30	160	20	26	44	4.2	37
824	Unnao	Miyanganj	7.83	441	0	256	14	0.44	0	11	170	40	17	30	4.8	36
822	Unnao	Safipur	7.74	689	0	232	21	0.77	69	31	240	56	24	31	4.7	36
825	Unnao	Asoha	8.14	3303	0	146	652	0.00	0	706	240	44	31	725	8.6	39
826	Unnao	Nawabganj	7.83	2003	0	488	199	0.60	13	313	200	44	22	390	7.2	36
827	Unnao	Bichhiya	7.93	663	0	342	28	0.61	0	7.6	240	32	38	36	6.2	36
828	Unnao	Purwa	7.89	904	0	415	71	1.0	29	40	310	12	67	86	2.4	38
829	Unnao	Hilauli	8.11	715	0	293	50	0.00	5.0	37	170	16	31	82	6.2	29
830	Unnao	Sumerpur	8.48	1087	24	549	43	1.1	0	43	70	8.0	12	240	4.2	30
831	Unnao	Bighapur	8.05	517	0	268	21	1.1	0	5.0	170	16	31	38	4.5	32
832	Unnao	Sikandarpur Karan	7.62	585	0	354	14	0.47	0	5.7	210	44	24	47	4.9	36
833	Unnao	Sikandarpur Sarausi	7.79	630	0	317	14	0.99	0	53	200	36	26	66	3.7	36
834	Varanasi	Arajiline	7.93	599	0	390	14	0.51	0.35	5.8	130	12	24	140	3.0	22

S.No.	District	Block	pH	EC µS/cm at 25°C	CO ₃	HC O ₃	Cl	F	NO ₃	SO ₄	TH	Ca	Mg	Na	K	SiO ₂
					mg/l											
835	Varanasi	Baragaon	7.58	805	0	390	50	0.56	6.26	37	300	20	60	115	5.7	31
836	Varanasi	Chiraigaon	7.87	687	0	403	14	0.46	0	3.7	260	12	55	105	2.5	26
837	Varanasi	Cholapur	8.18	310	0	183	14	0.57	2.9	27	150	12	29	25	2.0	26
838	Varanasi	Harhuwa	8.11	293	0	183	7.1	0.23	4.7	2.7	130	8.0	26	41	2.0	30
839	Varanasi	Kashi Vidya Peeth	8.37	1118	18	244	135	0.80	46	84	380	8.0	86	131	5.3	26
840	Varanasi	Pindra	8.43	583	18	293	14	0.36	11	14	270	8.0	60	110	3.5	31
841	Varanasi	Sewapuri	7.71	470	0	317	7.1	0.56	1.8	2.2	100	20	12	51	2.5	28

For Heavy Metals:

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
1	Agra	Achhnera	0.000	3.100	0.035	-0.001	0.058	0.000	0.000	0.020
2	Agra	Akola	0.000	0.093	0.140	0.002	0.072	0.000	0.000	0.031
3	Agra	Bah	0.005	-0.028	-0.001	-0.001	0.083	0.001	0.000	0.001
4	Agra	Barauli Ahir	0.000	-0.014	0.021	-0.001	1.160	0.000	0.001	0.013
5	Agra	Bichpuri	0.000	9.346	0.185	0.000	1.951	0.000	0.000	0.009
6	Agra	Etmadpur	0.000	0.201	0.027	-0.001	0.428	0.000	0.000	0.019

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
7	Agra	Fatehabad	0.000	-0.028	-0.001	-0.001	0.014	0.001	0.000	0.028
8	Agra	Fatehpur Sikri	0.000	0.540	0.060	0.001	0.211	0.000	0.000	0.006
9	Agra	Jagner	0.000	0.158	0.027	0.000	0.258	0.000	0.001	0.024
10	Agra	Jaitpur Kalan	0.000	0.037	0.021	0.001	2.638	0.000	0.001	0.007
11	Agra	Khandauli	0.000	-0.029	0.030	-0.001	0.401	0.000	0.000	0.025
12	Agra	Kheragarh	0.001	-0.028	-0.001	-0.001	-0.003	0.000	0.000	0.026
13	Agra	Pinhat	0.000	-0.029	0.003	-0.001	0.163	0.000	0.000	0.010
14	Agra	Saiyan	0.001	-0.028	-0.001	-0.001	0.007	0.001	0.000	0.011
15	Agra	Shamsabad	0.001	0.002	0.000	0.000	0.013	0.001	0.001	0.016
16	Aligarh	Akrabad	0.000	0.348	0.104	0.001	0.472	0.001	0.001	0.027
17	Aligarh	Dhanipur	0.000	0.314	0.035	0.000	0.925	0.000	0.002	0.019
18	Aligarh	Jawan	0.000	0.337	0.097	0.001	0.792	0.001	0.001	0.028
19	Aligarh	Atrauli	0.000	0.567	0.240	0.016	0.852	0.000	0.001	0.028
20	Aligarh	Gangiri	0.000	0.505	0.032	0.001	0.155	0.001	0.001	0.027
21	Aligarh	Bijauli	0.000	0.283	1.243	0.001	0.051	0.001	0.001	0.043
22	Aligarh	Chandaus	-0.001	0.303	0.179	0.006	1.827	0.000	0.001	0.011
23	Aligarh	Tappal	0.000	0.434	0.484	0.004	0.137	0.001	0.002	0.033
24	Aligarh	Khair	0.000	0.597	0.805	0.019	1.657	0.001	0.001	0.126
25	Aligarh	Lodha	0.001	0.034	0.015	0.005	2.873	0.001	0.007	0.027
26	Aligarh	Dhanipur	0.000	1.340	0.456	0.004	0.417	0.001	0.001	0.016
27	Aligarh	Gonda	0.000	0.286	0.928	0.001	16.44 ₂	0.003	0.002	0.032
28	Aligarh	Gonda	0.000	3.205	1.362	0.001	0.031	0.002	0.000	0.012

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
29	Aligarh	Iglas	0.000	0.407	1.161	0.010	5.769	0.001	0.001	0.014
30	Ambedkar Nagar	Akberpur	0.000	2.358	0.030	-0.002	0.952	0.001	0.000	0.001
31	Ambedkar Nagar	Baskhari	0.000	0.051	0.011	-0.001	0.694	0.000	0.000	0.001
32	Ambedkar Nagar	Bhiti	0.000	2.643	0.102	-0.002	0.922	0.000	0.000	0.003
33	Ambedkar Nagar	Bhiyaon	0.001	0.150	0.002	0.003	0.188	0.000	0.000	0.010
34	Ambedkar Nagar	Jahangirganj	0.000	0.787	0.041	-0.002	0.433	0.000	0.001	0.006
35	Ambedkar Nagar	Jalalpur	0.000	0.809	0.287	-0.002	1.376	0.000	0.000	0.004
36	Ambedkar Nagar	Katehari	0.000	1.662	0.050	-0.002	0.677	0.001	0.008	0.002
37	Ambedkar Nagar	Ramnagar	0.000	0.095	0.032	-0.002	1.238	0.000	0.002	0.004
38	Ambedkar Nagar	Tanda	0.000	2.279	0.056	-0.002	0.045	0.001	0.002	0.002
39	Auraiya	Bidhuna	0.000	0.887	0.052	0.006	0.360	0.000	0.002	0.012
40	Auraiya	Bidhuna	0.002	0.280	0.004	0.001	0.097	0.000	0.002	0.004
41	Auraiya	Bidhuna	-0.001	1.112	0.033	0.000	0.136	0.001	0.000	0.021
42	Auraiya	Bidhuna	0.000	2.866	0.064	0.000	0.180	0.000	0.000	0.024
43	Auraiya	Achhalda	-0.001	0.128	0.017	-0.001	0.068	0.001	0.000	0.016
44	Auraiya	Airwa Katra	-0.001	0.393	0.063	-0.001	0.524	0.000	0.000	0.010

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
45	Auraiya	Ajitmal	0.000	0.195	0.006	0.002	0.275	0.000	0.000	0.015
46	Auraiya	Auraiya	0.004	1.630	0.040	0.001	2.251	0.000	0.002	0.008
47	Auraiya	Bhagya Nagar	- 0.001	0.011	0.015	0.001	-0.002	0.001	0.001	0.017
48	Auraiya	Bidhuna	- 0.001	0.187	0.015	0.000	0.450	0.000	0.001	0.047
49	Auraiya	Sahar	0.000	0.294	0.028	0.000	1.968	0.001	0.002	0.031
50	Azamgarh	Ahiraula	0.000	1.030	0.021	-0.003	1.407	0.000	0.002	0.004
51	Azamgarh	Atraulia	0.000	1.176	0.029	-0.003	0.973	0.000	0.003	0.003
52	Azamgarh	Azmatgarh	0.000	0.242	0.032	-0.002	0.443	0.000	0.004	0.005
53	Azamgarh	Bilariyaganj	0.000	0.050	0.158	-0.003	1.232	0.000	0.002	0.008
54	Azamgarh	Harraiya	0.000	0.709	0.018	0.000	0.277	0.000	0.002	0.012
55	Azamgarh	Jahanaganj	0.000	0.139	0.022	-0.002	0.518	0.000	0.002	0.019
56	Azamgarh	Koyalsa	0.000	0.194	0.026	-0.003	0.014	0.000	0.001	0.002
57	Azamgarh	Lalganj	0.000	0.290	0.011	-0.002	0.095	0.000	0.003	0.014
58	Azamgarh	Maharajganj	0.000	0.026	0.191	-0.003	0.232	0.017	0.001	0.000
59	Azamgarh	Mehnagar	0.000	0.480	0.008	-0.001	0.231	0.000	0.004	0.010
60	Azamgarh	Mirzapur H.Q.	0.000	0.091	0.029	-0.003	1.373	0.000	0.001	0.009
61	Azamgarh	Mohammadpur	0.000	0.158	0.008	-0.003	0.275	0.000	0.001	0.013
62	Azamgarh	Palhana	0.000	0.019	0.002	0.001	0.051	0.026	0.001	0.055
63	Azamgarh	Palhani	0.000	0.971	0.039	-0.002	2.482	0.000	0.004	0.012
64	Azamgarh	Pawai	0.000	0.091	0.045	0.004	0.126	0.000	0.001	0.008
65	Azamgarh	Phoolpur	0.000	0.030	0.016	-0.002	0.177	0.000	0.001	0.007

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
66	Azamgarh	Rani Ki Sarai	0.001	0.378	0.012	-0.003	0.045	0.000	0.001	0.008
67	Azamgarh	Sathiaon	0.000	0.197	0.011	-0.003	0.203	0.000	0.001	0.007
68	Azamgarh	Tahabarpur	0.001	0.277	0.011	0.001	0.158	0.001	0.004	0.005
69	Azamgarh	Tarwa	0.000	0.072	0.004	-0.003	0.256	0.001	0.001	0.010
70	Azamgarh	Thekma	0.000	0.707	0.071	-0.003	0.748	0.000	0.001	0.008
71	Baghpat	Chapruli	0.000	0.263	0.066	0.000	0.536	0.000	0.000	0.034
72	Baghpat	Baghpat	0.000	0.148	0.031	0.001	0.175	0.001	0.001	0.013
73	Baghpat	Binauli	0.000	0.433	0.029	0.000	0.240	0.000	0.001	0.015
74	Baghpat	Baraut	0.000	0.119	0.004	0.000	0.156	0.001	0.001	0.009
75	Baghpat	Pilana	0.001	0.269	0.123	0.002	1.561	0.000	0.001	0.023
76	Baghpat	Khekra	0.000	-0.001	0.008	0.002	0.016	0.001	0.000	0.025
77	Bahraich	Jarwal H.Q.	0.000	7.064	0.191	-0.001	1.458	0.002	0.001	0.000
78	Bahraich	Kaisarganj H.Q.	0.000	4.629	0.249	0.000	2.311	0.008	0.001	0.000
79	Bahraich	Fakarpur H.Q.	0.000	12.26 0	0.178	-0.001	0.359	0.003	0.000	0.000
80	Bahraich	Fejawapur H.Q.	0.000	10.71 5	0.122	-0.001	0.866	0.021	0.001	0.000
81	Bahraich	Mahasi H.Q.	0.000	7.930	0.453	-0.001	0.952	0.046	0.001	0.000
82	Bahraich	Shivpur H.Q.	0.000	3.266	0.126	-0.001	0.022	0.034	0.001	0.000
83	Bahraich	Balha H.Q.	0.000	8.235	0.095	-0.001	0.033	0.004	0.001	0.000
84	Bahraich	Nawabganj	0.000	1.225	0.124	-0.001	0.042	0.008	0.001	0.002
85	Bahraich	Mihipurwa	0.000	2.840	0.165	-0.001	0.949	0.008	0.002	0.000
86	Bahraich	Risia H.Q.	0.000	1.265	0.060	-0.001	0.041	0.001	0.001	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
87	Bahraich	Huzurpur	0.000	2.635	0.039	-0.001	0.061	0.110	0.001	0.000
88	Bahraich	Bisheshwarganj H.Q.	0.000	1.449	0.035	-0.001	0.589	0.002	0.001	0.001
89	Bahraich	Payagpur H.Q.	0.000	2.316	0.119	-0.001	0.430	0.002	0.002	0.001
90	Bahraich	Chittaura H.Q.	0.000	2.501	0.050	-0.001	0.472	0.003	0.001	0.000
91	Ballia	Bairyा	0.000	2.038	0.264	-0.003	0.393	0.040	0.001	0.000
92	Ballia	Bansdeeh	0.000	0.753	0.115	0.000	0.902	0.000	0.001	0.002
93	Ballia	Belhari	0.000	4.291	0.144	0.000	2.176	0.012	0.006	0.000
94	Ballia	Beruwarbari	0.001	1.900	0.047	0.001	0.374	0.001	0.002	0.025
95	Ballia	Chilkahar	0.000	0.163	0.029	-0.003	1.426	0.000	0.001	0.005
96	Ballia	dubahar	0.000	1.544	0.027	-0.003	0.083	0.041	0.001	0.000
97	Ballia	Garwar	0.000	1.986	0.098	-0.003	0.059	0.001	0.001	0.003
98	Ballia	Hanumanganj	0.000	0.258	0.028	-0.003	0.068	0.000	0.002	0.004
99	Ballia	Maniyar	0.000	4.236	0.201	-0.003	0.253	0.001	0.001	0.001
100	Ballia	Murali Chhapara	0.000	-0.012	-0.001	-0.004	-0.007	0.001	0.000	0.014
101	Ballia	Nawa Nagar	0.000	1.602	0.082	-0.003	0.109	0.002	0.001	0.000
102	Ballia	Negara	0.000	2.220	0.192	0.000	0.070	0.002	0.001	0.000
103	Ballia	Pandah	0.000	3.617	0.064	-0.003	0.263	0.002	0.002	0.001
104	Ballia	Rasara	0.000	0.473	0.014	-0.002	0.339	0.000	0.005	0.010
105	Ballia	Reoti	0.000	1.333	0.080	-0.003	1.026	0.041	0.001	0.000
106	Ballia	Siyar	0.000	0.628	0.104	-0.004	0.266	0.003	0.001	0.000
107	Ballia	Sohaon	0.000	3.512	0.124	0.007	0.317	0.027	0.001	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
108	Balrampur	Harraiya Satgharwa H.Q.	0.000	0.156	0.193	-0.001	0.374	0.000	0.001	0.011
109	Balrampur	Tulsipur	0.000	3.392	0.295	0.000	0.168	0.008	0.001	0.002
110	Balrampur	Balrampur H.Q.	0.000	0.567	0.197	-0.001	0.297	0.012	0.001	0.000
111	Balrampur	Utraula	0.000	1.099	0.240	-0.001	1.419	0.001	0.001	0.002
112	Balrampur	Gaidas Buzurg H.Q.	0.000	2.006	0.161	-0.001	1.709	0.010	0.003	0.002
113	Balrampur	Rehra Bazar H.Q.	0.000	4.027	0.381	-0.001	0.058	0.016	0.001	0.001
114	Balrampur	Sriduttaganj H.Q.	0.000	2.082	0.125	0.000	0.438	0.005	0.000	0.000
115	Balrampur	Pachperwa H.Q.	0.000	0.665	0.104	-0.001	1.014	0.000	0.001	0.009
116	Balrampur	Gainsari H.Q.	0.000	3.306	0.422	-0.001	0.044	0.014	0.001	0.000
117	Banda	Baberu	0.000	-0.005	0.049	0.000	0.102	0.002	0.001	0.012
118	Banda	Barokhar	0.001	1.470	0.011	0.000	0.044	0.000	0.000	0.014
119	Banda	Bisanda	0.000	0.600	0.123	0.003	0.836	0.000	0.001	0.011
120	Banda	Jaspura	0.000	-0.010	0.000	0.004	0.043	0.001	0.001	0.005
121	Banda	Kamasin	0.003	0.385	0.006	0.001	0.226	0.000	0.000	0.005
122	Banda	Mahua	0.003	0.332	0.065	0.000	0.017	0.000	0.001	0.005
123	Banda	Naraini	0.000	1.313	0.316	0.000	0.034	0.000	0.002	0.005
124	Banda	Tindwari	0.000	0.427	0.060	0.006	2.834	0.000	0.001	0.004
125	Barabanki	Trivediganj	0.000	0.094	0.042	-0.001	0.312	0.000	0.000	0.009
126	Barabanki	Banki	0.000	0.090	0.131	-0.008	1.384	0.000	0.001	0.001

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
127	Barabanki	Dewa	0.000	2.292	0.053	-0.009	0.127	0.002	0.000	0.004
128	Barabanki	Fatehpur	0.000	4.257	0.158	-0.009	0.707	0.002	0.001	0.001
129	Barabanki	Ramnagar	0.000	1.761	0.088	-0.009	0.016	0.005	0.000	0.000
130	Barabanki	Suratganj	0.000	5.528	0.049	-0.008	0.019	0.144	0.001	0.000
131	Barabanki	Sirauli Gauspur	0.000	0.476	0.042	0.008	0.222	0.001	0.004	0.000
132	Barabanki	Daraiyabad	0.000	0.419	0.028	-0.008	0.725	0.001	0.001	0.005
133	Barabanki	Puredalai	0.000	-0.036	-0.001	-0.009	-0.008	0.000	- 0.001	0.000
134	Barabanki	Banikodar	0.000	2.799	0.118	-0.008	0.183	0.004	0.001	0.001
135	Barabanki	Masauli	0.000	0.130	0.138	-0.008	0.001	0.001	0.001	0.002
136	Barabanki	Harak	0.000	1.603	0.059	-0.008	0.528	0.003	0.001	0.005
137	Barabanki	Siddharthnagar	0.000	0.430	0.044	-0.008	1.267	0.000	0.001	0.011
138	Barabanki	Haidergarh	0.000	0.155	0.086	-0.008	0.926	0.000	0.001	0.010
139	Barabanki	Nindura	0.000	0.617	0.095	-0.008	0.335	0.001	0.001	0.010
140	Barabanki	Mawai	0.000	3.548	0.026	-0.008	1.292	0.000	0.001	0.000
141	Barabanki	Rudauli	0.000	0.761	0.087	-0.006	0.008	0.004	0.002	0.001
142	Bareilly	ALAMPUR JAFARABAD	0.000	1.566	0.100	0.000	0.006	0.000	0.001	0.005
143	Bareilly	BAHERI	0.000	0.312	0.034	0.000	0.063	0.001	0.000	0.002
144	Bareilly	BHADPURA	0.001	2.159	0.057	0.000	0.023	0.000	0.002	0.014
145	Bareilly	BHOJIPURA	0.000	0.767	0.098	-0.001	0.009	0.005	0.001	0.000
146	Bareilly	BHUTAH	0.001	4.478	0.202	0.000	0.021	0.002	0.001	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
147	Bareilly	BITHRI CHAINPUR	0.000	0.802	0.245	0.000	0.145	0.002	0.001	0.016
148	Bareilly	FARIDPUR	0.001	4.945	0.147	-0.001	0.030	0.007	0.001	0.000
149	Bareilly	FATEHGANJ WEST	0.000	1.302	0.090	-0.001	0.151	0.006	0.001	0.000
150	Bareilly	KIYARA	0.001	0.199	0.056	0.000	1.141	0.001	0.001	0.002
151	Bareilly	MAJHGAWAN	0.000	2.280	0.180	-0.001	0.012	0.001	0.000	0.002
152	Bareilly	MEERGANJ	0.000	6.429	0.334	0.000	0.160	0.006	0.001	0.000
153	Bareilly	NAWABGANJ	0.000	0.660	0.066	0.000	0.032	0.003	0.001	0.006
154	Bareilly	RAM NAGAR	0.000	0.049	0.002	0.000	0.160	0.003	0.001	0.000
155	Bareilly	RICHHA	0.000	0.802	0.076	-0.001	0.011	0.001	0.001	0.004
156	Bareilly	SHERGARH	0.000	0.215	0.098	0.001	0.978	0.014	0.001	0.002
157	Basti	Rudauli H.Q.	0.000	0.752	0.109	-0.002	4.158	0.001	0.001	0.016
158	Basti	Saunghat H.Q.	0.000	2.260	0.174	-0.002	0.709	0.002	0.003	0.002
159	Basti	Basti Sadar H.Q.	0.000	0.154	0.011	0.000	0.549	0.000	0.001	0.000
160	Basti	Saltauwa Gopalpur H.Q.	0.000	9.373	0.063	-0.002	2.078	0.000	0.001	0.005
161	Basti	Ramnagar H.Q.	0.000	1.611	0.181	-0.002	2.739	0.001	0.000	0.003
162	Basti	Gaur H.Q.	0.000	0.960	0.140	-0.001	5.524	0.001	0.001	0.002
163	Basti	Bahadurpur H.Q.	0.000	2.793	0.056	-0.002	0.856	0.000	0.001	0.002
164	Basti	Dubauliya H.Q.	0.000	1.689	0.068	-0.002	1.765	0.000	0.001	0.003
165	Basti	Kudraha H.Q.	0.000	3.057	0.393	-0.002	0.636	0.000	0.000	0.001
166	Basti	Bankati H.Q.	0.000	1.046	0.070	-0.002	0.214	0.004	0.001	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
167	Basti	Kaptanganj H.Q.	0.000	0.464	0.307	-0.001	0.363	0.000	0.000	0.020
168	Basti	Harraiya Satgharwa H.Q.	0.000	0.523	0.022	-0.002	0.335	0.000	0.001	0.001
169	Basti	Vikramjot H.Q.	0.000	0.687	0.038	-0.002	1.706	0.002	0.001	0.002
170	Basti	Parasurampur H.Q.	0.000	6.605	0.122	-0.002	0.387	0.011	0.001	0.000
171	Bijnor	Kiratpur	0.000	0.846	0.299	0.000	0.039	0.001	0.001	0.002
172	Bijnor	Kiratpur	0.000	2.429	0.285	0.000	0.973	0.005	0.001	0.009
173	Bijnor	Kiratpur	0.000	1.282	0.143	-0.001	0.279	0.009	0.007	0.003
174	Bijnor	Kiratpur	0.000	1.392	0.036	0.000	0.008	0.003	0.002	0.005
175	Bijnor	Mohammadpur Deomal	0.000	0.073	0.063	0.000	0.241	0.004	0.002	0.026
176	Bijnor	Mohammadpur Deomal	0.000	0.028	0.051	-0.001	0.071	0.005	0.001	0.013
177	Bijnor	Mohammadpur Deomal	0.000	0.432	0.166	-0.001	0.135	0.011	0.002	0.007
178	Bijnor	Mohammadpur Deomal	0.000	0.519	0.041	0.000	0.277	0.001	0.001	0.001
179	Bijnor	BUDHANPUR (SEOHARA)	0.000	1.332	0.069	-0.001	0.228	0.002	0.001	0.000
180	Bijnor	ALHEPUR	0.000	0.261	0.113	-0.002	0.113	0.002	0.000	0.005
181	Bijnor	AFZALGARH	0.000	1.487	0.368	-0.002	0.209	0.040	0.001	0.000
182	Bijnor	AKU(NEHTAU R)	0.000	0.577	0.213	-0.003	0.047	0.008	0.000	0.002
183	Bijnor	KOTWALI	0.000	0.972	0.095	-0.003	0.029	0.007	0.000	0.005

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
184	Bijnor	NAJIBABAD	0.000	0.634	0.097	-0.002	0.678	0.000	-0.001	0.010
185	Bijnor	KIRTAPUR	0.000	7.044	0.160	-0.001	0.030	0.003	0.000	0.038
186	Bijnor	MOHAMMADPUR DEOMAL	0.000	0.834	0.062	-0.002	0.550	0.001	0.001	0.239
187	Bijnor	KHARI JHALU	0.000	0.666	0.180	-0.002	0.228	0.006	0.001	0.002
188	Bijnor	NOORPUR	0.000	2.314	0.192	-0.001	0.772	0.021	0.002	0.006
189	Bijnor	JALEELPUR	0.000	0.272	0.016	-0.002	0.094	0.000	0.001	0.005
190	Budaun	RAJPURA	0.000	2.021	0.035	0.001	0.248	0.001	0.003	0.013
191	Budaun	GUNNAUR	0.000	0.205	0.168	0.002	0.394	0.000	0.003	0.010
192	Budaun	JUNAWAHI	0.000	1.730	0.097	0.000	1.285	0.001	0.002	0.013
193	Budaun	DAHIGAWAAN	0.000	6.791	0.248	0.000	0.388	0.001	0.001	0.007
194	Budaun	SAHSWAN	0.000	0.074	0.012	0.002	0.143	0.002	0.001	0.007
195	Budaun	BADAUN(HQ)	0.000	0.586	0.342	0.000	3.540	0.001	0.002	0.009
196	Budaun	JAGAT	0.000	0.130	0.072	0.000	0.223	0.003	0.001	0.002
197	Budaun	DATAGANJ	0.000	1.501	0.147	0.000	0.015	0.000	0.003	0.020
198	Budaun	SAMRER	0.000	0.347	0.024	0.000	0.018	0.002	0.001	0.003
199	Budaun	MIAON	0.000	0.819	0.037	0.000	0.636	0.001	0.002	0.013
200	Budaun	USA WAN	0.000	0.127	0.248	0.000	0.022	0.001	0.001	0.008
201	Budaun	QUADAR CHOWK	0.000	0.074	0.116	0.000	0.032	0.002	0.001	0.001
202	Budaun	UJHANI	0.000	0.247	0.317	0.003	0.176	0.000	0.001	0.015
203	Budaun	AMBIAPUR	0.000	0.150	0.239	0.000	0.074	0.002	0.002	0.001
204	Budaun	ISLAMNAGAR	0.000	0.472	0.097	-0.001	0.115	0.005	0.001	0.001

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
205	Budaun	ASAFTPUR	0.000	0.139	0.102	0.002	0.210	0.001	0.001	0.026
206	Budaun	BISOULI	0.000	0.079	0.278	0.003	0.315	0.001	0.002	0.034
207	Budaun	WAJIRGANJ	0.000	3.552	0.296	0.003	0.902	0.003	0.002	0.014
208	Budaun	SALARPUR	0.000	0.303	0.209	0.002	0.676	0.011	0.001	0.049
209	Budaun	Miaon	0.000	0.132	0.169	-0.001	0.474	0.004	0.002	0.007
210	Budaun	Miaon	0.000	2.341	0.286	-0.001	0.067	0.001	0.001	0.006
211	Budaun	Miaon	0.000	0.976	0.201	0.013	0.463	0.005	0.003	0.003
212	Budaun	Miaon	0.000	0.315	0.185	0.000	0.246	0.002	0.001	0.016
213	Budaun	Bisouli	0.000	0.312	0.128	-0.001	0.159	0.005	0.001	0.006
214	Budaun	Bisouli	0.000	0.096	0.007	0.000	0.331	0.003	0.001	0.001
215	Budaun	Bisouli	0.000	14.65 9	0.271	-0.001	0.032	0.004	0.001	0.004
216	Budaun	Bisouli	0.000	1.119	0.402	-0.001	2.435	0.001	0.001	0.026
217	Budaun	Wajirganj	0.000	0.206	0.239	0.000	0.854	0.004	0.001	0.004
218	Budaun	Wajirganj	0.000	1.123	0.239	-0.001	0.181	0.008	0.001	0.009
219	Budaun	Wajirganj	0.000	9.365	0.264	-0.001	0.034	0.000	0.002	0.001
220	Budaun	Wajirganj	0.000	5.257	0.234	-0.001	0.003	0.004	0.001	0.004
221	Bulandshahr	Danpur	- 0.001	0.302	0.044	0.000	0.168	0.000	0.001	0.045
222	Bulandshahr	Debai	- 0.001	3.556	0.102	0.000	0.032	0.000	0.001	0.013
223	Bulandshahr	Anupshahr	- 0.001	0.150	0.004	0.000	0.063	0.001	0.002	0.003
224	Bulandshahr	Jahangirabad	- 0.001	0.269	0.229	0.009	0.140	0.000	0.001	0.098

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
225	Bulandshahr	Unchagaon	0.000	0.110	0.004	0.002	1.345	0.000	0.001	0.003
226	Bulandshahr	Siyana	- 0.001	0.529	0.210	0.004	2.704	0.001	0.001	0.008
227	Bulandshahr	Bhagwan Bahadur Nagar	- 0.001	6.961	0.406	0.000	2.308	0.001	0.002	0.018
228	Bulandshahr	Agauta	0.000	0.173	0.278	0.000	2.860	0.001	0.001	0.008
229	Bulandshahr	Gulaothi	0.000	1.053	0.031	0.002	0.654	0.000	0.001	0.008
230	Bulandshahr	Sikandrabad	0.000	0.846	0.252	0.009	0.080	0.001	0.001	0.022
231	Bulandshahr	Khurja	0.000	0.458	0.214	0.001	0.157	0.000	0.001	0.023
232	Bulandshahr	Pahasu	0.000	0.438	0.008	0.002	0.068	0.001	0.001	0.005
233	Bulandshahr	Shikarpur	- 0.001	0.606	0.097	0.000	1.851	0.001	0.002	0.039
234	Bulandshahr	Shikarpur	0.000	0.068	0.272	0.008	0.105	0.001	0.002	0.030
235	Bulandshahr	Lakhaoti	0.000	0.554	0.092	0.000	0.259	0.001	0.001	0.013
236	Bulandshahr	Bulanshahr	0.000	0.032	0.005	0.001	0.207	0.001	0.002	0.002
237	Bulandshahr	Arnia	0.000	0.219	0.080	0.001	0.281	0.001	0.002	0.006
238	Chandauli	Barahani	0.000	0.712	0.271	-0.001	0.094	0.000	0.001	0.006
239	Chandauli	Chahania	- 0.001	0.308	0.005	0.001	2.322	0.000	0.002	0.009
240	Chandauli	Chakiya	0.000	0.170	0.016	0.002	0.690	0.000	0.001	0.002
241	Chandauli	Chandauli	- 0.001	0.027	0.003	0.003	0.224	0.001	0.001	0.003
242	Chandauli	Dhanapur	- 0.001	0.682	0.011	-0.001	0.032	0.001	0.002	0.017

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
243	Chandauli	Naugarh	-0.001	12.018	0.218	-0.001	0.135	0.000	0.001	0.000
244	Chandauli	Niyamatabad	-0.001	2.714	0.048	-0.002	1.259	0.000	0.000	0.036
245	Chandauli	Sakaldiha	0.000	-0.005	0.004	0.043	0.334	0.000	0.003	0.006
246	Chandauli	Shahabganj	-0.001	0.076	0.006	0.001	1.252	0.000	0.001	0.001
247	Chitrakoot	Karvi	0.001	0.025	0.007	0.006	0.111	0.000	0.001	0.009
248	Chitrakoot	Manikpur	0.000	0.721	0.201	0.000	5.174	0.000	0.001	0.001
249	Chitrakoot	Mau	0.000	0.211	0.008	0.006	0.473	0.000	0.002	0.004
250	Chitrakoot	Pahari	0.000	0.341	0.004	0.000	0.088	0.000	0.001	0.012
251	Chitrakoot	Ram Nagar	0.000	1.728	0.036	0.001	0.140	0.000	0.005	0.004
252	Deoria	Bhaluwani	-0.001	0.465	0.054	-0.001	0.415	0.001	0.001	0.002
253	Deoria	Bhaluwani	-0.001	1.975	0.105	-0.001	0.014	0.003	0.001	0.005
254	Deoria	Bhaluwani	-0.001	0.157	0.037	0.011	0.823	0.000	0.000	0.040
255	Deoria	Bhaluwani	-0.001	20.371	0.508	-0.001	0.640	0.018	0.000	0.000
256	Deoria	Bhaluwani	-0.001	0.018	0.016	-0.001	0.016	0.002	0.000	0.004
257	Deoria	Baitalpur	0.000	0.153	0.107	-0.001	0.093	0.005	0.001	0.005
258	Deoria	Bankata	-0.001	14.171	0.561	-0.001	0.605	0.001	0.000	0.000
259	Deoria	Barhaj	-0.001	-0.060	-0.002	-0.002	-0.009	0.000	-0.001	0.001

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
260	Deoria	Bhagalpur	-0.001	2.221	0.039	-0.001	0.404	0.000	0.001	0.000
261	Deoria	Bhaluwani	-0.001	5.757	0.140	-0.001	0.575	0.000	0.001	0.011
262	Deoria	Bhatani	-0.001	2.256	0.082	-0.001	0.545	0.000	0.000	0.002
263	Deoria	Bhatparani	-0.001	0.310	0.024	-0.001	1.164	0.000	0.001	0.005
264	Deoria	Deoria Sadar	-0.001	-0.022	0.008	-0.001	0.093	0.001	0.001	0.000
265	Deoria	Desahi Deoria	-0.001	1.713	0.077	-0.001	0.246	0.001	0.001	0.001
266	Deoria	Gauri Bazar	-0.001	0.796	0.011	-0.001	0.011	0.004	0.001	0.000
267	Deoria	Lar	-0.001	0.024	0.015	-0.001	0.106	0.002	0.000	0.001
268	Deoria	Pather Dewa	-0.001	-0.025	0.002	-0.001	0.222	0.001	0.001	0.001
269	Deoria	Rampur Karkhana	-0.001	0.923	0.048	0.000	0.401	0.000	0.001	0.004
270	Deoria	Rudrapur	-0.001	5.776	0.209	-0.001	0.029	0.001	0.000	0.003
271	Deoria	Salempur	-0.001	1.593	0.054	-0.001	0.006	0.000	0.001	0.001
272	Deoria	Tarkulwa	-0.001	1.995	0.022	-0.001	0.006	0.001	0.001	0.003
273	Etah	Aliganj	0.000	-0.029	0.090	-0.001	0.020	0.000	0.000	0.014
274	Etah	Awagarh	0.000	0.001	0.012	0.000	0.248	0.001	0.002	0.016
275	Etah	Jaithara	0.000	0.108	0.025	0.000	0.046	0.001	0.002	0.006

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
276	Etah	Jalesar	0.001	0.181	0.039	-0.001	16.74 4	0.000	0.003	0.001
277	Etah	Marhara	0.000	0.949	0.049	-0.001	0.103	0.001	0.000	0.021
278	Etah	Nidholi Kalan	0.000	-0.029	0.059	-0.001	0.399	0.000	0.000	0.005
279	Etah	Sakeet	0.000	-0.029	0.235	-0.001	0.027	0.001	0.000	0.004
280	Etah	Sheetalpur	0.000	-0.029	0.627	-0.001	0.126	0.000	0.000	0.048
281	Etawah	Barhpura	- 0.001	5.071	0.237	0.003	1.310	0.000	0.000	0.012
282	Etawah	Basrehar	0.000	0.088	0.036	0.001	0.206	0.000	0.002	0.021
283	Etawah	Bharthana	- 0.001	0.078	0.027	-0.001	0.109	0.001	0.001	0.017
284	Etawah	Chakkar Nagar	0.000	0.017	0.028	0.008	1.951	0.000	0.001	0.010
285	Etawah	Jaswant Nagar	- 0.001	0.087	0.049	0.005	1.391	0.000	0.001	0.010
286	Etawah	Mahewa	0.003	0.647	0.016	0.000	0.658	0.000	0.001	0.012
287	Etawah	Saifai	- 0.001	0.306	0.039	0.000	0.173	0.001	0.001	0.028
288	Etawah	Takha	- 0.001	0.011	0.087	0.003	0.290	0.001	0.001	0.018
289	Faizabad	Amaniganj	0.000	0.388	0.100	-0.002	0.084	0.000	0.001	0.008
290	Faizabad	Bikapur	0.000	0.078	0.124	0.006	0.194	0.000	0.000	0.012
291	Faizabad	Haringtonganj	0.000	0.293	0.262	-0.002	0.202	0.007	0.002	0.000
292	Faizabad	Masodha	0.000	0.737	0.122	-0.002	0.222	0.004	0.000	0.000
293	Faizabad	Maya Bazar	0.000	1.141	0.115	-0.002	0.376	0.005	0.000	0.001
294	Faizabad	Milkipur	0.000	0.333	0.067	-0.001	0.179	0.000	0.001	0.008

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
295	Faizabad	Pura Bazar	0.000	0.290	0.033	-0.002	0.157	0.001	0.000	0.005
296	Faizabad	Sohawal	0.000	0.193	0.026	-0.002	0.480	0.002	0.000	0.005
297	Faizabad	Tarun	0.000	0.261	0.032	0.000	0.190	0.001	0.000	0.003
298	Faizabad	Mawai	0.000	4.684	0.040	-0.002	1.161	0.000	0.001	0.001
299	Faizabad	Rudauli	0.000	0.792	0.098	-0.002	0.239	0.005	0.000	0.002
300	Fatehpur	Airayan	0.000	0.856	0.159	0.001	5.946	0.000	0.001	0.019
301	Fatehpur	Amauli	0.000	0.141	0.053	0.001	2.665	0.000	0.002	0.008
302	Fatehpur	Asother	0.000	3.842	0.036	0.000	2.013	0.000	0.001	0.005
303	Fatehpur	Bahua	0.000	0.979	0.010	0.000	0.340	0.000	0.001	0.008
304	Fatehpur	Bhitaura	0.000	0.170	0.034	0.002	0.579	0.000	0.001	0.016
305	Fatehpur	Demai	0.000	0.192	0.024	0.001	0.845	0.000	0.001	0.012
306	Fatehpur	Dhata	0.000	3.157	0.153	0.000	0.007	0.001	0.001	0.005
307	Fatehpur	Haswa	0.000	0.778	0.052	0.000	0.403	0.000	0.002	0.012
308	Fatehpur	Hathgaon	0.003	0.495	0.015	0.002	0.350	0.000	0.001	0.017
309	Fatehpur	Khuajuha	0.000	0.046	0.028	0.000	0.048	0.001	0.000	0.110
310	Fatehpur	Malwan	0.000	0.078	0.030	0.001	0.325	0.001	0.002	0.020
311	Fatehpur	Teliyani	0.000	0.458	0.009	0.007	0.086	0.001	0.001	0.007
312	Fatehpur	Vijayeepur	0.000	0.143	0.006	0.016	1.032	0.000	0.001	0.006
313	Ferrukabad	Barhpur	0.000	-0.035	0.013	-0.001	0.059	0.000	-0.001	0.012
314	Ferrukabad	Kamalganj	0.000	-0.035	0.116	-0.001	0.180	0.000	-0.001	0.005
315	Ferrukabad	Kayamganj	0.000	-0.035	0.024	-0.001	0.064	0.002	0.000	0.008

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
316	Ferrukabad	Mohammadabad	0.000	-0.035	-0.001	-0.001	-0.003	0.000	-0.001	0.042
317	Ferrukabad	Nawabganj	0.000	-0.035	0.036	-0.001	-0.001	0.000	-0.001	0.030
318	Ferrukabad	Rajepur	0.000	0.004	0.016	-0.001	0.088	0.002	0.000	0.045
319	Ferrukabad	Shamsabad	0.000	-0.035	0.295	-0.001	0.063	0.000	-0.001	0.003
320	Ferrukabad	Rajepur	0.000	-0.035	1.857	-0.001	-0.006	0.003	-0.001	0.001
321	Ferrukabad	Rajepur	0.000	0.030	0.002	-0.001	0.004	0.001	0.001	0.041
322	Ferrukabad	Rajepur	0.000	-0.035	0.000	-0.001	-0.007	0.003	-0.001	0.049
323	Firozabad	Aron	0.000	-0.029	-0.001	-0.001	-0.005	0.001	0.000	0.016
324	Firozabad	Eka	0.000	0.020	0.007	0.004	0.151	0.000	0.000	0.032
325	Firozabad	Firozabad	0.000	0.190	0.030	0.001	0.502	0.000	0.002	0.001
326	Firozabad	Jasrana	0.000	0.113	0.025	0.001	0.392	0.000	0.000	0.022
327	Firozabad	Khairagarh/Hathwant	0.006	4.130	0.211	0.006	1.771	0.000	0.007	0.024
328	Firozabad	Madanpur	0.000	-0.028	0.022	-0.001	0.027	0.001	0.000	0.031
329	Firozabad	Narkhi	0.000	0.242	0.066	0.006	0.841	0.000	0.000	0.049
330	Firozabad	Shikohabad	0.000	0.151	0.077	0.000	1.104	0.000	0.001	0.008
331	Firozabad	Tundla	0.003	0.070	0.000	-0.001	0.152	0.002	0.000	0.054
332	Gautam Buddha Nagar	Dadri	-0.001	0.058	0.108	0.001	0.215	0.001	0.001	0.031
333	Gautam Buddha Nagar	Bisrakh	-0.001	0.024	0.002	0.000	0.316	0.000	0.001	0.013

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
334	Gautam Buddha Nagar	Jewar	0.000	0.375	0.004	0.000	0.205	0.000	0.001	0.032
335	Gautam Buddha Nagar	Jewar	0.000	0.315	0.009	-0.001	0.338	0.001	0.001	0.026
336	Gautam Buddha Nagar	Dankaur	-0.001	0.072	0.031	0.029	0.138	0.001	0.001	0.082
337	Gautam Buddha Nagar	Dankaur	0.000					0.000	0.000	0.000
338	Gautam Buddha Nagar	Dankaur	-0.001	0.101	0.055	0.000	0.102	0.001	0.001	0.035
339	Ghaziabad	Loni	0.001	1.099	0.094	0.001	0.811	0.000	0.001	0.011
340	Ghaziabad	Razapur	0.000	0.012	0.105	0.008	0.337	0.000	0.001	0.033
341	Ghaziabad	Muradnagar	0.001	0.384	0.099	0.005	0.246	0.001	0.002	0.035
342	Ghaziabad	Bhojpur	0.000	0.876	0.029	0.002	0.704	0.000	0.002	0.029
343	Ghaziabad	Hapur	0.000	0.115	0.059	0.002	2.477	0.000	0.001	0.006
344	Ghaziabad	Dholana	0.000	0.258	0.186	0.008	1.403	0.000	0.001	0.012
345	Ghaziabad	Simbholi	0.001	0.882	0.135	0.004	0.278	0.001	0.001	0.009
346	Ghaziabad	Garh	0.000	-0.030	0.129	0.006	2.190	0.000	0.001	0.007
347	Ghazipur	Barachawar	0.000	0.051	0.001	-0.003	0.301	0.000	0.001	0.008
348	Ghazipur	Bhadaura	0.000	0.508	0.008	0.001	0.188	0.000	0.001	0.003
349	Ghazipur	Bhawarkol	0.000	0.279	0.042	-0.001	0.066	0.000	0.001	0.005
350	Ghazipur	Birno	0.000	0.737	0.037	0.000	0.539	0.000	0.003	0.006
351	Ghazipur	Deokali	0.000	0.051	0.023	-0.004	0.293	0.001	0.002	0.025
352	Ghazipur	Ghazipur	0.000	0.907	0.490	-0.003	1.405	0.047	0.001	0.000
353	Ghazipur	Jakhaniya	0.000	0.122	0.008	-0.003	0.053	0.003	0.001	0.019

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
354	Ghazipur	Jamania	0.000	0.361	0.007	0.001	2.822	0.000	0.003	0.009
355	Ghazipur	Karanda	0.000	0.901	0.011	0.005	0.208	0.000	0.003	0.003
356	Ghazipur	Kasimabad	0.000	0.092	0.006	-0.003	0.124	0.000	0.001	0.014
357	Ghazipur	Manihari	0.000	0.278	0.012	-0.002	0.485	0.000	0.001	0.008
358	Ghazipur	Mardah	0.000	0.146	0.092	-0.003	0.287	0.000	0.001	0.009
359	Ghazipur	Muhammadabad	0.000	0.598	0.085	-0.002	0.246	0.002	0.001	0.004
360	Ghazipur	Reotipur	0.000	1.095	0.310	-0.003	0.165	0.010	0.001	0.000
361	Ghazipur	Sadat	0.000	3.096	0.276	-0.004	0.325	0.002	0.001	0.012
362	Ghazipur	Saidpur	0.001	1.424	0.015	-0.002	0.415	0.000	0.003	0.030
363	Ghazipur	Zakhania	0.000	0.419	0.012	-0.002	0.181	0.000	0.001	0.012
364	Ghazipur	Zakhania	0.000	0.120	0.028	-0.003	0.741	0.000	0.001	0.011
365	Ghazipur	Zakhania	0.000	0.115	0.147	0.000	0.559	0.000	0.001	0.028
366	Ghazipur	Zakhania	0.000	0.136	0.025	-0.002	0.028	0.000	0.001	0.011
367	Ghazipur	Jananaganj	0.000	0.092	0.005	0.000	0.238	0.001	0.001	0.010
368	Ghazipur	Jananaganj	0.000	0.812	0.079	-0.002	0.336	0.000	0.001	0.025
369	Ghazipur	Jananaganj	0.000	1.066	0.026	-0.002	0.262	0.000	0.001	0.024
370	Ghazipur	Jananaganj	0.001	0.421	0.020	0.011	0.123	0.000	0.002	0.013
371	Gonda	Katra Bazar H.Q.	0.000	16.375	0.322	-0.001	0.964	0.019	0.001	0.004
372	Gonda	Karnailganj H.Q.	0.000	3.608	0.077	-0.001	1.902	0.002	0.000	0.000
373	Gonda	Haldharmau H.Q.	0.000	6.288	0.066	-0.001	0.067	0.026	0.001	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
374	Gonda	Rupaideeh H.Q.	0.000	4.095	0.168	-0.001	0.203	0.004	0.001	0.000
375	Gonda	Itigathok H.Q.	0.000	0.959	0.137	-0.001	0.728	0.007	0.001	0.001
376	Gonda	Padri Kripal H.Q.	0.000	0.625	0.090	-0.001	0.652	0.011	0.001	0.000
377	Gonda	Jhanjhari H.Q.	0.001	0.036	0.001	-0.001	1.034	0.000	0.005	0.003
378	Gonda	Mankapur H.Q.	0.000	0.759	0.047	-0.001	0.526	0.003	0.002	0.001
379	Gonda	Chhapia H.Q.	0.000	12.54 ₇	0.185	-0.001	3.452	0.000	0.001	0.001
380	Gonda	Babhanjot H.Q.	0.000	0.913	0.059	-0.001	0.516	0.002	0.002	0.002
381	Gonda	Mujehna H.Q.	0.000	1.370	0.138	-0.001	0.469	0.006	0.001	0.001
382	Gonda	Nawabganj H.Q.	0.000	1.905	0.170	-0.001	1.506	0.001	0.001	0.002
383	Gonda	Wazirganj H.Q.	0.000	0.827	0.047	0.000	0.970	0.002	0.001	0.001
384	Gonda	Tarabganj H.Q.	0.000	0.287	0.216	-0.001	0.624	0.001	0.001	0.005
385	Gonda	Belsar H.Q.	0.000	0.357	0.050	-0.001	1.445	0.001	0.002	0.006
386	Gonda	Paraspur H.Q.	0.000	3.978	0.153	-0.001	0.678	0.023	0.001	0.000
387	Gorakhpur	Bansgaon	0.000	1.632	0.172	0.003	1.424	0.004	0.006	0.000
388	Gorakhpur	Barahalganj	-0.001	0.982	0.144	-0.001	0.061	0.001	0.001	0.000
389	Gorakhpur	Belghat	-0.001	0.145	0.011	0.001	0.733	0.001	0.001	0.001
390	Gorakhpur	Bhatahat	-0.001	0.062	0.078	0.000	0.103	0.003	0.004	0.001
391	Gorakhpur	Brahmpur	0.000	0.308	0.050	0.003	0.382	0.008	0.005	0.001

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
392	Gorakhpur	Campierganj	- 0.001	1.427	0.020	-0.001	2.182	0.000	0.002	0.010
393	Gorakhpur	Chargawan	0.000	5.801	0.052	0.000	0.839	0.002	0.004	0.002
394	Gorakhpur	Gagaha	- 0.001	0.475	0.074	-0.001	0.946	0.012	0.001	0.000
395	Gorakhpur	Gola	- 0.001	0.057	0.141	0.001	0.136	0.004	0.003	0.000
396	Gorakhpur	Jangal Kuriya	- 0.001	1.657	0.073	0.000	1.102	0.003	0.005	0.001
397	Gorakhpur	Kauriram	0.000	1.944	0.214	0.003	1.233	0.022	0.010	0.003
398	Gorakhpur	Khajani	0.000	5.715	0.093	0.000	2.497	0.001	0.006	0.003
399	Gorakhpur	Khorabar	0.000	1.817	0.134	0.001	1.773	0.004	0.005	0.000
400	Gorakhpur	Pali	- 0.001	2.091	0.187	0.003	1.663	0.003	0.004	0.001
401	Gorakhpur	Pipraich	- 0.001	1.572	0.117	-0.001	0.433	0.009	0.004	0.001
402	Gorakhpur	Piprauli	- 0.001	0.419	0.045	0.014	0.557	0.007	0.003	0.003
403	Gorakhpur	Sahjanwa	- 0.001	2.515	0.149	0.000	1.195	0.001	0.004	0.001
404	Gorakhpur	Sardar Nagar	0.000	1.015	0.089	0.006	0.233	0.002	0.003	0.001
405	Gorakhpur	Uruwa	0.000	1.519	0.136	0.001	1.224	0.002	0.004	0.005
406	Hamirpur	Gohand	0.003	0.044	0.002	0.001	0.116	0.000	0.001	0.004
407	Hamirpur	Kurara	0.001	0.003	0.003	0.002	0.147	0.000	0.000	0.008
408	Hamirpur	Maudaha	- 0.001	0.016	0.041	0.001	3.139	0.000	0.002	0.014
409	Hamirpur	Muskara	0.000	0.173	0.038	0.004	1.408	0.000	0.000	0.014

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
410	Hamirpur	Rath	0.000	1.878	0.069	-0.001	0.467	0.000	0.000	0.023
411	Hamirpur	Sareela	0.010	0.005	0.001	-0.001	0.016	0.000	0.001	0.005
412	Hamirpur	Sumerpur	0.000	0.832	0.055	0.000	0.360	0.000	0.000	0.025
413	Hardoi	AHIRORI	0.000	2.384	0.151	-0.001	0.018	0.002	0.001	0.006
414	Hardoi	BILGRAM	0.000	1.369	0.035	-0.001	0.230	0.000	0.000	0.024
415	Hardoi	BAVAN	0.000	1.712	0.122	0.002	0.156	0.004	0.001	0.000
416	Hardoi	BAHENDRA KHURD	0.000	1.152	0.165	-0.001	0.146	0.001	0.001	0.018
417	Hardoi	BHARAWAN	0.000	0.034	0.053	0.001	0.189	0.001	0.001	0.009
418	Hardoi	BHARKHANI	0.000	4.120	0.135	-0.001	0.166	0.001	0.001	0.002
419	Hardoi	HARPALPUR	0.000	1.320	0.105	0.000	0.191	0.001	0.001	0.026
420	Hardoi	HARIYAWAN	0.000	0.483	0.052	-0.001	0.100	0.002	0.001	0.005
421	Hardoi	KACHHAUNA	0.001	4.927	0.512	-0.001	0.167	0.002	0.000	0.002
422	Hardoi	KOTHAWAN	0.000	0.779	0.152	0.000	0.146	0.000	0.000	0.020
423	Hardoi	MADHAVGANJ	0.000	0.086	0.016	0.000	0.091	0.001	0.001	0.012
424	Hardoi	MALLAWAN	0.000	0.600	0.155	0.001	0.170	0.001	0.001	0.044
425	Hardoi	MALLAWAN	0.000	0.411	0.085	0.001	0.258	0.000	0.001	0.024
426	Hardoi	MALLAWAN	0.002	0.628	0.301	0.001	0.084	0.000	0.001	0.037
427	Hardoi	MALLAWAN	0.002	2.452	0.182	0.010	2.783	0.000	0.013	0.010
428	Hardoi	PIHANI	0.000	0.249	0.214	0.001	2.913	0.000	0.002	0.020
429	Hardoi	SHAHABAD	0.000	3.463	0.201	0.000	0.008	0.021	0.001	0.000
430	Hardoi	SURSA	0.000	2.173	0.036	0.000	0.183	0.000	0.001	0.017
431	Hardoi	SANDI	0.000	0.421	0.325	0.002	0.147	0.000	0.000	0.044

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
432	Hardoi	SANDILA	0.001	0.304	0.013	0.000	0.461	0.000	0.001	0.011
433	Hardoi	TADIYAWAN	0.000	1.307	0.254	-0.001	3.024	0.010	0.001	0.001
434	Hardoi	TODARPUR	0.002	0.371	0.157	0.000	0.837	0.001	0.001	0.003
435	J.P. Nagar	DHANAURA	0.000	2.134	0.174	0.000	0.555	0.002	0.001	0.000
436	J.P. Nagar	AMROHA	0.000	0.246	0.055	0.003	1.339	0.001	0.002	0.005
437	J.P. Nagar	JOYA	0.000	8.989	0.247	0.001	0.064	0.012	0.003	0.012
438	J.P. Nagar	GAJRAULA	0.000	0.230	0.786	0.003	1.003	0.000	0.002	0.019
439	J.P. Nagar	HASANPUR	0.000	0.419	0.167	0.001	0.020	0.000	0.001	0.003
440	J.P. Nagar	GANGESHWARI	0.000	0.232	0.118	0.000	0.213	0.001	0.002	0.004
441	J.P. Nagar	Joya	0.000	1.487	0.169	0.007	0.060	0.008	0.003	0.002
442	J.P. Nagar	Joya	0.000	1.930	0.153	0.000	0.294	0.004	0.002	0.000
443	J.P. Nagar	Joya	0.000	0.048	0.130	0.001	0.027	0.003	0.001	0.015
444	J.P. Nagar	Joya	0.000	0.034	0.113	0.001	0.005	0.001	0.001	0.011
445	Jalaun	Kadaura	0.000	0.024	0.024	-0.004	0.441	0.000	0.001	0.007
446	Jalaun	Mahewa	0.001	0.189	0.003	-0.005	0.261	0.000	0.001	0.005
447	Jalaun	Kuthond	0.003	0.097	0.000	-0.007	0.361	0.001	0.001	0.005
448	Jalaun	Jalaun	0.000	1.421	0.123	-0.007	0.333	0.000	0.001	0.004
449	Jalaun	Konch	0.000	0.269	0.007	0.018	0.310	0.000	0.001	0.005
450	Jalaun	Nadigaon	0.000	0.179	0.008	-0.005	0.765	0.000	0.000	0.003
451	Jalaun	Madhogarh	0.001	0.336	0.002	-0.008	0.271	0.000	0.001	0.004
452	Jalaun	Rampura	0.000	1.850	0.013	-0.008	0.597	0.000	0.001	0.003
453	Jalaun	Orai (HQ)	0.000	1.295	0.091	-0.007	1.009	0.000	0.002	0.006

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
454	Jalaun	Dakore	0.001	0.079	0.001	-0.007	0.075	0.000	0.001	0.006
455	Jaunpur	Jaunpur H.Q.	- 0.001	1.128	0.014	-0.001	0.176	0.000	0.000	0.013
456	Jaunpur	Barsathi	- 0.001	1.330	0.131	-0.001	5.206	0.001	0.001	0.007
457	Jaunpur	Dharampur	- 0.001	0.246	0.019	-0.001	0.086	0.000	0.001	0.033
458	Jaunpur	Dobhi	- 0.001	1.828	0.016	-0.002	0.617	0.000	0.001	0.006
459	Jaunpur	Jalalpur	- 0.001	0.068	0.008	-0.001	4.828	0.000	0.001	0.006
460	Jaunpur	Karanja Kalan	- 0.001	-0.036	0.002	-0.001	0.070	0.000	0.000	0.023
461	Jaunpur	Kerakat	- 0.001	0.096	0.005	0.002	0.164	0.000	0.001	0.008
462	Jaunpur	Khutahan	- 0.001	-0.033	0.076	-0.001	0.114	0.001	0.001	0.004
463	Jaunpur	Madiyahun	- 0.001	0.100	0.030	0.000	0.711	0.000	0.000	0.022
464	Jaunpur	Muftiganj	- 0.001	0.106	0.024	-0.001	1.541	0.000	0.001	0.006
465	Jaunpur	RamNagar	- 0.001	-0.017	0.001	-0.001	0.239	0.000	0.000	0.015
466	Jaunpur	Rampur	- 0.001	-0.051	0.001	-0.001	0.495	0.000	0.001	0.029
467	Jaunpur	Shahganj	- 0.001	0.037	0.037	0.004	0.215	0.001	0.001	0.004
468	Jaunpur	Sirkoni	- 0.001	16.11 3	0.073	-0.001	1.567	0.000	0.001	0.021

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
469	Jaunpur	Suitha Kalan	- 0.001	0.437	0.027	-0.001	0.210	0.000	0.001	0.010
470	Jaunpur	M Badshahpur	- 0.001	1.441	0.018	-0.001	0.723	0.001	0.000	0.008
471	Jaunpur	Machhali Shahar	- 0.001	0.228	0.023	-0.002	0.270	0.001	0.000	0.027
472	Jaunpur	Sikrara	- 0.001	3.000	0.024	-0.002	0.469	0.000	0.000	0.009
473	Jaunpur	Buxa	0.000	0.095	0.001	-0.001	0.176	0.000	0.000	0.008
474	Jaunpur	Badlapur	- 0.001	0.374	0.000	-0.001	3.036	0.000	0.000	0.008
475	Jaunpur	Maharajganj	0.000	0.167	0.033	-0.001	0.027	0.000	0.001	0.013
476	Jaunpur	Sujanganj	- 0.001	1.754	0.034	-0.001	0.594	0.001	0.000	0.009
477	Jhansi	Bamaur	0.000	0.075	0.003	-0.007	1.819	0.000	0.001	0.012
478	Jhansi	Gursarai	0.000	0.160	0.008	-0.007	2.325	0.000	0.001	0.022
479	Jhansi	Mauranipur	0.000	2.346	0.023	-0.005	0.119	0.000	0.001	0.004
480	Jhansi	Bangra	0.000	0.886	0.013	-0.006	0.351	0.000	0.001	0.012
481	Jhansi	Jhansi (HQ)	0.000	0.101	0.079	-0.008	2.583	0.000	0.001	0.000
482	Jhansi	Babina	0.000	0.211	0.002	-0.006	0.531	0.000	0.004	0.001
483	Jhansi	Badagaon	0.000	0.099	0.007	0.004	0.114	0.000	0.001	0.011
484	Jhansi	Chirgaon	0.001	0.008	0.000	-0.007	0.275	0.001	0.004	0.003
485	Jhansi	Moth	0.000	0.078	0.013	-0.007	0.702	0.000	0.001	0.005
486	Kannauj	Chhibramau	0.000	0.219	0.024	0.001	0.611	0.001	0.002	0.015
487	Kannauj	Gugrapur	- 0.001	0.144	0.048	0.000	5.891	0.001	0.001	0.006

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
488	Kannauj	Haseran	- 0.001	0.214	0.049	-0.001	0.177	0.004	0.001	0.006
489	Kannauj	Jalalabad	- 0.001	0.013	0.434	0.003	0.140	0.000	0.001	0.008
490	Kannauj	Kannauj	- 0.001	2.110	0.065	0.001	0.850	0.000	0.000	0.008
491	Kannauj	Saurikh	- 0.001	0.120	0.134	0.000	0.034	0.001	0.001	0.026
492	Kannauj	Talgram	- 0.001	0.225	0.016	0.000	0.453	0.000	0.001	0.026
493	Kannauj	Umarda	0.000	1.716	1.718	0.002	0.944	0.000	0.001	0.001
494	Kanpur Dehat	Akbarpur	- 0.001	-0.055	0.018	-0.001	0.420	0.002	- 0.001	0.047
495	Kanpur Dehat	Amraudha	- 0.001	0.305	0.011	0.000	0.216	0.000	0.001	0.008
496	Kanpur Dehat	Derapur	- 0.001	0.367	0.019	-0.001	1.172	0.000	0.000	0.021
497	Kanpur Dehat	Jhinhak	- 0.001	0.407	0.028	0.001	0.343	0.000	0.001	0.017
498	Kanpur Dehat	Maitha	- 0.001	0.001	0.011	0.001	0.187	0.000	0.000	0.023
499	Kanpur Dehat	Malasa	- 0.001	0.214	0.013	0.000	1.283	0.000	0.001	0.008
500	Kanpur Dehat	Rajpur	- 0.001	0.135	0.095	0.000	0.045	0.000	0.001	0.009
501	Kanpur Dehat	Rasoolabad	- 0.001	0.177	0.042	0.001	0.374	0.000	0.001	0.031
502	Kanpur Dehat	Sandalpur	0.001	0.701	0.122	0.001	0.222	0.000	0.002	0.008

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
503	Kanpur Dehat	Sarvan Khera	- 0.001	0.079	0.028	-0.001	0.113	0.001	0.001	0.017
504	Kanpur Nagar	Bhitar Gaon	- 0.001	0.524	0.027	0.001	0.505	0.000	0.001	0.023
505	Kanpur Nagar	Bidhnoo	- 0.001	-0.054	0.000	-0.001	-0.018	0.000	- 0.001	0.028
506	Kanpur Nagar	Bilhaur	- 0.001	0.168	0.054	0.001	0.218	0.000	0.002	0.013
507	Kanpur Nagar	Chaubeypur	- 0.001	2.509	0.077	-0.001	0.231	0.000	0.000	0.014
508	Kanpur Nagar	Ghatampur	0.004	0.053	0.002	0.001	0.329	0.000	0.001	0.008
509	Kanpur Nagar	Kakwan	- 0.001	0.198	0.053	0.000	0.015	0.001	0.001	0.023
510	Kanpur Nagar	Kalyanpur	- 0.001	0.155	0.263	0.001	0.126	0.000	0.001	0.024
511	Kanpur Nagar	Patara	- 0.001	0.410	0.155	0.002	0.110	0.000	0.001	0.022
512	Kanpur Nagar	Sarsaul	- 0.001	0.076	0.004	0.000	0.386	0.000	0.000	0.030
513	Kanpur Nagar	Shivrajpur	- 0.001	0.924	0.130	0.000	1.845	0.000	0.000	0.019
514	Kanpur Nagar	Chaubeypur	0.000	0.283	0.006	0.000	0.145	0.001	0.001	0.023
515	Kanpur Nagar	Chaubeypur	0.000	0.282	0.006	0.000	0.147	0.001	0.001	0.024
516	Kanpur Nagar	Chaubeypur	0.003	0.080	0.017	0.002	0.003	0.002	0.000	0.016
517	Kanpur Nagar	Chaubeypur	- 0.001	0.300	0.031	-0.001	0.084	0.001	0.000	0.017
518	Kasganj	Amanpur	0.000	1.011	0.019	0.000	0.165	0.000	0.001	0.015

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
519	Kasganj	Ganj dundwara	0.000	1.104	0.162	0.000	0.233	0.005	0.001	0.001
520	Kasganj	Kasganj	0.003	0.041	0.002	0.003	0.196	0.001	0.001	0.016
521	Kasganj	Patiyali	0.000	0.055	0.006	0.001	0.166	0.001	0.001	0.010
522	Kasganj	Sahawar	0.000	0.867	0.019	-0.001	0.015	0.001	0.001	0.003
523	Kasganj	Sidhpura	0.000	-0.029	0.200	0.002	1.361	0.000	0.000	0.024
524	Kasganj	Soron	0.000	0.071	0.092	0.000	0.090	0.000	0.001	0.014
525	Kaushambi	Chail	0.000	0.139	0.005	0.000	0.347	0.000	0.001	0.012
526	Kaushambi	Kara	-0.001	0.932	0.062	0.001	0.225	0.000	0.000	0.023
527	Kaushambi	Kaushambi	0.000	0.745	0.007	-0.001	0.047	0.000	0.001	0.010
528	Kaushambi	Manjhanpur	-0.001	0.237	0.064	-0.001	0.282	0.000	0.004	0.013
529	Kaushambi	Moorat Ganj	-0.001	4.043	0.056	0.000	0.578	0.000	0.000	0.014
530	Kaushambi	Newada	-0.001	1.040	0.059	0.000	1.467	0.000	0.002	0.006
531	Kaushambi	Sarsawan	0.001	0.184	0.004	0.006	0.966	0.000	0.001	0.008
532	Kaushambi	Sirathu	-0.001	0.876	0.170	-0.001	0.339	0.000	0.000	0.002
533	Kushi Nagar	Dudhai	-0.001	3.851	0.139	-0.001	0.011	0.022	0.001	0.000
534	Kushi Nagar	Fazil Nagar	-0.001	1.953	0.321	-0.001	8.267	0.000	0.002	0.000
535	Kushi Nagar	Hata	-0.001	2.421	0.087	-0.001	0.252	0.006	0.000	0.002
536	Kushi Nagar	Kaptan Ganj	0.001	7.493	0.134	0.000	0.441	0.003	0.001	0.001

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
537	Kushi Nagar	Kasiya	- 0.001	0.435	0.036	-0.001	0.577	0.008	0.002	0.001
538	Kushi Nagar	Khadda	- 0.001	2.687	0.307	-0.001	0.272	0.000	0.001	0.000
539	Kushi Nagar	Motichak	- 0.001	4.438	0.039	-0.001	0.419	0.001	0.002	0.001
540	Kushi Nagar	Nebuwa Naurangia	- 0.001	9.261	0.702	-0.001	0.742	0.011	0.001	0.000
541	Kushi Nagar	Padrauna	0.000	13.31 4	0.199	-0.001	0.263	0.001	0.001	0.002
542	Kushi Nagar	Ram Kola	- 0.001	1.070	0.231	-0.001	0.236	0.000	0.001	0.003
543	Kushi Nagar	Sewarhi	- 0.001	0.613	0.170	-0.001	0.037	0.033	0.001	0.000
544	Kushi Nagar	Sukrauli	- 0.001	3.141	0.047	-0.001	0.004	0.001	0.000	0.002
545	Kushi Nagar	Tamkuhi	- 0.001	2.197	0.037	-0.001	0.352	0.000	0.001	0.008
546	Kushi Nagar	Vishnupurwa	0.000	3.746	0.635	-0.001	0.155	0.001	0.001	0.000
547	Lakhimpur Kheri	BANKEYGANJ	0.000	0.069	0.137	0.005	0.032	0.000	0.001	0.009
548	Lakhimpur Kheri	BEHJAM	0.000	5.186	0.081	-0.001	0.064	0.001	0.001	0.002
549	Lakhimpur Kheri	BIJUA	0.002	0.633	0.144	-0.001	0.175	0.006	0.001	0.000
550	Lakhimpur Kheri	DHAURAHRA	0.000	2.000	0.044	0.000	0.640	0.001	0.000	0.000
551	Lakhimpur Kheri	GOLA	0.000	0.372	0.074	-0.001	0.413	0.001	0.000	0.002

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
552	Lakhimpur Kheri	ISHANAGASR	0.002	6.749	0.067	-0.001	0.111	0.024	0.001	0.000
553	Lakhimpur Kheri	LAKHIMPUR KHIRI	0.000	0.470	0.106	0.000	0.385	0.001	0.000	0.002
554	Lakhimpur Kheri	MOHAMMADI	0.001	4.614	0.063	-0.001	1.056	0.000	0.001	0.003
555	Lakhimpur Kheri	MITAULI	0.001	0.685	0.028	0.001	0.122	0.001	0.000	0.006
556	Lakhimpur Kheri	NAKAHA	0.001	7.634	0.251	0.004	0.018	0.038	0.001	0.000
557	Lakhimpur Kheri	NIGHASAN	0.000	1.489	0.140	0.000	0.349	0.034	0.001	0.000
558	Lakhimpur Kheri	PASGAWAN	0.000	0.168	0.012	0.002	0.086	0.001	0.001	0.000
559	Lakhimpur Kheri	PALIA KALAN	0.001	1.492	0.037	-0.001	0.038	0.002	0.000	0.002
560	Lakhimpur Kheri	PHOOLBEHAR	0.001	3.264	0.115	-0.001	0.039	0.002	0.001	0.000
561	Lakhimpur Kheri	RAMAIYABEH AR	0.000	2.882	0.129	-0.001	0.521	0.001	0.000	0.000
562	Lalitpur	Talbehat	0.000	0.121	0.009	-0.007	3.128	0.000	0.002	0.001
563	Lalitpur	Jakhaura	0.000	0.146	0.002	-0.006	0.484	0.000	0.001	0.004
564	Lalitpur	Bar	0.000	0.057	0.002	-0.008	1.424	0.000	0.001	0.002
565	Lalitpur	Lalitpur (HQ)	0.000	0.222	0.029	-0.008	0.010	0.000	0.001	0.002
566	Lalitpur	Mahroni	0.000	0.609	0.010	-0.008	0.211	0.000	0.000	0.006
567	Lalitpur	Maadawara	0.000	0.260	0.025	-0.004	8.285	0.000	0.001	0.001
568	Lalitpur	Birdha	0.000	0.171	0.032	-0.007	1.772	0.000	0.001	0.003

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
569	Lucknow	Chinhat	0.001	0.498	0.022	-0.002	0.230	0.000	0.001	0.005
570	Lucknow	Bakshi Ka Talab	0.000	0.678	0.094	-0.002	0.506	0.005	0.001	0.013
571	Lucknow	Mal	0.000	0.535	0.048	-0.003	0.388	0.000	0.001	0.004
572	Lucknow	Malihabad	0.000	0.722	0.043	-0.003	0.009	0.000	0.001	0.004
573	Lucknow	Kakori	0.000	0.807	0.030	-0.002	2.830	0.000	0.001	0.004
574	Lucknow	Gosaiganj	0.000	0.416	0.014	-0.003	0.037	0.000	0.001	0.004
575	Lucknow	Mohanlalganj	0.000	1.221	0.062	-0.001	0.426	0.000	0.001	0.006
576	Lucknow	Sarojini Nagar	0.000	0.223	0.006	-0.002	0.147	0.000	0.001	0.004
577	Mahamaya Nagar	Sikandra Rao	0.000	0.270	0.367	0.001	0.784	0.006	0.001	0.008
578	Mahamaya Nagar	Sasni	-0.001	0.463	0.108	-0.001	0.473	0.000	0.001	0.040
579	Mahamaya Nagar	Hathras	-0.001	0.830	0.037	0.002	0.294	0.000	0.000	0.028
580	Mahamaya Nagar	Hasayan	-0.001	0.690	0.334	0.002	0.066	0.000	0.001	0.009
581	Mahamaya Nagar	Sahpau	0.001	0.016	0.005	0.000	1.034	0.001	0.001	0.015
582	Mahamaya Nagar	Sadabad	-0.001	0.056	0.146	-0.001	1.646	0.000	0.001	0.009
583	Mahamaya Nagar	Mursan	0.000	0.462	0.046	0.002	2.516	0.000	0.000	0.032
584	Maharajganj	Brijman Ganj	0.000	0.121	0.008	-0.001	0.054	0.003	0.000	0.000
585	Maharajganj	Dhani	-0.001	1.128	0.095	-0.001	0.096	0.000	0.000	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
586	Maharajganj	Ghughuli	-0.001	8.695	0.222	0.000	0.798	0.017	0.002	0.000
587	Maharajganj	Laxmipur	-0.001	5.323	0.363	-0.001	0.351	0.008	0.000	0.006
588	Maharajganj	Maharajganj	-0.001	8.480	0.706	-0.002	2.423	0.011	-0.001	0.002
589	Maharajganj	Mithaura	-0.001	0.623	0.023	-0.001	0.033	0.004	0.000	0.000
590	Maharajganj	Nautanwa	-0.001	0.829	0.067	-0.001	0.110	0.001	0.000	0.001
591	Maharajganj	Nichlaul	-0.001	0.273	0.241	-0.001	7.290	0.003	0.000	0.000
592	Maharajganj	Paniyara	0.000	2.347	0.576	-0.001	14.224	0.002	0.001	0.002
593	Maharajganj	Partawal	-0.001	0.202	0.049	-0.001	1.225	0.003	0.001	0.000
594	Maharajganj	Pharenda	-0.001	0.161	0.028	-0.001	0.080	0.000	0.000	0.003
595	Maharajganj	Siswa	-0.001	1.801	0.060	0.000	0.180	0.006	0.000	0.000
596	Mahoba	Charkhari	0.000	0.486	0.056	-0.001	0.034	0.000	0.000	0.008
597	Mahoba	Jaitpur	0.000	0.898	0.014	0.005	0.111	0.000	0.001	0.014
598	Mahoba	Kabrai	0.000	0.067	0.018	0.004	0.636	0.000	0.000	0.009
599	Mahoba	Panwari	0.000	0.134	0.010	-0.001	0.034	0.000	0.000	0.036
600	Mainpuri	Barnahal	0.000	-0.029	0.221	-0.001	1.599	0.000	0.000	0.022
601	Mainpuri	Bewar	0.000	0.351	0.021	0.000	0.192	0.001	0.002	0.015
602	Mainpuri	Ghirore	0.000	-0.035	0.109	-0.001	0.013	0.000	-0.001	0.012

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
603	Mainpuri	Jageer	0.000	-0.036	0.009	0.000	0.057	0.001	-0.001	0.008
604	Mainpuri	Karhal	0.005	0.150	0.101	0.017	0.126	0.001	0.001	0.039
605	Mainpuri	Kishni	0.000	-0.035	0.077	-0.001	0.002	0.001	-0.001	0.083
606	Mainpuri	Kishni	0.000	-0.036	0.013	-0.001	0.118	0.001	-0.001	0.019
607	Mainpuri	Kishni	0.000	-0.035	0.048	-0.001	0.034	0.000	-0.001	0.006
608	Mainpuri	Kurawali	0.000	1.363	0.036	-0.001	0.150	0.001	0.001	0.030
609	Mainpuri	Mainpuri	0.000	-0.036	0.251	-0.001	0.157	0.001	-0.001	0.002
610	Mainpuri	Sultanganj	0.000	1.090	0.028	0.000	1.111	0.001	0.011	0.022
611	Mathura	Raya	-0.001	0.178	0.058	0.001	0.815	0.001	0.001	0.034
612	Mathura	Manth	-0.001	0.043	0.008	0.002	1.429	0.000	0.001	0.048
613	Mathura	Raya	-0.001	0.220	0.156	0.001	0.057	0.000	0.001	0.026
614	Mathura	Baldeo	0.000	0.323	0.018	0.003	0.338	0.001	0.003	0.062
615	Mathura	Mathura	0.000	0.381	0.020	0.008	5.025	0.000	0.003	0.009
616	Mathura	Goverdhan	0.000	0.059	0.008	0.000	0.720	0.001	0.001	0.046
617	Mathura	Goverdhan	-0.001	1.732	0.433	0.000	0.035	0.000	0.000	0.038
618	Mathura	Nandgaon	0.000	0.178	0.511	0.000	0.009	0.000	0.001	0.015
619	Mathura	Nandgaon	-0.001	0.328	0.376	0.000	2.469	0.000	0.000	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
620	Mathura	Chhata	-0.001	0.375	0.236	0.000	2.250	0.000	0.001	0.014
621	Mathura	Chhata	0.000	0.102	0.014	0.000	0.013	0.000	0.002	0.003
622	Mathura	Naujhil	0.000	1.412	0.051	0.001	0.582	0.000	0.000	0.030
623	Mathura	Chaumuhan	0.000	0.481	0.041	0.003	4.213	0.000	0.001	0.026
624	Maunath Bhanjan	Badraon	0.000	0.237	0.088	0.000	0.870	0.000	0.001	0.010
625	Maunath Bhanjan	Dohari Ghat	0.000	4.058	0.089	-0.003	0.007	0.004	0.001	0.000
626	Maunath Bhanjan	Fatehpur Madaon	0.000	0.593	0.078	-0.003	0.175	0.002	0.001	0.001
627	Maunath Bhanjan	Ghosi	0.000	1.549	0.035	-0.003	0.183	0.000	0.001	0.005
628	Maunath Bhanjan	Kopaganj	0.000	0.412	0.054	-0.003	0.256	0.000	0.001	0.003
629	Maunath Bhanjan	Mohammadabad	0.000	0.207	0.007	-0.003	0.306	0.000	0.001	0.006
630	Maunath Bhanjan	Pardaha	0.000	0.061	0.013	-0.003	2.320	0.000	0.001	0.011
631	Maunath Bhanjan	Ranipur	0.000	0.301	0.003	-0.002	0.049	0.000	0.002	0.015
632	Maunath Bhanjan	Ratanpura	0.000	0.365	0.028	-0.004	0.091	0.000	0.002	0.007
633	Meerut	Saroorpur	0.000	0.277	0.068	-0.001	1.600	0.000	0.001	0.012
634	Meerut	Parichhatgarh	0.000	5.884	0.079	0.005	0.879	0.000	0.001	0.011
635	Meerut	Meerut	0.000	0.640	0.208	0.009	0.054	0.000	0.000	0.008
636	Meerut	Hastinapur	0.001	0.040	0.001	0.001	0.317	0.001	0.001	0.005

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
637	Meerut	Rohta	0.000	0.509	0.368	0.000	0.174	0.000	0.001	0.014
638	Meerut	Daurala	0.000	0.148	0.156	0.001	1.036	0.000	0.001	0.007
639	Meerut	Mawana	0.000	0.069	0.086	0.003	0.340	0.001	0.000	0.024
640	Meerut	Rajpura	0.000	3.541	0.151	-0.001	0.027	0.003	0.000	0.010
641	Meerut	Kharkhoda	0.000	0.213	0.549	0.002	1.973	0.000	0.001	0.013
642	Meerut	Sardhana	0.000	0.456	0.006	0.000	0.230	0.004	0.001	0.029
643	Meerut	Janikhurd	0.000	2.583	0.122	0.000	0.274	0.000	0.000	0.011
644	Meerut	Machhra	0.001	6.078	0.109	0.000	0.471	0.001	0.001	0.007
645	Mirzapur	Mirzapur H.Q.	- 0.001	0.171	0.008	0.000	0.528	0.000	0.000	0.012
646	Mirzapur	Chanbey	- 0.001	-0.029	0.004	0.009	0.047	0.000	0.001	0.001
647	Mirzapur	City	- 0.001	0.075	0.001	0.001	0.117	0.000	0.000	0.015
648	Mirzapur	Haliya	0.000	0.085	0.025	0.001	0.084	0.001	0.001	0.000
649	Mirzapur	Jamalpur	- 0.001	1.021	0.022	-0.002	2.126	0.000	0.000	0.001
650	Mirzapur	Kon	- 0.001	4.720	0.340	-0.002	0.123	0.021	0.000	0.000
651	Mirzapur	Lalganj	- 0.001	0.365	0.083	-0.001	0.186	0.000	0.001	0.004
652	Mirzapur	Majhawan	- 0.001	-0.005	0.008	0.004	0.761	0.000	0.001	0.008
653	Mirzapur	Marihan	- 0.001	-0.043	-0.001	-0.001	-0.003	0.000	0.002	0.000
654	Mirzapur	Narainpur	- 0.001	0.019	0.032	0.006	0.113	0.000	0.000	0.028

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
655	Mirzapur	Pahari	- 0.001	0.195	0.009	0.003	1.012	0.000	0.000	0.003
656	Mirzapur	Rajgarh	- 0.001	0.946	0.445	-0.001	0.290	0.000	0.001	0.000
657	Mirzapur	Sikhar/ Shikhad	- 0.001	1.781	0.201	-0.002	0.900	0.000	0.000	0.002
658	Moradabad	BHAGATPUR TANDA	0.000	1.841	0.161	-0.002	0.410	0.012	0.000	0.000
659	Moradabad	THAKURDWA RA	0.000	0.035	0.073	-0.002	0.001	0.001	0.000	0.005
660	Moradabad	DILARI	0.000	0.331	0.135	-0.002	0.024	0.006	0.030	0.001
661	Moradabad	MOONDHA PANDEY	0.000	1.494	0.143	-0.002	0.132	0.021	0.001	0.000
662	Moradabad	SAMBHAL	0.000	0.226	0.134	0.001	0.391	0.001	0.003	0.003
663	Moradabad	PANWASA	0.000	0.148	0.040	-0.002	0.027	0.001	0.001	0.007
664	Moradabad	BAHJOI	0.000	3.002	0.264	-0.002	0.012	0.000	0.000	0.017
665	Moradabad	BANIAKHERA	0.000	0.184	0.166	-0.001	0.087	0.003	0.000	0.007
666	Moradabad	BILARI	0.000	0.466	0.072	-0.002	0.025	0.001	0.000	0.005
667	Moradabad	DEENGARPUR	0.000	2.987	0.273	-0.002	0.024	0.004	0.000	0.007
668	Moradabad	MORADABAD	0.000	2.364	0.033	-0.002	0.423	0.000	0.000	0.015
669	Moradabad	CHHAJLET	0.000	0.776	0.280	-0.002	0.039	0.019	0.000	0.007
670	Moradabad	ASMOLI	0.000	3.162	0.148	-0.001	0.261	0.003	0.001	0.012
671	Muzaffarnagar	Kandhala	0.000	0.443	0.029	0.002	0.040	0.000	0.001	0.016
672	Muzaffarnagar	Kairana	0.000	0.593	0.049	0.000	0.764	0.000	0.001	0.035

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
673	Muzaffarnagar	Bhaghara	0.000	0.514	0.031	0.000	0.391	0.001	0.001	0.013
674	Muzaffarnagar	Budhana	0.000	0.146	0.145	0.000	1.618	0.000	0.001	0.031
675	Muzaffarnagar	Charthawal	0.000	0.455	0.488	0.001	1.565	0.000	0.001	0.014
676	Muzaffarnagar	Jansath	0.000	0.890	0.032	0.002	0.216	0.001	0.001	0.009
677	Muzaffarnagar	Khatauli	0.000	0.341	0.123	0.000	0.527	0.000	0.001	0.011
678	Muzaffarnagar	Morna	0.000	0.007	0.005	0.006	0.338	0.000	0.002	0.002
679	Muzaffarnagar	Muzaffarnagar	0.000	2.347	0.091	-0.001	0.003	0.000	0.001	0.006
680	Muzaffarnagar	Purkaji	0.000	0.079	0.125	0.002	0.544	0.012	0.001	0.009
681	Muzaffarnagar	Shahpur	0.000	5.224	0.083	0.000	0.529	0.001	0.001	0.005
682	Muzaffarnagar	Shamli	0.000	0.120	0.152	0.000	1.666	0.000	0.001	0.019
683	Muzaffarnagar	Thana Bhawan	0.000	1.668	0.034	0.000	0.020	0.000	0.001	0.023
684	Muzaffarnagar	UN	0.000	0.038	0.051	0.002	1.449	0.000	0.002	0.006
685	Pilibhit	AMARIA	0.000	0.844	0.080	-0.001	0.015	0.007	0.001	0.001
686	Pilibhit	BAR KHERA	0.000	0.965	0.075	0.000	0.231	0.006	0.002	0.004
687	Pilibhit	BILSANDA	0.000	2.374	0.043	0.000	0.039	0.001	0.001	0.002
688	Pilibhit	BISALPUR	0.000	4.103	0.081	0.000	0.227	0.001	0.001	0.002

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
689	Pilibhit	LALAURO KHERA	0.000	0.625	0.185	-0.001	0.018	0.005	0.000	0.004
690	Pilibhit	MARORI	0.001	0.296	0.040	-0.001	0.501	0.001	0.003	0.004
691	Pilibhit	PURANPUR	0.000	0.201	0.041	-0.001	0.093	0.010	0.005	0.000
692	Pratapgarh	Aspur- Deosara	-0.001	0.119	0.036	-0.001	1.302	0.000	0.000	0.012
693	Pratapgarh	Baba Bekhernath	0.000	0.652	0.040	0.002	0.325	0.001	0.000	0.032
694	Pratapgarh	Baba Bekhernath	0.000	1.042	0.208	0.000	0.585	0.002	0.001	0.044
695	Pratapgarh	Baba Bekhernath	0.000	0.090	0.009	0.018	0.295	0.000	0.001	0.023
696	Pratapgarh	Baba Bekhernath	0.006	2.308	0.027	-0.001	0.373	0.000	0.000	0.028
697	Pratapgarh	Baba Bekhernath	0.000	-0.015	0.000	0.016	0.817	0.000	0.000	0.019
698	Pratapgarh	Babaganj	0.000	0.115	0.012	0.000	0.215	0.001	0.000	0.034
699	Pratapgarh	Babaganj	-0.001	0.193	0.006	-0.002	0.025	0.001	0.000	0.016
700	Pratapgarh	Babaganj	-0.001	0.551	0.047	0.000	1.418	0.002	0.000	0.064
701	Pratapgarh	Babaganj	-0.001	0.688	0.027	-0.002	0.091	0.003	0.000	0.014
702	Pratapgarh	Bihar	-0.001	0.379	0.005	-0.001	0.147	0.000	0.000	0.021
703	Pratapgarh	Gaura	-0.001	0.065	0.013	-0.001	0.209	0.000	0.000	0.017
704	Pratapgarh	Kalanker	-0.001	0.601	0.203	-0.001	2.125	0.000	0.000	0.006

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
705	Pratapgarh	Kunda	- 0.001	1.305	0.077	-0.001	0.136	0.000	0.001	0.023
706	Pratapgarh	Lakshmanpur	0.001	0.504	0.201	0.001	2.675	0.001	0.001	0.037
707	Pratapgarh	Lalganj	- 0.001	-0.008	0.003	-0.001	0.141	0.001	0.000	0.029
708	Pratapgarh	Mandhata	- 0.001	1.822	0.137	-0.002	0.110	0.000	0.000	0.005
709	Pratapgarh	Mangraura	- 0.001	0.524	0.051	-0.001	0.073	0.000	0.001	0.008
710	Pratapgarh	Patti	- 0.001	-0.043	0.040	-0.001	0.014	0.000	0.000	0.014
711	Pratapgarh	Pratapgarh Sadar	- 0.001	0.109	0.031	0.002	1.144	0.000	0.001	0.027
712	Pratapgarh	Rampur-Sangramg	- 0.001	0.097	0.018	-0.002	0.080	0.005	0.000	0.028
713	Pratapgarh	Sandwa-Chandrik	0.000	0.286	0.136	-0.001	0.511	0.000	0.000	0.021
714	Pratapgarh	Sangaipur	- 0.001	2.522	0.136	-0.002	1.428	0.000	0.000	0.014
715	Pratapgarh	Sangaipur	- 0.001	0.047	0.008	0.003	0.319	0.000	0.000	0.032
716	Pratapgarh	Sangaipur	- 0.001	2.462	0.954	-0.002	0.676	0.001	0.000	0.064
717	Pratapgarh	Sangaipur	0.000	0.240	0.179	0.001	0.833	0.011	0.000	0.086
718	Pratapgarh	Shivgarh	- 0.001	-0.005	0.026	0.003	0.199	0.000	0.002	0.013
719	Prayagraj	Bahadurpur	0.001	1.320	0.071	0.000	1.258	0.000	0.002	0.005

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
720	Prayagraj	Bahera	0.000	6.128	0.045	-0.001	0.607	0.000	0.001	0.009
721	Prayagraj	Chaka	0.000	0.443	0.017	0.003	0.943	0.000	0.001	0.009
722	Prayagraj	Dhanpur	0.001	0.272	0.074	0.000	1.598	0.000	0.001	0.005
723	Prayagraj	Handa	0.000	0.162	0.034	-0.001	0.222	0.001	0.002	0.015
724	Prayagraj	Holagarh	0.000	0.053	0.028	0.000	0.540	0.000	0.000	0.022
725	Prayagraj	Jasra	-0.001	2.102	0.082	-0.001	0.199	0.000	0.001	0.021
726	Prayagraj	Karchana	0.034	14.175	0.408	0.039	2.659	0.001	0.018	0.005
727	Prayagraj	Kaundhiyara	0.000	0.214	0.005	0.003	0.493	0.001	0.001	0.004
728	Prayagraj	Kaurihar	0.000	0.451	0.047	-0.001	0.572	0.000	0.001	0.024
729	Prayagraj	Koran	0.000	-0.009	0.067	-0.001	0.020	0.001	0.001	0.005
730	Prayagraj	Manda	0.005	0.089	0.000	0.000	0.063	0.000	0.002	0.002
731	Prayagraj	Mau-Aima	0.000	0.082	0.012	0.000	0.181	0.001	0.001	0.013
732	Prayagraj	Meja	0.000	0.228	0.005	0.005	0.231	0.000	0.002	0.011
733	Prayagraj	Phoolpur	0.000	0.237	0.017	-0.001	0.166	0.001	0.002	0.038
734	Prayagraj	Pratappur	0.000	0.379	0.161	0.000	1.900	0.000	0.001	0.036
735	Prayagraj	Saidabad	0.000	1.032	0.008	-0.001	0.106	0.002	0.002	0.011
736	Prayagraj	Shankargarh	-0.001	1.198	0.129	0.003	0.595	0.000	0.004	0.002
737	Prayagraj	Soraon	0.000	0.195	0.018	0.001	0.042	0.001	0.001	0.018
738	Prayagraj	Urwa	0.000	0.619	0.143	0.006	1.726	0.000	0.001	0.004
739	Rai Bareli	Amawan	0.000	2.300	0.176	-0.002	0.975	0.000	0.000	0.010
740	Rai Bareli	Bachharawan	0.000	1.249	0.044	-0.001	0.403	0.000	0.000	0.018

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
741	Raibareli	Bahadurpur	0.000	-0.023	0.014	-0.003	0.115	0.000	-0.001	0.023
742	Raibareli	Chhatoh	0.000	0.402	0.070	-0.002	1.153	0.000	0.000	0.039
743	Raibareli	Chhatoh	0.000	2.601	0.039	-0.002	0.011	0.001	0.000	0.080
744	Raibareli	Chhatoh	0.001	0.262	0.029	0.000	1.102	0.000	0.002	0.022
745	Raibareli	Dalmau	0.000	0.724	0.014	-0.002	1.528	0.000	0.000	0.010
746	Raibareli	Deeh	0.000	1.670	0.021	-0.002	3.403	0.000	0.001	0.023
747	Raibareli	Dinshahgaura	0.000	0.152	0.049	-0.001	0.018	0.001	0.001	0.013
748	Raibareli	Harichandpur	0.000	0.502	0.052	-0.002	0.228	0.000	0.000	0.032
749	Raibareli	Jagatpur	0.000	4.309	0.052	-0.001	0.030	0.001	0.000	0.008
750	Raibareli	Kheron	0.000	17.55 6	0.999	-0.002	0.128	0.034	0.000	0.001
751	Raibareli	Lalganj	0.000	0.399	0.034	-0.002	0.079	0.000	0.000	0.065
752	Raibareli	Lalganj	0.000	0.605	0.037	-0.002	2.197	0.000	0.000	0.070
753	Raibareli	Lalganj	0.000	0.105	0.005	-0.001	0.400	0.001	0.000	0.017
754	Raibareli	Maharajganj	0.000	0.333	0.036	0.002	0.821	0.000	0.000	0.034
755	Raibareli	Rahi	0.000	0.703	0.061	-0.002	0.477	0.000	0.000	0.025
756	Raibareli	Rohnia	0.000	0.324	0.014	-0.002	0.067	0.001	0.000	0.006
757	Raibareli	Salon	0.000	0.250	0.058	-0.002	0.581	0.000	0.000	0.013
758	Raibareli	Sareni	0.000	1.384	0.059	-0.002	0.138	0.000	0.000	0.035
759	Raibareli	Sartawan	0.000	3.694	0.101	-0.001	4.062	0.001	0.001	0.007
760	Raibareli	Sheogarh	0.000	3.120	0.085	0.000	0.160	0.000	0.000	0.014
761	Raibareli	Singhpur	0.001	0.368	0.051	-0.001	0.428	0.000	0.001	0.008
762	Raibareli	Tiloee	0.000	0.943	0.221	-0.001	0.324	0.000	0.000	0.049

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
763	Raibareli	Unchahar	0.000	0.500	0.112	-0.001	2.197	0.000	0.000	0.016
764	Raibareli	Unchahar	0.000	1.983	0.095	-0.002	2.070	0.000	0.000	0.037
765	Raibareli	Unchahar	0.000	0.272	0.016	-0.002	0.180	0.001	0.001	0.015
766	Rampur	MILAK	0.000	4.084	0.245	-0.001	0.262	0.008	0.000	0.002
767	Rampur	SHAHBAD	0.000	0.067	0.032	0.000	0.427	0.000	0.001	0.006
768	Rampur	CHAMRAUA	0.000	9.891	0.316	-0.002	0.006	0.002	0.001	0.001
769	Rampur	BILASPUR	0.000	5.706	0.115	-0.002	0.022	0.001	0.000	0.005
770	Rampur	SWAR	0.000	0.415	0.066	-0.002	0.508	0.001	0.001	0.004
771	Rampur	SAIDNAGAR	0.000	0.658	0.115	-0.002	0.054	0.007	0.005	0.000
772	Saharanpur	Nanauta	0.000	4.203	0.200	-0.001	0.083	0.001	0.000	0.005
773	Saharanpur	Nakur	0.000	0.039	0.466	0.001	2.230	0.000	0.000	0.004
774	Saharanpur	Nagal	0.000	0.036	0.089	0.000	0.865	0.002	0.001	0.005
775	Saharanpur	Puwarka	0.001	0.034	0.101	0.000	0.776	0.000	0.001	0.007
776	Saharanpur	Rampur	0.000	0.871	0.127	-0.001	0.027	0.001	0.000	0.003
777	Saharanpur	Sadauli Qudim	0.000	0.236	0.007	0.003	0.504	0.000	0.000	0.005
778	Saharanpur	Sarsawa	-0.001	-0.089	0.142	-0.001	-0.006	0.001	-0.001	0.012
779	Saharanpur	Deoband	0.000	0.491	0.153	0.000	0.264	0.001	0.000	0.007
780	Saharanpur	Baliakheri	0.001	3.931	0.122	0.001	0.127	0.004	0.002	0.004
781	Saharanpur	Gangoh	0.000	0.122	0.089	0.000	0.927	0.000	0.001	0.037
782	Saharanpur	Muzafarabad	0.000	0.411	0.743	0.003	0.121	0.000	0.001	0.001
783	Sant Kabir Nagar	Bagholi	0.000	1.765	0.132	0.010	0.752	0.002	0.003	0.001

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
784	Sant Kabir Nagar	Belhar Kalan	- 0.001	0.390	0.206	0.002	0.782	0.009	0.002	0.001
785	Sant Kabir Nagar	Hessar Bazar	- 0.001	0.936	0.174	0.000	0.507	0.001	0.001	0.000
786	Sant Kabir Nagar	Khalilabad	0.000	0.449	0.123	0.006	0.374	0.000	0.004	0.027
787	Sant Kabir Nagar	Mehdawal	- 0.001	2.289	0.141	0.000	1.220	0.001	0.003	0.000
788	Sant Kabir Nagar	Nnath Nagar	- 0.001	2.136	0.071	-0.001	0.021	0.003	0.000	0.001
789	Sant Kabir Nagar	Poli	0.000	0.892	0.095	-0.001	1.306	0.018	0.003	0.000
790	Sant Kabir Nagar	Santha	0.000	2.022	0.194	0.024	0.472	0.013	0.007	0.001
791	Sant Kabir Nagar	Semariyawan	0.005	3.074	0.202	0.047	1.918	0.004	0.018	0.002
792	Sant Ravidas Nagar	Abholi	- 0.001	0.001	0.018	0.009	0.111	0.000	0.000	0.013
793	Sant Ravidas Nagar	Aurai	- 0.001	0.278	0.017	-0.001	0.165	0.000	0.001	0.003
794	Sant Ravidas Nagar	Bhadohi	- 0.001	0.055	0.027	0.001	0.031	0.001	0.000	0.005
795	Sant Ravidas Nagar	Deegh	- 0.001	-0.022	0.005	-0.001	4.529	0.000	0.003	0.010
796	Sant Ravidas Nagar	Gyanpur	- 0.001	1.057	0.089	-0.001	3.619	0.000	0.001	0.009
797	Sant Ravidas Nagar	Suriyawan	0.000	0.080	0.000	0.003	0.601	0.000	0.003	0.007
798	Shahjahanpur	BANDA	0.000	1.337	0.126	0.000	0.032	0.010	0.002	0.001

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
799	Shahjahanpur	BHAWAL KHERA	0.001	0.486	0.056	-0.001	11.40 4	0.000	0.002	0.003
800	Shahjahanpur	DADRAUL	0.000	1.344	0.102	-0.001	0.049	0.016	0.002	0.000
801	Shahjahanpur	JAITIPUR	0.000	1.537	0.076	-0.001	0.207	0.011	0.001	0.000
802	Shahjahanpur	JALALABAD	0.000	0.321	0.090	0.000	0.032	0.002	0.001	0.007
803	Shahjahanpur	KALAN	0.000	5.914	0.209	-0.001	0.045	0.000	0.003	0.020
804	Shahjahanpur	KANTH	0.000	1.138	0.217	0.000	0.039	0.003	0.000	0.001
805	Shahjahanpur	KATRA	0.000	2.648	0.159	-0.001	0.085	0.002	0.003	0.006
806	Shahjahanpur	KHUTAR	0.000	10.47 7	0.732	0.000	3.884	0.001	0.001	0.000
807	Shahjahanpur	MADANAPUR	0.000	3.554	0.453	0.000	0.121	0.005	0.000	0.005
808	Shahjahanpur	MIRZAPUR	0.000	0.208	0.007	0.000	0.051	0.001	0.000	0.034
809	Shahjahanpur	NIGOHI	0.000	-0.024	0.102	-0.001	1.662	0.001	0.003	0.003
810	Shahjahanpur	PUYAWAN	0.000	4.240	0.051	-0.001	0.143	0.000	0.000	0.002
811	Shahjahanpur	SINDHAULI	0.002	0.517	0.367	0.005	0.690	0.000	0.001	0.005
812	Shahjahanpur	TILHAR	0.000	1.818	0.143	0.000	0.324	0.004	0.001	0.001
813	Shrawasti	Jamunaha H.Q.	0.000	5.090	0.288	0.006	0.046	0.004	0.001	0.001
814	Shrawasti	Hariharpur Rani H.Q.	0.000	1.343	0.148	-0.001	1.711	0.006	0.001	0.001
815	Shrawasti	Sirsiya H.Q.	0.000	7.696	0.248	-0.001	1.023	0.001	0.001	0.007
816	Shrawasti	Ikauna H.Q.	0.000	5.392	0.145	-0.001	0.210	0.001	0.002	0.000
817	Shrawasti	Gilaula H.Q.	0.000	0.524	0.110	-0.001	0.185	0.001	0.001	0.001
818	Siddharth Nagar	Bhanwapur H.Q.	0.000	0.989	0.116	-0.001	0.488	0.008	0.003	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
819	Siddharth Nagar	Dumariyaganj H.Q.	0.000	0.071	0.366	0.000	1.131	0.000	0.002	0.003
820	Siddharth Nagar	Itwa H.Q.	0.000	2.804	0.222	-0.001	0.620	0.003	0.001	0.002
821	Siddharth Nagar	Badhni H.Q.	0.000	2.842	0.065	-0.001	4.719	0.024	0.004	0.000
822	Siddharth Nagar	Shohratgarh H.Q.	0.000	0.655	0.096	-0.001	1.995	0.000	0.002	0.000
823	Siddharth Nagar	Naugarh H.Q.	0.000	0.533	0.333	-0.001	0.121	0.000	0.001	0.013
824	Siddharth Nagar	Lotan H.Q.	0.000	4.774	0.124	-0.001	0.805	0.001	0.001	0.004
825	Siddharth Nagar	Uska bazar H.Q.	0.000	2.752	0.123	-0.002	0.568	0.005	0.001	0.000
826	Siddharth Nagar	Birdpur H.Q.	0.000	0.063	0.164	0.000	0.583	0.000	0.000	0.003
827	Siddharth Nagar	Jogiya H.Q.	0.000	3.239	0.185	-0.002	1.717	0.013	0.001	0.000
828	Siddharth Nagar	Khuniyaw H.Q.	0.000	0.660	0.082	-0.001	0.318	0.003	0.000	0.001
829	Siddharth Nagar	Mithawal H.Q.	0.000	0.102	0.031	-0.001	1.604	0.000	0.001	0.001
830	Siddharth Nagar	Bansi H.Q.	0.000	10.18 ₄	0.339	-0.002	0.422	0.003	0.000	0.001
831	Siddharth Nagar	Khesraha H.Q.	0.000	4.430	0.185	-0.002	0.685	0.003	0.000	0.001
832	Sitapur	Mahmudabad	0.000	0.841	0.047	-0.010	0.324	0.002	0.000	0.001
833	Sitapur	Rampur Mathura	0.000	0.750	0.056	-0.010	0.172	0.010	0.001	0.000

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
834	Sitapur	Rewsa	0.000	2.550	0.173	-0.010	0.163	0.001	0.000	0.000
835	Sitapur	Behta	0.000	1.866	0.182	-0.010	0.659	0.002	0.001	0.000
836	Sitapur	Sakran	0.000	0.881	0.045	-0.010	0.146	0.007	0.001	0.000
837	Sitapur	Biswan	0.000	0.217	0.054	-0.010	0.421	0.000	0.001	0.002
838	Sitapur	Pahala	0.000	0.376	0.131	-0.010	0.200	0.003	0.001	0.001
839	Sitapur	Sidhaul	0.000	0.227	0.203	-0.009	0.384	0.001	0.001	0.006
840	Sitapur	Gondlamau	0.000	2.218	0.039	-0.010	0.087	0.000	0.001	0.011
841	Sitapur	Machhreta	0.000	0.254	0.018	-0.009	0.285	0.000	0.001	0.003
842	Sitapur	Misrikh	0.000	4.882	0.108	-0.010	0.130	0.000	0.000	0.003
843	Sitapur	Pisawan	0.000	0.251	0.025	-0.007	0.817	0.000	0.000	0.003
844	Sitapur	Mohol	0.000	0.832	0.045	-0.010	0.905	0.001	0.001	0.005
845	Sitapur	Aliya	0.000	0.239	0.033	-0.010	0.346	0.000	0.001	0.005
846	Sitapur	Hargaon	0.000	0.254	0.012	-0.007	0.315	0.000	0.000	0.002
847	Sitapur	Laharpur	- 0.001	1.973	0.175	-0.012	0.168	0.003	0.000	0.000
848	Sitapur	Khairabad	- 0.001	2.432	0.050	-0.009	0.131	0.000	0.001	0.002
849	Sitapur	Parsendi	0.000	0.540	0.086	-0.011	0.346	0.003	0.000	0.003
850	Sitapur	Kasmanda	- 0.001	2.539	0.028	-0.012	0.158	0.001	0.001	0.001
851	Sonbhadra	Babhani	0.000	0.334	0.029	0.011	0.158	0.000	0.001	0.004
852	Sonbhadra	Chatara	- 0.001	0.181	0.005	0.001	0.464	0.000	0.000	0.003
853	Sonbhadra	Chopan	- 0.001	1.251	0.218	0.003	2.877	0.000	0.001	0.001

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
854	Sonbhadra	Dudhi	- 0.001	0.001	0.008	0.010	0.367	0.000	0.001	0.005
855	Sonbhadra	Ghorwal	- 0.001	0.128	0.014	0.000	0.637	0.000	0.001	0.006
856	Sonbhadra	Myorpur	- 0.001	21.70 5	0.471	-0.001	0.405	0.000	0.001	0.002
857	Sonbhadra	Nagawa	- 0.001	3.689	0.114	-0.001	0.358	0.000	0.000	0.000
858	Sonbhadra	Robertsganj	- 0.001	1.643	0.036	-0.002	8.007	0.000	0.001	0.003
859	Sultanpur	Sultanpur	0.000	0.355	0.024	-0.002	0.029	0.000	0.000	0.008
860	Sultanpur	Akhand Nagar	0.000	0.993	0.076	-0.002	0.605	0.000	0.000	0.006
861	Sultanpur	Amethi	0.000	0.351	0.068	-0.002	0.171	0.000	0.000	0.033
862	Sultanpur	Baldirai	0.000	0.303	0.034	-0.002	0.064	0.000	0.000	0.006
863	Sultanpur	Bhadaiyau	0.000	0.153	0.016	0.001	0.482	0.000	0.000	0.008
864	Sultanpur	Bhadar	0.000	0.600	0.132	-0.002	0.467	0.000	0.000	0.017
865	Sultanpur	Bhetya	0.000	0.189	0.051	0.001	0.263	0.000	0.000	0.050
866	Sultanpur	Dhanpatganj	0.000	0.085	0.018	0.002	0.247	0.000	0.001	0.017
867	Sultanpur	Dostpur	0.000	0.263	0.006	-0.002	0.054	0.000	0.000	0.045
868	Sultanpur	Dubeypur	0.000	0.201	0.084	0.002	0.085	0.001	0.001	0.012
869	Sultanpur	Gauriganj	0.000	6.341	0.049	-0.002	0.038	0.000	0.000	0.036
870	Sultanpur	Jagdishpur	0.000	0.267	0.365	0.011	0.667	0.000	0.000	0.014
871	Sultanpur	Jagdishpur	0.000	0.304	0.152	-0.003	1.127	0.000	0.003	0.011
872	Sultanpur	Jagdishpur	0.000	0.460	0.269	-0.002	0.051	0.000	0.000	0.017
873	Sultanpur	Jaisinghpur	0.000	2.113	0.130	-0.003	0.725	0.000	0.001	0.027

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
874	Sultanpur	Jamo	0.000	0.190	0.096	-0.001	0.252	0.000	0.001	0.015
875	Sultanpur	Kadipur	0.001	0.896	0.086	0.004	0.184	0.000	0.001	0.006
876	Sultanpur	Kurebhar	0.000	1.838	0.259	-0.002	0.609	0.002	0.000	0.006
877	Sultanpur	Kurwar	0.000	0.449	0.057	-0.001	0.137	0.000	0.001	0.016
878	Sultanpur	Lambhua	0.000	0.526	0.054	0.000	0.572	0.000	0.001	0.005
879	Sultanpur	Motigarpur	0.000	0.081	0.138	-0.002	0.401	0.001	0.000	0.011
880	Sultanpur	Musafir Khana	0.000	0.138	0.055	-0.001	0.117	0.001	0.000	0.056
881	Sultanpur	P.P. kannaicha	0.000	0.216	0.012	-0.002	0.160	0.001	0.000	0.009
882	Sultanpur	P.P. kannaicha	0.000	0.094	0.084	-0.002	3.793	0.000	0.001	0.007
883	Sultanpur	P.P. kannaicha	0.000	0.271	0.012	-0.002	0.096	0.000	0.001	0.013
884	Sultanpur	Sangrampur	0.000	1.103	0.017	-0.002	0.048	0.000	0.000	0.034
885	Sultanpur	Shahgarh	0.000	0.233	0.082	-0.002	0.091	0.000	0.000	0.015
886	Sultanpur	Shukul Bazar	0.000	0.090	0.004	0.002	0.503	0.000	0.001	0.005
887	Unnao	Auras	0.000	0.849	0.039	-0.010	-0.002	0.000	0.001	0.009
888	Unnao	Ganj Moradabad	0.001	0.305	0.002	-0.010	0.020	0.001	0.001	0.005
889	Unnao	Bangarmau	0.000	0.080	0.252	-0.007	0.499	0.000	0.000	0.006
890	Unnao	Fatehpur Chaurasi	0.000	0.040	0.012	-0.009	0.495	0.002	0.002	0.002
891	Unnao	Safipur	0.000	0.133	0.018	-0.010	0.126	0.000	0.001	0.011
892	Unnao	Hasanganj	0.000	1.978	0.017	-0.010	0.043	0.000	0.001	0.009
893	Unnao	Miyanganj	0.000	0.511	0.022	-0.010	0.049	0.000	0.000	0.010
894	Unnao	Asoha	0.000	1.221	0.091	-0.010	0.888	0.000	0.000	0.018

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
895	Unnao	Nawabganj	0.000	0.695	0.127	-0.010	0.251	0.000	0.000	0.040
896	Unnao	Bichhiya	0.000	4.724	0.050	-0.009	0.078	0.000	0.001	0.015
897	Unnao	Purwa	0.000	0.177	0.007	-0.006	0.147	0.000	0.001	0.009
898	Unnao	Hilauli	0.000	8.843	0.129	-0.010	0.663	0.000	0.000	0.005
899	Unnao	Sumerpur	0.000	0.125	0.005	-0.009	0.199	0.001	0.001	0.030
900	Unnao	Bighapur	0.000	0.153	0.039	-0.010	0.315	0.000	0.000	0.012
901	Unnao	Sikandarpur Karan	0.000	0.503	0.074	-0.010	1.600	0.000	0.001	0.009
902	Unnao	Sikandarpur Sarausi	0.000	0.184	0.019	-0.010	0.095	0.000	0.000	0.022
903	Unnao	Nawabganj	-0.001	0.060	0.003	-0.012	0.088	0.002	0.000	0.015
904	Unnao	Nawabganj	-0.001	0.060	0.015	-0.008	0.397	0.000	0.000	0.004
905	Unnao	Nawabganj	-0.001	0.116	0.019	-0.011	0.096	0.001	0.000	0.012
906	Varanasi	Arajiline	-0.001	0.483	0.066	-0.002	0.261	0.001	0.000	0.011
907	Varanasi	Baragaon	-0.001	0.270	0.105	0.001	0.897	0.000	0.000	0.019
908	Varanasi	Chiraiigaon	-0.001	1.650	0.026	-0.001	1.107	0.000	0.000	0.005
909	Varanasi	Cholapur	-0.001	0.346	0.021	-0.002	0.282	0.000	0.001	0.011

S. No.	District	Block	Cr	Fe	Mn	Cu	Zn	As	Pb	U
			mg/l							
910	Varanasi	Harhuwa	- 0.001	0.005	0.003	0.000	0.423	0.000	0.001	0.006
911	Varanasi	Kashi Vidya Peeth	0.000	0.099	0.000	-0.001	0.062	0.000	0.000	0.042
912	Varanasi	Pindra	0.003	0.001	-0.002	-0.001	0.026	0.000	0.001	0.011
913	Varanasi	Sewapuri	- 0.001	0.675	0.013	-0.001	0.195	0.000	0.001	0.008