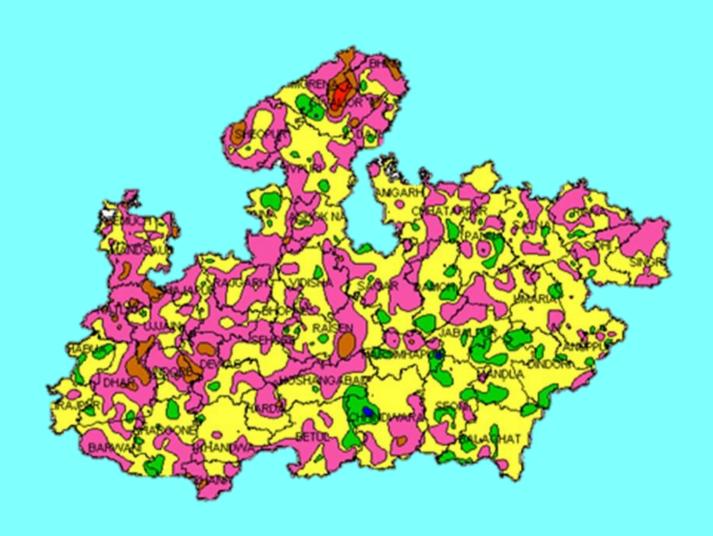


Ground Water Year Book - Madhya Pradesh (2021-22)



Central Ground Water Board

North Central Region

GOVERNMENT OF INDIA

MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION



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Central Ground Water Board GOVERNMENT OF INDIA MINISTRY OF JAL SHAKTI DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION

June 2022

FOREWORD

Groundwater is of fundamental importance to meet the rapidly expanding drinking, agricultural and industrial water requirement of the country. Pe iodic monitoring of the ground water regime is an essential prerequisite for effective planning, management and sustenance of quantity as well quality of this precious resource. To keep track of the changes in ground water regime, Central Ground Water Board monitors ground water level four times in a year, i.e. during May, August, November and January, through a network of groundwater monitoring wells scattered throughout the length and breadth of the country. The present report gives an overview of the status of ground water level monitored during the Year 2021-22 by the officers of Central Ground Water Board in the state of Madhya Pradesh. As on 31.03.2022, there is 1482 Ground Water monitoring ground water monitoring dug wells and piezometers in the state•.

Water samples are collected once in a year during May and are subjected to detailed chemical analysis to monitor the changes in chemical quality of groundwater. Water samples are also collected for selected stations for every year in May for analysis of heavy metals. The water level and water quality data so generated are updated and stored in computer and subjected to analyses using the latest software. The results of the analyses are reflected in the periodic reports on Status of Ground Water Level, which are usually issued within a month of completion of each monitoring. As such, four reports are issued every year beside the Ground Water Year Book, which is published annually. The presents report deals with the cumulative action of the work done during the year 2021-22. During this year, the existing observation wells were monitored during May 2021, August 2021, November 2021 and January 2022.

The groundwater regime monitoring work is a joint endea cr of all the officers and staff of this region, and their contribution in this important activ.ty is highly appreciated. This year book is prepared under the supervision of Mrs. Rose Anita Kujur, Scientist E. Preparation of this report has been an arduous task which has been successfully completed by *Dr. Sarita Tiwari*, Scient/st *B (HM)*. Shri Tej Singh, Assistant Chemist has contributed in writing the Hydrochemistry of Madhya Pradesh State. I hope that the State Government and other user agencies would utilize the data incorporated in the report for proper planning of the ground water develo" pment and management activities in the state.

(Rana Chatterjee) Regional Director

EXECUTIVE SUMMARY

Central Ground Water Board, North Central Region, Bhopal monitors ground water level in the state of Madhya Pradesh through a network of 1482 ground water monitoring dug wells and piezometers, four times in a year in order to bring out the spatial and temporal changes in the ground water regime. This continuous monitoring provides a valuable tool to decipher the seasonal and long-term changes in ground water level and quality and in turn helps in managing the ground water resources in a more scientific and effective manner. The present report incorporates the overall behavior of the ground water regime including the quality aspects in the state of Madhya Pradesh on the basis of the detailed analyses of the field data collected from observation wells during the Year 2021-22.

Total geographical area of Madhya Pradesh State is 3, 08,252 km2, which comprises fifty two districts. The state exhibits six distinct physiographic units namely the Malwa Plateau, the Satpura Range, the Vindhyan Range, the Mahakoshal Range, the Bundelkhand Region and the river valleys. There are six river basins in Madhya Pradesh which is Ganga Basin (Yamuna sub basin - Chambal sub-sub basin, Kunwari sindh sub-sub basin, Jamni sub-sub basin, Betwa sub-sub basin, Dhasan sub-sub basin, Ken sub-sub basin, Paisuni and Waidhan sub-sub basin, Tons sub basin and Sone sub basin), Narmada Basin, Godavari Basin, Tapti Basin, Mahi Basin and Mahanadi Basin.

Central Ground Water Board, North Central Region, Bhopal has set up a network of monitoring wells spread over the state in different hydrogeological conditions, consisting of 1182 dugwells and 300 piezometers, which are being monitored four times in a year. The periods of monitoring are – January 1st to 10th, May 20th to 30th, August 20th to 30th and November 1st to 10th. Water samples are being collected for analysis during the month of May.

The state has varied hydrogeological set-up due to which ground water potential differs from place to place. The area is underlain by various geological formations ranging in age from Archaean to Recent. Hard rock areas cover more than 80% of total land area of the state. These hard rock areas show wide variations and complexities in nature and composition of rocks, geological structures, geomorphological set up and hydrometeorological conditions. The crystalline rocks of Archaean age like granite, gneiss, granulites, schist, quartzite and granitoids occupy about 14.7% of geographical area of the state. The basaltic rocks of Deccan lava flows are the predominant formations and occupy nearly 44.5% of total geographical area. The consolidated sedimentary rocks of Vindhyan Super Group and Mahakoshal

(Cuddapah) Super Group of Proterozoic age occupy about 19.1% of total geographical area and the semi consolidated (Gondwana Formation) occupies about 6.7% area. Recent unconsolidated alluvial sediments occupy about 14.4% of total geographical area.

Rainfall is the sole source of natural recharge to ground water regime and rainfall pattern has an important impact on groundwater level in the phreatic aquifer. Rainfall in the state occurs during south-west monsoon season (mid June to September) and sometimes during winter (November to February). Most of the rainfall (more than 90%) occurs during the south-west monsoon season.

Monsoon rainfall within \pm 19% of the normal monsoon rainfall is considered normal. Monsoon rainfall between 20 per cent and 59 per cent of the normal monsoon rainfall is considered excess and above 60% is considered as large excess. Monsoon rainfall less than -20% and more than -59% of the normal monsoon rainfall is considered deficit and if the monsoon rainfall is lesser than -60% of the normal monsoon rainfall, it is considered large deficient.

The normal monsoon rainfall and normal post monsoon rainfall of the Madhya Pradesh State is 940.6 mm and 53.7 mm respectively. During monsoon season state has received 945.2 mm, 0% departure from monsoon normal and in the post monsoon season 72.1 mm, 34% above post monsoon normal. Madhya Pradesh State has recorded no surplus rain during 2021 monsoon period with respect to normal rainfall and also as compared to last year monsoon rainfall this year state has received 4% less rain. Guna District has received the highest monsoon rainfall of 1633.2 mm and Khargone District has received the least rainfall of 590.7 mm. East Madhya Pradesh (E MP) and West Madhya Pradesh (W MP) have received normal monsoon rainfall with a variation in percentage departure at -15% and 15% respectively. However, during post monsoon season East subdivisions have received deficit rainfall of -22% departures from normal and excess rainfall of 83% above normal respectively. Most of the districts in East Madhya Pradesh are showing normal to deficit monsoon rainfall as compared to west side. Sheopur has received highest post monsoon rainfall, 501% above normal and Sidhi is lowest, 74% below normal. Out of total districts there are many districts which falls in west subdivision namely Alirajpur, Agar Malwa, Barwani, Bhind, Burhanpur, Datia, Dewas, Dhar, Guna, Gwalior, Harda, Indore, Shivpur, Shivpuri and etc has received large excess post monsoon rainfall.

The groundwater level monitored in the May is the pre-monsoon water level and the water level as it stands at the end of the ground water year after all the inputs and outputs have taken place. It is the resultant ultimate/deepest water level. Depth to water level (DTW) during May

2021 ranged from 0.42 to 46.62 metres below ground level (mbgl) in Madhya Pradesh. About 3.58 % percent of the wells in the state recorded a water level up to 2 m bgl, 18.46 % between 2-5 m bgl, 46.34 % between 5-10 m bgl, 28.37 % between 10-20 m bgl, 3.09 % between 20-40 m bgl and 0.16 % in more than 40 m bgl. Depth to water levels between 5-10 m bgl is the most prominent over the entire State.

The groundwater level monitored in November is the post-monsoon water level and the water level as it stands after the major portion of rainfall recharge has taken place. Depth to water level (DTW) during November 2021 ranged from 0.08 m bgl to 37.76 m bgl in Madhya Pradesh.12.95 % percent of the wells in the State recorded a water level up to 2 m bgl, 45.41 % between 2-5 m bgl, 32.54 % between 5-10 m bgl, 8.10 % between 10-20 m bgl, and 1.00% between 20-40 m bgl and no well comes under more than 40 m bgl. Water levels between 2-10 m bgl are most prominent over the entire state.

Ground water is a dynamic system. The ground water level or head is subject to change both due to natural and man made causes. Comparison of November 2021 water levels with that of May 2021 shows that there is a rise in the ground water level in about 87.43 % of the wells due to monsoon recharge and only 12.57 % of wells show decline in water level. Rise in the order of 0-2 m is seen in about 25.40 % of wells in the state. 25.57 % of wells show a rise in the order of 2-4 m. About 36.46 % wells recorded a rise of water level by more than 4 m. About 8.86 % of the wells show a decline in water level up to 2 m, 2.70% of the wells show a decline in water level between 2 to 4 m and 1.01% wells shows decline more than 4 m.

Long term behaviour of water level of the phreatic zone have been analysed by comparing the average water level data of last ten years with the current water level of different measurements during the year. The ground water level of May 2021 were compared with the 10 years May (2011-2020) average ground water level to decipher the long-term changes in the ground water regime. It is observed that about 64.85% of the wells show rise and about 35.15 % wells show decline in water levels in the state. The rise in water level is in the order of 0-2 m in 39.89 % of the wells, 2-4 m in 16.80 % of the wells and more than 4 m in about 8.16 % of the wells. The decline in water levels in the order of 0-2 m is shown by about 26.35 % of the wells, between 2-4 m in 5.79 % of the wells and more than 4 m in 3.02 % of the wells.

Ground water level trend of pre-monsoon period (May 2012 to May 2021) shows the general rise and fall in water level in the state. Around 47% of monitoring wells are showing declining water levels trend while 53 % monitoring wells are showing rising ground water level trend. Rising trend and declining trend less than 0.3 m/year of ground water level is found during the

past decade in most of the district of the state. The rising trend more than 0.3 m/year has been observed in a small pocket in Barwani, Khargone, Dhar, Mandsaur, Neemuch, Sheopur, Shivpuri, Narsinghpur, Damoh, Balaghat, Damoh, Betul and etc. Declining trend at a rate less than 0.3 m/year is observed in patches in many parts of the state. The declining trend of premonsoon water levels reflects the ground water developmental activities in an area, whereas the rising trend indicates that either the developmental activities have reduced, or that, recharge due to sources other than the rainfall, such as applied irrigation has increased.

Like a pre monsoon ground water level trend, post monsoon ground water trend (Nov 2012 to Nov 2021) shows that there is a general rise and fall in water level in the state. Post monsoon depth to water level rising trend is most prominent over West Madhya Pradesh as compared to East. Rising ground water level trend in the range of 0.3 to 0.6m/yr is mostly observed in the form of patches in North West part of the state and also distributed in the form of small patches in the few districts. Depth to water level declining trend less than 0.3m/yr is more prominent towards east and north part of the state, Alirajpur, Barwani and Jhabua. The declining trend in post-monsoon water levels suggests that a part of the aquifer is being dewatered every year, due either to deficient rainfall or to developmental activities. The rising post-monsoon trend, on the other hand, shows that additional water is being stored in the aquifer, due either to increased rainfall or to seepage through applied irrigation.

Total 120 number of wells constructed in Madhya Pradesh state classified as semi confined and confined aquifers ranging from a depth of 33m bgl to 120m bgl.the pre monsoon water level ranges in these aquifers 3.7 mbgl to 66mbgl. the post monsoon water level ranges in these aquifers 0.63 mbgl to 49mbgl.

1153 number of ground water samples was collected from the ground water monitoring wells during May 2021 in entire state for the quality monitoring.

The analyses of ground water samples indicate that ground water in state of Madhya Pradesh State is generally good. In most part of the State the ground water has low to medium salinity (EC 1000 μ s/cm) except in few pockets. In some parts of the state very high electrical conductivity i.e. more than 3000 μ s/cm at 25°C (0.69%) has been recorded specially in Agar Malwa, Bhind, Indore, Neemuch, Seoni, Shivpuri and Ujjain districts.

Fluoride concentration more than permissible limit i.e. 1.5 mg/l is observed in Anuppur, Betul, Bhind, Chhatarpur, Datia, Dhar, Harda, Jabalpur, Katni, Khargone, Morena, Neemuch, Shajapur, Singrauli, Ujjain and Vidisha districts. The maximum fluoride concentration has been observed at Junapani of Betul district (4.30 mg/l). In Madhya Pradesh, 92.02% wells Fluoride concentration is within the desirable limit of 1.0 mg/l where as 2.08% wells show Fluoride concentration above the maximum permissible limit of 1.5 mg/l.

The analyses of ground water samples indicate that 74.76% wells have nitrate concentration within the permissible limit of 45mg/l, while 25.24% wells have nitrate concentration above

permissible limit. Nitrate concentration more than permissible limits have been observed in Madhya Pradesh, nitrate concentration in shallow aquifer occurs in Agar Malwa, Alirajpur, Anuppur, Ashok Nagar, Balaghat, Barwani, Betul, Bhind, Bhopal, Burhanpur, Chhatarpur, Chhindwara, Damoh, Datia, Dewas, Dhar, Gwalior, Harda, Hoshangabad, Indore, Jabalpur, Jhabua, Katni, Khandwa, Khargone, Mandla, Mandsaur, Morena, Narsimhapur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Rewa, Sagar, Satna, Sehore, Seoni, Shahdol, Shajapur, Sheopur, Shivpuri, Singrauli, Tikamgarh, Ujjain, Umaria and Vidisha districts. Very high nitrate concentration of 400 mg/l was found in the ground water sample from Soyat of Agar Malwa District.

Total Hardness in ground water samples ranges between 20 to 1450 mg/l. Most of the waters are calcium bicarbonate type attributing to temporary hardness of water. The analyses reveal that 5.20% of wells show hardness more than the permissible limit of 600 mg/l.

In general, the ground water is good for drinking purposes and suitable for irrigation.

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1 INTRODUCTION

Madhya Pradesh is located in the central part of India and is a land-locked state, bordered on the west by Gujarat, on the northwest by Rajasthan, on the northeast by Uttar Pradesh, on the east by Chhattisgarh and on the south by Maharashtra State. It has a geographical area of 3,08,252 km² and is situated between north latitudes 21° 04′ and 26° 54′ and east longitudes 74° 00′ and 82° 50′. There are 52 districts and 313 community development blocks in Madhya Pradesh. The population of state as per census 2011 is 7, 25, 97, 565 with a population density of 236 persons per km² area. Out of total population, 75% lives in the villages and their main occupation is agriculture. The important urban areas in the state are Bhopal, Indore, Jabalpur, Ujjain and Gwalior. Dhupgarh in Pachmarhi is the highest point in the state.

Madhya Pradesh comprises several linguistically and culturally distinct regions, of which the major regions are:

Malwa Plateau Region is located in the northwest of the state and north of the Vindhya Range, with its distinct language and culture. Indore is the major city of the region, while Ujjain is a town of historical importance. Bhopal, the capital city lies on the extension of Malwa Region and on the edge of Bundelkhand Region.

Nimar Region is located in the western portion of the Narmada River valley, lying south of the Vindhyas in the southwest portion of the state. Khandwa, Khargone, Burhanpur and Barwani are the major district of the Nimar Region.

Bundelkhand is a region of rolling hills and fertile valleys in the northern part of the state, which slopes down toward the Indo-Gangetic plain to the north. Gwalior is an historic center of the region. This region encompasses Gwalior, Sagar, Damoh, Panna, Chhatarpur and Tikamgarh Districts.

Chambal region is located in the north-western parts of the state. The climate is harsh, and the area is known for murderous pirates who were active in hundreds in the late 1900s. This region is comprised of Sheopur, Morena and Bhind Districts.

Baghelkhand is a hilly region in the northeast parts of the state, which includes the eastern end of the Vindhya Range. Satna, Rewa and Sidhi Districts lie in this region.

Mahakoshal (Mahakaushal) is the southeastern portion of the state, which includes the eastern end of the Narmada River valley and the Eastern Satpuras. Jabalpur is the most important city in the region. Katni and Jabalpur Districts lie in this region.

Central Vindhyan and Satpura Region is occupying most parts of the central Narmada River valley. Hoshangabad, Harda and Narsimhapur Districts lies in this region.

Agriculture is the main stay of the people of Madhya Pradesh State. Water is essential for irrigation purposes, but its indiscriminate use can lead not only to shortages, but also to the deterioration of crop yields and soils. Ground water resource of a region is one of the building blocks for balanced economic development of the area, especially in an agriculture-based society. Dependence on ground water for irrigation and increasing water requirements in urban areas in Madhya Pradesh has necessitated judicious and planned uses of ground water resources in order to reach sustainability. For proper planning and management of ground water development in a judicious and socio-economically equitable manner, assessment of ground water scenario is one of the most important prerequisites.

Central Ground Water Board (CGWB) monitors ground water levels all over the country four times in a year in order to bring out the spatial and temporal changes in the ground water regime. This continuous monitoring provides a valuable tool to decipher the annual, seasonal and long-term changes in ground water regime, and in turn helps in managing the ground water resources in a scientific manner.

The North Central Region office of CGWB, based at Bhopal, monitor the ground water wells spreaded all over the state. As on start of the year i.e., 31-03-2022, the number of ground water monitoring wells are 1482 which includes 1182dugwells and 300 piezometers. Few of the exiting dugwells and piezometers were declared as abandoned. District-wise distribution of Ground Water Monitoring Wells in Madhya Pradesh during 2021-22 is given in Table 1-1. The locations of these monitoring wells are shown in Figure 1-1. All monitoring wells are monitored four times in a given hydrological year in the months of August (20st to 30th day), November (postmonsoon) (1st to 10th day), January (1st to 10th day) and May (premonsoon) (20th to 30th day). The long-term data generated during these monitoring seasons are important for computation, comparison and analysis of ground water utilization and its availability.

Reports on the status of ground water levels are produced within one month from each monitoring period and contain analysis of ground water levels in that particular season, and compare these water levels with those of the same season of previous year, premonsoon period and previous seasons of the same hydrological year and decadal mean (10 years of average) of the same season.

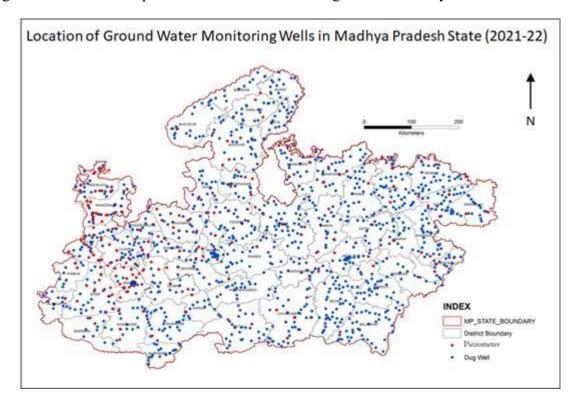


Figure 1-1 Location Map of Ground Water Monitoring Wells in Madhya Pradesh State

Table 1-1 District-Wise Distribution of Ground Water Monitoring Wells in Madhya Pradesh State

Sl.No	District	No. of Mo	onitoring S	Stations as on
		March 2022		
		DW	Pz	Total
1	Agar Malwa	12	3	15
2	Alirajpur	12	2	14
3	Anuppur	20	5	25
4	Ashok Nagar	17	5	22
5	Balaghat	40	6	46
6	Barwani	9	2	11
7	Betul	27	4	31
8	Bhind	18	1	19
9	Bhopal	26	4	30
10	Burhanpur	17	0	17

11	Chhatarpur	32	7	39
12	Chhindwara	35	7	42
13	Damoh	21	6	27
14	Datia	12	0	12
15	Dewas	20	8	28
16	Dhar	26	19	45
17	Dindori	14	2	16
18	Guna	21	4	25
19	Gwalior	17	3	20
20	Harda	11	2	13
21	Hoshangabad	18	0	18
22	Indore	22	23	45
23	Jabalpur	32	6	38
24	Jhabua	10	4	14
25	Katni	18	1	19
26	Khandwa	30	1	31
27	Khargone	20	5	25
28	Mandla	32	2	34
29	Mandsaur	24	24	48
30	Morena	14	0	14
31	Narsinghpur	18	1	19
32	Neemuch	24	13	37
33	Panna	26	4	30
34	Raisen	27	3	30
35	Rajgarh	21	13	34
36	Ratlam	28	21	49
37	Rewa	29	6	35

38	Sagar	43	8	51
39	Satna	45	7	52
40	Sehore	19	9	28
41	Seoni	44	2	46
42	Shahdol	26	3	29
43	Shajapur	16	5	21
44	Sheopur	20	1	21
45	Shivpuri	30	6	36
46	Sidhi	29	6	35
47	Singrauli	19	4	23
48	Tikamgarh	20	7	27
49	Ujjain	27	20	47
50	Umaria	16	1	17
51	Vidisha	28	4	32
Total		1182	300	1482

1.1. PHYSIOGRAPHY

The State of Madhya Pradesh exhibits six distinct physiographic units as follows:

The Malwa Plateau

The Satpura Range

The Vindhyan Range

The Mahakoshal Range

The Bundelkhand Region

The River valleys

The Malwa Plateau marks the northern span of the Deccan Plateau and this region forms a part of the vast Deccan Plateau of Central India. The hill ranges run across the plateau. The SatpuraRange located in the southern part of the State is E-W trending. It has an average elevation of 600 m amsl and highest elevation of 1350 m amsl. The Vindhyan range occupies

in the northern and central part of the region and has ENE-WSW trend. The Mahakoshal Range also has a similar trend. The Vindhyan Range extends into the MalwaPlateau and Bundelkhand Region. The Vindhyan Range and Mahakoshal Range are separated from the SatpuraRange by the Narmada River and vast tract of its basin area. The river valleys, other than the Narmada alluvial plain and Chambal alluvial plain, are very limited and form narrow belts along the rivers.

1.2. DRAINAGE

Madhya Pradesh State represents great river basins and the watershed of a number of rivers. Catchments of many rivers of India lie in Madhya Pradesh. There are six river basins in Madhya Pradesh namely 1 Ganga Basin (1.1 Yamuna sub basin - Chambal sub-sub basin, Kunwarisindh sub-sub basin, Jamni sub-sub basin, Betwa sub-sub basin, Dhasan sub-sub basin, Ken sub-sub basin, Paisuni and Baidhan sub sub basin 1.2 Tons sub basin, 1.3 Sone sub basin), 2 Narmada Basin, 3 Godavari Basin, 4 Tapti Basin, 5 Mahi Basin and 6 Mahanadi Basin. As Madhya Pradesh is located in the center of India, most of the rivers are interstate rivers. The rivers namely, Chambal, Sindh, Betwa, Ken flows northward and meet with Yamuna, whereas the Sone Riverfalls directly into Ganga. Narmada, Tapti and Mahi Rivers flow westward and meet Arabian Sea whereas Wainganga and PenchRivers meet Godavari in the south. The Narmada (originating from Amarkantak) and Tapti (originating from Multai in Betul District) Rivers and their basins divide the state in two, with the northern part draining largely into the Ganga basin and the southern part into the Godavari and Mahanadi systems. The Vindhyas form the southern boundary of the Ganga basin, with the western part of the Ganga basin draining into the Yamuna and the eastern part directly into the Ganga itself. All the rivers, which drain into the Ganga, flow from south to north, with the Chambal, Kshipra, Kalisindh, Parbati, Kuno, Sind, Betwa, Dhasan and Ken Rivers being the main tributaries of the Yamuna. The land drained by these rivers is agriculturally rich, with the natural vegetation largely consisting of grass and dry deciduous forest types. The eastern part of the Ganga basin consists of the Son, the Tons and the Rihand Rivers, with the Son being the major tributary. This is also the junction point of the Satpura and the Vindhya Ranges, with the Maikal and Kaimur Hills being the fulcrum. The forests here are much richer than the thorn forests of the northwestern part of Madhya Pradesh. The Son River is of great significance in that it is the largest tributary going into the Ganga on the south bank and arising out of the hills of Madhya Pradesh rather than from the Himalayas. This river and its

tributaries contribute the bulk of the monsoon flow into Ganga, because the north bank tributaries are all snow fed.

The major tributary of the Ganga, the Son River, arises in one of the most important watersheds in India, the Maikal hills around Amarkantak. Three of the great rivers of India, Narmada, Mahanadi and Son, are given birth to by these hills. This is also one of the few ranges in the state having a north south configuration. The Mahanadi itself, together with its tributaries such as Hasdeo, Mand and Kharun flows southeast into Chhattisgarh and converts that state into a green rice bowl. The upper Mahanadi catchment contains some of the finest forests in the state, ranging from mixed deciduous to teak, bamboo and sal. Just as the Mahanadi flows east from the Maikal hills and the Son flows north, the mighty Narmada charts a westerly course from these very hills. The Narmada flows through a rift valley, with the Vindhyas marching along its northern bank and the Satpuras along the southern. Its tributaries include Banjar, Tawa, Machna, Denwa and Sonbhardra Rivers. Taken in combination with its parallel sister river, the Tapti, which also flows through a rift valley, the Narmada - Tapti systems carry and enormous volume of water and provide drainage for almost a quarter of the land area of Madhya Pradesh.

The Satpuras, in the Gawligarh and Mahadeo hills, also contain a watershed, which is south facing. The Indrawati, Wainganga, Wardha, Pench, Kanhan and Penganga Rivers, discharge an enormous volume of water into the Godavari system. The Godavari is the lifeline of Andhra Pradesh, but the water which feeds it is a gift of the central India watershed.

1.3. HYDROGEOLOGY

The state of Madhya Pradesh has varied hydrogeological characteristics due to which ground water potential differs from place to place. The area is underlain by various geological formations ranging in age from the Archaean to the Recent. Hard rock areas cover more than 80% of total land area of the state. These hard-rock areas show wide variations and complexities in nature and composition of rocks, geological structures, geomorphological set up and hydrometeorological conditions. The crystalline rocks of Archaean age like granite, gneiss, granulites, schist, quartzite and granitoids occupy about 14.7% of geographical area of the State. The basaltic rocks of Deccan lava flows are the predominant formations and occupy nearly 44.5% of total geographical area. The consolidated sedimentary rocks of Vindhyan Super Group and Mahakoshal (Cuddapah) Super Group of Proterozoic age occupy about 19.1% of total geographical area and the semi consolidated (Gondwana Formation)

occupies about 6.7%. Recent unconsolidated alluvial sediments occupy about 14.4% of total geographical area. Hydrogeological units of Madhya Pradesh State are given in Table 1-2 and Hydrogeological map of Madhya Pradesh State has been given in Figure 1-2a and Figure 1-2b.

Archeans

Archaeans comprise of old metamorphics, granites, gneisses and schiests. They are hard and compact formations with low primary permeability, forming poor aquifers. Ground water occurs in these only in the weathered mantle and underlying fractured zone. Dug wells in this formation have depths of 5-30 m with water levels between 3-17 mbgl. Where thickness of aquifer is considerable, specific capacity ranges from 20-200 lpm/m of draw down. Hydraulic conductivity is generally less than 1 m/d and specific yield less than 5%. The yield of open wells ranges between 40-135 m3/d.

Vindhyans

Vindhyan Group of rocks comprise of sandstone, shale and limestone. The sandstone and shale are hard and compact and form poor aquifers. Ground water occurs in these in the weathered mantle and fractured zone or bedding plane fissures. The limestone is different in its hydrogeological properties having large solution cavities, which give rise to immense secondary permeability. The wells in limestone formations yield 100-500 m3/day for less than 5m draw down. Specific capacity ranges from 100-300 lpm/m of draw down, hydraulic conductivity varies between 5-15 m/d and specific yield ranges from 5-15% in good karstic zones.

Gondwanas

The Gondwanas are sedimentary formations rich in granular zones and form good aquifers. They support both dugwells and tubewells, capable of yielding 100-500 m3/d for the drawdown of 6-10 m. the specific capacity ranges between 75-250 lpm/m of drawdown, hydraulic conductivity varies between 10-25 m/d and specific yield is from10-15%. However, the clayey and silty formations (shales/claystone/siltstone) of Dewas District are poor aquifers.

Infra Trappeans

The Bagh and Lameta beds and Nimar Sandstone are also sedimentary formations but have a limited extent and poor to moderate permeability. The limestone and calcareous clays when karstified form productive aquifers. The corralling limestone, the marls and nodular

limestone are hard and compact having poor permeability. The Nimar sandstone has intergranular porosity, joints, fracture, bedding planes, which give moderate scope for ground water movement. The depth of wells varies from 3 to 13 m and depth to water level between 2 to 12 mbgl.

Deccan Traps

These form the most important aquifers in the region. The weathered, fractured, jointed and vesicular units of basalts form moderate to good aquifers. These formations have highly variable yields ranging from 10 to 750 m³/d. Dugwells range in depth from 4 to 20 m with water levels varying between 2 and 14 mbgl. The specific capacity ranges from 50 to 150 lpm/m of drawdown, hydraulic conductivity varies between 5 and 15 m/d and the specific yield is 5-10%. The Deccan Traps formations can be tapped by dug-cum-bore and drilled wells. It is observed that the yield increases by 5-10 times when 10-15 m bores extending down to the lower vesicular zone are drilled at the base of dugwells. Yields of 400-600 m³/d can be obtained in this way. In some areas the control of doleritic dykes on occurrence of ground water was observed. Wells located on the upstream side of these dykes gave better yields. Also wells located on tectonic lineaments gave better yields.

Alluvium

It comprises of unconsolidated gravel, sand, silt, clay in various proportions and has primary intergranular porosity and permeability. Hence it is the most promising formation for ground water development. The thickness of alluvium varies from 10 to 318 m with aquifer thickness from 10 to 160 m being more in the Ganga basin than in the Narmada basin. The depth to water ranges from 5 to 30 mbgl. The transmissivity is high in the Ganga basin reached upto 300 m²/d. In the Narmada basin transmissivity ranges between 83-283 m²/d. the yields vary from 30 to 50 m³/hr in the shallow wells and 30-200 m³/hr for deep wells in the Ganga basin. In the Narmada basin the yields are of the order of 15-30 m3/hr in the phreatic zone and 70-200 m³/hr in the deeper zone. In the Wainganga sub basin, the wells yield 60-600 m³/d. In the Tapi basin, the yields are 25-95 m³/d.

HYDROGEOLOGY a MADHYA PRADESH SCALE **LEGEND** b AGE FORMATION LITHOLOGY AQUIFER CHARACTERISTICS POROUS MEDIA UNCONSOLIDATED CONSOLIDATED FISSURED MEDIA Discontinuous unconfined to as down to a depth of 150 mbg. GROUND WATER HYDROLOGY Water table confour inmelies above mean sea level MAN MADE FEATURES **Groundwater Potential**

Figure 1-2 Hydrogeological Map of Madhya Pradesh

(Source:Geological Survey of India)

Table 1-2 Hydrogeological Units in Madhya Pradesh, their Potential and Ground Water Scenario

Geologic al	Group	Rock Formati	Surface Exposure	Occurrence and Hydrogeological
Age		on	Area	Characters.
			(Approx.)	
Pleistoce ne to Recent	Alluvial plains (older and Newer Alluviu m)	Unconsolida te d clays and silts, gravels and sands of different mix. Lenses of Peat and organic matter carbonate and siliceous	38,000 Sq.Km.	Occur widespread in Bhind (Chambal basin), Hoshangabad and Narsimhapur districts (Narmada basin) and also in Sheopur, Morena, Datia, Chhatarpur, Jabalpur, Katni, Khandwa, Burhanpur, Raisen, Sidhi and Balaghat Districts and along rivers in some other districts. Form very potential ground water reservoirs with a thick sequence of sandy
		concretions (Kankars)		aquifers down to great depths (>300 m.bgl). The aquifers are unconfined, semi-confined (leaky confined) or confined.

Creatace	Decca	Basalts	1,43,300	Occupy the Malwa Plateau	
ou s to	n		Sq.Km.	covering Nimuch, Mandsaur,	
Eocene	Trap			Indore, Dhar, Ratlam,	
				Shajapur, Sagar, Rajgarh,	
				Sehore, Badwani, Khargone,	
				Khandwa and Burhanpur	
				Districts and parts of Jhabua,	
				Raisen, Guna, Ashoknagar,	
				Vidisha, Bhopal, Sehore, Betul,	
				Jabalpur, Katni, Hoshangabad,	
				Harda, Narsimhapur,	
				Chhindwara, Seoni, Dindori,	
				Mandla, Shahdol and Anuppur	
				Districts.	

	Bagh	Sandston	8,500	Infra Trappean formation of
	and	es cherty	Sq.Km.	Bagh &Lameta occurs in
	Lameta	limeston		Dhar, Jhabua& Jabalpur
	Groups	es		Districts and small patches in
				Sagar, Hoshangabad and
				Narsimhapur Districts.
				Weathered, Fractured and
				vesicular basaltic layers of
				Traps, inter- trappeans and
				infratrappeans form
				productive unconfined hallow
				aquifers and leaky
				confined/confined deeper
				aquifers and yield upto 5 lips.
				(Infra trappeans are less
				productive). Storativity 1 to
				4% Hydraulic
				conductivity 5–15 m/day.
Palaezoic	Gondwa	Boulder	28,000	Occur in Betul, Chhindwara,
to	n a	beds	Sq.Km.	Narsimhapur, Hoshangabad,
Cretaceo	super	Sand-		Jabalpur, Katni, Sidhi,
us	Group.	stones,		Umaria, Shahdol and Anuppur
	Jabalpu	shales,		Districts. Possess moderate
	, r,	clay		primary porosity.
	Mahad	S,		Groundwater occurs under
	ev a,	limestone,		phreatic as well as semi-
	-	coal seams		confined to confined
				(Vagy 2021 22)

t,		conditions	. Free	flowing
Raniga	a	conditions	with	free flow
nj,		discharge	of 150 t	to 200 lpm
Barak	a	have been	recorded	d in North-
rs and	!	eastern	part of	. Jabalpur
Talchii	r	District.		
Group	S			

Precamb	Vindhy	Shales,Sand	58,700	Occur in Gwalior, Morena,
ria n	an	sto nes,	Sq.Km.	Sheopur, Shivpuri, Guna,
(Proteoz	Super	limestones		Ashoknagar, Rewa, Panna,
oic	Group.			Satna, Jabalpur, Katni,
)	Bhander			Damoh, Sagar, Chhatarpur,
	, Rewa,			Raisen, Bhopal, Vidisha,
	Kaimur			Nimuch, Mandsaur and Dewas
	and			Districts. Generally, devoid of
	Semri			any primary porosity.
	Groups.			Weathering and denudation,
	Mahako			structurally weak planes and
	s hal			fractures impart porosity and
	(Cudda			permeability in the rock mass.
	ph			Solution cavities (Cavernous) in
)			carbonate rocks, at places give
	Supe			rise to large groundwater
	r Group			storage/circulation. Sp. Yield
				value of unconfined aquifer is
	Bijaw			generally low (0.2% to 3%).
	ar ,			Hydraulic conductivity varies
	and			widely depending upon
	Gwali			fracture incidence (2 to 10
	or			m/day.)
	Group			
	S.			

Archaeans	Older	Granitoid	31,500	Occur in Seoni, Balaghat,
	Metamo	gneisses,	Sq.Km.	Shahdol, Anuppur, Mandla,
	r	schists,		Dindori, Sidhi, Rewa, Panna,
	phicsSau	gneisses,		Datia, Tikamgarh, Gwalior,
	s ar,	quartzites		Chhatarpur, Jabalpur, Katni,
	Sakoli	and		Jhabua and Shivpuri Districts,
	and	granites		as also parts of Chhindwara,
	Chilpi			Harda, Hoshangabad,
	Groups.			Narsimhapur and Dewas
	&			Districts. Do not posses
	Bundel			primary porosity.
	kh and			Weatherin
	Granite			g, fracturing, jointing impart
	S.			secondary porosity.
				Groundwater mostly occurs
				under phreatic conditions and
				at some places also under
				confined/semi confined
				conditions.

1.4. MONSOON AND POST MONSOON RAINFALL DISTRIBUTION 2021

Rainfall is the sole source of natural recharge to ground water and rainfall pattern has an important impact on groundwater levels in the phreatic aquifer. Rainfall in the State of Madhya Pradesh occurs during south-west monsoon season (mid June to September) and

sometimes during winter season (December to February). Most of the rainfall (more than 90%) occurs during the south-west monsoon season, August being the rainiest month.

In order to understand the impact of rainfall on ground water level, monsoon rainfall (1st june 2021 to 30th September 2021) and post monsoon rainfall (1st Oct. 2021 to 31st Dec. 2021) data of the state collected from IMD, Bhopal Regional Centre and presented in Table 1-3 & Table 1-4. The isohyetal map of monsoon rainfall 2021, prepared on the basis of 371 rain guage stations data distributed in the state and is given in Figure 1-3a. Rainfall within ± 19% of the normal rainfall is considered as normal rainfall. Rainfall above 19% of the normal monsoon rainfall is considered excess rainfall. Rainfall less than -19% and less than -59% of the normal rainfall is considered deficit and if the rainfall is even lesser than -59% of the normal monsoon rainfall, it is considered scanty rainfall. The rainfall departure map of monsoon rainfall 2021 with respect to normal, prepared on the basis of 371 rain guage stations data distributed in the state and is given in Figure 1-3b.

The normal rainfall of the Madhya Pradesh State is 977.5 mm. The normal monsoon rainfall and normal post monsoon rainfall of the Madhya Pradesh State is 940.6 mm and 53.7 mm respectively. During monsoon season state has received 945.2 mm, 0% departure from monsoon normal and in the post monsoon season 72.1 mm, 34% above post monsoon normal. However as compared to last year monsoon rainfall this year state has received 4% less rainfall. Guna District has received the highest monsoon rainfall of 1633.2 mm and Khargone District has received the least rainfall of 590.7 mm.

East Madhya Pradesh (E MP) and West Madhya Pradesh (W MP) have received normal monsoon rainfall with a variation in percentage departure at -15% and 15% respectively. However, during post monsoon season East subdivisions have received deficit rainfall of -22%departuresand excess rainfall of 83% above normal respectively. Most of the districts in east Madhya Pradesh are showing normal to deficit monsoon rainfall as compared to west side. Sheopur has received highest post monsoon rainfall, 501% above normal and Sidhi is lowest, 74% below normal. Out of total districts there are many districtswhich falls in west subdivision namely Alirajpur, Agar Malwa, Barwani, Bhind, Burhanpur, Datia, Dewas, Dhar, Guna, Gwalior, Harda, Indore, Shivpur, Shivpuri and etc has received large excess post monsoon rainfall.

Rainfall report of monsoon 2021 was prepared on the basis of 371 station rainfall data provided by IMD regional centre Bhopal. It will improve the relationship between rainfall

and ground water level. During the monsoon season 2021, some rain-gauge station in Sheopur, Guna and Singrauli has received the rainfall of more than 1500mm with highest intensity of more than 40mm/day as compared to other districts. Most of the districts in the state received rainfall in the range of 500-1000mm during the monsoon season. Rainfall in the range of 1000-1500mm recorded by rainguage stations located inSheopur, Shivpuri, Guna, Ashoknagar, Vidisha, Rajgarh, Shajapur, Agar-Malwa, Ratlam, NW Ujjain, Junction of Sehore and Raisen, N & S Bhopal, Junction of Sagar and Raisen, Hoshangabad, Betul and Chhindwara Junction, W Betul, Singrauli and extreme SE district of MP.

Percentage monsoon rainfall departure of the year 2021 compared to normal rainfall of 371 rainguage stations are interpolated and given in figure. Most of the rainguage stations of the state show normal rainfall. Deficit rainfall occurred over Damoh, Katni, Jabalpur, Panna, most of the blocks of Chhattarpur District, some blocks of Narsinghpur, Seoni, Sagar, Satna, Balaghat, Hoshangabad, Chhindwara, Harda, Khargone, Barwani and Dhar District. One rain gauge station of Jabalpur recorded large deficit rainfall. North and NW districts namely Shivpuri, Ashoknagar, some gauge stations of Rajgarh, Ratlam, Mandsaur, Neemuch, Bhind, Gwalior, Morena, Shivpuri, Shajapur, Vidisha, Alirajpur, Betul, Khandwa, Barwani and Singrauli has recorded excess rainfall. Large excess rainfall noticed over Sheopur, Guna and few blocks of Shivpuri, Alirajpur and Singrauli District.

During the Year 2021 monsoon period station wise rainfall intensity was calculated and is given in Figure 1-4a. As compared to other district highest rainfall during monsoon season observed over Guna and Sheopur District with highest intensity. Low intensity rainfall of 10 to 20mm/day during the monsoon 2021 observed in Jhabua, Dhar, Barwani, Khargone, Khandwa, Burhanpur, Harda, Sehore, Bhopal, Sagar, Damoh, Narsinghpur, Seoni, Jabalpur, Katni, Umaria, Balaghat part, Mandla part, Satna part, Panna part, Morena part, Gwalior part, and it also includes Bhopal, Sehore, Morena part, Datia part and Gwalior part. Rainfall intensity between 20 to 30 mm/day noticed over most of the district of the states. Rainfall intensity between 30-40mm/day observed in few districts such as Sheopur, Shivpuri, Guna, Patch in Rajgarh, patch in Panna, and extreme east part of Singrauli District. Maximum intensity of ~48mm/day rainfall observed in Karhal block of Sheopur District and Bamori Block of Guna District.

During the Year 2021 monsoon period station wise rainy days was calculated and is given in Figure 1-4b. It is found that only few districts i.e., Morena, Bhind part, Damoh part, Panna part and Chattarpur part observed lowest no of rainy days (25-35). Highest rainy days of 71

days observed in Amarkantak Block (origin of Narmada River) of Anuppur District and lowest 26 rainy days in Rajpur gauge station of Barwani District. 35-45 numbers of rainy days are noticed mainly in north and northeast portion of the state and in many other districts. In the extreme east and south east part of the state, central part and few district of west Madhya Pradesh falls in the range of 45-55 number of rainy days.

District wise percent monsoon rainfall difference of the year 2021 and year 2020 is calculated. It is found that as compared to 2020, in the year 2021 lowest rainfall (-34%) occurred in the Sehore District and highest (132%) in Sheopur District. Northern part of the state and few districts of eastern part of the state namely Sidhi, Singrauli, Rewa, Satna and Shahdol received more than 0.01 to > 90% of rainfall in the year 2021 as compared to year 2020. Neemuch, Shivpuri, Bhind, Guna and Sheopur received more than 50% monsoon rainfall in 2021 as compared to 2020. Thirty districts of the state received 0 to 34% less rainfall in the year 2021 as compared to previous year.

Table 1-3 District Wise Monsoon Rainfall Distributin in Madhya Pradesh State in the Year 2021

S. No.	Name of District	Actual rainfall Monsoon (1st June- 30th Sept)	Normal rainfall Monsoon (1stJune- 30th Sept)	Departure (%) of Monsoon Rainfall wrt Normal of the Year 2021	Category
1	AGAR-MALWA	1224.2	812.1	51	EXCESS
2	ALIRAJPUR	843.2	784.3	8	NORMAL
3	ANUPPUR	1146.3	1099.6	4	NORMAL
4	ASHOKNAGAR	1182.3	852.1	39	EXCESS
5	BALAGHAT	985.5	1323	-26	DEFICIT
6	BARWANI	644.1	658.7	-2	NORMAL
7	BETUL	1014.4	957.8	6	NORMAL
8	BHIND	834.1	657.7	27	EXCESS
9	BHOPAL	979.8	962.4	2	NORMAL
10	BURHANPUR	777.4	741.4	5	NORMAL
11	CHHATARPUR	719.4	947.5	-24	DEFICIT

12	CHINDWARA	938.7	1001.3	-6	NORMAL
13	DAMOH	644.8	1046.3	-38	DEFICIT
14	DATIA	707.2	755.8	-6	NORMAL
15	DEWAS	961.4	904.4	6	NORMAL
16	DHAR	650.5	835.9	-22	DEFICIT
17	DINDORI	1088.4	1182	-8	NORMAL
18	GUNA	1633.2	888.1	84	LARGE EXCESS
19	GWALIOR	718.2	747.9	-4	NORMAL
20	HARDA	875.9	1042.1	-16	NORMAL
21	HOSHANGABAD	1025.9	1308.7	-22	DEFICIT
22	INDORE	836.6	827	1	NORMAL
23	JABALPUR	718.9	1111.2	-35	DEFICIT
24	JHABUA	829	774.7	7	NORMAL
25	KATNI	708.2	1011.9	-30	DEFICIT
26	KHANDWA	837.5	790.9	6	NORMAL
27	KHARGONE	590.7	714.4	-17	NORMAL
28	MANDLA	1015.7	1210.7	-16	NORMAL
29	MANDSAUR	914.6	786.5	16	NORMAL
30	MORENA	658.2	651.5	1	NORMAL
31	NARSINGHPUR	882.4	1046.6	-16	NORMAL
32	NEEMUCH	1056.3	742.3	42	EXCESS
33	PANNA	730.5	1087.4	-33	DEFICIT
34	RAISEN	1123.6	1074.9	5	NORMAL
35	RAJGARH	1195.8	833.2	44	EXCESS
36	RATLAM	1035.1	867.5	19	NORMAL
37	REWA	1008.7	950.7	6	NORMAL

38	SAGAR	896.1	1080.2	-17	NORMAL
39	SATNA	799.3	949.2	-16	NORMAL
40	SEHORE	944.7	1043.3	-9	NORMAL
41	SEONI	784.2	1027	-24	DEFICIT
42	SHAHDOL	971.7	989.5	-2	NORMAL
43	SHAJAPUR	1065.1	886.7	20	EXCESS
44	SHEOPUR	1343.8	670.7	100	LARGE EXCESS
45	SHIVPURI	1262.5	779.8	62	LARGE EXCESS
46	SIDHI	992.2	987.5	0	NORMAL
47	SINGRAULI	1257.9	837	50	EXCESS
48	TIKAMGARH	878.9	889.2	-1	NORMAL
49	UJJAIN	999.6	844.3	18	NORMAL
50	UMARIA	908.9	1075	-15	NORMAL
51	VIDISHA	1181.8	982.2	20	EXCESS

Table 1-4 Post Monsoon Rainfall in Madhya Pradesh State in the Year 2021

S. No.	Name of District	Actual rainfall (01.10.2021 to 31.12.2021)	Normal rainfall Post- Monsoon (1stOct- 31st Dec)	Departure (%) of Post Monsoon Rainfall wrt Normal of the Year 2021	Category
1	AGAR-MALWA	73.9	44.5	66	LARGE EXCESS
2	ALIRAJPUR	88	36.2	143	LARGE EXCESS
3	ANUPPUR	48.5	72.7	-33	DEFICIT
4	ASHOKNAGAR	44	39.8	11	NORMAL
5	BALAGHAT	58.9	80.4	-27	DEFICIT
6	BARWANI	87	48.3	80	LARGE EXCESS

7	BETUL	100.7	70.4	43	EXCESS
8	BHIND	102.1	43.9	133	LARGE EXCESS
9	BHOPAL	75.1	57.5	31	EXCESS
10	BURHANPUR	144.2	72.2	100	LARGE EXCESS
11	CHHATARPUR	48	50.4	-5	NORMAL
12	CHINDWARA	79.1	77	3	NORMAL
13	DAMOH	16.7	45.3	-63	LARGE DEFICIT
14	DATIA	136.1	42.5	220	LARGE EXCESS
15	DEWAS	82.2	51.5	60	LARGE EXCESS
16	DHAR	110.9	53.1	109	LARGE EXCESS
17	DINDORI	59	59.5	-1	NORMAL
18	GUNA	105.1	48.8	115	LARGE EXCESS
19	GWALIOR	95.3	47.5	101	LARGE EXCESS
20	HARDA	105	64.5	63	LARGE EXCESS
21	HOSHANGABAD	55.2	62.3	-11	NORMAL
22	INDORE	154.8	56.1	176	LARGE EXCESS
23	JABALPUR	40.9	50.8	-19	NORMAL
24	JHABUA	54.2	47.6	14	NORMAL
25	KATNI	24	34.6	-31	DEFICIT
26	KHANDWA	96.3	54.9	75	LARGE EXCESS
27	KHARGONE	73	49.4	48	EXCESS

28	MANDLA	62	59	5	NORMAL
29	MANDSAUR	86.4	46.5	86	LARGE EXCESS
30	MORENA	40.3	30.4	33	EXCESS
31	NARSINGHPUR	28.2	43.9	-36	DEFICIT
32	NEEMUCH	181.7	35.7	409	LARGE EXCESS
33	NIWARI	124.7	33.7	270	LARGE EXCESS
34	PANNA	20.1	47.1	-57	DEFICIT
35	RAISEN	44.7	55.3	-19	NORMAL
36	RAJGARH	83.8	53.9	55	NORMAL
37	RATLAM	76.9	55.8	38	NORMAL
38	REWA	30.3	50.5	-40	DEFICIT
39	SAGAR	37.2	54.7	-32	DEFICIT
40	SATNA	40.8	47.5	-14	NORMAL
41	SEHORE	101.7	57.9	76	LARGE EXCESS
42	SEONI	61.2	76.7	-20	DEFICIT
43	SHAHDOL	44	45.5	-3	NORMAL
44	SHAJAPUR	79.1	51.6	53	EXCESS
45	SHEOPUR	200.8	33.4	501	LARGE EXCESS
46	SHIVPURI	104.7	43.6	140	LARGE EXCESS
47	SIDHI	12.8	49.8	-74	LARGE DEFICIT
48	SINGRAULI	28	56.8	-51	DEFICIT
49	TIKAMGARH	41.5	43.5	-5	NORMAL
50	UJJAIN	98	52	89	LARGE

					EXCESS
51	UMARIA	47.9	70.4	-32	DEFICIT
52	VIDISHA	66.5	49.4	35	EXCESS

Source: www.imd.gov.in and IMD BHOPAL REGIONAL CENTRE

Figure 1-3 Monsoon Rainfall Distribution & Departure from Normal in Madhya Pradesh State (Year - 2021)

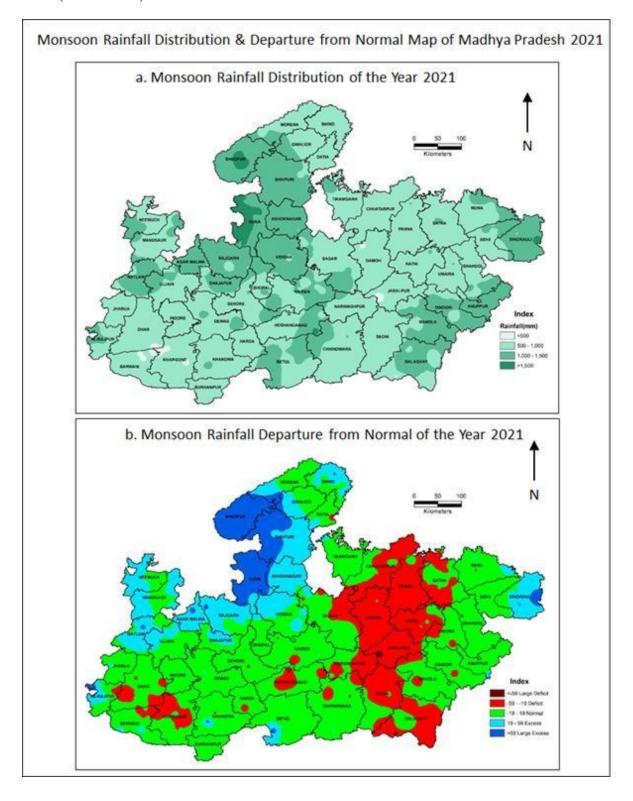
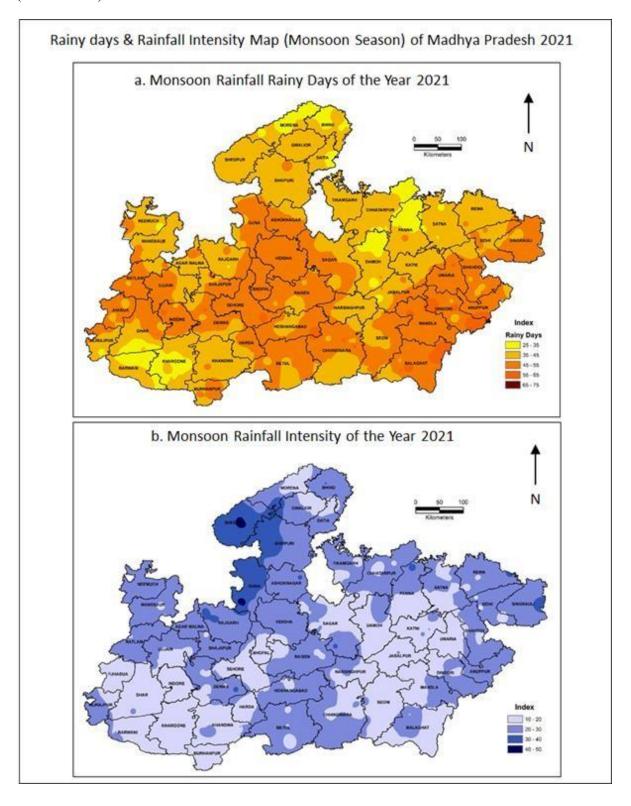


Figure 1-4 Rainfall Intensity & Rainy Days Map (Monsoon Season) of Madhya Pradesh State (Year - 2021)



2 ANALYSIS OF GROUND WATER LEVELS

2.1. DEPTH TO WATER LEVELS

During the water year, the existing monitoring wells were monitored four times, i.e., during May 2021, August 2021, November 2021 and January 2022. With the field data, maps were prepared for visual interpretation of the behaviours of the ground water levels. Depth to ground water levels were demarcated into various zones in the ranges of less than 2 m, 2-5 m, 5-10 m, 10-20 m, 20-40 m and more than 40 m. The description of the depth to water level during different monitoring seasons is as follows:

DEPTH TO WATER LEVEL MAY 2021

Depth to Water levels ranges from 0.42 in Agar_D monitoring station, Agar Blcok, Agar Malwa District to 46.62 m bgl in Nayagaon_D station, Ghatigaon Block, Gwalior District Madhya Pradesh. Very shallow water levels up to 2 m bgl are very few and observed as small patches in part of Chhindwara, Seoni, Damoh, Balaghat and Dindori District of the state. Only 3.58% of wells in Madhya Pradesh State fall in this category. About 18.46% of wells spreading all over Madhya Pradesh State has recorded a water level in depth range of 2-5 m bgl occurring mainly in south-east and in sporadic patches in entire state. Depth to water levels ranging 5-10 m bglis spread in most parts of the State. About 46.34% of wells fall under this category. Deeper ground water levels ranging 10-20 m bgl are seen mostly in northern western, central and north parts of the state and in isolated patches in the eastern and south eastern parts of the state. About 28.37% of wells in the state fall in this category. Ground water levels of 20-40 m bgl are found in about 3.09% of the wells and occur mainly in Bind, Morena, Gwalior, Sheopur, Ratlam, Ujjain, Dhar, Dewas and Mandsaur District and it is found in patches. Depth to water level more than 40 m bgl is found in 0.16% of wells.

DEPTH TO WATER LEVEL AUGUST 2021

Depth to Water levels ranges from 0.02 m bgl in Banda Block, Sagar District to 24.65 m bgl in Bhind Block in Bhind District in Madhya Pradesh state. During this year the state has received -7% less rainfall from normal till the 31st August 2021. Shallow water levels up to 2 m bgl are seen in Panna (parts), Satna (parts), Dindori, Seoni, Balaghat, Damoh, Shahdol, Chhindawara, Betul, Vidisha, Bhopal, Barwani and in pockets in many districts. About 30.97% of monitoring wells recorded water level less than 2 m bgl category. About 39.48% of monitoring wells spreading all over Madhya Pradesh state has recorded a water level in the depth range of 2-5 m bgl. Depth to water levels ranging 2-5 m bgl is noticed prominently in

all parts of the state and in pockets in many districts of the state. About 22.14% of wells measured water level between 5-10 m bgl. Deeper ground water levels ranging 10-20 m bgl are seen in northern part and in isolated patches in Dhar, Dewas, Khargone, Jabalpur, Panna, Hoshangabad and Rewa districts. About 6.38% of wells in the state fall in this category. Ground water levels of 20-40 m bgl are found in about 0.87% of the wells and are seen in Bhind, Morena and Gwalior districts.

DEPTH TO WATER LEVEL NOVEMBER 2021

Depth to Water levels ranges from 0.08 m bglin Shujalpur Block, Shajapur District to 37.76 m bgl in Ghatigaon Block, Gwalior District in Madhya Pradesh state. During this year the state has received 4% less rainfall compared to last year monsoon rainfall. Very shallow water levels up to 2 m bgl are seen in Sehore, Chhindwara, Seoni, Balaghat, Mandla, Betul and Vidisha and in pockets in many districts. About 12.95% of monitoring wells recorded water level less than 2 m bgl category. About 45.41% of monitoring wells spreading all over Madhya Pradesh state has recorded a water level in the depth range of 2-5 m bgl. Depth to water levels ranging 5-10 m bgl is noticed prominently in all parts of the state and in pockets in many districts of the state. About 32.54% of wells fall in this category. Deeper ground water levels ranging 10-20 m bgl are seen in northern part and in isolated patches in Burhanpur, Hoshangabad, Singrauli, Jabalpur, Morena, Bhind and Gwalior districts and in patches in many districts of the state. About 8.10% of wells in the state fall in this category. Ground water levels of more than 20 m are found in about 1.00% of the wells and are seen in Bhind, Morena and Gwalior Districts.

DEPTH TO WATER LEVEL JANUARY 2022

Depth to Water levels ranges from ground level to 0.10 m bgl to 32.60 m bgl in Madhya Pradesh state. Very shallow water levels up to 2 m bgl are seen in Seoni, Balaghat, Dindori, Mandla, Chhindwara and Neemuch districts. About 7.84% of monitoring wells recorded water level less than 2 m bgl category. About 37.20% of monitoring wells spreading all over Madhya Pradesh state has recorded a water level in the depth range of 2-5 m bgl. Depth to water levels ranging 5-10 m bgl is noticed prominently in all parts of the state and in pockets in many districts of the state. About 40.81% of wells fall in this category. Deeper ground water levels ranging 10-20 m bgl are seen in northern part and in isolated patches in Burhanpur, Khargone, Dewas, Chhatarpur, Jabalpur districts and in patches in many districts of the state. About 13.07% of wells in the state fall in this category. Ground water levels of

more than 20 m are found in about 1.07% of the wells and are seen at the tri-junction of Bhind, Morena and Gwalior Districts.

Depth to water level at a glance is shown in Figure 2-1. Depths to water level maps of different period have been depicted in Figure 2-2 to Figure 2-5. The district wise depth to water level and frequency distribution of wells in different ranges is given in Annexures (I to IV).

Figure 2-1 Depth to Water Level at a Glance

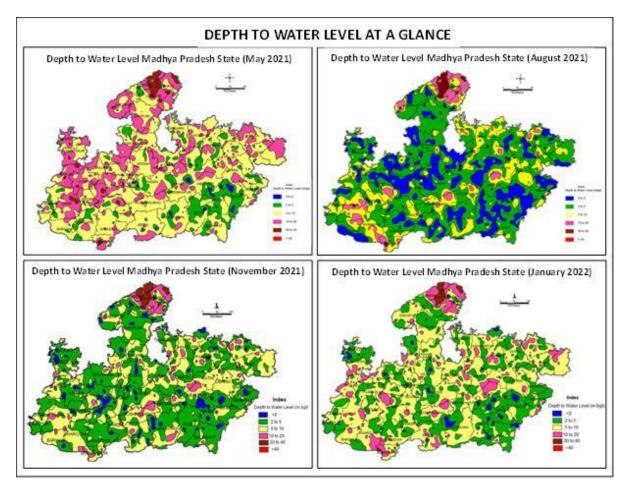


Figure 2-2 Depth to Water Level (May 2021)

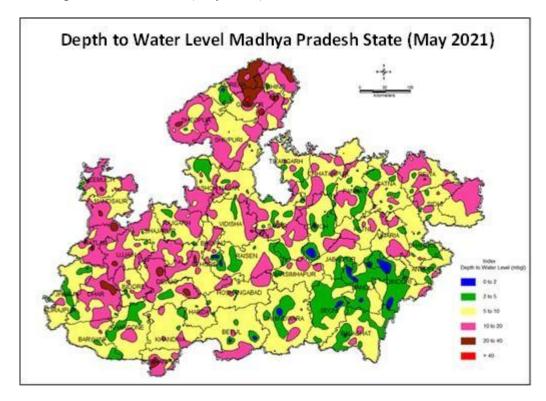


Figure 2-3 Depth to Water Level (August 2021)

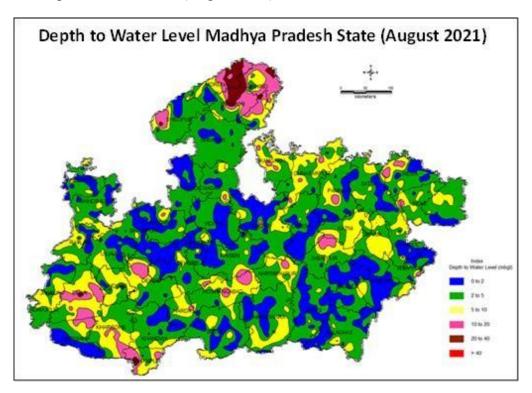


Figure 2-4 Depth to Water Level (November 2021)

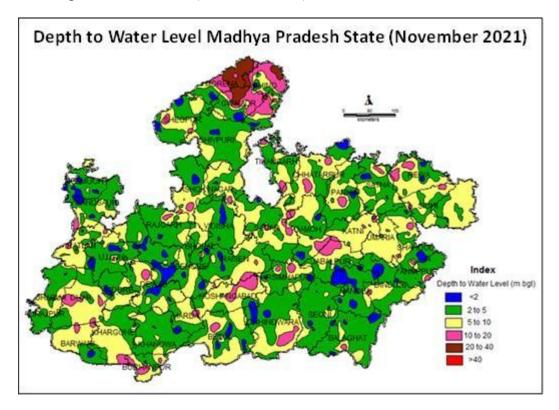
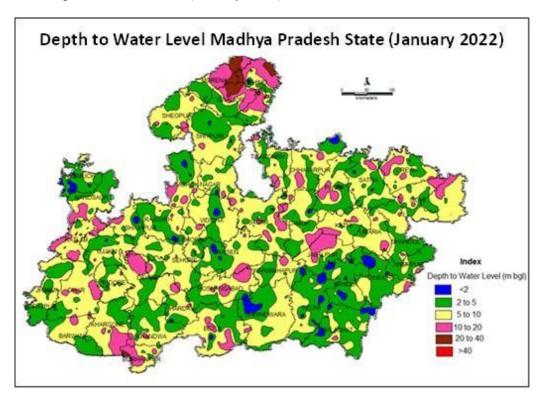


Figure 2-5 Depth to Water Level (January 2022)



2.2. WATER LEVEL FLUCTUATIONS

Water level fluctuations were analysed and maps were prepared after every water level measurement comparing the current water levels with that of the same season of the previous year, preceding season, pre-monsoon season and the decadal seasonal mean. These fluctuations were carefully examined to decipher the ground water situation with respect to time.

2.2.1. ANNUAL WATER LEVEL FLUCTUATIONS

WATER LEVEL FLUCTUATION MAY 2020 TO MAY 2021

In Madhya Pradesh State, 39.50% of the wells show a rise and the rest 60.50% wells show a decline in water levels. About 25.31% of the wells show a rise in water level up to 2 m, 7.67% of the wells show a rise in water level between 2 to 4 m and 6.52% of the wells shows rise in water level more than 4 m. About 39.88% of the wells show a decline in water level up to 2 m. 11.79% of the wells show a decline in water level between 2 to 4 m and 8.82% of the wells shows decline more than 4 m.

The ground water levels of monitoring wells during May 2021 were compared with those of May 2020 to decipher the changes that took place in the ground water regime. As a result of deficit rainfall in the monsoon season in 2020, In Madhya Pradesh, 39.50% of the wells show a rise and the rest 60.50% wells show a decline in water levels. About 25.31% of the wells show a rise in water level up to 2 m spreading in sporadic patches in many parts of the state. About 7.67% of the wells show a rise in water level between 2 to 4 m and, and 6.52% of the wells shows rise more than 4 m. The rise in water level in the range of 2-4 m and more than 4 m are found in Jabalpur, Dindori, Indore, Chhindwara, Hoshangabad, Sheopur and Shivpuri. At the tri-junction of Bhind, Morena and Gwalior District water level rises more than 4m.

About 39.88% of the wells show a decline in water level up to 2 m and covering central and northern district of the state. About 11.79% of the wells show a decline in water level between 2 to 4 m and occur in sporadic patches of the state. About 8.82% of the wells shows decline more than 4 m. Water level decline more than 4 m is mainly seen in Rewa, Satna, Panna, Chhattarpur, Umaria, Bhind, Shajapur, Ujjain, Neemuch, Dhar and Barwani District and seen as small pockets in many parts of the State. Decline in water level in the above-mentioned district is well corroborated with the reduced rainfall in the same.

WATER LEVEL FLUCTUATION AUGUST 2020 TO AUGUST 2021

About 38.53% of wells show rise and 61.47% decline in water levels in August 2021 compared to those in August 2020 due to less rainfall as compared to last year. About 28.58% of wells in Madhya Pradesh state, shows rise in water levels up to 2 m and seen mainly in Northern most part of state, AshokNagar, Vidisha, Bhopal, Neemuch, Mandsaur, Ratlam, Sidhi, Umaria, Shahdol, Dindori, Chhindwara and Barwani districts. Rise of 2-4 m has occurred in 6.21% of wells mainly in Sheopur, Singrauli, Mandsaur, Neemuch and Barwani districts. About 3.73% of wells falls in Morena, Sheopur, Mandsaur, Ashoknagar districts show rise in water levels more than 4 m. In the Sheopur district rainfall departure from normal to actual is 105% which is highest in Madhya Pradesh however only 50% of wells are showing rise in water level. 80% of the wells in Singrauli District are showing rise in water level as compared to last year which could be due to more rainfall (59% DP from normal in 2021 and 29% DP from normal in 2020).

Ground water levels decline is recorded in about 61.47% of the wells, mostly spread in entire parts of the state except in Neemuch and Mandsaur districts. Decline in water levels up to 2 m are sheen in about 42.09% of wells. Decline in water level between 2-4 m is observed in 12.76% of wells spread in North, Central, and North western parts of the state. Decline in water level more than 4 m is observed by 6.63% monitoring wells spread in Gwalior, Bhind, Morena, Datia, Tikamgarh, Panna, Dhar, Indore, Dewas, Khargone, Hoshangabad and in few districts in pockets. In the Burhanpur District 100% wells are showing fall in water level as compared to last year August and it could be due to less rainfall (-20% departure from normal). The impact of less rainfall (-40%& 2% departure from normal) is also observed on Balaghat and Betul District ground water level where 83% and 89% of wells are showing fall in water level as compared to last year. The impact of less rainfall is clearly visible on the ground water level of Balaghat, Mandla, Seoni, Jabalpur and etc. However, ground water level rise and fall not only depends on rainfall but also on the hydrogeological conditions of the area.

WATER LEVEL FLUCTUATION NOVEMBER 2020 TO NOVEMBER 2021

In the state 57.58% of wells show rise and 42.42% decline in water levels in November 2021. There is slight increase of 4.6% in monsoon rainfall as compared to last year and the state has received 76% more rainfall in the month of October as compared to normal October rainfall. About 38.36% of wells in Madhya Pradesh State shows rise in water levels up to 2 m and seen mainly in Khargone, Seoni, Chhindwara, Balaghat, Barwani, Narsinghpur, Mandla

(part) and Sagar Districts and patches in many districts of the state. Rise of 2-4 m has occurred in 11.60% of wells mainly in Khargone (part), Khandwa, Ratlam, Ujjain, Rajgarh, Ashoknagar, Vidisha, Rewa, Sidhi, Dindori and in many others districts. About 7.62% of wells located mainly in Rajgarh, Mandsaur, Neemuch, Sheopur, Shivpuri and Betul (parts) districts show rise in water levels more than 4 m. In the Sheopur district 100% wells are showing rise in water level as compared to last year it could be due to the highest rainfall recorded in Sheopur (100% departure from normal monsoon rainfall) during monsoon season and in the month of October also Shivpuri has recorded 671% rainfall departure from normal October rainfall. In the Agar Malwa District also 100% wells are showing water level rise in post monsoon 2021 as compared to 2020. It could be also due to the heavy rainfall during monsoon where monsoon rainfall departure is 51% from normal monsoon rainfall and 197% departure in October month from normal October rainfall.

Ground water levels decline is recorded in about 42.42% of the wells, mostly spread in entire parts of the state except in Mandsaur, Neemuch, Sheopur and Shivpuri districts. Decline in water levels up to 2 m are sheen in about 32.68% of wells. Decline in water level between 2-4 m is observed in 5.52% of wells spread in south eastern parts and western parts of the state. Decline in water level more than 4 m is observed by 4.22% monitoring wells spread in Khargone, Hoshangabad, Betul, Chhindwara, Jabalpur, Chhattarpur (part) Districts and in many districts in pockets. The impact of less rainfall is visible on ground water level recharge in most of the district. As a result of less rainfall about 82% wells in Balaghat and 84% in Chhindwara District shows decline in water level as compared to last year.

WATER LEVEL FLUCTUATION JANUARY 2021 TO JANUARY 2022

Actual monsoon rainfall of the state in the Year 2021 was about 4.8% less than the Year 2020. 64.8% of wells show rise and 35.13% decline in water levels in January 2022 compared to January 2021. About 42.09% of wells in Madhya Pradesh state, shows rise in water levels up to 2 m and seen mainly in most of the districts of the state. Rise of 2-4 m has occurred in 13.77% of wells mainly in North West part of the state i.e. Mandsaur, Neemuch, Ashok nagar, Rajgarh, Shivpur and Shivpuri districts. About 9.02% of wells distributed in Mandsaur, Neemuch, Sheopur and Shivpuri districts show rise in water levels more than 4 m. As a consequence of normal to large excess monsoon rainfall and post monsoon rainfall in Neemuch, Sheopur and Shivpuri District all the wells are showing rise in the water level of more than 4m this year as compared to last year.

Ground water levels decline is recorded in about 35.13% of the wells, mostly spread in entire parts of the state except in Sheopur, Shivpuri and Neemuch districts. Decline in water levels up to 2 m are sheen in about 27.45% of wells. Decline in water level between 2-4 m is observed in 5.46% of wells spread in Khargone, Khandwa, Dewas, Chhindwara, Hoshangabad, Damoh, Jabalpur and in small patches in many other districts. Decline in water level more than 4 m is observed by 2.22% monitoring wells spread mainly in Khandwa, Khargone and Chhindwara districts in pockets. In the state highest number of wells (70%) in Panna District are showing decline in water level due to less monsoon rainfall (-33% dep. from normal) and post monsoon rainfall (-57% dep. from normal).

Annual water level fluctuations at a glance are shown in Figure 2-6. The seasonal water level fluctuation maps of different period have been depicted in Figure 2-7 to Figure 2-10. The district wise annual water level fluctuation and frequency distribution of wells in different ranges is given in Annexures (V to VIII).

Figure 2-6 Annual Water Level Fluctuation at a Glance

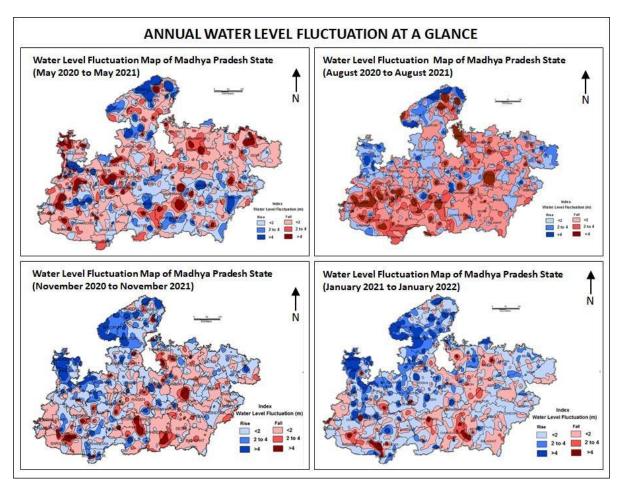


Figure 2-7 Annual Water Level Fluctuation (May 2020 to May 2021)

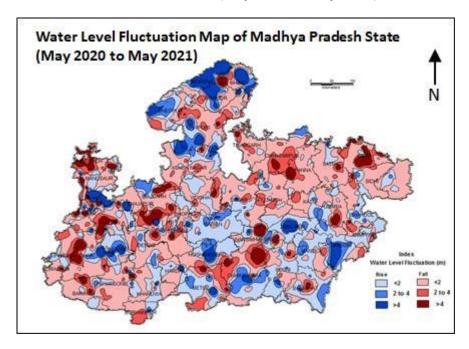


Figure 2-8 Annual Water Level Fluctuation (August 2020 to August 2021)

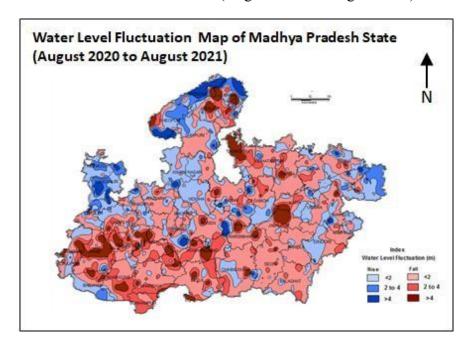


Figure 2-9 Annual Water Level Fluctuation (November 2020 to November 2021)

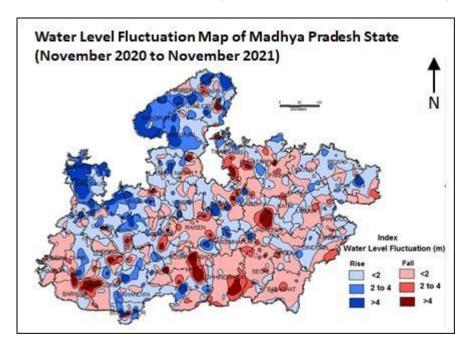
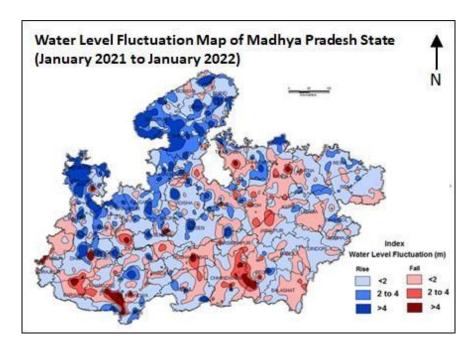


Figure 2-10 Annual Water Level Fluctuation (January 2021 to January 2022)



2.2.2. SEASONAL WATER LEVEL FLUCTUATIONS

WATER LEVEL FLUCTUATION MAY 2021 TO AUGUST 2021

Water levels have shown a general rise in 94.65% of the wells. Such a rise is a normal phenomenon in the hydrological cycle since the monsoon rainfall forms the sole source of natural recharge to ground water regime in the state. Rise in the order of 0 to 2 m is seen in 21.16% of wells and are seen in Khargone, Dhar, Bhind, Morena, Shivpuri, Narsinghpur, Hoshangabad and in patches in some of the districts of the state. About 26.76% of the wells have shown a rise of 2-4 m and are seen in most of the parts of the state except the tri junction of Bhind, Morena and Gwalior. Significant rise of >4 m is found in 46.73% of wells, in entire parts of the state except the northern parts of the state.

About 3.99% of the wells in Madhya Pradesh state show a marginal decline in water level up to 2 m and 1.36% wells more than 2 m. Decline is seen in tri junction of Bhind, Morena and Gwalior, Barwani (part), Khargone, Dhar (part), Hoshangabad (part). The Marginal decline in water level is mainly due to less rainfall as observed mainly in northern parts of the state.

WATER LEVEL FLUCTUATION MAY 2021 TO NOVEMBER 2021

Water levels have shown a general rise in 87.43% of the wells. Such a rise is a normal phenomenon in the hydrological cycle since the monsoon rainfall forms the sole source of natural recharge to ground water regime in the state. Rise in the order of 0 to 2 m is seen in 25.40% of wells and are seen in south eastern district, Barwani, Khargone and in patches in some of the districts of the state. About 25.57% of the wells have shown a rise of 2-4 m and are seen in almost all parts of the state. Significant rise of >4 m is found in 36.46% of wells, in entire parts of the state except the northern parts of the state.

About 8.86% of the wells in Madhya Pradesh state show a marginal decline in water level up to 2 m and 3.71% wells more than 2 m. The decline in water level is seen in northern part of state, Khargone, Hoshangabad and Dindori Districts. The decline in water level is mainly due to less rainfall and lithological condition of district which restrict water to infiltrate.

WATER LEVEL FLUCTUATION MAY 2021 TO JANUARY 2022

Water levels have shown a general rise in 81.57% of the wells. Rise in water level is well corroborated with the monsoon rainfall (2021) and rainfall continues to post monsoon period over many of the districts. Such a rise is a normal phenomenon in the hydrological cycle since the rainfall forms the sole source of natural recharge to ground water regime in the state. Rise in the order of 0 to 2 m is seen in 33.16% of wells and are seen in most of the

district of the state. About 24.16% of the wells have shown a rise of 2-4 m and seen in west and North West part of the state and in many districts in patches. Significant rise of >4 m is found in 24.24% of wells, in Ratlam, Ujjain, Indore, Dewas, Dhar, Mandsaur, Neemuch, Sheopur, Shivpuri, Gwalior and in patches in many districts of the state.

About 13.97% of the wells in Madhya Pradesh state show a marginal decline in water level up to 2 m and 4.46% wells more than 2 m. The decline in water level is mainly observed in Khandwa, Khargone, Betul, Seoni, Chhindwara, and Jabalpur and in part of many districts of the state. Decline in water level is well correlated with the less rainfall during pre and post monsoon season.

Seasonal water level fluctuations at a glance are shown in Figure 2-11. The seasonal water level fluctuation maps of different period have been depicted in Figure 2-12 to Figure 2-14.

The district wise seasonal water level fluctuation and frequency distribution of wells in different ranges is given in Annexures (IX to XI).

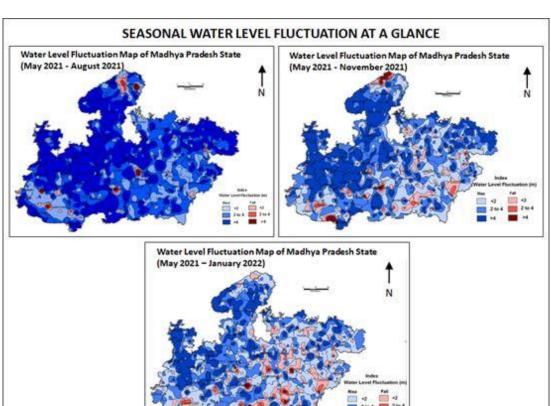


Figure 2-11 Seasonal Water Level Fluctuation at a Glance

Figure 2-12 Seasonal Water Level Fluctuation (May2021 to August 2021)

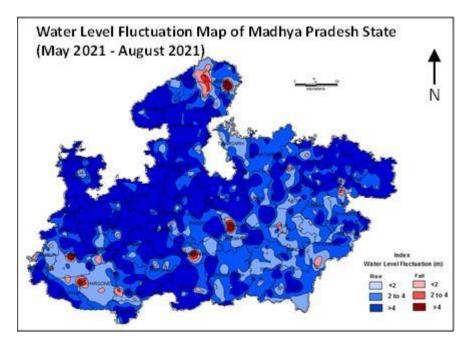
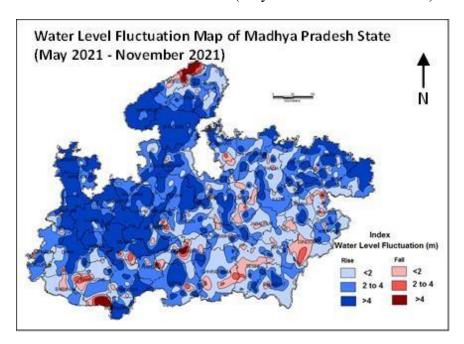


Figure 2-13 Seasonal Water Level Fluctuation (May 2021 to November 2021)



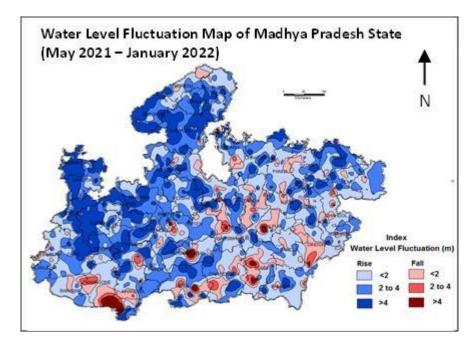


Figure 2-14 Seasonal Water Level Fluctuation (May 2021 to January 2022)

2.2.3. DECADAL WATER LEVEL FLUCTUATIONS

Depth to ground water level of a particular monitoring season is compared with its 10 years of mean data, i.e., decadal mean of water levels, to get an idea about the water level conditions of that particular season with respect to the decadal mean. Such a comparison helps in the assessment of drought situations or otherwise of the abundance of ground water resources in a particular monitoring season.

Decadal water level fluctuations at a glance are shown in Figure 2-15. The decadal water level fluctuation maps of different period have been depicted in Figure 2-16 to Figure 2-19. The district wise decadal water level fluctuation and frequency distribution of wells in different ranges is given in Annexures (XII to XV).

WATER LEVEL FLUCTUATIONS DECADAL MEAN (MAY 2011-2020) TO MAY 2021

The ground water levels of May 2021 were compared with the 10 years May (2011-2020) average ground water levels to decipher the long-term changes in the ground water regime. It is observed that 64.85% of the wells show rise and about 35.15% of wells show decline in water levels in the state. The rise in water level is in the order of 0-2 m in 39.89% of the wells, 2-4 m in 16.80% of the wells and more than 4 m in about 8.16% of the wells. The rise in water level less than 2m is covering most of the part of the state. The rise in water level is more prominent in the Eastern part of the State compared to that of Western part. Water level

rise more than 4m is mainly observed in Morena, Bhind, Sehore, Dhar, Shajapur, Indore, Chhindwara, Balaghat and Khargone Districts.

The decline in water levels in the order of 0-2 m is about 26.35% of the wells, between 2-4 m in 5.79% of the wells and more than 4 m in 3.02% of the wells. Decline in water level less than 2 m is covering most of the district in northern and central part of the state. Decline in water level more than 4m is mainly observed in Gwalior, Bhind, Dhar, Mandsaur, Umaria, Rewa, Datia and Neemuch District of the State. In general, by comparing mean of water level of previous 10 year and current year water level, it is inferred that there is no significant decline in water level but in general there is a rise in water level in most of the part of the state could be due to pre monsoon rainfall in the year 2021 and early monsoon rainfall in most of the districts. Ground water level data was monitored during June first week of Year 2021 so an early monsoon rainfall may have impacted the ground water level.

WATER LEVEL FLUCTUATION DECADAL MEAN (AUGUST 2011-2020) TO AUGUST 2021

There is a rise in the water levels in about 50.31% of wells and fall in 49.69% wells. About 39.83% of wells spreading in manly north western parts of the state and many districts in patches show a rise in water level up to 2 m. About 7.28% of the wells show a rise in the order of 2- 4 m and is found in patches only in Raisen, Shivpuri, Bhind, Morena, Sheopur, Damoh and Burhanpur District. Rise in water level of more than 4 m is found in about 3.21% of the wells and are seen Sagar, Raisen, Bhind, Morena, Sheopur, Burhanpur and in small part in Singrauli District.

Water level decline up to 2 m is recorded in about 38.50% of wells spread in most of the districts of the state. About 7.59% of the wells show a decline in the order of 2-4 m and 3.60% in the order of more than 4m, mostly spread in Bhind, Morena, Gwalior, Tikamgarh, Dhar, Khargone, Jabalpur, Hoshangabad, Panna and in patches in many districts.

WATER LEVEL FLUCTUATION MEAN (NOVEMBER 2011-2020) TO NOVEMBER 2021

However, monsoon rainfall in the year 2021 is about 4% percent less than the year 2020 even though rise in the water levels is observed in about 65.62% of wells and fall in 34.38% wells. The large contribution in average water level rise of state comes from Mandsaur (94.94%), Neemuch (96.97%), Shajapur (100%), Sheopur (100%), Agar Malwa (100%) and Shivpuri (96.67%). This could be due to substantial monsoon rainfall and it is continued till October Month. About 45.54% of wells spreading in manly Khandwa, Mandsaur, Indore, Vidisha,

Ashoknagar, Satna, Rewa and Sidhi and in patches in many other districts show a rise in water level up to 2 m. About 12.62% of the wells show a rise in the order of 2- 4 m and is found in Sheopur, Shivpuri, Gwalior, Neemuch, Mandsaur, Rajgarh and in patches in many districts of North West part of state. Rise in water level of more than 4 m is found in about 7.46% of the wells and are seen in Sheopur, Shivpuri, Bhind, Mandsaur District of state.

Water level decline up to 2 m is recorded in about 26.62% of wells spread in central, eastern and northern parts of the state. About 5.38% of the wells show a decline in the order of 2-4 m and 2.38% in the order of more than 4m, mostly spread in Bhind, Morena, Gwalior, Dewas, Jabalpur, Hoshangabad, Raisen, Jabalpur and in patches in many districts. Decline in water level is well corroborated with less rainfall in the corresponding district.

WATER LEVEL FLUCTUATION MEAN (JANUARY 2012-2021) TO JANUARY 2022

There is a rise in the water levels in about 72.21% of wells and fall in 27.79% wells. About 46.04% of wells spreading in manly western and north western parts of the state and many districts in patches show a rise in water level up to 2 m. About 16.63% of the wells show a rise in the order of 2-4 m and is found in Chhindwara, Indore, Barwani, Ujjain, Ratlam, Mandsaur, Sheopur, Shivpuri, Gwalior and in many districts in patches only. Rise in water level of more than 4 m is found in about 9.55% of the wells and are seen in Chhindwara, Dhar, Indore, Neemuch, Sheopur, Shivpuri, Bhind, Gwalior. Excess rainfall of monsoon and post monsoon season in Sheopur, Shivpuri and Neemuch District has increased the water level of about of less than 4m in most of the wells. In the Agar Malwa District 100% of wells shows rise in water level that could be due to increased rainfall in monsoon and the rainfall continue till post monsoon season.

Water level decline up to 2 m is recorded in about 22.56% of wells spread in central, eastern and northern parts of the state. About 4% of the wells show a decline in the order of 2-4 m and 1.23% in the order of more than 4m, mostly spread in Bhind, Morena, Gwalior, Khargone, Khandwa, Tikamgarh, Damoh, Jabalpur, Hoshangabad, Panna districts and in patches in many districts that could be due to normal to deficit rainfall. 77% of the wells in Hoshangabad District is showing decline in water level as compared to decadal mean which is highest in the state. It could be due to deficit rainfall received during monsoon and post monsoon season.

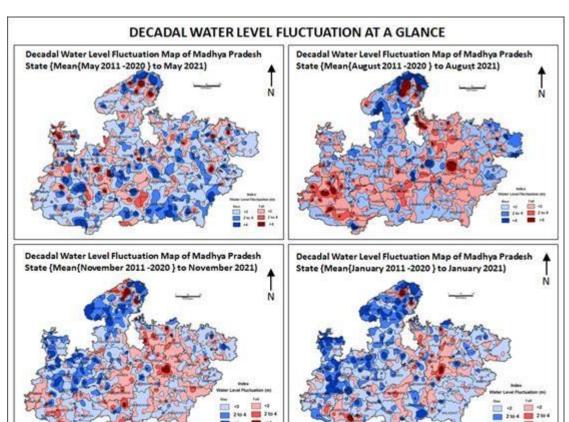
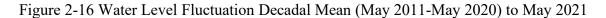


Figure 2-15 Decadal Water Level Fluctuation at a Glance



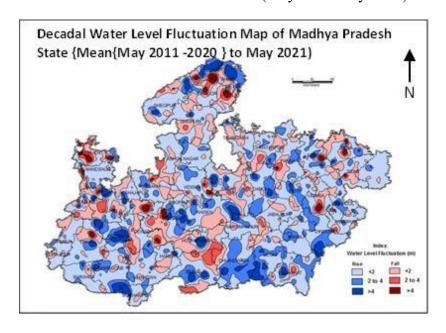


Figure 2-17 Water Level Fluctuation Decadal Mean (August 2011 - August 2020) to August 2021

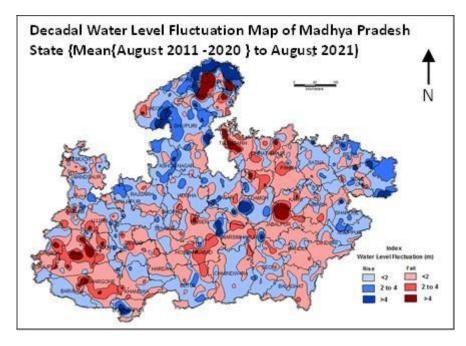


Figure 2-18 Water Level Fluctuation Decadal Mean (November 2011 -November 2020) to November 2021

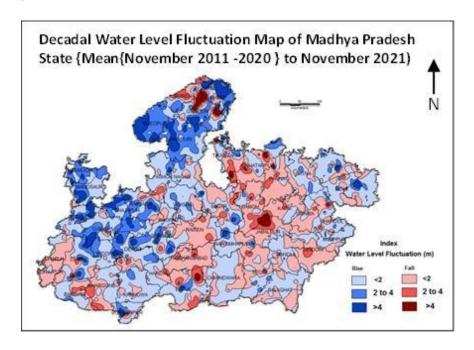
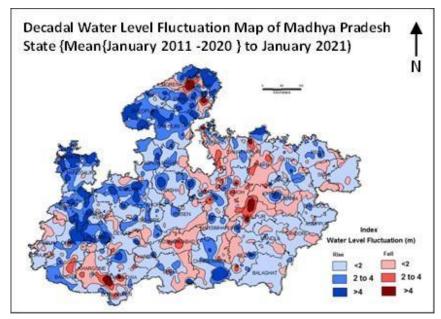


Figure 2-19 Water Level Fluctuation Decadal Mean (January 2012- January 2021) to January 2022



2.3. LONGTERM TREND OF GROUND WATER LEVELS

The trend analysis of depth to ground water levels (time series analysis) using the data from the hydrograph network stations for the past one decade 2012-21 was carried out using the least square method. Based on this analysis, maps are prepared demarcating various zones of rising and declining trends for the decade 2012-21.

GROUND WATER LEVELS TREND PRE MONSOON (May 2012 to May 2021)

Ground water levels trend map of pre-monsoon period (May 2012 to May 2021) in Madhya Pradesh state has been depicted in Figure 2-20. The Map shows a general rising trend and declining trend of less than 0.3 m/year of ground water levels during the past decade in most of the districts of the state. The rising trend more than 0.3 m/year has been observed in a small pocket in Barwani, Khargone, Dhar, Mandsaur, Neemuch, Sheopur, Shivpuri, Narsinghpur, Damoh, Balaghat, Damoh, Betul and etc. Declining trend at a rate less than 0.3 m/year is observed in patches in many parts of the state and declining trend at a rate (>-0.3 m/year) has been observed in the form of small extent patches in the districts mainly Dhar, Indore, Dewas, Ratlam, Shajapur, Guna, Raisen, Damoh, Chhattarpur, Katni, Siddhi, Rewa, Annuppur, Balaghat and Chhindwara districts. The declining trend of pre-monsoon water levels reflects the ground water developmental activities in an area, whereas the rising trend indicates that either the developmental activities have reduced, or that, recharge due to

sources other than the rainfall, such as applied irrigation has increased. Around 48% of monitoring wells are showing declining water levels trend while 52% monitoring wells are showing rising ground water level trend.

GROUND WATER LEVELS TREND POST MONSOON (November 2012 to November 2021)

Ground water levels trend map of post-monsoon period (Nov 2012 to Nov 2021) in Madhya Pradesh state has been depicted in Figure 2-21. Like a pre monsoon ground water levels trend, post-monsoon trend (Nov 2012 to Nov 2021) shows that there is a general rising trend as well as declining trend of less than 0.3 m/year of ground water levels during the past decade in most of the districts of the state. Post monsoon depth to water level rising trend is most prominent over West Madhya Pradesh as compared to East. Rising ground water level trend in the range of 0.3 to 0.6m/yr is mostly observed in the form of patches in North West part of the state and also distributed in the form of small patches in the few districts. Post monsoon depth to water level declining trend is most prominent over East Madhya Pradesh as compared to West. Depth to water level declining trend less than 0.3m/yr is more prominent towards east and north part of the state and Alirajpur, Barwani and Jhabua. Depth to water level declining trend in the range of 0.3 to 0.6 m/yr and more than this are found in small patches in north part of the state and in the form of patches in few districts. The declining trend in post-monsoon water levels suggests that a part of the aquifer is being dewatered every year, due either to deficient rainfall or to developmental activities. The rising postmonsoon trend, on the other hand, shows that additional water is being stored in the aquifer, due either to increased rainfall or to seepage through applied irrigation.

Figure 2-20 Ground Water Level Trends Pre Monsoon (May 2012 to May 2021)

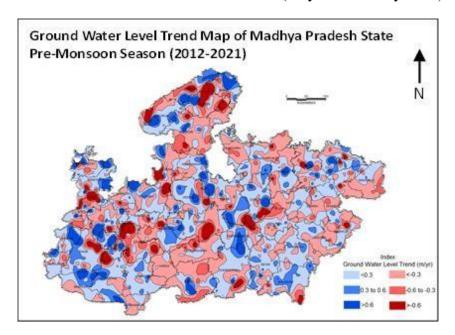
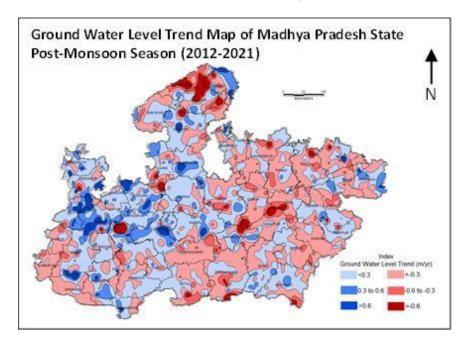


Figure 2-21 Ground Water Level Trends Post Monsoon (November 2012 to November 2021)



Ground Water Level Behaviour in Deeper Aquifer:

Pre-Monsoon Water Levels in Deeper Aquifers in Madhya Pradesh 2021

As on May 2021, 120 number of wells constructed in Madhya Pradesh state classified as semi confined and confined aquifers ranging from a depth of 33m bgl to 120m bgl. These include the basaltic aquifers of Malwa plateau covering the central as well as Western parts of the state. The eastern part of the state is covered mostly by older formations including Gondwana and Vindhyan group of rocks which area mainly comprising shale and sandstone. Towards the Northern part of the state, the aquifers include shale and sandstone of Vindhyan group of rocks, Granite and mafic dykes of Bundelkhand and Gwalior formations. As on May 2021, the pre monsoon water level ranges in these aquifers 3.7 mbgl to 66mbgl. The minimum water level is observed in Sidhi district and the maximum water level is observed in Vidisha district. Water levels ranging from 3-20mbgl are observed mostly in districts Betul, Indore, Panna, Raisen, Rewa, Sidhi, Satna, Singrauli, Rajgarh, Chhindwara, Jabalpur, Sagar, Damoh, Jhabua, Chhatarpur, Balaghat, Shivpuri, Khargone, Tikamgarh, Ujjain and deeper water levels of 30-87mbgl are observed in districts including Mandsaur, Ratlam, Alirajpur, Neemuch, Dhar and Damoh.

Post-Monsoon Water Levels in Deeper Aquifers in Madhya Pradesh 2021

As on November 2021, 120 number of wells constructed in Madhya Pradesh state classified as semi confined and confined aquifers ranging from a depth of 33m bgl to 120m bgl. These include the basaltic aquifers of Malwa plateau covering the central as well as Western parts of the state. The eastern part of the state is covered mostly by older formations including Gondwana and Vindhyan group of rocks which area mainly comprising shale and sandstone. Towards the Northern part of the state, the aquifers include shale and sandstone of Vindhyan group of rocks, Granite and mafic dykes of Bundelkhand and Gwalior formations. As on May 2021, the pre monsoon water level ranges in these aquifers 0.63 mbgl to 49mbgl. The minimum water level is observed in Ujjain district and the maximum water level is observed in Chhindwara district. Water levels ranging from 0-25mbgl in almost all districts during post monsoon. Deeper water levels more than 30m are observed in two wells in Dhar and Chhindwara districts.

3 HYDROCHEMISTRY OF GROUND WATER (2021-22)

Water samples were collected from 1153 Ground Water Monitoring Wells during May 2021 and monitored for chemical quality of ground water (phreatic aquifer) and their location is given in Fig. 26. Detailed analysis of the chemical samples was carried out parameters namely: pH, Electrical Conductivity (EC), Carbonate, Bi-carbonate, Chloride, Fluoride, Nitrate, Sulphate, Phosphate, Total hardness, Calcium, Magnesium, Sodium and Potassium. The results of chemical data observed are given in ANNEXURE - XVI.

3.1. SALINITY

The salinity of water is represented by electrical conductivity. Electrical conductivity is a numerical expression of the ability of water to conduct an electric current. It depends on the total concentration of the ionized substances dissolved in water and the temperature at which the measurement is made. Electrical conductivity increases by about 2% per degree Celsius rise in temperature. The mobility of the dissolved ions, their valencies and their concentration affect conductivity. As electrical conductivity is an index of salinity in water, high electrical conductivity means high salinity. High salinity not only imparts bad taste to drinking water but such water is not suitable for irrigation purposes as it leads to deposition of salt content in the soil and affects the fertility of soil in the absence of adequate soil management practices.

The water having electrical conductivity upto 1000 μ S/cm at 25°C may be considered fresh & suitable for drinking purpose. The Ground water quality of Madhya Pradesh is generally good as 63.9% wells have electrical conductivity below 1000 μ S/cm at 25°C. The chemical quality of ground water of Madhya Pradesh is generally good as the perusal of the frequency distribution of electrical conductivity in phreatic aquifer. Table 3-1 shows that 88.73% wells fall in the range of 0-1500 μ S/cm at 25°C and only 0.69% wells have electrical conductivity more than 3000 μ S/cm at 25°C. The salinity tolerant crop may be grown in the area where electrical conductivity is more than 2000 μ S/cm 25°C.

Table 3-1 Frequency Distribution of Electrical Conductivity in Phreatic Aquifer Range

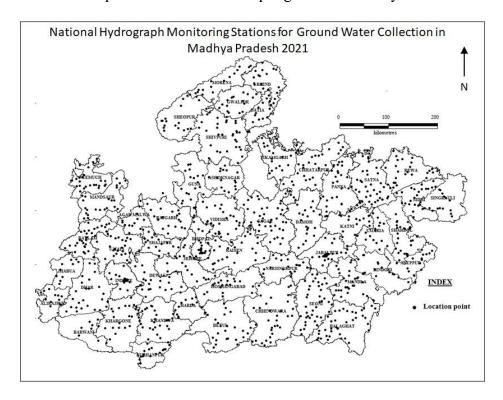
EC Range (μS/cmat 25°C)	No. of Samples	%
0-1500	1023	88.73
1501-3000	122	10.58
>3001	8	0.69

The distribution of major ions indicates that in Madhya Pradesh in ground water with low to medium salinity (EC $\approx 1000~\mu s/cm$) bicarbonate is the predominant anion but there is conspicuous increase in Chloride, Sulphate and Nitrate ion concentration with increase in salinity which indicates that the leaching of minerals of these constituents or human activit is contributing towards salinity in ground water of the area. Generally, the ground water in Madhya Pradesh is alkaline earth bicarbonate type. In Madhya Pradesh, the electrical conductivity of water in shallow aquifer occurs more than 3000 $\mu s/cm$ at 25°C in Agar Malwa, Bhind, Indore, Neemuch, Seoni, Shivpuri and Ujjain districts. The list of samples having electrical conductivity more than 3000 $\mu s/cm$ at 25°C is given in Table 3-2 and distribution of Electrical Conductivity in Madhya Pradesh is given in the Figure 3-2.

Table 3-2 Locations Showing Electrical Conductivity Above 3000 μs/cm at 25°C

S. No.	District	Block	Location	Lattitude	Longitude	EC (μS/cm at 25°C)
1	Agar Malwa	Susner	Soyat	24.1880	76.1740	3356
2	Bhind	Gohad	Bhagathar	26.3448	78.4904	3802
3	Indore	Sanwer	Sanwer	22.9790	75.8310	3560
4	Neemuch	Manasa	Kukreshwar	24.4807	75.2672	3450
5	Seoni	Dhanaura	Khamaria	22.5990	79.7910	3312
6	Shivpuri	Narwar	Sehore	25.6722	78.1074	3298
7	Ujjain	Ujjain	Ujjain Nagar Palika	23.1856	75.7881	3725
8	Ujjain	Khachrod	Unhel	23.3380	75.5490	3056

Figure 3-1 Location Map of Ground Water Sampling Wells in Madhya Pradesh State 2021



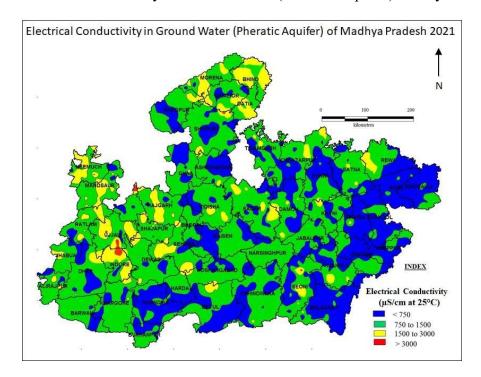


Figure 3-2 Electrical Conductivity in Ground Water (Phreatic Aquifer) Madhya Pradesh 2021

3.2. FLUORIDE

Generally, fluoride is present in low concentration in natural water. The presence of fluoride in ground water is very important from health point of view for human consumption as in low concentration; it prevents dental caries (upto 1.0 mg/l). However, the high concentration of fluoride above the permissible limit of 1.5 mg/l in drinking water (IS: 10500 Drinking water standards) is harmful for human consumption as it causes mottling of teeth and skeletal fluorosis. Its accumulation leads not only to high skeletal concentration, but also has crippling ill effects.

In Madhya Pradesh fluoride rich water in shallow aquifer occurs in Anuppur, Betul, Bhind, Chhatarpur, Datia, Dhar, Harda, Jabalpur, Katni, Khargone, Morena, Neemuch, Shajapur, Singrauli, Ujjain and Vidisha districts. The distribution of fluoride in the State is shown in Fig 28. Flouride analysis reveals that there is no specific trend observed for distribution of Fluoride in the State. The maximum fluoride concentration has been observed at Junapani of Betul district (4.30 mg/l).

Table 3-3 Frequency Distribution of Fluoride in Phreatic Aquifer

Fluoride Conc. Range (mg/l)	No. of Samples	%
<	1061	92.02
1.00	68	5.90
>	24	2.08

The frequency distribution of Fluoride is given in the Table 3-3 shows that in 92.02% (1061 nos.) wells Fluoride concentration is within the desirable limit of 1.0 mg/l where as 2.08% (24 nos.) wells show Fluoride concentration above the maximum permissible limit of 1.5 mg/l. The list of locations having Fluoride concentration more than 1.5mg/l is given in Table 3-4.

Table 3-4 Locations Showing Fluoride Exceeding 1.5 mg/l in Ground Water

SI.	District	Block	Location	Lattitude	Longitude	F
1	Anuppur	Jaithari	Jamudi	23.6853	81.6386	1.65
2	Betul	Multai	Kapasia	21.8310	78.4153	3.40
3	Betul	Multai	Ghatpiparia	21.8820	78.5190	3.50
4	Betul	Multai	Junapani	21.7210	78.3530	4.30
5	Bhind	Lahar	Balaji	26.2967	78.9788	1.64
6	Bhind	Mehgaon	Mehgaon	26.5007	78.5984	1.69
7	Bhind	Bhind	Nahrakapura	26.6228	78.9313	1.72
8	Chhatarpur	Chhatarpur	Mankari	25.0266	79.7935	1.66
9	Chhatarpur	Nowgaon	Kukrel	25.2261	79.3458	1.87
10	Datia	Bhander	Bhander	25.7330	78.7410	1.75
11	Datia	Datia	Datia	25.6466	78.4575	1.76
12	Dhar	Kukshi	Dehari	22.2870	74.9160	2.55
13	Harda	Khirkiya	Chhuri Khal	22.0340	76.9400	1.62
14	Jabalpur	Jabalpur	Jain Dharamshala	23.1530	79.8860	1.91
15	Katni	Rithi	Deogawan	23.9075	80.2528	1.65
16	Khargone	Barwaha	Amba	22.0430	75.9440	1.55
17	Morena	Joura	Huseinpur	26.4041	77.6026	1.58
18	Neemuch	Neemuch	SemaliChandrawat	24.5480	74.9360	1.54
19	Shajapur	NA	Pagrawat Kalan	23.1600	76.5510	1.74
20	Singrauli	Deosar	Bargawan	24.1960	82.4560	1.54
21	Singrauli	Deosar	BetahaDand	24.2420	82.3760	1.81
22	Ujjain	Tarana	Rupakhedi	23.4750	75.9710	1.52
23	Ujjain	Ujjain	Patpala	23.1980	75.8660	1.89
24	Vidisha	Vidisha	Pattan	23.7310	77.6460	1.76

3.3. NITRATE

Undesirable changes in the natural quality of ground water due to anthropogenic activities of man are a matter of great concern. The contribution of atmospheric and geological sources for Nitrate in ground water is small in comparison to the sources related to pollution as a result of activities of man. Sewage and animal waste contain considerable amount of Nitrate and its discharge on land & subsequent leaching by rainfall causes enrichment of Nitrate in ground water. Similarly, agricultural sources such as excessive use of fertilizers, irrigation with wastewaters, legumes and farm yard wastes contribute nitrate to ground water.

Concentration of nitrate in excess of 45 mg/l in water is harmful for human consumption, particularly for infants as it may cause blue baby disease. The highest desirable and maximum permissible limit of nitrate is 45mg/l (IS: 10500 Drinking water standards). The locations of wells in Madhya Pradesh, where concentration of nitrate ion was more than 45 mg/l in ground water are shown in Figure 3-4. Perusal of frequency distribution of nitrate in ground water reveals that 74.76% (862 nos.) wells have nitrate concentration within the permissible limit of 45mg/l while 25.24% (291 nos.) well water contain nitrate in excess of 45 mg/l (Table 3-5).

Table 3-5 Frequency Distribution of Nitrate in Shallow Aquifer

Nitrate Conc. Range (mg/l)	No. of Samples	%
< 45	862	74.76
45-100	220	19.08
>	71	6.16

In Madhya Pradesh, nitrate concentration in shallow aquifer occurs in Agar Malwa, Alirajpur, Anuppur, Ashok Nagar, Balaghat, Barwani, Betul, Bhind, Bhopal, Burhanpur, Chhatarpur, Chhindwara, Damoh, Datia, Dewas, Dhar, Gwalior, Harda, Hoshangabad, Indore, Jabalpur, Jhabua, Katni, Khandwa, Khargone, Mandla, Mandsaur, Morena, Narsimhapur, Neemuch, Panna, Raisen, Rajgarh, Ratlam, Rewa, Sagar, Satna, Sehore, Seoni, Shahdol, Shajapur, Sheopur, Shivpuri, Singrauli, Tikamgarh, Ujjain, Umaria and Vidisha districts. The distribution of nitrate concentration in the State is shown in Figure 3-4. Very high nitrate concentration of 400 mg/l was found in the ground water sample from Soyat of Agar Malwa district. The locations having more than 45 mg/l nitrate in ground water of Madhya Pradesh are shown in Table 3-6.

Figure 3-3 Fluoride Concentration in Ground Water (Phreatic Aquifer) Madhya Pradesh State 2021

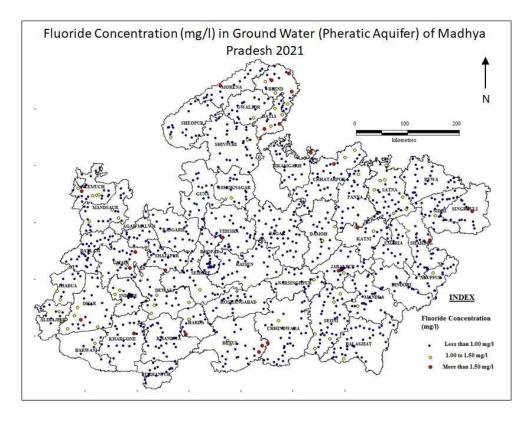


Figure 3-4 Nitrate Concentration in Ground Water (Phreatic Aquifer) Madhya Pradesh State 2021

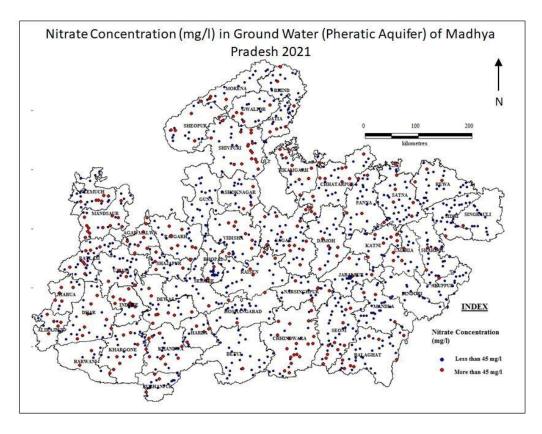


Table 3-6 Locations Showing Nitrate More than 45 mg/l in Ground Water

						NO3
S. No.	District	Block	Location	Lat.	Long.	(more than 45 mg/l)
1	Agar Malwa	Agar	Agar New	23.7180	76.0080	102
2	Agar Malwa	Agar	Amla	23.8530	76.1051	51
3	Agar Malwa	Badod	Barod	23.7880	75.8060	78
4	Agar Malwa	Susner	Guradi Bangla	24.0800	76.1550	80
5	Agar Malwa	Agar	Kanad	23.6680	76.1740	58
6	Agar Malwa	Susner	Soyat	24.1880	76.1740	400
7	Agar Malwa	Susner	Susner New	23.9440	76.1010	77
8	Agar Malwa	Not Given	Tanodia	23.5890	75.9410	71
9	Alirajpur	Alirajpur	Ambua	22.4310	74.4360	105
10	Alirajpur	Bhabra	Bhabra New	22.5490	74.3170	51
11	Alirajpur	Alirajpur	Borkua	22.2240	74.3420	66
12	Alirajpur	Jobat	Jobat New	22.4130	74.5700	56
13	Alirajpur	Alirajpur	Khattali	22.3480	74.5180	49
14	Anuppur	Jaithari	Deohara	23.1636	81.5969	55
15	Ashok Nagar	Mungoali	Bahadurpur	24.3420	77.9690	125
16	Ashok Nagar	Chanderi	Chanderi	24.7120	78.1360	80
17	Ashok Nagar	Mungoali	Mungaoli	24.4030	78.1090	60
18	Balaghat	Waraseoni	Amai	21.6760	79.9520	65
19	Balaghat	Katangi	Katangi	21.7720	79.8050	92
20	Balaghat	Paraswada	Khurmundi	22.1260	80.4750	69
21	Balaghat	Khairlanji	Miragpur	21.6310	79.8390	66
22	Balaghat	Paraswada	Paraswara	22.1780	80.2960	55
23	Balaghat	Khairlanji	Rampalli	21.6640	80.0170	47
24	Balaghat	Birsa	Saletekhri	21.7810	80.8100	72
25	Balaghat	Baihar	Supkhar	22.1890	80.9370	49
26	Barwani	Thikri	Borlai	22.0380	75.9970	158
27	Barwani	Newali	Niwali1	21.6830	74.9220	104
28	Barwani	Rajpur	Rajpur	21.9360	75.1360	57
29	Betul	Athner	Gujarmaal	21.6300	77.9460	52
30	Bhind	Ater	Ater	26.7489	78.6440	63

31	Bhind	Lahar	Dewri	26.0810	78.9011	63
32	Bhind	Mehgaon	Mehgaon	26.5007	78.5984	78
33	Bhopal	Phanda	Islamnagar	23.3572	77.4164	70
34	Bhopal	Phanda	Sarvar	23.1560	77.3000	50
35	Burhanpur	Burhanpur	Dehnala	21.5290	76.3110	74
36	Burhanpur	Burhanpur	Nachankheda	21.2330	76.1520	68
37	Burhanpur	Khaknar	Nepa Nagar	21.4530	76.3940	102
38	Chhatarpur	Buxwaha	Buxwaha	24.2490	79.2870	78
39	Chhatarpur	Rajnagar	Chandra Nagar	24.7500	79.9589	83
40	Chhatarpur	Buxwaha	Gadhoi	24.2947	79.2272	90
41	Chhatarpur	Rajnagar	Ganj	24.7919	79.7953	65
42	Chhatarpur	Gaurihar	Gaurihar	25.2670	80.1995	143
43	Chhatarpur	Chhatarpur	Issanagar	24.8619	79.3847	70
44	Chhatarpur	Rajnagar	Khajuraho	24.8497	79.9311	170
45	Chhatarpur	Chhatarpur	Mankari	25.0266	79.7935	56
46	Chhatarpur	Chhatarpur	Pipora Khurd	24.8500	79.4808	78
47	Chhatarpur	Nowgaon	Putaria	25.1150	79.3875	63
48	Chhatarpur	Bada Malhara	Sendpa	24.5469	79.2528	52
49	Chhatarpur	Nowgaon	Tatampur	25.0447	79.8653	289
50	Chhindwara	Harai	Kundali	22.7766	79.2274	46
51	Chhindwara	Pandhurana	Borgaon1	21.5590	78.8160	68
52	Chhindwara	Chaurai	Chaurai l	22.0540	79.2510	55
53	Chhindwara	Tamia	Chhindi	22.3880	78.8240	56
54	Chhindwara	Chhindwara	Chhindwara	22.0530	78.9490	123
55	Chhindwara	Tamia	Delakhari	22.4250	78.6166	92
56	Chhindwara	Mohkhed	Goni	21.8322	79.0068	55
57	Chhindwara	Harai	Harraidw	22.6120	79.2224	85
58	Chhindwara	Jamai	Jamai	22.1960	78.5950	50
59	Chhindwara	Chaurai	MarkaHandi	22.0450	79.1640	154
60	Chhindwara	Pandhurana	Piplanarayanwar	21.5880	78.7310	120
61	Chhindwara	Sausar	Ramakona New	21.7188	78.8449	63
62	Chhindwara	Chaurai	Ramgarh	22.1750	79.2720	103
63	Chhindwara	Chhindwara	Saonri1	21.9650	78.7700	140
64	Chhindwara	Mohkhed	Sarangbheri	21.8670	78.9530	93
65	Chhindwara	Mohkhed	Silwani1	21.8236	78.8361	70

66	Chhindwara	Parasia	Sonapipri	22.1439	78.8014	123
67	Chhindwara	Amarwara	Surla	22.4330	79.1720	64
68	Chhindwara	Mohkhed	Tansara Mal	21.8620	78.8980	100
69	Damoh	Damoh	Abhana	23.7050	79.5370	104
70	Damoh	Jabera	Bamhori	23.6850	79.7190	56
71	Damoh	Damoh	Damoh2	23.8280	79.4360	49
72	Damoh	Jabera	Jabera1	23.5380	79.7010	55
73	Damoh	Tendukheda		23.3380	79.7010	84
74	Danion		Samnapur Bhander		78.7410	64
75	Datia Datia	Bhander Datia	Datia	25.7330 25.6466	78.4575	57
					78.5811	
76	Datia	Datia	Imaliya	25.6945	76.3390	147 65
77	Dewas	Bagli	Bhikupura	22.5390		
78	Dewas	Sonkatch	Bhonrasa	22.9880	76.2070	87 52
79	Dewas	Kannod	Kantaphor	22.5760	76.5660	53
80	Dewas	Bagli	Nevri	22.8580	76.2500	57
81	Dewas	Khategaon	Pipilianankar	22.5860	77.0010	52
82	Dewas	Bagli	Pipri	22.3990	76.2780	53
83	Dewas	Bagli	Punjapura	22.5460	76.3700	62
84	Dewas	Kannod	Satwas New	22.5340	76.6820	82
85	Dhar	Sardarpur	Dasai	22.7210	75.1310	65
86	Dhar	Gandhwani	Gandhwani	22.3360	75.0040	165
87	Dhar	Dharampuri	Gujri1	22.3080	75.5090	46
88	Dhar	Badnawar	Kanwan New	22.8700	75.2450	132
89	Dhar	Tirla	Lunera	22.4610	75.4190	51
90	Dhar	Nisarpur	Pipalya	22.1330	74.8730	132
91	Dhar	Sardarpur	Rajod	23.9550	75.0670	78
92	Dhar	Manawar	Singhana	22.1880	74.9690	52
93	Dhar	Gandhwani	Zeerabad	22.5560	75.0680	87
94	Gwalior	Morar	Aarauli	26.1010	78.4522	130
95	Gwalior	Ghatigaon	Aron	25.9541	77.9314	80
96	Gwalior	Ghatigaon	CharaiShyampur	25.9748	77.8307	65
97	Gwalior	Bhitarwar	Dongarpur	25.8216	77.9623	205
98	Gwalior	Ghatigaon	Mohna	25.9078	77.7767	59
99	Harda	Harda	Hardadw	22.3460	77.0880	120
100	Harda	Timarni	Mohanpur1	22.2550	77.2300	61

101	Harda	Khirkiya	Sonpura Colony	22.0780	76.9160	46
102	Harda	Timarni	Temagaon	22.2980	77.3210	70
103	Hoshangaba d	Pipariya	Sandia	22.9130	78.3550	50
104	Hoshangaba d	Kesla	Suktawa	22.4080	77.8430	74
105	Indore	Indore	Cable Factory	22.7180	75.8360	55
106	Indore	Depalpur	Depalpur	22.8460	75.5370	58
107	Indore	Indore	Dudhiya	22.6760	75.9540	76
108	Indore	Indore	Gandhi Hall	22.7200	75.8660	65
109	Indore	Indore	Hatod	22.7900	75.7400	65
110	Indore	Mhow	Nandpura	22.5200	75.9120	125
111	Indore	Indore	Polo Ground	22.7390	75.8540	59
112	Indore	Depalpur	Rangwasa	22.7320	75.5730	121
113	Indore	Sanwer	Sanwer	22.9790	75.8310	140
114	Indore	Depalpur	Ushapura	22.8080	75.6720	109
115	Jabalpur	Jabalpur	Adhartal Naka	23.2030	79.9880	48
116	Jabalpur	Kundam	Kundam	23.2190	80.3460	52
117	Jabalpur	Majhauli	Majholi	23.4990	79.9270	75
118	Jhabua	Jhabua	Jhabua1	22.7710	74.5900	51
119	Jhabua	Meghnagar	Meghnagar New	22.9050	74.5420	50
120	Jhabua	Petlawad	Petlabad	23.0070	74.7980	57
121	Jhabua	Jhabua	Pitol	22.7870	74.4640	80
122	Jhabua	Thandla	Thandla1	23.0080	74.5790	113
123	Katni	Badwara	Badwara	23.7547	80.5675	51
124	Katni	Vijay Raghavgarh	Barhi	23.9022	80.8100	59
125	Katni	Badwara	Kewlari	23.7978	80.8203	52
126	Katni	Katni	Majhgawan1	23.8967	80.4072	66
127	Katni	Vijay Raghavgarh	Piparia2	23.8608	80.7014	53
128	Katni	Dhimarkheda	Umariapan	23.5125	80.2764	110
129	Khandwa	Pandhana	Balwara1	21.7000	76.5160	87
130	Khandwa	Harsud	BoriSaray	22.0060	76.8170	91
131	Khandwa	Chhegaon Makhan	Chhegaon Makhan	21.8320	76.2180	76
132	Khandwa	Khandwa	Jaswadi 1	21.7940	76.4280	62

133	Khandwa	Punasa	Karoli	22.1420	76.2060	57
134	Khandwa	Punasa	Kelwa Kalan	22.1740	76.2670	70
135	Khandwa	Khalwa	Khalwa1	21.8050	76.7460	59
136	Khandwa	Chhegaon Makhan	Roshiya	21.9560	76.1560	53
137	Khandwa	Khandwa	RudhyBhata	21.8330	76.4670	51
138	Khandwa	Punasa	Udaipur	22.2260	76.4030	121
139	Khargone	Bhikangaon	Bamnala New	21.8250	75.8530	69
140	Khargone	Bhagwanpura	Bhulwani	21.5480	75.4810	65
141	Khargone	Maheshwar	Dhargaon	22.1970	75.7300	110
142	Khargone	Bhagwanpura	Dhulkot	21.6100	75.5530	56
143	Khargone	Bhagwanpura	Ghatti	21.7150	75.6670	47
144	Khargone	Khargone	Khargone	21.8280	75.6140	51
145	Khargone	Maheshwar	Piplyabuzrug	22.2340	75.8610	53
146	Mandla	Narayanganj	Babaliya	22.8850	80.4131	86
147	Mandla	Bijadandi	Kalpi	22.9161	80.1983	63
148	Mandla	Bichhiya	Sijhora	22.4175	80.7783	73
149	Mandsaur	Bhanpura	Babulda	24.4742	75.6881	103
150	Mandsaur	Garoth	Barkheranayak	24.2195	75.5212	155
151	Mandsaur	Mandsaur	Basakheda	24.0320	75.7030	49
152	Mandsaur	Mandsaur	Daloda1	23.9250	75.0990	55
153	Mandsaur	Sitamau	Khejriya	24.0500	75.4900	48
154	Mandsaur	Mandsaur	Mandsaur	24.0530	75.0530	48
155	Mandsaur	Sitamau	Manpura	23.8540	75.0260	96
156	Mandsaur	Mandsaur	Nayakhera	24.0140	75.0830	57
157	Mandsaur	Malhargarh	Pipaliya	24.1960	75.0080	48
158	Mandsaur	Garoth	Shamgarh1	24.1910	75.6400	154
159	Mandsaur	Sitamau	Sitamau	24.0180	75.3490	65
160	Morena	Sabalgarh	Mangrol	26.2442	77.3537	120
161	Morena	Pahadgarh	Pahargarh	26.1982	77.6385	150
162	Morena	Sabalgarh	Ranipura	26.2075	77.3309	62
163	Narsimhapur	Narsimhapur	Bauchhar	22.9920	79.3399	72
164	Narsimhapur	Chawarpatha	Dobhi	23.1153	78.9243	64
165	Narsimhapur	Gotegaon	Jhoteshwar	22.9486	79.5555	71
166	Narsimhapur	Narsimhapur	Karakbel New	22.9942	79.3488	47

167	Neemuch	Manasa	Besla	24.5540	75.4570	47
168	Neemuch	Manasa	Bhadanadw	24.5610	75.3670	61
169	Neemuch	Neemuch	Girdola	24.4620	74.9320	232
170	Neemuch	Manasa	GotaPipliya	24.4800	75.2230	88
171	Neemuch	Manasa	Kukreshwar	24.4807	75.2672	247
172	Neemuch	Manasa	Kundaliya	24.4670	75.3310	172
173	Panna	Ajaigarh	Ajaigarh	24.9090	80.2664	62
174	Panna	Ajaigarh	Bariyarpur	24.8510	80.0980	72
175	Panna	Pawai	Powai	24.26.01	80.1620	64
176	Panna	Pawai	Semaria1	24.2670	79.8801	52
177	Raisen	Begamganj	Begumganj	23.6070	78.3490	52
178	Raisen	Gairatganj	Dehgaon	23.3187	78.0883	48
179	Raisen	Gairatganj	Garhi	23.2190	78.1413	48
180	Raisen	Begamganj	Paloha	23.5320	78.2960	47
181	Raisen	Begamganj	Sultanganj	23.5030	78.5550	58
182	Rajgarh	Sarangpur	Bamangaon	23.8830	76.6190	132
183	Rajgarh	Rajgarh	Bawari	23.9860	76.8160	65
184	Rajgarh	Narsinghgarh	Ganayari	23.6910	77.0080	136
185	Rajgarh	Narsinghgarh	Gandhigram	23.6740	77.0690	74
186	Rajgarh	Khilchipur	Khilchipur	24.0430	76.5790	65
187	Rajgarh	Narsinghgarh	Pachor	23.7180	76.7380	92
188	Rajgarh	Sarangpur	Udhankheri	23.6640	76.6290	129
189	Rajgarh	Narsinghgarh	Pachor New	23.7180	76.7380	196
190	Ratlam	Piploda	Barkheda	23.6250	75.0305	47
191	Ratlam	Ratlam	Dhamnod	23.4400	74.9780	62
192	Ratlam	Jaora	Jaora	23.6330	75.1220	105
193	Ratlam	Jaora	Mindli	23.6925	75.2923	46
194	Ratlam	Bajna	Rajapur	23.3514	74.7319	52
195	Rewa	Gangeo	Garh	24.8170	81.6500	50
196	Rewa	Sirmour	Semaria2	24.7980	81.1540	150
197	Rewa	Jawa	Senhuda	25.0130	81.3705	47
198	Sagar	Banda	Banda	24.0460	78.9670	83
199	Sagar	Malthon	Barodia	24.2148	78.5811	66
200	Sagar	Banda	Dalpatpur	24.1340	79.0170	125
201	Sagar	Deori	Deorikhas	23.3860	79.0160	51

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202	Sagar	Rehli	Garhakota	23.7840	79.1290	125
203	Sagar	Shahgarh	Hirapur	24.3660	79.2110	174
204	Sagar	Rahatgarh	Hurra	23.7280	78.4050	49
205	Sagar	Sagar	Khajuria	23.9400	78.6860	70
206	Sagar	Malthon	Khimlasa	24.2010	78.3630	97
207	Sagar	Rehli	Rehli	23.6410	79.0650	185
208	Sagar	Sagar	Rehpura	23.7160	78.8140	76
209	Sagar	Shahgarh	Shahgarh1	24.3200	79.1190	135
210	Sagar	Jaisinagar	Surkhi	23.6300	78.8330	46
211	Sagar	Rehli	Baroda	23.7180	78.9063	79
212	Satna	Maihar	Amdara	24.1040	80.5764	52
213	Satna	Sohawal	Barakalan	24.6711	80.7871	76
214	Satna	Majhgawan	Majhagawa	24.9110	80.8130	60
215	Satna	Amarpatan	MauhariKatra	24.4440	81.1180	57
216	Satna	Majhgawan	Paldeo	25.1108	80.7835	94
217	Satna	Unchehara	Pondipithourabd	24.4480	80.7450	50
218	Satna	Ramnagar	Ramnagar_Bam hnadi	24.2120	81.0940	62
219	Sehore	Budni	Budhni	22.7910	77.6830	97
220	Sehore	Nasrullaganj	Rala	22.6900	77.3140	160
221	Seoni	Barghat	Ari	21.9470	79.7120	152
222	Seoni	Seoni	Bamhodi	22.0657	79.6562	51
223	Seoni	Ghansaur	Ghansor1	22.6540	79.9530	84
224	Seoni	Barghat	Kauria	22.0195	79.8361	49
225	Seoni	Kurai	Khawasa	21.7102	79.4404	63
226	Seoni	Dhanaura	Kudari	22.4080	79.8130	88
227	Seoni	Kurai	Kurai New	21.8060	79.5010	52
228	Seoni	Dhanaura	Mehta	22.6319	79.8669	96
229	Seoni	Seoni	Nandora	22.0200	79.5370	75
230	Seoni	Kurai	Rukhar	21.8711	79.5267	100
231	Shahdol	Jiysingh Nagar	Amjhor	23.6636	81.5436	49
232	Shahdol	Jiysingh Nagar	Jaisinghnagar1	23.6786	81.3881	82
233	Shahdol	Burhar	Khamhidol	23.8786	81.7228	53
234	Shahdol	Sohagpur	Shahdol	23.2994	81.3586	52
235	Shajapur	Kalapipal	Kalapipal	23.3340	76.8330	68

236	Shajapur	Shajapur	Majhania	23.4480	76.3210	66
237		MomanBadodia	MomanBadodia	23.6060	76.3410	151
238	Shajapur		Tilawad Govind	23.3100	76.3330	76
239	Shajapur	Shajapur			76.9730	46
	Shajapur	Shajapur	Khardon Kalan	23.4660 25.6730		64
240	Sheopur	Sheopur	Bhagwara		76.6150	
241	Sheopur	Vijaypur	Dhobni	25.8320	77.5800	86
242	Sheopur	Vijaypur	Ghaswani	25.8920	77.5060	83
243	Sheopur	Vijaypur	Harkui	26.1590	77.1790	48
244	Sheopur	Karahal	Karahal	25.4930	77.0570	53
245	Sheopur	Vijaypur	Pura	25.9530	76.9910	112
246	Sheopur	Sheopur	Sheopur	25.6650	76.6930	104
247	Shivpuri	Khaniyadhana	Achhroni New	25.0120	78.2352	91
248	Shivpuri	Narwar	Behgwan	25.6298	78.1024	59
249	Shivpuri	Pichhore	Bhonti	25.3206	78.0969	50
250	Shivpuri	Pichhore	Dhola	25.2876	78.1266	214
251	Shivpuri	Badarwas	Ganeshkhera	25.0893	77.7884	129
252	Shivpuri	Karera	Karera	25.4548	78.1326	100
253	Shivpuri	Khaniyadhana	Masoori	25.1008	77.9269	159
254	Shivpuri	Narwar	Narwar	25.6467	77.9138	162
255	Shivpuri	Pichhore	Pichhore	25.1803	78.1869	46
256	Shivpuri	Pohri	Pohari	25.5417	77.3644	67
257	Shivpuri	Karera	Sarsod	25.4001	78.0443	76
258	Shivpuri	Narwar	Sehore	25.6722	78.1074	332
259	Shivpuri	Pichhore	Semri	25.1837	78.1164	97
260	Shivpuri	Karera	SirsodChouraha	25.4251	78.0550	92
261	Shivpuri	Khaniyadhana	Sitapur	25.1330	78.2066	108
262	Singrauli	Deosar	Parasi	24.0480	82.0410	52
263	Tikamgarh	Tikamgarh	Baragaon	24.5742	79.0195	87
264	Tikamgarh	Jatara	Digaura	24.9711	78.8394	80
265	Tikamgarh	Jatara	Ladhaura	25.0722	78.8695	162
266	Tikamgarh	Tikamgarh	Majna	24.8360	78.9970	86
267	Tikamgarh	Baldeogarh	Manikpur	24.8480	79.1710	46
268	Tikamgarh	Prithvipur	Nengawan	25.2550	78.6730	114
269	Tikamgarh	Niwari	Niwari New	25.3450	78.8010	119
270	Tikamgarh	Niwari	Orchha	25.3490	78.6410	84

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271	Tikamgarh	Palera	Palera	25.0240	79.2244	130
272	Tikamgarh	Prithvipur	Prithipur	25.2060	78.7540	151
273	Ujjain	Ujjain	Chakrawada Grid	23.2570	75.7080	71
274	Ujjain	Badnagar	ChhotiGhadsod	23.1085	75.4535	88
275	Ujjain	Tarana	Kaiytha	23.2330	75.0180	55
276	Ujjain	Tarana	Khakri Sultan	23.4022	75.0107	95
277	Ujjain	Ujjain	Palkhanda	23.0411	75.9461	77
278	Ujjain	Ghatia	Ruie	23.2860	75.6520	64
279	Ujjain	Ujjain	Ujjain Nagar Palika	23.1856	75.7881	327
280	Umaria	Karkeli	Bichua	23.4636	80.7472	89
281	Umaria	Karkeli	Karkeli New	23.4600	80.9044	49
282	Umaria	Bandhavgarh	Parasi	23.6653	80.9433	58
283	Umaria	Not Given	Choti Pali	23.5942	80.7458	63
284	Vidisha	Basoda	Bareth	23.9150	78.0010	47
285	Vidisha	Vidisha	Bilari	23.5780	77.6980	142
286	Vidisha	Sironj	Dehri Jagir	24.0410	77.7860	154
287	Vidisha	Basoda	Ghatera	23.8070	78.1250	85
288	Vidisha	Gyaraspur	Gyaraspur1	23.6660	78.1120	156
289	Vidisha	Sironj	Patharia	24.1150	77.8160	72
290	Vidisha	Vidisha	Salaiya	23.6080	77.5750	94
291	Vidisha	Sironj	Sironj1	24.0990	77.6890	51

3.4. TOTAL HARDNESS

Hardness is mainly caused by the presence of Calcium and Magnesium Bicarbonate, Sulphate and Chloride ions. As per Bureau of Indian Standard IS:10500: 2012 (Drinking water), the desirable limit of total hardness is 200 mg/l and permissible limit is 600 mg/l. Total Hardness in the shallow ground water in Madhya Pradesh ranges between 30 to 1385 mg/l (1385 mg/l in Ujjain Nagar Palika, Ujjain district). Most of the waters are calcium bicarbonate type attributing to temporary hardness of water. Permanent hardness of water caused by Calcium and Magnesium, Sulphate and Chloride can be removed by ion exchange.

Table 3-7 Frequency Distribution of Total Hardness in Shallow Aquifer

Total Hardness Range (mg/l)	No. of Samples	%
<200	287	24.89

200-600	806	69.90
>600	60	5.20

The study of Total Hardness in ground water reveals that 60 nos. (5.20%) of well waters contain hardness more than the permissible limit of 600 mg/l and 806 nos. (69.902%) of well waters has total hardness above the desirable limit of 200 mg/l but below the permissible limit of 600 mg/l (Table 3-7). The locations having Total Hardness more than 600 mg/l in ground water of Madhya Pradesh are shown in Table 3-8.

Table 3-8 Locations Showing Total Hardness Exceeding 600 mg/l in Ground Water

S. No.	District	Block	Location	Lat.	Long.	Total Hardness (More Than 600 mg/L)
1	Agar Malwa	Badod	Barod	23.7880	75.8060	667
2	Agar Malwa	Susner	Soyat	24.1880	76.1740	1232
3	Alirajpur	Alirajpur	Ambua	22.4310	74.4360	650
4	Alirajpur	Alirajpur	Nanpur	22.2690	74.5279	615
5	Ashok Nagar	Mungoali	Bahadurpur	24.3420	77.9690	640
6	Barwani	Thikri	Borlai	22.0380	75.9970	640
7	Betul	Shahpur	Bhonra	22.2780	77.8700	870
8	Bhind	Gohad	Bhagathar	26.3448	78.4904	930
9	Bhind	Gohad	Mau	26.2724	78.6651	670
10	Chhatarpur	Rajnagar	Khajuraho	24.8497	79.9311	626
11	Chhatarpur	Nowgaon	Tatampur	25.0447	79.8653	662
12	Chhindwara	Pandhurana	Piplanarayanwar	21.5880	78.7310	720
13	Datia	Datia	Imaliya	25.6945	78.5811	680
14	Datia	Seondha	Indergarh New	25.9161	78.5670	675
15	Dhar	Badnawar	Kanwan New	22.8700	75.2450	660
16	Dhar	Nisarpur	Pipalya	22.1330	74.8730	660
17	Gwalior	Bhitarwar	Dongarpur	25.8216	77.9623	855
18	Indore	Indore	Cable Factory	22.7180	75.8360	680
19	Indore	Indore	Dudhiya	22.6760	75.9540	740
20	Indore	Mhow	Nandpura	22.5200	75.9120	1000
21	Indore	Sanwer	Sanwer	22.9790	75.8310	1250
22	Khargone	Barwaha	Balwara	22.3900	75.9750	645

23	Khargone	Bhagwanpura	Ghatti	21.7150	75.6670	605
24	Mandsaur	Garoth	Barkheranayak	24.2195	75.5212	843
25	Morena	Morena	KheraMewda New	26.5510	78.0761	625
26	Morena	Sabalgarh	Mangrol	26.2442	77.3537	810
27	Neemuch	Neemuch	Girdola	24.4620	74.9320	808
28	Neemuch	Neemuch	Kacholi	24.3630	74.9410	626
29	Neemuch	Manasa	Kukreshwar	24.4807	75.2672	813
30	Neemuch	Manasa	Kundaliya	24.4670	75.3310	662
31	Rajgarh	Sarangpur	Bamangaon	23.8830	76.6190	813
32	Rajgarh	Narsinghgarh	Pilukhedi	23.4910	77.0600	631
33	Ratlam	Jaora	Jaora	23.6330	75.1220	640
34	Ratlam	Alot	Tal	23.7220	75.3830	700
35	Rewa	Rewa	Raipur	24.5240	81.3420	650
36	Rewa	Rewa	Reethi	24.5220	81.3550	925
37	Rewa	Rewa	Sagra	24.6110	81.3621	885
38	Sagar	Malthon	Barodia	24.2148	78.5811	635
39	Sagar	Banda	Dalpatpur	24.1340	79.0170	680
40	Sagar	Rehli	Garhakota	23.7840	79.1290	960
41	Sagar	Malthon	Khimlasa	24.2010	78.3630	1215
42	Sagar	Sagar	Parsoria	23.8540	78.9360	833
43	Sagar	Rehli	Rehli	23.6410	79.0650	990
44	Sehore	Ashta	Ashta	23.0230	76.7160	662
45	Sehore	Ichhawar	Ichhawar	23.0320	77.0190	763
46	Sehore	Ashta	Khachrod	22.8720	76.7180	657
47	Sehore	Nasrullaganj	Rala	22.6900	77.3140	970
48	Seoni	Seoni	Kaniwara	22.2120	79.7400	610
49	Seoni	Dhanaura	Khamaria	22.5990	79.7910	625
50	Shajapur	Shajapur	Makshi New	23.2530	76.1480	615
51	Shajapur	MomanBadodia	MomanBadodia	23.6060	76.3410	795
52	Shajapur	Shajapur	Khamlai	23.1530	76.8740	805
53	Shivpuri	Pichhore	Dhola	25.2876	78.1266	660
54	Shivpuri	Narwar	Sehore	25.6722	78.1074	850
55	Ujjain	Tarana	Kaiytha	23.2330	75.0180	1237
56	Ujjain	Mahidpur	Mahidpurroad	23.5670	75.5080	695

57	Ujjain	Ujjain	Ujjain Nagar Palika	23.1856	75.7881	1385
58	Ujjain	Khachrod	Unhel	23.3380	75.5490	755
59	Vidisha	Gyaraspur	Gyaraspur1	23.6660	78.1120	775
60	Vidisha	Vidisha	Salaiya	23.6080	77.5750	655

3.5. SUITABILITY FOR IRRIGATION

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. The potential hazards to crop growth are salinity, sodicity, alkalinity and toxicity.

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 affect soil structure and permissibility by replacing Ca and Mg ions.

$$SAR = \frac{Na^+}{\sqrt{\frac{Ca^{++} + Mg^{++}}{2}}}$$

Where: Na+, Ca+2 and Mg+2 is expressed in meq/l

Table 3-9 shows that the quality of water samples as per SAR is good as 99.48% (1147 nos.) wells have SAR value below 10.

Table 3-9 Quality of Water on the Basis of SAR Values

S.No.	Range of SAR	No. of Sample	% of Samples	Quality of Water
1.	<10	1147	99.48	Low Sodium hazard good quality
2.	10-18	6	0.52	Medium Sodium hazard medium
3.	18-26	0	0.00	High Sodium hazard bad quality
4.	>26	0	0.00	Very High Sodium hazard very bad

RESIDUAL SODIUM CARBONATE

Residual Sodium Carbonate (RSC) equals the sum of bicarbonate and carbonate ion concentration minus the sum of calcium &magnesium ions, when all the ions are expressed in meq/l.

$$RSC = (CO_3^{--} + HCO_3^{-}) - (Ca^{++} + Mg^{++})$$

According to Eaton (1950) and USSL (1954), irrigation waters containing residual sodium carbonate (RSC) above 2.5 meq/l are not suitable for irrigation purpose. Water containing 1.25 to 2.5 meq/l of RSC is marginally suitable & those containing less than 1.25 meq/l of RSC are safe. The water quality of Madhya Pradesh has been evaluated on the basis of RSC in Table 3-10 and in Table 3-11 maximum, minimum and values exceeding desirable & permissible limit for drinking use are given.

Table 3-10 Number of Wells Falling in Different RSC Ranges

S.No.	RSC Range in meq/l	No. of wells	% of wells	Suitability
1.	<1.25	1038	90.03	Suitable
2.	1.25–2.5	70	6.07	Marginally suitable
3.	>2.5	45	3.90	Unsuitable

Nearly 90.03% (1038 Nos.) of dug well waters of Madhya Pradesh were found to have RSC values below 2.5 meq/l, which infers that the water is free from alkalinity hazards. However, 3.90% (45 Nos.) of wells have RSC more than 2.5 meq/l. Excessive use of these high RSC waters for irrigation can adversely affect fertility of the soil in the area by making it alkaline, resulting at times in hardening of the soil due to deposition of sodium carbonate. For safe use of such waters gypsum requirement for different soils needs to be evaluated.

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Table 3-11 Maximum and Minimum Values and Values Exceeding Desirable and Permissible Limit for Drinking Use of Different Parameters

	рН	TH	Ca	Mg	Na	K	PO ₄	SiO	CO ₃	НСО3	Cl	SO ₄	NO3	F		EC
								m	ıg/l						μS/c	em at 25 °C
Range of values (Min.)	6.69	30	6	1	2	0.1	BDL	5	0	6	7	1	1	0.01	Minimum	Range of values (Min.)
Range of values (Max.)	9.25	1385	446	160	558	319	1.10	67	42	1461	857	678	400	4.3	Maximum	Range of value (Max.)
IS:10500 drinking water (desirable limit)	6.5- 8.5	200	75	30						Bicarbonate alkalinity 200	250	200	45	1	Range of EC	IS:10500 drinking water (desirable limit)
IS: 10500 drinking water (permissi ble limit)	6.5- 8.5	600	200	100						600	1000	400	45	1.5	<1500	IS: 10500 drinking water (permissible limit)
% samples exceedin g desirable limit	NIL	69.90	41.02	31.92						76.24	6.33	0.26	25.24	5.9	1501- 3000	% samples Exceeding desirable limit
% samples exceeding permissible limit	0.69	5.20	2.34	0.87						5.38	NIL	0.17	25.24	2.08	>3000	% samples Exceeding permissible limit

S. No.	District-wise I	No. of		l and Distr to Water	ibution o								(mbgl) in	the Range	Annexur e of	e- I
	District	wells		(mbgl)	0	-2		-5		-10		-20	 	-40	>	40
		Analysed	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%
1	Agar Malwa	14	0.42	19.10	1	7.14	0	0.00	4	28.57	9	64.29	0	0.00	0	0.00
2	Alirajpur	11	3.07	11.62	0	0.00	3	27.27	6	54.55	2	18.18	0	0.00	0	0.00
3	Anuppur	22	1.55	15.86	1	4.55	9	40.91	10	45.45	2	9.09	0	0.00	0	0.00
4	Ashok Nagar	20	2.82	19.25	0	0.00	4	20.00	11	55.00	5	25.00	0	0.00	0	0.00
5	Balaghat	32	1.65	14.20	1	3.13	16	50.00	13	40.63	2	6.25	0	0.00	0	0.00
6	Barwani	9	4.17	10.66	0	0.00	1	11.11	6	66.67	2	22.22	0	0.00	0	0.00
7	Betul	26	1.05	13.53	2	7.69	3	11.54	17	65.38	4	15.38	0	0.00	0	0.00
8	Bhind	18	2.40	35.76	0	0.00	3	16.67	6	33.33	6	33.33	3	16.67	0	0.00
9	Bhopal	26	0.47	16.32	7	26.92	6	23.08	8	30.77	5	19.23	0	0.00	0	0.00
10	Burhanpur	13	3.15	31.02	0	0.00	1	7.69	5	38.46	6	46.15	1	7.69	0	0.00
11	Chhatarpur	35	0.85	18.10	1	2.86	3	8.57	17	48.57	14	40.00	0	0.00	0	0.00
12	Chhindwara	30	0.90	12.80	1	3.33	6	20.00	19	63.33	4	13.33	0	0.00	0	0.00
13	Damoh	19	0.55	14.30	5	26.32	5	26.32	7	36.84	2	10.53	0	0.00	0	0.00
14	Datia	12	5.70	24.00	0	0.00	0	0.00	5	41.67	6	50.00	1	8.33	0	0.00
15	Dewas	20	3.12	29.97	0	0.00	3	15.00	7	35.00	8	40.00	2	10.00	0	0.00
16	Dhar	39	1.68	27.2 2	1	2.56	4	10.26	17	43.59	14	35.90	3	7.69	0	0.00
17	Dindori	16	0.70	21.04	4	25.00	7	43.75	4	25.00	0	0.00	1	6.25	0	0.00
18	Guna	21	2.05	23.53	0	0.00	4	19.05	7	33.33	9	42.86	1	4.76	0	0.00
19	Gwalior	21	4.75	46.62	0	0.00	1	4.76	9	42.86	7	33.33	3	14.29	1	4.76
20	Harda	12	1.28	13.84	1	8.33	2	16.67	7	58.33	2	16.67	0	0.00	0	0.00
21	Hoshangabad	17	3.19	15.57	0	0.00	3	17.65	12	70.59	2	11.76	0	0.00	0	0.00
22	Indore	31	0.60	13.58	1	3.23	4	12.90	18	58.06	8	25.81	0	0.00	0	0.00
23	Jabalpur	31	1.70	14.00	3	9.68	16	51.61	9	29.03	3	9.68	0	0.00	0	0.00
24	Jhabua	12	1.62	9.38	1	8.33	4	33.33	7	58.33	0	0.00	0	0.00	0	0.00
25	Katni	18	3.42	17.47	0	0.00	3	16.67	8	44.44	7	38.89	0	0.00	0	0.00
26	Khandwa	28	2.91	13.16	0	0.00	2	7.14	20	71.43	6	21.43	0	0.00	0	0.00
27	Khargone	21	2.57	13.76	0	0.00	9	42.86	8	38.10	4	19.05	0	0.00	0	0.00
28	Mandla	32	0.80	9.50	7	21.88	11	34.38	14	43.75	0	0.00	0	0.00	0	0.00
29	Mandsaur	32	2.40	30.70	0	0.00	2	6.25	13	40.63	14	43.75	3	9.38	0	0.00
30	Morena	13	1.00	23.00	1	7.69	1	7.69	3	23.08	4	30.77	4	30.77	0	0.00
31	Narsinghpur	17	1.90	18.70	1	5.88	2	11.76	11	64.71	3	17.65	0	0.00	0	0.00
32	Neemuch	29	2.50	28.40	0	0.00	6	20.69	9	31.03	11	37.93	3	10.34	0	0.00
33	Panna	25	1.58	27.18	1	4.00	5	20.00	11	44.00	6	24.00	2	8.00	0	0.00
34	Raisen	26	1.26	14.40	1	3.85	8	30.77	12 8	46.15	5 14	19.23	0	0.00	0	0.00
35 36	Rajgarh Ratlam	26 36	3.70 4.70	18.82 45.00	0	0.00	1	15.38 2.78	10	30.77 27.78	21	53.85 58.33	3	0.00 8.33	1	0.00 2.78
37	Rewa	28	3.45	20.85	0	0.00	3	10.71	11	39.29	12	42.86	2	7.14	0	0.00
38	Sagar	44	2.00	19.44	1	2.27	10	22.73	13	29.55	20	45.45	0	0.00	0	0.00
39	Satna	45	2.13	25.27	0	0.00	10	22.73	26	57.78	8	17.78	1	2.22	0	0.00
40	Sehore	21	5.23	29.46	0	0.00	0	0.00	10	47.62	10	47.62	1	4.76	0	0.00
41	Seoni	37	0.90	9.70	2	5.41	18	48.65	17	45.95	0	0.00	0	0.00	0	0.00
42	Shahdol	26	3.30	14.73	0	0.00	6	23.08	18	69.23	2	7.69	0	0.00	0	0.00
43	Shajapur	21	5.52	19.20	0	0.00	0	0.00	12	57.14	9	42.86	0	0.00	0	0.00
44	Sheopur	19	3.70	23.40	0	0.00	1	5.26	7	36.84	10	52.63	1	5.26	0	0.00
45	Shivpuri	30	3.20	17.60	0	0.00	2	6.67	18	60.00	10	33.33	0	0.00	0	0.00
46	Sidhi	27	2.90	23.66	0	0.00	4	14.81	13	48.15	9	33.33	1	3.70	0	0.00
47	Singrauli	17	4.95	17.00	0	0.00	1	5.88	11	64.71	5	29.41	0	0.00	0	0.00
48	Tikamgarh	24	3.65	13.60	0	0.00	4	16.67	13	54.17	7	29.17	0	0.00	0	0.00
49	Ujjain	39	3.69	21.48	0	0.00	2	5.13	17	43.59	19	48.72	1	2.56	0	0.00
50	Umaria	15	4.15	14.82	0	0.00	2	13.33	9	60.00	4	26.67	0	0.00	0	0.00
51	Vidisha	27	3.87	22.50	0	0.00	2	7.41	17	62.96	7	25.93	1	3.70	0	0.00
	Total	1230	0.42	46.62	44	3.58	227	18.46	570	46.34	349	28.37	38	3.09	2	0.16

S No	District-wise		water Lev	el and Dis	tribution	of Percen	tage of W								Annexure-	II
3. NO.	Name of District	Analysed		Water Level	L .						ring Depth to			_		
			Min (m	bgl) Max	No	-2 %	No 2	!-5 %	No	-10	No No	-20 %	No No	-40	No No	40 %
1	Agar Malwa	15	0.09	6.78	3	20.00	8	53.33	4	26.67	0	0.00	0	0.00	0	0.00
2	-	11	2.30	9.05	0	0.00	4	36.36	7	63.64	0	0.00	0	0.00	0	0.00
3	Alirajpur	20	0.62	13.91	10	50.00	7	35.00	1	5.00	2	10.00	0	0.00	0	0.00
4	Anuppur Ashok Nagar	20	0.90	11.70	7	35.00	11	55.00	1	5.00	1	5.00	0	0.00	0	0.00
5		39	0.41	10.32	17	43.59	19	48.72	2	5.13	1	2.56	0	0.00	0	0.00
- 6	Balaghat Barwani	9	1.50	12.00	2	22.22	2	22.22	3	33.33	2	22.22	0	0.00	0	0.00
7	Betul	29	0.20	9.38	12	41.38	11	37.93	6	20.69	0	0.00	0	0.00	0	0.00
8	Bhind	18	1.10	24.65	2	11.11	4	22.22	5	27.78	4	22.22	3	16.67	0	0.00
9	Bhopal	26	0.20	10.20	17	65.38	8	30.77	0	0.00	1	3.85	0	0.00	0	0.00
10		12	1.70	23.60	1	8.33	4	33.33	3	25.00	3	25.00	1	8.33	0	0.00
11	Burhanpur Chhatarpur	35	0.60	15.25	5	14.29	10	28.57	16	45.71	4	11.43	0	0.00	0	0.00
12	-	33	0.00	8.74	7	21.21	13	39.39	13	39.39	0	0.00	0	0.00	0	0.00
13	Chhindwara Damoh	18		6.51	9	50.00	7	38.89	2	11.11	0	0.00	0	0.00	0	0.00
14	Damon	12	0.1	23.00	2	16.67	1	8.33	5	41.67	3	25.00	1	8.33	0	0.00
15	Datia	22	0.92	16.85	3	13.64	12	54.55	5	22.73	2	9.09	0	0.00	0	0.00
16	Dewas		2.40			0.00	13	34.21	16	42.11	8	21.05	0	0.00	1	2.63
17	Dindori	38 16	0.44	15.95 7.50	11	68.75	4	25.00	1	6.25	0	0.00	0	0.00	0	0.00
					9			47.62	2							
18	Guna	21 19	0.50 1.40	5.62 18.54	2	42.86 10.53	10 6	31.58	2	9.52	7	0.00 36.84	1	0.00 5.26	1	0.00 5.26
	Gwalior								5							
20	Harda	13	0.62	14.30	3	23.08	4	30.77		38.46	1	7.69	0	0.00	0	0.00
21	Hoshangabad	16	1.04	14.95	5	18.75	7	43.75	11	25.00	2	12.50	0	0.00	0	0.00
22	Indore	32	0.25 1.10	11.63 13.58	6	15.63 20.00	16	43.75 53.33	5	34.38 16.67	3	6.25 10.00	0	0.00	0	0.00
24	Jabalpur	11	0.60	8.40	5	45.45	4	36.36	2	18.18	0	0.00	0	0.00	0	0.00
25	Jhabua Katni	18	1.87	10.92	2	11.11	4	22.22	11	61.11	1	5.56	0	0.00	0	0.00
						-			7							
26	Khandwa	31 22	0.75	9.99	6 2	19.35 9.09	18	58.06 36.36	8	22.58 36.36	4	0.00 18.18	0	0.00	0	0.00
28	Khargone	33	0.02	9.63	18	54.55	12	36.36	3	9.09	0	0.00	0	0.00	0	0.00
29	Mandla	36	0.50	9.10	15	41.67	15	41.67	6	16.67	0	0.00	0	0.00	0	0.00
30	Mandsaur Morena	14	0.50	22.40	3	21.43	2	14.29	2	14.29	3	21.43	4	28.57	0	0.00
						-		-	5				0	-	0	
31	Narsinghpur Neemuch	12 32	0.05	12.92 9.65	12	51.43 37.50	5 13	41.67	7	41.67 21.88	0	8.33 0.00	0	0.00	0	0.00
33	Panna	27	0.10	16.70	5	18.52	14	51.85	7	25.93	1	3.70	0	0.00	0	0.00
34		28	0.25	5.60	16	57.14	9	32.14	3	10.71	0	0.00	0	0.00	0	0.00
35	Raisen	24	0.25				11	45.83	1			4.17	0	0.00	0	
	Rajgarh	38		10.72	11	45.83 31.58	8	-	15	4.17	3			0.00	0	0.00
36	Ratlam	38	0.16	13.63 17.01	12 9	28.13	17	21.05 53.13	3	39.47 9.38	3	7.89 9.38	0	0.00	0	0.00
38		32	0.52	17.01	16	41.03	17	38.46	5	12.82	3	7.69	0	0.00	0	0.00
39	Sagar	50	0.02	13.47	17	34.00	21	42.00	11	22.00	1	2.00	0	0.00	0	0.00
40	Sehore	22	0.28	13.47	8	36.36	5	22.73	7	31.82	2	9.09	0	0.00	0	0.00
41		43	0.30	8.27	18	41.86	21	48.84	4	9.30	0	0.00	0	0.00	0	0.00
41	Shahdol Shahdol	26	0.22	12.57	18 8	30.77	8	30.77	7	9.30 26.92	3	11.54	0	0.00	0	0.00
42		19	0.32	7.50	15	78.95	3	15.79	1	5.26	0	0.00	0	0.00	0	0.00
43	Shajapur	17	0.33	23.40	5	29.41	8	47.06	2	11.76	1	5.88	1	5.88	0	0.00
44	Sheopur	30	0.70	5.10	7	23.33	22	73.33	1	3.33	0	0.00	0	0.00	0	0.00
						-										
46	Sidhi Singrauli	33 22	0.63	16.61 12.52	5 6	15.15 27.27	15 8	45.45 36.36	7	33.33 31.82	1	6.06 4.55	0	0.00	0	0.00
47	-	22	2.30	12.52	0	0.00	12	36.36 52.17	7	31.82	4	4.55 17.39	0	0.00	0	0.00
	Tikamgarh															
49	Ujjain	40	0.20	8.98	19	47.50	12	30.00	9 7	22.50	0	0.00	0	0.00	0	0.00
50	Umaria	13	2.16	10.08	0	0.00	5	38.46		53.85	1	7.69	0	0.00	0	0.00
51	Vidisha	30	0.45	7.87	16	53.33	11	36.67	3	10.00	0	0.00	0	0.00	0	0.00
	Total	1269	0.02	24.65	393	30.97	501	39.48	281	22.14	81	6.38	11	0.87	2	0.16

6 11-	District-wise		water Lev	el and Dis	tribution	of Percen	tage of W								Annexure-	III
S. No.	Analysed (mbgl) 0-2 2-5										ring Depth to			_		
		•								-10		-20		-40		40
								%	No	%	No	%	No	%	No	%
1	Agar Malwa	14	2.30	8.00	0	0.00	9	64.29	5	35.71	0	0.00	0	0.00	0	0.00
2	Alirajpur	13	0.65	9.95	1	7.69	5	38.46	7	53.85	0	0.00	0	0.00	0	0.00
3	Anuppur	17	1.25	15.86	4	23.53	8	47.06	4	23.53	1	5.88	0	0.00	0	0.00
4	Ashok Nagar	20	0.90	12.30	4	20.00	5	25.00	9	45.00	2	10.00	0	0.00	0	0.00
5	Balaghat	40	1.18	13.29	5	12.50	27	67.50	7	17.50	1	2.50	0	0.00	0	0.00
7	Barwani	9	1.58	11.80	1	11.11	1	11.11	6	66.67	1	11.11	0	0.00	0	0.00
	Betul	28	0.66	14.06	6	21.43	10	35.71	10	35.71	2	7.14	0	0.00	0	0.00
9	Bhind	19	1.07	29.98	7	15.79	13	21.05	5	21.05	5	26.32	0	15.79	0	0.00
	Bhopal		0.60	13.10	2	26.92	4	50.00		19.23	1	3.85	-	0.00		0.00
10	Burhanpur	17 37	1.25	31.90	1	11.76		23.53	6	35.29	4	23.53	1	5.88	0	0.00
11	Chhatarpur	35	1.80	17.50 15.12	2	2.70 5.71	11	42.86	19 15	51.35 42.86	6	16.22	0	0.00	0	0.00
	Chhindwara		0.44				15		7			8.57	-			
13	Damoh	22	1.50	11.95	2	18.18	10 3	45.45	2	31.82	4	4.55	0	0.00	0	0.00
	Datia	12	1.50	23.50	5	16.67	8	25.00	8	16.67	1	33.33	0	8.33 0.00	0	0.00
15	Dewas		1.20	13.35		5.26	15	36.36 39.47	14	36.36 36.84	7	4.55 18.42	0	0.00	0	0.00
		38		17.67	2											
17	Dindori	16	0.50	9.35	3	18.75	10	62.50	3	18.75	0	0.00	0	0.00	0	0.00
18	Guna	22	0.50	15.62	2	9.09	12	54.55	5	22.73	7	13.64	0	0.00	0	0.00
19	Gwalior	21	1.30	37.76	3	14.29	5	23.81	4	19.05		33.33	2	9.52	0	0.00
20	Harda	13	1.05	19.40	2	15.38	5	38.46	5	38.46	1	7.69	0	0.00	0	0.00
21	Hoshangabad	17	1.31	14.90	1	5.88	3	17.65	8	47.06	5	29.41	0	0.00	0	0.00
22	Indore	32	0.55	10.35	3	9.38	18	56.25	10	31.25	1	3.13	0	0.00	0	0.00
23	Jabalpur	32	0.30	15.60		12.50	18	56.25	7	21.88	3	9.38	0	0.00	0	0.00
24	Jhabua	11	1.75	6.18	1	9.09	8	72.73	2	18.18	0	0.00	0	0.00	0	0.00
25	Katni	16	3.60	15.90	0	0.00	5	31.25	7	43.75	4	25.00	0	0.00	0	0.00
26	Khandwa	31	1.85	8.32	1	3.23	24	77.42	6	19.35	0	0.00	0	0.00	0	0.00
27	Khargone	22	2.68	11.70	0	0.00	11	50.00	10	45.45	1	4.55	0	0.00	0	0.00
28	Mandla	32	0.75	10.70	10	31.25	20	62.50	1	3.13	1	3.13	0	0.00	0	0.00
29	Mandsaur	36	1.04	11.35	9	25.00	17	47.22	8	22.22	2	5.56	0	0.00	0	0.00
30	Morena	14	1.71	30.20	1	7.14	4	28.57	0	0.00	4	28.57	5	35.71	0	0.00
31	Narsinghpur	15	0.34	15.25	2	51.43	7	46.67	4	26.67	2	13.33	0	0.00	0	0.00
32	Neemuch	33 28	0.40	9.44	12	36.36	15 12	45.45	6 13	18.18	2	0.00	0	0.00	0	0.00
33	Panna		1.20	17.45	1	3.57		42.86		46.43		7.14				
34	Raisen	28	1.35	10.90	3	10.71	13	46.43	11	39.29	1	3.57	0	0.00	0	0.00
35	Rajgarh	28	1.65	13.57	3	10.71	18	64.29	6	21.43	1	3.57	0	0.00	0	0.00
36	Ratlam	39	0.89	13.58	4	10.26	10	25.64	22	56.41	3	7.69	0	0.00	0	0.00
37	Rewa	30 46	1.00	17.11 19.54	5	6.67	11	36.67	14 22	46.67	3	10.00	0	0.00	0	0.00
38	Sagar					10.87	14	30.43		47.83	5	10.87		0.00		
39	Satna	47	1.15 0.70	18.54	6	12.77	24	51.06 30.43	14	29.79	3	6.38	0	0.00	0	0.00
40	Sehore	23		13.12	5	21.74	7		10	43.48	1	4.35	0		0	0.00
41	Seoni	43	0.78	9.32	5	11.63	30	69.77	8	18.60	0	0.00	0	0.00	0	0.00
42	Shahdol	27	0.35	14.50 7.70	9	14.81 45.00	7	37.04 35.00	11 4	40.74 20.00	0	7.41 0.00	0	0.00	0	0.00
	Shajapur															
44	Sheopur	18	0.55	13.10	6	33.33	6 22	33.33	4	22.22	0	11.11	0	0.00	0	0.00
45	Shivpuri	30	0.95	7.50	1	3.33		73.33	7	23.33		0.00	0	0.00	0	0.00
46	Sidhi	31	2.25	12.53	0	0.00	11	35.48	16	51.61	4	12.90	0	0.00	0	0.00
47	Singrauli	22	2.71	11.06 22.07	0	0.00	11	50.00	10 7	45.45 30.43	2	4.55	1	0.00	0	0.00
	Tikamgarh		2.05 0.30			0.00		56.52				8.70		4.35		
49	Ujjain	40		12.70	8	20.00	20	50.00	11	27.50	1	2.50	0	0.00	0	0.00
50	Umaria	13	2.67	11.00	0	0.00	3	23.08	9	69.23	1	7.69	0	0.00	0	0.00
51	Vidisha	29	1.15	7.77	3	10.34	17	58.62	9	31.03	0	0.00	0	0.00	0	0.00
	Total	1297	0.08	37.76	168	12.95	589	45.41	422	32.54	105	8.10	13	1.00	0	0.00

S. No.		No. of			tribution	of Percen		ells for the			/-2022 ig Depth to \	Matar Laval	(mbal) in th		Annexure-	<u>v</u>
0. 140.	District	wells		Water Level bgl)		-2		-5		-10	· ·	-20		-40		40
		Analysed	Min	Max	No	%	No	-5	No	-10 %	No	-20	No No	%	No	%
1	Agar Malwa	15	0.19	12.56	2	13.33	2	13.33	10	66.67	1	6.67	0	0.00	0	0.00
2	Alirajpur	13	2.69	9.73	0	0.00	5	38.46	8	61.54	0	0.00	0	0.00	0	0.00
3	Anuppur	20	1.40	13.87	3	15.00	9	45.00	6	30.00	2	10.00	0	0.00	0	0.00
4	Ashok Nagar	20	0.73	11.18	1	5.00	6	30.00	11	55.00	2	10.00	0	0.00	0	0.00
5	Balaghat	38	1.60	12.20	6	15.79	21	55.26	10	26.32	1	2.63	0	0.00	0	0.00
6	Barwani	9	2.29	11.89	0	0.00	2	22.22	6	66.67	1	11.11	0	0.00	0	0.00
7	Betul	30	0.58	13.60	4	13.33	10	33.33	7	23.33	9	30.00	0	0.00	0	0.00
8	Bhind	19	0.65	31.56	2	10.53	5	26.32	4	21.05	5	26.32	3	15.79	0	0.00
9	Bhopal	27	0.98	11.93	5	18.52	10	37.04	10	37.04	2	7.41	0	0.00	0	0.00
10	Burhanpur	15	2.20	24.40	0	0.00	3	20.00	7	46.67	4	26.67	1	6.67	0	0.00
11	Chhatarpur	37	0.75	17.52	2	5.41	10	27.03	19	51.35	6	16.22	0	0.00	0	0.00
12	Chhindwara	36	1.67	12.98	3	8.33	10	27.78	21	58.33	2	5.56	0	0.00	0	0.00
13	Damoh	22	0.88	12.62	3	13.64	10	45.45	8	36.36	1	4.55	0	0.00	0	0.00
14	Datia	12	1.90	23.60	1	8.33	3	25.00	3	25.00	4	33.33	1	8.33	0	0.00
15	Dewas	21	2.91	17.75	0	0.00	7	33.33	11	52.38	3	14.29	0	0.00	0	0.00
16	Dhar	39	1.88	17.4 6	1	2.56	13	33.33	17	43.59	8	20.51	0	0.00	0	0.00
17	Dindori	16	0.40	10.35	4	25.00	7	43.75	4	25.00	1	6.25	0	0.00	0	0.00
18	Guna	22	1.52	13.23	2	9.09	7	31.82	9	40.91	4	18.18	0	0.00	0	0.00
19	Gwalior	19	2.00	32.60	1	5.26	7	36.84	4	21.05	5	26.32	2	10.53	0	0.00
20	Harda	13	1.40	11.50	2	15.38	4	30.77	6	46.15	1	7.69	0	0.00	0	0.00
21	Hoshangabad	18	1.50	15.00	1	5.56	5	27.78	8	44.44	4	22.22	0	0.00	0	0.00
22	Indore	32	1.78	10.41	2	6.25	12	37.50	17	53.13	1	3.13	0	0.00	0	0.00
23	Jabalpur	30	0.80	17.70	4	13.33	14	46.67	8	26.67	4	13.33	0	0.00	0	0.00
24	Jhabua	12	1.98	7.42	1	8.33	6	50.00	5	41.67	0	0.00	0	0.00	0	0.00
25	Katni	18	3.60	17.21	0	0.00	3	16.67	10	55.56	5	27.78	0	0.00	0	0.00
26	Khandwa	31	2.78	13.85	0	0.00	17	54.84	11	35.48	3	9.68	0	0.00	0	0.00
27	Khargone	22	1.99	12.74	1	4.55	7	31.82	11	50.00	3	13.64	0	0.00	0	0.00
28	Mandla	32	0.10	8.70	8	25.00	16	50.00	8	25.00	0	0.00	0	0.00	0	0.00
29	Mandsaur	36	1.25	26.60	2	5.56	18	50.00	10	27.78	5	13.89	1	2.78	0	0.00
30	Morena	13	2.20	24.60	0	0.00	5	38.46	1	7.69	4	30.77	3	23.08	0	0.00
31	Narsinghpur	14	0.20	13.20	1	51.43	5	35.71	6	42.86	2	14.29	0	0.00	0	0.00
32	Neemuch	34	0.80	9.70	11	32.35	15	44.12	8	23.53	0	0.00	0	0.00	0	0.00
33	Panna	26	1.48	20.38	1	3.85	7	26.92	14	53.85	3	11.54	1	3.85	0	0.00
34	Raisen	28	0.96	10.43	2	7.14	11	39.29	14	50.00	1	3.57	0	0.00	0	0.00
35	Rajgarh	26	1.05	11.10	1	3.85	11	42.31	10	38.46	4	15.38	0	0.00	0	0.00
36	Ratlam	40	1.62	15.52	1	2.50	7	17.50	15	37.50	17	42.50	0	0.00	0	0.00
37	Rewa	32	1.63	17.01	2	6.25	8	25.00	17	53.13	5	15.63	0	0.00	0	0.00
38	Sagar	46	1.44	22.46	1	2.17	13	28.26	23	50.00	8	17.39	1	2.17	0	0.00
39	Satna	46	1.68	18.60	3	6.52	23	50.00	17	36.96	3	6.52	0	0.00	0	0.00
40	Sehore	22	1.90	11.96	1	4.55	4	18.18	15	68.18	2	9.09	0	0.00	0	0.00
41	Seoni	44	0.70	10.30	7	15.91	22	50.00	14	31.82	1	2.27	0	0.00	0	0.00
42	Shahdol	27	2.00	13.50	1	3.70	14	51.85	8	29.63	4	14.81	0	0.00	0	0.00
43	Shajapur	22	2.15	11.90	0	0.00	11	50.00	10	45.45	1	4.55	0	0.00	0	0.00
44	Sheopur	18	1.20	14.20	2	11.11	7	38.89	5	27.78	4	22.22	0	0.00	0	0.00
45 46	Shivpuri	30 29	1.00	10.80	0	6.67 0.00	15 9	50.00	11	36.67	7	6.67	0	0.00	0	0.00
46	Sidhi	29	2.44 3.36	13.48 15.29	0	0.00	8	31.03 36.36	13 11	44.83 50.00	3	24.14 13.64	0	0.00	0	0.00
48	Singrauli	24	2.24	24.31	0	0.00	10	41.67	10	41.67	3	13.64	1	4.17	0	0.00
48	Tikamgarh	40	1.58	12.07	3	7.50	17	41.67	10	35.00	6	15.00	0	0.00	0	0.00
50	Ujjain Umaria	14	3.17	11.50	0	0.00	3	21.43	9	64.29	2	14.29	0	0.00	0	0.00
51	Vidisha	30	0.40	10.35	2	6.67	10	33.33	17	56.67	1	3.33	0	0.00	0	0.00
υı	Total	1301	0.40	32.60	102	7.84	484	37.20	531	40.81	170	13.07	14	1.08	0	0.00

District-Wise Annual Fluctuation & Frequency Distribution of Different Ranges from May 2020 to May 2021 Annexure -V Name of No. of Range in m Rise Fall Fall District wells Rise 2-4 m 0-2 m 2-4 m S.No 0-2 m >4 m Analysed Min Max % % No % Min No No No No No No No Agar Malwa 13 0.05 49.12 0.10 5.29 7.69 7.69 7.69 61.54 7.69 7.69 23.08 10 76.92 2 2 0 1 3 70.00 Alirajpur 10 1.10 2.48 0.11 4.73 20.00 10.00 0 0.00 6 60.00 0.00 10.00 30.00 3 Anuppur 16 0.20 1.90 0.20 4.40 11 68.75 0 0.00 0 3 18.75 1 6.25 1 6.25 11 68.75 5 31.25 0.00 4 Ashok Nagar 17 0.30 4.11 0.10 5.49 4 23.53 11.76 5.88 47.06 5.88 5.88 7 41.18 58.82 5 Balaghat 31 0.20 4.90 0.05 4.85 14 45.16 3 9.68 1 3.23 9 29.03 3 9.68 1 3.23 18 58.06 13 41.94 6 9 0.88 6.68 22.22 22.22 22.22 22.22 33.33 66.67 Barwani 2.99 0.72 2 11.11 0.00 2 2 6 1 0 2 3 Betul 26 0.01 7.38 0.01 5.05 10 38.46 7.69 7.69 19.23 19.23 7.69 14 53.85 12 46.15 8 Bhind 18 0.10 24.50 0.50 8.56 2 11.11 5.56 2 11.11 10 55.56 2 11.11 5.56 5 27.78 13 72.22 9 26 7 Bhopal 0.38 18.38 0.12 4.77 11 42.31 15.38 2 7.69 26.92 0 0.00 7.69 17 65.38 9 34.62 10 Burhanpur 9 0.07 5.35 0.43 3.28 3 33.33 11.11 11.11 3 33.33 1 11.11 0 0.00 5 55.56 44.44 11 Chhatarpur 28 0.15 3.75 0.20 6.02 1 3 57 2 7.14 0.00 13 46.43 9 32.14 3 10.71 3 10.71 25 89.29 0 12 Chhindwara 24 0.30 6.09 0.25 5.70 3 12.50 5 20.83 1 4.17 8 33.33 3 12.50 4 16.67 9 37.50 15 62.50 13 Damoh 15 0.05 2.85 33.33 6.67 40.00 13.33 6.67 9 60.00 0.20 4.12 0.00 2 40.00 5 1 0 6 6 1 14 Datia 11 0.10 7.50 0.20 3.65 2 18.18 9.09 9.09 45.45 18.18 0.00 36.36 63.64 0 15 Dewas 19 0.30 3.35 0.30 3.80 15.79 10.53 0 0.00 52.63 21.05 0.00 26.32 14 73.68 10 16 Dhar 35 4 2 3 17 48.57 6 9 0.25 10.78 0.10 10.52 11.43 5.71 8.57 17.14 8.57 25.71 26 74.29 17 Dindori 11 0.20 5.54 0.20 2.30 5 45.45 2 18.18 2 18.18 1 9.09 1 9.09 0 0.00 9 81.82 18.18 0.50 18 Guna 18 0.49 6.75 5.38 11.11 0.00 5.56 50.00 5 27.78 5.56 16.67 83.33 2 9 3 15 19 Gwalior 36.84 19 0.20 12.00 0.40 4.10 5.26 2 10.53 4 21.05 4 21.05 1 5.26 7 36.84 12 63.16 20 12 2.67 25.00 8.33 16.67 33.33 16.67 0.00 50.00 Harda 0.01 8.56 0.40 50.00 6 3 2 0 6 21 Hoshangabad 17 0.12 12.89 0.01 4.60 41.18 5.88 23.53 17.65 5.88 5.88 12 70.59 29.41 22 Indore 9 0.10 10.12 0.12 1.50 3 33.33 0.00 33.33 33.33 0 0.00 0.00 6 66.67 33.33 7 23 Jabalpur 12 2 2 16.67 16.67 0.30 17.83 0.30 0.90 58.33 8.33 16.67 0 0.00 0 0.00 10 83.33 24 Jhabua 10 0.48 0.88 0.22 3.30 2 20.00 0.00 0 60.00 2 20.00 0 0.00 20.00 8 80.00 0 0.00 6 25 Katni 14 0.30 3.30 0.05 1.80 4 28 57 2 14.29 0 0.00 8 57.14 0 0.00 0.00 6 42 86 8 57 14 0 26 Khandwa 26 0.67 5.59 0.43 5.95 7 26.92 2 7.69 1 3.85 10 38.46 4 15.38 2 7.69 10 38.46 16 61.54 27 Khargone 19 0.22 0.57 0.17 5.44 4 21.05 0.00 0 0.00 42.11 31.58 5.26 4 21.05 15 78.95 0 8 6 1 28 Mandla 31 0.20 5.80 3.50 13 41.94 16.13 3.23 35.48 3.23 0.00 19 61.29 12 38.71 0.10 29 Mandsaur 32 0.10 22.02 0.29 22.60 21.88 6.25 4 12.50 11 34.38 2 6.25 18.75 13 40.63 19 59.38 30 Morena 11 0.05 16.40 0.60 0.60 3 27.27 1 9.09 6 54.55 1 9.09 0 0.00 0 0.00 10 90.91 9.09 31 Narsinghpur 14 0.51 5.40 0.34 14.75 2 14.29 3 21.43 1 7.14 5 35.71 0 0.00 21.43 6 42.86 8 57.14 32 Neemuch 25 0.60 4.45 0.30 17.00 12.00 0.00 4.00 28.00 20.00 36.00 16.00 84.00 3 0 5 4 33 Panna 25 0.10 1.60 0.10 14.41 7 28.00 0 0.00 0 0.00 13 52.00 4 16.00 1 4.00 7 28.00 18 72.00 34 Raisen 23 0.05 4.28 0.57 3.30 12 52.17 13.04 8.70 13.04 13.04 0.00 73.91 26.09 3 2 17 6 3 3 0 35 Rajgarh 24 0.20 8.95 0.15 7.60 8.33 8.33 4.17 10 41.67 20.83 16.67 20.83 79.17 Ratlam 36 34 0.13 34.70 0.10 8.90 7 20.59 2 5.88 4 11.76 12 35.29 8.82 17.65 13 38.24 21 61.76 37 Rewa 23 1.30 5 9 39.13 3 13.04 21.74 78.26 0.15 0.05 13.67 21.74 0 0.00 0 0.00 26.09 5 18 38 Sagar 35 0.15 4.98 0.17 5.28 6 17.14 4 11.43 2.86 45.71 11.43 11.43 11 31.43 68.57 16 39 Satna 38 0.40 12.75 0.05 6.19 9 23.68 2 63 2.63 23 60.53 2 5.26 2 5.26 11 28 95 27 71.05 1 45.00 75.00 40 Sehore 20 0.60 3.60 0.20 10.46 3 15.00 2 10.00 0 0.00 9 2 10.00 4 20.00 5 25.00 15 41 Seoni 32 0.15 7.00 0.25 5.47 34.38 18.75 3.13 31.25 9.38 3.13 18 56.25 14 43.75 11 10 3 6 1 1 42 Shahdol 23 0.20 5.50 0.10 5.23 4 17.39 8.70 8.70 47.83 13.04 4.35 34.78 15 65.22 11 8 43 Shajapur 17 0.20 26.90 0.25 14 20 2 11 76 5.88 2 11 76 6 35 29 17.65 17.65 5 29 41 12 70.59 44 Sheopur 18 7.45 5 2 1 5.56 33.33 3 16.67 1 44.44 55.56 0.25 0.10 4.45 27.78 11.11 6 5.56 8 10 45 Shivpuri 29 0.40 8.60 0.30 5.30 6 20.69 3.45 3 10.34 15 51.72 1 3.45 3 10.34 10 34.48 19 65.52 46 Sidhi 16 0.05 5.45 0.20 4.70 12.50 0.00 6.25 68.75 6.25 6.25 18.75 81.25 2 0 11 1 3 13 47.06 47 17 Singrauli 0.10 7.45 0.20 2.20 7 41.18 0 0.00 1 5.88 8 1 5.88 0 0.00 8 47.06 9 52.94 48 Tikamgarh 18 5.10 16.67 0.00 55.56 22.22 5.56 16.67 83.33 0.10 0.45 0.10 3 0 0 0.00 10 4 3 15 49 Ujjain 27 3.70 44.44 0.20 4.90 0.08 10.80 25.93 3.70 12 11.11 11.11 33.33 18 66.67 50 Umaria 13 0.40 3.70 0.20 7.70 5 38.46 7.69 0 0.00 5 38.46 0 0.00 15.38 6 46.15 53.85 51 Vidisha 2 24 0.13 3.47 0.07 6.17 10 41.67 4.17 0 0.00 11 45.83 0 0.00 8.33 11 45.83 13 54.17

Total

1043

0.01

49.12

0.01 22.60

25.31

80 7.67 68 6.52 416 39.88

123 11.79

92 8.82 412

39.50

631

60.50

District-Wise Annual Fluctuation & Frequency Distribution of Different Ranges from August 2020 to August 2021 Annexure -VI Range in m Fall Rise Fall S. No 0-2 m 2-4 m >4 m 0-2 m 2-4 m >4 m Min No Max Max No Min No No No No No Agar Malwa 16 0.03 4.87 0.14 2.53 12.50 6.25 56.25 6.25 0.00 37.50 62.50 18.75 2 Alirajpur 63.64 11 0.15 2.15 0.10 8.22 27.27 9.09 0 0.00 3 27.27 18.18 2 18.18 4 36.36 Anuppur 16 0 43.75 50.00 3 0.08 0.72 0.16 2.44 8 50.00 0.00 0 0.00 6.25 0 0.00 8 50.00 8 4 Ashok Nagar 19 0.02 2.40 0.10 47.37 5.26 0 0.00 42.11 5.26 0.00 10 52.63 47.37 5 Balaghat 36 0.31 0.79 0.09 3.48 16.67 0 0.00 0 0.00 26 72.22 4 11.11 0.00 16.67 30 83.33 9 33.33 33.33 66.67 6 Barwani 0.31 2.93 0.88 6.08 2 22.22 11.11 0 0.00 3 0 0.00 33.33 3 6 Betul 28 0.34 2.05 0.04 8.38 7.14 3.57 0.00 53.57 21.43 14.29 3 10.71 25 89.29 15 6 8 Bhind 16 0.50 10.10 0.20 14.40 43.75 18.75 6.25 18.75 6.25 6.25 11 68.75 31.25 9 Bhopal 26 0.02 1.10 0.02 3.60 12 46.15 0.00 0.00 12 46.15 2 7.69 0.00 12 46.15 14 53.85 10 Burhanpur 10 100.00 0.40 6.04 0 0.00 0 0.00 0 0.00 5 50.00 4 40.00 10.00 0 0.00 10 11 Chhatarpur 31 0.17 4.12 0.10 6.25 25.81 3.23 3.23 11 35.48 22.58 9.68 10 32.26 21 67.74 12 Chhindwara 31 0.08 4.80 0.09 5.99 9 29.03 1 3.23 1 3.23 14 45.16 5 16.13 3.23 11 35.48 20 64.52 13 Damoh 16 0.30 2.60 0.05 4.88 2 12.50 1 6.25 0 0.00 10 62.50 1 6.25 2 12.50 3 18.75 13 81.25 14 Datia 63.64 11 0.30 1.00 13.30 18.18 9.09 9.09 18.18 18.18 27.27 36.36 4.80 2 4 2 1 2 3 15 Dewas 22 4.55 40.91 4.31 0.16 9.09 4.55 18.18 22.73 81.82 16 Dhar 38 0.30 9.45 0.08 36.04 0.00 2.63 16 42.11 15.79 12 31.58 10.53 89.47 17 Dindori 15 0 0 73.33 0.25 1.44 0.02 2.85 26.67 0.00 0.00 10 66.67 6.67 0.00 4 26 67 11 18 Guna 20 6.44 0.47 11 2 10.00 25.00 15 75.00 25.00 0.03 0.91 55.00 2 10.00 5 0 0.00 0 0.00 19 Gwalior 18 0.40 2.35 33.33 2 11.11 0 0.00 27.78 3 11.11 44 44 55.56 0.30 18.40 16.67 10 20 Harda 13 2.01 2.01 0.18 4 80 0 0.00 7.69 0 0.00 6 46.15 2 15.38 30.77 7.69 12 92.31 21 Hoshangabad 16 2.55 0.00 6.25 37.50 43.75 6.25 12.50 87.50 6.60 0.18 9.60 0 6.25 6 7 2 14 22 Indore 31 0.22 1.00 0.05 9.85 22.58 0.00 0.00 13 41.94 16.13 19.35 22.58 24 77.42 23 Jabalpui 25 0.05 3.95 0.13 12.58 16.00 4.00 0.00 44.00 24.00 12.00 20.00 80.00 24 Jhabua 12 0.22 2.00 0.08 6.29 5 41.67 0.00 0 0.00 41.67 0 0.00 16.67 41.67 58.33 25 Katni 17 7 41.18 58.82 0.14 3.78 0.55 3.42 35.29 1 5.88 0 0.00 29.41 5 29.41 0.00 10 6 5 0 26 Khandwa 31 0.81 0.94 0.08 0.00 18 58.06 29.03 6.45 93.55 27 Khargone 0.20 22 0.07 1.44 5.61 5 22.73 0 0.00 0 0.00 9 40.91 6 27.27 2 9.09 5 22.73 17 77.27 28 Mandla 32 0.05 2.64 0.01 2.92 7 21.88 1 3.13 0 0.00 22 68.75 2 6.25 0 0.00 8 25.00 24 75.00 29 Mandsaur 35 0.40 97.14 2.86 0.30 16.80 0.40 15 42.86 12 34.29 20.00 2.86 0.00 0.00 34 0 0 30 Morena 13 30.77 7.69 0.00 10 2.20 17.00 0.60 2.10 0.00 15.38 76.92 23.08 31 Narsinghpur 12 1.10 1.10 0.23 8.13 8.33 0.00 0.00 66.67 8.33 16.67 8.33 11 91.67 32 Neemuch 33 0.10 4.30 0.10 1.70 25 75.76 2 6.06 3.03 5 15.15 0 0.00 0 0.00 28 84.85 5 15.15 33 Panna 25 1.88 0 0.00 64.00 16.00 84.00 0.12 0.17 5.60 16.00 0 0.00 16 16.00 4.00 21 34 Raisen 28 0.05 11.65 0.02 5.50 12 42.86 0 0.00 2 7.14 11 39.29 3.57 7.14 14 50.00 14 50.00 35 Rajgarh 24 0.07 2.45 0.05 4 45 9 37.50 4.17 0 0.00 13 54.17 0 0.00 4.17 10 41 67 14 58.33 36 Ratlam 38 0.15 5.75 0.40 3.10 42.11 13.16 10.53 18.42 15.79 0.00 65.79 34.21 16 5 4 7 6 0 25 13 37 31 0.04 4.72 0.09 4.85 25.81 3.23 3.23 54.84 9.68 3.23 10 32.26 21 67.74 38 37 51.35 Sagar 0.05 7.35 0.04 8.11 8.11 13.51 11 29.73 70.27 39 Satna 47 0.02 13.45 0.10 3.31 11 23.40 4 8.51 2.13 25 53.19 12.77 0.00 16 34.04 65.96 Sehore 40 22 0 9 40.91 13 59.09 0.02 6.60 0.02 6.00 36.36 0.00 4.55 36.36 2 9.09 13.64 8 8 41 Seoni 43 0.84 0.00 65.12 2.33 13.95 37 86.05 42 Shahdol 24 0.08 3.68 0.02 5.98 8 33.33 1 4 17 0 0.00 10 41.67 4 16.67 4.17 q 37.50 15 62.50 43 Shajapur 18 0.05 2.87 0.01 0.76 8 44.44 1 5.56 0 0.00 9 50.00 0 0.00 0 0.00 9 50.00 9 50.00 44 Sheopur 17 0.70 11.75 0.20 8.40 11.76 5 29.41 2 11.76 23.53 3 17.65 5.88 9 52.94 47.06 2 8 4 45 Shivpuri 30 4.80 0.10 16.67 3.33 43.33 2 6.67 0.00 15 50.00 15 50.00 0.20 3.00 30.00 13 46 Sidhi 29 0.10 5.90 0.01 3.81 10 34.48 6 20.69 6.90 27.59 10.34 0.00 18 62.07 11 37.93 47 Singrauli 21 2 17 19.05 0.01 9.09 0.12 5.15 13 61.90 9.52 9.52 3 14.29 0 0.00 4.76 80.95 4 48 Tikamgarh 13 0.52 7.69 0 0.00 0.00 46.15 23.08 7.69 12 92.31 0.52 0.18 8.72 6 23.08 49 Ujjain 36 4.20 44.44 0.00 30.56 17 47.22 52.78 16 2.78 11 16.67 5.56 50 Umaria 13 0.08 6.65 0.01 2 25 5 38.46 0 0.00 1 7 69 6 46 15 1 7 69 Λ 0.00 6 46.15 53.85 51 Vidisha 30 0.13 1.80 0.01 2.30 18 60.00 0.00 0.00 36.67 3.33 0.00 18 60.00 40.00 0 0 11 0 12 Total

75 6.21 45 3.73 508 42.09 154 12.76 80 6.63 465

38.53

742

61.47

1207

2.55

0.52 0.01 36.04 345

District-Wise Annual Fluctuation & Frequency Distribution of Different Ranges from November 2020 to November 2021 Annexure -VII Range in m Rise Fall Rise Fall S. No 0-2 m 2-4 m >4 m 0-2 m 2-4 m >4 m Min No Max Max No No No No No Agar Malwa 14 1.05 35.71 28.57 35.71 0.00 0.00 0.00 14 0.00 100.00 2 Alirajpur 66.67 12 0.17 2.86 0.13 4.21 2 16.67 2 16.67 0 0.00 6 50.00 8.33 8.33 33.33 Anuppur 15 0.2 40.00 53.33 46.67 3 0.20 1.6 3.29 53.33 0 0.00 0 0.00 6 6.67 0 0.00 8 4 Ashok Nagar 20 0.05 3.48 0.4 8.2 11 55.00 3 15.00 0 0.00 15.00 2 5.00 14 70.00 30.00 5 Balaghat 39 0.05 3.68 0.08 2.8 6 15.38 2.56 0 0.00 29 74.36 3 7 69 0.00 17.95 32 82.05 9 0.17 1.09 44.44 0.00 22.22 77.78 6 Barwani 1.43 7.25 2 22.22 0.00 0 0.00 0 33.33 Betul 28 0.05 8.45 0.05 6.2 10.71 10.71 14.29 53.57 3.57 7.14 10 35.71 18 64.29 15 8 Bhind 15 0.55 10.41 0.2 4.12 33.33 26.67 13.33 20.00 0 0.00 6.67 11 73.33 26.67 2 9 Bhopal 25 0.08 3.31 0.08 5.6 8 32.00 4.00 0.00 13 52.00 2 8.00 4.00 36.00 16 64.00 10 Burhanpur 16 12.50 0.10 15.6 0.28 5.8 43.75 4 25.00 18.75 6.25 0 0.00 6.25 14 87.50 11 Chhatarpur 34 0.10 3.35 0.1 7.2 26.47 11.76 0.00 15 44.12 8.82 8.82 13 38.24 21 61.76 12 Chhindwara 32 0.03 0.59 0.04 6.66 5 15.63 0 0.00 0 0.00 14 43.75 9 28.13 4 12.50 5 15.63 27 84.38 13 Damoh 18 0.20 6.84 0.09 4.25 4 22.22 0 0.00 2 11.11 10 55.56 1 5.56 1 5.56 6 33.33 12 66.67 14 Datia 12 16.67 0.05 5.5 0.15 50.00 25.00 8.33 0.00 8.33 10 83.33 7.3 3 8.33 0 2 6 15 Dewas 21 0.13 12 3.8 42.86 14.29 28.57 9.52 42.86 16 Dhar 37 0.05 0.11 5.89 15 40.54 13.51 5.41 29.73 2.70 22 59.46 15 40.54 17 Dindori 14 1 7.14 6 57.14 0.10 2.4 0.05 3.8 35.71 0 0.00 50.00 7.14 0 0.00 42.86 8 18 Guna 21 7.48 0.1 4.76 19.05 4.76 16 76.19 23.81 0.08 5.9 13 61.90 9.52 4 0 0.00 5 19 Gwalior 20 11.55 0.15 10 50.00 4 20.00 10.00 0 0.00 5.00 17 85.00 15.00 0.08 4.56 15.00 2 3 20 Harda 13 0.05 2.3 0.05 11 4 30.77 2 15.38 0 0.00 6 46.15 0 0.00 7.69 6 46.15 53.85 68.75 21 Hoshangabad 16 0.05 0.36 18.75 6.25 43.75 12.50 12.50 31.25 4.85 6.5 3 6.25 2 5 11 22 Indore 31 0.22 2.96 0.11 6.15 29.03 9.68 0.00 18 58.06 0.00 3.23 12 38.71 19 61.29 23 Jabalpui 27 0.10 3.3 0.1 9.6 18.52 7.41 0.00 13 48.15 18.52 7.41 25.93 74.07 24 Jhabua 11 0.47 0.82 0.32 3.02 27.27 0.00 0.00 54.55 18.18 0.00 27.27 72.73 25 Katni 16 1.5 0.1 43.75 50.00 0.10 50.00 0 0.00 0 0.00 0.00 6.25 8 50.00 8 4.2 8 0 26 Khandwa 30 0.10 11.29 0.02 1.95 18 60.00 3 10.00 23.33 0.00 0.00 23 76.67 23.33 27 Khargone 22 0.10 4.3 0.07 5.68 8 36.36 0 0.00 4.55 9 40.91 4.55 3 13.64 9 40.91 13 59.09 28 Mandla 31 0.10 3 0.1 1.7 13 41.94 2 6.45 0 0.00 16 51.61 0 0.00 0 0.00 15 48.39 16 51.61 29 Mandsaur 36 2.05 36.11 35 2.78 0.60 13.53 2.05 13 30.56 30.56 0.00 2.78 0.00 97.22 11 11 0 1 0 30 Morena 10 17 0.2 40.00 10.00 20.00 0.00 20.00 0.50 1.25 0.00 80.00 31 Narsinghpur 15 0.09 6.07 0.28 2.46 46.67 0.00 20.00 26.67 6.67 0.00 10 66.67 33.33 32 Neemuch 33 0.30 28.82 0.55 0.55 27.27 9 27.27 14 42.42 3.03 0 0.00 0 0.00 32 96.97 3.03 33 Panna 26 2.55 3 11.54 0.00 50.00 11.54 34.62 17 65.38 0.05 0.05 6.7 23.08 0 13 3.85 34 Raisen 28 0.10 1.52 0.1 4.88 10 35.71 0 0.00 0 0.00 12 42.86 4 14.29 7.14 10 35.71 18 64.29 35 Rajgarh 27 0.07 7.42 0.25 2.2 12 44 44 25.93 3 11.11 4 14 81 1 3.70 Λ 0.00 22 81.48 5 18.52 36 Ratlam 37 0.10 8.7 0.25 1.95 56.76 13.51 18.92 0.00 0.00 81.08 18.92 21 5 4 10.81 7 0 0 30 7 37 30 0.50 3.5 0.1 0.95 20 13.33 0.00 20.00 0.00 0.00 24 80.00 20.00 38 7.69 38.46 Sagar 39 0.04 5.1 7.69 10.26 56.41 39 Satna 44 0.05 3.8 0.05 3.36 21 47.73 11.36 0.00 16 36.36 4.55 0.00 26 59.09 18 40.91 Sehore 40 23 0.2 11 47.83 2 14 39.13 0.50 4 8.70 4.35 26.09 4.35 2 8.70 60.87 6.5 6 41 Seoni 43 4.45 4.78 2.33 2.33 55.81 4.65 34 79.07 42 Shahdol 25 0.10 5.5 0.1 3.9 12 48.00 4.00 4.00 9 36.00 2 8.00 Λ 0.00 14 56.00 11 44.00 43 Shajapur 18 0.38 6.4 1.45 1.45 6 33.33 8 44.44 3 16.67 1 5.56 0 0.00 0 0.00 17 94.44 1 5.56 44 Sheopur 18 1.30 24.35 11.11 38.89 50.00 0.00 0 0.00 0.00 18 100.00 0.00 9 0 0 0 45 Shivpuri 29 0.05 5.95 0.55 1.4 14 48.28 31.03 10.34 0.00 26 89.66 10.34 10.34 0 0.00 46 Sidhi 31 0.10 2.6 0.05 17 54.84 2 6.45 0.00 11 35.48 3.23 0.00 19 61.29 12 38.71 47 Singrauli 0.1 54.55 0 15 7 31.82 22 0.20 10.8 6.47 12 0.00 13.64 5 22.73 4.55 4.55 68.18 48 Tikamgarh 19 4.4 0.8 26.32 5 26.32 5.26 21.05 5.26 15.79 11 57.89 42.11 0.35 16.4 49 Ujjain 40 27 2.50 75.00 25.00 67.50 2 20.00 50 Umaria 12 0.10 1.1 0.6 3 1 58.33 0 0.00 0 0.00 4 33 33 1 8.33 0 0.00 7 58.33 5 41 67 51 Vidisha 29 0.05 0.35 2.52 15 51.72 10.34 3.45 31.03 3.45 0.00 19 65.52 34.48 10.5 9 0 10

Total

1233

0.03

0.01 16.40 473

38.36

143 | 11.60 | 94 | 7.62 | 403 | 32.68 | 68 | 5.52

4.22

710

57.58

523

42.42

District-Wise Annual Fluctuation & Frequency Distribution of Different Ranges from January 2021 to January 2022 Annexure -VIII Range in m Rise Fall District Analysed Rise Fall 2-4 m S. No 2-4 m 0-2 m >4 m 0-2 m >4 m Max No No % Min Max No No No No No No Agar Malwa 15 0.09 6.24 0.6 0.6 53.33 20.00 3 20.00 6.67 0 0.00 0.00 14 93.33 6.67 2 7 Alirajpur 13 1 0 6 46.15 53.85 0.08 2.38 0.15 7.35 5 38.46 7.69 0.00 6 46.15 0 0.00 7.69 11.11 11.11 3 Anuppur 18 0.06 1.79 0.25 0.97 16 88.89 0 0.00 0 0.00 2 0 0.00 0 0.00 16 88.89 2 4 Ashok Naga 20 0.02 6.97 0.01 25.00 2 10.00 4 20.00 25.00 3 15.00 5.00 55.00 45.00 5 Balaghat 37 0.02 2 12 0.03 4.03 16 43 24 1 2 70 0 0.00 18 48 65 1 2 70 2 70 17 45 95 20 54.05 9 0.01 1.92 33.33 22.22 33.33 33.33 66.67 6 Barwani 0.84 5.89 0.00 0.00 11.11 6 3 0 0 2 3 3 7 Betul 27 0.05 9.55 0.05 2.75 40.74 7.41 7.41 37.04 7.41 0.00 44.44 11 2 2 10 2 0 15 55.56 12 Bhind 19 26.32 10.53 8 0.4 12.4 0.04 2.5 10 52.63 5.26 5.26 0.00 16 84.21 15.79 9 Bhopal 27 0.05 6.82 0.03 9.47 18 66.67 3.70 3.70 5 18.52 3.70 3.70 20 74.07 25.93 10 Burhanpur 13 0.12 7.5 0.32 5.25 53.85 0 0.00 3 23.08 7.69 7.69 7.69 10 76.92 3 23.08 11 Chhatarpur 36 0.3 7.47 0.12 3.17 25.00 8 22.22 11.11 11 30.56 4 11.11 0 0.00 21 58.33 15 41.67 12 Chhindwara 35 0.06 8 36 0.04 8 86 12 34.29 0 0.00 1 2 86 10 28 57 8 22 86 4 11 43 13 37.14 22 62 86 0.07 13 Damoh 19 0.09 4.67 3.98 5 26.32 1 5.26 1 5.26 8 42.11 4 21.05 0 0.00 7 36.84 12 63.16 12 14 Datia 9.4 0.65 25.00 75.00 25.00 0.15 1.6 41.67 8.33 25.00 0 0.00 0.00 3 5 1 3 3 0 9 15 Dewas 21 0.39 6.5 0.1 4.9 38.10 0 0.00 4.76 42.86 9.52 4.76 42.86 12 57.14 16 Dhar 37 0.11 13.42 0.05 10.29 11 29.73 6 16.22 10.81 13 35.14 2.70 5.41 21 56.76 16 43.24 17 Dindori 16 1.7 87.50 0 0 12.50 14 87.50 2 12.50 0.11 0.38 0.42 14 0.00 0.00 2 0 0.00 0 0.00 18 Guna 22 0.23 7.75 0.04 1.3 22.73 10 45.45 4 18.18 13.64 0 0.00 0 0.00 19 86.36 3 13.64 3 19 Gwalion 20 0.34 3 16.67 4 0 88.89 18 0.15 50.00 22.22 2 11.11 0.00 0.00 16 2 11.11 20 Harda 13 0.02 2.2 0.33 2 47 7 53.85 2 15.38 0 0.00 3 23.08 1 7 69 Λ 0.00 9 69 23 4 30.77 21 Hoshangabad 18 66.67 72.22 0.1 0.93 0.05 5.6 5 27.78 0 0.00 0 0.00 12 0 0.00 5.56 5 27.78 13 22 Indore 32 0.04 8 0.05 3.17 12 37.50 12.50 5 15.63 9 28.13 2 6.25 0.00 21 65.63 11 34.38 0 23 Jabalpur 29 0.01 3.06 0.09 3.99 19 65.52 3.45 0.00 20.69 10.34 0.00 20 68.97 31.03 24 Jhabua 12 0.04 0.73 0.04 2.65 4 33.33 0 0.00 0 0.00 6 50.00 2 16.67 0 0.00 4 33.33 66.67 25 Katni 18 2.75 38.89 5.56 0 44.44 2 11.11 8 44.44 55.56 0.05 0.05 2.69 0.00 8 0 0.00 10 26 Khandwa 30 0.08 6.73 0.15 8.95 13 43.33 4 13.33 6.67 23.33 2 6.67 6.67 19 63.33 11 36.67 27 Khargone 22 0.21 3.15 0.13 6.54 8 2.00 1 4 55 0 0.00 10 45.45 2 9.09 1 4 55 9 40.91 13 59.09 28 Mandla 0.06 37.50 37.50 32 0.01 1.58 0.9 20 62.50 0 0.00 0 0.00 12 0 0.00 0 0.00 20 62.50 12 29 Mandsaur 36 0.4 10.4 0.2 6.18 25.00 15 41.67 22.22 5.56 2.78 2.78 32 88.89 4 11.11 9 8 2 1 30 Morena 10 1.4 12.9 0.45 0.7 40.00 10.00 30.00 20.00 0 0.00 0.00 8 80.00 20.00 31 Narsinghpur 13 0.07 7.3 0.23 2.43 46.15 0 0.00 7.69 38.46 7.69 0 0.00 53.85 46.15 11.76 32 Neemuch 34 0.36 29.35 0.05 0.57 5 14.71 6 17.65 19 55.88 4 11.76 0 0.00 0 0.00 30 88.24 4 33 Panna 45.83 4.17 29.17 70.83 24 0.45 2 0.1 29.17 0 0.00 0 0.00 11 5 20.83 17 5 34 Raisen 28 7.89 1.56 23 2 7.14 7.14 0 0.00 92.86 7.14 0.07 1.08 82.14 3.57 2 0.00 0 26 2 35 Rajgarh 25 0.09 7.1 0.1 1 42 11 44 00 7 28.00 4 16.00 3 12 00 0 0.00 Λ 0.00 22 88 00 3 12 00 36 Ratlam 40 0.05 16.7 0.07 4.4 9 22.50 10 25.00 15.00 27.50 2 5.00 2 5.00 25 62.50 15 37.50 6 11 37 Rewa 32 0.02 3.89 0.18 2.78 14 43.75 12 37.50 0.00 15.63 3.13 0.00 26 81.25 18.75 0 5 0 6 38 Sagar 43 23.26 39.53 51.16 0.21 6.84 0.1 5.11 20.93 10 4.65 9.30 2.33 21 48.84 39 Satna 43 0.05 4 0.15 3.15 24 55.81 16.28 0 0.00 11 25.58 2.33 0 0.00 31 72.09 12 27.91 40 Sehore 22 7.07 4 27.27 15 0.02 0.1 3.5 10 45.45 18.18 4.55 1 4.55 0 68.18 31.82 6 0.00 41 Seoni 44 0.15 6.02 8.01 19 43.18 3 2.27 31.82 3 6.82 9.09 52.27 47.73 42 Shahdol 25 0.02 7.2 0.01 22 14 56.00 2 8 00 1 4 00 7 28.00 1 4.00 Ω 0.00 17 68.00 8 32.00 43 Shaiapur 19 0.03 4.63 0.12 10 52.63 15.79 10.53 15.79 5.26 21.05 2.01 3 2 3 1 0 0.00 15 78.95 4 44 Sheopur 18 0.45 21 0.35 0.35 6 33.33 4 22.22 7 38.89 5.56 0 0.00 0 0.00 17 94.44 1 5.56 45 Shivpuri 30 0.2 10.2 0.1 2.8 23.33 30.00 30.00 13.33 3.33 0.00 25 83.33 16.67 46 Sidhi 29 0.04 3.85 0.01 1.7 21 72.41 2 6.90 0 0.00 20.69 0 0.00 0 0.00 23 79.31 6 20.69 47 Singrauli 22 0.08 2.62 0.07 1.28 15 68.18 2 9.09 0 0.00 22.73 0.00 0.00 17 77.27 5 22.73 5 0 0 48 Tikamgarh 24 7.48 5 54.17 37.50 62.50 1.02 0.21 5.35 8.33 20.83 2 8.33 13 0 0.00 2 8.33 9 15 49 Ujjain 40 0.22 5.27 0.03 1.9 13 32.50 9 22.50 3 7.50 15 37.50 0 0.00 0 0.00 62.50 37.50 25 15 50 Umaria 13 0.1 1.56 0.02 15 5 38 46 Λ 0.00 0 0.00 8 61 54 0 0.00 Λ 0.00 5 38 46 8 61 54 51 Vidisha 30 56.67 73.33 26.67 0.21 13.22 0.08 2.31 17 4 13.33 3.33 20.00 2 6.67 0 0.00 22 8 6

Total

1264

0.01

29.35 0.01 10.29 532

42.09

174 | 13.77 | 114 | 9.02 | 347 | 27.45 | 69 | 5.46 | 28 | 2.22

820 64.87

444

35.13

	District-Wise S Name of District	Seasonal Flu	ctuation			ibution c	of Differ	ent Ranges fr		2021 to A	August 2	2021				F-11					Annexur	e -IX
	Traine or Bibliot	Analysed		Range					Rise							Fall			,	Rise	1	Fall
S. No.				se		all		0-2 m		4 m		4 m		2 m		!-4 m		>4 m				1
_	A M-1		Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
2	Agar Malwa	14	0.42	12.32	-	-	2	7.14	1	7.14	12	85.71	0	0.00	0	0.00	0	0.00	14	100.00	0	0.00
3	Alirajpur	10	0.12	4.62 6.96	1.58	2.10	6	20.00	7	30.00	7	30.00	0	0.00	0	0.00	0	0.00	8 20	80.00 100.00	0	20.00
4	Anuppur Ashok Nagar	20	1.42	14.55	-	-	3	15.00	7	35.00	10	50.00	0	0.00	0	0.00	0	0.00	20	100.00	0	0.00
5	Balaghat	32	0.35	7.44	0.07	0.07	13	40.63	11	34.38	7	21.88	1	3.13	0	0.00	0	0.00	31	96.88	1	3.13
6	Barwani	9	2.12	5.52	1.29	5.52	0	0.00	5	55.56	2	22.22	1	11.11	0	0.00	1	11.11	7	77.78	2	22.22
7	Betul	25	0.01	10.09	1.13	1.13	3	12.00	4	16.00	17	68.00	1	4.00	0	0.00	0	0.00	24	96.00	1	4.00
8	Bhind	17	0.50	5.40	3.00	3.00	6	35.29	7	41.18	3	17.65	0	0.00	1	5.88	0	0.00	16	94.12	1	5.88
9	Bhopal	25	0.02	12.22	0.13	0.78	7	28.00	2	8.00	12	48.00	4	16.00	0	0.00	0	0.00	21	84.00	4	16.00
10	Burhanpur	10	0.02	8.93	0.13	0.70	5	50.00	3	30.00	2	20.00	0	0.00	0	0.00	0	0.00	10	100.00	0	0.00
11	Chhatarpur	34	0.25	8.30	-	-	5	14.71	21	61.76	8	23.53	0	0.00	0	0.00	0	0.00	34	100.00	0	0.00
12	Chhindwara	28	0.73	11.38	-		8	28.57	15	53.57	5	17.86	0	0.00	0	0.00	0	0.00	28	100.00	0	0.00
13	Damoh	16	0.35	11.25	0.10	0.40	5	31.25	6	37.50	2	12.50	3	18.75	0	0.00	0	0.00	13	81.25	3	18.75
14	Datia	12	0.60	11.20	0.10	10.00	3	25.00	3	25.00	4	33.33	1	8.33	0	0.00	1	8.33	10	83.33	2	16.67
15	Dewas	20	0.00	25.42	0.89	0.89	2	10.00	4	20.00	13	65.00	1	5.00	0	0.00	0	0.00	19	95.00	1	5.00
16	Dhar	38	0.35	17.52	0.89	25.08	15	39.47	12	31.58	8	21.05	2	5.26	0	0.00	1	2.63	35	92.11	3	7.89
17	Dindori	16	0.35	16.82	0.34	25.08	9	56.25	6	37.50	1	6.25	0	0.00	0	0.00	0	0.00	16	100.00	0	0.00
18	Guna	21	0.15	18.83	-	-	1	4.76	3	14.29	17	80.95	0	0.00	0	0.00	0	0.00	21	100.00	0	0.00
19	Guila	17	0.20	7.00	1.70	2.30	3	17.65	7	41.18	5	29.41	1	5.88	1	5.88	0	0.00	15	88.24	2	11.76
20	Harda		0.66	4.82	0.46	1.11	2	16.67	4	33.33	4	33.33	2	16.67	0	0.00	0	0.00	10	83.33	2	16.67
21	Hoshangabad	12	0.62	7.98	0.40	5.83	5	33.33	3	20.00	4	26.67	2	13.33	0	0.00	1	6.67	12	80.00	3	20.00
22	Indore	29	0.02	8.15	3.96	3.96	12	41.38	7	24.14	9	31.03	0	0.00	1	3.45	0	0.00	28	96.55	1	3.45
23	Jabalpur	29	0.10	4.82	0.08	2.70	16	55.17	5	17.24	2	6.90	5	17.24	1	3.45	0	0.00	23	79.31	6	20.69
24	Jhabua	12	0.12	6.23	0.08	0.30	2	16.67	4	33.33	4	33.33	2	16.67	0	0.00	0	0.00	10	83.33	2	16.67
25	Katni	17	0.44	7.78	0.07	2.22	4	23.53	6	35.29	5	29.41	1	5.88	1	5.88	0	0.00	15	88.24	2	11.76
26	Khandwa	28	0.27	9.90	0.18	2.56	2	7.14	10	35.71	13	46.43	1	3.57	2	7.14	0	0.00	25	89.29	3	10.71
27	Khargone	20	0.12	3.62	0.15	0.22	11	55.00	7	35.00	0	0.00	2	10.00	0	0.00	0	0.00	18	90.00	2	10.00
28	Mandla	32	0.12	6.62	0.13	1.86	14	43.75	11	34.38	5	15.63	2	6.25	0	0.00	0	0.00	30	93.75	2	6.25
29	Mandsaur	32	1.70	26.42	0.13	1.00	1	3.13	2	6.25	29	90.63	0	0.00	0	0.00	0	0.00	32	100.00	0	0.00
30	Morena	13	0.10	9.90	0.01	1.90	6	46.15	1	7.69	3	23.08	3	23.08	0	0.00	0	0.00	10	76.92	3	23.08
31	Narsinghpur	11	0.28	7.65	0.52	7.35	2	18.18	4	36.36	3	27.27	1	9.09	0	0.00	1	9.09	9	81.82	2	18.18
32	Neemuch	28	1.00	26.95	0.55	0.55	3	10.71	4	14.29	20	71.43	1	3.57	0	0.00	0	0.00	27	96.43	1	3.57
33	Panna	25	0.10	22.98	1.77	1.77	5	20.00	8	32.00	11	44.00	1	4.00	0	0.00	0	0.00	24	96.00	1	4.00
34	Raisen	26	0.36	11.65	0.45	0.45	4	15.38	8	30.77	13	50.00	1	3.85	0	0.00	0	0.00	25	96.15	1	3.85
35	Rajgarh	24	2.78	12.17	-	-	0	0.00	4	16.67	20	83.33	0	0.00	0	0.00	0	0.00	24	100.00	0	0.00
36	Ratlam	36	0.08	42.30	-	-	3	8.33	5	13.89	28	77.78	0	0.00	0	0.00	0	0.00	36	100.00	0	0.00
37	Rewa	28	1.93	17.34	-	-	1	3.57	5	17.86	22	78.57	0	0.00	0	0.00	0	0.00	28	100.00	0	0.00
38	Sagar	40	0.65	15.40	-	-	4	10.00	7	17.50	29	72.50	0	0.00	0	0.00	0	0.00	40	100.00	0	0.00
39	Satna	44	0.42	21.67	0.40	0.89	5	11.36	16	36.36	21	47.73	2	4.55	0	0.00	0	0.00	42	95.45	2	4.55
40	Sehore	20	2.53	24.30	0.28	0.28	0	0.00	2	10.00	17	85.00	1	5.00	0	0.00	0	0.00	19	95.00	1	5.00
41	Seoni	37	0.16	6.28	0.15	0.54	11	29.73	18	48.65	6	16.22	2	5.41	0	0.00	0	0.00	35	94.59	2	5.41
42	Shahdol	24	0.01	5.08	0.13	5.80	5	20.83	10	41.67	6	25.00	1	4.17	1	4.17	1	4.17	21	87.50	3	12.50
43	Shajapur	20	1.60	18.72	-	-	1	5.00	0	0.00	19	95.00	0	0.00	0	0.00	0	0.00	20	100.00	0	0.00
44	Sheopur	16	3.30	15.00	-	-	0	0.00	3	18.75	13	81.25	0	0.00	0	0.00	0	0.00	16	100.00	0	0.00
45	Shivpuri	30	0.80	14.40	-	-	2	6.67	6	20.00	22	73.33	0	0.00	0	0.00	0	0.00	30	100.00	0	0.00
46	Sidhi	27	0.75	15.46	2.36	2.36	7	25.93	4	14.81	15	55.56	0	0.00	1	3.70	0	0.00	26	96.30	1	3.70
47	Singrauli	17	1.15	8.19	2.30	2.30	3	17.65	4	23.53	10	58.82	0	0.00	0	0.00	0	0.00	17	100.00	0	0.00
48	Tikamgarh	23	0.70	8.14	0.02	0.02	13	56.52	6	26.09	3	13.04	1	4.35	0	0.00	0	0.00	22	95.65	1	4.35
49	Ujjain	38	0.40	14.03	0.02	0.02	1	2.63	6	15.79	31	81.58	0	0.00	0	0.00	0	0.00	38	100.00	0	0.00
50	Umaria	13	0.50	7.68	-	-	5	38.46	5	38.46	31	23.08	0	0.00	0	0.00	0	0.00	13	100.00	0	0.00
51	Vidisha	27	0.12	18.30	-	-	2	7.41	3	11.11	22	81.48	0	0.00	0	0.00	0	0.00	27	100.00	0	0.00
01	Total	1177	0.12	42.30	0.01	25.08	249	21.16	315	26.76	550	46.73	47	3.99	10	0.85	6	0.51	1114	94.65	63	5.35

	District-Wise S Name of District	Seasonal Flu	ctuation			ibution o	of Differ	ent Ranges fr		2021 to I	Nov 202	1							1		Annexur	e -X
	I value of District	Analysed		Range					Rise							Fall			F	Rise	1	Fall
S. No.				ise		all		0-2 m		4 m		4 m		-2 m		!-4 m		>4 m				
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Agar Malwa	13	3.80	11.27	2.47	2.47	0	0.00	2	15.38	10	76.92	0	0.00	1	7.69	0	0.00	12	92.31	1	7.69
2	Alirajpur	11	0.02	5.64	0.90	3.23	1	9.09	6	54.55	2	18.18	1	9.09	1	9.09	0	0.00	9	81.82	2	18.18
3	Anuppur	16	0.30	5.50	0.30	0.30	7	43.75	6	37.50		12.50	1	6.25	0	0.00	0	0.00	15	93.75	1	6.25
5	Ashok Nagar	20 32	0.32	12.75 6.77	2.88	2.88	5	25.00	8	40.00	6	30.00 12.50	3	0.00	1	5.00 3.13	0	0.00	19 28	95.00 87.50	4	5.00
	Balaghat						13	40.63	11		4			9.38	1		0					
7	Barwani Betul	9	0.22	3.97	1.29	3.16	2	22.22	4	44.44	0	0.00	2	22.22	1	11.11		0.00	6	66.67	3	33.33
8	Bhind	25 18	0.39	8.45 5.78	0.29	3.33 0.50	5	20.00	8	32.00 44.44	8	32.00 16.67	2	8.00	0	0.00	0	0.00	21 16	84.00 88.89	2	16.00
9	Bhopal	25	0.90	8.22	0.05	3.03	2	8.00	4	16.00	8	32.00	8	32.00	3	12.00	0	0.00	14	56.00	11	11.11 44.00
							3		3		5		1		0		1					
10	Burhanpur	13 34	0.88	7.60	0.39	25.52	11	23.08 32.35	15	23.08	6	38.46 17.65	1	7.69 2.94	1	0.00 2.94	0	7.69	11 32	84.62 94.12	2	15.38 5.88
12	Chhindwara	28	0.46	4.65	0.40	2.78	13	46.43	8	28.57	2	7.14	3	10.71	2	7.14	0	0.00	23	82.14	5	17.86
13	Damoh	19	1.05	5.60	0.55	2.76	3	15.79	3	15.79	4	21.05	8	42.11	1	5.26	0	0.00	10	52.63	9	47.37
13	Damon	19	0.05	11.60	0.55	2.80	6	50.00	3	25.00	3	25.00	0	0.00	0	0.00	0	0.00	10	100.00	0	0.00
14		20	0.05	23.08	3.80	3.90	2	10.00	2	10.00	14	70.00	0	0.00	2	10.00	0	0.00	12	90.00	2	10.00
16	Dewas	37	0.85	21.72	2.90	2.90	11	29.73	9	24.32	16	43.24	0	0.00	1	2.70	0	0.00	36	97.30	1	2.70
16	Dindori	15	0.12	16.34	0.40	2.90	9	60.00	0	0.00	16	6.67	5	33.33	0	0.00	0	0.00	10	97.30	5	33.33
18	Guna	20	0.10	14.83	0.40	0.25	3	15.00	6	30.00	10	50.00	1	5.00	0	0.00	0	0.00	19	95.00	1	5.00
19	Gwalior	21	0.54	9.33	0.45	1.00	4	19.05	7	33.33	8	38.10	2	9.52	0	0.00	0	0.00	19	90.48	2	9.52
20	Harda		0.23	4.52	1.53	5.56	2	16.67	7	58.33	1	8.33	1	8.33	0	0.00	1	8.33	10	83.33	2	16.67
21	Hoshangabad	12	0.23	6.13	0.69	6.29	5	31.25	1	6.25	3	18.75	3	18.75	1	6.25	3	18.75	9	56.25	7	43.75
22	Indore	29	0.20	8.97	0.09	0.29	9	31.03	7	24.14	13	44.83	0	0.00	0	0.00	0	0.00	29	100.00	0	0.00
23	Jabalpur	30	0.20	3.70	0.10	2.70	17	56.67	3	10.00	0	0.00	9	30.00	1	3.33	0	0.00	29	66.67	10	33.33
24	Jhabua	11	0.69	4.26	1.31	1.31	3	27.27	6	54.55	1	9.09	1	9.09	0	0.00	0	0.00	10	90.91	1	9.09
25	Katni	15	0.60	4.90	0.10	0.50	6	40.00	5	33.33	1	6.67	3	20.00	0	0.00	0	0.00	12	80.00	3	20.00
26	Khandwa	28	0.37	9.33	0.35	0.89	5	17.86	11	39.29	9	32.14	3	10.71	0	0.00	0	0.00	25	89.29	3	10.71
27	Khargone	20	0.15	5.30	0.17	3.42	8	40.00	6	30.00	1	5.00	4	20.00	1	5.00	0	0.00	15	75.00	5	25.00
28	Mandla	31	0.20	5.10	0.04	3.90	10	32.26	6	19.35	6	19.35	8	25.81	1	3.23	0	0.00	22	70.97	9	29.03
29	Mandsaur	32	0.73	25.60	0.04	3.80	2	6.25	7	21.88	23	71.88	0	0.00	0	0.00	0	0.00	32	100.00	0	0.00
30	Morena	13	0.60	5.15	1.70	8.00	5	38.46	1	7.69	2	15.38	1	7.69	0	0.00	4	30.77	8	61.54	5	38.46
31	Narsinghpur	14	0.95	7.36	0.25	1.22	2	14.29	4	28.57	5	35.71	3	21.43	0	0.00	0	0.00	11	78.57	3	21.43
32	Neemuch	28	0.05	26.65	-	-	3	10.71	5	17.86	20	71.43	0	0.00	0	0.00	0	0.00	28	100.00	0	0.00
33	Panna	25	0.29	14.90	0.53	1.90	8	32.00	4	16.00	9	36.00	4	16.00	0	0.00	0	0.00	21	84.00	4	16.00
34	Raisen	26	0.04	5.30	0.48	3.84	10	38.46	6	23.08	7	26.92	2	7.69	1	3.85	0	0.00	23	88.46	3	11.54
35	Rajgarh	26	1.05	10.90	0.30	0.30	2	7.69	7	26.92	16	61.54	1	3.85	0	0.00	0	0.00	25	96.15	1	3.85
36	Ratlam	35	0.50	43.40	0.35	2.88	3	8.57	6	17.14	23	65.71	1	2.86	2	5.71	0	0.00	32	91.43	3	8.57
37	Rewa	28	0.20	16.37	3.90	3.90	8	28.57	4	14.29	15	53.57	0	0.00	1	3.57	0	0.00	27	96.43	1	3.57
38	Sagar	42	0.15	9.82	0.30	3.10	10	23.81	9	21.43	19	45.24	3	7.14	1	2.38	0	0.00	38	90.48	4	9.52
39	Satna	43	0.55	14.97	0.45	1.50	12	27.91	11	25.58	16	37.21	4	9.30	0	0.00	0	0.00	39	90.70	4	9.30
40	Sehore	21	1.00	21.25	1.30	2.60	3	14.29	2	9.52	14	66.67	1	4.76	1	4.76	0	0.00	19	90.48	2	9.52
41	Seoni	36	0.08	5.67	0.04	2.52	17	47.22	7	19.44	4	11.11	7	19.44	1	2.78	0	0.00	28	77.78	8	22.22
42	Shahdol	25	0.70	5.00	0.30	5.30	7	28.00	8	32.00	3	12.00	3	12.00	2	8.00	2	8.00	18	72.00	7	28.00
43	Shajapur	21	1.40	19.20	-	-	1	4.76	2	9.52	18	85.71	0	0.00	0	0.00	0	0.00	21	100.00	0	0.00
44	Sheopur	18	2.45	16.90	-	-	0	0.00	5	27.78	13	72.22	0	0.00	0	0.00	0	0.00	18	100.00	0	0.00
45	Shivpuri	30	0.55	12.05	-	-	5	16.67	5	16.67	20	66.67	0	0.00	0	0.00	0	0.00	30	100.00	0	0.00
46	Sidhi	26	0.45	14.06	0.40	0.40	8	30.77	9	34.62	8	30.77	1	3.85	0	0.00	0	0.00	25	96.15	1	3.85
47	Singrauli	17	0.20	13.50	3.29	3.29	6	35.29	3	17.65	7	41.18	0	0.00	1	5.88	0	0.00	16	94.12	1	5.88
48	Tikamgarh	23	0.05	8.80	1.05	11.55	6	26.09	9	39.13	5	21.74	1	4.35	1	4.35	1	4.35	20	86.96	3	13.04
49	Ujjain	38	0.20	17.30	-	-	3	7.89	12	31.58	23	60.53	0	0.00	0	0.00	0	0.00	38	100.00	0	0.00
50	Umaria	13	0.50	7.90	0.95	0.95	7	53.85	3	23.08	2	15.38	1	7.69	0	0.00	0	0.00	12	92.31	1	7.69
51	Vidisha	25	0.22	9.92	-	-	3	12.00	9	36.00	13	52.00	0	0.00	0	0.00	0	0.00	25	100.00	0	0.00
	Total	1185	0.02	43.40	0.04	25.52	301	25.40	303	25.57	432	36.46	105	8.86	32	2.70	12	1.01	1036	87.43	149	12.57

	District-Wise S Name of	No. of wells	ctuation			ibution o	f Differ	ent Ranges fr			Jan 2022	2									Annexur	e -XI
		Analysed		Range	_				Rise							Fall			F	Rise	F	all
S. No.		,		ise		all		0-2 m	2-	4 m	>	4 m	0	-2 m		-4 m		•4 m				
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Agar Malwa	14	0.23	6.54	-	-	4	28.57	4	28.57	6	42.86	0	0.00	0	0.00	0	0.00	14	100.00	0	0.00
2	Alirajpur	11	0.19	3.81	0.26	2.53	4	36.36	4	36.36	0	0.00	2	18.18	1	9.09	0	0.00	8	72.73	3	27.27
3	Anuppur	20	0.15	4.00	0.15	0.80	11	55.00	6	30.00	0	0.00	3	15.00	0	0.00	0	0.00	17	85.00	3	15.00
4	Ashok Nagar	19	0.36	9.92	0.15	3.63	7	36.84	5	26.32	3	15.79	3	15.79	1	5.26	0	0.00	15	78.95	4	21.05
5	Balaghat	31	0.10	6.20	0.05	3.45	16	51.61	7	22.58	3	9.68	3	9.68	2	6.45	0	0.00	26	83.87	5	16.13
6	Barwani	9	0.45	3.72	0.05	3.29	3	33.33	2	22.22	0	0.00	3	33.33	1	11.11	0	0.00	5	55.56	4	44.44
7	Betul	26	0.47	7.95	0.07	6.78	5	19.23	5	19.23	6	23.08	7	26.92	1	3.85	2	7.69	16	61.54	10	38.46
8	Bhind	18	0.10	4.20	0.20	0.20	8	44.44	8	44.44	1	5.56	1	5.56	0	0.00	0	0.00	17	94.44	1	5.56
9	Bhopal	26	0.03	6.40	0.13	7.14	5	19.23	6	23.08	4	15.38	10	38.46	0	0.00	1	3.85	15	57.69	11	42.31
10	Burhanpur	12	0.95	5.30	1.17	18.02	2	16.67	3	25.00	3	25.00	1	8.33	2	16.67	1	8.33	8	66.67	4	33.33
11	Chhatarpur	34	0.10	7.55	0.12	0.52	14	41.18	12	35.29	6	17.65	2	5.88	0	0.00	0	0.00	32	94.12	2	5.88
12	Chhindwara	29	0.10	10.70	0.05	3.81	12	41.38	6	20.69	2	6.90	8	27.59	1	3.45	0	0.00	20	68.97	9	31.03
13	Damoh	19	1.01	4.72	1.25	3.71	5	26.32	1	5.26	4	21.05	4	21.05	5	26.32	0	0.00	10	52.63	9	47.37
14	Datia	12	0.20	11.20	0.50	0.50	6	50.00	2	16.67	3	25.00	1	8.33	0	0.00	0	0.00	11	91.67	1	8.33
15	Dewas	20	0.05	21.48	0.42	4.20	4	20.00	7	35.00	7	35.00	1	5.00	0	0.00	1	5.00	18	90.00	2	10.00
16	Dewas	37	0.03	19.40	0.08	2.92	15	40.54	8	21.62	11	29.73	2	5.41	1	2.70	0	0.00	34	91.89	3	8.11
17	Dindori	16	0.19	15.75	0.08	1.70	7	43.75	1	6.25	1	6.25	7	43.75	0	0.00	0	0.00	9	56.25	7	43.75
18	Guna	21	0.10	11.18	0.25	1.70	6	28.57	6	28.57	9	42.86	0	0.00	0	0.00	0	0.00	21	100.00	0	0.00
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19	Gwalior	18	1.00	24.60	-	-	4	22.22	6	33.33	8	44.44	0	0.00	0	0.00	0	0.00	18	100.00	0	0.00
20	Harda	12	0.24	4.94	0.61	0.92	2	16.67	5	41.67	3	25.00	2	16.67	0	0.00	0	0.00	10	83.33	2	16.67
21	Hoshangabad	17	0.39	5.04	0.02	7.98	5	29.41	2	11.76	3	17.65	5	29.41	0	0.00	2	11.76	10	58.82	7	41.18
22	Indore	29	0.17	5.52	0.19	0.83	7	24.14	14	48.28	6	20.69	2	6.90	0	0.00	0	0.00	27	93.10	2	6.90
23	Jabalpur	26	0.05	3.71	0.15	7.70	13	50.00	2	7.69	0	0.00	9	34.62	1	3.85	1	3.85	15	57.69	11	42.31
24	Jhabua	12	0.54	4.84	0.07	2.13	5	41.67	3	25.00	1	8.33	2	16.67	1	8.33	0	0.00	9	75.00	3	25.00
25	Katni	18	0.26	7.20	0.05	2.70	8	44.44	3	16.67	1	5.56	4	22.22	2	11.11	0	0.00	12	66.67	6	33.33
26	Khandwa	28	0.48	10.26	0.96	5.09	8	28.57	8	28.57	6	21.43	4	14.29	1	3.57	1	3.57	22	78.57	6	21.43
27	Khargone	20	0.05	2.31	1.34	3.89	15	75.00	2	10.00	0	0.00	2	10.00	1	5.00	0	0.00	17	85.00	3	15.00
28	Mandla	31	0.22	3.55	0.24	4.34	17	54.84	6	19.35	0	0.00	7	22.58	0	0.00	1	3.23	23	74.19	8	25.81
29	Mandsaur	32	0.30	24.66	0.13	0.13	7	21.88	4	12.50	20	62.50	1	3.13	0	0.00	0	0.00	31	96.88	1	3.13
30	Morena	11	0.60	6.70	1.10	2.00	4	36.36	2	18.18	2	18.18	3	27.27	0	0.00	0	0.00	8	72.73	3	27.27
31	Narsinghpur	13	0.35	7.50	0.10	4.32	2	15.38	3	23.08	4	30.77	3	23.08	0	0.00	1	7.69	9	69.23	4	30.77
32	Neemuch	29	1.00	26.90	1.02	1.02	4	13.79	4	13.79	20	68.97	1	3.45	0	0.00	0	0.00	28	96.55	1	3.45
33	Panna	24	0.10	6.80	0.30	2.30	11	45.83	4	16.67	4	16.67	4	16.67	1	4.17	0	0.00	19	79.17	5	20.83
34	Raisen	26	0.21	4.68	0.86	3.79	11	42.31	6	23.08	3	11.54	5	19.23	1	3.85	0	0.00	20	76.92	6	23.08
35	Rajgarh	24	0.32	8.50	-	-	4	16.67	10	41.67	10	41.67	0	0.00	0	0.00	0	0.00	24	100.00	0	0.00
36	Ratlam	36	0.10	38.60	0.22	1.90	6	16.67	11	30.56	16	44.44	3	8.33	0	0.00	0	0.00	33	91.67	3	8.33
37	Rewa	28	0.18	14.74	0.08	2.04	7	25.00	7	25.00	10	35.71	3	10.71	1	3.57	0	0.00	24	85.71	4	14.29
38	Sagar	44	0.21	8.92	0.18	4.23	10	22.73	12	27.27	11	25.00	8	18.18	2	4.55	1	2.27	33	75.00	11	25.00
39	Satna	43	0.65	17.07	0.10	2.25	18	41.86	7	16.28	10	23.26	7	16.28	1	2.33	0	0.00	35	81.40	8	18.60
40	Sehore	20	0.60	10.20	1.10	2.20	4	20.00	3	15.00	10	50.00	2	10.00	1	5.00	0	0.00	17	85.00	3	15.00
41	Seoni	36	0.10	4.30	0.30	6.30	15	41.67	6	16.67	1	2.78	8	22.22	2	5.56	4	11.11	22	61.11	14	38.89
42	Shahdol	25	0.43	4.02	0.20	5.80	14	56.00	2	8.00	1	4.00	5	20.00	2	8.00	1	4.00	17	68.00	8	32.00
43	Shajapur	20	0.43	17.05	0.20	0.10	3	15.00	6	30.00	10	50.00	1	5.00	0	0.00	0	0.00	19	95.00	1	5.00
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44	Sheopur	18	0.40	15.00	0.10	1.70		16.67	2	11.11	11	61.11	2	11.11	0	0.00	0	0.00	16	88.89	2	11.11
45	Shivpuri	30	1.50	8.20	1.20	2.80	2	6.67	14	46.67	12	40.00	1	3.33	1	3.33	0	0.00	28	93.33	2	6.67
46	Sidhi	26	0.11	11.26	1.20	1.22	12	46.15	9	34.62	3	11.54	2	7.69	0	0.00	0	0.00	24	92.31	2	7.69
47	Singrauli	17	0.28	4.64	0.07	6.97	7	41.18	7	41.18	1	5.88	1	5.88	0	0.00	1	5.88	15	88.24	2	11.76
48	Tikamgarh	24	0.06	8.23	0.15	13.79	9	37.50	6	25.00	4	16.67	3	12.50	1	4.17	1	4.17	19	79.17	5	20.83
49	Ujjain	38	0.20	12.52	0.10	1.51	9	23.68	8	21.05	18	47.37	3	7.89	0	0.00	0	0.00	35	92.11	3	7.89
50	Umaria	14	0.35	7.20	0.50	1.30	6	42.86	2	14.29	3	21.43	3	21.43	0	0.00	0	0.00	11	78.57	3	21.43
51	Vidisha	25	0.70	6.04	0.33	0.51	8	32.00	8	32.00	7	28.00	2	8.00	0	0.00	0	0.00	23	92.00	2	8.00
	Total	1188	0.05	38.60	0.02	18.02	394	33.16	287	24.16	288	24.24	166	13.97	34	2.86	19	1.60	969	81.57	219	18.43

District-Wise Decadal Water Level Fluctuation With [Mean May (2011 to 2020) and May 2021] Annexure - XII Range in m Fall Fall District wells Rise S. No Rise 0-2 m 2-4 m >4 m 0-2 m 2-4 m >4 m Analysed Min % No % No % Max Min Max No No No No No No 50.00 Agar Malwa 14 0.01 9.67 0.06 1.86 35.71 7.14 7.14 50.00 0 0.00 0.00 50.00 2 Alirajpur 11 0.29 3.38 0.35 1.70 63.64 9.09 0.00 27.27 0.00 0.00 72.73 27.27 Anuppur 22 0.01 3.47 0.03 1.86 12 54.55 27.27 0.00 18.18 0.00 0.00 18 81.82 18.18 4 Ashok Nagar 20 0.12 3.48 0.13 1.57 12 60.00 20.00 0.00 4 20.00 0.00 0 0.00 16 80.00 20.00 5 Balaghat 0.43 2.87 31.25 31.25 12.50 18.75 0.00 75.00 25.00 32 6.01 0.14 10 10 6.25 0 24 6 Barwani 1.05 0.15 2.44 33.33 11.11 22.22 22.22 11.11 0.00 66.67 33.33 7 Betul 3.38 42.31 19.23 15.38 11.54 11.54 0.00 76.92 23.08 26 0.09 7.37 0.47 11 4 20 8 Bhind 18 0.53 15.56 0.07 8.02 2 11.11 16.67 11.11 44.44 11.11 5.56 38.89 11 61.11 57 69 30.77 7 69 9 Bhopal 26 0.12 10.69 0.09 0.23 15 3.85 0 0.00 0 0.00 24 92 31 2 7 69 10 Burhanpur 0.40 19.63 0.56 1.35 61.54 15.38 7.69 15.38 0 0.00 0.00 11 84.62 15.38 13 8 2 0 2 11 Chhatarpur 35 0.01 4.28 0.01 3.15 20.00 20.00 8.57 15 42.86 8.57 0.00 17 48.57 18 51.43 12 33.33 16.67 3.33 0.00 20.00 Chhindwara 30 2.11 36.67 10.00 80.00 13 Damoh 19 0.16 1.49 42.11 26.32 10.53 21.05 0.00 0.00 15 78.95 21.05 0.13 14 Datia 12 0.48 4.08 0.34 8 44 25.00 0.00 8.33 50.00 8.33 8.33 33.33 66 67 15 Dewas 4.46 6.68 5 25.00 5.00 5.00 40.00 20.00 5.00 35.00 65.00 20 0.03 0.18 13 16 Dhar 39 0.20 6.68 0.04 6.98 20 51.28 17.95 7.69 17.95 2.56 2.56 30 76.92 23.08 17 Dindori 18.75 0.00 6.25 16 15.07 68.75 6.25 0.00 6.25 93.75 18 Guna 21 0.06 2.64 0.04 2.99 12 57.14 4.76 0 0.00 33.33 4.76 0.00 13 61.90 8 38.10 14 29 19 Gwalio 21 0.22 7 51 0.04 6 66 6 28.57 4 76 2 9.52 38 10 3 4 76 9 42.86 12 57 14 20 Harda 0.33 7.18 0.79 50.00 8.33 8.33 33.33 0.00 0.00 66.67 33.33 12 0.06 0 4 6 1 1 4 0 8 21 Hoshangabad 17 0.02 9.58 0.16 3.83 6 35.29 5.88 11.76 6 35.29 11.76 0 0.00 9 52.94 8 47.06 22.58 22 31 0.69 45.16 10 32.26 0.00 0 0.00 0.00 31 100.00 0.00 23 Jabalpur 2.50 67.74 16.13 0.00 12.90 3.23 0.00 26 83.87 16.13 31 0.36 0.10 21 24 Jhabua 12 0.17 3.67 0.42 2 46 41.67 16.67 0.00 25.00 16.67 0.00 58.33 41.67 7 25 Katni 38.89 16.67 33.33 66.67 33.33 18 0.24 5.60 0.22 1.17 11.11 0.00 0 0.00 12 26 Khandwa 28 0.29 5.38 3.00 5 17.86 21.43 7.14 12 42.86 10.71 0 0.00 13 46.43 53.57 0.04 15 27 Khargone 21 0.04 3.94 2.42 12 57.14 19.05 0.00 19.05 4.76 0.00 16 76.19 23.81 28 Mandla 32 0.09 0.50 17 53.13 31.25 6.25 9.38 0.00 0.00 90.63 9.38 5.98 0.27 3 0 29 3 29 Mandsaur 32 0.05 4 65 0.21 17.63 8 25.00 21.88 3 13 9 28.13 4 12 50 3 9.38 16 50.00 16 50.00 30 15.38 23.08 0.00 30.77 Morena 13 0.35 14.22 0.43 5.08 1 7.69 6 46.15 0 7.69 9 69.23 4 31 17 0.57 10.54 3.08 35.29 17.65 11.76 23.53 11.76 0.00 11 64.71 35.29 Narsinghpu 0.36 6 6 0 32 Neemuch 29 0.39 4.23 0.01 7.47 20.69 13.79 3.45 27.59 10.34 24.14 11 37.93 18 62.07 6 33 Panna 25 0.07 3.69 0.48 10.98 10 40.00 12.00 0.00 10 40.00 4.00 4.00 13 52.00 12 48.00 34 Raisen 26 0.40 6.93 0.02 2.49 11 42.31 23.08 11.54 19.23 3.85 0.00 20 76.92 23.08 35 Rajgarh 20.00 4.00 40.00 0.00 4.00 56.00 44.00 25 0.04 4.58 0.13 5.11 8 32.00 10 14 11 36 Ratlam 36 0.23 28.86 6.74 11 30.56 13.89 13.89 16.67 13.89 11.11 21 58.33 15 41.67 0.04 37 Rewa 28 0.47 5.27 0.25 8.80 8 28.57 14.29 10.71 28.57 10.71 7.14 15 53.57 13 46.43 44 15.91 36.36 0.00 54.55 45.45 38 Sagar 0.01 13.50 0.08 3.10 15 34.09 4.55 4 9.09 24 39 Satna 45 0.05 13.49 0.01 6.31 19 42.22 20.00 6 13.33 10 22 22 0 0.00 2.22 34 75.56 11 24.44 40 Sehore 21 0.05 6.19 0.25 13.08 8 38.10 1 4.76 2 9.52 4 19.05 3 14.29 3 14.29 11 52.38 10 47.62 41 35.14 29.73 13.51 21.62 0.00 0.00 21.62 Seoni 37 0.09 10.05 0.07 13 29 78.38 1.13 11 0 8 5 8 0 42 Shahdol 26 0.05 5.76 0.19 3.04 13 50.00 11.54 11.54 23.08 3.85 0 0.00 19 73.08 26.92 6 43 Shajapur 27.78 38.89 18 0.45 3.41 0.46 9.41 22.22 0.00 0.00 11.11 9 50.00 50.00 44 Sheopur 19 0.54 0.02 2.64 31.58 10.53 10.53 31.58 15.79 0 0.00 10 52.63 9 47.37 8.86 45 Shivpuri 30 0.13 6.01 0.02 2.35 14 46.67 3.33 6.67 11 36.67 6.67 0 0.00 17 56.67 13 43.33 46 Sidhi 27 0.17 3.81 0.34 5.83 15 55.56 3.70 0 0.00 8 29.63 3.70 2 7.41 16 59.26 11 40.74 Singrauli 8.18 1.58 10 58.82 0.00 5.88 35.29 0.00 0 0.00 11 64.71 35.29 17 0.08 0.14 48 9 Tikamgarh 24 0.37 2.07 37.50 12.50 8.33 37.50 4.17 0.00 58.33 41.67 49 Ujjain 39 0.01 10.47 0.08 4.92 16 41.03 10.26 2 5.13 12 30.77 4 10.26 2.56 22 56.41 17 43.59 50 Umaria 15 0.14 3.98 0.11 6.84 7 46.67 13.33 0 0.00 4 26.67 6.67 6.67 9 60.00 6 40.00 51 Vidisha 33.33 14.81 37.04 3.70 48.15 27 0.14 5.36 0.03 9.01 9 3.70 10 2 7.41 14 51.85 13 Total 1226 0.01 28.86 0.01 17.63 489 39.89 206 16.80 100 8.16 323 26.35 71 5.79 37 3.02 795 64.85 431 35.15

	District-Wise I	Decadal Wa	ter Level I			Mean [Au	gust (20)11 to 2020			21		ı						I		Annexure	-XIII
	INAME OF DISTRICT	Analysed		Range					Ris							Fall			R	tise	F	all
S. No.			R Min	Max	Min	all Max	No	0-2 m	No	4 m	No No	4 m %	No	2 m	No 2-	-4 m %	No >	-4 m %	No	%	No	%
1	Agar Malwa	16	0.52	4.14	0.13	2.14	5	31.25	3	18.75	1	6.25	6	37.50	1	6.25	0	0.00	9	56.25	7	43.75
2	Alirajpur	11	.00	0.22	0.23	4.03	2	18.18	0	0.00	0	0.00	5	45.45	3	27.27	1	9.09	2	18.18	9	81.82
3	Anuppur	20	0.10	2.99	0.01	1.05	11	55.00	3	15.00	0	0.00	6	30.00	0	0.00	0	0.00	14	70.00	6	30.00
4	Ashok Nagar	20	0.03	3.44	0.42	1.59	11	55.00	2	10.00	0	0.00	7	35.00	0	0.00	0	0.00	13	65.00	7	35.00
5	Balaghat	39	0.10	1.24	0.05	3.05	22	56.41	0	0.00	0	0.00	16	41.03	1	2.56	0	0.00	22	56.41	17	43.59
6	Barwani	9	0.08	2.00	1.25	6.23	4	44.44	0	0.00	0	0.00	2	22.22	1	11.11	2	22.22	4	44.44	5	55.56
7	Betul	29	0.01	3.01	0.09	3.51	12	41.38	4	13.79	0	0.00	11	37.93	2	6.90	0	0.00	16	55.17	13	44.83
8	Bhind	18	0.02	14.41	0.74	20.93	7	38.89	2	11.11	4	22.22	4	22.22	0	0.00	1	5.56	13	72.22	5	27.78
9	Bhopal	26	0.15	1.86	0.01	1.06	14	53.85	0	0.00	0	0.00	12	46.15	0	0.00	0	0.00	14	53.85	12	46.15
10	Burhanpur	12	0.22	6.51	0.13	3.84	2	16.67	0	0.00	2	16.67	7	58.33	1	8.33	0	0.00	4	33.33	8	66.67
11	Chhatarpur	35	0.18	2.35	0.01	8.18	8	22.86	2	5.71	0	0.00	15	42.86	6	17.14	4	11.43	10	28.57	25	71.43
12	Chhindwara	33	0.23	1.94	0.08	2.90	18	54.55	0	0.00	0	0.00	13	39.39	2	6.06	0	0.00	18	54.55	15	45.45
13	Damoh	18	0.13	2.90	0.02	4.93	6	33.33	1	5.56	0	0.00	7	38.89	3	16.67	1	5.56	7	38.89	11	61.11
14	Datia	12	0.56	3.48	0.10	13.23	1	8.33	4	33.33	0	0.00	2	16.67	3	25.00	2	16.67	5	41.67	7	58.33
15	Dewas	23	0.10	3.70	0.17	4.21	7	30.43	2	8.70	0	0.00	10	43.48	3	13.04	1	4.35	9	39.13	14	60.87
16	Dhar	38	0.17	1.61	0.01	36.72	4	10.53	0	0.00	0	0.00	20	52.63	7	18.42	7	18.42	4	10.53	34	89.47
17	Dindori	16	0.08	1.56	0.02	0.98	9	56.25	0	0.00	0	0.00	7	43.75	0	0.00	0	0.00	9	56.25	7	43.75
18	Guna	22	0.22	7.08	0.06	1.58	14	63.64	2	9.09	2	9.09	4	18.18	0	0.00	0	0.00	18	81.82	4	18.18
19	Gwalior	19	0.10	8.78	0.36	18.26	11	57.89	0	0.00	2	10.53	1	5.26	3	15.79	2	10.53	13	68.42	6	31.58
20	Harda	13	0.05	1.21	0.26	1.74	5	38.46	0	0.00	0	0.00	8	61.54	0	0.00	0	0.00	5	38.46	8	61.54
21	Hoshangabad	16	0.12	3.02	0.16	4.45	2	12.50	2	12.50	0	0.00	7	43.75	4	25.00	1	6.25	4	25.00	12	75.00
22	Indore	32	0.10	2.28	0.13	6.57	10	31.25	1	3.13	0	0.00	13	40.63	6	18.75	2	6.25	11	34.38	21	65.63
23	Jabalpur	30	0.02	1.17	0.13	6.93	6	20.00	0	0.00	0	0.00	20	66.67	0	0.00	4	13.33	6	20.00	24	80.00
24	Jhabua	12	0.49	1.43	0.01	5.52	5	41.67	0	0.00	0	0.00	5	41.67	1	8.33	1	8.33	5	41.67	7	58.33
25	Katni	18	0.05	2.41	0.08	4.60	6	33.33	2	11.11	0	0.00	7	38.89	1	5.56	2	11.11	8	44.44	10	55.56
26	Khandwa	31	.00	2.68	0.27	4.43	10	32.26	3	9.68	0	0.00	14	45.16	3	9.68	1	3.23	13	41.94	18	58.06
27	Khargone	22	0.03	1.14	0.27	4.43	4	18.18	0	0.00	0	0.00	13	59.09	4	18.18	1	4.55	4	18.18	18	81.82
28	Mandla	33	0.04	2.30	0.01	2.11	7	21.21	1	3.03	0	0.00	24	72.73	1	3.03	0	0.00	8	24.24	25	75.76
29	Mandsaur	36	0.06	4.92	0.02	3.32	19	52.78	1	2.78	1	2.78	14	38.89	1	2.78	0	0.00	21	58.33	15	41.67
30	Morena	14	0.02	15.47	1.37	1.37	3	21.43	5	35.71	5	35.71	1	7.14	0	0.00	0	0.00	13	92.86	1	7.14
31	Narsinghpur	12	0.05	5.03	0.41	3.90	1	8.33	1	8.33	1	8.33	6	50.00	3	25.00	0	0.00	3	25.00	9	75.00
32	Neemuch	33	0.01	2.15	0.07	4.76	14	42.42	2	6.06	0	0.00	12	36.36	3	9.09	2	6.06	16	48.48	17	51.52
33	Panna	27	0.06	3.02	0.16	3.24	5	18.52	1	3.70	0	0.00	17	62.96	4	14.81	0	0.00	6	22.22	21	77.78
34	Raisen	28	0.22	8.14	0.05	4.62	11	39.29	1	3.57	2	7.14	12	42.86	0	0.00	2	7.14	14	50.00	14	50.00
35	Rajgarh	25	0.03	4.01	0.04	2.65	16	64.00	1	4.00	1	4.00	6	24.00	1	4.00	0	0.00	18	72.00	7	28.00
36	Ratlam	39	.00	4.44	0.00	5.41	11	28.21	2	5.13	3	7.69	15	38.46	6	15.38	2	5.13	16	41.03	23	58.97
37	Rewa	32	0.30	4.53	0.07	1.64	11	34.38	6	18.75	1	3.13	14	43.75	0	0.00	0	0.00	18	56.25	14	43.75
38	Sagar	40	-	9.72	0.18	3.66	18	45.00	6	15.00	2	5.00	10	25.00	4	10.00	0	0.00	26	65.00	14	35.00
39	Satna	50	0.04	12.96	0.01	4.41	30	60.00	1	2.00	2	4.00	16	32.00	0	0.00	1	2.00	33	66.00	17	34.00
40	Sehore	22	0.03	3.01	0.04	1.86	10	45.45	2	9.09	0	0.00	10	45.45	0	0.00	0	0.00	12	54.55	10	45.45
41	Seoni	44	0.13	2.64	0.03	3.56	18	40.91	2	4.55	0	0.00	19	43.18	5	11.36	0	0.00	20	45.45	24	54.55
42	Shahdol	26	0.14	5.85	0.25	3.90	11	42.31	4	15.38	1	3.85	8	30.77	2	7.69	0	0.00	16	61.54	10	38.46
43	Shajapur	18	0.39	2.34	0.05	0.53	12	66.67	2	11.11	0	0.00	4	22.22	0	0.00	0	0.00	14	77.78	4	22.22
44	Sheopur	18	0.19	7.91	0.07	5.79	7	38.89	1	5.56	2	11.11	6	33.33	1	5.56	1	5.56	10	55.56	8	44.44
45	Shivpuri	30	0.36	7.00	0.10	1.37	13	43.33	9	30.00	2	6.67	6	20.00	0	0.00	0	0.00	24	80.00	6	20.00
46	Sidhi	33	0.01	9.64	0.04	3.08	16	48.48	5	15.15	3	9.09	7	21.21	2	6.06	0	0.00	24	72.73	9	27.27
47	Singrauli	22	0.01	7.74	0.04	3.92	11	50.00	3	13.64	3	13.64	4	18.18	1	4.55	0	0.00	17	77.27	5	22.73
48	Tikamgarh	23 40	0.08	1.05 3.54	0.07	6.63 4.89	6	26.09	0	0.00	0	0.00	11	47.83	4	8.70	4	17.39	6	26.09	17	73.91
49 50	Ujjain	13	0.08	2.02	0.03	2.98	18	45.00 61.54	3	7.50	0	0.00		35.00 23.08	1	7.69	0	2.50 0.00	21 9	52.50 69.23	19	47.50 30.77
51	Umaria	30	0.07	4.17	0.20	2.98	17	56.67	0	0.00	1	3.33	3	36.67	1	3.33	0	0.00	18	60.00	12	40.00
31	Vidisha Total	1278	0.02		0.000	36.72	509	39.83	93	7.28	41	3.33		38.50	97		46	3.60		50.31		49.69
		1278	0.00	15.47	0.000	36.72	509	39.83	93	7.28	41	3.21	492	38.50	97	7.59	46	3.60	643	50.31	635	49.69

District-Wise Decadal Water Level Fluctuation With Mean [November (2011 to 2020)] and November 2021 Annexure - XIV Fall Fall Rise S. No 2-4 m 0-2 m 2-4 m >4 m Min No No Min Max No No No No No Agar Malwa 0.00 15 Alirajpur 76.92 Anuppur 0.28 1.22 52.94 11.76 0.00 35.29 0.00 0.00 11 64.71 35 29 Ashok Nagar 0.27 2.29 12 20 3.13 0.5 60.00 15.00 0.00 20.00 5.00 0.00 15 75.00 25.00 5 Balaghat 0.01 1.72 2.2 23 57.50 57.50 42.50 40 0.06 0.00 0.00 16 40.00 2.50 0.00 23 17 Barwani 0.48 2.11 4.41 Betul 32.14 14.29 3.57 35.71 7.14 7.14 50.00 50.00 8 Bhind 19 0.26 14.71 0.67 8.41 21.05 26.32 26.32 15.79 5.26 5.26 14 73.68 5 26.32 9 Bhopal 26 0.15 2.57 0.04 3.27 16 61 54 11 54 0.00 19 23 7 69 0.00 19 73 08 26.92 11.76 10 Burhanpur 12.75 4.9 47.06 17.65 11.76 0.00 11.76 13 76.47 23.53 17 0.22 0.07 8 Chhatarpur 37 0.01 7.83 8.11 0.00 32.43 13.51 10.81 16 43.24 56.76 3.78 0.03 0.00 13 Damoh 40.91 4.55 0.00 31.82 18.18 4.55 10 54.55 Datia 14 12 50.00 0.00 25.00 16 67 0.00 8.33 75 00 25.00 15 Dewas 9 40.91 13.64 4.55 4.55 17 77.27 22.73 22 0.24 5.25 0.04 4.27 22.73 13.64 5 16 Dhar 38 0.21 0.19 5.31 16 42.11 13.16 11 0.00 5.26 25 65.79 13 34.21 Dindori 18 Guna 22 0.37 3.54 16 72.73 4.55 4.55 9.09 9.09 0.00 18 81.82 18.18 Gwalior 19 21 0.61 9.65 0.1 6.95 28 57 23 81 19 05 14.29 4 76 9.52 15 71.43 28.57 7.69 46.15 20 Harda 1.84 53.85 0.00 0.00 38.46 0.00 53.85 13 0.12 0.13 3.58 6 21 Hoshangabad 17 0.04 1.35 0.07 6.06 17.65 0.00 0.00 11 11.76 5.88 17.65 14 82.35 22 18.75 59.38 6.25 0.00 84.38 15.63 23 Jabalpur 37.50 0.00 0.00 43.75 15.63 3.13 12 37.50 20 62.50 24 Jhabua 36.36 0.00 0.00 63 64 0.00 0.00 36.36 63 64 Katni 16 2.09 0.06 5.26 11 68.75 25 0.1 25.00 6.25 0.00 56.25 6.25 6.25 31.25 26 Khandwa 31 0.15 3.5 0.02 1.9 17 54.84 19.35 0.00 25.81 0.00 0.00 23 74.19 25.81 Khargone 22 0.26 1.83 0.33 3.86 12 54.55 0.00 28 Mandla 32 0.02 17 53.13 3.13 3.13 40.63 0.00 0.00 19 59.38 13 40.63 29 Mandsaur 36 0.06 16.78 0.55 0.92 22 61.11 19 44 13.89 5.56 0.00 0.00 34 94.44 2 5.56 30 Morena 28.57 21.43 21.43 7.14 14.29 71.43 28.57 14 0.02 13.13 0.57 4.05 7.14 10 31 40.00 6.67 13.33 40.00 0.00 0.00 60.00 40.00 Narsinghpur 15 0.38 5.42 0.02 0.96 6 32 48.48 30.30 18.18 3.03 0.00 0.00 32 96.97 3.03 33 0.15 0.38 0.38 33 Panna 25.93 0.00 0.00 48.15 18.52 7.41 25.93 74.07 34 Raisen 28 14 50.00 0.00 0.00 39.29 7.14 3.57 14 50.00 50.00 3.57 17.86 35 Rajgarh 28 0.39 7.13 0.09 3.27 11 39.29 21.43 21.43 14.29 0.00 23 82.14 36 Ratlam 39 0.2 13.31 3.76 17 43.59 20.51 23.08 10.26 2.56 0.00 34 87.18 5 12.82 0.04 37 16 51.61 6.45 0.00 0.00 20 64.52 11 35.48 31 0.02 0.05 1.17 11 38 Sagar 46 34.78 6.52 4.35 43.48 10.87 0.00 21 45.65 25 54.35 39 Satna 47 0.01 3.35 0.06 2.6 24 51.06 12.77 0.00 16 34.04 2.13 0.00 30 63.83 17 36.17 40 Sehore 23 0.48 7.03 0.92 5.53 12 52.17 17.39 17.39 4.35 4.35 4.35 20 86.96 3 13.04 41 Seoni 37.21 9.30 2.33 44.19 4.65 2.33 51.16 4.17 21 48.84 22 43 0 0.05 4.4 16 19 42 Shahdol 3.4 14 51.85 14.81 0.00 22.22 3.70 18 66.67 33.33 27 0.14 5.17 Shajapur 5.9 33.33 57.14 9.52 0.00 0.00 21 0.00 44 Sheopur 19 18.99 21.05 42.11 36.84 0.00 0.00 0.00 19 100.00 0.00 45 Shivpuri 30 0.13 5.55 0.09 0.09 15 50.00 23.33 23.33 3.33 0.00 0.00 29 96.67 3.33 46 Sidhi 31 0.13 3.27 0.31 3.16 18 58.06 9.68 0.00 29.03 3.23 0.00 21 67.74 10 32.26 Singrauli 12 54.55 13.64 13.64 81.82 18.18 22 0.03 10.09 6.8 13.64 0.00 4.55 0.05 Tikamgarl 30.43 13.04 52.17 47.83 49 Ujjain 40 0.02 6.24 0.12 3.72 24 60.00 15.00 12.50 7.50 5.00 0.00 35 87.50 12.50 50 Umaria 13 0.31 1.54 0.41 4.07 7 53.85 0.00 0.00 30.77 7.69 7.69 53.85 6 46.15 51 31.03 Vidisha 29 0.05 3.82 0.06 1.24 15 51.72 17.24 0.00 31.03 0.00 0.00 20 68.97 9 Total 1300 0 18.99 11.43 592 45.54 164 12.62 97 7.46 346 26.62 70 5.38 31 2.38 853 65.62 447 34.38

	District-Wise I		ter Level I			lean [Jar	uary(20	012 to 2021			022										Annexure	e-XV
	Name of District	No. of wells Analysed		Range					Ris							all			R	ise	F	all
S. No.			Ri Min	ise Max	Min	all Max	No	-2 m %	No	4 m	No	4 m	0- No	2 m	No	4 m %	> No	4 m	No	%	No	%
1	Agar Malwa	15	0.11	5.86	-	-	9	60.00	3	20.00	3	20.00	0	0.00	0	0.00	0	0.00	15	100.00	0	0.00
2	Alirajpur	13	0.22	2.8	0.21	1.71	6	46.15	1	7.69	0	0.00	6	46.15	0	0.00	0	0.00	7	53.85	6	46.15
3	Anuppur	20	0.22	2.15	0.01	0.33	15	75.00	1	5.00	0	0.00	4	20.00	0	0.00	0	0.00	16	80.00	4	20.00
4	Ashok Nagar	20	0.06	4.72	0.17	1.51	12	60.00	3	15.00	1	5.00	4	20.00	0	0.00	0	0.00	16	80.00	4	20.00
5	Balaghat	38	0.03	2.78	0.69	1.96	33	86.84	2	5.26	0	0.00	3	7.89	0	0.00	0	0.00	35	92.11	3	7.89
6	Barwani	9	0.37	3.24	0.25	4.02	3	33.33	2	22.22	0	0.00	2	22.22	1	11.11	1	11.11	5	55.56	4	44.44
7	Betul	30	0.04	7.5	0.16	2.91	15	50.00	4	13.33	1	3.33	9	30.00	1	3.33	0	0.00	20	66.67	10	33.33
8	Bhind	19	0.9	12.55	0.14	8.85	4	21.05	4	21.05	4	21.05	4	21.05	2	10.53	1	5.26	12	63.16	7	36.84
9	Bhopal	27	0.01	3.56	0.04	1.49	19	70.37	3	11.11	0	0.00	5	18.52	0	0.00	0	0.00	22	81.48	5	18.52
10	Burhanpur	15	0.3	4.44	0.79	3.56	5	33.33	3	20.00	1	6.67	3	20.00	3	20.00	0	0.00	9	60.00	6	40.00
11	Chhatarpur	37	0.23	6.1	0.01	6.37	14	37.84	7	18.92	2	5.41	8	21.62	5	13.51	1	2.70	23	62.16	14	37.84
12	Chhindwara	36	0.12	12.04	0.04	3.94	16	44.44	9	25.00	3	8.33	6	16.67	2	5.56	0	0.00	28	77.78	8	22.22
13	Damoh	22	0.18	4.32	0.1	4.91	7	31.82	2	9.09	1	4.55	6	27.27	5	22.73	1	4.55	10	45.45	12	54.55
14	Datia	12	0.38	7.85	0.26	6.74	3	25.00	1	8.33	2	16.67	5	41.67	0	0.00	1	8.33	6	50.00	6	50.00
15	Dewas	21	0.1	6.89	0.16	2.14	11	52.38	2	9.52	1	4.76	6	28.57	1	4.76	0	0.00	14	66.67	7	33.33
16	Dhar	39	0	10.16	0.06	3.71	13	33.33	9	23.08	7	17.95	6	15.38	4	10.26	0	0.00	29	74.36	10	25.64
17	Dindori	16	0.08	1.44	0.12	0.83	12	75.00	0	0.00	0	0.00	4	25.00	0	0.00	0	0.00	12	75.00	4	25.00
18	Guna	22	0.6	6.4	2.2	2.2	13	59.09	7	31.82	1	4.55	0	0.00	1	4.55	0	0.00	21	95.45	1	4.55
19	Gwalior	19	0.16	12.2	2.4	2.79	5	26.32	7	36.84	5	26.32	0	0.00	2	10.53	0	0.00	17	89.47	2	10.53
20	Harda	13	0.15	5.04	0.02	1.59	9	69.23	0	0.00	1	7.69	3	23.08	0	0.00	0	0.00	10	76.92	3	23.08
21	Hoshangabad	18	0.26	0.79	0.11	4.17	4	22.22	0	0.00	0	0.00	12	66.67	1	5.56	1	5.56	4	22.22	14	77.78
22	Indore	32	0.26	12.14	0.03	0.94	12	37.50	12	37.50	4	12.50	4	12.50	0	0.00	0	0.00	28	87.50	4	12.50
23	Jabalpur	30	0.23	1.94	0.01	5.78	14	46.67	0	0.00	0	0.00	14	46.67	0	0.00	2	6.67	14	46.67	16	53.33
24	Jhabua	12	0.13	0.97	0.22	1.99	6	50.00	0	0.00	0	0.00	6	50.00	0	0.00	0	0.00	6	50.00	6	50.00
25	Katni	18	0.22	5.35	0.76	4.11	7	38.89	0	0.00	1	5.56	8	44.44	1	5.56	1	5.56	8	44.44	10	55.56
26	Khandwa	31	0.07	7.84	0.1	7.25	13	41.94	7	22.58	2	6.45	5	16.13	2	6.45	2	6.45	22	70.97	9	29.03
27	Khargone	22	0.01	3.1	0.08	3.41	8	36.36	2	9.09	0	0.00	9	40.91	3	13.64	0	0.00	10	45.45	12	54.55
28	Mandla	32	0.09	2.44	0	1.27	18	56.25	4	12.50	0	0.00	10	31.25	0	0.00	0	0.00	22	68.75	10	31.25
29	Mandsaur	36	0.23	11.78	0.02	0.53	13	36.11	11	30.56	8	22.22	4	11.11	0	0.00	0	0.00	32	88.89	4	11.11
30	Morena	13	2.12	13.5	0.28	1.82	7	0.00	6	46.15	4	30.77	3	23.08	0	0.00	0	0.00	10	76.92	3	23.08
31	Narsinghpur	14	0.45	5.52	0.29	1.9	9	50.00	7	7.14	2	14.29	4	28.57	0	0.00	0	0.00	10	71.43	4	28.57
32	Neemuch Panna	34 26	0.35	15.15	0.58	0.58 6.81	7	26.47 26.92	0	0.00	17	50.00	1 14	2.94 53.85	0	0.00	0	0.00 3.85	33 7	97.06 26.92	19	73.08
34	Raisen	28	0.12	4.07	0.12	1.68	20	71.43	1	3.57	0	3.57	6	21.43	0	0.00	0	0.00	22	78.57	6	21.43
35	Rajgarh	26	0.03	7.52	0.19	1.55	6	23.08	11	42.31	6	23.08	3	11.54	0	0.00	0	0.00	23	88.46	3	11.54
36	Ratlam	40	0.31	12.36	0.3	3.38	11	27.50	12	30.00	10	25.00	5	12.50	2	5.00	0	0.00	33	82.50	7	17.50
37	Rewa	32	0.02	4.66	0.11	2.22	19	59.38	7	21.88	1	3.13	4	12.50	1	3.13	0	0.00	27	84.38	5	15.63
38	Sagar	46	0.02	10.28	0.09	4.39	17	36.96	5	10.87	3	6.52	14	30.43	5	10.87	2	4.35	25	54.35	21	45.65
39	Satna	46	0.02	6.94	0.09	1.79	21	45.65	13	28.26	2	4.35	10	21.74	0	0.00	0	0.00	36	78.26	10	21.74
40	Sehore	21	0.02	4.14	0.12	1.16	9	42.86	6	28.57	1	4.76	5	23.81	0	0.00	0	0.00	16	76.19	5	23.81
41	Seoni	44	0.01	4.83	0.07	4.62	27	61.36	2	4.55	2	4.55	11	25.00	1	2.27	1	2.27	31	70.45	13	29.55
42	Shahdol	27	0.24	2.61	0.25	3.15	15	55.56	1	3.70	0	0.00	10	37.04	1	3.70	0	0.00	16	59.26	11	40.74
43	Shajapur	21	0.18	5.42	0.23	3.24	12	57.14	4	19.05	2	9.52	2	9.52	1	4.76	0	0.00	18	85.71	3	14.29
44	Sheopur	18	0.21	13.63	0.2	0.57	5	27.78	3	16.67	8	44.44	2	11.11	0	0.00	0	0.00	16	88.89	2	11.11
45	Shivpuri	30	0.18	6.36	0.07	1.92	10	33.33	9	30.00	8	26.67	3	10.00	0	0.00	0	0.00	27	90.00	3	10.00
46	Sidhi	29	0.02	2.25	0.05	1.3	19	65.52	1	3.45	0	0.00	9	31.03	0	0.00	0	0.00	20	68.97	9	31.03
47	Singrauli	22	0.03	3.53	0.19	1.5	15	68.18	2	9.09	0	0.00	5	22.73	0	0.00	0	0.00	17	77.27	5	22.73
48	Tikamgarh	24	0.09	5.74	0.38	11.69	6	25.00	3	12.50	3	12.50	8	33.33	3	12.50	1	4.17	12	50.00	12	50.00
49	Ujjain	40	0.26	8.48	0.3	1.74	20	50.00	10	25.00	5	12.50	5	12.50	0	0.00	0	0.00	35	87.50	5	12.50
50	Umaria	14	0.29	1.6	0.09	1.51	7	50.00	0	0.00	0	0.00	7	50.00	0	0.00	0	0.00	7	50.00	7	50.00
51	Vidisha	30	0.04	11.57	0.19	1.25	17	56.67	6	20.00	1	3.33	6	20.00	0	0.00	0	0.00	24	80.00	6	20.00
	Total	1299	0.01	15.15	0	11.69	598	46.04	216	16.63	124	9.55	293	22.56	52	4.00	16	1.23	938	72.21	361	27.79

<u> </u>	District	Block	Monitoring Wels in Mad	Source	Lat.	Long.	pН	EC	CO3	НСО3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	iexure : Na	K
5.110.	District		Boomion	Source	2	zong.	at	μS/cm	000	11000		50.	1,00	- 1	mg/l	5102		· ·			
1	A M - 1	A	A N	DW	22.710	76,000	25°C	1005	0	240	120	0		0.10		22 1	227	0.1	24	(1	21.6
1	Agar Malwa	Agar	Agar New	DW	23.718	76.008	7.27	1005	0	340	129	8	6	0.19	0.12	22	327	91	24	64	
2	Agar Malwa	Agar	Amla	DW	23.853	76.104	7.39	741	0	231	52	29	63	0.25	0.05	19	317	73	33	19	4.8
3	Agar Malwa	Badod	Barod	DW	23.788	75.806	7.38	1908	0	516	277	11	146	0.51	0.23	34	817	107	134	59	1.1
4	Agar Malwa	Susner	Guradi Bangla	DW	24.080	76.155	7.15	1351	0	431	139	15	110	0.47	0.05	29	545	113	64	55	2.4
5	Agar Malwa	Badod	Jahangirpura	DW	23.819	75.800	7.05	341	0	128	15	17	14	0.13	0.08	17	134	34	12	9	7.4
6	Agar Malwa	Badod	Jhounta	DW	23.733	75.946	7.47	943	0	431	40	12	44	0.54	0.11	27	257	97	4	94	2.6
7	Agar Malwa	Agar	Kanad	DW	23.668	76.174	7.37	998	0	474	47	17	10	0.40	0.17	26 34	337	95	24	65	11.3
8	Agar Malwa	Agar Badod	Kashi Bardiya	DW DW	23.773	76.044	7.54	1232 870	0	626 413	30	25	35	0.93	0.09		198	51 48	17	187	5.8
9	Agar Malwa	+	Matkotra		23.739	75.853			0	_	47	15	6 278	0.35	0.20	30	327		51	43	
10	Agar Malwa	Susner	Soyat	BW	24.188	76.174	7.44	3330	0	735	398	66		0.55		48	871	111	144	336	3.1 8.9
11	Agar Malwa	Susner NA	Susner New	DW DW	23.944 NA	76.101 NA	7.77	793 1545	0	261 389	69 196	31 49	46 56	0.53	0.08	21 28	267 614	73 121	20 76	52 62	4.7
12	Agar Malwa	-	Tanodia village	_			7.63	1343	0	384	205	12	134	0.67	BDL	26	540	160	34	90	1.2
13	Alirajpur	Alirajpur	Alirajpur	DW HP	22.309 22.430	74.353 74.437	7.65	1390	0	293	235	20	110	0.73	BDL	18	545	130	53	68	0.8
14	Alirajpur Alirajpur	Alirajpur Jobat	Ambua Badaguda	DW	22.430	74.437	8.06	1015	0	476	52	8	35	1.38	0.025	28	250	48	32	115	1.6
16	Alirajpur	Bhabra	Bhabra New	DW	22.549	74.317	7.81	885	0	390	37	10	55	1.19	0.023	33	255	76	16	85	1.0
17	Alirajpur	Alirajpur	Borkua	HP	22.224	74.319	8.03	590	0	293	17	4	18	1.02	BDL	23	260	72	19	15	0.3
18	Alirajpur	Kattiwada	Chandpur	DW	22.357	74.243	8.07	1400	0	494	160	13	70	1.02	BDL	21	350	94	28	158	1.3
19	Alirajpur	Alirajpur	Fatta	DW	22.259	74.598	7.88	1295	0	488	57	54	90	0.57	0.03	42	365	106	24	125	3.4
20	Alirajpur	Jobat	Jobat New	HP	22.413	74.570	7.43	3210	0	433	850	9	41	0.68	0.032	45	680	172	61	425	10.2
21	Alirajpur	Kattiwada	Kathiwara	DW	22.481	74.150	7.64	800	0	305	60	27	27	0.72	BDL	35	325	80	30	33	0.2
22	Alirajpur	1200011000	Salampur	HP	22.519	74.202	7.98	580	0	281	15	10	30	0.75	BDL	38	250	62	23	18	0.2
23	Anuppur	Pushprajgarh	Amarkantak	HP	22.674	81.761	6.75	130	0	55	10	1	1	0.01	0.08	11	30	8	2	10	9.2
24	Anuppur	Anuppur	Anuppur	HP	23.119	81.701	7.53	987	0	371	97	15	8	0.52	0.10	22	425	100	43	28	1.1
25	Anuppur	Kotma	Banshi Tola	HP	23.198	81.889	6.54	282	0	79	37	8	23	0.32	0.12	32	110	24	12	14	1.6
26	Anuppur	Pushprajgarh	Bhejari	HP	22.823	81.698	7.55	469	0	176	47	5	11	0.46	0.06	19	70	26	1	70	5.4
27	Anuppur	Jaithari	Deohara	DW	23.143	81.597	7.36	1431	0	437	265	8	8	0.41	0.23	34	580	186	28	56	4.1
28	Anuppur	Jaithari	Dhangaon	HP	23.031	81.839	7.23	305	0	109	20	22	2	0.33	0.05	15	90	26	6	22	3.6
29	Anuppur	Jaithari	Jamudi	DW	23.066	81.633	7.18	578	0	279	22	9	1	1.19	0.07	27	185	58	10	38	11.4
30	Anuppur	Anuppur	Jhiriyatola	DW	23.214	82.104	7.25	895	0	437	47	12	5	0.52	0.11	23	275	92	11	75	2.8
31	Anuppur	Jaithari	Kerar	DW	23.010	81.610	7.46	1140	0	559	45	25	2	0.39	0.05	28	410	114	30	65	8.7
32	Anuppur	Kotma	Kotma	DW	23.196	81.979	6.70	596	0	97	104	17	32	0.12	0.08	22	225	66	15	28	4.5
33	Anuppur	Jaithari	Lapta	HP	22.984	81.889	6.80	388	0	134	37	19	2	0.52	0.08	18	130	40	7	25	1.6
34	Anuppur	Anuppur	Muddhoba	DW	23.252	81.884	7.32	410	0	225	10	9	3	0.59	0.16	27	110	28	10	45	2.3
35	Anuppur	Jaithari	Murra Tola	DW	23.056	81.793	6.91	487	0	109	54	51	6	0.52	0.12	20	150	48	7	36	5.6
36	Anuppur	Kotma	Nagara Bandh	DW	23.209	81.985	7.27	1130	0	267	208	13	18	0.23	0.09	32	505	192	6	27	1.6
37	Anuppur	Pushprajgarh	Podki	DW	22.784	81.729	7.53	604	0	237	40	15	26	0.13	0.05	39	225	54	22	30	2.9
38	Anuppur	Pushprajgarh	Rajendra Gram	HP	22.933	81.608	6.95	591	0	152	99	22	11	0.04	0.06	41	265	76	18	8	5.3
39	Anuppur	Jaithari	Venkat Nagar	HP	22.923	81.873	6.81	315	0	91	22	29	8	0.69	0.05	22	80	30	1	32	1.7
40	Ashok Nagar	Mungoali	Bahadurpur	DW	24.342	77.969	7.12	1550	0	369	202	22	144	0.29	BDL	27	569	150	47	86	1.2
41	Ashok Nagar	Chanderi	Chanderi	DW	24.712	78.136	7.49	1215	0	442	92	12	109	0.36	BDL	22	386	103	31	93	3.2
42	Ashok Nagar	Isagarh	Dhakoni	HP	24.763	77.858	7.27	612	0	248	27	14	43	0.35	BDL	19	238	63	19	24	1.9
43	Ashok Nagar	Isagarh	Isagarh	BW	24.842	77.880	7.17	712	0	315	22	18	7	0.37	0.1	21	257	71	19	35	2.6

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
44	Ashok Nagar	Mungoali	Khalilpur	BW	24.559	78.088	7.67	769	0	327	45	13	25	0.36	BDL	23	302	85	22	32	2.4
45	Ashok Nagar	Mungoali	Mungaoli	DW	24.403	78.109	7.27	836	0	248	125	18	4	0.29	BDL	26	366	101	28	14	3.1
46	Ashok Nagar	Isagarh	Pachlana	DW	24.781	77.803	8.05	888	0	405	30	24	24	0.67	BDL	29	238	63	19	86	0.9
47	Ashok Nagar	Ashok Nagar	Rati Kheda	HP	24.597	77.674	7.74	714	0	278	32	16	32	0.58	BDL	32	208	61	13	61	1.7
48	Ashok Nagar	Mungoali	Sahrai	DW	24.529	78.102	7.62	746	0	315	27	15	23	0.45	BDL	27	287	63	31	32	2.4
49	Ashok Nagar	Ashok Nagar	Sankat Mochan	DW	24.615	77.731	7.89	842	0	387	22	14	34	0.50	0.1	19	312	81	26	37	2.1
50	Ashok Nagar	Isagarh	Saraskheri	HP	24.736	77.789	7.23	789	0	333	32	24	13	0.21	BDL	26	267	63	26	46	3.6
51	Ashok Nagar	Ashok Nagar	Semrisahabad	HP	24.628	77.563	7.65	1352	0	520	120	16	25	1.28	BDL	36	460	137	29	85	2.9
52	Ashok Nagar	Ashok Nagar	Shadora	HP	24.620	77.590	7.89	498	0	121	30	35	76	0.14	0.1	22	124	24	16	52	3.2
53	Ashok Nagar	Isagarh	Shankarpur	HP	24.755	77.921	7.62	1042	0	315	125	24	39	0.19	BDL	26	277	71	24	103	1.9
54	Balaghat	Waraseoni	Amai	DW	21.676	79.952	7.46	1172	0	342	142	15	78	1.06	0.06	31	490	96	61	39	1
55	Balaghat	Lanji	Baghatola	HP	21.398	80.627	7.53	1233	0	378	192	12	15	0.10	0.04	30	570	130	60	17	1
56	Balaghat	Paraswada	Bagholi	DW	22.142	80.369	6.71	408	0	49	47	14	87	0.01	0.08	21	140	44	7	20	9
57	Balaghat	Baihar	Baihar1	DW	22.104	80.551	7.35	1007	0	275	137	15	35	0.17	0.06	32	350	90	30	66	3
58	Balaghat	Balaghat	Balaghat	DW	21.813	80.184	7.42	935	0	293	135	10	6	0.10	0.12	31	310	90	21	67	4
59	Balaghat	Baihar	Bhaisanghat	DW	22.183	80.714	7.41	549	0	287	15	7	3	0.22	0.29	72	205	52	18	28	1
60	Balaghat	Kirnapur	Bhanegaon	DW	21.551	80.408	7.37	932	0	250	122	18	44	0.13	0.07	40	350	70	43	49	1
61	Balaghat	Birsa	Birsa	DW	22.011	80.740	7.34	478	0	116	55	14	50	0.13	0.28	63	185	56	11	20	2
62	Balaghat	Khairlanji	Bonkatta	DW	21.606	79.763	7.37	482	0	226	27	8	4	0.34	0.43	19	145	48	6	38	5
63	Balaghat	Birsa	Damoh2	DW	21.896	80.795	7.63	727	0	250	80	11	9	0.09	0.33	28	275	72	23	35	5
64	Balaghat	Baihar	Jawaditula	DW	22.236	80.871	7.48	660	0	250	42	13	32	0.05	0.09	41	270	70	23	21	5
65	Balaghat	Lalbarra	Kanjai	DW	22.026	79.986	7.36	953	0	323	100	17	49	0.64	0.12	43	225	70	12	111	4
66	Balaghat	Waraseoni	Kanki	DW	21.832	80.152	7.09	720	0	79	150	12	70	0.08	0.06	25	205	56	16	65	5
67	Balaghat	Lalbarra	Katang Tola	DW	21.948	80.047	7.63	550	0	244	27	14	9	0.40	0.07	28	190	52	15	35	1
68	Balaghat	Katangi	Katangi	DW	21.771	79.803	7.36	1314	0	445	165	9	25	0.60	0.07	36	465	92	57	84	1
69	Balaghat	Katangi	Katedhara	DW	21.714	79.797	7.54	1109	0	348	120	14	66	0.28	0.06	30	350	78	38	75	25
70	Balaghat	Khairlanji	Khairlanji	DW DW	21.601	79.979	7.85	912 658	0	403 323	30	15 9	13	0.07	0.10	23	175 260	38	19	125	5
71	Balaghat	Paraswada	Khurmundi	DW	21.626	80.481	7.66		0	232			25			18		78	16	25	36
72	Balaghat Balaghat	Kirnapur	Kirnapur	DW	21.020	80.329 79.929	7.31	749 378	0	171	105 12	12 20	3	0.11	0.08	32 45	210 125	56 44	17 4	51 26	30
74	Balaghat	Waraseoni	Kochwahi	DW	22.142	80.125	7.41	1095	0	365	127	12	34	0.18	0.03	29	385	104	30	70	2
75	Balaghat	Balaghat Baihar	Lamtal	DW	21.930	80.352	7.43	413	0	182	15	14	5	0.00	0.08	23	95	30	5	45	5
76	Balaghat	Balaghat	Laugur Magardarta	DW	21.966	80.332	7.13	319	0	115	17	9	42	0.13	0.28	31	130	30	13	10	4
77	Balaghat	Khairlanji	Miragpur	DW	21.631	79.839	7.15	1760	0	267	327	16	165	0.80	0.07	1	695	190	54	79	2
78	Balaghat	Baihar	Mohagaon	DW	22.052	80.681	7.13	608	0	213	55	5	38	0.30	0.07	43	215	54	19	36	3
79	Balaghat	Baihar	Mukki	DW	22.154	80.672	7.33	285	0	122	15	2	10	0.24	0.00	38	110	26	11	11	4
80	Balaghat	Lanji	Nandora	HP	21.515	80.618	7.58	770	0	322	52	9	38	0.03	0.07	10	325	54	46	24	1
81	Balaghat	Waraseoni	Newargaon	DW	21.811	80.016	7.62	1500	0	352	300	14	5	0.56	0.07	38	485	106	54	109	15
82	Balaghat	Lanji	Paldongri	DW	21.471	80.488	7.48	1495	0	419	247	22	7	0.31	1.24	24	495	116	50	78	57
83	Balaghat	Paraswada	Paraswara	BW	22.176	80.301	7.44	374	0	128	30	8	26	0.25	0.17	35	140	40	10	18	1
84	Balaghat	Baihar	Parsatola	DW	22.170	80.546	6.95	500	0	115	65	17	51	0.23	0.17	37	180	46	16	28	1
85	Balaghat	Kirnapur	Rajegaon	HP	21.631	80.250	7.33	1263	0	389	167	13	66	0.16	0.07	40	385	72	50	109	1
86	Balaghat	Khairlanji	Rampalli	DW	21.664	80.017	7.45	599	0	188	50	18	54	0.05	0.06	27	210	48	22	36	2
87	Balaghat	Paraswada	Rangpatbaba	HP	22.153	80.217	7.46	655	0	316	17	12	4	1.22	0.09	56	155	38	15	75	1
0/	Danagnat	1 araswada	Trangpatoaoa	111	22.133	00.21/	I /.40	022	U	510	1 /	14	-	1.44	0.09	50	133	50	L 13	13	1

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
88	Balaghat	Balaghat	Saleteka New	DW	21.705	80.225	7.61	730	0	371	27	7	6	0.20	0.06	43	235	36	35	56	2
89	Balaghat	Baihar	Samnapur	DW	21.969	80.490	7.09	955	0	170	182	19	34	0.17	0.09	58	310	86	23	73	1
90	Balaghat	Baihar	Supkhar	DW	22.189	80.937	7.45	313	0	146	10	3	3	0.09	0.07	26	100	30	6	21	2
91	Balaghat	Waraseoni	Waraseoni1	DW	21.763	80.052	7.26	645	0	243	55	12	11	0.10	0.62	18	175	50	12	57	12
92	Barwani	Rajpur	Balsamund		21.806	75.175	7.72	1235	0	399	120	12	92	0.25	BDL	22	470	103	52	57	2.2
93	Barwani	Thikri	Baruphatak	TW	21.984	75.302	7.42	745	0	272	42	24	27	0.50	0.1	26	208	50	20	65	3.5
94	Barwani	Thikri	Borlai	DW	22.038	74.997	7.78	1212	0	303	145	28	60	0.35	BDL	31	490	125	43	42	1.2
95	Barwani	Sendhawa	Chachariya	DW	21.576	75.186	7.46	545	0	212	12	5	54	0.40	BDL	23	208	53	18	15	1.9
96	Barwani	Rajpur	Julwania	TW	21.872	75.186	7.26	565	0	206	27	22	18	1.10	BDL	17	210	50	21	22	0.9
97	Barwani	Newali	Niwali1	DW	21.684	74.923	7.14	1942	0	424	280	45	195	0.30	0.1	35	675	184	52	127	1.5
98	Barwani	Rajpur	Palsud	HP	21.825	74.968	7.76	912	0	218	127	25	58	0.25	BDL	26	317	105	13	57	2.1
99	Barwani	Rajpur	Rajpur	DW	31.936	75.136	8.02	2123	0	460	325	45	177	0.50	BDL	46	723	224	40	142	2.2
100	Barwani		Sendhwa	BW	21.700	75.105	7.72	965	0	284	110	27	46	0.30	BDL	25	322	105	14	62	3.7
101	Betul	Athner	Athner1	DW	21.621	77.921	7.82	1095	0	431	75	29	48	0.48	BDL	29	361	77	41	80	4.2
102	Betul	Betul	Betul1	DW	21.860	77.927	7.39	1515	0	462	167	70	75	1.02	BDL	22	574	166	38	78	1.5
103	Betul	Bhainsdehi	Bhainsdehi1	DW	21.644	77.637	7.46	550	0	128	42	55	43	0.34	0.35	32	163	32	20	46	0.6
104	Betul	Shahpur	Bhonra	DW	22.278	77.870	7.4	715	0	249	60	15	34	0.4	BDL	29	193	69	5	70	1.2
105	Betul	Chicholi	Chirapatala	HP	22.109	77.497	7.65	470	0	164	42	12	22	0.21	BDL	33	163	32	20	30	0.6
106	Betul	Betul	Gadha	DW	21.915	77.748	7.85	565	0	207	35	20	40	0.35	0.24	29	183	50	14	43	0.8
107	Betul	Multai	Ghatpiparia	DW	21.882	78.519	7.68	1210	0	383	122	30	95	1.15	BDL	33	416	89	47	82	0.5
108	Betul	Bhainsdehi	Gudagaon	DW	21.592	77.710	7.86	795	0	219	75	55	55	0.86	BDL	22	312	85	24	35	1.6
109	Betul	Athner	Gujarmaal	DW	21.630	77.946	7.85	675	0	225	57	32	28	0.52	BDL	21	272	73	22	25	0.6
110	Betul	Bhainsdehi	Jhallar	DW	21.726	77.743	7.68	935	0	304	85	38	53	0.5	BDL	18	307	55	41	70	1.8
111	Betul	Chicholi	Jogli	HP	21.976	77.669	7.35	1093	0	371	105	35	52	1.24	0.12	23	381	77	46	70	2.5
112	Betul	Prabhat Pattan	Junapani	DW	21.721	78.353	7.8	623	0	200	45	20	55	0.62	BDL	36	248	42	35	25	1.3
113	Betul	Multai	Kapasia	DW	21.831	78.415	7.86	705	0	273	45	29	36	0.52	BDL	25	262	65	24	40	2
114	Betul	Betul	Khedi	DW	21.857	77.803	7.9	755	0	286	75	14	18	0.72	0.21	22	228	69	13	66	2.1
115	Betul	Chicholi	Khokharkheda	HP	22.208	77.419	7.65	507	0	140	25	31	72	0.28	BDL	28	208	44	24	16	0.9
116	Betul	Betul	Kolgaon	DW	21.769	77.894	7.68	605	0	207	50	23	26	0.32	BDL	29	188	40	22	47	2.3
117	Betul	Bhainsdehi	Kotal Kund	DW	21.463	77.658	7.82	720	0	231	55	45	45	0.55	0.18	30	248	51	29	48	1.6
118	Betul	Prabhat Pattan	Masod New	DW	21.603	78.118	7.73	454	0	134	67	28	36	0.45	BDL	35	163	42	14	47	1.3
119	Betul	Multai	Multaidw	DW	21.775	78.256	7.45	1130	0	383	115	33	60	0.86	BDL	25	347	85	32	96	2.1
120	Betul	Ghoda Dongri	Nimpani	HP	22.072	77.875	7.62	535	0	194	40	20	30	0.6	BDL	33	193	32	28	30	1.9
121	Betul	Chicholi	Pathakhera	DW	22.068	77.534	7.58	365	0	134	55	12	18	0.42	BDL	35	124	28	13	21	0.9
122	Betul	Prabhat Pattan	Pattan	DW	21.651	78.266	7.82	430	0	146	27	18	20	0.72	BDL	28	168	26	25	18	1.6
123	Betul	Bhainsdehi	Sanwal Medha	DW	21.514	77.699	7.68	615	0	207	40	20	34	1.15	BDL	27	233	34	36	31	1.5
124	Betul	Ghoda Dongri	Sarni	DW	22.118	78.143	7.58	572	0	255	20	15	27	0.42	BDL	18	203	30	31	35	1.6
125	Betul	Amla	Sasundra	HP	21.833	78.091	7.68	485	0	134	40	28	48	0.32	0.1	35	163	30	22	33	1.3
126	Betul	Shahpur	Shahpur	HP	22.141	77.904	7.65	1005	0	365	70	30	62	0.95	BDL	27	366	75	43	52	2.3
127	Bhind	Lahar	Alampur	HP	26.029	78.797	7.23	1089	0	464	67	15	14	0.55	BDL	22	355	104	23	82	1.2
128	Bhind	Ater	Ater	HP	26.750	78.644	7.89	4069	0	708	837	85	140	1.05	0.1	47	1115	332	69	412	2.3
129	Bhind	Lahar	Balaji	HP	26.296	78.980	7.62	2712	0	1336	85	65	23	1.45	BDL	24	825	286	27	225	3.1
130	Bhind	Gohad	Bhagathar	HP	26.344	78.492	7.83	2934	0	512	627	45	37	0.65	BDL	34	535	152	38	415	1.9
131	Bhind	Gohad	Bhirkhari	HP	26.475	78.478	7.42	1565	0	543	172	22	6	1.00	BDL	27	415	112	33	158	1.6

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
132	Bhind	Mehgaon	Chirole	HP	26.355	78.634	8.02	3902	0	921	712	65	7	1.35	0.1	46	450	118	38	675	3.3
133	Bhind	Lahar	Daboh	BW	25.996	78.879	8.03	1298	0	647	27	22	11	0.50	BDL	19	370	102	28	112	3.5
134	Bhind	Lahar	Dewri	HP	26.081	78.903	7.46	1189	0	586	37	15	9	0.45	BDL	23	405	124	23	80	2.9
135	Bhind	Mehgaon	Gormi	HP	26.599	78.502	7.58	1423	0	506	112	45	5	0.90	BDL	27	325	86	27	165	2.7
136	Bhind	Ater	Kanuapuradw	HP	26.611	78.647	7.45	1023	0	519	35	13	5	0.30	BDL	20	260	70	21	106	1.6
137	Bhind	Gohad	Khader	DW	26.368	78.484	8.02	1122	0	464	67	15	45	0.80	BDL	22	425	92	47	56	2.3
138	Bhind	Lahar	Lahar	BW	26.186	78.947	7.76	2031	0	836	175	35	23	1.30	BDL	28	455	118	39	245	2.6
139	Bhind	Ater	Lavan	HP	26.521	78.731	7.92	1098	0	543	47	12	9	0.80	0.1	22	405	112	30	56	3.5
140	Bhind	Gohad	Mau	BW	26.270	78.667	7.76	1712	0	366	302	23	19	0.65	BDL	34	595	162	46	111	2.8
141	Bhind	Mehgaon	Mehgaon	BW	26.498	78.601	7.56	1509	0	436	225	12	77	1.35	BDL	44	213	42	26	237	2.9
142	Bhind	Mehgaon	Meroli	DW	26.562	78.530	7.86	1723	0	823	80	25	14	1.40	BDL	22	431	111	37	185	3.6
143	Bhind	Bhind	Nahrakapura	DW	26.637	78.942	7.22	1689	0	557	175	35	34	0.90	BDL	27	441	101	46	171	3.8
144	Bhind	Bhind	Phuph	HP	26.643	78.879	7.96	1285	0	514	87	29	26	1.00	0.1	31	401	123	23	94	4.2
145	Bhind	Ron Mihona	Ratanpura	HP	25.968	78.825	7.67	689	0	297	40	12	3	0.50	BDL	19	243	71	16	36	1.1
146	Bhopal	Berasia	Amlia	DW	23.87	77.248	7.37	585	0	190	50	29	32	0.48	0.12	33	213	57	17	32	1.9
147	Bhopal	Phanda	Ayodhya Nagar	DW	23.267	77.433	7.34	1080	0	404	102	28	15	0.68	0.14	25	307	61	37	98	4.6
148	Bhopal	Phanda	Bairagarh	DW	23.273	77.352	7.25	1520	0	423	222	42	29	0.31	0.21	24	401	107	33	156	7.4
149	Bhopal	Phanda	Balampurghati	DW	23.397	77.542	7.28	809	0	208	107	38	38	0.28	0.14	29	193	44	20	93	1.8
150	Bhopal	Phanda	Barkheda Pathani	DW	23.214	77.475	7.62	1216	0	423	120	35	41	0.30	0.07	35	342	59	47	110	9.9
151	Bhopal	Phanda	Barkhera	DW	23.231	77.468	7.34	293	0	92	27	12	16	0.47	0.09	20	50	8	7	40	4.2
152	Bhopal	Berasia	Berasia	DW	23.623	77.431	7.65	506	0	153	65	16	10	0.59	0.18	18	144	30	17	44	5.7
153	Bhopal	Phanda	Bilkhiria	HP	23.254	77.581	7.27	551	0	208	40	23	19	0.32	0.23	41	149	38	13	52	7.9
154	Bhopal	Phanda	Chichli	DW	23.209	77.376	7.10	299	0	67	40	20	6	0.24	0.21	32	84	24	6	22	9.3
155	Bhopal	Phanda	DIG Bangla	DW	23.278	77.404	7.46	886	0	318	97	17	8	0.55	0.13	28	233	50	26	87	6.7
156	Bhopal	Phanda	E- 2 Nursery	DW	23.22	77.437	7.32	970	0	361	95	28	15	0.38	0.10	24	312	63	37	73	3.9
157	Bhopal	Phanda	Gandhi Nagar	DW	23.294	77.347	7.37	526	0	165	60	19	12	0.29	0.12	31	139	30	16	50	5.5
158	Bhopal	Berasia	Gunga	DW	23.449	77.36	7.33	659	0	129	112	37	8	0.42	0.08	32	153	42	12	72	6.1
159	Bhopal	Phanda	Islamnagar	HP	23.356	77.418	7.12	1183	0	374	125	51	41	0.77	0.05	23	317	63	39	115	6.5
160	Bhopal	Phanda	Lal Ghati	DW	23.277	77.376	6.89	732	0	233	85	28	15	0.29	0.09	25	223	57	19	59	5.7
161	Bhopal	Phanda	Nabibagh	DW	23.308	77.404	7.58	915	0	286	99	32	32	0.48	0.14	42	267	63	26	79	6.4
162	Bhopal	Berasia	Nagirabad	DW	23.794	77.256	7.23	780	0	213	111	26	19	0.12	0.17	21	188	50	16	89	3.5
163	Bhopal	Phanda	Nipaniya Jaat	DW	23.41	77.399	7.26	798	0	237	104	19	16	0.45	0.19	23	223	65	14	71	5.9
164	Bhopal	Phanda	Patel Nagar	BW	23.249	77.483	7.85	458	0	146	47	15	18	0.19	0.09	26	124	26	14	44	2.5
165	Bhopal	Phanda	Piplani	DW	23.214	77.475	7.41	806	0	286	74	27	15	0.54	0.08	34	208	46	23	80	3.9
166	Bhopal	Berasia	Ramgarha	DW	23.654	77.347	7.28	582	0	188	52	18	37	0.35	0.09	44	149	36	14	58	6.9
167	Bhopal	Phanda	Sarvar	DW	23.156	77.3	7.61	777	0	255	74	22	43	0.58	0.19	32	213	48	23	75	4.8
168	Bhopal	Phanda	Shahjahana bad	DW	23.266	77.398	7.48	539	0	176	59	17	11	0.25	0.21	29	144	38	12	48	10.5
169	Bhopal	Phanda	Shahpura	DW	23.207	77.423	7.98	650	0	219	69	25	9	0.29	0.11	33	193	30	29	51	8.3
170	Bhopal	Phanda	South T T Nagar	DW	23.231	77.407	7.22	740	0	298	52	24	10	0.68	0.15	40	218	46	25	61	6.8
171	Bhopal	Berasia	Suhaya Kala	DW	23.744	77.51	7.31	570	0	188	54	20	22	0.43	0.18	22	173	32	23	46	5.7
172	Burhanpur	Khaknar	Dedtalai	HP	21.509	76.758	8.05	842	0	328	72	8	43	0.24	BDL	33	292	75	25	58	1.3
173	Burhanpur	Burhanpur	Dehnala	HP	21.529	76.311	7.63	670	0	322	17	10	34	0.26	0.021	34	223	46	26	50	2
174	Burhanpur	Khaknar	Karkheda	DW	21.337	76.487	7.68	895	0	328	72	12	73	0.14	BDL	24	351	65	46	43	1.7
175	Burhanpur	Khaknar	Khaknardw	HP	21.365	76.567	7.57	1385	0	565	120	10	50	0.26	0.15	38	564	57	102	56	1.4

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
176	Burhanpur	Khaknar	Manjrod Kalan	HP	21.413	76.628	7.59	1410	0	565	125	12	58	0.06	BDL	22	515	61	88	85	2.4
177	Burhanpur	Khaknar	Nepa Nagar	DW	21.453	76.394	7.66	1180	0	474	122	10	8	0.14	BDL	32	347	85	32	110	2
178	Burhanpur	Khaknar	Pipalpani	HP	21.430	76.679	7.57	1185	0	437	115	8	65	0.33	0.24	36	426	69	61	75	1.9
179	Burhanpur	Khaknar	Shekhpura	HP	21.552	76.734	8.04	880	0	322	72	18	60	0.37	BDL	22	277	69	25	73	0.9
180	Burhanpur	Khaknar	Sirpur	BW	21.302	76.373	7.62	1395	0	559	120	15	48	0.27	0.02	27	530	55	95	75	1.6
181	Burhanpur	Khaknar	Tukai Thad	DW	21.429	76.653	8.05	800	0	352	32	18	47	0.19	BDL	34	243	40	35	70	0.8
182	Chhatarpur	Buxwaha	Amodha	DW	24.199	79.326	6.95	395	0	213	20	5	6	0.82	BDL	28	120	26	13	48	1.2
183	Chhatarpur	Bijawar	Bijawar	DW	24.650	79.498	7.2	750	0	377	17	10	18	0.71	BDL	22	285	86	17	42	0.5
184	Chhatarpur	Buxwaha	Buxwaha	DW	24.249	79.287	7.25	1010	0	286	110	35	48	0.52	0.018	32	305	102	12	88	2.8
185	Chhatarpur	Laundi	Chandla	DW	25.067	80.194	7.23	1250	0	480	97	42	21	1.39	0.02	29	410	124	24	85	0.8
186	Chhatarpur	Chhatarpur	Chhatarpur	DW	24.900	79.591	7.12	1450	0	529	130	30	62	0.35	BDL	20	510	150	33	90	8
187	Chhatarpur	Buxwaha	Gadhoi	DW	24.295	79.227	7.05	673	0	237	25	23	12	0.6	BDL	18	110	36	5	75	1.9
188	Chhatarpur	Gaurihar	Gaurihar	DW	25.268	80.194	7.45	1580	0	450	210	65	32	1.18	BDL	38	285	86	17	225	1.8
189	Chhatarpur	Bijawar	Gulganj	DW	24.693	79.369	7.22	1250	0	377	110	85	60	0.66	BDL	42	500	160	24	55	1.2
190	Chhatarpur	Chhatarpur	Issanagar	DW	24.862	79.385	7.35	1355	0	425	135	60	59	0.92	BDL	33	220	50	23	208	0.7
191	Chhatarpur	Rajnagar	Khajuraho	DW	24.850	79.931	7.32	1250	0	425	115	80	14	0.9	BDL	42	395	116	26	100	2.5
192	Chhatarpur	Nowgaon	Kukrel	DW	25.226	79.346	7.24	1100	0	480	67	25	15	1.38	0.012	42	210	60	15	152	1.8
193	Chhatarpur	Laundi	Lavkush Nagar	DW	25.139	80.006	7.08	2290	0	401	425	85	100	0.66	BDL	48	920	286	50	95	2.6
194	Chhatarpur	Nowgaon	Maharajpur	DW	25.021	79.726	7.28	1125	0	431	82	39	58	0.38	BDL	20	450	146	21	50	1.9
195	Chhatarpur	Chhatarpur	Mankari	DW	25.027	79.799	7.51	780	0	371	20	10	44	1.09	BDL	39	300	96	15	43	2.5
196	Chhatarpur	Chhatarpur	Matgawan	DW	24.798	79.477	7.28	850	0	322	45	32	29	0.28	BDL	28	345	106	19	25	2.4
197	Chhatarpur	Bijawar	Motigarh	DW	24.613	79.669	7.29	385	0	164	17	8	12	0.33	BDL	22	65	16	6	55	1.8
198	Chhatarpur	Nowgaon	Nowgaon	DW	25.054	79.450	7.36	1295	0	322	125	90	95	1.11	BDL	45	525	166	27	45	3.5
199	Chhatarpur	Chhatarpur	Pipora Khurd	DW	24.850	79.481	7.55	805	0	340	50	30	25	0.55	BDL	32	310	72	32	40	3.2
200	Chhatarpur	Nowgaon	Putaria	DW	25.115	79.388	7.45	1195	0	383	105	40	100	0.62	BDL	29	290	106	6	135	4.5
201	Chhatarpur	Gaurihar	Sarwai	DW	25.186	80.287	7.62	1765	0	352	305	120	42	0.58	BDL	45	580	166	40	140	8.1
202	Chhatarpur	Gaurihar	Singhpur	DW	25.128	80.244	7.42	705	0	322	35	10	22	0.92	BDL	29	300	86	21	22	3.2
203	Chhatarpur	Bijawar	Tapra Lahar	DW	24.588	79.610	7.21	476	0	194	30	8	26	0.42	BDL	18	95	12	16	65	3.8
204	Chhatarpur	Nowgaon	Tatampur	DW DW	25.045	79.865	7.18	1420	0	377 279	135	95	120	1.23	BDL	28	495 195	154	27	95	
205	Chhindwara Chhindwara	Amarwara	Amarwara	DW	22.194 22.421	78.469 78.618	7.59 7.48	748 765	0	249	62 70	31 42	11 17	0.59 1.04	0.10 BDL	25 32	185	43 24	21 30	78 85	2.1
207	Chhindwara	Amarwara Pandhuran	Banjari Pargaan 1	DW	21.821	79.013	7.44	1506	0	377	147	58	189	1.04	BDL	41	455	118	39	133	1.4
208	Chhindwara	Chaurai	Borgaon1 Chaurai1	DW	22.260	79.013	7.44	880	0	207	105	64	42	1.69	0.14	19	225	48	26	94	1.8
209	Chhindwara	Chhindwara	Chhindwara	DW	21.559	78.816	7.57	1217	0	407	95	56	69	1.10	BDL	25	410	86	47	88	1.9
210	Chhindwara	Pandhurana	Chincholiwad	DW	22.054	79.251	7.80	781	0	255	72	25	51	0.68	BDL	33	245	56	26	63	2.4
211	Chhindwara	Jamai	Damua	DW	22.053	78.949	7.53	1064	0	340	107	43	49	0.00	0.15	42	315	66	36	96	1.3
212	Chhindwara	Tamia	Delakhari	DW	21.500	78.693	7.72	715	0	237	70	32	27	0.51	0.13	29	225	58	19	54	7.9
213	Chhindwara	Mohkhed	Goni	DW	22.301	79.171	7.72	811	0	249	77	24	65	0.67	BDL	41	322	87	26	36	1.2
214	Chhindwara	Harai	HarraiDW	DW	21.589	79.171	7.76	670	0	182	82	17	48	0.42	0.24	38	145	30	17	86	1.4
215	Chhindwara	Chhindwara	Jamunia Ner	DW	22.137	79.023	7.96	635	0	194	52	30	43	0.42	0.15	22	210	48	22	46	0.8
216	Chhindwara	Parasia	Lahgudna	HP	22.272	78.724	7.98	716	0	267	47	44	14	1.10	BDL	39	195	56	13	72	1.5
217	Chhindwara	Mohkhed	Linga rly.stn.	DW	21.963	78.938	7.35	1235	0	310	150	42	107	0.54	0.25	28	315	74	32	135	1.9
218	Chhindwara	Tamia	Mahaljhir	DW	22.609	78.574	7.37	923	0	322	77	51	24	1.01	0.23	39	213	37	29	112	1.3
219	Chhindwara	Pandhurana	Mohi	DW	21.658	78.441	7.70	628	0	207	62	26	15	0.98	0.10	51	175	24	28	59	2.1
219	Cillinuwara	I andiiui ana	IMOIII	שען	21.036	/0.441	7.70	020	U	207	02	20	13	0.70	0.10	J1	1/5	47	20	3)	4.1

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
220	Chhindwara	Pandhurana	Pandurna	DW	22.613	78.518	7.48	1338	0	352	182	62	47	1.10	0.30	33	255	62	24	187	1.6
221	Chhindwara	Pandhurana	Piplanarayanwar	DW	21.588	78.731	7.43	1019	0	371	80	35	51	0.84	BDL	27	335	93	25	75	2.2
222	Chhindwara	Pandhurana	Rajna	DW	21.540	78.639	7.37	1549	0	480	137	96	59	1.14	0.10	26	421	96	44	157	1.2
223	Chhindwara	Sausar	Ramakona New	DW	21.702	78.843	7.93	706	0	249	55	42	21	1.63	BDL	22	230	48	27	55	1.0
224	Chhindwara	Chaurai	Ramgarh	DW	22.175	79.272	7.43	1258	0	352	110	120	49	0.98	0.10	31	390	90	40	106	1.9
225	Chhindwara	Mohkhed	Sarangbheri	DW	21.867	78.953	7.56	512	0	170	37	24	37	0.27	BDL	25	155	36	16	44	1.3
226	Chhindwara	Sausar	Sathiya	DW	22.590	79.179	7.66	461	0	164	45	10	8	0.32	0.24	34	85	10	15	63	0.8
227	Chhindwara	Sausar	Sausar	DW	21.655	78.806	7.45	1105	0	334	122	46	40	0.30	0.19	37	345	78	36	92	1.4
228	Chhindwara	Amarwara	Silwanighati	DW	21.788	78.831	7.95	696	0	225	65	23	39	0.80	BDL	29	215	54	19	57	0.7
229	Chhindwara	Parasia	Singhori	DW	22.201	79.062	7.29	1219	0	395	127	58	30	0.72	0.10	44	405	86	46	90	1.1
230	Chhindwara	Amarwara	Sonapipri	DW	22.143	78.803	7.61	555	0	158	57	19	42	1.32	0.17	26	160	24	24	49	1.3
231	Chhindwara	Chaurai	Surla	DW	22.433	79.172	7.52	889	0	322	77	34	18	0.54	BDL	27	285	70	27	67	0.9
232	Chhindwara	Mohkhed	Tansara Mal	DW	21.862	78.898	7.31	773	0	255	72	28	31	0.45	0.14	36	245	62	22	59	1.4
233	Damoh	Damoh	Abhana	DW	23.705	79.537	7.53	1842	0	384	240	76	240	0.70	1.2	54	415	122	27	196	49.2
234	Damoh	Jabera	Bamhori	DW	23.685	79.719	7.61	612	0	177	32	18	86	0.20	0.5	12	165	42	15	55	1.9
235	Damoh	Patera	Bangaon New	DW	24.007	79.517	7.62	412	0	171	17	12	20	0.15	0.2	14	150	36	15	20	6.2
236	Damoh	Batiagarh	Batiagarh1	DW	24.111	79.353	7.42	402	0	116	32	26	22	0.05	0.1	16	105	24	11	37	3.2
237	Damoh	Damoh	Damoh2	DW	23.828	79.436	7.12	1477	0	323	137	70	200	0.25	BDL	19	350	118	13	172	1.0
238	Damoh	Tendukheda	Dhangor	DW	23.377	79.477	7.23	842	0	244	107	60	6	0.05	BDL	21	325	104	16	28	24.2
239	Damoh	Hatta	Gaisabad	DW	24.236	79.827	7.46	1342	0	305	260	72	10	0.30	BDL	22	520	152	34	54	7.4
240	Damoh	Hatta	Hardua	DW	24.175	79.671	7.58	698	0	360	20	16	20	0.40	BDL	26	240	62	21	39	2.1
241	Damoh	Jabera	Jabera 1	DW	23.538	79.701	7.47	697	0	342	10	10	46	0.40	BDL	28	235	56	23	47	1.3
242	Damoh	Patera	Kumhari	DW	23.926	79.815	7.63	894	0	275	55	24	156	0.40	0.1	22	285	74	24	64	1.2
243	Damoh	Patera	Majhgawa	DW	24.066	79.640	7.71	542	0	275	20	10	5	0.20	0.2	19	170	50	11	40	2.1
244	Damoh	Jabera	Nohta	DW	23.678	79.574	7.31	2206	0	519	347	125	22	0.65	BDL	20	705	156	77	168	14.6
245	Damoh	Damoh	Palar	DW	23.929	79.469	7.53	1589	0	561	160	88	25	0.05	0.2	42	315	90	22	203	17.2
246	Damoh	Patera	Patera2	DW	23.997	79.689	7.36	1245	0	397	137	78	29	0.30	BDL	18	375	90	36	112	6.4
247	Damoh	Patharia	Pathria	DW	23.895	79.196	7.61	842	0	390	52	21	4	0.20	BDL	28	260	62	26	60	8.4
248	Damoh	Damoh	Piparia Champat	DW	23.955	79.404	7.59	789	0	262	72	36	39	0.20	0.4	26	305	102	12	35	6.2
249	Damoh	Tendukheda	Samnapur	DW	23.313	79.386	7.49	989	0	311	72	34	119	0.20	BDL	22	295	88	18	87	1.2
250	Damoh	Jabera	Tejgarh	DW	23.575	79.546	7.69	1045	0	287	130	32	112	0.05	0.1	19	300	72	29	98	4.7
251	Datia	Seondha	Basturi	BW	26.086	78.737	7.85	786	0	321	60	11	13	0.60	0.10	36	208	55	17	79	2.4
252	Datia	Bhander	Bhander	HP	25.733	78.743	7.45	1194	0	358	130	47	58	0.93	0.08	42	292	63	33	137	1.6
253	Datia	Seondha	Chhikau	HP	25.825	78.523	8.17	1019	0	370	108	24	13	1.57	BDL	33	243	42	34	117	1.9
254	Datia	Datia	Datia	BW	25.645	78.459	7.62	818	0	242	73	36	59	0.98	BDL	39	208	38	28	87	2.4
255	Datia	Datia	Dursadha	DW	25.710	78.644	7.97	880	0	321	85	19	15	1.66	BDL	25	213	44	25	99	1.5
256	Datia	Datia	Imaliya	HP	25.694	78.581	7.28	1516	0	388	178	82	85	0.87	BDL	41	391	101	34	157	10.7
257	Datia	Seondha	Indergarh New	HP	25.909	78.564	7.68	1190	0	436	83	76	12	0.50	0.12	18	332	50	51	115	3.1
258	Datia	Seondha	Kasherua	DW	26.238	78.781	8.10	917	0	394	70	9	9	1.00	BDL	35	262	46	36	85	2.6
259	Datia	Bhander	Pandokhar	HP	25.890	78.796	8.01	675	0	297	35	14	13	0.58	BDL	33	223	57	19	48	1.5
260	Datia	Datia	Ruduapura	HP	25.778	78.501	8.11	893	0	315	83	29	16	1.40	0.08	29	213	42	26	100	1.9
261	Datia	Seondha	Seondha	HP	26.149	78.701	7.71	602	0	236	53	12	10	0.5	BDL	32	163	28	23	60	2.1
262	Datia	Seondha	Tharet	HP	26.011	78.657	7.88	862	0	309	73	24	44	0.63	BDL	34	252	51	30	76	5.4
263	Dewas	Bagli	Bagli1	DW	22.639	76.347	7.53	900	0	332	95	8	35	0.36	BDL	21	406	85	47	18	3

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
264	Dewas	Bagli	Bamohri	DW	22.709	76.275	7.45	972	0	338	110	10	32	1.55	BDL	33	361	81	38	55	0.8
265	Dewas	Bagli	Bhikupura	DW	22.539	76.339	7.61	905	0	356	60	5	65	0.3	BDL	28	416	57	66	15	1.2
266	Dewas	Sonkatch	Bhonrasa	DW	22.988	76.207	7.51	1256	0	380	134	7	100	0.01	BDL	32	460	141	26	68	2.5
267	Dewas	Kannod	Bijawad	DW	22.699	76.572	7.5	800	0	260	100	6	31	0.72	BDL	38	376	73	47	8	2
268	Dewas	Dewas	Dewas	DW	22.974	76.068	7.48	1290	0	362	199	10	25	0.38	BDL	30	525	59	91	46	1.2
269	Dewas	Khategaon	Dhayali	DW	22.546	76.800	7.53	1185	0	374	37	150	54	0.75	BDL	25	223	50	24	165	1.1
270	Dewas	Kannod	Kannod	DW	22.664	76.751	7.32	1177	0	344	157	10	50	0.42	BDL	32	406	67	58	75	1.9
271	Dewas	Kannod	Kantaphor	BW	22.576	76.566	7.5	790	0	236	105	13	16	0.35	BDL	20	302	71	30	35	1.7
272	Dewas	Bagli	Karnawad	DW	22.730	76.229	7.54	630	0	223	50	8	40	0.34	BDL	48	178	51	12	55	4.5
273	Dewas	Kannod	Kusumania	DW	22.768	76.760	7.3	565	0	151	87	5	19	1.62	BDL	35	149	46	8	58	1.6
274	Dewas	Bagli	Matmore New	DW	22.717	76.379	7.32	504	0	199	35	8	20	0.55	BDL	24	213	40	28	15	1.5
275	Dewas	Bagli	Nevri	DW	22.858	76.250	7.49	846	0	320	65	4	55	0.81	BDL	25	376	46	64	18	2
276	Dewas	Khategaon	Pipilianankar	DW	22.586	77.001	7.34	1530	0	652	37	75	52	0.82	BDL	46	272	75	20	220	1.4
277	Dewas	Bagli	Pipri	DW	22.399	76.278	7.98	1375	0	380	204	18	54	1	BDL	26	549	38	111	48	20
278	Dewas	Bagli	Punjapura	DW	22.546	76.370	7.41	1090	0	296	149	20	70	0.36	BDL	43	411	73	55	44	25
279	Dewas	Kannod	Satwas New	DW	22.534	76.682	7.86	1020	0	278	124	18	93	0.66	BDL	50	371	65	51	32	50
280	Dewas	Bagli	Udainagardw	DW	22.538	76.204	7.42	1325	0	411	97	75	82	1.05	BDL	38	292	57	36	165	3.8
281	Dhar	Sardarpur	Amjhira	DW	22.556	75.123	7.98	2057	0	493	348	76	21	0.55	0.21	30	425	94	46	218	91.4
282	Dhar	Badnawar	Badnawar New	DW	23.019	75.246	8.08	944	0	304	95	46	23	1.10	0.11	25	155	26	22	143	1.1
283	Dhar	Bagh	Bagh New	BW	22.363	74.796	7.79	768	0	256	73	40	19	1.32	0.14	18	170	42	16	95	4.2
284	Dhar	Sardarpur	Dasai	HP	22.722	75.132	7.43	1456	0	371	138	94	126	0.55	0.25	46	445	94	51	121	9.8
285	Dhar	Kukshi	Dehari	DW	22.288	74.916	7.76	1037	0	298	133	53	17	1.34	0.16	29	230	48	27	127	8.9
286	Dhar	Dharampuri	Dhamnod	TW	22.214	75.473	7.98	1045	0	310	105	34	78	0.88	BDL	33	255	44	35	119	2.1
287	Dhar	Dhar	Dhar	DW	22.591	75.318	7.88	640	0	256	45	23	18	1.10	BDL	34	205	54	17	51	0.9
288	Dhar	Dharampuri	Dharampuri 1	DW	22.153	75.347	7.92	1284	0	408	148	38	27	0.98	BDL	29	320	68	36	129	15.1
289	Dhar	Kukshi	Dhulsar	DW	22.205	74.869	7.64	802	0	256	95	29	13	1.19	0.25	42	165	38	17	103	3.4
290	Dhar Dhar	Gandhwani	Gandhwani	DW DW	22.336 22.321	75.005	7.82	1134 816	0	359 262	103	64	48	1.39	0.18	45	325 240	86	27	108	2.6
-		Dharampuri	Gujril	DW	22.321	75.500			0	146	88	19	46			37		62	21	75	1.9
292	Dhar Dhar	Sardarpur Badnawar	Julana Vanyan Navy	DW	22.781	74.989 75.258	8.11 7.57	439 1286	0	256	28 180	28 64	29 92	0.44	0.20	31	145 195	28 56	18	32 195	3.4
293	Dhar	Kukshi	Kanwan New Kukshi l	TW	22.204	74.755	7.98	1854	0	517	183	57	182	1.02	0.14	28	480	48	13 88	201	1.7
294	Dhar	Tirla	Lunera	HP	22.460	75.420	7.86	612	0	213	38	35	39	0.75	0.16	36	135	32	13	75	4.8
296	Dhar	Manawar	Manawar	DW	22.235	75.094	7.76	912	0	262	73	58	80	0.73	0.28	38	255	66	22	91	1.2
297	Dhar	Nalchha	Mandu	DW	22.347	75.398	7.70	583	0	170	48	42	33	0.65	BDL	42	145	26	19	62	1.7
298	Dhar	Kukshi	Palasi	DW	22.228	74.661	8.06	736	0	237	70	34	29	0.79	0.14	29	180	48	15	81	2.1
	Dhar	Nisarpur	Pipalya	DW	22.134	74.875	7.98	1254	0	322	153	41	83	1.10	BDL	41	225	50	24	172	1.2
300	Dhar	Sardarpur	Rajod	DW	22.954	75.067	7.75	881	0	268	73	36	75	0.87	0.15	26	260	86	11	80	1.4
301	Dhar	Sardarpur	Sardarpur	DW	22.668	74.974	7.73	675	0	170	78	42	41	0.59	0.13	44	175	40	18	73	0.9
302	Dhar	Manawar	Singhana	DW	22.188	74.969	7.54	1604	0	499	163	71	67	0.88	0.10	51	365	76	43	183	25.4
303	Dhar	Bagh	Tanda	DW	22.505	74.909	7.88	623	0	237	48	18	25	0.49	0.18	33	210	44	24	45	1.1
304	Dhar	Umarban	Tawlai	DW	22.161	75.242	8.09	1093	0	335	103	69	37	1.42	0.21	29	290	64	32	113	1.4
305	Dhar	Gandhwani	Zeerabad	DW	22.398	75.070	7.92	875	0	256	83	42	45	0.59	0.17	41	245	78	12	81	0.9
306	Dindori	Amarpur	Amarpur1	HP	22.786	80.989	8.01	345	0	170	10	3	5	0.63	BDL	22	25	6	2	65	0.4
307	Dindori	Bajag	Bijhauri	HP	22.780	81.563	7.43	760	0	328	65	5	14	0.34	BDL	32	335	108	16	19	0.4
307	וושטווערן	Dajag	Diliami	1111	44.737	01.505	1.73	700	U	520	03	ر ا	17	0.54	DDL	54	ددد	100	10	17	0.0

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
308	Dindori	Dindori	Dindori	DW	22.933	81.092	7.61	405	0	194	12	2	10	0.65	BDL	29	135	42	7	27	0.8
309	Dindori	Mehadwani	Harra	HP	22.875	80.792	7.35	370	0	176	10	12	6	1.62	BDL	25	155	46	10	12	0.7
310	Dindori	Karanjiya	Karanjiya	DW	22.711	81.621	7.47	495	0	237	17	8	13	0.2	0.012	33	235	56	23	4	1
311	Dindori	Shahpura	Katangi l	DW	23.126	80.626	7.34	560	0	261	27	10	10	1.57	BDL	32	255	76	16	10	0.9
312	Dindori	Bajag	Sagar Tola	DW	22.828	81.292	7.19	1035	0	304	132	20	50	0.25	BDL	30	360	82	38	65	2.4
313	Dindori	Dindori	Salaiya	DW	22.910	80.947	7.32	525	0	237	27	30	12	0.98	0.01	31	215	60	16	30	1.4
314	Dindori	Dindori	Shahpur	DW	23.021	81.006	7.27	335	0	134	12	30	6	1.3	BDL	40	140	42	9	11	1.2
315	Dindori	Shahpura	Shahpura Depot	DW	23.183	80.695	7.3	545	0	194	45	20	27	0.6	0.015	33	245	66	19	10	1.9
316	Dindori	Shahpura	Shahpura 2	DW	NA	NA	7.38	705	0	292	32	35	13	0.48	BDL	27	295	46	44	23	0.8
317	Dindori	Shahpura	Vikrampur 1	DW	NA	NA	7.42	675	0	304	25	20	24	1.55	BDL	30	275	54	34	25	1.8
318	Guna	Bamori	Akoda	HP	24.865	77.190	7.76	435	0	201	23	6	8	0.16	BDL	32	153	40	13	27	1.9
319	Guna	Raghogarh	Amlia	DW	24.212	77.197	7.94	1090	0	511	60	10	19	0.60	BDL	26	356	38	64	84	1.0
320	Guna	Aron	Aron	DW	24.438	77.378	7.61	672	0	298	40	8	16	0.16	BDL	39	267	59	29	30	0.7
321	Guna	Bamori	Bamori New	DW	24.853	77.139	8.11	460	0	189	30	11	20	0.23	BDL	58	193	50	17	15	1.3
322	Guna	Bamori	Berkheri	DW	24.628	77.184	7.70	670	0	268	38	12	44	0.22	BDL	22	139	50	4	88	1.5
323	Guna	Chachaura	Binaganj	DW	24.188	77.032	7.54	1100	0	280	203	8	15	0.06	BDL	44	485	119	46	28	1.4
324	Guna	Raghogarh	Gunjari	DW	23.911	77.264	7.64	740	0	335	35	7	35	0.22	BDL	33	277	55	34	40	1.7
325	Guna	Guna	Jaitadongar	DW	24.531	77.336	7.49	682	0	298	48	5	15	0.75	BDL	27	218	28	36	55	1.9
326	Guna	Raghogarh	Janjali	DW	24.362	77.121	8.15	1820	0	596	253	20	3	0.36	BDL	44	312	42	51	272	3.3
327	Guna	Raghogarh	Khairai	DW	24.419	77.278	7.38	368	0	146	33	8	4	0.02	BDL	42	163	44	13	8	0.7
328	Guna	Chachaura	Khatkiya	DW	24.330	77.103	7.71	750	0	298	65	10	14	0.32	BDL	41	292	55	37	36	1.1
329	Guna	Raghogarh	Maksudangarh	HP	24.061	77.258	7.92	600	0	292	25	5	18	0.35	BDL	26	228	42	30	32	0.9
330	Guna	Guna	Pagara	HP	24.654	77.436	7.62	850	0	444	23	12	8	0.27	BDL	32	272	38	43	68	1.6
331	Guna	Chachaura	Penchi	DW	24.136	77.010	7.61	1300	0	280	250	25	35	0.10	BDL	31	540	95	73	48	1.2
332	Guna	Raghogarh	Pipaliya	DW	24.309	77.159	7.92	790	0	420	20	11	3	0.34	BDL	29	238	32	39	70	1.9
333	Guna	Aron	Rampur-I	DW	24.308	77.448	8.19	1075	0	402	130	6	2	0.25	BDL	33	262	46	36	118	9.2
334	Guna	Bamori	Rampur-Ii	DW	24.771	77.168	8.08	505	0	225	33	10	7	0.17	BDL	25	188	36	24	27	3.2
335	Guna	Guna	Singwasa	BW	24.650	77.364	7.98	809	0	140 274	70	132	40	0.02	BDL	24	312 228	51 22	45	38	3.1
336	Guna Gwalior	Bamori	Suhaya New	HP HP	24.691	77.124 78.455	7.64	615 1146	0	279	23 127	10	38 160	0.23	BDL BDL	32	431	105	42	35 57	2.3
338	Gwalior	Morar	Aarauli	BW	25.952	77.931	7.61	723	0	225	45	12 8	98	0.03	BDL	23	267	91	10	35	3.2
339	Gwalior	Ghatigaon Bhitarwar	Aron Bajna	HP	25.843	77.951	7.01	702	0	194	87	19	40	0.23	0.1	28	198	61	11	65	1.2
340	Gwalior	Morar	Bajrang Colony Dabka	HP	26.154	78.433	7.29	888	0	261	130	12	18	0.07	BDL	26	262	63	25	76	2.6
341	Gwalior	Morar	Behat	BW	26.174	78.543	7.76	265	0	91	17	8	11	0.03	BDL	19	94	18	12	10	3.2
342	Gwalior	Ghatigaon	Charai Shyampur	DW	25.975	77.831	7.70	1109	0	261	180	14	80	0.00	BDL	21	297	89	18	113	1.9
343	Gwalior	Bhitarwar	Dongarpur	HP	25.822	77.964	7.67	2415	0	456	390	22	285	0.13	BDL	24	861	267	47	152	1.8
344	Gwalior	Ghatigaon	Ghantigaon	BW	26.050	77.933	7.95	565	0	188	52	14	22	0.27	0.1	26	168	46	13	46	2.1
345	Gwalior	Bhitarwar	Harsibandh	DW	25.762	77.929	7.87	489	0	243	20	10	3	0.06	BDL	33	198	42	23	17	1.4
346	Gwalior	Dabra	Kariyawati	HP	25.702	78.180	7.67	1012	0	444	77	12	9	0.42	BDL	35	297	81	23	85	1.6
347	Gwalior	Dabra	Makoda	HP	26.036	78.256	7.62	689	0	158	115	14	20	0.42	BDL	42	203	63	11	56	2.1
348	Gwalior	Morar	Manpura	HP	26.164	78.355	7.32	788	0	383	32	12	12	0.31	0.1	19	208	61	13	78	3.5
349	Gwalior	Dabra	Masoorpur New	BW	25.830	78.244	7.63	1279	0	352	237	8	9	0.95	BDL	26	233	53	24	182	1.5
350	Gwalior	Morar	Mohanpur	HP	26.208	78.249	7.81	792	0	340	52	14	12	0.42	BDL	28	233	51	25	65	1.6
351	Gwalior	Ghatigaon	Mohna	DW	25.897	77.777	7.52	2112	0	267	497	25	47	0.42	BDL	13	574	168	37	212	2.7
	Jawanoi	Tonangaon	Iviolilia	אען	43.071	11.111	1.34	4114	U	207	77/	43	+/	0.02	DDL	13	J/4	100	31	414	۷.1

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
352	Gwalior	Ghatigaon	Nayagaon2	BW	26.118	78.021	7.73	765	0	340	55	9	23	0.54	0.2	24	243	71	16	56	8.1
353	Gwalior	Ghatigaon	Panihar	BW	26.106	78.027	7.62	512	0	249	20	14	7	0.05	BDL	22	203	63	11	17	2.1
354	Gwalior	Dabra	Tekanpur	HP	25.985	78.284	7.89	2168	0	516	390	55	6	0.86	BDL	26	426	97	45	291	2.5
355	Harda	Timarni	Chhidgaon	DW	22.394	77.298	7.62	585	0	255	17	22	28	0.05	BDL	22	227	71	12	23	2.3
356	Harda	Khirkiya	Chhipawad	HP	22.155	76.877	7.92	812	0	324	72	12	21	1.21	BDL	15	258	83	12	65	3.1
357	Harda	Khirkiya	Chhuri Khal	Dw	22.034	76.940	7.82	1056	0	442	70	8	36	0.56	0.1	19	268	85	14	112	2.8
358	Harda	Harda	Handia	HP	22.484	76.981	7.62	1187	0	380	77	12	134	0.43	BDL	26	394	113	27	82	1.9
359	Harda	Harda	Hardadw	DW	22.346	77.088	7.92	898	0	361	92	8	7	0.32	BDL	32	338	87	29	45	1.7
360	Harda	Khirkiya	Mandla	DW	22.219	76.947	7.69	1576	0	529	162	52	24	0.42	0.1	18	242	73	15	244	2.5
361	Harda	Harda	Masangaon	DW	22.291	77.003	7.72	945	0	405	65	12	25	0.65	BDL	27	263	79	16	87	3.5
362	Harda	Timarni	Mohanpur1	HP	22.255	77.230	7.69	1026	0	355	100	14	82	0.48	0.2	31	318	85	26	85	1.9
363	Harda	Khirkiya	Morgarhi	HP	22.008	76.944	7.12	842	0	311	50	8	84	0.36	BDL	26	273	77	20	60	1.1
364	Harda	Khirkiya	Sonpura Colony	DW	22.078	76.916	7.52	1095	0	517	57	26	43	0.05	BDL	34	424	113	34	53	0.9
365	Harda	Timarni	Temagaon	DW	22.298	77.321	7.65	1189	0	380	155	24	89	0.18	0.2	32	354	123	11	107	1.5
366	Harda	Timarni	Timarni	DW	22.374	77.223	7.55	865	0	342	72	16	42	0.22	BDL	29	273	79	18	65	1.6
367	Hoshangabad	Babai	Babaidw	HP	22.700	77.939	7.53	1038	0	411	82	11	50	0.27	0.08	33	338	48	53	69	18.6
368	Hoshangabad	Babai	Bagratawadw	HP	22.629	77.993	7.97	727	0	342	27	15	22	0.25	0.12	41	293	42	45	28	3.2
369	Hoshangabad	Babai	Baharpur	HP	22.736	78.074	7.64	696	0	349	17	9	21	0.46	0.06	26	242	36	37	44	3.7
370	Hoshangabad	Seoni Malwa	Bhilatdeo	DW	22.491	77.528	7.02	575	0	243	32	18	20	0.48	0.10	37	141	20	22	62	4.0
371	Hoshangabad	Hoshangabad	Dolariadw	HP	22.626	77.639	7.73	894	0	454	22	12	10	0.20	0.05	39	313	32	57	57	3.4
372	Hoshangabad	Kesla	Gurra New	HP	22.630	77.918	8.08	621	0	317	12	10	13	0.37	0.05	44	217	36	31	39	2.7
373	Hoshangabad	Kesla	Kesla	DW	22.478	77.840	7.67	739	0	330	35	21	15	0.28	0.13	40	273	57	32	37	8.3
374	Hoshangabad	Pipariya	Matkuli	DW	22.592	78.458	7.62	684	0	342	17	14	3	0.62	0.11	29	242	40	34	42	2.0
375	Hoshangabad	Hoshangabad	Nimsadia	HP	22.708	77.806	7.75	700	0	299	32	11	44	0.26	0.08	36	237	34	37	48	3.6
376	Hoshangabad	Pipariya	Pachmarhi	DW	22.477	78.439	6.99	667	0	224	75	8	33	0.22	0.07	42	172	44	15	61	18.6
377	Hoshangabad	Kesla	Pathrautadw	HP	22.576	77.796	7.59	1219	0	367	145	13	86	0.30	0.14	47	505	83	72	43	3.4
378	Hoshangabad	Hoshangabad	Raisalpur	HP	22.669	77.758	8.08	829	0	405	25	17	16	0.44	0.13	51	308	85	23	45	2.5
379	Hoshangabad	Pipariya	Sandia	BW	22.913	78.355	7.84	934	0	355	52	22	66	0.30	0.08	48	333	53	49	57	2.8
380		Hoshangabad	Sanwalkhera	HP	22.650	77.677	7.78	795	0	386	17	12	20	0.17	0.12	50	207	42	25	84	1.9
381	Hoshangabad	Sohagpur	Semri Harchand	BW	22.689	78.092	7.59	703	0	311	37	14	22	0.39	0.20	27	242	63	21	46	2.0
382	Hoshangabad	Seoni Malwa	Seonimalwa	HP	22.448	77.466	7.73	1085	0	423	102	19	24	0.37	0.14	36	298	53	41	108	2.7
383	Hoshangabad	Sohagpur	Sohagpur	BW	22.694	78.189	8.01	900	0	405	35	25	27	0.37	0.08	31	354	65	47	39	5.9
384	Hoshangabad	Kesla	Sonkhera	DW	22.617	77.834	7.97	1750	0	654	210	9	19	0.28	0.27	46	510	111	57	125	68.1
385	Hoshangabad	Kesla	Suktawa	DW	22.408	77.843	7.62	1690	0	349	252	15	201	0.21	0.36	52	551	162	36	116	26.6
386	Indore	Depalpur	Depalpur	HP	22.843	75.539	7.73	1409	0	395	148	81	76	0.64	0.21	30	305	58	39	178	1.9
387	Indore	Indore	Dudhiya	DW	22.676	75.946	7.94	505	0	189	38	25	13	0.76	0.11	25	160	34	18	41	1.3
388	Indore	Mhow	Mhow	DW	22.549	75.762	7.82	899	0	341	63	38	25	0.98	0.14	18	235	50	27	95	1.7
389	Indore	Nandpura	Nandpura	DW	22.522	75.912	7.99	1170	0	292	135	94	43	1.47	0.25	46	275	56	33	141	2.4
390	Indore	Rangwasa	Rangwasa	DW	22.732	75.574	7.85	883	0	259	73	62	55	1.34	0.16	29	235	48	28	92	1.2
391	Jabalpur	Jabalpur	Barela	DW	23.282	80.369	7.72	580	0	298	10	14	11	0.39	0.02	35	235	26	41	20	8
392	Jabalpur	Jabalpur	Bargi1	DW	22.989	79.874	7.64	785	0	407	10	12	20	0.81	BDL	31	305	54	41	35	4.5
393	Jabalpur	Shahpura	Bheraghat New	DW	23.144	79.803	7.58	768	0	377	30	9	12	0.64	BDL	29	285	44	43	40	4
394	Jabalpur	Kundam	Ghughara	HP	23.282	80.369	7.25	750	0	328	47	10	25	0.45	BDL	45	300	66	33	29	8.3
395	Jabalpur	Sihora	Kachupura	HP	23.399	80.065	7.45	415	0	176	17	4	27	0.37	BDL	43	125	38	7	28	9

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
396	Jabalpur	Majhauli	Majholi	HP	23.489	79.936	7.55	1000	0	273	102	24	94	0.43	BDL	49	350	76	39	60	6.3
397	Jabalpur	Jabalpur	Manegaon1	DW	23.078	79.913	7.56	980	0	425	62	6	33	0.81	0.01	33	325	42	53	65	8.7
398	Jabalpur	Patan	Nunsar	HP	23.233	79.802	7.21	878	0	249	97	58	13	0.45	BDL	40	365	78	41	25	8.2
399	Jabalpur	Jabalpur	Padaria	DW	23.207	80.158	7.32	565	0	286	20	6	9	0.3	BDL	54	210	46	23	26	7.9
400	Jabalpur	Panagar	Rehepura	HP	23.300	80.033	7.35	736	0	164	12	165	7	0.67	BDL	35	260	38	40	31	8.4
401	Jabalpur	Shahpura	Shahpura	HP	23.139	79.674	7.36	555	0	255	27	5	12	0.47	0.18	27	170	48	12	37	10.2
402	Jabalpur	Sihora	Sihora1	HP	23.486	80.269	7.52	670	0	249	52	20	48	0.37	0.02	46	280	56	34	25	10.2
403	Jhabua	Petlawad	Bamania	DW	23.089	74.761	7.90	680	0	189	85	38	12	0.69	0.10	25	130	28	15	92	4.1
404	Jhabua	Petlawad	Karwar	DW	23.101	74.870	7.85	1129	0	347	105	49	65	0.57	0.18	48	265	64	26	131	2.7
405	Jhabua	Meghnagar	Meghnagar New	DW	22.905	74.542	7.92	1207	0	402	128	53	15	0.98	BDL	55	290	74	26	140	3.3
406	Jhabua	Petlawad	Petlabad	DW	23.005	74.799	7.94	734	0	213	70	41	40	1.04	0.11	34	195	30	29	76	1.6
407	Jhabua	Jhabua	Pitol	DW	22.785	74.466	7.59	1056	0	310	105	47	69	0.88	0.24	55	210	52	19	143	1.1
408	Jhabua	Ranapur	Ranapur	HP	22.639	74.523	7.52	999	0	298	120	36	24	0.79	0.14	31	195	24	33	134	1.8
409	Jhabua	Petlawad	Sarangi	HP	23.052	74.908	8.02	1266	0	432	90	59	72	0.54	0.15	33	335	86	29	129	2.2
410	Jhabua	Thandla	Thandla1	HP	23.008	74.579	7.89	1165	0	353	80	68	94	0.7	0.10	44	325	76	33	112	1.5
411	Jhabua	Ranapur	Tikadimoti	DW	22.694	74.542	7.94	562	0	164	28	48	49	0.87	0.21	29	165	28	23	48	0.9
412	Katni	Badwara	Badwara	DW	23.749	80.577	7.85	855	0	275	75	42	23	0.75	BDL	42	275	62	29	62	8.5
413	Katni	Vijay Raghavgarh	Barchheka	DW	23.851	80.557	7.55	385	0	134	35	7	20	0.25	BDL	14	145	26	19	16	6.6
414	Katni	Vijay Raghavgarh	Barhi	DW	23.902	80.811	7.39	1105	0	494	42	12	70	0.66	0.15	39	425	50	73	55	5
415	Katni	Badwara	Basadi	DW	23.827	80.622	7.84	1055	0	195	150	78	32	0.14	BDL	12	360	72	44	65	6.9
416	Katni	Katni	Katni1	DW	23.831	80.399	7.7	620	0	214	65	12	12	0.53	BDL	28	270	40	41	12	5.9
417	Katni	Badwara	Kewlari	DW	23.797	80.830	7.45	1100	0	244	140	40	75	0.44	BDL	40	285	48	40	98	32
418	Katni	Badwara	Khitoli	DW	23.711	80.832	7.85	585	0	207	42	22	35	0.35	BDL	22	200	62	11	35	10
419	Katni	Katni	Lakhapateri	HP	23.708	80.317	7.8	570	0	177	45	25	42	0.25	0.18	39	150	24	22	45	22
420	Katni	Katni	Majhgawan1	DW	23.822	80.499	7.59	367	0	153	22	8	18	0.18	BDL	15	140	38	11	12	10.5
421	Katni	Vijay Raghavgarh	Piparia2	DW	23.862	80.699	7.25	833	0	183	85	55	65	0.36	BDL	45	200	32	29	75	36.5
422	Katni	Dhimarkheda	Siloni	HP	23.345	80.361	7.3	1030	0	354	70	40	53	0.78	BDL	40	360	80	39	62	11.8
423	Katni	Dhimarkheda	Sleemanabad	HP	23.612	80.286	7.55	805	0	262	90	20	26	0.35	0.18	39	325	64	40	28	8
424	Katni	Vijay Raghavgarh	Ubra	HP	23.936	80.815	7.85	825	0	275	70	35	18	0.95	BDL	34	250	58	26	63	10.1
425	Katni	Dhimarkheda	Umariapan	HP	23.522	80.292	7.47	645	0	153	120	30	25	0.66	0.13	39	250	80	12	42	8.9
426	Khandwa	Pandhana	Balwara1	BW	21.700	76.516	7.56	850	0	292	82	24	36	0.25	0.08	33	208	73	6	96	1.9
427	Khandwa	Punasa	Bangarda	DW	22.145	76.462	8.02	333	0	140	15	11	11	0.18	0.05	21	114	30	10	21	1.4
428	Khandwa	Harsud	Bedia	DW	21.970	76.744	7.85	511	0	182	35	17	35	0.22	0.10	36	198	51	17	23	1.4
429	Khandwa	Pandhana	Borgaon Buzurg	HP	21.609	76.325	7.70	920	0	389	37	19	69	0.29	0.14	41	371	61	53	37	1.7
430	Khandwa	Harsud	Bori Saray	HP	22.006	76.817	7.60	1279	0	261	200	21	119	0.42	0.13	45	376	123	17	115	4.9
431	Khandwa	Harsud	Chanera	DW	21.962	76.698	7.97	1169	0	310	155	25	81	0.24	0.08	39	460	103	49	53	2.3
432	Khandwa	Chhegaon Makhan	Chhegaonmakhan	DW	21.832	76.218	7.83	594	0	152	82	14	40	0.40	0.06	42	173	48	13	55	1.3
433	Khandwa	Harsud	Dagad Khedi	HP	22.082	76.833	7.58	520	0	243	15	12	25	0.35	0.10	34	183	55	11	32	1.4
434	Khandwa	Chhegaon Makhan	Deshgaon New	BW	21.902	76.179	7.62	576	0	146	80	25	34	0.32	0.05	37	158	50	8	58	3.0
435	Khandwa	Chhegaon Makhan	Dhangaon	DW	22.088	76.118	8.04	1353	0	462	115	14	111	0.28	0.14	49	441	111	40	85	33.2
436	Khandwa	Punasa	Gujar Khedi	HP	22.197	76.301	8.22	782	36	279	75	16	6	1.55	0.06	29	74	18	7	144	3.8
437	Khandwa	Pandhana	Gurhi	DW	21.639	76.574	7.47	1590	0	267	222	29	194	0.14	0.19	52	693	158	72	40	3.7
438	Khandwa	Khandwa	Jawar	DW	21.930	76.448	7.82	740	0	299	42	9	47	0.28	0.08	45	323	77	32	18	1.9
439	Khandwa	Khandwa	Kahlari	HP	21.983	76.464	8.10	505	0	181	50	13	12	0.71	0.21	36	121	44	2	56	1.7

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440	Khandwa	Khalwa	Kalamkalan	DW	21.863	76.709	7.26	1410	0	436	135	19	127	0.22	0.19	44	571	129	60	54	7.0
441	Khandwa	Punasa	Karoli	DW	22.142	76.206	8.01	545	0	255	15	21	12	0.48	0.14	50	207	53	18	26	1.5
442	Khandwa	Punasa	Kelwa Kalan	DW	22.174	76.267	7.82	1128	0	473	47	17	66	0.49	0.16	36	460	57	77	42	2.3
443	Khandwa	Khalwa	Khalwa1	DW	21.805	76.746	7.52	1211	0	367	135	12	85	0.21	0.14	31	500	129	43	37	11.0
444	Khandwa	Khalwa	Khedi New	DW	21.868	76.566	7.66	620	0	261	35	14	27	0.28	0.05	40	237	57	23	30	1.7
445	Khandwa	Pandhana	Kusumbia	DW	21.671	76.175	7.96	1124	0	255	152	23	122	0.19	0.05	44	359	69	45	71	32.0
446	Khandwa	Punasa	Mundi	HP	22.063	76.492	7.87	335	0	149	15	10	5	0.20	0.05	26	126	32	11	15	2.3
447	Khandwa	Chhegaon Makhan	Pandhana	DW	21.699	76.227	7.30	1700	0	268	275	26	185	0.18	0.24	56	727	202	54	49	2.5
448	Khandwa	Chhegaon Makhan	Roshiya	BW	21.956	76.156	8.04	780	0	299	62	14	38	0.33	0.06	37	273	89	12	50	2.2
449	Khandwa	Khandwa	Rudhy Bhata	DW	21.833	76.467	8.13	633	0	249	50	16	19	0.22	0.08	35	258	57	28	23	2.3
450	Khandwa	Punasa	Thapana	BW	22.222	76.087	7.93	1380	0	498	135	28	7	0.98	0.25	40	268	36	43	187	3.6
451	Khandwa	Punasa	Udaipur	HP	22.226	76.403	7.81	1450	0	317	202	30	150	0.47	0.22	46	338	95	25	174	4.0
452	Khargone	Barwaha	Amba	DW	22.041	75.944	7.63	970	0	393	45	30	72	0.99	BDL	30	391	77	48	40	3.8
453	Khargone	Maheshwar	Baddiya	TB	22.233	75.943	7.3	2020	0	303	400	20	200	0.85	BDL	34	827	226	64	82	2.3
454	Khargone	Barwaha	Balwara	DW	22.394	75.975	8.03	1500	0	575	140	14	65	1.24	BDL	20	564	89	83	85	0.2
455	Khargone	Bhikangaon	Bamnala New	DW	21.825	75.853	7.71	1040	0	309	117	20	87	0.9	BDL	22	490	93	63	12	1
456	Khargone	Barwaha	Barwah	BW	22.254	76.035	7.7	830	0	357	52	18	26	0.96	BDL	35	351	40	61	25	5.2
457	Khargone	Bhikangaon	Bhikangaon1	TW	21.862	75.955	7.53	825	0	230	110	5	73	0.8	BDL	29	361	65	48	22	2
458	Khargone	Bhagwanpura	Bhulwani	DW	21.546	75.465	7.99	980	0	418	40	6	100	1	BDL	32	421	61	65	30	1.8
459	Khargone	Bhikangaon	Daudwa	DW	22.020	76.137	7.36	1290	0	424	145	8	94	0.92	0.02	35	574	101	78	30	2.5
460	Khargone	Bhagwanpura	Dhulkot	HP	21.611	75.552	7.76	900	0	351	65	6	71	0.88	0.09	30	371	63	52	32	5.2
461	Khargone	Gogawan	Divalgaon	DW	21.829	75.744	7.88	797	0	145	130	7	95	0.91	BDL	18	198	73	4	90	2.3
462	Khargone	Bhagwanpura	Ghatti	DW	21.720	75.668	7.63	780	0	327	37	10	44	0.86	BDL	22	347	46	57	18	1.5
463	Khargone	Gogawan	Gogaon	TW	21.918	75.743	7.42	1495	0	345	235	10	127	0.83	0.04	24	525	46	100	100	2.7
464	Khargone	Kasrawad	Kasrawad1	DW	22.127	75.606	7.66	1540	0	478	182	17	112	0.84	BDL	24	520	79	78	112	2.3
465	Khargone	Khargone	Khargone	DW	21.826	75.614	8.05	1125	0	418	95	12	70	0.83	BDL	45	431	65	65	58	2.1
466	Khargone	Maheshwar	Maheshwar	DW	22.178	75.587	7.76	1390	0	442	127	10	160	0.94	BDL	40	475	44	89	100	1.8
467	Khargone	Maheshwar	Piplyabuzrug Sanawad New	DW DW	22.235	75.861	7.82	1675 940	0	496	205	18	129	0.89	BDL	40	495	77 55	73	155	2.2
468	Khargone Khargone	Barwaha	Sawda New	DW	22.173 22.026	75.071 75.628	8.04	805	0	357 321	77 50	10 8	59 63	0.78 0.86	BDL BDL	22 25	356 361	59	53 52	50 18	2.3
470	Khargone	Kasrawad	Segaon	DW	21.859	75.325	8.11	710	0	260	70	10	32	0.85	BDL	35	287	46	42	30	1.2
471	Khargone	Segaon Khargone	Un	DW	21.822	75.453	7.45	1385	0	502	165	12	37	0.83	BDL	42	505	51	91	85	1.2
472	Mandla	Nainpur	Anjania	DW	22.494	80.509	7.43	638	0	140	122	8	1	0.10	0.09	22	165	52	9	65	4.5
473	Mandla	Narayanganj	Babaliya	DW	22.883	80.414	7.33	982	0	231	82	58	104	0.10	0.03	35	405	90	44	35	3.0
474		Nainpur	Bamhni New	DW	22.476	80.368	7.43	775	0	310	57	11	31	0.14	0.12	33	275	62	29	48	1.5
			Bichhia1	DW	22.452	80.700	7.56	991	0	346	115	14	16	0.50	0.08	29	355	50	56	60	1.3
476	Mandla	Mohgaon	Chabi	DW	22.825	80.700	7.26	595	0	267	17	19	23	0.11	0.09	25	250	56	27	17	2.0
477		Mandla	Devgaon	DW	22.739	80.525	7.42	879	0	346	57	33	20	0.13	0.14	42	380	60	56	23	1.7
478		Nainpur	Dithori	HP	22.519	80.199	7.21	685	0	243	57	10	49	0.11	0.05	29	285	54	36	22	5.5
479		Ghughri	Ghughri	HP	22.678	80.690	7.24	403	0	182	12	11	9	0.04	0.06	18	160	40	15	15	2.1
480	Mandla	Mandla	Gwari	DW	22.713	80.342	7.25	789	0	322	40	40	25	0.09	0.08	34	295	56	38	36	11.0
481		Mohgaon	Indira	HP	22.761	80.597	7.54	583	0	310	15	13	2	0.20	0.09	38	250	62	23	11	14.2
482	Mandla	Bijadandi	Kalpi	HP	22.919	80.197	7.29	970	0	358	77	25	33	0.07	0.27	41	425	108	38	22	6.4
	Mandla	Mandla	Khari	DW	22.793	80.411	7.11	392	0	158	17	20	16	0.05	0.09	49	160	44	12	9	7.6

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484	Mandla	Narayanganj	Kudomali New	DW	22.879	80.213	7.52	1007	0	523	25	9	18	0.09	0.08	55	390	94	38	47	2.3
485	Mandla	Mandla	Mahania Patpara	DW	22.685	80.477	7.52	746	0	322	35	43	7	0.25	0.12	43	320	90	23	17	6.5
486	Mandla	Mandla	Mandla1	DW	22.600	80.369	7.57	1513	0	358	265	54	2	0.16	0.29	29	505	60	86	111	1.8
487	Mandla	Narayanganj	Mangalganj	DW	22.750	80.311	7.33	498	0	231	12	12	5	0.15	0.09	40	175	42	17	29	3.0
488	Mandla	Niwas	Manikpur	HP	23.092	80.500	8.40	380	36	49	42	41	1	1.18	0.08	20	20	6	1	70	7.7
489	Mandla	Mawai	Motinala	DW	22.345	80.903	7.23	829	0	158	145	19	35	0.40	0.09	34	325	70	36	37	1.2
490	Mandla	Nainpur	Nainpur	TW	22.428	80.110	7.44	510	0	243	17	21	3	0.28	0.09	27	200	44	22	21	2.4
491	Mandla	Niwas	Niwas	DW	23.039	80.442	7.33	451	0	213	15	12	2	0.22	0.06	46	110	38	4	49	1.1
492	Mandla	Mandla	Padmi Choraha	DW	22.550	80.410	7.59	640	0	310	17	18	4	0.20	0.09	36	255	56	28	24	4.9
493	Mandla	Mandla	Pathiri Patpara	DW	22.608	80.471	7.32	628	0	292	20	24	7	0.11	0.18	42	260	72	19	18	5.6
494	Mandla	Mandla	Ramnagar1	DW	22.614	80.521	7.28	668	0	219	57	20	53	0.08	0.08	39	290	72	27	19	2.7
495	Mandla	Nainpur	Rampuri New	DW	22.409	80.264	7.47	715	0	346	25	11	11	0.16	0.10	43	285	60	33	28	5.6
496	Mandla	Mandla	Rehgaon	DW	22.749	80.577	7.63	700	0	286	40	29	14	0.05	0.34	35	285	66	29	22	8.4
497	Mandla	Bichhiya	Sijhora	DW	22.426	80.777	7.30	551	0	170	55	31	17	0.17	0.08	47	195	54	15	33	1.9
498	Mandla	Nainpur	Subhariya	DW	22.526	80.271	7.36	650	0	267	60	15	2	0.25	0.16	26	255	54	29	28	5.1
499	Mandla	Nainpur	Surajpura	DW	22.521	80.138	7.84	310	0	134	15	12	1	0.85	0.09	18	40	12	2	45	5.3
500	Mandsaur	Bhanpura	Babulda	DW	24.474	75.688	7.56	1540	0	398	203	29	104	0.02	0.21	45	655	126	83	50	4.3
501	Mandsaur	Bhanpura	Badodiya	BW	24.599	75.689	7.97	525	0	184	32	20	45	0.29	0.02	23	150	44	10	46	4.6
502	Mandsaur	Garoth	Barkheranayak	DW	24.219	75.522	7.23	1700	0	361	280	20	140	0.02	0.01	43	795	228	55	20	2.3
503	Mandsaur	Mandsaur	Basakheda	HP	24.032	75.198	7.82	990	0	318	104	26	70	0.03	BDL	36	400	98	38	40	8.4
504	Mandsaur	Bhanpura	Bhanpura	DW	24.512	75.749	8.12	1355	0	429	195	10	20	0.23	0.01	29	370	64	51	135	9
505	Mandsaur	Mandsaur	Botalganj	DW	24.148 24.022	75.029	7.46	1105	0	337	146 134	18 40	60	0.1	BDL	30	490	120	46	25	5.3
506	Mandsaur	Mandsaur	Chirmoliya	DW DW		75.257	7.86	1160	0	331 325			85 65	0.18	BDL	49	430	82 38	55	65 65	2
508	Mandsaur	Mandsaur	Daloda1	DW	23.925 24.193	75.099 75.500	7.86	975 1000	0	435	82 67	43	22	0.25	0.21 BDL	32 35	340 280	100	7	93	10
509	Mandsaur Mandsaur	Garoth Bhanpura	Dharmarajeswar Dudhkheri	DW	24.193	75.685	8.12	790	0	374	30	18 15	15	0.02	BDL	20	290	48	41	44	5.4
510	Mandsaur	Garoth	Garoth	DW	24.325	75.652	7.46	1185	0	306	198	20	23	0.03	BDL	25	440	94	50	65	6.7
511	Mandsaur	Mandsaur	Kachnera	HP	23.864	75.103	7.99	1500	0	692	92	14	35	0.36	0.024	43	325	36	57	190	5.6
512	Mandsaur	Sitamau	Khejriya	HP	24.050	75.490	7.43	985	0	325	119	32	48	0.24	BDL	33	340	66	43	82	10
513	Mandsaur	Malhargarh	Malhargarh	BW	24.278	74.991	7.68	1320	0	429	156	38	55	0.46	BDL	45	435	40	81	100	5.3
514	Mandsaur	Mandsaur	Mandsaur	HP	24.053	75.053	7.61	1300	1	488	124	25	53	0.53	BDL	43	460	38	89	85	2.6
515	Mandsaur	Sitamau	Manpura	HP	23.884	75.026	7.33	1155	2	281	148	35	120	0.16	BDL	36	505	104	60	35	5.5
516	Mandsaur	Malhargarh	Narayangarh	DW	24.267	75.054	7.59	2285	3	506	376	39	135	0.02	BDL	32	955	130	153	80	6.5
517	Mandsaur	Mandsaur	Nayakhera	DW	24.014	75.083	7.98	2070	4	171	547	43	57	0.65	BDL	38	625	116	81	180	12
518	Mandsaur	Malhargarh	Pipaliya	DW	24.196	75.008	7.75	915	5	323	69	45	50	0.05	0.02	36	360	40	63	40	7.5
519	Mandsaur	Bhanpura	Sandhara	DW	24.561	75.868	7.42	785	6	287	96	5	5	0.24	BDL	42	275	36	45	46	10.2
520	Mandsaur	Garoth	Shamgarh1	DW	24.191	75.640	7.3	1450	7	268	247	25	154	0.16	0.01	29	670	134	81	25	7.8
521	Mandsaur	Sitamau	Sitamau	BW	24.013	75.349	7.46	1390	8	433	168	45	55	0.15	BDL	39	510	46	96	80	6.7
522	Mandsaur	Sitamau	Surjani	HP	24.025	75.445	7.98	1320	9	323	252	12	19	0.16	BDL	35	325	34	58	150	4.3
523	Mandsaur	Sitamau	Suwasara	BW	24.077	75.643	8.12	645	10	98	124	25	26	1.75	BDL	43	45	14	2	120	9.8
524	Morena	Porsa	Aurethi	HP	26.678	78.380	7.71	1025	0	526	37	8	8	0.27	0.05	22	275	34	46	104	0.4
525	Morena	Porsa	Bareha	HP	26.747	78.238	7.51	793	0	399	20	7	30	0.31	0.08	28	320	56	44	32	0.2
526	Morena	Porsa	Dimni New	BW	26.615	78.145	7.80	1048	0	539	32	11	6	0.56	0.10	34	345	44	57	78	0.3
527	Morena	Joura	Huseinpur	DW	26.405	77.603	8.01	1888	0	805	95	33	47	1.60	0.05	18	190	16	36	340	0.9

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
528	Morena	Joura	Jafrabad	BW	26.431	77.877	8.05	1181	0	563	47	14	28	0.52	0.08	26	455	60	74	56	0.5
529	Morena	Kailaras	Kailaras	BW	26.299	77.609	7.98	1615	0	762	67	19	5	0.56	0.13	38	295	24	57	232	0.3
530	Morena	Morena	Khera Mewda New	DW	26.563	78.090	7.55	1834	0	654	195	24	19	0.22	0.14	42	605	66	107	139	0.6
531	Morena	Sabalgarh	Mangrol	DW	26.223	77.352	7.25	1908	0	303	367	20	148	0.41	0.09	48	800	172	90	66	0.5
532	Morena	Morena	Morena	BW	26.487	77.981	8.03	1096	0	484	60	9	40	0.55	0.17	37	420	54	69	55	0.4
533	Morena	Pahadgarh	Pahargarh	DW	26.200	77.639	8.08	2324	0	508	375	15	224	0.23	0.21	49	575	170	36	256	16.9
534	Morena	Porsa	Porsa	HP	26.671	78.369	7.96	973	0	442	47	17	27	0.30	0.18	29	270	40	41	96	0.6
535	Morena	Sabalgarh	Ranipura	DW	26.206	77.335	7.54	1288	0	418	152	23	51	0.62	0.08	22	535	78	83	45	0.3
536	Morena	Sabalgarh	Tentra	BW	26.177	77.305	7.75	649	0	297	30	19	11	0.46	0.05	24	240	46	30	35	1.0
537	Morena	Kailaras	Tonga Gaon	BW	26.255	77.438	7.69	561	0	278	10	8	7	0.48	0.08	20	225	50	24	22	0.8
538	Narsinghpur	Narsinghpur	Bachai	DW	22.874	79.306	7.77	1759	0	790	136	14	11	0.67	0.07	49	575	132	60	70	111.0
539	Narsinghpur	Kareli	Betli	DW	23.083	79.030	7.69	1465	0	551	134	22	14	0.14	0.08	52	495	122	46	91	24.0
540	Narsinghpur	Narsinghpur	Bhainsa	DW	22.848	79.224	8.06	945	0	453	15	18	21	0.41	0.12	44	245	40	35	98	2.8
541	Narsinghpur	Narsinghpur	Dangidhana	BW	22.910	79.274	7.98	847	0	416	17	13	8	0.35	0.08	36	240	50	28	78	1.6
542	Narsinghpur	Saikheda(Gadarwra)	Deoribadwani	DW	22.917	78.682	7.80	1636	0	766	104	14	10	0.22	0.13	51	485	82	68	86	106.0
543	Narsinghpur	Chawarpatha	Dobhi	HP	23.115	78.925	7.60	1282	0	478	92	11	96	0.09	0.05	39	470	82	64	71	5.2
544	Narsinghpur	Chawarpatha	Gundrai(Ii)	DW	23.177	79.032	8.00	1279	0	631	54	15	8	1.09	0.08	50	435	72	62	87	4.0
545	Narsinghpur	Gotegaon	Jhoteshwar	DW	22.948	79.558	7.39	779	0	410	20	8	8	0.35	0.09	38	265	82	15	53	1.9
546	Narsinghpur	Narsinghpur	Karakbel New	DW	22.991	79.338	7.86	632	0	337	15	9	5	0.32	0.16	47	200	50	18	49	1.8
547	Narsinghpur	Kareli	Kareli Basti	DW	22.911	79.068	7.75	1001	0	392	49	13	55	0.24	0.08	40	300	50	43	87	2.5
548	Narsinghpur	Chawarpatha	Koudiya	DW	22.946	78.816	7.73	1125	0	484	49	32	10	0.34	0.21	31	405	52	67	67	2.1
549	Narsinghpur	Gotegaon	Manegaon2	HP	22.986	79.399	8.01	1337	0	606	74	18	13	0.18	0.09	46	565	76	91	42	1.7
550	Narsinghpur	Narsinghpur	Nandwara	DW	22.959	79.176	7.70	1115	0	563	35	13	19	0.53	0.18	41	410	56	66	62	2.2
551	Narsinghpur	Narsinghpur	Ramkhiria	DW	23.101	79.163	7.84	700	0	343	15	12	15	0.38	0.08	29	235	64	18	49	2.0
552	Narsinghpur	Saikheda(Gadarwra)	Salichauka	DW	22.831	78.667	7.81	968	0	410	67	17	13	0.10	0.14	43	330	92	24	62	10.5
553	Narsinghpur	Narsinghpur	Sundernagar	BW	22.838	79.234	7.66	1053	0	465	59	19	24	1.26	0.08	55	385	52	62	59	2.3
554	Narsinghpur	Chawarpatha	Tendukhera	DW	23.175	78.871	7.67	776	0	282	74	14	38	0.28	0.19	37	300	72	29	37	2.2
555	Neemuch	Manasa	Barlai	DW	24.424	75.320	8.12	1150	0	598	35	18	13	1.68	BDL	27	165	16	30	168	34
556	Neemuch	Manasa	Besla	DW	24.554	75.457	7.88	770	0	232	89	20	52	0.59	BDL	22	280	68	27	45	2
557	Neemuch	Manasa	Bhadanadw	DW	24.561	75.369	8.4	875	18	67	96	75	130	0.41	0.018	33	315	78	29	37	32
558	Neemuch	Manasa	Chachor	HP	24.372	75.357	7.58	1355	0	153	287	100	43	0.92	0.02	30	495	92	64	76	12
559	Neemuch	Jawad	Dadoli	DW	24.674	75.041	7.63	1000	0	281	136	54	7	0.74	BDL	28	375	84	40	54	2.5
560	Neemuch	Neemuch	Girdola	HP	24.462	74.932	7.62	1985	0	397	309	60	175	1.02	BDL	23	870	114	142	52	3
561	Neemuch	Manasa	Gota Pipliya	DW	24.480	75.223	7.47	1130	0	342	106	22	129	1	BDL	31	355	46	58	94	1.1
562	Neemuch	Manasa	Jamalpura	DW	24.487	75.464	8.29	1270	12	110	124	95	87	0.87	BDL	25	225	30	36	110	5
563	Neemuch	Jawad	Jat	HP	24.848	74.938	8.37	1300	12	397	181	25	13	0.24	BDL	33	560	36	114	30	18
564	Neemuch	Neemuch	Kacholi	DW	24.363	74.941	7.61	1240	0	232	205	55	75	0.43	BDL	42	530	172	24	38	1.2
565	Neemuch	Manasa	Kukreshwar	BW	24.480	75.268	7.51	1620	0	561	191	25	60	0.76	0.012	49	460	64	73	90	120
566	Neemuch	Manasa	Kundaliya	HP	24.467	75.331	7.58	3350	0	366	592	350	105	0.39	BDL	34	1380	226	198	125	3.4
567	Neemuch	Jawad	Lalpura	HP	24.614	74.926	7.5	1320	0	458	180	25	20	1.56	BDL	32	425	24	89	120	1.5
568	Neemuch	Manasa	Manasa	HP	24.471	75.144	7.85	2670	0	653	317	36	315	0.81	BDL	35	900	174	113	195	1.2
569	Neemuch	Jawad	Morban1	HP	24.622	75.000	7.79	1650	0	592	120	75	95	1.12	BDL	40	490	26	103	150	6
570	Neemuch	Neemuch	Neemuch	DW	24.454	74.874	8.39	1210	18	268	202	30	20	0.75	BDL	32	335	34	61	98	43
571	Neemuch	Jawad	Patan1	BW	24.907	75.211	7.51	1110	0	378	75	65	26	0.38	BDL	25	460	30	94	35	7.3

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
572	Neemuch	Manasa	Rampura	DW	24.462	75.441	7.52	974	0	329	90	72	14	0.93	BDL	34	320	34	57	75	1.3
573	Neemuch	Jawad	Ratangarh	HP	24.811	75.109	7.5	1360	0	329	200	25	120	0.77	BDL	33	380	24	78	135	5
574	Neemuch	Neemuch	Savan	HP	24.452	75.063	7.8	1190	0	85	320	25	29	0.78	BDL	31	380	104	29	95	4
575	Neemuch	Neemuch	Semali Chandrawat	DW	24.548	74.936	8.25	2125	18	519	387	18	16	1.47	BDL	46	340	24	68	321	12.3
576	Neemuch	Jawad	Singoli	HP	24.968	75.288	7.42	1850	0	378	352	22	95	0.57	BDL	23	590	30	125	150	4.5
577	Panna	Ajaigarh	Ajaigarh	HP	24.909	80.266	7.6	1070	0	290	137	12	90	1.20	BDL	60	505	83	72	12	1
578	Panna	Panna	Akola	DW	24.631	80.140	8.0	318	0	73	42	8	31	0.74	BDL	15	99	28	7	23	5.6
579	Panna	Gunnor	Amanganj	TW	29.416	80.261	7.5	2190	0	242	47	750	12	1.00	BDL	20	901	251	130	85	4.2
580	Panna	Panna	Badagaon	TW	24.626	80.345	7.8	300	0	18	17	80	26	0.64	BDL	17	124	16	20	10	1.8
581	Panna	Panna	Bahera	DW	24.663	80.253	8.1	285	0	61	20	30	35	0.63	BDL	20	124	20	18	8	0.8
582	Panna	Ajaigarh	Banahari Kalan	DW	24.855	80.182	7.7	790	0	315	50	21	39	0.97	BDL	12	347	36	63	20	1.5
583	Panna	Ajaigarh	Bariyarpur	HP	24.851	80.098	7.6	1034	0	224	117	10	115	1.11	BDL	25	391	113	26	28	7.5
584	Panna	Panna	Barrachh	DW	24.548	80.171	8.0	365	0	169	12	15	9	0.98	BDL	22	158	51	7	10	0.5
585	Panna	Shahnagar	Dharampura	HP	24.125	80.260	7.5	780	0	327	67	10	15	0.77	BDL	28	277	50	37	50	0.7
586	Panna	Pawai	Hathkuri	HP	24.243	80.070	7.6	620	18	254	40	8	20	0.91	BDL	21	282	53	36	10	1.2
587	Panna	Pawai	Kharmora	DW	24.122	80.261	8.5	682	0	212	85	20	6	0.92	BDL	25	198	38	25	55	5.3
588	Panna	Shahnagar	Kuankheda	HP	23.901	79.923	8.0	1010	0	381	117	10	5	0.96	BDL	19	173	26	18	150	1.7
589	Panna	Panna	Madla	DW	24.737	80.014	7.3	560	0	121	57	38	61	0.74	BDL	50	230	74	11	20	2
590	Panna	Pawai	Mohendra	HP	24.190	79.958	7.8	1040	0	315	217	17	39	0.93	BDL	23	540	84	80	35	1.4
591	Panna	Ajaigarh	Pandepurwa	HP	24.843	80.267	8.1	650	0	333	17	10	17	1.34	BDL	40	275	26	51	20	4
592	Panna	Panna	Panna1	TW	24.705	80.187	7.69	1010	0	242	162	25	25	0.93	BDL	21	380	86	40	45	5.1
593	Panna	Pawai	Powai	DW	24.266	80.162	8.11	1415	0	393	147	85	80	1.16	BDL	28	670	90	124	15	1.8
594	Panna	Shahnagar	Raipura	DW	23.903	79.959	9.07	412	24	91	52	17	18	0.78	BDL	28	180	42	18	10	2.9
595	Panna	Shahnagar	Saharan	DW	24.079	79.948	8.14	500	0	236	17	10	18	1.04	BDL	27	195	50	17	24	0.85
596	Panna	Gunnor	Salleha	DW	24.413	80.400	8.06	550	0	145	77	8	34	0.80	BDL	35	110	24	12	68	10.4
597	Panna	Pawai	Semaria 1	HP	24.267	79.880	7.76	1090	0	254	142	60	71	0.83	BDL	24	495	70	95	20	2.9
598 599	Panna	Ajaigarh	Sinhai	DW	24.904 23.989	80.209 79.948	8.11 10.47	583 240	0	212 12	47	23 38	19	1.00 0.93	BDL BDL	54	260 100	20	39	12 7	2.5
	Panna	Shahnagar	Takhori	DW DW					24	73	27		-			15		24	12 9		0.8
600	Panna Raisen	Panna Bareli	Tara Bari	DW	24.518	80.081 78.083	10.47 7.98	268 677	36	279	12 52	12	8	1.07 0.65	BDL BDL	24	95 282	63	30	15 19	0.8
602	Raisen	Obaidullaganj	Barkheda	DW	22.917	77.651	7.98	1455	0	492	183	5 12	15	0.60	0.1	29	520	164	26	83	2.1
603	Raisen	Begamganj		DW	23.607	78.349	7.41	1389	0	389	176	6	75	0.30	BDL	36	540	149	41	57	0.4
604	Raisen	Obaidullaganj	Begumganj Chiklod	DW	23.106	77.723	7.65	896	0	334	94	9	20	0.35	BDL	24	351	105	22	36	0.4
605	Raisen	Obaidullaganj	Dam Dongri	DW	23.100	77.838	7.71	712	0	316	22	5	25	0.30	0.2	42	307	91	19	13	0.9
606	Raisen	Gairatganj	Dehgaon Dehgaon	DW	23.319	78.091	7.47	1546	0	407	233	11	86	0.30	BDL	19	653	180	49	42	1.0
607	Raisen	Silwani	Dhangwan	HP	23.221	78.478	7.89	756	0	97	148	42	7	1.00	BDL	36	144	32	16	94	1.9
608	Raisen	Gairatganj	Gairatganj	DW	23.408	78.226	7.72	1498	0	352	297	4	10	0.35	BDL	27	386	85	42	156	1.4
609	Raisen	Gairatganj	Garhi	DW	23.394	78.142	7.72	1095	0	358	92	14	78	0.30	BDL	34	396	101	35	58	1.4
610	Raisen	Obaidullaganj	Goharganj	DW	23.026	77.679	7.41	568	0	176	57	12	27	0.20	BDL	46	188	32	26	33	1.6
611	Raisen	Obaidullaganj	Hathi Palan	DW	23.076	77.753	7.73	742	0	286	47	21	27	0.55	BDL	41	203	42	24	66	2.1
612	Raisen	Sanchi	Khadera	HP	23.304	77.946	7.61	643	0	310	25	4	4	0.35	0.1	22	243	51	28	24	3.6
613	Raisen	Sanchi	Kharwai	HP	23.267	77.663	7.01	589	0	243	37	14	15	0.33	BDL	27	252	61	24	9	2.0
614	Raisen	Udaipura	Khiria	HP	23.092	78.483	7.42	796	0	279	74	12	12	0.60	BDL	23	302	57	39	34	1.9
615	Raisen	Obaidullagani	Maindwa	DW	23.122	77.546	7.73	365	0	140	7	15	19	0.00	BDL	34	104	22	12	27	1.6
013	Ivaiscii	Obaldullagalij	Iviaiiiuwa	I DW	43.144	1 / / . 340	1.13	202	U	140	/	13	17	0.10	DDL	4ر	104	44	14	41	1.0

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
616	Raisen	Begamganj	Padahjir	DW	23.573	78.404	7.21	643	0	231	67	5	7	0.30	BDL	32	203	63	11	40	7.4
617	Raisen	Begamganj	Paloha	DW	23.532	78.296	7.43	1093	0	371	82	13	138	0.30	BDL	41	460	129	34	29	1.6
618	Raisen	Sanchi	Raisen	DW	23.336	77.783	7.77	1013	0	431	45	35	25	0.25	BDL	21	421	125	26	34	3.7
619	Raisen	Sanchi	Salamatpurchoraha	DW	23.453	77.698	7.77	1056	0	316	139	16	19	0.40	BDL	22	252	69	19	112	2.3
620	Raisen	Sanchi	Sanchi	DW	23.487	77.741	7.62	888	0	334	57	44	12	0.45	BDL	19	337	91	26	32	7.0
621	Raisen	Silwani	Siarmau	DW	23.401	78.550	7.69	998	0	371	139	10	13	0.20	0.1	26	356	101	25	58	1.1
622	Raisen	Silwani	Silwani	DW	23.300	78.440	7.42	945	0	401	67	14	18	0.25	BDL	29	381	111	25	36	2.0
623	Raisen	Begamganj	Sultanganj	DW	23.503	78.555	7.32	1012	0	292	119	22	77	0.10	BDL	31	203	63	11	135	1.6
624	Raisen	Obaidullaganj	Sultanpur	DW	23.136	77.932	7.67	623	0	243	40	18	13	0.30	BDL	24	262	81	14	15	2.4
625	Raisen	Obaidullaganj	Tamot	DW	23.007	77.639	7.32	1188	0	395	136	16	16	0.25	BDL	32	426	117	33	69	1.5
626	Raisen	Udaipura	Udaipura	DW	23.075	78.513	7.46	945	0	316	126	5	43	0.20	BDL	42	312	91	20	64	1.6
627	Rajgarh	Biaora	Baiheda	DW	23.836	76.95	8.04	848	0	358	49	22	19	0.91	0.09	29	223	26	39	88	1.9
628	Rajgarh	Sarangpur	Bamangaon	TW	23.883	76.619	7.75	964	0	292	116	32	29	0.23	0.10	36	252	44	35	101	2.1
629	Rajgarh	Biaora	Bapchi	DW	24.006	76.943	7.88	697	0	225	69	19	33	0.63	0.11	29	163	32	20	79	3.3
630	Rajgarh	Biaora	Barkheda	DW	23.942	76.955	7.52	656	0	200	64	35	27	0.17	0.09	37	193	50	17	59	2.5
631	Rajgarh	Rajgarh	Bawari	DW	23.986	76.816	7.5	728	0	194	94	23	34	0.46	0.14	28	218	42	28	62	3.1
632	Rajgarh	Narsinghgarh	Bhagaribungalow	HP	23.799	76.985	7.76	1131	0	340	126	53	41	0.50	0.16	42	342	73	39	99	1.9
633	Rajgarh	Biaora	Biaora		NA	NA	7.69	1201	0	389	121	44	43	0.47	0.13	25	267	63	26	145	2.4
634	Rajgarh	Jirapur	Chhapihera	TW	23.897	76.453	7.15	1101	0	310	114	55	78	0.29	0.16	42	287	38	47	117	1.9
635	Rajgarh	Narsinghgarh	Ganayari	HP	23.691	77.008	7.45	763	0	188	72	47	69	0.13	0.11	25	213	46	24	72	1.1
636	Rajgarh	Narsinghgarh	Gandhigram	DW	23.674	77.069	7.64	1264	0	298	141	94	71	0.45	0.14	38	285	62	32	152	4.4
637	Rajgarh	Khilchipur	Khilchipur	TW	24.043	76.579	7.62	685	0	176	64	73	21	0.29	0.17	41	165	40	16	76	3.2
638	Rajgarh	Jirapur	Machalpur	DW	24.13	76.314	7.55	1166	0	334	101	60	99	0.32	0.15	26	320	78	30	118	2.9
639	Rajgarh	Narsinghgarh	Mandawar	DW	23.703	76.883	7.65	1125	0	267	171	54	19	0.43	0.09	19	195	44	21	166	3.2
640	Rajgarh	Narsinghgarh	Pilukhedi	DW	23.491	77.06	7.78	1089	0	346	114	36	37	0.66	0.12	37	305	62	36	104	4.3
641	Rajgarh	Sarangpur	Sandavta	DW	23.834	76.526	7.53	648	0	176	67	31	44	0.35	0.11	28	175	34	22	65	1.9
642	Rajgarh	Sarangpur	Sarangpur	DW	23.569	76.472	7.44	1308	0	389	144	47	65	0.28	0.14	39	370	106	26	119	5.1
643	Rajgarh	Sarangpur	Udhankheri	DW	23.664	76.629	7.79	889	0	243	97	56	28	0.69	0.13	26	205	36	28	104	1.8
644	Rajgarh	Jirapur	Zirapur	DW	24.016	76.378	7.71	1677	0	492	186	62	89	0.16	0.16	42	445	76	62	175	4.2
645	Ratlam	Alot	Alot	DW	23.758	75.530	7.92	965	0	140	158	45	51	0.20	BDL	23	380	104	29	38	1.5
646	Ratlam	Bajna	Bajna	HP	23.309	74.638	7.96	1089	0	390	72	15	54	0.20	BDL	26	355	82	36	78	1.0
647	Ratlam	Piploda	Barkheda	BW	23.625	75.031	7.59	2745	0	275	646	85	48	0.20	BDL	28	795	224	57	258	1.8
648	Ratlam	Ratlam	Dhamnod	BW	23.440	74.978	7.36	989	0	159	158	54	30	0.10	0.1	35	300	68	32	79	2.8
649	Ratlam	Ratlam	Dharad	BW	23.250	75.108	7.81	881	0	262	109	22	24	0.25	BDL	29	160	38	16	128	1.1
650	Ratlam	Jaora	Dhodhar	DW	23.775	75.109	7.78	1214	0	519	52	42	3	0.20	BDL	44	325	86	27	122	1.7
651	Ratlam	Alot	Gul Balod	BW	23.749	75.475	7.22	1546	0	421	213	45	37	0.35	0.3	19	325	70	36	199	2.0
652	Ratlam	Jaora	Jaora	HP	23.633	75.122	7.36	1867	0	384	304	35	107	0.10	BDL	41	710	250	21	96	1.1
653	Ratlam	Alot	Kharwa Kalan	HP	23.615	75.478	7.82	1710	0	512	200	25	52	0.30	BDL	37	515	152	33	142	2.9
654	Ratlam	Alot	Malakhera	BW	23.697	75.449	7.92	1826	0	128	445	32	37	0.45	BDL	43	470	112	46	187	4.5
655	Ratlam	Ratlam	Mewasa	BW	23.497	75.067	7.62	1102	0	390	99	15	47	0.30	BDL	26	360	102	26	80	1.9
656	Ratlam	Jaora	Mindli	BW	23.690	75.292	7.96	1365	0	543	77	44	70	0.10	BDL	22	540	162	33	55	2.0
657	Ratlam	Ratlam	Mundri	DW	23.201	75.021	7.91	1013	0	366	84	10	39	0.20	BDL	34	325	106	15	73	1.6
658	Ratlam	Ratlam	Namli	BW	23.455	75.066	7.82	1723	0	506	210	22	41	0.15	BDL	28	680	204	41	72	3.9
659	Ratlam	Bajna	Rajapur	DW	23.341	74.730	7.51	912	0	397	32	8	10	0.05	BDL	22	350	86	33	27	1.7

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
660	Ratlam	Jaora	Ramnagar	HP	23.537	75.255	7.65	1185	0	159	225	15	56	0.15	0.1	45	455	162	12	45	2.2
661	Ratlam	Piploda	Rankoda	DW	23.613	74.964	8.03	1245	0	421	161	6	45	0.35	BDL	52	195	42	22	185	3.1
662	Ratlam	Bajna	Raoti	HP	23.227	74.842	8.12	1423	0	433	144	44	77	0.05	BDL	37	545	150	41	62	4.6
663	Ratlam	Ratlam	Ratlam	DW	23.331	75.045	7.62	1745	0	525	243	24	11	0.15	BDL	23	605	184	35	109	3.9
664	Ratlam	Ratlam	Rattagarhkhera	DW	23.139	75.216	7.97	989	0	244	134	14	78	1.65	BDL	41	300	46	45	86	1.2
665	Ratlam	Sailana	Sailana	BW	23.457	74.933	7.82	1546	0	293	290	28	48	0.25	BDL	26	380	102	30	174	3.1
666	Ratlam	Sailana	Saser	DW	23.400	74.887	7.96	998	0	336	87	10	93	0.05	BDL	32	375	84	40	49	2.1
667	Ratlam	Ratlam	Sejawata	BW	23.377	75.060	7.36	2345	0	397	475	22	86	0.40	0.2	36	910	304	36	112	4.1
668	Ratlam	Sailana	Shivgarh	BW	23.349	74.862	7.46	845	0	214	119	29	10	0.60	BDL	29	90	18	11	142	1.8
669	Ratlam	Jaora	Sindurkiya	HP	23.666	75.235	7.63	1365	0	500	116	9	61	0.20	BDL	35	505	156	28	70	2.1
670	Ratlam	Piploda	Sohangarh	DW	23.580	75.080	7.43	1142	0	397	57	32	73	0.05	BDL	41	465	112	45	37	1.7
671	Ratlam	Alot	Tal	BW	23.722	75.383	7.86	2594	0	372	527	14	125	0.05	0.2	23	935	272	62	150	2.5
672	Ratlam	Jaora	Ukediya	DW	23.585	75.180	7.62	2685	0	366	567	16	251	0.25	0.2	42	765	252	33	248	6.5
673	Rewa	Rewa	Amilki	DW	24.432	81.309	7.39	1279	0	375	237	22	22	0.48	BDL	32	580	150	50	52	1.2
674	Rewa	Gangeo	Baikunthpur1	HP	24.729	81.407	7.23	676	0	363	40	18	5	0.61	BDL	18	380	104	29	16	2.3
675	Rewa	Sirmour	Bara	TW	24.821	80.093	7.52	568	0	339	30	27	5	0.60	BDL	16	270	72	22	43	3.2
676	Rewa	Jawa	Barduhawan	HP	27.944	81.396	7.63	573	0	363	15	8	6	0.52	BDL	19	230	62	18	48	2.6
677	Rewa	Jawa	Dabhoura	HP	25.115	81.307	7.27	906	0	315	132	22	100	0.34	BDL	22	385	104	30	82	1.8
678	Rewa	Mauganj	Deotalav	HP	24.679	81.724	7.57	529	0	430	22	24	2	0.53	0.1	26	310	102	13	52	1.1
679	Rewa	Gangeo	Gangeo	HP	24.725	81.600	7.89	910	0	405	142	12	6	0.55	BDL	23	450	130	30	50	1.6
680	Rewa	Gangeo	Garh	HP	24.817	81.650	7.92	1157	0	254	215	25	41	0.54	BDL	19	500	138	38	59	2.4
681	Rewa	Hanumana	Hanumana	DW	24.778	82.093	7.32	781	0	236	120	14	45	0.35	BDL	42	285	72	26	64	1.9
682	Rewa	Jawa	Jawa1	TW	24.963	81.492	7.62	892	0	303	125	12	98	0.48	BDL	24	470	152	22	20	3.8
683	Rewa	Rewa	Kanauji	HP	24.473	81.380	7.53	630	0	393	27	42	4	0.80	BDL	31	300	84	22	49	4.2
684	Rewa	Teonthar	Katra	HP	24.897	81.673	7.67	1256	0	472	175	25	51	0.35	BDL	29	445	98	49	125	2.1
685	Rewa	Mauganj	Khatkhari	TW	24.708	81.999	7.61	373	0	169	45	9	23	0.16	0.1	27	155	42	12	43	1.6
686	Rewa	Teonthar	Kuthla	HP	24.964	81.606	7.87	526	0	309	27	14	26	0.42	BDL	24	250	64	22	45	1.9
687	Rewa	Hanumana	Madha	TW	24.741	82.046	7.62	420	0	188	47	16	17	0.12	BDL	26	225	72	11	14	2.4
688	Rewa	Gangeo	Mangawan	HP	24.679	81.552	7.82	724	0	436	102	34	8	0.35	BDL	34	475	118	44	53	2.1
689	Rewa	Mauganj	Pahadi	DW	24.747	81.884	7.92	1603	0	242	427	12	51	0.27	BDL	27	580	172	36	114	1.7
690	Rewa	Hanumana	Pratapganj	DW	24.710	82.110	7.32	601	0	182	82	24	35	0.16	BDL	16	270	72	22	26	1.9
691	Rewa	Rewa	Reethi	HP	24.522	81.385	7.23	2071	0	944	222	42	4	0.38	BDL	36	780	292	12	156	2.3
692	Rewa	Rewa	Sagra	HP	24.611	81.362	7.62	1632	0	617	80	32	9	0.30	BDL	41	610	204	24	42	2.5
693	Rewa	Sirmour	Semaria2	HP	24.796	81.151	7.32	1478	0	321	187	15	179	0.54	BDL	29	540	112	63	72	1.6
694	Rewa	Jawa	Senhuda	DW	25.013	81.370	7.62	739	0	369	35	34	12	0.91	BDL	35	310	86	23	45	1.9
695	Rewa	Sirmour	Sirmaur1	HP	24.834	81.364	7.32	981	0	454	180	18	75	0.43	0.1	19	410	72	56	154	2.0
696	Rewa	Teonthar	Sohagi	HP	24.981	81.690	7.35	678	0	309	15	16	34	0.81	BDL	26	320	112	10	14	2.5
697	Rewa	Gangeo	Tikura	HP	24.674	81.689	7.63	752	0	363	52	9	21	0.62	BDL	23	375	118	19	19	3.2
698	Sagar	Malthon	Bamhori Lal	DW	24.246	78.433	6.98	2052	0	480	377	128	54	0.20	0.5	33	865	204	86	58	37.2
699	Sagar	Banda	Banda	DW	24.046	78.967	7.51	1245	0	371	127	72	106	0.05	0.2	30	340	98	23	118	23.2
700	Sagar	Malthon	Bandri	DW	24.042	78.640	7.68	1627	0	456	197	102	71	0.20	3.2	37	480	122	43	109	73.5
701	Sagar	Jaisinagar	Baroda	DW	23.715	78.706	7.46	1302	0	401	165	66	5	0.10	0.2	56	495	120	47	69	2.2
702	Sagar	Malthon	Barodia	DW	24.216	78.583	7.71	1288	0	480	112	74	54	0.05	BDL	77	550	184	22	29	31.2
703	Sagar	Banda	Behrol	DW	24.050	78.746	7.32	865	0	292	62	52	48	0.05	BDL	26	330	98	21	49	1.6

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
704	Sagar	Jaisinagar	Bhapel	DW	23.806	78.638	7.68	989	0	304	97	34	59	0.30	0.2	30	355	86	34	62	1.2
705	Sagar	Banda	Dalpatpur	DW	24.134	79.017	7.57	1145	0	450	122	22	17	0.20	BDL	65	460	132	32	44	1.5
706	Sagar	Deori	Deorikhas	DW	23.386	79.016	7.13	1307	0	401	177	34	53	0.30	BDL	43	505	144	35	64	1.1
707	Sagar	Rehli	Garhakota	DW	23.784	79.129	7.51	1503	0	450	90	145	146	0.10	0.1	21	550	176	27	88	1.2
708	Sagar	Shahgarh	Hirapur	DW	24.366	79.211	7.58	865	0	255	52	48	77	0.15	BDL	18	305	60	38	51	1.1
709	Sagar	Rahatgarh	Hurra	DW	23.728	78.405	7.42	1265	0	346	162	16	61	0.10	BDL	77	395	60	60	102	1.1
710	Sagar	Rahatgarh	Jaruakhera	DW	23.973	78.482	7.32	1465	0	407	205	32	21	0.05	BDL	43	565	142	51	73	1.1
711	Sagar	Kesli	Kesli	Given	23.421	78.806	7.62	1233	0	322	87	38	252	0.30	0.2	55	310	66	35	138	1.2
712	Sagar	Sagar	Khajuria	DW	23.940	78.686	7.74	2842	0	322	780	46	28	0.15	BDL	49	1155	312	91	111	5.9
713	Sagar	Malthon	Khimlasa	DW	24.201	78.363	7.61	1575	0	492	140	126	27	0.45	BDL	31	505	168	21	132	1.2
714	Sagar	Khurai	Khurai	DW	24.039	78.333	7.93	1189	0	377	170	18	36	0.50	BDL	39	395	52	64	87	1.3
715	Sagar	Malthon	Naktapur	DW	24.276	78.549	7.43	965	0	298	115	44	35	0.25	0.1	19	360	44	61	52	1.5
716	Sagar	Rahatgarh	Naryawali	Given	23.906	78.593	7.26	1021	0	419	35	39	38	0.20	BDL	37	295	64	33	92	1.6
	Sagar	Kesli	Nayanagar	DW	23.484	78.896	7.62	1032	0	492	15	10	109	0.10	BDL	40	310	44	49	82	1.1
718	Sagar	Rehli	Parsiya	Given	23.792	79.071	7.31	987	0	310	37	29	175	0.25	BDL	19	235	32	38	112	1.2
719	Sagar	Sagar	Parsoria	DW	23.854	78.936	7.69	1812	0	249	375	110	6	0.05	BDL	43	820	198	79	36	1.3
720	Sagar	Rahatgarh	Rahatgarh	DW	23.788	78.418	7.56	1021	0	352	115	52	18	0.10	0.3	56	395	90	41	42	2.1
721	Sagar	Rehli	Rehli	DW	23.641	79.065	7.18	689	0	304	45	14	9	0.30	BDL	24	310	62	38	9	1.8
722	Sagar	Shahgarh	Rurawan	DW	24.182	79.025	7.51	612	0	225	27	12	26	0.05	BDL	21	130	24	17	65	1.9
723	Sagar	Sagar	Sagar	DW	23.833	78.833	7.67	1022	0	413	65	46	8	0.20	BDL	39	320	62	40	91	2.1
724	Sagar	Jaisinagar	Sarkhedi	DW	23.736	78.589	7.42	1188	0	310	152	26	52	0.35	0.1	62	485	100	57	46	1.5
725	Sagar	Shahgarh	Shahgarh1	DW	24.320	79.119	7.92	912	0	377	27	82	5	0.30	BDL	28	255	60	26	83	2.1
726	Sagar	Jaisinagar	Sihora	DW	23.798	78.561	7.42	892	0	419	47	21	2	0.15	0.1	47	295	80	23	65	3.2
727	Sagar	Deori	Silarpur	DW	23.504	78.952	7.62	844	0	352	52	18	28	0.10	BDL	58	410	80	51	8	1.8
728	Sagar	Jaisinagar	Surkhi	Given	Given	Given	7.31	1056	0	188	127	66	169	0.20	0.2	27	445	100	47	27	2.2
729	Satna	Amarpatan	Amarpatan1	TW	24.314	80.976	7.29	1738	0	323	302	56	34	0.64	0.45	45	695	174	63	70	2.6
730	Satna	Maihar	Amdara	HP	24.104	80.576	7.41	1227	0	342	142	33	61	0.32	0.12	41	435	118	34	75	2.4
731	Satna	Majhgawan	Babupur	HP	25.004	80.800	7.63	696	0	372	10	12	9	0.24	0.08	36	320	66	38	9	2.6
732	Satna	Sohawal	Barakalan	HP	24.671	80.787	7.20	1915	0	433	375	14	7	0.46	0.23	51	800	224	58	63	3.8
733	Satna	Nagod	Barethia	HP	24.576	80.684	7.63	979	0	403	55	28	18	0.92	0.09	39	390	78	47	41	3.7
734	Satna	Maihar	Bhadanpur New	HP	24.166	80.821	7.36	855	0	281	62	33	46	0.46	0.05	36	350	94	28	19	22.1
735	Satna	Unchehara	Bhatanwara New	HP	24.492	80.858	7.35	1104	0	268	140	61	17	0.32	0.11	44	450	124	34	42	1.7
736	Satna	Majhgawan	Birsinghpur	HP	24.798	80.970	7.96	881	0	366	50	21	4	0.64	0.08	29	375	80	43	25	3.5
737	Satna	Majhgawan	Chitrakoot	HP	25.067	80.817	7.62	1151	0	415	125	16	27	0.29	0.05	36	380	78	45	84	2.2
738	Satna	Rampur Baghelan	Chorhata	HP	24.388	80.917	7.79	714	0	146	130	26	15	0.33	0.07	42	305	82	24	21	2.1
739	Satna	Majhgawan	Chowraha	DW	24.978	80.798	8.53	649	36	110	67	59	25	0.21	0.05	37	215	38	29	36	20.0
740	Satna	Nagod	Dureha	DW	24.451	80.461	8.42	497	48	128	42	4	11	0.81	0.08	27	125	22	17	52	3.9
741	Satna	Maihar	Ghunwara	TW	24.147	80.632	7.76	578	0	275	12	18	7	0.64	0.09	32	180	42	18	45	3.8
742	Satna	Ramnagar	Gorsari	HP	24.238	81.035	7.52	529	0	262	15	12	3	0.70	0.16	37	230	68	15	12	2.3
743	Satna	Ramnagar	Govindpur	TW	24.230	81.183	7.56	644	0	275	37	17	10	0.95	0.05	29	260	66	23	22	5.4
744	Satna	Majhgawan	Jaitwara	HP	24.740	80.867	7.76	1034	0	439	62	14	25	0.55	0.09	45	385	80	45	56	2.0
745	Satna	Nagod	Jaso	HP	24.499	80.504	7.72	894	0	390	45	21	11	0.80	0.09	39	335	54	49	47	1.9
746	Satna	Sohawal	Jhali	HP	24.732	80.686	8.00	1320	0	610	72	13	8	1.09	0.23	40	450	54	77	91	1.8
747	Satna	Maihar	Jhukehi	TW	24.004	80.426	7.46	1221	0	329	197	17	9	0.63	0.09	46	395	92	40	93	2.1

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748	Satna	Ramnagar	Jowa	HP	24.157	80.938	7.85	703	0	256	35	54	4	1.15	0.08	33	285	64	30	24	7.3
749	Satna	Amarpatan	Kakra	HP	24.353	81.039	7.70	945	0	214	167	32	12	0.85	0.08	36	405	96	40	27	1.7
750	Satna	Amarpatan	Kemar	TW	24.487	81.195	7.62	852	0	244	120	25	5	0.52	0.08	43	335	86	29	37	3.1
751	Satna	Rampur Baghelan	Kotar	DW	24.699	80.995	7.48	1791	0	366	220	66	157	1.01	0.32	48	640	180	46	112	1.5
752	Satna	Sohawal	Kothi	DW	24.747	80.777	8.43	715	36	256	35	18	9	0.75	0.09	25	235	22	44	53	1.4
753	Satna	Maihar	Kusendi	HP	24.171	80.677	7.69	975	0	342	82	35	16	0.47	0.07	34	235	56	23	111	3.7
754	Satna	Maihar	Maihar New	HP	24.260	80.761	7.32	1550	0	354	230	83	25	0.59	0.08	46	590	112	75	74	12.2
755	Satna	Majhgawan	Majhagawa	DW	24.911	80.813	7.69	905	0	299	67	29	52	0.83	0.14	44	360	56	54	36	5.8
756	Satna	Amarpatan	Mauhari Katra	TW	24.444	81.118	7.40	1221	0	232	177	55	77	0.25	0.11	39	455	94	54	64	5.6
757	Satna	Amarpatan	Mukundpur	DW	24.423	81.247	7.82	732	0	256	82	25	5	0.57	0.18	28	305	62	36	24	2.1
758	Satna	Majhgawan	Nakaila	HP	25.018	80.686	7.50	568	0	214	42	18	24	0.59	0.22	30	225	72	11	23	1.3
759	Satna	Maihar	Naraura	HP	24.277	80.841	7.48	605	0	188	57	29	9	0.50	0.08	44	257	67	22	16	2.8
760	Satna	Unchehara	Pahari	HP	24.392	80.547	7.31	655	0	133	75	24	89	0.11	0.05	49	267	67	24	22	3.6
761	Satna	Majhgawan	Paldeo	HP	25.110	80.783	7.53	1415	0	369	185	17	111	0.33	0.27	52	540	81	82	64	13.9
762	Satna	Unchehara	Paras Maniya	DW	24.350	80.616	7.76	560	0	175	47	11	36	0.29	0.15	28	208	65	11	29	2.1
763	Satna	Rampur Baghelan	Rampur1	HP	24.511	81.056	7.46	1030	0	218	182	30	6	0.41	0.08	36	401	85	46	44	2.9
764	Satna	Maihar	Rivara	HP	24.126	80.868	7.49	759	0	266	42	46	30	0.61	0.08	41	342	71	40	13	3.2
765	Satna	Maihar	Sabhaganj	DW	24.035	80.456	7.89	475	0	157	42	19	14	0.47	0.08	35	163	34	19	27	7.8
766	Satna	Ramnagar	Sagauni New	HP	24.264	81.203	7.76	458	0	212	15	8	4	0.46	0.09	33	183	53	12	17	2.1
767	Satna	Nagod	Singhpur	DW	24.702	80.582	7.34	652	0	303	27	10	6	0.15	0.07	42	287	67	29	13	3.3
768	Satna	Unchehara	Uchehara	DW	24.362	80.781	7.87	856	0	290	70	54	14	0.49	0.17	49	257	42	37	72	2.8
769	Sehore	Ichhawar	Amlaha	DW	23.118	76.903	7.62	1102	0	392	122	8	33	0.94	BDL	14	376	103	29	78	1.6
770	Sehore	Ashta	Ashta	DW	23.023	76.716	7.43	2105	0	612	280	15	104	0.45	BDL	16	599	168	43	208	2.1
771	Sehore	Budni	Bayan	DW	22.734	77.556	7.72	745	0	306	22	24	56	0.55	0.1	23	332	101	19	13	0.6
772	Sehore	Sehore	Bhandeli	DW	23.124	77.261	7.37	387	0	171	17	5	11	0.10	BDL	25	163	42	14	7	1.0
773	Sehore	Ichhawar	Bordi	DW	22.973	77.086	7.47	1542	0	429	210	12	62	0.10	BDL	14	624	170	48	49	3.1
774	Sehore	Budni	Budhni	DW	22.791	77.683	7.55	1482	0	606	107	14	80	0.40	BDL	28	574	170	36	71	1.2
775	Sehore	Sehore	Chandbar	DW	23.318	77.047	7.42	1522	0	153	397	55	24	0.45	0.1	35	173	46	14	260	1.4
776	Sehore	Sehore	Heerapur	DW	23.143	77.173	7.54	1810	0	496	270	21	41	0.60	BDL	26	431	111	37	206	5.6
777	Sehore	Ichhawar	Ichhawar	DW	23.032	77.019	7.94	1685	0	759	52	65	82	0.35	0.1	38	648	222	23	75	1.9
778	Sehore	Sehore	Jattakheda	DW	23.153	76.963	7.35	1445	0	355	247	22	17	0.45	BDL	54	337	103	19	158	0.9
779	Sehore	Ichhawar	Kankad Kheda	HP	23.101	77.036	7.51	1204	0	135	277	16	56	1.85	BDL	22	243	63	20	152	1.0
780	Sehore	Ashta	Khachrod	DW	22.872	76.718	7.29	1411	0	514	37	56	110	0.55	BDL	29	505	164	23	78	2.1
781	Sehore	Sehore	Khajuria Kalan	DW	23.361	77.073	7.41	1055	0	521	37	12	52	0.35	0.1	27	366	101	28	62	0.2
782	Sehore	Nasrullaganj	Larkui New	DW	22.817	77.209	7.32	1089	0	521	35	8	63	1.45	BDL	23	351	91	30	82	0.9
783	Sehore	Budni	Malibayan	DW	22.751	77.454	7.58	1489	0	741	67	10	21	0.60	BDL	32	292	101	10	189	1.2
784	Sehore	Ichhawar	Nadan	DW	22.897	77.122	7.31	977	0	374	50	25	69	0.25	0.1	26	436	129	28	20	0.9
785	Sehore	Budni	Neelkachar	TW	22.722	77.501	7.86	1510	0	263	350	42	21	0.45	BDL	38	406	105	35	157	0.6
786	Sehore	Nasrullaganj	Rala	DW	22.690	77.314	7.21	2050	0	741	212	56	81	0.40	BDL	26	743	236	37	104	21.1
787	Sehore	Sehore	Sehore1	DW	23.162	77.056	7.43	808	0	159	132	15	45	0.20	BDL	31	351	103	23	20	1.2
788	Seoni	Seoni	Amagarh	DW	22.012	79.613	7.59	335	0	98	32	17	26	0.14	0.12	10	120	24	15	20	0.8
789	Seoni	Barghat	Ari	DW	21.947	79.712	7.43	1176	0	360	153	25	19	0.78	0.10	30	370	74	45	91	2.9
790	Seoni	Seoni	Bamandehi	DW	22.046	79.580	7.67	245	0	85	22	6	12	0.65	0.09	36	80	18	9	17	0.7
791	Seoni	Seoni	Bamhodi	DW	22.064	79.658	7.70	581	0	189	67	14	17	0.92	0.08	31	170	32	22	52	1.3

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
792	Seoni	Keolari	Banjal	HP	22.306	79.999	7.55	475	0	177	45	8	10	0.89	0.11	32	145	24	21	40	0.9
793	Seoni	Lakhnadon	Banjari	DW	22.818	79.758	7.80	758	0	250	62	25	47	0.34	0.15	33	265	63	26	48	1.1
794	Seoni	Barghat	Borghat	DW	22.033	79.747	7.76	888	0	293	84	31	33	0.77	0.06	25	275	50	36	71	3.9
795	Seoni	Chhapara	Chhapara	DW	22.394	79.546	7.61	841	0	360	54	24	12	0.56	0.09	26	310	56	41	48	2.4
796	Seoni	Seoni	Chunatola	HP	22.147	79.668	7.58	439	0	165	27	19	15	0.73	0.12	53	120	24	15	42	1.8
797	Seoni	Lakhnadon	Dargada	DW	22.929	79.638	7.63	837	0	287	79	28	28	0.28	0.08	28	260	73	19	69	1.6
798	Seoni	Dhanaura	Dhanaura	DW	22.529	79.838	7.84	1209	0	378	131	42	39	0.72	0.16	32	345	50	54	110	9.6
799	Seoni	Keolari	Dhangada	DW	22.321	79.861	7.93	925	0	281	101	46	17	1.32	0.09	21	170	31	22	129	1.8
800	Seoni	Barghat	Dharamkuan	DW	21.875	79.762	7.75	456	0	153	45	17	10	0.98	0.17	39	110	22	13	50	1.4
801	Seoni	Lakhnadon	Dhuma	DW	22.750	79.723	7.70	832	0	336	54	25	21	0.44	0.15	46	240	48	29	77	1.0
802	Seoni	Lakhnadon	Gaurabibi	DW	22.702	79.513	7.68	540	0	165	47	31	28	0.63	0.20	32	175	36	21	41	1.5
803	Seoni	Ghansaur	Ghansor1	DW	22.654	79.953	7.88	1028	0	329	79	46	57	0.52	0.17	48	380	58	57	56	1.3
804	Seoni	Lakhnadon	Gharghatia	DW	22.673	79.790	7.75	552	0	189	40	21	31	0.39	0.16	38	115	22	15	69	1.4
805	Seoni	Chhapara	Ghunai	DW	22.441	79.565	7.76	608	0	201	54	18	28	0.74	0.11	31	195	36	26	47	1.1
806	Seoni	Ghansaur	Gorakhpur	DW	22.743	79.914	7.78	743	0	244	72	23	33	0.38	0.17	39	310	54	43	25	0.7
807	Seoni	Barghat	Kalyanpur	DW	21.961	79.812	7.54	599	0	165	62	19	38	0.54	0.13	51	160	30	21	58	1.6
808	Seoni	Seoni	Kaniwara	DW	22.212	79.740	7.47	1717	0	439	220	78	49	1.08	0.14	31	445	66	68	183	2.5
809	Seoni	Barghat	Kauria	DW	22.017	79.843	7.63	914	0	262	92	42	52	0.57	0.19	35	325	68	38	55	3.7
810	Seoni	Keolari	Keolari	DW	22.371	79.911	7.91	655	0	275	37	19	15	0.46	0.21	39	245	24	45	34	1.9
811	Seoni	Dhanaura	Khamaria	DW	22.599	79.791	7.83	527	0	146	69	21	13	0.67	0.08	29	120	18	18	63	1.5
812	Seoni	Dhanaura	Kudari	DW	22.408	79.813	7.78	742	0	293	52	15	31	0.52	0.14	31	255	56	28	49	0.8
813	Seoni	Ghansaur	Kudopar	DW	22.638	80.035	7.67	574	0	195	45	29	12	0.41	0.09	48	205	62	12	33	1.2
814	Seoni	Lakhnadon	Lakhnadon 1	DW	22.599	79.613	7.84	1100	0	299	116	54	65	0.78	0.15	26	340	78	35	92	2.1
815	Seoni	Lakhnadon	Madai	DW	22.540	79.595	7.75	592	0	226	35	25	18	0.29	0.21	38	175	30	24	52	0.9
816	Seoni	Lakhnadon	Makarjhir	DW	22.691	79.683	7.64	386	0	140	30	12	18	0.33	0.16	42	125	20	18	27	1.1
817	Seoni	Ghansaur	Masurbhanwari	DW	22.638	80.144	7.89	827	0	287	77	23	31	0.56	0.18	16	225	44	28	84	1.3
818	Seoni	Dhanaura	Mehta	DW	22.631	79.866	7.67	1589	0	476	146	68	101	0.42	0.22	38	555	146	46	103	1.9
819	Seoni	Lakhnadon	Nagan Deori	DW	22.818	79.666	7.91	834	0	238	92	36	42	0.48	0.14	37	255	50	32	72	2.1
820	Seoni	Seoni	Palari	DW	22.308	79.809	7.72	691	0	256	54	21	27	1.11	0.16	48	240	62	21	46	1.4
821	Seoni	Keolari	Pandiachhappara	DW	22.126	80.002	7.54	665	0	171	77	42	34	1.24	0.11	28	145	28	18	84	1.8
822	Seoni	Seoni	Pipardahi	DW	22.051	79.413	7.78	558	0	220	30	16	29	0.48	0.12	32	205	56	16	31	1.2
823	Seoni	Seoni	Rahiwara	DW	22.220	79.536	7.62	533	0	171	42	20	41	0.54	0.09	25	185	30	27	35	1.4
824	Seoni	Lakhnadon	Sahasna	DW	22.606	79.728	7.64	321	0	110	25	13	18	0.27	0.08	39	120	26	13	15	0.6
825	Seoni	Seoni	Seoni1	DW	22.094	79.547	7.88	935	0	348	72	29	39	0.38	0.13	28	325	82	29	62	0.7
826	Seoni	Keolari	Ugli	DW	22.258	80.063	7.73	650 617	0	220 165	59	28	18 47	0.45	0.11	42 12	210 165	48	22 15	45 61	9.4 5.7
827	Shahdol	Jiysingh Nagar	Amjhor		23.667	81.546	7.36	0.17	-		77		.,	0.11	0.11	1					
828	Shahdol	Burhar	Bandhua Tola	DW	23.432	81.689	7.39	580	0	189	67	21	9	0.14	0.12	14	205	38	27	38	0.6
829	Shahdol	Jiysingh Nagar	Bansukli	HP	23.787	81.616	7.88	363	0	116	37	17	11	0.33	0.04	23	115	26	12	29	1.3
830	Shahdol	Beohari	Beohari	HP	24.013	81.380	7.54	820	0	342	60	11	19	0.17	0.05	48	245	48	30	72	3.8
831	Shahdol	Burhar	Bhikhampur	DW	23.441	81.673	7.46	760	0	275	80	15	20	0.24	0.06	10	240	38	35	59	6.9
832	Shahdol	Jiysingh Nagar	Bhurka	DW	23.714	81.376	7.04	527	0	201	47	13	8	0.49	0.07	28	175	34	22	37	1.9
833	Shahdol	Burhar	Burhar	HP	23.249	81.492	7.69	813	0	232	107	35	17	1.01	0.06	13	210	64	12	82	11.7
834	Shahdol	Jiysingh Nagar	Daraudi	HP	23.693	81.494	7.21	280	0	92	22	9	21	0.15	BDL	31	90	10	16	21	1.7
835	Shahdol	Burhar	Girwah	DW	23.257	81.696	7.67	506	0	195	27	18	27	0.30	BDL	23	185	36	23	27	2.0

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm					•		mg/l						
836	Shahdol	Gohparu	Gohparu	HP	23.491	81.409	7.21	815	0	268	70	33	44	0.15	BDL	29	265	44	38	62	1.8
837	Shahdol	Jiysingh Nagar	Jaisinghnagar1	HP	23.678	81.397	7.58	659	0	92	80	36	111	0.39	BDL	34	155	38	15	75	5.2
838	Shahdol	Jiysingh Nagar	Kanadi (Khurd)	HP	23.756	81.361	7.58	589	0	146	62	49	24	0.23	0.21	22	135	26	17	67	3.9
839	Shahdol	Sohagpur	Kanchanpur	DW	23.261	81.462	7.56	796	0	311	55	19	20	0.28	BDL	34	220	50	23	76	3.7
840	Shahdol	Jiysingh Nagar	Karki	DW	23.808	81.388	7.01	629	0	195	50	27	43	0.13	0.09	32	115	16	18	69	32.5
841	Shahdol	Burhar	Khamhidol	DW	23.369	81.732	7.29	1198	0	372	147	15	51	0.17	BDL	17	330	74	35	115	7.6
842	Shahdol	Burhar	Kotri	DW	23.459	81.711	7.38	639	0	214	57	18	33	0.28	BDL	3	170	36	19	49	29.5
843	Shahdol	Jiysingh Nagar	Kubara	DW	23.698	81.469	7.67	397	0	146	27	9	19	0.17	BDL	20	105	22	12	38	2.3
844	Shahdol	Burhar	Marjad	DW	23.271	81.587	7.49	973	0	299	107	33	37	0.20	0.04	13	265	58	29	96	7.5
845	Shahdol	Sohagpur	Nipaniya	DW	23.389	81.373	7.47	592	0	201	52	19	28	0.23	0.08	16	190	28	29	45	4.1
846	Shahdol	Beohari	Pasgari	DW	24.098	81.431	7.75	740	0	250	70	23	38	0.19	0.25	22	165	42	15	89	6.9
847	Shahdol	Jiysingh Nagar	Sanousi	DW	23.949	81.458	7.39	598	0	201	42	29	36	0.90	0.06	22	220	50	23	26	11.8
848	Shahdol	Gohparu	Sarsi	DW	23.581	81.401	7.43	434	0	153	35	13	25	0.38	0.38	30	145	26	19	29	3.7
849	Shahdol	Sohagpur	Shahdol	DW	23.299	81.360	7.24	590	0	220	47	23	13	0.41	0.52	22	160	38	16	59	2.6
850	Shahdol	Jiysingh Nagar	Sidi	DW	23.692	81.665	7.46	1030	0	311	102	39	55	0.90	0.10	19	290	56	36	97	6.1
851 852	Shahdol Shahdol	Sohagpur	Singhpur1 Tihki	HP DW	23.211 23.928	81.418 81.367	7.54	869 645	0	287 177	82 90	31	43 19	0.20	0.54	13 12	225 245	62 56	17 26	89 31	8.3 3.5
853	Shahdol	Jiysingh Nagar Jiysingh Nagar	Umarkhohi	HP	23.854	81.497	7.14	623	0	201	62	18 23	32	0.33	0.08	31	180	38	21	57	2.1
854	Shajapur	Shujalpur	Akodia	BW	23.382	76.599	7.14	1315	0	484	105	75	11	0.43	0.14	42	420	20	90	102	3.2
855	Shajapur	Kalapipal	Arandia	DW	23.208	76.739	7.33	2245	0	303	455	125	75	0.45	0.018	39	910	246	72	102	2.5
856	Shajapur	Moman Badodia	Chouma	DW	23.649	76.225	7.2	1590	0	539	197	10	73	0.65	BDL	44	705	122	97	40	2
857	Shajapur	Kalapipal	Kalapipal	BW	23.334	76.833	7.51	1195	0	393	125	15	77	0.15	BDL	41	500	90	67	41	3.8
858	Shajapur	Shajapur	Majhania	DW	23.448	76.321	7.64	1050	0	284	90	68	61	0.14	BDL	40	435	96	47	35	1.5
859	Shajapur	Shajapur	Makshi New	BW	23.253	76.148	7.71	1026	0	266	107	72	60	0.74	BDL	52	240	38	35	120	2
860	Shajapur	Moman Badodia	Moman Badodia	DW	23.606	76.341	7.37	2030	0	605	285	12	100	0.38	0.015	40	805	136	113	95	1.8
861	Shajapur	Kalapipal	Nandni	DW	23.318	76.938	7.57	780	0	351	20	8	47	0.51	0.01	38	320	48	49	30	2.1
862	Shajapur	Shajapur	Narayangaon	DW	23.478	76.256	7.68	765	0	284	50	40	40	0.2	BDL	29	295	40	47	38	2
863	Shajapur	Shajapur	Panwadi	DW	23.504	76.404	7.6	1762	0	448	245	72	63	0.39	BDL	33	500	50	91	165	2.2
864	Shajapur	Moman Badodia	Salsalai	DW	23.464	76.538	7.56	1520	0	424	195	62	70	0.28	BDL	34	680	140	80	35	2.5
865	Shajapur	Shajapur	Shajapur	DW	23.421	76.276	7.8	1172	0	399	105	70	10	0.69	BDL	39	510	126	47	32	2.8
866	Shajapur	Shujalpur	Shujalpur	DW	23.406	76.709	7.77	720	0	175	105	10	56	0.82	0.018	46	300	58	38	25	3.5
867	Shajapur	Shajapur	Tilawad Govind	DW	23.310	76.333	7.59	1350	0	309	215	35	72	1.03	BDL	33	485	140	33	80	2.6
868	Shajapur		Khamlai	DW	23.154	76.875	7.39	736	0	236	60	35	30	0.27	BDL	28	330	32	61	15	1.5
869	Shajapur		Morta Kawadi	BW	NA 22.160	NA 76.551	7.5	945	0	405	67	6 7	43	0.4	BDL	24	410	40	75	32	1.3
870 871	Shajapur Shajapur		Pagrawat Kalan Simrol	DW DW	23.160	76.551 76.490	7.4	1043 985	0	393 121	95 217	12	62 43	0.23 1.09	BDL BDL	38 29	390 190	38	69 23	58 135	0.8
871		Chaonur	Baroda New	DW	25.491	76.490	7.62	1155	0	375	115	34	19	0.98	0.05	33	361	59	52	94	0.2
872	Sheopur Sheopur	Sheopur Sheopur	Bhagwara	BW	25.491	76.615	7.66	1424	0	430	145	41	64	0.98	0.03	24	465	111	46	108	0.2
874	Sheopur	Vijaypur	Dhobni	DW	25.832	77.580	7.89	1664	0	339	297	24	86	0.47	0.10	39	391	141	10	199	2.9
875	Sheopur	Sheopur	Doti	HP	25.671	76.599	7.80	766	0	327	32	39	15	0.61	0.09	25	213	42	26	75	0.4
876	Sheopur	Sheopur	Filojpura	HP	25.585	76.665	7.62	1979	0	442	245	44	223	0.64	0.13	41	500	69	79	220	1.0
877	Sheopur	Vijaypur	Garhi l	HP	26.120	77.306	7.51	928	0	339	92	18	35	0.40	0.09	30	416	103	39	19	0.3
878	Sheopur	Vijaypur	Ghaswani	HP	25.892	77.506	7.35	1347	0	230	245	36	48	0.23	0.17	27	465	135	31	94	0.8
879	Sheopur	Karahal	Goras	DW	25.534	76.945	7.79	574	0	236	35	12	9	0.12	0.16	29	208	50	20	32	1.6

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
880	Sheopur	Vijaypur	Harkui	BW	26.159	77.179	7.33	1012	0	290	97	15	89	0.13	0.05	33	396	97	37	47	0.4
881	Sheopur	Karahal	Kalmi	BW	25.581	76.879	7.48	1097	0	345	107	9	94	0.12	0.08	27	312	71	33	95	13.5
882	Sheopur	Karahal	Karahal	HP	25.493	77.057	7.88	804	0	260	60	20	63	0.22	0.14	35	277	89	13	54	1.0
883	Sheopur	Karahal	Kunorh	DW	25.529	77.199	7.76	1110	0	381	102	25	28	0.40	0.13	29	282	48	40	121	0.8
884	Sheopur	Karahal	Nonpura	DW	25.522	77.131	7.49	1122	0	484	82	10	8	0.30	0.08	34	361	55	54	86	1.4
885	Sheopur	Vijaypur	Panchoncolony	HP	26.135	77.124	7.32	2056	0	375	262	24	281	0.48	0.15	45	658	107	95	165	0.3
886	Sheopur	Sheopur	Pandola	HP	25.546	76.644	8.05	1150	0	484	67	17	59	0.80	0.18	36	411	69	58	71	1.0
887	Sheopur	Karahal	Piprani New	BW	25.633	76.953	8.03	628	0	303	22	13	7	0.20	0.05	25	248	63	22	27	0.5
888	Sheopur	Vijaypur	Pura	BW	25.953	76.991	7.26	1022	0	254	97	19	162	0.18	0.08	35	455	127	34	20	0.6
889	Sheopur	Sheopur	Rajpura	BW	25.710	76.681	7.78	805	0	357	32	11	27	0.39	0.17	28	297	73	28	45	0.4
890	Sheopur	Vijaypur	Shyampur	DW	26.081	77.034	7.96	1540	0	502	202	9	60	0.32	0.11	36	495	133	40	114	12.3
891	Sheopur	Vijaypur	Vijaypurcolony	BW	26.057	77.364	7.79	1460	0	375	220	49	5	0.53	0.08	40	282	50	39	201	1.2
892	Shivpuri	Khaniyadhana	Achhroni New	HP	24.992	78.231	7.64	817	0	212	70	34	103	0.37	BDL	38	223	55	20	81	1.5
893	Shivpuri	Pohri	Ainpura	DW	25.647	77.410	7.51	1606	0	399	127	98	196	0.63	BDL	27	426	77	57	170	1.9
894	Shivpuri	Karera	Awas	DW	25.473	78.351	8.00	590	0	169	50	27	55	1.09	BDL	29	163	42	14	58	1.4
895	Shivpuri	Badarwas	Badarwas	HP	24.975	77.568	7.45	1517	0	454	132	53	132	0.38	0.10	31	386	67	53	166	2.3
896	Shivpuri	Khaniyadhana	Bamorkalan New	HP	24.886	78.151	7.71	578	0	169	55	39	23	0.74	BDL	34	149	32	17	62	1.2
897	Shivpuri	Narwar	Behgwan	DW	25.629	78.103	7.44	756	0	206	70	34	74	1.20	0.15	42	173	44	16	91	2.1
898	Shivpuri	Shivpuri	Bhagora	HP	25.418	77.760	7.71	443	0	139	37	27	19	0.51	BDL	51	119	18	18	45	1.7
899	Shivpuri	Pichhore	Bhonti	HP	25.320	78.100	8.03	834	0	266	72	21	71	0.43	0.11	28	208	55	17	94	1.6
900	Shivpuri	Shivpuri	Chorpura	HP	25.727	77.736	7.73	644	0	194	65	32	32	0.46	BDL	34	153	30	19	75	2.4
901	Shivpuri	Pichhore	Dhola	HP	25.283	78.130	8.06	1025	0	345	95	64	11	1.11	0.22	22	233	51	25	124	2.8
902	Shivpuri	Badarwas	Ganeshkhera	HP	25.087	77.793	7.93	916	0	236	77	42	115	0.29	0.09	37	248	69	18	93	3.2
903	Shivpuri	Pohri	Gobardhan	DW	25.790	77.534	7.79	629	0	206	67	23	13	0.68	BDL	15	129	26	16	79	2.5
904	Shivpuri	Karera	Karera	DW	25.454	78.136	7.67	862	0	248	72	37	91	1.04	BDL	19	208	34	30	101	1.7
905	Shivpuri	Karera	Languri	DW	25.484	78.123	7.85	543	0	163	45	19	58	1.03	0.08	24	153	24	23	52	1.9
906	Shivpuri	Narwar	Mangroni	HP	25.696	77.933	7.66	775	0	248	67	31	45	0.70	BDL	31	213	50	22	75	2.1
907	Shivpuri	Kolaras	Manipura New	DW	25.213	77.606	7.55	616	0	200	47	21	49	0.38	BDL	46	178	36	22	56	1.4
908	Shivpuri	Khaniyadhana	Masoori	DW	25.100	77.930	7.79	670	0	188	52	38	65	0.12	0.10	33	193	42	22	63	1.8
909	Shivpuri	Narwar	Narwar	HP	25.651	77.833	7.58	1151	0	333	95	42	127	0.39	BDL	24	327	55	46	112	1.6
910	Shivpuri	Shivpuri	Patera	DW	25.610	77.736	7.97	754	0	248	80	23	24	0.55	BDL	18	173	34	22	90	2.1
911	Shivpuri	Pichhore	Pichhore	HP	25.179	78.191	7.44	1866	0	454	240	80	114	0.49	0.15	44	480	135	35	201	2.5
912	Shivpuri	Pohri	Pohari	DW	25.541	77.365	7.70	961	0	315	77	35	76	0.21	BDL	19	272	42	41	92	1.9
913	Shivpuri	Karera	Sarsod	HP	25.423	78.051	7.47	840	0	224	57	41	118	0.42	0.07	35	238	36	36	79	2.1
914	Shivpuri	Shivpuri	Satanwara	DW	25.544	77.731	7.49	1487	0	418	210	58	19	0.39	BDL	27	356	55	53	172	2.7
915	Shivpuri	Narwar	Sehore	HP	25.665	78.106	7.45	3371	0	890	287	141	296	0.32	BDL	22	718	111	107	319	127.5
916	Shivpuri	Pichhore	Semri	HP	25.182	78.112	7.57	721	0	212	52	52	51	0.55	BDL	29	208	46	23	67	2.1
917	Shivpuri	Karera	Sikandara	DW	25.472	78.365	7.70	482	0	151	35	18	42	0.54	0.09	25	139	22	20	43	1.2
918	Shivpuri	Shivpuri	Sirsod	BW	25.486	77.510	7.80	673	0	236	50	29	37	0.59	BDL	36	183	30	26	68	2.1
919	Shivpuri	Karera	Sirsod Chouraha	DW	25.422	78.051	7.49	945	0	260	77	38	108	0.58	0.11	47	228	44	29	108	1.7
920	Shivpuri	Khaniyadhana	Sitapur	HP	25.133	78.207	7.55	678	0	169	55	31	96	1.02	0.07	23	188	38	23	66	1.4
921	Shivpuri	Shivpuri	Survaya	DW	25.413	77.835	7.86	373	0	97	45	15	22	0.46	BDL	44	64	10	10	53	1.8
922	Shivpuri	Karera	Toda Karea	DW	25.453	78.185	7.68	657	0	206	60	22	50	0.31	BDL	23	193	24	33	60	1.3
923	Sidhi	Rampur Naikin	Baghwar	DW	24.331	81.379	7.95	450	0	213	22	8	2	1.02	BDL	32	153	42	12	31	0.5

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
924	Sidhi	Sidhi	Baghwari	HP	24.353	81.826	7.70	565	0	279	15	10	10	0.35	BDL	25	178	44	17	46	0.2
925	Sidhi	Sihawal	Bahari	DW	24.447	82.171	8.20	252	0	61	15	38	7	0.20	BDL	28	35	10	2	38	0.7
926	Sidhi	Sidhi	Barambaba	HP	24.275	81.902	7.98	350	0	164	15	12	2	0.15	BDL	36	168	46	13	2	0.4
927	Sidhi	Majhauli	Bastua	DW	23.987	81.709	7.87	535	0	207	30	10	49	0.24	BDL	41	198	53	16	30	0.6
928	Sidhi	Majhauli	Chhuhi	HP	24.186	81.656	7.96	520	0	207	45	6	18	0.15	BDL	32	139	22	20	55	0.9
929	Sidhi	Sidhi	Chilheri Kalan	TW	24.458	81.792	7.45	420	0	194	22	8	6	0.42	BDL	21	153	28	20	25	0.4
930	Sidhi	Rampur Naikin	Chouphal	TW	24.289	81.788	8.00	555	0	225	15	42	20	0.12	BDL	18	183	42	19	40	2.5
931	Sidhi	Rampur Naikin	Chourhat	DW	24.425	81.673	7.97	610	0	219	70	10	13	0.32	BDL	10	178	38	20	56	1.2
932	Sidhi	Majhauli	Jogipahari	HP	24.116	81.750	7.94	435	0	152	30	18	25	0.38	BDL	17	139	34	13	34	0.8
933	Sidhi	Rampur Naikin	Khamh	DW	24.238	81.738	7.49	315	0	85	27	25	18	0.97	BDL	40	104	18	14	22	0.3
934	Sidhi	Sidhi	Kuchwahi	DW	24.406	81.977	8.10	370	0	164	22	5	7	0.52	BDL	20	139	28	17	20	0.4
935	Sidhi	Majhauli	Mahua Gaon	DW	24.047	81.947	7.78	520	0	231	27	10	15	0.11	BDL	15	188	48	17	32	0.6
936	Sidhi	Majhauli	Majhauli	HP	24.120	81.630	7.66	985	0	310	115	26	35	0.21	BDL	25	282	77	22	93	1.7
937	Sidhi	Majhauli	Majhgawan	HP	24.101	81.819	7.59	540	0	225	35	18	6	0.30	BDL	18	168	46	13	45	1.1
938	Sidhi	Sihawal	Padariya	TW	24.432	82.099	7.48	275	0	97	20	12	10	0.22	BDL	24	89	20	10	19	0.6
939	Sidhi	Majhauli	Parsilli	DW	24.147	81.488	7.79	650	0	334	25	10	3	0.21	BDL	28	213	38	29	50	1.4
940	Sidhi	Sidhi	Patpara	DW	24.485	81.890	7.73	675	0	328	27	9	13	0.17	BDL	29	213	42	26	55	1.3
941	Sidhi	Rampur Naikin	Rampur2	HP	24.343	81.481	7.42	760	0	237	85	42	11	0.36	BDL	24	203	44	23	78	1.7
942	Sidhi	Majhauli	Semariha	DW	24.133	81.552	8.11	559	0	188	55	28	3	0.20	BDL	26	203	24	35	32	0.9
943	Sidhi	Sidhi	Sidhi	HP	24.403	81.888	7.65	900	0	255	120	41	13	0.22	BDL	32	277	53	35	78	0.6
944	Sidhi	Majhauli	Tikri	TW	24.162	81.863	8.19	415	0	152	40	14	8	1.02	BDL	33	139	32	14	30	1.2
945	Singrauli	Deosar	Banjari	DW	24.088	81.930	7.24	765	0	213	102	12	27	0.12	0.1	23	252	63	23	52	2.2
946	Singrauli	Deosar	Bargawan	HP	24.196	82.456	7.63	987	0	425	77	8	12	0.97	BDL	32	282	71	25	85	1.8
947	Singrauli	Deosar	Bharra	DW	24.383	82.260	8.02	322	0	106	30	14	16	0.05	BDL	27	81	12	12	34	0.8
948	Singrauli	Deosar	Bharseda	DW	24.078	81.963	8.08	445	0	149	35	22	8	0.05	BDL	19	187	42	20	11	1.5
949	Singrauli	Deosar	Chamari Dol	DW	24.001	82.106	7.92	532	0	181	57	10	28	0.34	0.2	35	162	38	16	42	2.4
950	Singrauli	Waidhan	Chaura	DW	24.011	82.472	7.47	965	0	317	155	5	22	0.42	BDL	26	202	42	23	124	1.9
951	Singrauli	Deosar	Deosarl	HP	24.319	82.304	7.89	687	0	280	47	12	26	0.56	BDL	31	217	73	9	52	2.6
952	Singrauli	Waidhan	Gaderiya	HP	24.156	82.486	7.62	512	0	156	60	5	28	0.42	BDL	42	197	42	22	22	2.2
953	Singrauli	Waidhan	Jamgadi	HP	24.040	82.318	7.96	543	0	218	40	8	26	0.32	BDL	37	172	46	14	42	2.4
954	Singrauli	Waidhan	Jattha Tola	DW	24.047	82.256	7.86	423	0	137	35	7	31 5	0.62	BDL	24	111	24	12	38	3.1
955 956	Singrauli	Waidhan	Kachani	HP DW	24.082 24.395	82.592	7.96 7.82	1289 742	0	93 87	352	48 5	105	0.25	0.1 BDL	29 33	303 177	85 53	22 11	152	3.5 2.9
956	Singrauli	Deosar	Karthua Kohara Khoh	DW	24.393	82.244 82.343	7.82	466	0	162	127 35	10	26	0.23	BDL	32	162	38	16	81 26	1.9
957	Singrauli	Deosar Waidhan	Konara Knon Koyal Khunth	HP	23.946	82.343	7.68	788	0	205	100	14	68	0.62	BDL	19	273	73	22	48	1.9
	Singrauli Singrauli	Waidhan	Mara	DW	23.897	82.503	7.35	1142	0	380	132	22	49	0.38	BDL	24	399	103	34	72	2.1
960	Singrauli	Deosar	Papal Khera	HP	24.120	81.934	7.42	698	0	305	27	14	43	0.43	BDL	28	207	65	11	58	2.1
961	Singrauli	Deosar	Parasi	DW	24.120	82.041	7.42	712	0	237	47	12	66	0.42	0.1	35	197	63	10	62	4.9
962	Singrauli	Waidhan	Parsauna New	DW	24.040	82.558	7.34	545	0	224	32	8	39	0.58	BDL	36	172	53	10	38	3.2
963	Singrauli	Deosar	Sarai	TW	24.049	82.204	7.62	723	0	255	70	11	44	0.32	0.1	23	237	65	18	52	3.5
964	Tikamgarh	Baldeogarh	Baldeogarh	DW	24.756	79.050	7.68	860	0	304	77	32	25	0.86	BDL	26	360	112	19	25	6
965	Tikamgarh	Tikamgarh	Baragaon	DW	24.730	79.030	7.75	770	0	279	55	23	65	0.43	BDL	21	325	114	10	27	0.8
966	Tikamgarh	Jatara	Bawri	DW	24.920	78.839	7.7	445	0	200	22	10	12	0.43	BDL	36	190	58	11	14	1
967	Tikamgarh	Prithvipur	Birorakhet	DW	25.115	78.792	7.74	1270	0	365	162	34	83	0.35	BDL	23	595	216	13	17	1.5
701	1	1	2 OTURNIO	L 2"	20.110	10.772	1 / - / - 7	12/0	U	202	102		55	0.55	שטט		575	210	1.5	1 /	

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
968	Tikamgarh	Jatara	Digaura	DW	24.971	78.839	7.38	1480	0	279	287	35	79	0.45	BDL	21	535	148	40	93	0.5
969	Tikamgarh	Jatara	Jatara	DW	25.003	79.048	7.99	490	0	182	15	30	50	0.4	BDL	22	185	64	6	25	3.2
970	Tikamgarh	Tikamgarh	Majna	DW	24.836	78.997	7.63	1410	0	304	205	40	110	0.53	BDL	43	605	138	63	45	1.3
971	Tikamgarh	Baldeogarh	Manikpur	DW	24.848	79.171	7.56	670	0	261	25	21	74	0.35	BDL	39	260	74	18	32	2.8
972	Tikamgarh	Tikamgarh	Mawai	DW	24.794	78.928	7.43	395	0	61	32	45	56	1.05	BDL	37	150	22	23	20	1.4
973	Tikamgarh	Prithvipur	Nengawan	DW	25.255	78.673	7.4	1025	0	243	130	40	87	1.13	BDL	45	385	100	33	55	2.9
974	Tikamgarh	Niwari	Niwari New	DW	25.345	78.801	7.27	1100	0	279	137	37	87	0.53	BDL	41	430	146	16	53	1
975	Tikamgarh	Niwari	Orchha	DW	25.349	78.641	7.64	1125	0	328	100	48	94	1.03	BDL	45	510	106	60	20	2
976	Tikamgarh	Prithvipur	Prithipur	DW	25.206	78.754	7.68	1030	0	322	145	10	30	1.64	BDL	21	340	78	35	76	1.3
977	Tikamgarh	Tikamgarh	Tikamgarh	DW	24.744	78.838	7.34	1625	0	286	345	34	23	0.75	BDL	43	765	134	105	20	2.3
978	Ujjain	Ghatia	Bachhukhera	BW	23.312	75.791	7.96	1612	0	207	227	22	321	0.90	0.3	36	280	52	36	212	2.3
979	Ujjain	Ujjain	Chakrawada Grid	DW	23.257	75.708	7.62	1423	0	348	177	28	108	0.40	BDL	42	555	158	39	64	1.1
980	Ujjain	Badnagar	Chhoti Ghadsod	HP	23.108	75.452	7.75	1145	0	275	130	45	104	0.20	BDL	19	325	86	27	102	3.2
981	Ujjain	Ujjain	Dabla Rehwari	HP	23.252	75.814	7.46	942	0	250	140	15	13	1.10	0.1	27	265	84	13	81	2.9
982	Ujjain	Tarana	Dablahardu	BW	23.495	75.895	7.49	2879	0	708	547	44	65	0.20	BDL	35	1010	306	60	184	2.1
983	Ujjain	Mahidpur	Ghosla	DW	23.439	75.876	8.03	2445	0	397	535	16	78	0.15	BDL	41	745	244	33	209	1.4
984	Ujjain	Tarana	Kaiytha	DW	23.233	76.018	7.69	3565	0	537	810	29	147	0.25	BDL	26	1450	486	57	139	2.5
985	Ujjain	Badnagar	Kharotia	HP	23.163	75.630	7.78	2042	0	647	215	44	53	0.35	0.2	29	660	224	24	152	1.8
986	Ujjain	Mahidpur	Mahidpurroad	DW	23.567	75.508	7.44	3046	0	372	887	35	55	0.95	BDL	32	1195	378	61	145	3.5
987	Ujjain	Tarana	Makdon	DW	23.504	76.069	7.81	947	0	250	150	22	30	0.05	BDL	39	355	106	22	50	2.2
988	Ujjain	Ujjain	Naikhedi	HP	23.204	75.675	8.01	1042	0	421	52	36	85	0.60	BDL	43	440	108	41	27	5.2
989	Ujjain	Ujjain	Narwar	BW	23.080	75.902	7.68	1123	0	372	62	65	73	0.05	BDL	29	325	112	11	102	1.9
990	Ujjain	Ghatia	Nazarpur	BW	23.352	75.853	7.84	1089	0	256	120	55	55	0.90	0.4	27	215	52	21	138	2.6
991	Ujjain	Ujjain	Palkhanda	HP	23.041	75.946	7.76	2512	0	299	615	15	74	0.25	BDL	34	690	198	47	242	1.1
992	Ujjain	Ujjain	Patpala	DW	23.198	75.866	7.65	912	0	281	77	45	21	0.10	BDL	36	310	92	19	54	1.3
993	Ujjain	Ghatia	Ruie	BW	23.286	75.652	7.76	1312	0	378	170	18	90	0.25	BDL	33	535	156	35	42	1.8
994	Ujjain	Tarana	Rupakhedi	HP	23.475	75.971	7.87	2085	0	610	255	24	93	0.50	0.1	29	465	164	13	256	2.3
995	Ujjain	Khachrod	Unhel	DW	23.338	75.549	7.82	2112	0	415	355	15	117	0.10	BDL	27	885	292	38	65	2.2
996	Ujjain	Ujjain	Vijayganj Mandi	HP	23.219	75.952	7.74	1456	0	311	232	14	87	0.40	BDL	35	440	112	39	123	1.6
997	Umaria	Karkeli	Bichua	OW	23.466	80.747	7.56	920	0	444	22	16	14	0.38	BDL	37	320	104	15	55	2.6
998	Umaria	Pali	Birsinghpur l	HP	23.367	81.040	7.22	675	0	122	60	95	65	0.23	BDL	22	290	82	21	30	2.3
999	Umaria	Manpur	Ohamokhar	OW	23.630	80.922	7.37	624	0	279	15	15	31	0.25	BDL	35	210	66	11	43	2.8
1000	Umaria	Pali	Ghunghuti New	HP	23.349	81.190	7.49	572	0	273	15	13	16	0.33	BDL	32	235	62	19	22	1.7
1001	Umaria	Karkeli	Karkeli New	OW	23.464	80.906	7.32	283	0	55	22	21	42	0.27	BDL	37	90	28	5	22	1.7
1002	Umaria	Manpur	Mahroi	OW	23.955	80.926	7.47	855	0	298	90	33	22	1.34	BDL	29	120	20	17	145	2.2
1003	Umaria	Manpur	ManpurNew	OW	23.760	81.117	7.34	275	0	49	15	28	38	0.37	BDL	34	75	26	2	23	1.1
1004	Umaria	Karkeli	Nigahari	HP	23.409	80.683	7.84	720	0	219	67	50	15	1.98	BDL	33	95	32	4	118	1.3
1005	Umaria	Karkeli	Nowrozabad	HP	23.393	80.983	7.14	345	0	49	35	37	42	0.41	BDL	29	95	30	5	32	1.8
1006	Umaria	Bandhavgarh	Parasi	HP	23.664	80.944	7.22	276	0	49	15	32	21	0.12	BDL	20	60	16	5	25	0.9
1007	Umaria	Manpur	Pataur	OW	23.774	81.036	7.34	860	0	316	77	23	21	0.41	BDL	34	360	120	15	34	1.3
1008	Umaria	Bandhavgarh	Tala	OW	23.721	81.021	7.75	672	0	200	35	30	75	0.24	BDL	30	230	50	26	37	2.1
1009	Umaria	Bandhavgarh	Umaria	OW	23.525	80.839	7.32	500	0	207	17	20	18	0.54	BDL	31	200	60	12	20	2.2
1010	Umaria	Pali	Amiliya	OW	23.322	81.298	7.23	365	0	164	7	18	12	0.31	BDL	38	135	44	6	18	1.6
1011	Umaria	Manpur	Panpatha	OW	23.869	81.005	7.24	844	0	261	67	32	55	0.38	BDL	27	290	90	16	54	2.5

S. No.	District	Block	Location	Source	Lat.	Long.	pН	EC	CO3	HCO3	Cl	SO4	NO3	F	PO4	SiO2	TH	Ca	Mg	Na	K
							at 25°C	μS/cm at							mg/l						
1012	Vidisha	Gyaraspur	Atari Khejda	DW	23.615	78.028	7.58	964	0	346	82	30	37	0.27	0.09	39	290	42	45	85	1.2
1013	Vidisha	Vidisha	Bagri	DW	23.568	77.765	7.43	889	0	298	105	17	11	0.30	BDL	21	225	56	21	96	2.3
1014	Vidisha	Basoda	Bagrodcrossing	HP	23.733	78.176	7.93	1053	0	431	87	11	22	0.54	BDL	55	270	66	26	114	1.8
1015	Vidisha	Vidisha	Bamuriya	DW	23.613	77.763	7.74	890	0	298	77	33	43	0.33	0.08	78	295	48	43	65	1.5
1016	Vidisha	Basoda	Bareth	DW	23.913	78.00	7.76	985	0	401	67	25	24	0.62	BDL	41	310	62	38	81	2.2
1017	Vidisha	Vidisha	Bilari	DW	23.578	77.70	7.48	1931	0	620	190	63	88	0.37	0.14	20	485	96	60	213	4.9
1018	Vidisha	Sironj	Dehri Jagir	DW	24.041	77.786	7.53	1391	0	504	122	43	49	0.22	BDL	31	370	74	45	147	1.8
1019	Vidisha	Sironj	Deopur	DW	24.155	77.621	7.49	828	0	292	55	27	63	0.12	BDL	33	275	58	32	61	1.2
1020	Vidisha	Basoda	Ganjbasoda1	DW	23.863	77.924	7.51	1358	0	516	132	31	11	0.46	0.20	29	255	70	19	190	2.6
1021	Vidisha	Basoda	Ghatera	DW	23.807	78.124	7.47	1064	0	310	97	40	101	0.07	BDL	51	395	116	26	53	11.1
1022	Vidisha	Gyaraspur	Gyaraspur1	BW	23.667	78.114	6.93	1551	0	529	137	57	80	0.18	BDL	38	490	122	45	127	2.8
1023	Vidisha	Vidisha	Hirnai	DW	23.568	77.95	7.76	1024	0	419	85	16	15	0.43	0.15	24	360	70	45	67	2.5
1024	Vidisha	Vidisha	Imaliya	DW	23.576	77.781	6.78	730	0	279	57	29	8	0.12	BDL	21	290	58	35	31	1.9
1025	Vidisha	Kurwai	Kurwai 1	DW	24.125	78.043	7.60	1250	0	377	122	63	73	0.36	BDL	22	455	106	46	75	2.2
1026	Vidisha	Basoda	Malkapur	DW	23.979	77.851	7.23	1106	0	310	137	49	49	0.67	0.04	43	275	56	33	123	5.2
1027	Vidisha	Neteran	Mohanpura	DW	23.796	77.531	7.33	804	0	256	85	29	36	0.33	BDL	49	195	42	22	93	1.4
1028	Vidisha	Basoda	Mudra	DW	23.777	78.186	7.66	589	0	207	37	20	51	0.45	BDL	36	215	44	26	32	1.5
1029	Vidisha	Neteran	Nateran	DW	23.762	77.775	7.53	1914	0	592	215	96	41	0.40	0.60	18	420	70	60	241	6.5
1030	Vidisha	Sironj	Patharia	DW	24.115	77.819	7.21	1374	0	317	137	104	125	0.31	BDL	23	440	88	54	110	2.0
1031	Vidisha	Vidisha	Pattan	DW	23.725	77.657	7.58	533	0	177	45	31	17	0.40	BDL	38	205	30	32	25	1.6
1032	Vidisha	Neteran	Rasulli	HP	23.811	77.542	7.20	593	0	195	52	22	39	0.20	0.13	27	190	48	17	47	1.3
1033	Vidisha	Vidisha	Salaiya	HP	23.608	77.576	7.43	1278	0	275	122	69	186	0.21	BDL	52	330	66	40	138	1.3
1034	Vidisha	Sironj	Sironj1	DW	24.099	77.689	7.51	994	0	305	107	42	32	0.12	BDL	24	290	42	45	88	6.8
1035	Vidisha	Lateri	Tajpura	DW	24.062	77.293	6.96	394	0	134	30	21	13	0.16	0.21	54	130	18	21	27	1.5
1036	Vidisha	Neteran	Tinsiyai	DW	23.772	77.609	7.92	821	0	238	107	36	21	0.56	BDL	49	215	56	18	86	4.4
1037	Vidisha	Basoda	Udaipur	DW	23.901	78.055	7.50	1037	0	281	90	55	109	0.10	1.00	31	355	44	60	71	3.1
1038	Vidisha	Vidisha	Vidisha	DW	23.526	77.824	7.15	1094	0	348	117	62	10	0.27	BDL	33	340	74	38	87	9.5

Ground Water Level Data of Ground Water Monitoring Wells in Madhya Pradesh (Year 2021-2022)

ANNEXURE XVII

		LAT(DMS LONG(DM SITE_TY	WATER_L EVEL_PR	LEVEL_	WATER_' LEVEL_P OST21(m	LEVEL_J
DISTRICT	SITE) S) PE	E21(mbgl)	mbgl)	bgl)	gl)
AGAR MALW	AAgar New	23°43'5" N 76°0'30" E Dug Well	7.5	2.75	2.3	4.7
AGAR MALW	AAgar(D)	23°43'50" 75°59'50" EBore Well	0.42	0	2.89	0.19
AGAR MALW	AAmla	23°51'9" N 76°6'15" E Dug Well	12.85	2.65	4.35	8.52
AGAR MALWA	AKashi Bardiya	23°46'22" 76°2'40" E Dug Well	12.96	3.33	3.95	7.8
AGAR MALWA	ATanodiya	23°35'22" 75°56'28" EDug Well	9.7	2.17	5.4	8.9
AGAR MALW	ABarod	23°47'16" 75°48'22" EDug Well	8.55	5.4	4.75	6.56
AGAR MALWA	AJahangirpura :	23°49'10" 75°48'1" E Dug Well	19.1	6.78	8	12.56
AGAR MALWA	AJhounta	23°43'58" 75°56'46" EDug Well	11.25	3.4	5.85	9.8
AGAR MALWA	AMatkotra	23°44'20" 75°51'12" EDug Well	12.83	4.46	5.74	6.74
AGAR MALWA	AGuradi Bangla	a 24°4'48" N 76°9'18" E Dug Well	11.2	0.58	5	7.3
AGAR MALWA	ASoyat	24°11'18" 76°10'28" EDug Well	11.7	6.6	2.58	7.8
AGAR MALWA	ASoyat(deep)	24°8'50" N 76°9'37" E Bore Well	10.57	5.32	6.57	7.37
AGAR MALWA	ASusner New	23°56'40" 76°6'2" E Dug Well	14.7	2.7	3.43	9.8
ALIRAJPUR	Ambua	22°25'48" 74°26'14" EDug Well	11.62	7	5.98	9.73
ALIRAJPUR	Borkua	22°13'25" 74°20'32" EDug Well	6.5	2.3	3.85	2.69
ALIRAJPUR	Fatta	22°15'34" 74°35'53" EDug Well	4	6.1	4.9	5.16
ALIRAJPUR	Khattali	22°20'51" 74°31'4" E Dug Well	8.4	4.9	5.93	5.95
ALIRAJPUR	Nanpur	22°16'16" 74°31'54" EDug Well	9.33	6.68	6.65	8.23
ALIRAJPUR	Bhabra New 2	22°32'55" 74°19'10" EDug Well	8.9	6	5.8	7.1
ALIRAJPUR	Badaguda	22°25'47" 74°31'2" E Dug Well	3.57	3.45	3.55	3.83
ALIRAJPUR	Jobat(D)	22°25'0" N 74°34'15" EBore Well	27.03	19.93	20.33	22.81
ALIRAJPUR	Chandpur	22°21'25" 74°14'33" EDug Well	10.55	6.55	6.25	7.67
ALIRAJPUR	Kathiwara	22°28'51" 74°9'1" E Dug Well	3.07	2.85	0.65	2.88
ANUPPUR	Anuppur	23°7'10" N 81°42'2" E Dug Well	5	0.72	2	2.65
ANUPPUR	Muddhoba	23°15'6" N 81°53'4" E Dug Well	3.8	0.62	2.2	2.1
ANUPPUR	Dhangaon	23°1'50" N 81°50'20" EDug Well	8.98	3.56	3.58	4.98
ANUPPUR	Jamudi	23°3'59" N 81°37'58" EDug Well	8.6	6.35	6	7
ANUPPUR	Kerar	23°0'35" N 81°36'37" EDug Well	4.3	3.48	2.6	5.1
ANUPPUR	Lapta	22°59'1" N 81°53'22" EDug Well	4.82	1.3	3.02	3.68
ANUPPUR	Murra Tola	23°3'22" N 81°47'36" EDug Well	2.4	1.92	2.7	2.85
ANUPPUR	Venkat nagar	22°55'22" 81°52'22" EDug Well	15.86	13.91	15.86	13.87
ANUPPUR	Banshi Tola	23°11'53" 81°53'20" EDug Well	8.3	2.71	2.8	5
ANUPPUR	Kotma	23°11'45" 81°58'43" EDug Well	7.35	4.77	5.15	5.8
ANUPPUR	Kotma(S)	23°11'45" 81°58'43" EBore Well	5.9	3.45	4.2	4.8
ANUPPUR	Nagara Bandl	n 23°12'34" 81°59'6" E Dug Well	1.55	0.94	1.25	1.4
ANUPPUR	Bhejari	22°49'24" 81°41'52" EDug Well	2.6	1.46	1.7	1.75
ANUPPUR	Piparaha	22°51'30" 81°38'45" EDug Well	4.53	1.51	1.93	1.88
ANUPPUR	Podki	22°47'2" N 81°43'45" EDug Well	3.7	1.98	3.4	2.85
ANUPPUR	Rajendra grar	n22°56'0" N 81°36'30" EDug Well	7.52	2.75	5.17	7.07
ANUPPUR	Rajendragram	n 22°56'0" N 81°36'30" EBore Well	9.92	3.35	6.7	7.23
ASHOK NAGA	A Ashoknagar(E) 24°33'48" 77°43'27" EBore Well	11.8	2.81	4.24	6.12
ASHOK NAGA	A Barkheda	24°34'14" 77°48'20" EDug Well	10.76	1	5.8	6.03
ASHOK NAGA	Sankat Mocha	a 24°36'53" 77°43'52" EDug Well	2.82	1	1.4	2.46
ASHOK NAGA	A Semrisahabad	d 24°37'40" 77°33'48" EDug Well	7.32	2.7	10.2	10.95
ASHOK NAGA	A Shadora	24°37'12" 77°35'24" EDug Well	3.35	1.25	2.05	2.31

ASHOK NAGA	\ Chanderi	24°42'42"	78°8'9" E	Dug Well	6.32	4.1	6	6.32
ASHOK NAGA	Chanderi(D)	24°42'45"	78°8'11" E	Bore Well	5.81	3.59	4.79	5.1
ASHOK NAGA	NPiprod(S)	24°44'23"	78°0'5" E	Bore Well	6.22	2.9	4.1	4.48
ASHOK NAGA	\ Dhakoni	24°45'45"	77°51'30" E	Dug Well	6.46	1.96	1.96	2.88
ASHOK NAGA	\ Isagarh	24°50'32"	77°52'48" E	Dug Well	10.56	8.16	8.76	8.04
ASHOK NAGA	Jhanghar(S)	24°52'42"	77°49'42" E	Bore Well	19.25	4.7	6.5	9.33
ASHOK NAGA	\ Pachlana	24°46'52"	77°48'12" E	Dug Well	7.92	1.15	5.75	8.15
ASHOK NAGA	\ Saraskheri	24°44'8" N	77°47'22"	EDug Well	9.9	3.4	5.25	9.28
ASHOK NAGA	Shankarpur	24°45'18"	77°55'16" E	Dug Well	6.97	3.9	2.75	5.05
ASHOK NAGA	\ Athaikhera	24°25'47"	77°48'59" E	Dug Well	8.52	3.2	5.8	5.02
ASHOK NAGA	\ Bahadurpur	24°20'30"	77°58'9" E [Dug Well	13.45	11.7	12.3	11.18
ASHOK NAGA	\ Damdama	24°21'56"	77°52'29" E	Dug Well	3.82	2.4	0.9	0.73
ASHOK NAGA	\ Khalilpur	24°33'34"	78°5'17" E [Dug Well	9.28	3.62	5.32	9.43
ASHOK NAGA	Mungaoli		78°6'34" E [5.05	1.55	2.5	4.11
ASHOK NAGA	Mungaoli(S)	24°24'7" N	78°6'38" E	Bore Well	6.32	1.25	3.4	5.56
ASHOK NAGA	\ Sahrai	24°31'44"	78°6'6" E	Dug Well	8.32	2.6	6.2	8.62
ASHOK NAGA	Sehpura Chal	< 24°27'11"	78°6'0" E	Dug Well	3.97	0.9	1.25	3.48
BALAGHAT	Baihar1	22°6'15" N	80°33'5" E	Dug Well	4.75	2.26	2.94	3.5
BALAGHAT	Jawaditula		80°52'15"	•	3	1.07	1.23	1.78
BALAGHAT	Laugur		80°21'7" E [•	11	3.56	4.23	4.85
BALAGHAT	Mukki	22°9'15" N	80°40'20"	EDug Well	6.82	3.09	3.04	3.77
BALAGHAT	Parsatola		80°32'47" I	•	2.75	0.46	1.97	1.85
BALAGHAT	Samnapur		80°29'25" E	•	8.4	3.35	4.74	5.6
BALAGHAT	Supkhar		80°56'13" E	•	4.94	2.58	2.78	1.62
BALAGHAT	Balaghat		80°11'1" E [•	6.9	2.49	3.92	4.66
BALAGHAT	Lamta1		80°7'30" E	•	7.6	3.85	5.32	5.9
BALAGHAT	Saleteka New			•	14.2	10.32	13.29	12.2
BALAGHAT	Birsa		80°44'23"	•	5.95	2.8	3.33	4.65
BALAGHAT	Damoh2		80°47'43" E	•	3.3	1.32	4.17	6.75
BALAGHAT	Saletekhri		80°48'36" E	•	4.55	2.47	3.37	3.95
BALAGHAT	Katangi-S		79°48'12" E	•	8.1	2.02	3.7	1.9
BALAGHAT	Katedhara		79°47'50" E		7.5	0.65	2.47	2.6
BALAGHAT	Garraghoda		79°47'10" E	•	5.18	3.5	3.79	5.39
BALAGHAT	Khairlanji		79°58'45"	•	3.9	2.45	1.75	2.3
BALAGHAT	Miragpur		79°50'20" E	•	3.7	2.04	3.22	3.75
BALAGHAT	Rampalli			Dug Well	7.5	4.95	5.33	5.7
BALAGHAT	Bhanegaon		80°24'30"	0	9.4	8.42	7.53	9.1
BALAGHAT	Kirnapur		80°19'43" E	-	2.7	1.12	2.17	2.3
BALAGHAT	Kanjai		79°59'8" E	-	5.2	1.75	2.69	2.8
BALAGHAT	Bagholi		80°22'10"	-	2.88	1.6	2.53	2.18
BALAGHAT	Khurmundi		80°28'50"	•	4.75	4.4	2.55	3.4
BALAGHAT	Paraswara		80°18'3" E [•	7.65	3.2	5.44	5.45
BALAGHAT	Rangpatbaba			-	5.6	0.72	1.39	2.9
BALAGHAT	Amai	21°40'35"		-	3.3	0.95	2.46	2.5
BALAGHAT	Kanki	21°49'55"		Dug Well	3.5	2.02	6.52	5.82
BALAGHAT	Kochwahi	21°47'25"		-	3.13	1.27	2.14	1.63
BALAGHAT	Newargaon	21°48'38"		•	1.65	1.72	2.14	2.4
BALAGHAT	Waraseoni(S)			Bore Well	9.34	5.66	5.14	5.34
BALAGHAT	Waraseoni(3)	21°45'48"		Dug Well	2.34	1.36	2.36	2.24
BARWANI	Niwali1	21°40'57"	74°55'24"		7.07	1.55	6.85	6.44
BARWANI	Balsamund	21°48'32"	74 55 24 75°10'31"	-	7.07 7.97	5.75	5.85	6.14
BARWANI	Julwania	21°52'17"	75 1031 1 75°11'5" E	-	10.66	6.9	6.83	6.14
DUIMANIN	Juiwailla	Z1 JZ 11	10 110 E	Dag Well	10.00	0.9	0.03	0.34

BARWANI	Palsud	21°49'22" 74°57'55" EDug Well	6.92	3.6	8.27	7.3
BARWANI	Rajpur	21°56'11" 75°8'10" E Dug Well	9.95	7.8	6.95	9.5
BARWANI	Rajpur(D)	21°56'5" N 75°8'11" E Bore Well	18.95	12.6	12.6	14.51
BARWANI	Chachariya	21°34'10" 75°19'28" EDug Well	5.55	1.5	1.58	2.29
BARWANI	Sendhwa	21°41'37" 75°6'10" E Dug Well	4.17	2.05	3.8	4.22
BARWANI	Anjad(D)	22°2'27" N 75°2'47" E Bore Well	12.92	14.22	11.22	9.25
BARWANI	Baruphatak	21°58'51" 75°18'9" E Dug Well	6.48	12	9.64	9.77
BARWANI	Borlai	22°2'20" N 75°0'6" E Dug Well	10.51	11.8	11.8	11.89
BETUL	Amla(d)	21°55'25" 78°7'27" E Bore Well	5.07	1.39	2.85	4.8
BETUL	Amla(S)	21°55'25" 78°7'27" E Bore Well	5.33	2.26	2.52	3.38
BETUL	Amla1	21°55'27" 78°7'5" E Dug Well	4.78	1.22	2.87	3.37
BETUL	Athner(D)	21°37'20" 77°55'25" EBore Well	20.52	18.82	18.25	11.2
BETUL	Athner1	21°37'16" 77°55'15" EDug Well	9.58	2.2	5.95	10.5
BETUL	Gujarmaal	21°37'49" 77°56'47" EDug Well	12.9	3.7	4.45	4.95
BETUL	Betul1	21°51'37" 77°55'37" EDug Well	6.83	0.54	1.6	3.3
BETUL	Khedi	21°51'24" 77°48'10" EDug Well	13.53	4.55	11.3	13.6
BETUL	Kolgaon	21°46'7" N 77°53'38" EDug Well	5.92	1.8	4.5	6.3
BETUL	•	21°38'40" 77°38'12" EDug Well	9.38	3.3	5.8	10.1
BETUL	Bhainsdehi1	21°35'30" 77°36 12 EDug Well	9.36	1.36	3.16	4.16
	Gudagaon Jhallar	<u> </u>	1.05			
BETUL	-	21°43'32" 77°44'33" EDug Well		0.56	0.66	0.58
BETUL	Kotal kund	21°27'47" 77°39'30" EDug Well	10.55	6.15	7.9	6
BETUL	Chirapatala	22°6'22" N 77°30'0" E Dug Well	8.01	2.7	4.5	5.8
BETUL	Gadha	21°54'53" 77°44'53" EDug Well	9.41	1.15	1.5	13.45
BETUL		a 22°12'28" 77°25'8" E Dug Well	4.43	1.1	6.16	3.1
BETUL	Pathakhera	22°4'4" N 77°32'1" E Dug Well	7.78	0.2	4.22	5.15
BETUL	Ghoradongri	22°7'16" N 78°0'17" E Dug Well	7.58	0.8	1.65	1.95
BETUL	Sarni	22°7'6" N 78°8'33" E Dug Well	8.94	5.3	8.35	5
BETUL	Ghatpiparia	21°52'56" 78°31'7" E Dug Well	6.72	6.53	9.03	10.1
BETUL	Junapani	21°43'14" 78°21'12" EDug Well	8.68	3.85	5.25	8.15
BETUL	Kapasia	21°49'50" 78°24'55" EDug Well	8.23	3.3	3.4	10.2
BETUL	MultaiDW	21°46'30" 78°15'20" EDug Well	1.06	1.05	1.35	2
BETUL	Sasundra	21°50'48" 78°5'31" E Dug Well	5.47	6.6	8.8	12.25
BETUL	Masod New	21°36'10" 78°7'4" E Dug Well	11.19	1.1	9.9	12.35
BETUL	Pattan	21°39'3" N 78°15'58" EDug Well	8.42	2.2	1.2	2.4
BETUL	Bhonra	22°16'40" 77°52'11" EDug Well	9.45	2.65	3.6	3.8
BHIND	Ater	26°45'0" N 78°38'39" EDug Well	15.2	10.8	12.9	13.5
BHIND	Lavan	26°31'17" 78°43'50" EDug Well	11.5	8.1	10.4	11.2
BHIND	Nahrakapura	26°38'13" 78°56'30" EDug Well	27.9	22.5	24.49	24.6
BHIND	Phuph	26°38'34" 78°52'46" EDug Well	25.65	24.65	26.15	24.75
BHIND	Bhagathar	26°20'40" 78°29'31" EDug Well	4.1	1.1	1.3	1.4
BHIND	Bhirkhari	26°28'31" 78°28'42" EDug Well	8.9	5.4	5.4	9.1
BHIND	Khader	26°22'6" N 78°29'2" E Dug Well	2.4	1.9	1.07	0.65
BHIND	Malanpur(S)	26°21'25" 78°17'25" EBore Well	35.76	38.76	29.98	31.56
BHIND	Alampur	26°1'46" N 78°47'50" EDug Well	10.15	6.55	7.95	8.75
BHIND	Balaji	26°17'46" 78°58'48" EDug Well	16.95	15.25	17	16.85
BHIND	Daboh	25°59'46" 78°52'45" EDug Well	7.75	4.85	3.25	4.55
BHIND	Dewri	26°4'50" N 78°54'11" EDug Well	13.45	12.05	11.15	11.15
BHIND	Lahar	26°11'10" 78°56'50" EDug Well	4.8	4.3	3.8	2.3
BHIND	Chirole	26°21'19" 78°38'3" E Dug Well	7.6	5	6.05	6.5
BHIND	Gormi	26°35'56" 78°30'6" E Dug Well	16.37	11.27	15.47	16.07
BHIND	Meroli	26°33'43" 78°31'47" EDug Well	6	2.4	1.7	2.4
BHIND	Ratanpura	25°58'3" N 78°49'30" EDug Well	6.85	5.55	3.05	4.65
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BHOPAL	Amlia	23°52'13"	77°14'54" EDug Well	7.42	1.1	3.4	7.81
BHOPAL	Berasia	23°37'22"	77°25'50" EDug Well	11.21	3.39	6.49	8.44
BHOPAL	Berasia(D)	23°37'16"	77°25'40" EBore Well	49.55	0.35	10.55	7.78
BHOPAL	Gunga	23°26'56"	77°21'36" EDug Well	12.97	0.95	5.15	8.77
BHOPAL	Ramgarha	23°39'15"	77°20'49" EDug Well	7.22	0.75	4	4.23
BHOPAL	Ayodhya Naga	a23°16'0" N	77°26'0" E Dug Well	0.62	0.6	0.6	0.98
BHOPAL	Bairagarh		77°21'6" E Dug Well	9.52	4	4.4	5.38
BHOPAL	•		77°32'30" EDug Well	5.12	0.65	1.4	2.18
BHOPAL	Barkheda Pat		77°28'30" EDug Well	1.62	0.9	1.8	1.75
BHOPAL	Bilkhiria	23°15'16"	77°34'50" EDug Well	2.42	0.9	3.2	3.75
BHOPAL	Chichli	23°12'32"	77°22'32" EDug Well	2.82	2.35	5	2.58
BHOPAL	DIG Bangla	23°16'42"	77°24'16" EDug Well	1.42	1.4	2	2.78
BHOPAL	E- 2 Nursery	23°13'12"	77°26'12" EDug Well	4.52	1.3	7.1	5.8
BHOPAL	Gandhi Nagar		77°20'48" EDug Well	8.67	1.1	1.8	5.68
BHOPAL	Islamnagar	23°21'22"	77°25'4" E Dug Well	16.32	10.2	13.1	9.92
BHOPAL	Lal Ghati	23°16'36"	77°22'35" EDug Well	1.62	1.95	2.2	1.59
BHOPAL	Misrod (D)		77°28'8" E Bore Well	8.49	6.85	3.55	5.6
BHOPAL	Misrod (S)		77°28'8" E Bore Well	7.6	4.88	2.98	5.57
BHOPAL	Nabibagh	23°18'30"	77°24'15" EDug Well	8.6	3.5	3.1	4.34
BHOPAL	Nipaniya Jaat		77°23'56" EDug Well	5.12	0.2	1.8	3.55
BHOPAL	Patel Nagar	23°14'55"	77°29'0" E Dug Well	0.72	1.5	3.4	7.86
BHOPAL	•		•				
	Patel Nagar	23°14'55"	77°29'0" E Dug Well	0.72	1.5	4.1	7.86
BHOPAL	Phanda(D)	23°13'35"	77°11'45" EBore Well	18.63	20.89	21.19	19.61
BHOPAL	Piplani	23°12'50"	77°28'30" EDug Well	2.37	0.65	1.8	2.82
BHOPAL	Piplani	23°12'50"	77°28'30" EDug Well	2.37	0.65	2.28	2.82
BHOPAL	Sarvar		77°18'1" E Dug Well	13.32	2.35	5.1	10.24
BHOPAL	Shahjahana b		77°23'54" EDug Well	1.36	1.7	2.4	1.78
BHOPAL	Shahpura	23°12'24"	77°25'24" EDug Well	0.47	0.6	0.6	1.06
BHOPAL	Shahpura	23°12'24"	•	0.47	0.6	0.78	1.06
BHOPAL		•	77°24'24" EDug Well	2.45	2.2	2.8	3.58
BURHANPUR			76°18'38" EDug Well	6.33	4.45	5.45	7.5
BURHANPUR	•		76°9'42" E Dug Well	11.59	10.68	6.18	6.8
BURHANPUR			76°15'59" EDug Well	6.03	4.8	3.95	8.2
BURHANPUR			76°45'30" EDug Well	11.63	9.1	5.8	8.9
BURHANPUR			76°29'12" EDug Well	12.58	3.65	4.46	8.25
BURHANPUR			76°23'37" EDug Well	6.1	2.42	3.1	4.85
BURHANPUR			76°40'45" EDug Well	13.8	11.4	8.2	8.5
BURHANPUR	•		76°44'3" E Dug Well	5.73	5.45	4.4	3.2
BURHANPUR			76°39'12" EDug Well	15.25	13.25	12.41	12.6
CHHATARPUF			79°16'30" EDug Well	6.18	4.08	4.78	4.89
CHHATARPUF	RSendpa		79°15'10" EDug Well	2.9	1.9	3.3	3.42
CHHATARPUF	RBijawar	24°39'1" N	79°29'53" EDug Well	11.1	6.6	8.8	8.68
CHHATARPUF	RBijawar(D)	24°38'22" 7	79°28'54" EBore Well	16.62	13.4	13.1	14.19
CHHATARPUF	RBijawar(S)	24°38'22"	79°28'54" EBore Well	15.49	13.32	12.77	14.29
CHHATARPUF	RGulganj	24°41'33" 7	79°22'8" E Dug Well	10.1	5.8	9.4	9.32
CHHATARPUF	RMotigarh	24°36'48"	79°40'9" E Dug Well	7.6	3.7	2.7	2.96
CHHATARPUF	RRaipura	24°28'53" 7	79°43'23" EDug Well	3.25	1.85	2.65	2.62
CHHATARPUF	RTapra Lahar	24°35'17"	79°36'35" EDug Well	9.77	6.17	9.52	9.42
CHHATARPUF	RAmodha	24°11'58"	79°19'34" EDug Well	10.85	4.25	8.1	9.82
CHHATARPUF	RBuxwaha	24°14'55"	79°17'14" EDug Well	13.9	13.6	10.1	11.03
CHHATARPUF	RGadhoi		79°13'38" EDug Well	0.85	0.6	3	0.75
CHHATARPUF	RChhatarpur	24°54'0" N	79°35'28" EDug Well	8.56	6.26	6.96	6.66

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	s) 24°55'56" 79°35'11" EBore Well	6.6	5.1	3	3.7
CHHATARPURKurri	24°52'5" N 79°43'12" EDug Well	5.64	2.59	4.29	4.32
CHHATARPURMankari	25°1'36" N 79°47'56" EDug Well	7.5	3.8	5.8	5.75
CHHATARPURMatgawan	24°47'52" 79°28'38" EDug Well	7	2.85	5.45	7.12
CHHATARPURNiwari1	24°59'47" 79°39'5" E Dug Well	7.1	4.8	4.1	4.08
CHHATARPURPipora Khurd	24°51'0" N 79°28'51" EDug Well	12.25	3.95	7.25	7.15
CHHATARPURGaurihar	25°16'6" N 80°11'40" EDug Well	9.4	5.9	1.8	1.85
CHHATARPURSarwai	25°11'10" 80°17'14" EDug Well	5.6	1.92	2.1	2.39
CHHATARPURSinghpur	25°7'40" N 80°14'38" EDug Well	6.9	4.4	2.9	2.95
CHHATARPURChandla	25°4'2" N 80°11'40" EDug Well	9	6.35	5.2	5.23
CHHATARPURLaundi (Lavkı	u 25°8'20" N 80°0'20" E Dug Well	4.95	1.75	2.8	2.83
CHHATARPURKukrel	25°13'34" 79°20'45" EDug Well	12.8	8.55	9.3	9.45
CHHATARPURMaharajpur	25°1'15" N 79°43'32" EDug Well	14.2	9.4	11.25	11.3
CHHATARPURNowgaon	25°3'15" N 79°27'0" E Dug Well	8	5.4	5.3	5.55
CHHATARPURTatampur	25°2'41" N 79°51'55" EDug Well	18.1	15.25	17.5	17.52
•	a 24°45'0" N 79°57'32" EDug Well	6.8	2.3	5.1	5.03
CHHATARPURGanj	24°47'31" 79°47'43" EDug Well	11.43	8.3	6.1	6.01
CHHATARPURGanj(S)	24°47'30" 79°47'43" EBore Well	12.18	9.04	6.69	8.01
CHHATARPURKhajuraho	24°50'59" 79°55'52" EDug Well	8.65	5.05	6.75	6.82
CHHATARPURKhajuraho(D)	•	7.96	5.52	5.9	6.77
CHHINDWARAAmarwara	22°18'5" N 79°10'15" EDug Well	10.3	6.92	8.48	9.09
CHHINDWARASinghori	22°12'4" N 79°3'42" E Dug Well	5.9	4.32	4.33	9.71
CHHINDWARASurla	22°26'0" N 79°10'20" EDug Well	5.71	2.53	3.16	6.51
CHHINDWARABichhua(D)	21°49'4" N 79°2'10" E Bore Well	23.9	11.32	17.23	11.98
CHHINDWARAChaurai(D)	22°3'0" N 79°15'49" EBore Well	10.85	1.36	4.95	7.75
CHHINDWARAChaurai1	22°3'13" N 79°15'3" E Dug Well	7.65	4.97	10.43	8.44
	22°2'43" N 79°9'52" E Dug Well	7.75	6.96	7.14	6.85
CHHINDWARARamgarh	22°10'29" 79°16'18" EDug Well	7.2	5.76	8.78	6.23
· ·	22°8'13" N 79°1'24" E Dug Well	11.8	5.34	7.15	7.25
CHHINDWARASaonri1	21°57'53" 78°46'13" EDug Well	4.3	1.07	3.17	5.1
CHHINDWARAHarraiDW	22°36'45" 79°13'15" EDug Well	8.35	5.11	4.1	5.65
CHHINDWARAKundali	22°46'34" 79°13'38" EDug Well	8.72	6.28	7.53	8.92
CHHINDWARASathiya	22°35'25" 79°10'45" EDug Well	7.5	3.83	4.63	7.4
CHHINDWARADamua	22°11'37" 78°28'10" EDug Well	4.65	0.46	0.93	1.67
CHHINDWARAJamai	22°11'44" 78°35'41" EDug Well	5.06	2.68	4	1.76
CHHINDWARAJamuai(D)	22°11'40" 78°36'6" E Bore Well	10.9	6.82	12.42	21.4
` ,	21°57'45" 78°56'16" EDug Well	7.9	2.72	6.07	9.5
	21°52'1" N 78°57'10" EDug Well	12.8	1.42	15.12	2.1
_	21°51'44" 78°53'53" EDug Well	3.8	2.67	4.93	3.4
CHHINDWARABangaon1	21°34'21" 78°26'50" EDug Well	6.4	4.72	5.67	5
•	21°30'0" N 78°41'35" EDug Well	6.3	1.32	3.05	2.41
) 21°35'35" 78°31'47" EBore Well	11.5	7.42	5.32	13.65
CHHINDWARAPandurna	21°35'22" 78°31'6" E Dug Well	7.7	5.41	4.55	6.2
	w21°35'16" 78°43'53" EDug Well	9.25	7.47	8.4	10.15
CHHINDWARARajna	21°32'25" 78°38'20" EDug Well	4.5	2.47	4.85	4.55
CHHINDWARALahgudna	22°16'20" 78°43'27" EDug Well	0.9	0.17	0.44	1.7
CHHINDWARASausar	21°39'19" 78°48'20" EDug Well	9.58	8.74	7.87	8.77
CHHINDWARASausar(D)	21°39'7" N 78°48'10" EBore Well	9.8	6.37	7.32	8
CHHINDWARASausar(S)	21°39'7" N 78°48'10" EBore Well	9.71	6.53	7.44	7.91
CHHINDWARASilwanighati	21°47'17" 78°49'50" EDug Well	4.4	1.62	2.76	3.1
CHHINDWARAChhindi	22°23'15" 78°49'26" EDug Well	4	1.52	3.31	2.5
CHHINDWARAMahaljhir	22°36'34" 78°34'28" EDug Well	9.3	6.27	6.87	6.28
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DEWAS	Pipilianankar	22°35'10" 77°0'5" E Dug Well	12.4	7.6	5.8	12.05
DEWAS	Bhonrasa	22°59'16" 76°12'25" EDug Well	15.45	16.34	7.55	12.95
DEWAS	Sonkutch(S)	22°58'23" 76°21'8" E Bore Well	23.4	16.85	13.35	17.75
DHAR	Kanwan New	22°52'12" 75°15'29" EDug Well	10.6	7.9	2.74	4.45
DHAR	Kanwan Npz	22°52'50" 75°14'57" EBore Well	11.55	8.6	3.68	4.89
DHAR	Karod Kalan I	N22°46'0" N 75°13'10" EBore Well	27.22	9.7	5.5	7.82
DHAR	Bagh New	22°21'45" 74°47'46" EDug Well	6.08	4.5	4.04	4.68
DHAR	Bagh(D)	22°21'43" 74°47'51" EBore Well	6.32	5.2	3.97	4.85
DHAR	Tanda	22°30'19" 74°51'18" EDug Well	12.85	12.15	12.45	10.35
DHAR	Dhar	22°35'29" 75°19'4" E Dug Well	13.03	8.15	6.43	8.31
DHAR	Dhar (D)	22°33'52" 75°17'30" EBore Well	25	12.97	3.7	9.32
DHAR	Dhar (S)	22°33'52" 75°17'30" EBore Well	17.72	10.87	2.25	7.82
DHAR	Gunawad Np		24.12	19.1	10.05	14.29
DHAR	Dhamnod	22°12'52" 75°28'22" EDug Well	4.35	3.75	3.37	4.16
DHAR		22°9'15" N 75°20'0" E Bore Well	9.38	5.9	6.38	5.88
DHAR	•	22°9'9" N 75°20'50" EDug Well	15.31	15.95	15.19	15.39
DHAR	Gujri1	22°19'15" 75°30'0" E Dug Well	13.9	6.9	8.54	6.49
DHAR	Gandhwani	22°20'8" N 75°0'19" E Dug Well	8.92	5.9	6.4	6.71
DHAR	Dehari	22°17'17" 74°54'59" EDug Well	11.46	11.8	7.43	9.85
DHAR	Dhulsar	22°12'19" 74°52'10" EDug Well	5.98	4.2	3.8	4.07
DHAR	Palasi	22°13'39" 74°39'40" EDug Well	3.55	3.2	3.4	1.88
DHAR	Manawar	22°14'8" N 75°5'36" E Dug Well	13.71	12.35	6.64	10.1
DHAR		22°14'8" N 75°5'36" E Bore Well	18.96	13.74	36.44	10.1
DHAR	Manawar(D)		5.42	4.5	8.32	4.05
	Singhana	22°11'15" 74°58'7" E Dug Well				
DHAR	Bagri Npz	22°29'20" 75°28'0" E Bore Well	14.61	13.2	10.8	15.6
DHAR	•	z 22°13'3" N 75°29'0" E Bore Well	4.58	4.1	4.2	4.12
DHAR	Mandu	22°20'48" 75°23'54" EDug Well	9.75	8.95	8.55	8.53
DHAR	•	22°27'20" 75°23'40" EBore Well	15.6	11.8	12.6	12.7
DHAR	•	1 22°36'45" 75°41'50" EBore Well	7.02	2.7	1.84	3.21
DHAR	Pipalya	22°8'2" N 74°52'31" EDug Well	7.52	6.6	3.97	4.98
DHAR	Amjhera(D)	22°33'22" 75°7'20" E Bore Well	24.49	49.57	17.67	17.46
DHAR	Amjhira	22°33'21" 75°7'22" E Dug Well	4.17	2.4	3.4	7.09
DHAR	•	22°35'10" 75°8'0" E Bore Well	11.31	8	2.4	4.99
DHAR	Julana	22°46'53" 74°59'21" EDug Well	13.35	4.93	7.11	8.83
DHAR	Lunera	22°27'37" 75°25'12" EDug Well	7.42	5.2	6.48	6.69
DINDORI	Amarpur1	22°47'10" 80°58'20" EDug Well	4.2	0.76	5.7	4.7
DINDORI	Bijhauri	22°51'24" 81°13'45" EDug Well	1.4	0.88	1	1.3
DINDORI	Gadasarai	22°49'11" 81°19'50" EDug Well	1.81	0.49	2.21	1.61
DINDORI	Dindori	22°56'0" N 81°5'30" E Dug Well	5.78	2.8	4.88	5.38
DINDORI	Salaiya	22°54'35" 80°56'50" EDug Well	2.2	2.05	2.8	2.7
DINDORI	Vikrampur1	23°4'36" N 80°54'25" EDug Well	0.7	0.44	0.5	0.4
DINDORI	Gorakhpur	22°44'52" 81°26'58" EDug Well	4.86	1.87	3.16	3.96
DINDORI	Karanjiya	22°42'40" 81°37'16" EDug Well	9.85	7.5	9.35	10.35
DINDORI	Harra	22°52'32" 80°47'29" EDug Well	2.6	0.92	2	3.5
DINDORI	Katangi1	23°7'34" N 80°37'34" EDug Well	2.8	1.94	2.7	3.05
DINDORI		p 23°11'0" N 80°41'43" EDug Well	1	0.65	3	2
DINDORI	Shahpura2	23°11'0" N 80°42'2" E Dug Well	2.6	1.98	2.6	2.05
GUNA	Aron	24°26'18" 77°22'42" EDug Well	6.55	0	2.3	2.54
GUNA	Aron(D)	24°23'6" N 77°24'52" EBore Well	22.35	4.53	8.33	12.55
GUNA	Aron(S)	24°23'6" N 77°24'52" EBore Well	23.53	4.7	8.7	12.35
GUNA	Rampur-I	24°18'27" 77°26'54" EDug Well	8.96	1.98	4.33	8.75
GUNA	Akoda	24°51'54" 77°11'24" EDug Well	2.05	1.75	2.3	1.52

GUNA	Bamori New	24°51'10"	77°8'20" E Dug Well	3.92	0.6	2.3	2.51
GUNA	Berkheri	24°37'40"	77°11'3" E Dug Well	4.37	0.85	3.45	2.73
GUNA	Rampur-II	24°46'14"	77°10'3" E Dug Well	11.62	3.6	3.5	4.17
GUNA	Suhaya New	24°41'27"	77°7'26" E Dug Well	6.52	1.8	3.9	4.53
GUNA	Binaganj	24°11'16"	77°1'56" E Dug Well	8.22	1.4	2.8	2.92
GUNA	Khatkiya	24°19'47"	77°6'12" E Dug Well	11.22	2.4	5.1	5.55
GUNA	Penchi	24°8'8" N	77°0'36" E Dug Well	13.46	2.3	12.5	11.49
GUNA	Jaitadongar	24°31'52"	77°20'8" E Dug Well	8.32	0.5	4	5.52
GUNA	Mahugarha	24°36'44"	77°15'31" EDug Well	9.15	2.4	1.95	3.19
GUNA	Pagara	24°39'14"	77°26'8" E Dug Well	13.22	3.2	3.8	6.25
GUNA	Singwasa	24°39'1" N	77°21'50" EDug Well	3.92	1.2	0.5	1.77
GUNA	Amlia	24°12'42"	77°11'48" EDug Well	14.05	2.3	12	11.54
GUNA	Gunjari	23°54'39"	77°15'50" EDug Well	8.32	1.55	4.9	5.28
GUNA	Janjali	24°21'42"	77°7'16" E Dug Well	12.15	2.7	8.9	6.02
GUNA	•		77°15'27" EDug Well	12	5.6	8.2	7.03
GUNA	•		77°15'17" EBore Well	87.8	71.8	87.8	49.4
GUNA	Pipaliya	24°18'34"	77°9'32" E Dug Well	11.72	3.1	6.4	8.32
GWALIOR	Bajna	25°50'36"	77°57'7" E Dug Well	8.4	3.9	3.4	4
GWALIOR	Dongarpur	25°49'19"	77°57'50" EDug Well	5.3	2.3	1.8	2.8
GWALIOR	Harsibandh	25°45'42"	77°55'44" EDug Well	9.86	6.66	5.56	7.06
GWALIOR	Harsibandh	25°45'42"	77°55'44" EDug Well	9.86	6.66	5.56	7.06
GWALIOR	Dabra(S)	25°53'28"	78°20'12" EBore Well	25.54	18.54	16.21	16.04
GWALIOR	Kariyawati		78°10'49" EDug Well	6.7	3.6	1.3	2.5
GWALIOR	Makoda	26°2'9" N	78°15'21" EDug Well	11.7	13.4	7.6	7.4
GWALIOR	Masoorpur Ne		78°14'40" EDug Well	5.2	1.4	1.9	2
GWALIOR	Tekanpur		78°17'2" E Dug Well	4.75	4.55	3.75	4.75
GWALIOR	Aron		77°55'51" EDug Well	6.45	1.55	3.15	4.45
GWALIOR	Ghantigaon	26°3'0" N	77°56'0" E Dug Well	5.12	2.12	2.79	2.62
GWALIOR	Mohana(S)		77°46'11" EBore Well	12.25	6.05	7.46	8.65
GWALIOR	Mohna	25°53'50"	77°46'38" EDug Well	6.2	4.3	5.66	2.1
GWALIOR	Nayagaon(D)	26°7'7" N	78°3'57" E Bore Well	46.62	41.62	37.76	22.02
GWALIOR	Nayagaon(D)	26°7'4" N	78°1'16" E Dug Well	14.1	11.1	14.55	13.1
GWALIOR	Aarauli		78°27'18" EDug Well	15.5	15.5	12.9	12.9
GWALIOR			78°25'58" EDug Well	14.7	13.1	10.75	10
GWALIOR	Behat	26°10'25"	78°32'34" EDug Well	20.29	16.49	17.74	13.49
GWALIOR		26°13'26"	78°11'40" EBore Well	34.4	34.4	33.15	32.6
	Gwalior(S)						
HARDA	Handia		76°58'52" EDug Well	9.45	7.05	7.4	7.35
HARDA	Handia(S)		76°59'10" EBore Well	7.89	3.47	4.5	3.5
HARDA HARDA	HardaDW		77°5'15" E Dug Well	4.49	5.6	6.02	5.1 4
	Masangaon		77°0'11" E Dug Well	8.94	4.12	4.42	
HARDA	•		76°52'36" EDug Well	6.12	1.52	2.5	1.4
HARDA	Chhuri Khal		'6°56'23" EDug Well	5.07	1.05	1.6	1.8
HARDA	Khirkiya(D)		76°51'34" EBore Well	1.28	0.62	1.05	2.2
HARDA	Mandla		76°56'49" EDug Well	8.09	5.45	5.75	7.85
HARDA	Chhidgaon		77°17'51" EDug Well	4.15	2.45	3.45	2.95
HARDA	Mohanpur1		77°13'48" EDug Well	11.61	8.7	9.26	9.55
HARDA	Temagaon		77°19'14" EDug Well	13.84	14.3	19.4	11.5
HARDA	Timarni		77°13'22" EDug Well	9.29	5.8	5.7	6.5
HOSHANGAB			77°56'20" EDug Well	8.17	6.35	5.75	5.55
	_		77°59'35" EDug Well	7.02	12.85	12.2	15
HOSHANGAB	•		78°4'25" E Dug Well	8.07	4.35	10.75	9.9
HOSHANGAB	Naisaipul	22 40 9 N	77°45'28" EDug Well	7.41	8.2	8.7	8.7

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HOSHANGAB			77°40'36" EDu	0	9.13	2.9	7.65	5
HOSHANGAB		22°28'39"		•	4.46	2.55	5.15	3.35
HOSHANGAB	PathrautaDW		77°47'45" EDu	_	12.68	4.7	6.55	12.7
HOSHANGAB	Sonkhera	22°37'0" N	77°50'3" E Dug	g Well	3.19	1.3	2.96	2.8
HOSHANGAB	Suktawa	22°24'27"	77°50'34" EDu	g Well	7.32	1.43	2.48	2.85
HOSHANGAB	Matkuli	22°35'32"	78°27'28" EDu	g Well	6.93	7	8.3	7.4
HOSHANGAB	Pachmarhi	22°28'38"	78°26'21" EDu	g Well	6.54	1.04	1.31	1.5
HOSHANGAB	Sandia	22°54'45"	78°21'19" EDu	g Well	15.57	14.95	14.9	15
HOSHANGAB	Bhilatdeo	22°29'27"	77°31'42" EDu	_	6.91	4.39	6.64	5.1
HOSHANGAB			78°5'31" E Dug	0	5.12	4.43	11.03	6.53
HOSHANGAB		22°41'39"	78°11'19" EDu	•	9.26	6.8	7.9	8
INDORE	Betma(D)	22°41'25"	75°36'42" EBo	•	24.84	3.64	11.44	10.12
INDORE	Betma(S)	22°41'25"	75°36'40" EBo		24	3.85	11.3	9.86
INDORE	Depalpur Bloc		75°32'12" EBo		17.58	10.6	7.9	8.8
INDORE	Gautampura 1		75°31'12" EBo		31.34	16.17	9.47	7.46
INDORE	Rangwasa	22°44'38"	75°34'11" EDu		6.87	0.25	0.55	1.78
INDORE	Ushapura	22°48'34"	75°40'27" EDu	•	9.82	8.35	3.58	4.3
INDORE	Bhil Paltan	22°41'44"	75°50'3" E Du		11.27	4.63	3.87	5.98
INDORE	Bijalpur Masjid		75°50'3" E Dug	,	2.3	1.9	3.87 1.78	1.86
	Bilawali Tank		75°53'8" E Bor		8.72	6.95	4.35	5.45
INDORE								
INDORE	Cable Factory		75°50'10" EDu	•	12.05	8.05	5.55	8.67
INDORE	Dudhiya	22°40'32"	75°56'44" EDu	•	8.03	0.25	3.43	4.35
INDORE	Footi Kothi	22°41'32"	75°49'35" EDu	•	4.98	1.55	3.29	4.73
INDORE	Gandhi Hall	22°43'12"	75°51'58" EDu	•	5.2	3.2	4.31	6.03
INDORE	Hatod	22°47'47"	75°44'35" EDu	•	6.6	5.36	2.46	3.06
INDORE	Hatod PWD N		75°44'27" EBo		13.58	11.63	4.78	9.43
INDORE	Hatod(D)	22°47'48"	75°44'33" EBo		14.48	10.8	4.5	9.11
INDORE	Hatod(S)	22°47'48"	75°44'33" EBo	re Well	11.46	11.36	3.76	8.65
INDORE	Indore(D)	22°42'12"	75°53'22" EBo	re Well	10.51	5.53	4.93	4.73
INDORE	Indore(S)	22°42'12"	75°53'22" EBo	re Well	9.84	4.4	4.4	4.48
INDORE	Indorecity Mho	o22°42'18" î	75°50'28" EBore	e Well	9.22	5.9	5.8	7
INDORE	Khudel New P	22°41'14"	76°1'48" E Bore	e Well	10.35	5.08	4.41	5.63
INDORE	Khudel(D)	22°41'10"	76°1'49" E Bore	Well	10.01	5.09	4.69	4.09
INDORE	Mari Mata	22°44'16"	75°50'59" EDug	Well	5.05	4.75	4.45	4.68
INDORE	Musakhedi(S)	22°44'15" 7	75°53'0" E Bore	Well	9.38	3.55	5.45	5.51
INDORE	Mushakhedi P	22°41'44"	75°53'39" EDug	ı Well	8.73	4.55	5.41	5.74
INDORE			5°51'13" EDug \	<i>.</i>	9.9	7.7	6.29	7.18
INDORE			75°52'46" EDug		6.01	3.55	5.15	5.73
INDORE			75°50'8" E Dug		5.34	1.48	2.67	3.03
INDORE	Rau IIM		75°47'32" EBore		11.6	9.4	10.35	8.61
INDORE			'5°53'35" EDug		4.25	2.3	4.05	4.08
INDORE	_		75°52'21" EDu		9.73	5.5	6.2	7.38
INDORE	Manpur(D)		75°37'10" EBore	-	41.04	34.84	14.94	14.97
INDORE	Mhow		75°45'43" EDug		5.62	4.2	5.33	5.81
INDORE	Nandpura		75°55'6" E Dug		11.32	3.17	8.27	9.4
INDORE	Mangliya(D)		75°55'30" EBore		14.05	8.33	5.01	6.01
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INDORE	Sanwer		75°49'40" EDug		5.92		3.96	4.36
INDORE			'5°49'55" EBore		11	3.15	3.58	3.5
INDORE	Sanwer(S)		75°50'0" E Bore		6.42	4.54	1.84	2.54
JABALPUR			79°59'15" EDug		6.57	9.27	9.27	8.92
JABALPUR	Barela		80°3'17" Ε Dug	•	1.9	2.21	0.3	1.9
JABALPUR	Bargi1	22°59'21"	79°52'26" EDug	Well	4.75	2.88	2.35	3.37

JABALPUR	Bedi Nagar	23°9'17" N 79°54'14" EDug Well	4.35	3.32	3.55	3.96
JABALPUR	Bus Stand	23°11'15" 79°55'18" EDug Well	3.9	3.78	3.8	4.2
JABALPUR	Datta Mandir	23°10'17" 79°55'50" EDug Well	2.2	1.55	2.2	2.2
JABALPUR	Gokalpur	23°11'25" 79°59'7" E Dug Well	3.54	2.92	3.94	3.34
JABALPUR	Gorakhpur	23°9'10" N 79°55'39" EDug Well	6.15	3.66	7.65	7.1
JABALPUR	Jabalpur	23°11'52" 79°57'47" EDug Well	9.29	5.34	9.77	8.04
JABALPUR	Jabalpur(D)	23°9'43" N 79°57'13" EBore Well	11.6	11.56	11.25	11.8
JABALPUR	Jabalpur(S)	23°9'43" N 79°57'13" EBore Well	11.37	11.25	11.3	11.55
JABALPUR	Jain Dharams	s 23°9'10" N 79°53'8" E Dug Well	2.86	1.1	4.46	1.08
JABALPUR	Kanch Ghar	23°10'34" 79°57'36" EDug Well	4.9	5.01	3.5	5.8
JABALPUR	Madan Mahal	l 23°9'30" N 79°54'57" EDug Well	1.7	1.31	1.4	8.0
JABALPUR	Manegaon1	23°4'42" N 79°54'45" EDug Well	2.92	1.2	2.52	2.48
JABALPUR	Nagar Nigam	23°9'57" N 79°55'58" EDug Well	1.8	1.41	1.6	1.95
JABALPUR	Padaria	23°12'26" 80°9'30" E Dug Well	4.77	3.55	4.57	4.67
JABALPUR	Panchpedi	23°9'31" N 79°56'55" EDug Well	2.14	1.67	1.84	2.09
JABALPUR	Panda Ki Mad	d 23°9'30" N 79°53'32" EDug Well	3	2.71	2.8	2.78
JABALPUR		i 23°10'50" 79°56'30" EDug Well	2.59	2.67	2.69	2.59
JABALPUR	Railway Station	o 23°9'58" N 79°56'50" EDug Well	2.2	2.41	2.9	2.5
JABALPUR	Ranjhi	23°11'45" 79°59'55" EDug Well	4.15	4.63	4.55	4.85
JABALPUR	Sadar Bazar	23°9'19" N 79°56'55" EDug Well	4.79	4.07	4.29	4.59
JABALPUR	Saliwada	23°6'25" N 79°59'26" EDug Well	10.4	5.58	9.2	6.69
JABALPUR	Bishanpura	23°13'45" 80°14'58" EDug Well	6.4	2.38	2.7	2.86
JABALPUR	Ghughara	23°16'56" 80°22'9" E Dug Well	5.5	3.28	3.7	5.3
JABALPUR	Kundam	23°13'8" N 80°20'47" EDug Well	7	3.98	5.4	6.6
JABALPUR	Kundam Pz	23°13'8" N 80°20'47" EBore Well	10.8	8.25	7.4	9.38
JABALPUR	Patan Pz	23°17'20" 79°42'6" E Bore Well	8.85	7.18	7.4	8.02
JABALPUR	Shahpura	23°8'18" N 79°39'55" EDug Well	5.45	2.94	4.15	6.1
JABALPUR	Sihora Pz	23°28'54" 80°6'14" E Bore Well	17.92	11.46	10.5	14.26
JABALPUR	Sihora1	23°29'0" N 80°6'30" E Dug Well	14	13.58	11.2	14.3
KATNI	Badwara	23°44'55" 80°34'37" EDug Well	10.8	7.62	7	3.6
KATNI	Basadi	23°49'37" 80°37'18" EDug Well	12.94	5.79	11.14	12.64
KATNI	Kewlari	23°47'50" 80°49'48" EDug Well	9	7.65	7.8	9.3
KATNI	Khitoli	23°42'38" 80°49'55" EDug Well	5.3	2.98	5.4	5.5
KATNI	Siloni	23°20'45" 80°22'40" EDug Well	7.95	7.51	6.8	6.6
KATNI	Umariapan	23°31'18" 80°17'30" EDug Well	8.7	3.55	4.7	6.5
KATNI	Katni(S)	23°49'50" 80°25'22" EBore Well	17.47	10.92	15.9	17.21
KATNI	Katni1	23°49'50" 80°23'55" EDug Well	4.2	6.42	3.6	3.6
KATNI	Majhgawan1	23°49'18" 80°29'55" EDug Well	7.8	7.32	6.1	10.3
KATNI	Deogawan	23°54'10" 80°15'5" E Dug Well	3.42	1.98	3.92	6.12
KATNI	Rithi	23°54'34" 80°8'31" E Dug Well	6.04	1.87	3.64	5.64
KATNI	Barchheka	23°51'2" N 80°33'24" EDug Well	12.73	8.84	10.23	12.33
KATNI	Barhi	23°54'6" N 80°48'38" EDug Well	12.85	5.07	7.95	8.98
KATNI	Piparia2	23°51'43" 80°41'55" EDug Well	6.94	4.36	4.74	7.19
KATNI	Ubra	23°56'10" 80°48'52" EDug Well	11.22	7.64	11.62	9.92
KHANDWA	Chhegaonma	k21°49'55" 76°13'4" E Dug Well	7.43	9.99	8.32	6.8
KHANDWA	Deshgaon Ne	21°54'6" N 76°10'46" EDug Well	6.39	3.4	4.3	4.1
KHANDWA	Dhangaon	22°5'15" N 76°7'6" E Dug Well	6.38	3.15	3.37	4.05
KHANDWA	Roshiya	21°57'22" 76°9'22" E Dug Well	5.7	2.07	2.97	4.37
KHANDWA	Bedia	21°58'13" 76°44'38" EDug Well	2.91	5.18	3.4	8
KHANDWA	Bori saray	22°0'20" N 76°49'0" E Dug Well	10.37	2.95	3.2	9.7
KHANDWA	Chanera	21°57'42" 76°41'53" EDug Well	4.95	2.48	2.03	2.78
KHANDWA	Dagad Khedi	22°4'56" N 76°49'58" EDug Well	9.48	1.8	4.53	7.95
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KHANDWA	Kalamkalan	21°51'46" 76°42'31" EDug Well	6.37	0.85	4.05	3.1
KHANDWA	Khalwa1	21°48'19" 76°44'44" EDug Well	11.35	2.42	4.02	7.22
KHANDWA	Khedi New	21°52'4" N 76°33'58" EDug Well	6.87	4.05	5.37	5.5
KHANDWA	Jaswadi1	21°47'40" 76°25'39" EDug Well	12.58	4.35	3.25	13.85
KHANDWA	Jawar	21°55'47" 76°26'51" EDug Well	8.56	5.5	4.82	6.3
KHANDWA	Kahlari	21°58'58" 76°27'50" EDug Well	7.1	1.9	4.09	5.9
KHANDWA	KhandwaDW	21°49'2" N 76°21'42" EDug Well	5.38	2.75	3.4	3.35
KHANDWA	Rudhy Bhata	21°49'58" 76°28'1" E Dug Well	5.83	1.65	2.62	4.1
KHANDWA	Balwara1	21°42'0" N 76°30'58" EDug Well	8.38	4.05	4.2	10.1
KHANDWA		u 21°36'33" 76°19'31" EDug Well	5.14	4.87	3.29	6.1
KHANDWA	Gurhi	21°38'20" 76°34'28" EDug Well	6.37	6.55	6.72	8.5
KHANDWA	Bangarda	22°8'41" N 76°27'43" EDug Well	5.38	1.95	3.1	4.9
KHANDWA	Daulatpur	22°13'56" 76°23'28" EDug Well	10.05	2.9	3.5	3.1
KHANDWA	Ghosali	22°9'30" N 76°7'52" E Dug Well	12.25	2.35	3.28	4.15
KHANDWA	Gujar Khedi	22°11'48" 76°18'2" E Dug Well	9.22	6.4	6.42	3.15
KHANDWA	Karoli	22°8'30" N 76°12'23" EDug Well	7.58	3.45	4.08	2.8
KHANDWA	Kelwa kalan	22°10'25" 76°16'2" E Dug Well	7.08	4.2	5.31	3.3
KHANDWA	Mundi	22°3'47" N 76°29'30" EDug Well	7.00	0.75	1.85	4.75
KHANDWA	Thapana	22°13'20" 76°5'14" E Dug Well	6.93	5.9	6.56	8
KHANDWA	Udaipur	22°13'33" 76°24'10" EDug Well	13.16	4.55	4.5	2.9
KHARGONE	Amba	22°2'34" N 75°56'45" EDug Well	4.91	3.15	3.13	3.23
KHARGONE	Balwara	22°23'39" 75°58'30" EDug Well	2.57	2.2	2.88	1.99
KHARGONE	Barwah	22°15'14" 76°2'6" E Dug Well	7.44	5.3	5.67	6.81
KHARGONE		v 22°10'24" 76°4'16" E Dug Well	5.12	2.3	2.68	2.93
KHARGONE	Sanawad(D)	22°10'10" 76°3'35" E Bore Well	5.52	4.7	5.8	5.23
KHARGONE	Bhulwani	21°32'54" 75°28'53" EDug Well	4.12	0.5	4.29	3.92
KHARGONE	Dhulkot	21°36'35" 75°33'10" EDug Well	8.08	7.05	4.62	7.38
KHARGONE		/ 21°49'31" 75°51'11" EDug Well	11.18	11.4	7.29	12.74
KHARGONE		21°51'47" 75°57'22" EBore Well	31.85	12.25	9.71	28.3
KHARGONE	,	21°51'43" 75°57'21" EDug Well	6.66	5.11	3.98	6.33
KHARGONE	Daudwa	22°1'14" N 76°8'13" E Dug Well	7.42	5.1	7.8	5.63
KHARGONE	Gogaon	21°55'5" N 75°44'40" EDug Well	11.24	10.32	9.63	9.95
KHARGONE	-	22°7'26" N 75°36'30" EBore Well	8.42	5.6	3.12	6.11
KHARGONE	Kasrawad(5)	22°7'25" N 75°36'30" EDug Well	4.17	3.65	2.76	3.88
KHARGONE	Khargone	21°49'40" 75°37'10" EDug Well	10.8	10.68	7.55	10.75
KHARGONE		21°49'25" 75°37'20" EBore Well	12.81	13.5	10.16	11.28
KHARGONE	Un	21°49'17" 75°27'2" E Dug Well	4.57	4.35	5.9	5.91
KHARGONE	Baddiya	22°14'2" N 75°56'54" EDug Well	5.92	2.6	4.1	5.03
KHARGONE	Dhargaon	22°12'33" 75°35'50" EDug Well	6.99	5.37	5.46	6.15
KHARGONE	Maheshwar	22°10'40" 75°35'15" EDug Well	4.15	4.3	4	3.95
KHARGONE		22°10'45" 75°35'15" EBore Well	13.76	10.85	11.7	12
KHARGONE	, ,	22°14'2" N 75°51'41" EDug Well	3.82	2.7	2.95	3.46
MANDLA	Bichhia1	22°27'6" N 80°42'0" E Dug Well	5.94	4.88	5.74	6.44
MANDLA	Sijhora	22°25'34" 80°46'38" EDug Well	5.1	2.61	2.7	4.83
MANDLA	Ghughri	22°40'40" 80°41'24" EDug Well	9.5	9.63	10.7	8.7
MANDLA	Devgaon	22°44'21" 80°31'30" EDug Well	8.75	5.27	4.45	5.75
MANDLA	Gwari	22°42'45" 80°20'30" EDug Well	4.7	2.52	3.9	5.75
MANDLA	Khari	22°47'34" 80°24'40" EDug Well	2.3	1.52	1.7	1.6
MANDLA		a22°41'5" N 80°28'37" EDug Well	2.3	1.12	1.7	1.98
MANDLA	Mandla1	22°36'0" N 80°22'8" E Dug Well	8.45	7.57	3.65	7.95
MANDLA		22°33'0" N 80°24'37" EDug Well	4.95	2.57	2.45	4.43
MANDLA		a22°36'30" 80°28'14" EDug Well	4.5	3.68	2.43	4.43
	. atimi patpai	are 50 00 00 20 17 LDag Well	7.5	0.00	7	7

MANDLA	Ramnagar1	22°36'50" 80°31'15" EDug Well	8.45	2.56	3.65	5.85
MANDLA	Motinala	22°20'43" 80°54'12" EDug Well	1.03	2.89	4.93	5.37
MANDLA	Chabi	22°49'30" 80°42'0" E Dug Well	5.3	2.21	3.7	4.6
MANDLA	Indira	22°45'40" 80°35'50" EDug Well	3.2	0.63	3.6	0.8
MANDLA	Anjania	22°29'37" 80°30'33" EDug Well	5	1.35	2.4	3.4
MANDLA	Dithori	22°31'10" 80°11'56" EDug Well	7.6	0.98	2.9	5.8
MANDLA	Nainpur	22°25'40" 80°6'35" E Dug Well	1.9	0.45	2.9	3.2
MANDLA	•	/ 22°24'31" 80°15'51" EDug Well	2.91	2.74	2.95	3.15
MANDLA	Subhariya	22°31'34" 80°16'15" EDug Well	4.05	1.07	3.25	1.15
MANDLA	Surajpura	22°31'15" 80°8'15" E Dug Well	5.98	0.9	1.08	4.03
MANDLA	Babaliya	22°52'58" 80°24'52" EDug Well	2.75	0.89	1.85	2.44
MANDLA	Manikpur	23°5'30" N 80°30'0" E Dug Well	0.8	0.64	1.4	1.19
MANDLA	Niwas	23°2'21" N 80°26'32" EDug Well	6.5	2.98	3.8	4.5
MANDLA	Niwas-d	23°2'21" N 80°26'22" EBore Well	7.05	3.46	4.1	4.85
MANDLA	Niwas-d Niwas-s	23°2'21" N 80°26'22" EBore Well	6.83	3.40	4.1	4.05
MANDSAUR	Babulda	24°28'27" 75°41'17" EDug Well	11.15	0.85	2.1	3.15
MANDSAUR		24°30'32" 75°44'40" EBore Well	16.66	3.35	3.24	3.13
MANDSAUR	Dudhkheri	24°25'53" 75°41'5" E Dug Well	5.6	1.15	2.95	3.57
MANDSAUR	Sandhara	•	10.65	1.13	3.73	3.75
MANDSAUR		24°33'41" 75°52'3" E Dug Well	9.5	6.78	8.3	8.9
MANDSAUR		w24°11'33" 75°30'0" E Dug Well 24°20'0" N 75°39'17" EDug Well	7.45	1.57	3.35	
	Garoth1	ĕ	7.45 7.2			3.65
MANDSAUR		24°11'24" 75°37'48" EBore Well		1.6	1.29	2.35
MANDSAUR	Shamgarh1	24°11'29" 75°38'24" EDug Well	7.15	1.45	2.2	3.25
MANDSAUR		z 24°9'6" N 75°1'36" E Bore Well	30.7	9.1	10.97	13.52
MANDSAUR	Malhargarh	24°16'41" 74°59'28" EDug Well	9.98	3.93	3.48	4.48
MANDSAUR	•	I 24°17'6" N 74°59'12" EBore Well	4.7	1.16	1.04	1.25
MANDSAUR	, ,	24°16'0" N 75°3'14" E Dug Well	7.85	1.65	1.45	2.65
MANDSAUR	, ,	24°16'18" 75°3'12" E Bore Well	7.69	1.83	1.43	2.7
MANDSAUR	Pipaliya	24°11'47" 75°0'30" E Dug Well	11.3	0.94	1.65	3.3
MANDSAUR		(D24°12'2" N 75°0'38" E Bore Well	34.35	11.03	10.81	11.67
MANDSAUR		(\$24°12'2" N 75°0'38" E Bore Well	30	3.58	4.4	5.34
MANDSAUR	Basakheda	24°1'54" N 75°11'53" EDug Well	19	2.4	3.4	9.1
MANDSAUR		oz24°1'42" N 75°13'18" EBore Well	41.65	37.3	23.37	34.5
MANDSAUR	Botalganj	24°8'54" N 75°1'45" E Dug Well	10	2.65	7.7	5.9
MANDSAUR	Chirmoliya	24°1'20" N 75°15'25" EDug Well	14.3	2.12	1.4	13.5
MANDSAUR	Daloda1	23°55'30" 75°5'56" E Dug Well	12.35	2.75	3.4	5.05
MANDSAUR	• .	23°58'54" 75°6'12" E Bore Well	13.14	4.62	3.46	4.46
MANDSAUR	-	N 24°2'30" N 75°11'0" E Bore Well	27.2	5.8	7.37	19.49
MANDSAUR	Kachnera	23°51'50" 75°6'12" E Dug Well	14.65	6.05	5.15	4.25
MANDSAUR	Mandsaur	24°3'10" N 75°5'3" E Dug Well	17.1	6	4.56	6.15
MANDSAUR	` ,	24°3'27" N 75°5'58" E Bore Well	24.2	9.72	10.49	7.43
MANDSAUR	, ,	24°3'27" N 75°5'58" E Bore Well	9.73	4.03	2.68	3.24
MANDSAUR	Nayakhera	24°0'52" N 75°5'0" E Dug Well	13.4	4	5.55	9
MANDSAUR	Khejriya	24°3'0" N 75°29'23" EDug Well	7	0.95	2.7	4.6
MANDSAUR		24°4'6" N 75°32'6" E Bore Well	34.22	27.16	22.03	32.58
MANDSAUR	Manpura	23°53'3" N 75°1'35" E Dug Well	13.4	4.7	11.35	11.9
MANDSAUR		23°53'27" 75°16'14" EBore Well	12.38	7.12	9.51	10.4
MANDSAUR	Sitamau	24°0'45" N 75°20'58" EDug Well	10.6	0.5	1.4	1.9
MANDSAUR	Sitamau(D)	24°0'48" N 75°20'52" EBore Well	5.3	0.76	1.73	2.56
MANDSAUR	Sitamau(S)	24°0'48" N 75°20'52" EBore Well	2.4	0.7	1.67	2.53
MANDSAUR	Surjani	24°1'31" N 75°26'42" EDug Well	7.75	1.29	4.5	5.9
MANDSAUR	Surjani Npz	24°1'0" N 75°23'6" E Bore Well	37.4	1.52	2.63	4.17

MANDSAUR	Suwasara	24°4'37" N	75°38'33" EDug We	II 9.8	4.3	7.8	9.5
MANDSAUR	Suwasra(D)		75°39'26" EBore We		23.99	12.43	17.34
MORENA	Jafrabad	26°25'50"	77°52'36" EDug We	II 19.5	9.6	18.05	17.1
MORENA	Kailaras	26°17'57"	77°36'31" EDug We	II 1	0.9	2.7	3
MORENA	Tonga Gaon	26°15'19"	77°26'17" EDug We	II 8.9	7.1	3.75	2.2
MORENA	Khera mewda	26°33'46"	78°5'24" E Dug Well	13.8	15.7	12.45	12.3
MORENA	Pahargarh	26°12'0" N	77°38'21" EDug We	II 3.11	1.11	1.71	2.31
MORENA	Aurethi	26°40'40"	78°22'49" EDug We	II 23	22.4	22.4	22.4
MORENA	Bareha	26°44'50"	78°14'15" EDug We		21.6	30.2	22.2
MORENA	Dimni New	26°36'53"	78°8'41" E Dug Well		21.9	29.6	24.6
MORENA	Porsa	26°40'14"	78°22'7" E Dug Well		16.45	21.25	15.95
MORENA	Mangrol	26°13'21"	77°21'7" E Dug Well		0.5	2.9	3.7
MORENA	Ranipura	26°12'23"	77°20'5" E Dug Well		2.2	3.3	3.7
MORENA	Tentra		77°18'18" EDug We		13.25	15.35	15.85
NARSIMHAPU			79°1'55" E Dug Well		5.16	2.53	4.05
NARSIMHAPU	` '	22°56'45"	78°48'59" EDug We		2.45	2.75	2.85
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NARSIMHAPU		23°10'30"	78°52'16" EDug We		9.25	3.12	6.22
NARSIMHAPU		22°56'52"	79°33'30" EDug We		0.05	0.34	0.2
NARSIMHAPU		23°5'0" N	79°1'48" E Dug Well		3.62	2.58	4.9
NARSIMHAPU			79°4'4" E Dug We		5.32	4.65	5.25
NARSIMHAPU			79°23'50" EBore We		8.52	10.42	8.85
NARSIMHAPU		22°50'51"	79°13'26" EDug We		2.37	3.32	4.4
NARSIMHAPU		22°57'32"	79°10'33" EDug We		6.92	7.45	8.25
NARSIMHAPU		23°6'5" N	79°9'45" E Dug Well		12.92	13.56	13.2
			78°40'55" EDug We		2.21	1.61	4.61
NARSIMHAPU			78°40'0" E Dug Wel		4.96	5.53	5.73
NEEMUCH	Athwakheda N	I24°50'18"	75°8'24" E Bore We	II 28.4	1.45	1.75	1.5
NEEMUCH	Jat	24°50'53"	74°56'17" EDug We	II 14.35	2.65	4.65	3.75
NEEMUCH	Javad(D)	24°35'5" N	74°52'2" E Bore We	II 37.16	15.06	5.19	3.06
NEEMUCH	Lalpura Npz	24°36'48"	74°55'35" EBore We	ell 23.6	7.88	5.96	6.32
NEEMUCH	Morban1	24°37'20"	75°0'0" E Dug We	II 10.6	5.2	4.75	4.5
NEEMUCH	Patan1	24°54'26"	75°12'40" EDug We	II 14.5	3.1	3.25	3.2
NEEMUCH	Pipalikheda N	24°55'14"	75°13'50" EBore We	ell 19.35	2.92	4.05	3.4
NEEMUCH	Ratangarh	24°48'38"	75°6'32" E Dug Well	11.9	6.42	8.3	9.7
NEEMUCH	Ratangarh Np		75°7'0" E Bore We		0.7	1.35	1.87
NEEMUCH	Singoli		75°17'17" EDug We		9.04	9.44	8.94
NEEMUCH	Barlai	24°25'27"	75°19'12" EDug We		9.65	4.45	4.55
NEEMUCH	Besla	24°33'15"	75°27'24" EDug We		0.65	1.5	1.5
NEEMUCH	Besla Npz	24°33'12"	75°27'0" E Bore We		3.8	5.7	6.3
NEEMUCH	Gota pipliya	24°28'48"	75°13'24" EDug We		4.15	6.1	4.1
NEEMUCH	Jamalpura	24°29'12"	75°27'51" EDug We		5.08	4.78	5.28
NEEMUCH	Kukreshwar	24°28'48"	75°16'5" E Dug Well		4.65	4	4.1
NEEMUCH			75°16'15" EBore We		8.08	7.24	6.81
NEEMUCH	Kundaliya		75°19'51" EDug We		0.42	0.75	0.9
NEEMUCH	Manasa		75°8'38" E Dug Well		4.38	3.25	3.2
NEEMUCH	Manasa Npz		75°8'42" E Bore We		4.95	2.62	2.62
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NEEMUCH	Rampura Noz		75°26'28" EDug We		1.2	1.53	3.08
NEEMUCH			75°26'0" E Bore We		0.58	1.6	1.99
NEEMUCH	Girdola		74°55'56" EDug We		2.68	3.2	2.6
NEEMUCH	Kacholi		74°56'29" EDug We		0	1.4	1.4
NEEMUCH			74°46'12" EBore We		0.1	0.4	0.91
NEEMUCH	Nayagaon2	24 33 40" <i>l</i>	74°46'35" EDug Well	3.3	0.37	0.92	1.1

NEEMUCH	Neemuch	24°27'13" 74°52'26" EDug Well	3.52	2.22	3.47	2.52
NEEMUCH	Savan	24°27'8" N 75°3'47" E Dug Well	7.35	2.5	0.9	8.0
NEEMUCH	Semali Chan	d 24°32'53" 74°56'10" EDug Well	11.9	0.85	0.72	8.0
PANNA	Ajaigarh	24°59'25" 80°16'3" E Dug Well	10.25	6.7	5.6	6.7
PANNA	Banahari Kal	a 24°51'13" 80°10'43" EDug Well	7.55	4.7	5.35	6.5
PANNA	Bariyarpur	24°50'58" 80°5'42" E Dug Well	10.9	8.6	7.1	9.4
PANNA	Pandepurwa	24°50'30" 80°16'1" E Dug Well	4.95	3.37	4.1	4.2
PANNA	Sinhai	24°55'12" 80°13'31" EDug Well	10.81	9.3	8.75	10.4
PANNA	Gunaur	24°27'46" 80°15'5" E Dug Well	1.58	3.35	2.11	1.48
PANNA	Salleha	24°24'48" 80°24'9" E Dug Well	2.2	0.28	1.2	2.2
PANNA	Akola	24°37'10" 80°7'56" E Dug Well	2.3	2.2	3.35	4.6
PANNA	Backchur	24°43'20" 80°6'6" E Dug Well	7.4	3.7	9.3	7.7
PANNA	Badagaon	24°37'25" 80°20'44" EDug Well	7.67	1.5	5.95	9.3
PANNA		24°37'30" 80°20'44" EBore Well	8.81	2.97	6.48	12.08
PANNA	Bahera	24°39'44" 80°15'17" EDug Well	9.55	2.6	3.7	6.9
PANNA	Barrachh	24°32'43" 80°10'24" EDug Well	10.27	3.43	9.98	8.62
PANNA	Madla	24°43'46" 80°0'38" E Dug Well	12.28	4.7	4.75	6.6
PANNA	Panna1	24°42'20" 80°10'50" EDug Well	4.95	1.85	3.25	4.45
PANNA	Hathkuri	24°14'45" 80°4'8" E Dug Well	8.52	5.4	7.1	7.5
PANNA	Kharmora	24°7'19" N 80°15'40" EDug Well	3	2.42	2.7	3.7
PANNA	Mohendra	24°11'26" 79°57'58" EDug Well	11.41	5.41	6.71	8.41
PANNA		24°15'48" 80°9'52" E Bore Well	17.84	17.54	5.79	17.89
	Pawai Deep					
PANNA	Powai	24°15'53" 80°9'55" E Dug Well	20.2	16.7	17.45	18.3
PANNA		p 24°15'57" 79°54'0" E Bore Well	27.18	4.2	12.28	20.38
PANNA	Semaria1	24°16'7" N 79°54'0" E Dug Well	7.45	4.05	8.45	8.55
PANNA	•	23°58'45" 80°18'53" EDug Well	7.35	2.09	6.45	7.1
PANNA	Kuankheda	23°54'5" N 79°55'22" EDug Well	9.1	0.8	2.75	4.3
PANNA	Raipura	23°54'13" 79°57'7" E Dug Well	9.8	3.1	3.55	6.4
PANNA	Saharan	24°4'50" N 79°57'55" EDug Well	8.3	1.72	3.8	4
PANNA	Takhori	23°59'16" 79°57'2" E Dug Well	7.4	2.21	2.6	6.7
RAISEN	Bari	23°1'50" N 78°5'0" E Dug Well	7.67	3.68	5.28	3.89
RAISEN	Begumganj	23°36'24" 78°20'55" EDug Well	8.7	1.45	4.05	4.76
RAISEN	Padahjir	23°34'24" 78°24'14" EDug Well	9	5.35	7.65	10.43
RAISEN	Sultanganj	23°30'9" N 78°33'18" EDug Well	4.95	3.6	4.6	5.81
RAISEN	Dehgaon	23°19'9" N 78°5'26" E Dug Well	6.84	3.82	5.02	6.33
RAISEN	Gairatganj	23°24'30" 78°13'34" EDug Well	4.77	1.75	3.25	3.97
RAISEN	Gairatganj(d)	23°24'35" 78°13'10" EBore Well	5.5	1.53	5.88	3.1
RAISEN	Garhi	23°23'40" 78°8'32" E Dug Well	6.72	0.55	7.2	8.02
RAISEN	Barkheda	22°55'0" N 77°39'4" E Dug Well	10.32	1.85	6.2	9.49
RAISEN	Chiklod	23°6'20" N 77°43'22" EDug Well	6.27	0.6	3.65	5.57
RAISEN	Dam Dongri	23°5'58" N 77°50'17" EDug Well	2.92	1.8	1.6	2.71
RAISEN	Goharganj	23°1'34" N 77°40'43" EDug Well	5.25	2.15	3.45	4.01
RAISEN	Hathi palan	23°4'35" N 77°45'12" EDug Well	2.92	2.05	3.7	4.82
RAISEN	Maindwa	23°7'19" N 77°32'47" EDug Well	1.26	0.9	5.1	5.05
RAISEN	Sultanpur	23°8'8" N 77°55'55" EDug Well	3.77	1.45	2.55	1.77
RAISEN	Tamot	23°0'24" N 77°38'21" EDug Well	4.45	4.9	2.55	3.64
RAISEN	Khadera	23°18'14" 77°56'44" EDug Well	7.82	5.6	3.7	3.61
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RAISEN	Kharwai	23°16'1" N 77°39'48" EDug Well	9.87	1.75	6.7 1.35	7.82
RAISEN	Raisen	23°20'10" 77°46'58" EDug Well	3.08	1.05	1.35	0.96
RAISEN	•	1 23°27'9" N 77°41'51" EDug Well	8.42	1.9	4	3.92
RAISEN	Sanchi	23°29'12" 77°44'28" EDug Well	5.97	0.25	4.15	5.16
RAISEN	Dhangwan	23°13'15" 78°28'40" EDug Well	10.94	1.7	10.9	9.73

RAISEN	Siarmau	23°24'3" N 78°33'0" E Dug Well	4.45	0.3	2.1	2.75
RAISEN	Silwani	23°18'0" N 78°26'23" EDug Well	10.37	5.55	5.45	6.45
RAISEN	Deori	23°7'25" N 78°41'2" E Dug Well	7.35	2.18	4.93	8.51
RAISEN	Khiria	23°5'32" N 78°29'0" E Dug Well	12.23	1.88	7.43	8.78
RAISEN	Udaipura	23°4'29" N 78°30'46" EDug Well	14.4	2.75	9.1	9.72
RAJGARH	Baiheda	23°50'10" 76°56'59" EDug Well	12.2	0.53	1.85	7.94
RAJGARH	Bapchi	24°0'22" N 76°56'36" EDug Well	9.25	0.43	3.15	4.29
RAJGARH	Barkheda	23°56'31" 76°57'18" EDug Well	14.35	2.18	5.7	11.1
RAJGARH	Biora	23°54'48" 76°55'0" E Dug Well	10.68	2.8	4.82	6.53
RAJGARH	Biora (D)	23°54'38" 76°54'30" EBore Well	7.66	5.96	5.66	7.86
RAJGARH	Biora(S)	23°54'38" 76°54'30" EBore Well	10.65	0.9	2.98	3.85
RAJGARH	Chhapihera	23°53'48" 76°27'12" EDug Well	10.6	2.3	3.8	6.9
RAJGARH	Machalpur	24°7'48" N 76°18'50" EDug Well	5.57	1.05	2.8	5.25
RAJGARH	Machalpur(S)	24°7'48" N 76°18'50" EBore Well	4.6	1.25	3.55	4.15
RAJGARH	Mohan(D)	23°54'55" 76°24'45" EBore Well	34.43	5.03	4.13	5.33
RAJGARH	Mohan(S)	23°54'55" 76°24'45" EBore Well	8.12	0.22	2.12	4.22
RAJGARH	Khilchipur	24°2'33" N 76°34'45" EDug Well	4.2	1.42	2.03	3.6
RAJGARH	•	al 23°47'57" 76°59'5" E Dug Well	11.6	0	2.2	8.15
RAJGARH	Ganayari	23°41'26" 77°0'30" E Dug Well	11.5	4.1	5.65	7.56
RAJGARH	Gandhigram	23°40'27" 77°4'10" E Dug Well	13.32	3.7	6.47	10.24
RAJGARH	Mandawar	23°42'10" 76°52'57" EDug Well	6.6	2.45	4.2	2.9
RAJGARH		(23°42'27" 77°4'33" E Bore Well	14.6	6	8.8	11.1
RAJGARH		(23°42'27" 77°4'33" E Bore Well	14.94	6.24	6.79	10.14
RAJGARH	PachorNew	23°42'32" 76°44'2" E Dug Well	7.3	1.7	2.1	3.1
RAJGARH	Pilukhedi	23°29'28" 77°3'37" E Dug Well	4.6	1.64	4.9	1.05
RAJGARH	Talen	23°34'34" 76°44'5" E Dug Well	10.2	3.2	4	6.5
RAJGARH	Bawari	23°59'11" 76°48'58" EDug Well	10.73	0	8.9	2.75
RAJGARH	Rajgarh(S)	24°0'31" N 76°44'29" EBore Well	18.82	10.72	13.57	10.32
RAJGARH	Bamangaon	23°52'58" 76°37'7" E Dug Well	5.6	1.1	2	4.1
RAJGARH	Sandavta	23°50'1" N 76°31'32" EDug Well	13.01	1.46	2.11	5.88
RAJGARH	Sarangpur	23°34'10" 76°28'20" EDug Well	7.4	4	4.9	5.16
RAJGARH	Sarangpur(D)	_	13.08	4.08	4.48	8.48
RAJGARH		23°34'0" N 76°27'40" EBore Well	11.84	3.79	3.24	7.49
RATLAM	Alot	23°45'28" 75°31'47" EDug Well	25.6	8.25	6.9	13.2
RATLAM	Alot Npz	23°45'10" 75°32'50" EBore Well	10.7	6.23	13.58	10.92
RATLAM	Gul Balod	23°44'55" 75°28'29" EDug Well	31.5	5.9	5.75	12
RATLAM		23°36'55" 75°28'41" EDug Well	18.52	10.52	6.72	15.52
RATLAM	Malakhera	23°41'50" 75°26'55" EDug Well	9.95	0.95	1.75	4.15
RATLAM	Tal Npz	23°43'50" 75°23'30" EBore Well	47.1	22.87	13.58	26.22
RATLAM	•	23°35'5" N 75°15'10" EBore Well	19.68	0.92	4.73	10.1
RATLAM	Dhodhar	23°46'29" 75°6'32" E Dug Well	9.5	0.17	2.2	2.7
RATLAM	Dhodhar (D)	23°46'29" 75°6'31" E Bore Well	45.57	2.67	3.51	8.33
RATLAM	Dhodhar(S)	23°46'30" 75°6'30" E Bore Well	10.41	0.16	0.89	1.62
RATLAM	Jaora	23°38'0" N 75°7'20" E Dug Well	12.65	5.35	5.55	8.9
RATLAM	Jaora (d)	23°37'24" 75°6'30" E Bore Well	43.45	21.04	18.12	18.05
RATLAM	Jaora Npz	23°37'30" 75°6'35" E Bore Well	15.3	8.8	8.04	11.41
RATLAM	Mindli	23°41'25" 75°17'30" EDug Well	10.5	1.52	2.7	4.9
RATLAM	Ramnagar	23°32'12" 75°15'18" EDug Well	12.25	0.75	6.15	10.25
RATLAM	Sindurkiya	23°39'58" 75°14'7" E Dug Well	16.38	1.6	7.63	8.88
RATLAM	Ukediya	23°35'5" N 75°10'49" EDug Well	11.08	6.56	2.4	4.1
RATLAM	Badoda Npz	23°33'46" 74°55'48" EBore Well	14.3	6.5	6.24	12.13
RATLAM	Barkheda	23°37'30" 75°1'50" E Dug Well	7	6.92	7.35	7.5
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RATLAM	Nawabganj (s		74°52'42" EBore Well	22.28	8.92	11.88	12.18
RATLAM	Piploda (d)	23°36'26"	74°56'55" EBore Well	25.68	17.78	7.93	13.31
RATLAM	Sohangarh	23°34'49"	75°4'48" E Dug Well	13.75	1.27	5.25	10.4
RATLAM	Dhamnod	23°26'25"	74°58'39" EDug Well	4.7	1.8	1.75	6.6
RATLAM	Mewasa	23°29'50"	75°4'2" E Dug Well	15	10.73	6.09	8.2
RATLAM	Palsoda Npz	23°24'20"	75°1'12" E Bore Well	45	2.7	1.6	6.4
RATLAM	Sejawata .	23°22'37"	75°3'37" E Dug Well	10.4	5.1	6.95	5.2
RATLAM	Sailana	23°27'25"	74°55'58" EDug Well	8.05	7.2	7.45	7.75
RATLAM	Sailana Npz	23°27'45"	74°55'34" EBore Well	41.4	42.05	23.98	39.09
REWA	Baikunthpur1	24°43'42"	81°24'32" EDug Well	3.75	0.67	2.15	1.81
REWA	Garh	24°48'56"	81°38'42" EDug Well	6.21	1.54	5.31	5.4
REWA	Mangawan	24°38'42"	81°32'36" EDug Well	18.8	4.98	6.6	11.89
REWA	Tikura	24°40'21"	81°38'12" EDug Well	20.85	3.51	6.55	8.94
REWA	Hanumana	24°46'37"	82°5'0" E Dug Well	10.46	1.92	3.66	6.26
REWA	Barduhawan	24°58'23"	81°23'28" EDug Well	20.01	17.01	17.11	17.01
REWA			81°18'7" E Dug Well	12	3.18	3.7	8.13
	Dabhoura		•				
REWA	Jawa1	24°57'45"	81°29'30" EDug Well	18.95	12.33	15.35	15.95
REWA	Deotalav	24°40'55"	81°42'53" EDug Well	10.23	4.66	0.41	3.13
REWA	Khatkhari	24°42'32"	81°59'33" EDug Well	7.25	0.63	2.6	4.87
REWA	Mauganj1	24°40'30"	81°53'20" EDug Well	6.35	1.71	6.15	4.3
REWA	Amilki	24°25'30"	81°18'30" EDug Well	5.25	3.15	9.15	7.29
REWA	Kanauji	24°28'18"	81°22'41" EDug Well	3.45	1.05	3.05	3.63
REWA	Raipur	24°34'42"	81°26'12" EDug Well	10.45	6.26	7.95	9.33
REWA	Reethi	24°31'19"	81°23'23" EDug Well	11.25	3.37	6.25	10.63
REWA	Rewa	24°32'38"	81°18'11" EDug Well	8.02	4.18	6.6	6.61
REWA	Semaria2	24°47'46"	81°9'7" E Dug Well	17.66	13.04	13.55	13.35
REWA	Sirmaur1	24°50'2" N	81°21'55" EDug Well	8.75	4.5	4.9	8.57
REWA	Katra	24°55'4" N	81°40'25" EDug Well	16.37	0.52	0	1.63
REWA	Sohagi	24°58'57"	81°41'26" EDug Well	6.35	0.6	1.75	3.49
SAGAR	Banda	24°2'44" N	78°58'2" E Dug Well	2	1.35	1.8	1.44
SAGAR	Bara	24°2'25" N	79°9'15" E Dug Well	14.15	5.7	12.45	12.93
SAGAR	Behrol	24°2'59" N	78°44'45" EDug Well	5.45	0.02	4.45	5.76
SAGAR	Dalpatpur		79°1'0" E Dug Well	9.35	4.68	6.3	9.14
SAGAR	Prahlad pura		79°2'58" E Dug Well	11.33	5.78	7.48	8.46
SAGAR	Bina(deep)		78°11'28" EBore Well	20.62	4.05	9.85	12.63
SAGAR	Bina(shallow)		78°11'28" EBore Well	19.31	3.91	9.66	12.56
SAGAR	Deorikhas		79°0'56" E Dug Well	8.52	3.02	4.02	5.99
SAGAR	Silarpur	23°30'15"	78°57'8" E Dug Well	11.3	2.2	8.6	9.78
SAGAR	Bhapel	23°48'22"	78°38'17" EDug Well	3.3	2	6.4	7.53
SAGAR	Jaisingh naga		78°34'30" EDug Well	10.62	3.52	5.12	6
SAGAR	Sarkhedi	23°44'10"	78°35'19" EDug Well	11.5	1.9	3.8	4.93
SAGAR	Sihora	23°47'51"	78°33'39" EDug Well	8	1.25	5.25	5.9
SAGAR	Surkhi	23°37'47"	78°50'0" E Dug Well	10.65	2.25	9.45	11.1
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SAGAR	Kesli	23°25'14"	78°48'20" EDug Well	2.3	1.4	2.3	3.78
SAGAR	Nayanagar		78°53'45" EDug Well	14.3	3.1	10.1	11.59
SAGAR	Khurai (shallo		78°19'56" EBore Well	19.44	11.32	9.62	13.7
SAGAR	Khurai(deep)	24°3'3" N	78°19'56" EBore Well	19.1	11.1	9.45	13.36
SAGAR	Reguwan		78°20'45" EDug Well	10.7	1.64	5.6	6.75
SAGAR	Bamhori Lal		78°25'58" EDug Well	4.8	0.2	4.5	5.7
SAGAR	Bandri		78°38'23" EDug Well	2.8	0.15	4.3	5.63
SAGAR	Barodia		78°35'0" E Dug Well	7.99	0	5.24	6.16
SAGAR	Khimlasa	24°12'4" N	78°21'47" EDug Well	5.95	0.4	2.7	4.57

SAGAR	Naktapur 24°16'35" 78°32'58" EDug Well	4.1	0.82	1.6	3.1
SAGAR	Hurra 23°43'40" 78°24'19" EDug Well	14.2	2.2	8.5	8.81
SAGAR	Jaruakhera 23°58'24" 78°28'55" EDug Well	11.6	3.15	7.05	7.96
SAGAR	Naryawali 23°54'22" 78°35'33" EDug Well	3.75	1.36	2.8	3.93
SAGAR	Rahatgarh 23°47'15" 78°25'5" E Dug Well	4.25	1	2.4	3.6
SAGAR	Garhakota 23°47'2" N 79°7'44" E Dug Well	17.92	10.42	12.32	13.01
SAGAR	Garhakota(de 23°47'7" N 79°8'0" E Bore Well	11.99	10.47	13.47	17.5
SAGAR	Parsiya 23°47'31" 79°4'14" E Dug Well	10.15	7.6	10	11.53
SAGAR	Piparia Narsin 23°39'44" 78°59'45" EDug Well	8.15	2.7	2.7	3.68
SAGAR	Rehli 23°38'26" 79°3'55" E Dug Well	14.85	2.37	8.8	9.74
SAGAR	Rehli (deep) 23°38'22" 79°4'10" E Bore Well	15.17	4.3	9.9	13.43
SAGAR	Baroda 23°42'57" 78°54'35" EDug Well	12	5.5	2.2	3.08
SAGAR	Khajuria 23°56'23" 78°41'11" EDug Well	8.85	3.13	3.5	4.68
SAGAR	Parsoria 23°51'14" 78°56'8" E Dug Well	10.5	5.3	5.4	6.8
SAGAR	Rehpura 23°42'57" 78°48'49" EDug Well	5	1.3	5	6.18
SAGAR	Sagar 23°50'0" N 78°46'3" E Dug Well	3.39	0.87	1.64	2.76
SAGAR	Sagar(deep) 23°50'10" 78°42'46" EBore Well	26.52	14.95	10.55	13.23
SAGAR	Sagar(shallow 23°50'10" 78°42'46" EBore Well	18.54	17.14	19.54	22.46
SAGAR	Hirapur 24°21'56" 79°12'38" EDug Well	7.82	3.15	5.07	5.05
SAGAR	Rurawan 24°10'54" 79°1'30" E Dug Well	10.02	1.97	5.02	6.22
SAGAR	Shahgarh(S) 24°19'20" 79°7'30" E Bore Well	6.96	2.4	1	3.12
SAGAR	Shahgarh1 24°19'11" 79°7'10" E Dug Well	7.95	2.45	8.25	8.76
SATNA	Amarpatan1 24°18'52" 80°58'32" EDug Well	8.77	3.1	3.47	5.65
SATNA	Kakra 24°21'10" 81°2'20" E Dug Well	3.5	1.41	1.8	2.75
SATNA	Mauhari katra 24°26'38" 81°7'5" E Dug Well	4.95	1.57	3.25	4.25
SATNA	Amdara 24°6'14" N 80°34'35" EDug Well	8.6	5.6	7	5.48
SATNA	Bhadanpur Ne 24°9'57" N 80°49'15" EDug Well	6.85	3.08	5.75	9.1
SATNA	Jhukehi 24°0'15" N 80°25'33" EDug Well	10.45	3.3	4	2.8
SATNA	Kusendi 24°10'17" 80°40'38" EDug Well	8.36	1.96	2.73	2.39
SATNA	Rivara 24°7'35" N 80°52'5" E Dug Well	8.61	1.91	4.16	3.46
SATNA	Birsinghpur 24°47'51" 80°58'11" EDug Well	14.95	6.15	10.8	14.05
SATNA	Chitrakoot 25°4'0" N 80°49'0" E Dug Well	5.95	6.84	7.45	7.15
SATNA	Chowraha 24°58'42" 80°47'52" EDug Well	4.6	1.8	1.8	1.85
SATNA	•	5.05	1.85	3.35	4.4
SATNA	Majhagawa 24°54'38" 80°48'48" EDug Well Majhgawan-S 24°54'50" 80°47'50" EBore Well	17.3	13.47	18.54	18.6
SATNA	Nakaila 25°1'3" N 80°41'10" EDug Well	9.54	2.2	3.79	4.59
SATNA	Paldeo 25°6'37" N 80°46'58" EDug Well	9.5 4 8.15	5.9	6.5	7.3
SATNA	· · · · · · · · · · · · · · · · · · ·	8.15	3.6		6.8
	· ·			7.55	
SATNA	Pathraundha 24°32'25" 80°39'16" EDug Well	11.29	2.97	3.1	9.75
SATNA	Patwara 24°33'11" 80°37'15" EDug Well	6.05	2.3	3.4	4.85
SATNA	Gorsari 24°14'15" 81°2'6" E Dug Well	11.74	1.45	3.5	9.2
SATNA	Govindpur 24°13'49" 81°10'58" EDug Well	8.55	0.55	1.95	3.05
SATNA	Jowa 24°9'26" N 80°56'18" EDug Well	4.2	3.78	4.9	4.4
SATNA	Sagauni New 24°15'51" 81°12'10" EDug Well	9.6	3.1	6	8.5
SATNA	Chorhata 24°23'18" 80°55'0" E Dug Well	3.29	2.05	2.74	1.68
SATNA	Kotar 24°41'58" 80°59'42" EDug Well	3.48	0.33	2.58	2.48
SATNA	Rampur1 24°30'40" 81°3'23" E Dug Well	9.75	1.15	2.3	2.59
SATNA	Jhali 24°43'55" 80°41'8" E Dug Well	2.13	2.53	1.15	2.75
SATNA	Kothi 24°44'50" 80°46'36" EDug Well	6.84	4.85	4.55	4.45
SATNA	Satna 24°34'5" N 80°49'55" EDug Well	7.95	3.08	5.55	7.12
SATNA	Pahari 24°23'30" 80°32'50" EDug Well	11.81	6.13	9	10.5
SATNA	Paras maniya 24°21'1" N 80°36'57" EDug Well	8.15	5.35	5.75	7.1

CATNIA	D = == 1!:= !#!= =	0480014011 0084512011 55 \\	0.47	4.07	0.47	4.47
SATNA	•	24°28'18" 80°45'33" EDug Well	8.17	1.97	2.47	4.17
SATNA	Uchehara	24°21'42" 80°46'52" EDug Well	8.81	5.31	5.51	7.01
SEHORE	Ashta	23°1'21" N 76°42'57" EDug Well	11.05	1.7	0.8	3.9
SEHORE	Jawar(deep)	23°0'24" N 76°30'21" EBore Well	22.62	8.82	6.92	10.72
SEHORE	•	/ 23°0'24" N 76°30'21" EBore Well	15.86	7.76	6.36	11.96
SEHORE	Khachrod	22°52'20" 76°43'3" E Dug Well	5.23	1.69	1.35	3.52
SEHORE	Budhni	22°47'26" 77°41'0" E Dug Well	14.5	10.2	7.3	9.4
SEHORE	Malibayan	22°45'5" N 77°27'13" EDug Well	7.63	5.1	0.7	1.9
SEHORE	Neelkachar	22°43'20" 77°30'5" E Dug Well	11.42	2.1	2.95	2.65
SEHORE	Amlaha	23°7'6" N 76°54'12" EDug Well	14.8	0.64	1.5	7.73
SEHORE	Bordi	22°58'24" 77°5'10" E Dug Well	13.86	5.3	1.1	9.05
SEHORE	Ichhawar	23°1'55" N 77°1'8" E Dug Well	6.4	1.52	2.4	5.2
SEHORE	Nadan	22°53'50" 77°7'20" E Dug Well	7.5	2.58	2.5	3.75
SEHORE	Larkui New	22°49'0" N 77°12'33" EDug Well	6.25	0.3	7.55	8.45
SEHORE	Rala	22°41'25" 77°18'52" EDug Well	9.66	3.59	4.94	5.34
SEHORE	Bhandeli	23°7'27" N 77°15'39" EDug Well	8.7	3.09	6.8	8.1
SEHORE	Chandbar	23°19'3" N 77°2'50" E Dug Well	19.75	6.35	8.65	9.55
SEHORE	Heerapur	23°8'35" N 77°10'23" EDug Well	5.45	5.73	4.45	6.55
SEHORE	Jattakheda	23°9'12" N 76°57'45" EDug Well	11.15	0.68	3	5.32
SEHORE		23°22'20" 77°11'2" E Bore Well	8.02	2.7	3.05	5.5
SEHORE	,	23°22'20" 77°11'2" E Bore Well	7.75	2.58	2.3	5.15
SEHORE	,	n23°21'38" 77°4'21" E Dug Well	8.5	1.48	6.5	9.85
SEHORE	•	23°11'5" N 77°3'45" E Bore Well	79.55	5.35	19.55	21.15
SEHORE	Sehore1	23°9'42" N 77°3'23" E Dug Well	14.95	6.55	8.15	10.45
SEHORE		e23°24'20" 77°6'42" E Bore Well	12.6	3.9	5.65	10.43
SEONI	Ari	21°56'50" 79°42'43" EDug Well	4.85	1.01	3.36	4.01
SEONI		•	4.65 9.5	7.42	4.25	7.5
		21°52'30" 79°45'42" EDug Well				
SEONI	Chhapara	22°23'38" 79°32'45" EDug Well	2.55	1.71	3.6	8.13
SEONI	Ghunai	22°26'28" 79°33'55" EDug Well	4.25	2.01	3.43	4.6
SEONI	Khamaria	22°35'55" 79°47'28" EDug Well	5.85	5.2	4.57	5.37
SEONI	Kudari	22°24'27" 79°48'45" EDug Well	4.7	2.65	4.15	3.7
SEONI	Mehta	22°37'50" 79°51'58" EDug Well	9.1	8.27	7.62	8.58
SEONI	Ghansor1	22°39'15" 79°57'9" E Dug Well	6.8	2.92	3.63	5
SEONI		a 22°38'15" 80°8'38" E Dug Well	6.5	3.12	5.35	4.18
SEONI	Banjal	22°18'22" 79°59'55" EDug Well	8.6	4.02	8.13	4.3
SEONI	Keolari	22°22'17" 79°54'39" EDug Well	0.9	0.74	1.82	1.2
SEONI		o 22°7'35" N 80°0'8" E Dug Well	7.4	1.12	1.73	5.2
SEONI	Ugli	22°15'27" 80°3'47" E Dug Well	2.4	1.07	2.08	1.43
SEONI	Khawasa	21°45'43" 79°28'19" EDug Well	6.2	1.4	3.19	5.2
SEONI	Kurai New	21°48'23" 79°30'3" E Dug Well	5.3	2.72	4.16	5.2
SEONI	Piparia1	21°46'58" 79°29'16" EDug Well	3.64	2.66	2.6	3.64
SEONI	Suktara	21°56'3" N 79°31'23" EDug Well	5.62	3.88	5.04	10.3
SEONI	Banjari	22°49'5" N 79°45'30" EDug Well	6	2.46	3.01	3.85
SEONI	Dargada	22°55'43" 79°38'15" EDug Well	6.3	2.42	4.23	4.72
SEONI	Dhuma	22°45'0" N 79°43'22" EDug Well	9.3	4.62	4.86	8.4
SEONI	Gaurabibi	22°42'8" N 79°30'47" EDug Well	3.45	0.92	3.87	2.7
SEONI	Gharghatia	22°40'22" 79°47'23" EDug Well	4.3	3.63	4.42	3.88
SEONI	Lakhnadon1	22°35'55" 79°36'45" EDug Well	4.95	2	2.77	3.61
SEONI	Madai	22°32'25" 79°35'42" EDug Well	3.4	0.94	2.99	4.09
SEONI	Makarjhir	22°41'26" 79°41'0" E Dug Well	1.95	1.22	1.87	2.35
SEONI	-	22°49'5" N 79°39'59" EDug Well	7.5	4.66	5.06	3.8
SEONI	Amagarh	22°0'43" N 79°36'45" EDug Well	2.3	2.84	1.37	7.4
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SEONI	Bamandehi	22°2'46" N 79°34'47" EDug Well	6.1	1.66	5.71	7.5
SEONI	Bamhodi	22°3'52" N 79°39'29" EDug Well	9.7	6.07	4.23	5.76
SEONI	Chunatola	22°8'49" N 79°40'5" E Dug Well	6.15	3.87	3.36	7.35
SEONI	Kaniwara	22°12'43" 79°44'23" EDug Well	4.05	0.81	2.52	3.23
SEONI	Nandora	22°1'12" N 79°32'13" EDug Well	2.85	0.62	5.37	9.15
SEONI	Palari	22°18'29" 79°48'33" EDug Well	2.1	1.42	4.08	4.18
SEONI	Rahiwara	22°13'13" 79°32'8" E Dug Well	2.57	1.69	2.61	2.9
SHAHDOL	Pasgari	24°5'53" N 81°25'53" EDug Well	6.3	1.62	1.65	2.28
SHAHDOL	Bahgad	23°21'17" 81°40'0" E Dug Well	5.35	2.57	0.35	3.8
SHAHDOL	Bandhua Tola	a 23°25'55" 81°41'22" EDug Well	3.3	0.98	2.5	3.8
SHAHDOL	Bhikhampur	23°26'27" 81°40'22" EDug Well	6.6	2.54	3.3	4.6
SHAHDOL	Burhar	23°13'30" 81°31'28" EDug Well	12.3	12.57	14.5	13.5
SHAHDOL	Girwah	23°15'26" 81°41'47" EDug Well	5.4	0.32	1	2
SHAHDOL	Khamhidol	23°22'10" 81°43'54" EDug Well	4.1	0.45	1.2	2.2
SHAHDOL	Marjad	23°16'15" 81°35'14" EDug Well	5.7	0.64	3.3	4.85
SHAHDOL	Gohparu	23°29'27" 81°24'34" EDug Well	4.01	1.39	6.31	4.81
SHAHDOL	Sarsi	23°34'52" 81°24'3" E Dug Well	5.95	3.09	3.75	4.55
SHAHDOL	Amjhor	23°40'0" N 81°32'45" EDug Well	6.95	2.93	3.95	4.95
SHAHDOL	Bansukli	23°47'12" 81°36'58" EDug Well	8.05	5.43	5.25	6.75
SHAHDOL	Bhurka	23°42'52" 81°22'32" EDug Well	4.5	2.92	3.1	3.5
SHAHDOL	Daraudi	23°40'44" 81°31'27" EDug Well	4	9.8	9.3	9.8
SHAHDOL		23°40'42" 81°23'48" EDug Well	8.7	8.17	9	8.9
SHAHDOL		I 23°45'22" 81°21'40" EDug Well	7.9	6.93	6.1	7
SHAHDOL	Karki	23°48'30" 81°23'17" EDug Well	9.9	7.62	8.1	8.6
SHAHDOL	Kubara	23°41'51" 81°28'8" E Dug Well	5.4	1.26	3.5	7.6
SHAHDOL	Sanousi	23°56'55" 81°27'30" EDug Well	7.1	9.78	6.2	10.7
SHAHDOL	Tihki	23°55'42" 81°22'0" E Dug Well	6.33	3.3	6.68	5.18
SHAHDOL	Umarkhohi	23°51'20" 81°29'38" EDug Well	9.43	9.42	14.1	9
SHAHDOL	Kanchanpur	23°15'39" 81°27'43" EDug Well	5.04	1.59	2.54	3.74
SHAHDOL	Shahdol-D	23°17'55" 81°21'35" EBore Well	6.8	3.62	5	4.45
SHAHDOL	Singhpur1	23°12'37" 81°25'5" E Dug Well	5.5	3.68	2.8	4.3
SHAJAPUR	Kalapipal	23°20'3" N 76°50'0" E Dug Well	7.3	1.06	3.1	7
SHAJAPUR	Khemliya	23°9'14" N 76°52'28" EDug Well	8.47	0.75	1.37	3.84
SHAJAPUR	Nandni	23°19'5" N 76°56'15" EDug Well	11.6	0.47	5.8	9.35
SHAJAPUR	Chouma	23°38'58" 76°13'30" EDug Well	9.1	7.5	7.7	8.55
SHAJAPUR		d23°36'21" 76°20'28" EDug Well	9.3	1.6	1.5	4.2
SHAJAPUR		1 23°36'21" 76°20'28" EBore Well	7.97	1.15	1.52	2.87
SHAJAPUR	Salsalai	23°27'52" 76°32'17" EDug Well	14.5	0.87	4.1	7
SHAJAPUR	Majhania	23°26'53" 76°19'17" EDug Well	11.6	0.7	1.4	7
SHAJAPUR	Makshi New	23°15'12" 76°8'51" E Dug Well	11.8	4.1	5.4	11.9
SHAJAPUR		23°28'42" 76°15'23" EDug Well	6	1.96	1.65	3.16
SHAJAPUR	Panwadi	23°30'16" 76°24'14" EDug Well	14.5	1.43	2.5	9.41
SHAJAPUR	Shajapur	23°25'16" 76°16'35" EDug Well	5.52	1.1	2.4	4.32
SHAJAPUR	Simrol	23°19'41" 76°29'28" EDug Well	7.06	2.26	2.66	4.5
SHAJAPUR		1 23°18'37" 76°20'0" E Dug Well	12.5	1.89	3.7	9.1
SHAJAPUR	Akodia	23°22'55" 76°35'58" EDug Well	19.2	0.48	0	2.15
SHAJAPUR) 23°19'28" 76°45'3" E Bore Well	8.52	0.40	1.12	3.12
SHAJAPUR	, , ,	23°19'28" 76°45'3" E Bore Well	7.12	0	0.52	2.22
SHAJAPUR	•	i 23°15'25" 76°33'16" EDug Well	6.79	1.1	3.05	6.79
SHAJAPUR		a 23°9'36" N 76°33'3" E Dug Well	5.93	0.33	0.08	3.13
SHAJAPUR	-	23°24'20" 76°42'34" EDug Well	16.9	2.06	1.9	3.13 4.55
SHEOPUR	Shujalpur Goras	•		3.5	3.6	4.55 3.5
SHEUFUR	Goras	25°32'4" N 76°56'42" EDug Well	6.8	3.3	3.0	ა.ა

SHEOPUR	Kalmi	25°34'52" 76°52'43" EDug Well	3.7	0	0	1.8
SHEOPUR	Karahal	25°29'35" 77°3'25" E Dug Well	18.55	3.55	4.3	6.35
SHEOPUR	Kunorh	25°31'43" 77°11'57" EDug Well	16.6	3.8	12	14.2
SHEOPUR	Nonpura	25°31'20" 77°7'53" E Dug Well	6.9	2	2	1.2
SHEOPUR	Piprani New	25°37'58" 76°57'9" E Dug Well	9.25	3.15	6.8	8.85
SHEOPUR	Baroda New	25°29'26" 76°39'21" EDug Well	12.3	3	2.7	3.9
SHEOPUR	Bhagwara	25°40'24" 76°36'53" EDug Well	18.45	8.95	1.55	10.55
SHEOPUR	Doti	25°40'14" 76°35'55" EDug Well	13	7	1.67	2.9
SHEOPUR	Filojpura	25°35'6" N 76°39'54" EDug Well	11.8	1.8	3.55	13.5
SHEOPUR	Pandola	25°32'45" 76°38'40" EDug Well	6.8	0.7	1.5	2.45
SHEOPUR	Sheopur	25°39'51" 76°41'46" EDug Well	23.4	23.4	9.1	8.4
SHEOPUR	Sheopur(deep	25°40'17" 76°42'43" EBore Wel	1 49.32	28.32	16.66	18.72
SHEOPUR	Garhi1	26°7'12" N 77°18'21" EDug Well	11.72	4.72	1.87	2.32
SHEOPUR	Ghaswani	25°53'30" 77°30'22" EDug Well	6.65	3.35	4.05	5.85
SHEOPUR	Pura	25°57'12" 76°59'29" EDug Well		1.4	2.45	3.8
SHEOPUR	Shyampur	26°4'52" N 77°2'3" E Dug Well	11.8	0.9	0.55	2.9
SHEOPUR	Vijaypurcolon	y 26°3'24" N 77°21'52" EDug Wel	I 10.4	4.9	7.5	10.5
SHIVPURI	Badarwas	24°58'29" 77°34'5" E Dug Well	10.45	2.65	4.95	7.95
SHIVPURI	Badarwas(sha	a 24°58'31" 77°34'10" EBore Well	26.38	22.28	3.04	6.28
SHIVPURI	Ganeshkhera	25°5'12" N 77°47'34" EDug Well	8.8	4.5	4.4	6.3
SHIVPURI	Sajai(shallow)) 25°4'55" N 77°41'33" EBore Wel	I 20.44	2.84	4.16	8.74
SHIVPURI	Awas	25°28'21" 78°21'4" E Dug Well	9.17	3.67	5.67	6.37
SHIVPURI	Karera	25°27'14" 78°8'11" E Dug Well	8.5	4.2	7.5	9.7
SHIVPURI	Karera(shallo	w25°28'17" 78°7'25" E Bore Well	9.9	1.4	4.96	7.4
SHIVPURI	Languri	25°29'2" N 78°7'21" E Dug Well	11.3	0.6	4.3	4.2
SHIVPURI	Sarsod	25°25'21" 78°3'4" E Dug Well	5.05	2.55	2.55	2.85
SHIVPURI	Sikandara	25°28'20" 78°21'55" EDug Well	10.7	4.4	5.65	7.2
SHIVPURI	Sirsod Choura	a 25°25'20" 78°3'2" E Dug Well	8.3	5	2.47	2.8
SHIVPURI	Toda Karea	25°27'10" 78°11'7" E Dug Well	14.3	3.7	7.3	6.2
SHIVPURI	Achhroni New	/ 24°59'32" 78°13'50" EDug Well	8.5	2.2	4.85	5.7
SHIVPURI	Bamorkalan N	N 24°53'9" N 78°9'4" E Dug Well	5.5	4.7	3.75	4
SHIVPURI	Masoori	25°6'1" N 77°55'49" EDug Well	10.62	3.62	4.52	6.82
SHIVPURI	Sitapur	25°8'0" N 78°12'24" EDug Well	8	2	6.1	10.8
SHIVPURI	Manipura Nev	v 25°12'46" 77°36'20" EDug Well	17.6	3.2	5.55	10.1
SHIVPURI	Behgwan	25°37'43" 78°6'12" E Dug Well	13.55	2.45	4.22	5.35
SHIVPURI	Mangroni	25°41'46" 77°55'57" EDug Well	6.95	2.15	3.1	4.15
SHIVPURI	Narwar	25°39'3" N 77°49'58" EDug Well		4	3.45	4.4
SHIVPURI	Narwar(Shallo	25°29'30" 77°54'30" EBore Well	7.9	2.8	2.95	4.2
SHIVPURI	Sehore	25°39'53" 78°6'20" E Dug Well	8.3	2.15	2.15	3.9
SHIVPURI	Bhonti	25°19'11" 78°6'0" E Dug Well		3.4	4.9	6
SHIVPURI	Dhola	25°16'57" 78°7'48" E Dug Well	3.2	1.3	2.65	1
SHIVPURI	Pichhore	25°10'45" 78°11'27" EDug Well	10.55	4.85	5.55	5.75
SHIVPURI	Semri	25°10'56" 78°6'43" E Dug Well	8.5	5.1	2.6	4.5
SHIVPURI	Ainpura	25°38'50" 77°24'35" EDug Well	12.3	3.3	3.85	4.4
SHIVPURI	Dhamora(sha	I 25°35'26" 77°23'15" EBore Well	18.22	8.17	6.62	9.72
SHIVPURI	Gobardhan	25°47'23" 77°32'2" E Dug Well	7.5	1.7	2.5	4
SHIVPURI	Pohari	25°32'29" 77°21'54" EDug Well	7.85	2.75	3.25	4.95
SHIVPURI	Bhagora	25°25'5" N 77°45'37" EDug Well		2.15	3.25	3.65
SHIVPURI	Patera	25°36'37" 77°44'10" EDug Well	7.62	3.72	3.32	1.82
SHIVPURI	Satanwara	25°32'40" 77°43'52" EDug Well	4.95	1.15	0.95	2.05
SHIVPURI		o25°26'0" N 77°39'36" EBore Wel		11.7	11.7	12.9
SHIVPURI	Sirsod	25°29'8" N 77°30'35" EDug Well	9.8	1.5	2.15	3.4

SHIVPURI	Survaya	25°24'48"	77°50'5" E Dug Well	7.9	1.5	2.45	3.8
SIDHI	Bastua	23°59'12"	81°42'31" EDug Well	4.25	2.8	3.5	3.7
SIDHI	Bastua(D)	23°59'45"	81°43'50" EBore Well	3.7	2.6	3.3	3.34
SIDHI	Chhuhi	24°11'9" N	81°39'21" EDug Well	9.6	5.31	6.5	7.58
SIDHI	Jogipahari	24°6'56" N	81°45'0" E Dug Well	15.75	9.85	10.05	11.75
SIDHI	Mahua Gaon		81°56'48" EDug Well	8.75	0.63	7.85	7.19
SIDHI	Majhauli		81°37'48" EDug Well	16.5	2.3	4.5	5.69
SIDHI	Majhgawan		81°49'9" E Dug Well	7.8	0.7	3.3	4.97
SIDHI	Parsilli		81°29'18" EDug Well	13.75	13	12.53	13.25
SIDHI	Semariha		81°33'8" E Dug Well	2.9	2.07	2.3	2.44
SIDHI	Tamsar		81°55'20" EDug Well	10.4	8.3	7.55	8.51
SIDHI	Tikri		81°51'45" EDug Well	6.05	3.34	3.65	4.91
SIDHI	Baghwar		•	9	2.3	5.85	6.9
SIDHI	Chouphal	24°17'19"	81°47'15" EDug Well	7.72	5.87	7.27	7.38
SIDHI	Chourhat	24°17'19'	81°40'24" EDug Well	4.2	2.4	4.6	4.09
			<u> </u>	7.35			
SIDHI	Khamh	24°14'15"	81°44'18" EDug Well		1.95	3.2	4.47
SIDHI	Rampur naikir		81°28'51" EBore Well	8.57	6.77	8	7.4
SIDHI	Rampur2	24°20'35"	81°28'51" EDug Well	23.66	8.2	9.6	12.4
SIDHI	Badhaora	24°23'47"	81°45'17" EDug Well	7.1	1.39	3.45	8.32
SIDHI	Baghwari	24°21'12"	81°49'33" EDug Well	7.6	6	7.1	8.8
SIDHI	Jogikothar	24°25'10"	82°2'15" E Dug Well	4.9	1.4	2.25	3.32
SIDHI	Kuchwahi	24°24'22"	81°58'37" EDug Well	8.5	3.7	5.2	6.2
SIDHI	Patpara		81°53'25" EDug Well	9.35	2.51	7.7	8.46
SIDHI	Sidhi	24°24'10"	81°53'15" EDug Well	10.65	6.56	7.7	8.36
SIDHI	Amiliya1	24°32'50"	82°7'51" E Dug Well	17.28	2.58	10.68	13.48
SIDHI	Bahari	24°26'48"	82°10'15" EDug Well	17.65	4.05	9.2	12.66
SIDHI	Padariya	24°25'56"	82°5'55" E Dug Well	9.5	6.4	5.5	7.15
SINGRAULI	Banjari	24°5'16" N	81°55'49" EDug Well	5.32	0.7	4.4	3.36
SINGRAULI	Baragawan(S)) 24°11'47"	82°27'21" EBore Well	10.1	6.55	6.4	7.38
SINGRAULI	Bargawan	24°11'47"	82°27'21" EDug Well	11.3	6.03	6.5	7.7
SINGRAULI	Bharra	24°23'0" N	82°15'35" EDug Well	9.4	2.42	4.3	6.58
SINGRAULI	Chamari Dol		82°6'21" E Dug Well	5.85	1.6	4.4	4.97
SINGRAULI	Deosar(S)		82°18'15" EBore Well	14.5	12.52	3.9	13.1
SINGRAULI	Deosar1		82°18'15" EDug Well	8.32	6.08	6.6	15.29
SINGRAULI	Karthua		82°14'38" EDug Well	17	9	3.5	14.76
SINGRAULI	Kohara Khoh		82°20'33" EDug Well	8.75	5.49	7.75	8.47
SINGRAULI	Parasi		82°2'29" E Dug Well	7.15	6	2.85	4.45
SINGRAULI	Sarai		82°12'14" EDug Well	4.95	0.77	2.71	4.28
SINGRAULI	Sarai(S)		82°12'20" EBore Well	7.77	2.88	11.06	3.99
SINGRAULI	Chaura		82°28'18" EDug Well	10.65	2.46	4.95	8.19
SINGRAULI	Jamgadi		82°19'4" E Dug Well	5.6	4.15	5.4	5.67
SINGRAULI	Jattha Tola		82°15'21" EDug Well	6.9	3.29	5.7	6
SINGRAULI	Koyal Khunth		82°29'6" E Dug Well	9.4	2.2	3.4	4.76
	•		82°30'10" EDug Well				
SINGRAULI	Mara	23°53'50"	•	9.03	1.82	6.53	7.91
SINGRAULI	Waidhan(D)		82°37'45" EBore Well	10.74	5.71	13	21.46
TIKAMGARH	Baldeogarh		79°3'0" E Dug Well	3.9	2.4	6.7	6.91
TIKAMGARH	Manikpur		79°10'14" EDug Well	4.8	3.66	3.6	3.84
TIKAMGARH	Bela		79°20'0" E Dug Well	7	3.7	5	5.88
TIKAMGARH	Digaura		78°50'22" EDug Well	12.7	10.8	5.3	5.47
TIKAMGARH	Jatara		79°2'51" E Dug Well	6.1	4.5	3.5	3.78
TIKAMGARH	Ladhaura		78°52'23" EDug Well	6.25	4.6	6.2	6.19
TIKAMGARH	Newari(D)	25°20'45"	78°48'0" E Bore Well	7.27	6.45	2.3	3.45

TIKAMGARH	Niwari New	25°20'41" 78°48'4" E Dug Well	7.35	7.37	2.05	2.56
TIKAMGARH	Orchha	25°20'58" 78°38'28" EDug Well	9.08	7.38	10.13	9.94
TIKAMGARH	•	25°21'5" N 78°38'43" EBore Well	10.52	7.47	22.07	24.31
TIKAMGARH	Bamori1	25°7'31" N 79°5'40" E Dug Well	11	10.3	5.2	5.39
TIKAMGARH	Palera	25°1'25" N 79°14'15" EDug Well	7.21	5.21	3.76	3.93
TIKAMGARH	Palera(deep)	25°1'25" N 79°13'30" EBore Well	7.47	6.03	4.47	6.05
TIKAMGARH	•	w25°1'25" N 79°13'30" EBore Well	6.89	5.37	3.97	5.38
TIKAMGARH	Birorakhet	25°6'54" N 78°47'30" EDug Well	5.95	3.33	2.05	2.24
TIKAMGARH	Nengawan	25°15'17" 78°40'24" EDug Well	12.75	10.6	3.95	4.52
TIKAMGARH	Prithipur	25°12'22" 78°45'14" EDug Well	6.35	2.3	2.4	2.58
TIKAMGARH	Baragaon	24°34'19" 79°1'19" E Dug Well	11.9	3.76	11.6	12.1
TIKAMGARH	Kundeshwar	24°41'51" 78°47'54" EDug Well	4.75	3.9	2.5	3.67
TIKAMGARH	Majna	24°50'11" 78°59'50" EDug Well	13.6	11.6	9.95	10.43
TIKAMGARH	Mawai	24°47'40" 78°55'42" EDug Well	6.8	4.1	4.9	5.13
TIKAMGARH	Tikamgarh	24°44'38" 78°50'17" EDug Well	8.25	4.85	6	7.48
TIKAMGARH	• ,	24°45'25" 78°50'5" E Bore Well	7.47	3.07	5.07	5.78
UJJAIN		z 23°2'41" N 75°22'44" EBore Well	10.96	3.38	2.39	3.79
UJJAIN		23°6'30" N 75°27'10" EDug Well	21.48	8.98	4.18	10.58
UJJAIN	Ingoria Npz	23°8'39" N 75°33'15" EBore Well	19.5	6.1	2.3	6.98
UJJAIN	Kharotia	23°9'26" N 75°37'26" EDug Well	8.8	5.1	2.2	4.3
UJJAIN	• • • • •	23°9'50" N 75°15'50" EBore Well	22.15	3.33	0.63	2.79
UJJAIN	• `	v23°9'50" N 75°15'50" EBore Well	15.25	2.9	0.3	2.83
UJJAIN	Bachhukhera	23°18'38" 75°47'32" EDug Well	12.7	5.4	5.3	6.6
UJJAIN	Nazarpur	23°20'41" 75°50'57" EDug Well	8.18	1.38	2.23	7.98
UJJAIN	Ruie	23°17'10" 75°39'7" E Dug Well	14.4	4.63	4.7	7
UJJAIN	•	z 23°25'34" 75°16'57" EBore Well	10.9	1.75	6.93	9.97
UJJAIN	Khachrod1	23°25'32" 75°17'0" E Dug Well	9.25	0.35	0.5	1.85
UJJAIN	Nagda Npz	23°26'52" 75°24'37" EBore Well	7.67	2.32	3.31	3.16
UJJAIN	Unhel	23°20'8" N 75°32'58" EDug Well	14.5	5.2	3.3	4.7
UJJAIN	Unhel Npz	23°20'7" N 75°33'16" EBore Well	35.03	6.63	4.06	5.89
UJJAIN	Baijnath	23°36'10" 75°45'32" EDug Well	8.9	1.45	7.1	6.1
UJJAIN		23°31'57" 75°34'15" EDug Well	16.6	2.57	6.5	4.9
UJJAIN	0 1 1	23°33'24" 75°30'58" EBore Well	7.65	1.58	3.6	4.93
UJJAIN	•	a 23°27'42" 75°47'46" EDug Well	8.95	0.35	1.35	3.4
UJJAIN		/ 23°29'28" 75°40'0" E Bore Well	3.69	0.2	0.6	1.58
UJJAIN	•	n23°29'25" 75°39'55" EBore Well	7.9	0.22	0.92	2.04
UJJAIN		23°34'0" N 75°30'30" EDug Well	7.6	0.65	1.95	3.4
UJJAIN	•	1 23°29'22" 75°39'55" EDug Well	9.5	0.3	0.85	1.9
UJJAIN	Dablahardu	23°29'34" 75°53'42" EDug Well	11.14	4.78	5.43	10.08
UJJAIN	Kaitha Npz	23°14'1" N 76°1'5" E Bore Well	11.4	8.75	7.42	8.46
UJJAIN	Kaiytha	23°13'59" 76°1'6" E Dug Well	9.9	5.48	5.73	10.1
UJJAIN		23°23'55" 76°0'48" E Dug Well	8.3	5	4.4	5.6
UJJAIN	Makdon	23°30'8" N 76°4'20" E Dug Well	4.55	0.9	2.1	3.85
UJJAIN		23°30'15" 76°9'18" E Bore Well	5.18	0.28	1.77	3.31
UJJAIN	Pat Npz	23°32'56" 75°54'9" E Bore Well	5.45	0.77	2.18	2.27
UJJAIN	Rupakhedi	23°28'23" 75°58'17" EDug Well	10.25	1.7	7.5	9.5
UJJAIN		23°16'0" N 76°3'42" E Dug Well	12.9	1	4.5	10.5
UJJAIN	Tarana	23°20'26" 76°2'25" E Dug Well	12.55	2.78	2.8	7.55
UJJAIN	Tarana Npz	23°20'27" 76°2'20" E Bore Well	12.7	5.38	2.6	7.2
UJJAIN		23°20'44" 76°2'23" E Bore Well	54.6	3.05	3.97	7.85
UJJAIN	•	23°12'13" 75°38'52" EBore Well	6.3	1.65	2.36	4.83
UJJAIN	Chakrawada (G23°15'23" 75°42'40" EDug Well	12.9	3.1	12.7	10.5

LLLIAINI	Doblo Pobyo	r 23°15'16" 75°48'56" EDug Well	7.32	1.57	2.22	3.02
UJJAIN UJJAIN		23°5'55" N 75°43'48" EBore Well	46.8	46.5	20.34	3.02 46
UJJAIN			10.56	3.77	6.82	12.07
	Naikhedi	23°12'15" 75°40'31" EDug Well				
UJJAIN	Palkhanda	23°2'26" N 75°56'53" EDug Well	6	3.5	2.8	4.8
UJJAIN	Patpala	23°11'50" 75°52'0" E Dug Well	10.5	0.62	8	8.6
UJJAIN	,,	P23°11'9" N 75°46'56" EDug Well	5.9	5.5	5.3	6
UJJAIN	Ujjain(deep)	23°9'52" N 75°48'42" EBore Well	6.57	5.39	4.04	4.2
UJJAIN		n 23°13'18" 75°57'5" E Dug Well	14.1	1.8	5	9.2
UMARIA	Parasi	23°39'52" 80°56'37" EDug Well	5.6	3.95	4.1	6.1
UMARIA	Tala	23°43'17" 81°1'15" E Dug Well	8.81	5.23	7.01	6.86
UMARIA	Umaria	23°31'30" 80°50'22" EDug Well	8.15	6.47	6.55	6.7
UMARIA	Umaria-D	23°31'30" 80°49'15" EBore Well	7.49	6.48	6.33	6.33
UMARIA	Bichua	23°27'56" 80°44'48" EDug Well	7.2	4.32	5.7	6.3
UMARIA	Karkeli New	23°27'52" 80°54'23" EDug Well	9.5	7.98	8	8.7
UMARIA	Nowrozabad	23°23'34" 80°58'58" EDug Well	14.82	7.14	6.92	7.62
UMARIA	Dhamokhar	23°37'48" 80°55'20" EDug Well	9.7	5.72	5.9	6.6
UMARIA	Mahroi	23°57'19" 80°55'35" EDug Well	7.97	2.22	2.67	3.17
UMARIA	Manpur New	23°45'35" 81°7'2" E Dug Well	4.15	3.65	5.1	3.8
UMARIA	Panpatha	23°52'10" 81°0'17" E Dug Well	12.87	10.08	9.57	10.67
UMARIA	Pataur	23°46'26" 81°2'8" E Dug Well	5.45	2.16	3.35	6.15
UMARIA	Amiliya	23°19'19" 81°17'52" EDug Well	12.7	5.65	11	6.9
UMARIA	•	23°20'55" 81°11'25" EDug Well	10.2	8.75	9.7	11.5
VIDISHA	Bareth	23°54'48" 77°59'59" EDug Well	8.42	1	3.8	3.92
VIDISHA		D23°50'55" 77°56'32" EBore Well	12.08	3.87	8.42	6.44
VIDISHA	•	23°51'47" 77°55'28" EDug Well	6.52	0.75	2.5	5.82
VIDISHA	Ghatera	23°48'24" 78°7'25" E Dug Well	11.97	2.75	5.35	7.81
VIDISHA	Malkapur	23°58'44" 77°51'3" E Dug Well	4.68	0.45	1.15	0.4
VIDISHA	Udaipur	23°54'3" N 78°3'18" E Dug Well	15.38	2.66	5.46	9.54
VIDISHA	Atari Khejda	23°36'55" 78°1'42" E Dug Well	8.12	1.3	2.7	8.63
VIDISHA	Gyaraspur(D)	9	14.42	5.55	7.1	8.38
VIDISHA	Anandpur	24°10'0" N 77°26'33" EDug Well	8.27	1.6	2.35	3.31
VIDISHA	Lateri(S)	24°3'27" N 77°24'26" EBore Well	11.04	2.02	5.62	7.07
VIDISHA	, ,	24°3'43" N 77°17'35" EDug Well	8.85	2.02	7.2	6.52
VIDISHA	Tajpura Mohanpura	23°47'45" 77°31'50" EDug Well	7.16	0.9	4.9	5.54
	•	23°48'40" 77°32'32" EDug Well	11.22	3.8	6.8	7.25
VIDISHA	Rasulli	23°46'18" 77°36'33" EDug Well	10.02		3.7	10.35
VIDISHA	Tinsiyai	· ·		4.4		
VIDISHA	Dehri Jagir	24°2'27" N 77°47'8" E Dug Well	6.92	0.7	2.6	3.06
VIDISHA	Patharia	24°6'53" N 77°49'9" E Dug Well	3.87	0.5	1.35	2.39
VIDISHA	Sironj(S)	24°5'42" N 77°40'32" EBore Well	7.99	7.87	7.77	7.29
VIDISHA	Sironj1	24°5'55" N 77°41'19" EDug Well	5.53	1.2	2.5	3.22
VIDISHA	Bagri	23°34'5" N 77°45'54" EDug Well	6.27	0.55	2.6	2.01
VIDISHA	Bamuriya	23°36'48" 77°45'45" EDug Well	5.05	0.9	1.7	1.95
VIDISHA	Hirnai	23°34'3" N 77°57'0" E Dug Well	7.42	0.85	2.5	5.42
VIDISHA	Imaliya	23°34'32" 77°46'50" EDug Well	8.02	2.15	2.9	4.34
VIDISHA	Pattan	23°43'30" 77°39'24" EDug Well	6.32	1.45	4.2	4.45
VIDISHA	Salaiya	23°36'28" 77°34'34" EDug Well	8.82	7.6	4.9	7.94
VIDISHA	Vidisha	23°31'32" 77°49'25" EDug Well	5.92	2.8	4.1	3.48

Central Ground Water Board

North Central Region

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT AND
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