

# ATAL BHUJAL YOJANA (AtalJal)

**State : HARYANA**

**Department : IRRIGATION & WATER  
RESOURCE DEPARTMENT**

**BLOCK : HASSANPUR**

**DISTRICT : PALWAL**

**YEAR : 2024-2025**

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*Towards partial fulfilment of requirements for Disbursement of  
Incentive under DLI -1*

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# HYDROGEOLOGICAL REPORT

(YEAR: 2024-25)

|                 |   |           |
|-----------------|---|-----------|
| STATE           | : | HARYANA   |
| DISTRICT        | : | PALWAL    |
| BLOCK/TALUK     | : | HASSANPUR |
| BLOCK/TALUK HQs | : | HASSANPUR |

| A  | GENERAL INFORMATION    |   |                         |             |        |
|----|------------------------|---|-------------------------|-------------|--------|
| 1. | Geographical area (Ha) | : | 20351                   |             |        |
| 2. | No. of Gram Panchayats | : | 33                      |             |        |
| 3. | No. of towns           | : | 1                       |             |        |
| 4. | No. of villages        | : | 38                      |             |        |
| 5. | Population (2011)      | : | Male                    | Female      | Total  |
|    |                        |   | 61169                   | 53807       | 114976 |
| 6. | Rainfall (mm)(2023)    | : | Monsoon                 | Non-monsoon | Annual |
|    |                        |   | 302                     | 215         | 517    |
| 7. | River basin            | : | Yamuna river basin      |             |        |
| 8. | Major soil types       | : | Tropical and Brown Soil |             |        |

| B  | LAND USE (2023-24)      |   |        |  |  |
|----|-------------------------|---|--------|--|--|
| 1. | Forest area (Ha)        | : | 493.06 |  |  |
| 2. | Cultivable area (Ha)    | : | 17111  |  |  |
| 3. | Net sown area (Ha)      | : | 14680  |  |  |
| 4. | Gross cropped area (Ha) | : | 30195  |  |  |

| C  | CROPPING PATTERN (As in 2023-24) |   |           |           |        |
|----|----------------------------------|---|-----------|-----------|--------|
| 1. | Major crops grown                | : | Kharif    | Rabi      | Summer |
|    |                                  |   | Paddy     | Wheat     | Pulses |
|    |                                  |   | Pulses    | Mustard   | Tomato |
|    |                                  |   | Sesame    | Vegetable |        |
|    |                                  |   | Vegetable |           |        |
|    |                                  |   | Cotton    |           |        |
|    |                                  |   | Perennial |           |        |
|    |                                  |   | NA        |           |        |
|    |                                  |   |           |           |        |
|    |                                  |   |           |           |        |
|    |                                  |   |           |           |        |
|    |                                  |   |           |           |        |

| D  | IRRIGATION FACILITIES (As in 2023-24)    |   |        |        |             |
|----|------------------------------------------|---|--------|--------|-------------|
| 1. | Net irrigated area (Ha)                  | : | 14680  |        |             |
| 2. | Gross irrigated area (Ha)                | : | 25950  |        |             |
| 3. | Area under irrigation (Ha) (Source-wise) | : | DW     | BW/TW  | Tanks/Ponds |
|    |                                          |   | Canals | Others |             |
|    |                                          |   | 0      | 14680  | 0           |
|    |                                          |   | 0      | 0      | 0           |

| E  | GEOLOGY & HYDROGEOLOGY             |   |                          |  |  |
|----|------------------------------------|---|--------------------------|--|--|
| 1. | Predominant rock type              | : | Sand, Silt and Clay      |  |  |
| 2. | Major geological formations        | : | Older and Newer Alluvium |  |  |
| 3. | Important water-bearing formations | : | Coarse grain sand        |  |  |
| 4. | Status of coverage under NAQUIM    | : | Covered                  |  |  |

| F | GROUND WATER CONDITIONS                            |   |                                             |                                            |          |       |                      |          |           |       |          |
|---|----------------------------------------------------|---|---------------------------------------------|--------------------------------------------|----------|-------|----------------------|----------|-----------|-------|----------|
| 1 | No. of wells used for Water Level (WL) monitoring. | : | Open wells                                  |                                            |          |       | BW/TW/ PZ            |          |           |       |          |
|   |                                                    |   | CGWB                                        | SGWB                                       | Atal Jal | Total | CGWB                 | SGWB     | Atal Jal  | Total |          |
|   |                                                    |   | 0                                           | 7                                          | 1        | 8     | 3                    | 1        | 56        | 60    |          |
| 2 | Monitoring mechanism (Nos.)                        | : | Manual                                      |                                            |          | DWLR  |                      |          | Telemetry |       |          |
|   |                                                    |   | CGWB                                        | SGWB                                       | Atal Jal | CGWB  | SGWB                 | Atal Jal | CGWB      | SGWB  | Atal Jal |
|   |                                                    |   | 2                                           | 8                                          | 40       | 1     | 0                    | 17       | 1         | 0     | 17       |
| 3 | Monitoring frequency                               | : | Agency                                      | No. of times monitored/year                |          |       |                      |          |           |       |          |
|   |                                                    |   | CGWB                                        | 2 times/year Pre and Post Monsoon          |          |       |                      |          |           |       |          |
|   |                                                    |   | SGWB                                        | 2 times/year Pre and Post Monsoon          |          |       |                      |          |           |       |          |
|   |                                                    |   | Atal Jal                                    | 2 times/year Pre and Post Monsoon          |          |       |                      |          |           |       |          |
| 4 | Period of water level data availability.           | : | Agency                                      | Period of WL data availability (From - To) |          |       |                      |          |           |       |          |
|   |                                                    |   |                                             | From (year)                                |          |       | To (year)            |          |           |       |          |
|   |                                                    |   | CGWB                                        | 2015                                       |          |       | 2024                 |          |           |       |          |
|   |                                                    |   | SGWB                                        | 2015                                       |          |       | 2024                 |          |           |       |          |
|   |                                                    |   | Atal Jal                                    | 2023                                       |          |       | 2024                 |          |           |       |          |
| 5 | Water level range (m.bgl)                          | : | Minimum/Village                             |                                            |          |       | Maximum/Village      |          |           |       |          |
|   | Pre-monsoon (May – June 2024)                      |   | 4.55/Bamariyaka_265265                      |                                            |          |       | 20.9/Hassanpur_28759 |          |           |       |          |
|   | Post-monsoon (Oct/Nov 2024)                        |   | 5.1/Bamariyaka_265265                       |                                            |          |       | 20.1/Jatoli_28760    |          |           |       |          |
| 6 | Seasonal WL fluctuation range (m)                  | : | Minimum/ Village                            |                                            |          |       | Maximum/ Village     |          |           |       |          |
|   |                                                    |   | -3.9/Bharatgarh Urf Sehdev Ka Nangla 265301 |                                            |          |       | 5.85/Hassanpur_28759 |          |           |       |          |

| G | GROUND WATER QUALITY                                 |               |                                                                                                   |          |       |           |      |          |       |
|---|------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------------|----------|-------|-----------|------|----------|-------|
| 1 | No. of wells used for Water Quality (WQ) monitoring. | Open Wells    |                                                                                                   |          |       | BW/TW/ PZ |      |          |       |
|   |                                                      | CGWB          | SGWB                                                                                              | Atal Jal | Total | CGWB      | SGWB | Atal Jal | Total |
|   |                                                      | 0             | 7                                                                                                 | 0        | 7     | 0         | 5    | 31       | 36    |
| 2 | Monitoring frequency                                 | Agency        | No. of times monitored/year                                                                       |          |       |           |      |          |       |
|   |                                                      | CGWB          | 1 time/year                                                                                       |          |       |           |      |          |       |
|   |                                                      | SGWB          | 1 time/year                                                                                       |          |       |           |      |          |       |
|   |                                                      | Atal Jal      | 1 time/year                                                                                       |          |       |           |      |          |       |
| 3 | Period of water quality data availability            | Agency        | Period of WQ data availability (Years)                                                            |          |       |           |      |          |       |
|   |                                                      | CGWB          | 2015 to 2024                                                                                      |          |       |           |      |          |       |
|   |                                                      | SGWB          | 2020 to 2024                                                                                      |          |       |           |      |          |       |
|   |                                                      | Atal Jal      | 2023 to 2024                                                                                      |          |       |           |      |          |       |
| 4 | Parameters analysed                                  | Agency        | Parameters Analysed                                                                               |          |       |           |      |          |       |
|   |                                                      | CGWB          | pH,EC,TH,Ca,Mg,Na,K,CO <sub>3</sub> ,HCO <sub>3</sub> , SO <sub>4</sub> ,Cl,F,NO <sub>3</sub>     |          |       |           |      |          |       |
|   |                                                      | SGWB          | EC                                                                                                |          |       |           |      |          |       |
|   |                                                      | Atal Jal      | pH,EC,TDS,TH,Ca,Mg,Na,K,CO <sub>3</sub> ,HCO <sub>3</sub> , SO <sub>4</sub> ,Cl,F,NO <sub>3</sub> |          |       |           |      |          |       |
| 5 | Known ground water quality issues, if any            | No Such Issue |                                                                                                   |          |       |           |      |          |       |

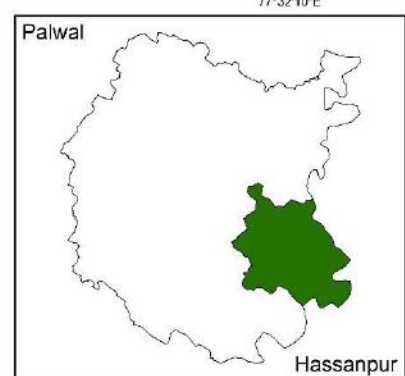
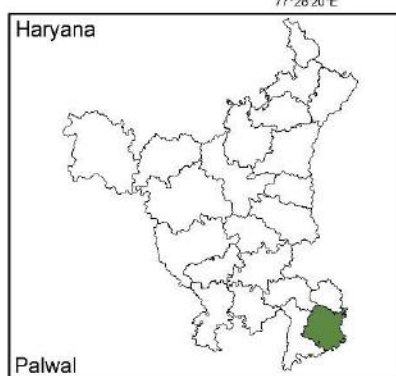
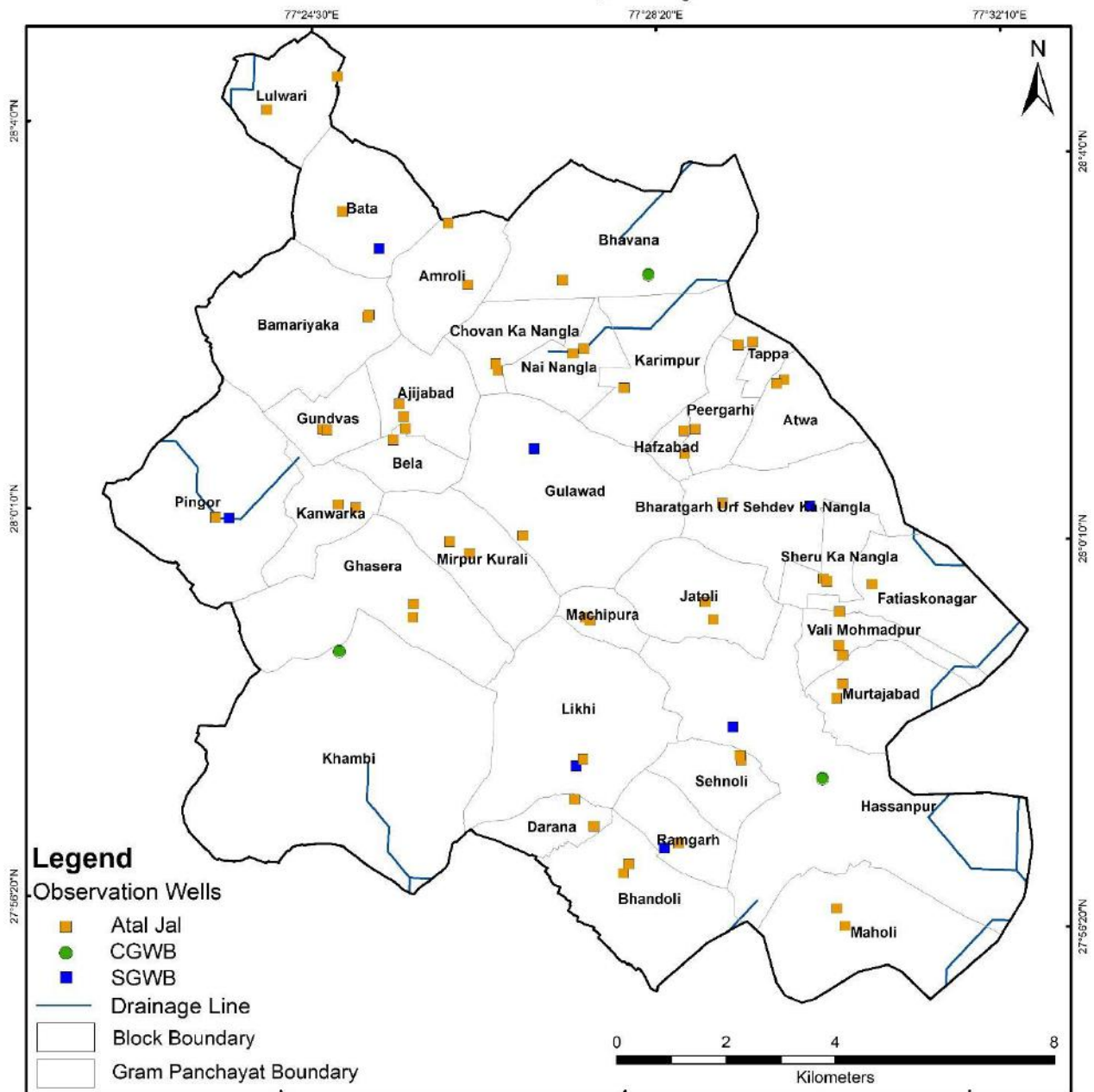
| H. GROUND WATER RESOURCES |                                                  |   |          |          |                |                |                |                |
|---------------------------|--------------------------------------------------|---|----------|----------|----------------|----------------|----------------|----------------|
| 1.                        | Latest assessment year                           | : | 2023     |          |                |                |                |                |
| 2.                        | Assessment Unit                                  | : | Block    |          |                |                |                |                |
| 3.                        | Annual extractable GW resource (ha.m)            | : | 5811.4   |          |                |                |                |                |
| 4.                        | Current annual GW extraction (ha.m)              | : | 5408.2   |          |                |                |                |                |
| 5.                        | Net GW availability for future use (ha.m)        | : | 403.2    |          |                |                |                |                |
| 6.                        | Stage of GW extraction (%)                       | : | 95.65 %  |          |                |                |                |                |
| 7.                        | Category of block/taluk/(2023)                   | : | Critical |          |                |                |                |                |
| 8.                        | Category of block/taluk/ in previous assessments |   | 2023     | 2020     | 2017           | 2013           | 2011           | 2009           |
|                           |                                                  |   | Critical | Critical | Over Exploited | Over Exploited | Over Exploited | Over Exploited |
|                           |                                                  |   |          |          |                |                |                | 2004           |
|                           |                                                  |   |          |          |                |                |                | Critical       |

| I WATER-RELATED SCHEMES                     |                                                                                 |                                                                                         |  |  |
|---------------------------------------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--|--|
| 1.                                          | Schemes with a bearing on ground water, being implemented in the block / taluk. |                                                                                         |  |  |
| Centrally Sponsored /Central Sector Schemes | i)                                                                              | PMKSY                                                                                   |  |  |
|                                             | ii)                                                                             | MGNREGA                                                                                 |  |  |
|                                             | iii)                                                                            | JJM                                                                                     |  |  |
|                                             | iv)                                                                             | RKVY                                                                                    |  |  |
|                                             | v)                                                                              | NHP                                                                                     |  |  |
|                                             | iv)                                                                             | NAQUIM                                                                                  |  |  |
| State Schemes                               | i)                                                                              | State Plan Scheme for providing assistance on adopting water saving technologies (2402) |  |  |
|                                             | ii)                                                                             | MPMV                                                                                    |  |  |
|                                             | iii)                                                                            |                                                                                         |  |  |
|                                             | iv)                                                                             |                                                                                         |  |  |

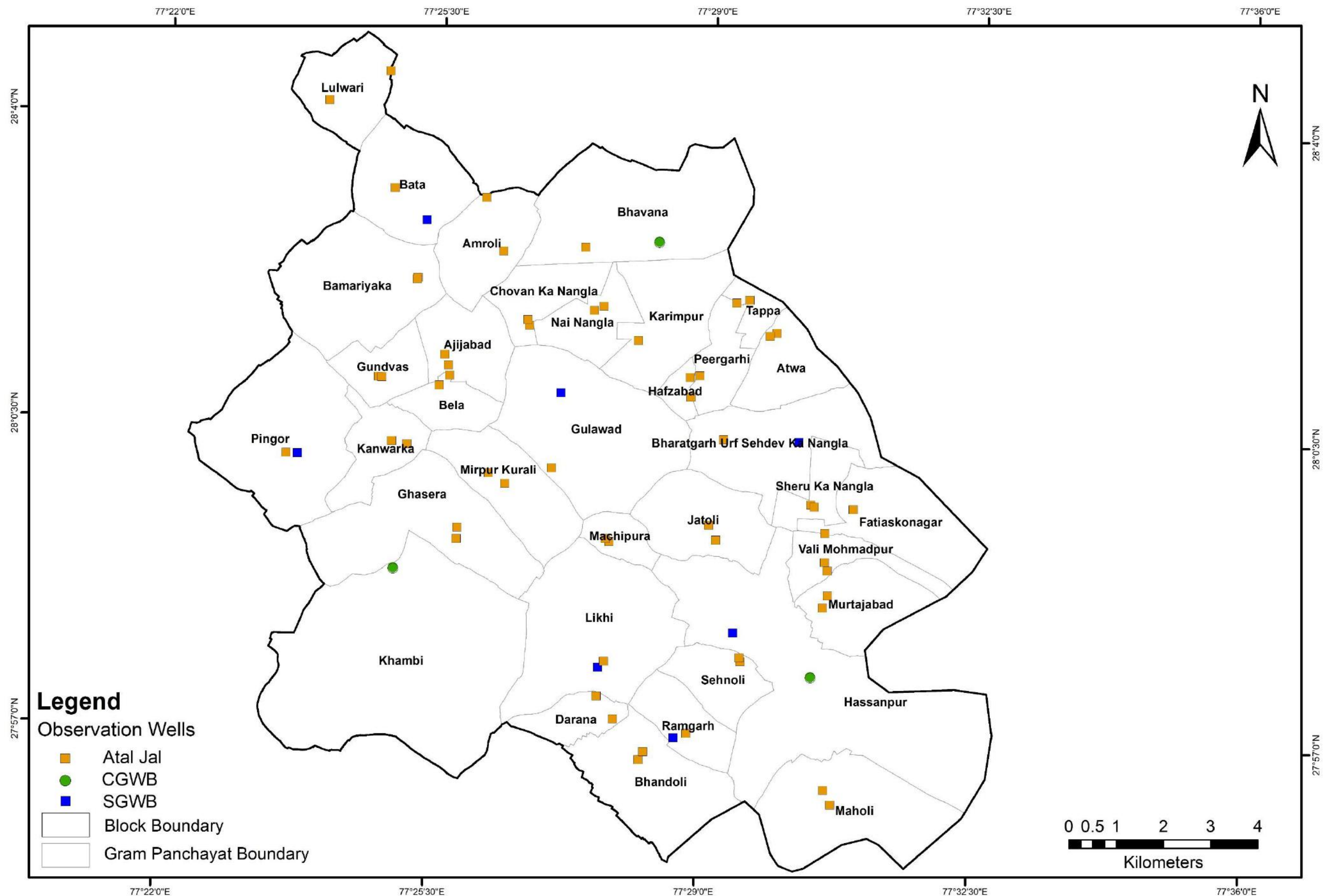
| J GROUND WATER RELATED ISSUES |                                           |                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.                            | Ground water related issues of the block/ |                                                                                                                                                                                                                                                                                                                                                                                           |
| i)                            | Issues related to GW availability         | : Sustainability issues, over exploitation of ground water                                                                                                                                                                                                                                                                                                                                |
| ii)                           | Issues related to GW quality              | : The shallow ground water of the block is alkaline in nature and is moderately to highly saline. It is found that more than half of the ground waters are not suitable for drinking purposes mainly due to fluoride content that exceeds the maximum permissible limit of 1.5mg/l. These waters are not suitable for customary irrigation as they may cause salinity and sodium hazards. |
| iii)                          | Other issues if any.                      | :                                                                                                                                                                                                                                                                                                                                                                                         |

| K ANNEXURES |                                            |
|-------------|--------------------------------------------|
| I           | Basic data of observation wells – Attached |
| II.         | Historical water level data – Attached     |
| III.        | Historical water quality data – Attached   |

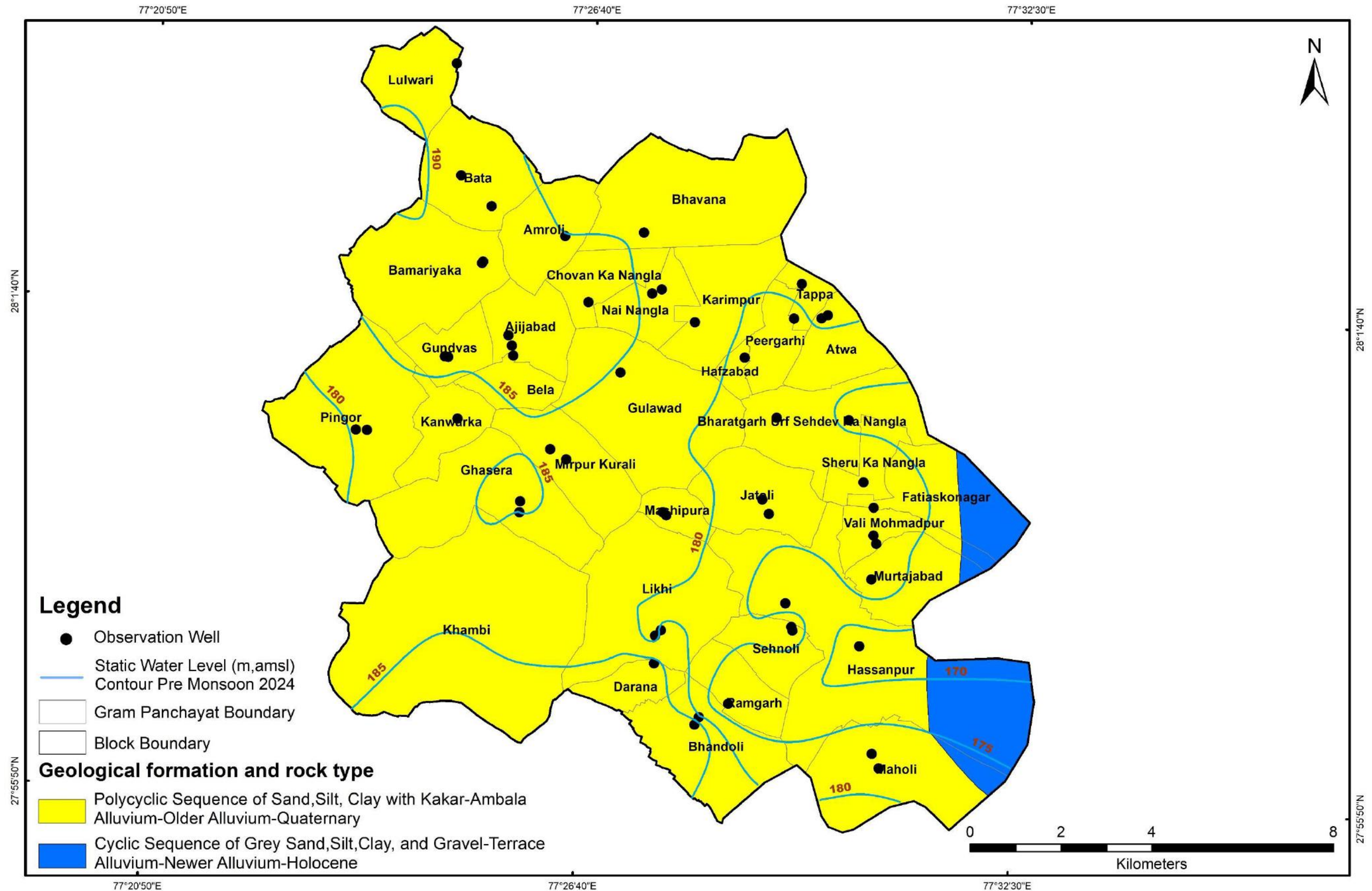
## Location Map of Block- Hassanpur, District- Palwal, Haryana



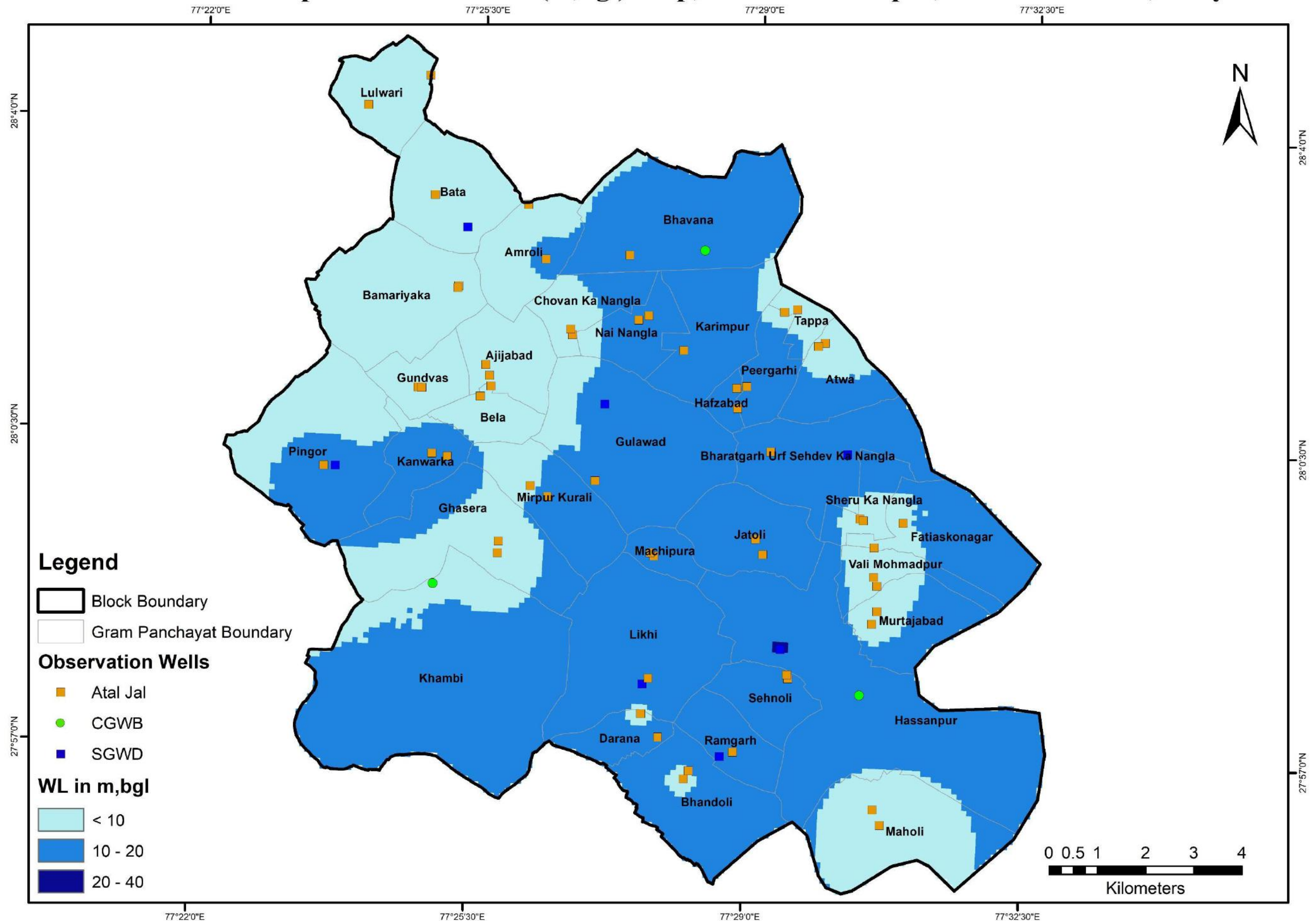
## Location of Observation Wells for Monitoring Water Levels and Water Quality, Block- Hassanpur, District- Palwal, Haryana



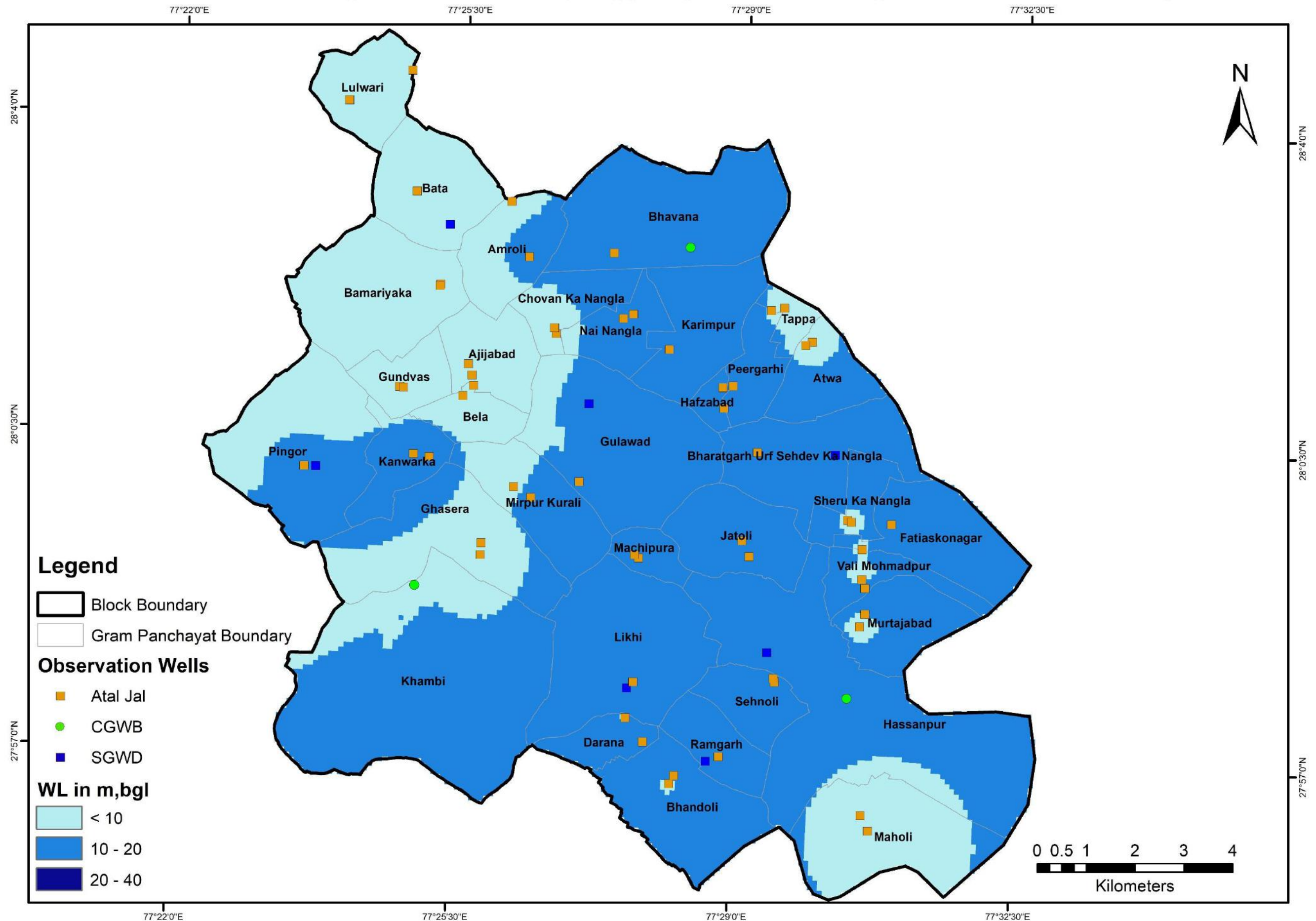
# Hydrogeological Map, Block- Hassanpur, District- Palwal, Haryana



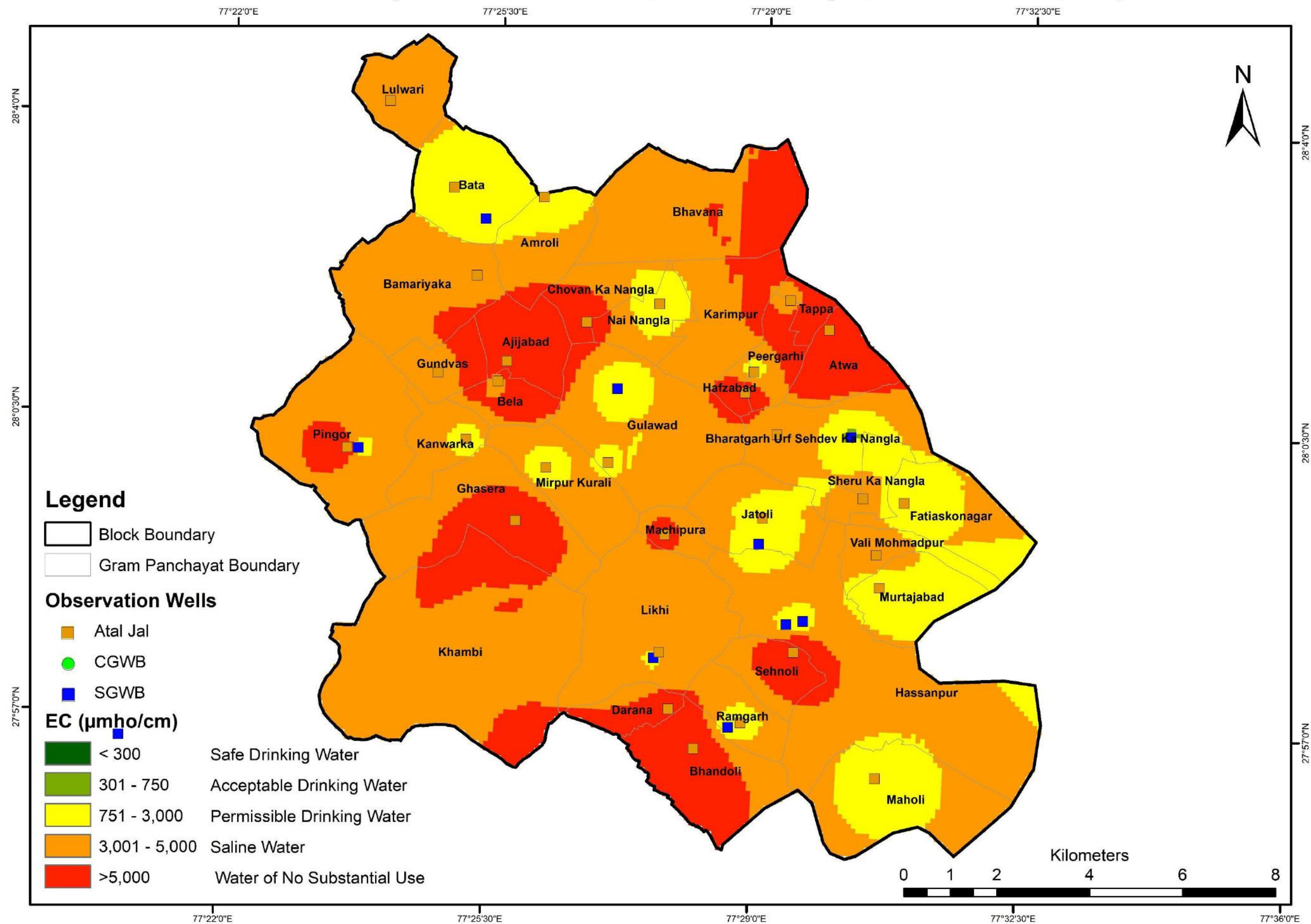
# Pre Monsoon 2024 Depth to Water Level (m,bgl) Map, Block - Hassanpur, District - Palwal, Haryana



## Post Monsoon 2024 Depth to Water Level (m,bgl) Map, Block - Hassanpur, District - Palwal, Haryana



# Electrical Conductivity of Groundwater-2024, Block - Hassanpur, District - Palwal, Haryana



ANNEXURE: I  
BASIC DATA OF MONITORING WELLS

| State | Haryana                       |                                        |                     | District                        | Palwal   |           |              |               | Block                  | Hassanpur                    |               |              |                               |                      |                  |
|-------|-------------------------------|----------------------------------------|---------------------|---------------------------------|----------|-----------|--------------|---------------|------------------------|------------------------------|---------------|--------------|-------------------------------|----------------------|------------------|
| S.No  | Well ID                       | Gram Panchayat                         | Name of the village | Site Name                       | Latitude | Longitude | Type of Well | Reduced Level | Aquifer Type/Lithology | Height of Measuring (m, agl) | Depth (m,bgl) | Diameter (m) | Purpose of Monitoring (WL/WQ) | Monitoring Mechanism | Agency           |
| 1.    | HR_GW_677                     | Ajijabad_265327                        | Ajijabad            | Govt Primary School             | 28.0199  | 77.4276   | Piezometer   | 212           | Trans-Yamuna Alluvial  | 0.50                         | 58            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 2.    | GWL-06-619-00465-00265327-001 | Ajijabad_265327                        | Ajijabad            | Sarpanch House                  | 28.0219  | 77.4268   | Bore Well    | 194           | Trans-Yamuna Alluvial  | 0.30                         | 18            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 3.    | GWL-06-619-00465-00028748-001 | Amroli_28748                           | Amroli              | Near Sarpanch                   | 28.0419  | 77.4388   | Tube Well    | 196           | Trans-Yamuna Alluvial  | 0.50                         | 21            | 0.20         | WL                            | Manual               | Atal Jal-Private |
| 4.    | PAL_HAS_AMR_1                 | Amroli_28748                           | Amroli              | Pvt, Chetram                    | 28.0520  | 77.4348   | Tube Well    | 196           | Alluvial               | 0.37                         | 20            | 0.12         | WQ                            | Manual               | Atal Jal         |
| 5.    | HR_GW_678                     | Atwa_28749                             | Atwa                | Govt Middle School, Atwa        | 28.0277  | 77.4980   | Piezometer   | 211           | Trans-Yamuna Alluvial  | 0.50                         | 60            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 6.    | GWL-06-619-00465-00028749-001 | Atwa_28749                             | Atwa                | Deepak Sarpanch                 | 28.0271  | 77.4966   | Tube Well    | 190           | Trans-Yamuna Alluvial  | 0.50                         | 28            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 7.    | HR_GW_679                     | Bamariyaka_265265                      | Bamariyaka          | Govt Primary School, Bamariyaka | 28.0364  | 77.4206   | Piezometer   | 214           | Trans-Yamuna Alluvial  | 0.50                         | 58            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 8.    | GWL-06-619-00465-00265265-001 | Bamariyaka_265265                      | Bamadiyaka          | Near Sarpanch House             | 28.0361  | 77.4204   | Bore Well    | 195           | Trans-Yamuna Alluvial  | 0.30                         | 15            | 0.10         | WL                            | Manual               | Atal Jal-Private |
| 9.    | HR_GW_694                     | Bata_28751                             | Bata                | Govt Sr Sec School, Bata        | 28.0534  | 77.4151   | Piezometer   | 217           | Trans-Yamuna Alluvial  | 0.50                         | 60            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 10.   | GWL-06-619-00465-00028752-001 | Bela_28752                             | Bela                | Sarpanch House                  | 28.0180  | 77.4280   | Bore Well    | 196           | Trans-Yamuna Alluvial  | 0.30                         | 18            | 0.10         | WL                            | Manual               | Atal Jal-Private |
| 11.   | PAL_HAS_BEL_1                 | Bela_28752                             | Bata                | Tejpal                          | 28.0160  | 77.4258   | Hand Pump    | 193           | Alluvial               | 0.36                         | 18            | 0.11         | WQ                            | Manual               | Atal Jal         |
| 12.   | HR_GW_680                     | Bhandoli_28753                         | Bhaindoli           | Govt High School, Bhaindoli     | 27.9457  | 77.4708   | Piezometer   | 218           | Trans-Yamuna Alluvial  | 0.50                         | 58            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 13.   | GWL-06-619-00465-00028753-001 | Bhandoli_28753                         | Bhaindoli           | Near Sarpanch                   | 27.9472  | 77.4718   | Tube Well    | 189           | Trans-Yamuna Alluvial  | 0.20                         | 30            | 0.20         | WL                            | Manual               | Atal Jal-Private |
| 14.   | HR_GW_681                     | Bharatgarh Urf Sehdev Ka Nangla_265301 | Bharatgarh          | Govt Primary School             | 28.0071  | 77.4872   | Piezometer   | 216           | Trans-Yamuna Alluvial  | 0.50                         | 58            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 15.   | GWL-06-619-00465-00265277-001 | Bhavana_265277                         | Bhavana             | Near Sarpanch                   | 28.0431  | 77.4564   | Dug Well     | 197           | Trans-Yamuna Alluvial  | 1.00                         | 25            | 3.00         | WL                            | Manual               | Atal Jal-Private |
| 16.   | GWL-06-619-00465-00265281-001 | Chovan Ka Nangla_265281                | Chovan Ka Nagla     | Near Sarpanch House             | 28.0290  | 77.4444   | Bore Well    | 197           | Trans-Yamuna Alluvial  | 0.15                         | 37            | 0.12         | WL                            | Manual               | Atal Jal-Private |
| 17.   | PAL_HAS_CHA_1                 | Chovan Ka Nangla_265281                | Chovan Ka Nangla    | Pvt.                            | 28.0280  | 77.4448   | Bore Well    | 196           | Alluvial               | 0.33                         | 20            | 0.13         | WQ                            | Manual               | Atal Jal         |
| 18.   | GWL-06-619-00465-00028755-001 | Darana_28755                           | Darana              | Govt School                     | 27.9576  | 77.4614   | Bore Well    | 195           | Trans-Yamuna Alluvial  | 0.30                         | 18            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 19.   | PAL_HAS_DAR_1                 | Darana_28755                           | Darana              | Pvt.                            | 27.9533  | 77.4651   | Hand Pump    | 192           | Alluvial               | 0.51                         | 18            | 0.12         | WQ                            | Manual               | Atal Jal         |

| S.No | Well ID                       | Gram Panchayat      | Name of the village | Site Name                                         | Latitude | Longitude | Type of Well | Reduced Level | Aquifer Type/Lithology | Height of Measuring (m, agl) | Depth (m,bgl) | Diameter (m) | Purpose of Monitoring (WL/WQ) | Monitoring Mechanism | Agency           |
|------|-------------------------------|---------------------|---------------------|---------------------------------------------------|----------|-----------|--------------|---------------|------------------------|------------------------------|---------------|--------------|-------------------------------|----------------------|------------------|
| 20.  | GWL-06-619-00465-00028756-001 | Fatiaskonagar_28756 | Fartascunagar       | Near Sarpanch                                     | 27.9898  | 77.5095   | Tube Well    | 186           | Trans-Yamuna Alluvial  | 1.10                         | 30            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 21.  | PAL_HAS_FAT_1                 | Fatiaskonagar_28756 | Fatasku Nagar       | Raju                                              | 27.9945  | 77.5155   | Tube Well    | 185           | Alluvial               | 0.80                         | 17            | 0.14         | WQ                            | Manual               | Atal Jal         |
| 22.  | HR_GW_682                     | Ghasera_28757       | Ghasera             | Shaheed Dharam Singh Govt Primary School, Ghasera | 27.9890  | 77.4305   | Piezometer   | 214           | Trans-Yamuna Alluvial  | 0.50                         | 58            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 23.  | GWL-06-619-00465-00028757-001 | Ghasera_28757       | Ghasera             | Near Sarpanch House                               | 27.9869  | 77.4304   | Bore Well    | 194           | Trans-Yamuna Alluvial  | 0.30                         | 15            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 24.  | PAL_HAS_GUL_1                 | Gulawad_28758       | Gulawad             | Pvt.                                              | 28.0008  | 77.4504   | Bore Well    | 195           | Alluvial               | 0.40                         | 18            | 0.13         | WQ                            | Manual               | Atal Jal         |
| 25.  | HR_GW_683                     | Gundvas_265328      | Gundvas             | Panchayati Land                                   | 28.0174  | 77.4126   | Piezometer   | 218           | Trans-Yamuna Alluvial  | 0.50                         | 60            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 26.  | GWL-06-619-00465-00265328-001 | Gundvas_265328      | Gundvas             | Sheru Ka Ghar                                     | 28.0173  | 77.4134   | Bore Well    | 194           | Trans-Yamuna Alluvial  | 0.30                         | 18            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 27.  | GWL-06-619-00465-00265357-001 | Hafzabad_265357     | Hafzabad            | Sarpanch Wali Gali                                | 28.0189  | 77.4797   | Tube Well    | 194           | Trans-Yamuna Alluvial  | 0.30                         | 25            | 0.20         | WL                            | Manual               | Atal Jal-Private |
| 28.  | PAL_HAS_HAF_1                 | Hafzabad_265357     | Hafzabad            | Pvt, Umar Khan                                    | 28.0151  | 77.4800   | Tube Well    | 193           | Alluvial               | 0.45                         | 15            | 0.15         | WQ                            | Manual               | Atal Jal         |
| 29.  | HR_GW_685                     | Jatoli_28760        | Jatoli              | Govt Middle School                                | 27.9908  | 77.4846   | Piezometer   | 211           | Trans-Yamuna Alluvial  | 0.50                         | 56            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 30.  | GWL-06-619-00465-00028760-001 | Jatoli_28760        | Jatoli              | Near By Sarpanch House                            | 27.9879  | 77.4861   | Tube Well    | 193           | Trans-Yamuna Alluvial  | 0.10                         | 27            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 31.  | GWL-06-619-00465-00028762-001 | Kanwarka_28762      | Kanwarka            | Pingore Road                                      | 28.0051  | 77.4159   | Bore Well    | 198           | Trans-Yamuna Alluvial  | 0.76                         | 24            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 32.  | PAL_HAS_KAN_1                 | Kanwarka_28762      | Kanwarka            | Govt.                                             | 28.0046  | 77.4192   | Bore Well    | 194           | Alluvial               | 0.40                         | 17            | 0.12         | WQ                            | Manual               | Atal Jal         |
| 33.  | GWL-06-619-00465-00265279-001 | Karimpur_265279     | Karimpur            | Bada Mandir                                       | 28.0256  | 77.4684   | Bore Well    | 197           | Trans-Yamuna Alluvial  | 0.17                         | 24            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 34.  | HR_GW_693                     | Likhi_28766         | Likhi               | Govt High School                                  | 27.9643  | 77.4627   | Piezometer   | 219           | Trans-Yamuna Alluvial  | 0.50                         | 60            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 35.  | GWL-06-619-00465-00028767-001 | Lulwari_28767       | Lulwari             | Near Sarpanch House                               | 28.0756  | 77.4134   | Bore Well    | 196           | Trans-Yamuna Alluvial  | 0.30                         | 18            | 0.10         | WL                            | Manual               | Atal Jal-Private |
| 36.  | PAL_HAS_LUL_1                 | Lulwari_28767       | Lulwari             | Pvt.                                              | 28.0698  | 77.4005   | Tube Well    | 196           | Alluvial               | 0.18                         | 17            | 0.57         | WQ                            | Manual               | Atal Jal         |
| 37.  | HR_GW_686                     | Machipura_28768     | Machipura           | Govt Primary School                               | 27.9871  | 77.4632   | Piezometer   | 217           | Trans-Yamuna Alluvial  | 0.50                         | 51            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 38.  | GWL-06-619-00465-00028768-001 | Machipura_28768     | Machhipura          | Mandir                                            | 27.9877  | 77.4624   | Bore Well    | 196           | Trans-Yamuna Alluvial  | 0.15                         | 18            | 0.10         | WL                            | Manual               | Atal Jal-Private |
| 39.  | HR_GW_687                     | Maholi_28769        | Maholi              | Govt Middle School                                | 27.9409  | 77.5106   | Piezometer   | 208           | Trans-Yamuna Alluvial  | 0.50                         | 52            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 40.  | GWL-06-619-00465-00028769-001 | Maholi_28769        | Maholi              | Sarpanch                                          | 27.9380  | 77.5123   | Tube Well    | 186           | Trans-Yamuna Alluvial  | 0.15                         | 30            | 0.12         | WL                            | Manual               | Atal Jal-Private |

| S.No | Well ID                       | Gram Panchayat         | Name of the village | Site Name                                                    | Latitude | Longitude | Type of Well | Reduced Level | Aquifer Type/Lithology      | Height of Measuring (m, agl) | Depth (m,bgl) | Diameter (m) | Purpose of Monitoring (WL/WQ) | Monitoring Mechanism | Agency           |
|------|-------------------------------|------------------------|---------------------|--------------------------------------------------------------|----------|-----------|--------------|---------------|-----------------------------|------------------------------|---------------|--------------|-------------------------------|----------------------|------------------|
| 41.  | HR_GW_692                     | Mirpur Kurali_28770    | Mirpur Kurali       | Govt Middle School, Mirpur Kurali                            | 27.9995  | 77.4368   | Piezometer   | 215           | Trans-Yamuna Alluvial       | 0.50                         | 60            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 42.  | GWL-06-619-00465-00028770-001 | Mirpur Kurali_28770    | Mirpur Korali       | Near Sarpanch                                                | 27.9976  | 77.4405   | Bore Well    | 194           | Trans-Yamuna Alluvial       | 0.25                         | 18            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 43.  | GWL-06-619-00465-00028771-001 | Murtajabad_28771       | Murtzabad           | Sarpanch Brother                                             | 27.9755  | 77.5095   | Tube Well    | 186           | Trans-Yamuna Alluvial       | 0.70                         | 30            | 0.12         | WL                            | Manual               | Atal Jal-Private |
| 44.  | PAL_MU_MUR_1                  | Murtajabad_28771       | Murtazabad          | Deepak                                                       | 27.9779  | 77.5105   | Bore Well    | 187           | Alluvial                    | 0.63                         | 20            | 0.13         | WQ                            | Manual               | Atal Jal         |
| 45.  | HR_GW_688                     | Nai Nangla_265280      | Nai Nangla          | Govt Primary School, Nai Nangla                              | 28.0319  | 77.4607   | Piezometer   | 213           | Trans-Yamuna Alluvial       | 0.50                         | 60            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 46.  | GWL-06-619-00465-00265280-001 | Nai Nangla_265280      | Nai Nagla           | Near Sarpanch House                                          | 28.0311  | 77.4586   | Bore Well    | 195           | Trans-Yamuna Alluvial       | 0.15                         | 46            | 0.12         | WL                            | Manual               | Atal Jal-Private |
| 47.  | PAL_HAS_PEE_1                 | Peergarhi_265356       | Peergarhi           | Pvt, Mubeen                                                  | 28.0192  | 77.4818   | Tube Well    | 193           | Alluvial                    | 0.60                         | 15            | 0.11         | WQ                            | Manual               | Atal Jal         |
| 48.  | HR_GW_689                     | Pingor_28773           | Pingore             | Govt Sr Sec School                                           | 28.0023  | 77.3933   | Piezometer   | 212           | Trans-Yamuna Alluvial       | 0.50                         | 60            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 49.  | PAL_HAS_RAM_1                 | Ramgarh_28776          | Ramgarh             | Govt.                                                        | 27.9509  | 77.4809   | Hand Pump    | 191           | Alluvial                    | 0.17                         | 15            | 0.12         | WQ                            | Manual               | Atal Jal         |
| 50.  | HR_GW_690                     | Sehnoli_28777          | Sehnoli             | Govt Primary School                                          | 27.9649  | 77.4921   | Piezometer   | 216           | Trans-Yamuna Alluvial       | 0.50                         | 57            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 51.  | GWL-06-619-00465-00028777-001 | Sehnoli_28777          | Sehnoli             | Sarpanch                                                     | 27.9656  | 77.4919   | Tube Well    | 190           | Trans-Yamuna Alluvial       | 0.20                         | 30            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 52.  | GWL-06-619-00465-00265302-001 | Sheru Ka Nangla_265302 | Sheru Ka Nangla     | On Road Near Aaganwari                                       | 27.9948  | 77.5071   | Tube Well    | 187           | Trans-Yamuna Alluvial       | 0.20                         | 18            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 53.  | PAL_HAS_SHE_1                 | Sheru Ka Nangla_265302 | Shoru Ka Nangla     | Jeevan Lal                                                   | 27.9951  | 77.5064   | Tube Well    | 188           | Alluvial                    | 0.27                         | 17            | 0.13         | WQ                            | Manual               | Atal Jal         |
| 54.  | GWL-06-619-00465-00265354-001 | Tappa_265354           | Tappa               | Sarpanch                                                     | 28.0338  | 77.4920   | Tube Well    | 189           | Trans-Yamuna Alluvial       | 0.40                         | 30            | 0.15         | WL                            | Manual               | Atal Jal-Private |
| 55.  | PAL_HAS_TAP_1                 | Tappa_265354           | Tappa               | Pvt, Rajesh                                                  | 28.0333  | 77.4893   | Tube Well    | 189           | Alluvial                    | 0.33                         | 14            | 0.12         | WQ                            | Manual               | Atal Jal         |
| 56.  | HR_GW_691                     | Vali Mohmadpur_28780   | Vali Mihammadpur    | Govt Sr Sec School                                           | 27.9843  | 77.5097   | Piezometer   | 220           | Trans-Yamuna Alluvial       | 0.50                         | 49            | 0.10         | Both                          | Telemetric           | Atal Jal         |
| 57.  | GWL-06-619-00465-00028780-001 | Vali Mohmadpur_28780   | Walimohmadpur       | Sarpanch                                                     | 27.9826  | 77.5103   | Tube Well    | 186           | Trans-Yamuna Alluvial       | 0.10                         | 22            | 0.10         | WL                            | Manual               | Atal Jal-Private |
| 58.  | W275800077292501              | Hassanpur_28759        | HASSANPUR           | Hassanpur-Pz                                                 | 27.9622  | 77.5072   | Piezometer   | 187           | Unconfined to Semi Confined | 0.50                         | 40            | 0.10         | WL                            | Telemetric           | CGWB             |
| 59.  | W275815077250001              | Khambi_28763           | Khambi              | Khambi                                                       | 27.9809  | 77.4169   | Piezometer   | 191           | Unconfined to Semi Confined | 0.50                         | 200           | 0.10         | Both                          | Manual               | CGWB             |
| 60.  | W280240077282001              | Peergarhi_265356       | Pirgarhi            | Pirgarhi- Pz                                                 | 28.0444  | 77.4722   | Piezometer   | 191           | Unconfined to Semi Confined | 1.00                         | 100           | 0.10         | WL                            | Manual               | CGWB             |
| 61.  | Na_28.04_777.422              | Bata_28751             | Nandgaon            | Panchyati East Of Village In Rumal S/O Yadh Ram Field Lhs Of | 28.0475  | 77.4221   | Dug Well     | 192.2         | Unconfined to Semi Confined | 1.25                         | 30            | 2.00         | WL                            | Manual               | SGWD             |

| S.No | Well ID          | Gram Panchayat                         | Name of the village | Site Name                                                                                       | Latitude | Longitude | Type of Well | Reduced Level | Aquifer Type/Lithology      | Height of Measuring (m, agl) | Depth (m,bgl) | Diameter (m) | Purpose of Monitoring (WL/WQ) | Monitoring Mechanism | Agency |
|------|------------------|----------------------------------------|---------------------|-------------------------------------------------------------------------------------------------|----------|-----------|--------------|---------------|-----------------------------|------------------------------|---------------|--------------|-------------------------------|----------------------|--------|
|      |                  |                                        |                     | Approach Road, Ow                                                                               |          |           |              |               |                             |                              |               |              |                               |                      |        |
| 62.  | Ka_28.00_777.503 | Bharatgarh Urf Sehdev Ka Nangla_265301 | Kashipur            | Rumal Nambardar S/O Amir Near Bus Stand And Behnmal House, Ow                                   | 28.0070  | 77.5034   | Dug Well     | 187.22        | Unconfined to Semi Confined | 1.25                         | 20            | 2.00         | WL                            | Manual               | SGWD   |
| 63.  | Gu_28.015_77.452 | Gulawad_28758                          | Gulawad             | Panchyati Near Ramji Lal Sharma House, Ow                                                       | 28.0152  | 77.4520   | Dug Well     | 189.34        | Unconfined to Semi Confined | 1.25                         | 19            | 2.00         | WL                            | Manual               | SGWD   |
| 64.  | Ha_27.970_77.490 | Hassanpur_28759                        | Hassanpur           | Mandir Well Behind Police Station, Kow                                                          | 27.9703  | 77.4904   | Dug Well     | 193           | Unconfined to Semi Confined | 0.60                         | 40            | 0.20         | WL                            | Manual               | SGWD   |
| 65.  | Hs_27.970_77.490 | Hassanpur_28759                        | Hassanpur           | Panchyati In Front Of School, Ow                                                                | 27.9703  | 77.4904   | Piezometer   | 193           | Unconfined to Semi Confined | 0.50                         | 40            | 0.10         | WL                            | Manual               | SGWD   |
| 66.  | Li_27.963_77.462 | Likhi_28766                            | Likhi               | Bhure S/O Naren West Of Village Near Road Towards Machipur, Ow                                  | 27.9631  | 77.4615   | Dug Well     | 193.9         | Unconfined to Semi Confined | 1.25                         | 15            | 2.00         | WL                            | Manual               | SGWD   |
| 67.  | Pi_28.002_77.396 | Pingor_28773                           | Pingora             | Harijan Well In Harijan Dharamshalla Rhs Of Approach Road Turning Of The Boundary Of Mandir, Ow | 28.0023  | 77.3957   | Dug Well     | 192.9         | Unconfined to Semi Confined | 1.25                         | 20            | 2.00         | WL                            | Manual               | SGWD   |
| 68.  | Ra_27.95_77.478  | Ramgarh_28776                          | Ramgarh             | Adjoining To Sh. Hariram S/O Harigovind House South Of Village, Ow                              | 27.9500  | 77.4783   | Dug Well     | 193.64        | Unconfined to Semi Confined | 1.25                         | 42            | 2.00         | WL                            | Manual               | SGWD   |

ANNEXURE: 2  
WATER LEVEL (WL) DATA OF MONITORING WELLS

|                                               |         |          |        |       |                  |
|-----------------------------------------------|---------|----------|--------|-------|------------------|
| State                                         | Haryana | District | Palwal | Block | Hassanpur        |
| Month of Pre-monsoon Water Level Measurement  |         |          |        |       | May/June         |
| Month of Post-monsoon water Level measurement |         |          |        |       | October/November |

| S.No. | Observation Point                      | Source   | Well Types | Co-ordinate |           | Water Level (m) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |
|-------|----------------------------------------|----------|------------|-------------|-----------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|-------|
|       |                                        |          |            | Latitude    | Longitude | 2015            |      | 2016 |      | 2017 |      | 2018 |      | 2019 |      | 2020 |      | 2021 |      | 2022 |      | 2023  |      | 2024  |       |
|       |                                        |          |            |             |           | Pre             | Post | Pre  | Post | Pre  | Post | Pre  | Post | Pre  | Post | Pre  | Post | Pre  | Post | Pre  | Post | Pre   | Post | Pre   | Post  |
| 1     | Ajijabad_265327                        | Atal Jal | Piezometer | 28.0199     | 77.4276   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 5.3   | 8.2   |
| 2     | Ajijabad_265327                        | Atal Jal | Bore Well  | 28.0219     | 77.4268   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 5.1   | 4.6  | 6.8   | 6.3   |
| 3     | Amroli_28748                           | Atal Jal | Tube Well  | 28.0419     | 77.4388   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 9.9   | 10.8 | 10.9  | 11.7  |
| 4     | Atwa_28749                             | Atal Jal | Piezometer | 28.0277     | 77.4980   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 8.15  | 9.4   |
| 5     | Atwa_28749                             | Atal Jal | Tube Well  | 28.0271     | 77.4966   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 8.3   | 8.9  | 8.8   | 9.4   |
| 6     | Bamariyaka_265265                      | Atal Jal | Piezometer | 28.0364     | 77.4206   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 4.55  | 7.4   |
| 7     | Bamariyaka_265265                      | Atal Jal | Bore Well  | 28.0361     | 77.4204   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 4.3   | 4.6  | 6.1   | 5.1   |
| 8     | Bata_28751                             | Atal Jal | Piezometer | 28.0534     | 77.4151   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 4.8   | 8.5   |
| 9     | Bela_28752                             | Atal Jal | Bore Well  | 28.0180     | 77.4280   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 6.2   | 6.9  | 7.8   | 7     |
| 10    | Bhandoli_28753                         | Atal Jal | Piezometer | 27.9457     | 77.4708   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 9     | 9.4   |
| 11    | Bhandoli_28753                         | Atal Jal | Tube Well  | 27.9472     | 77.4718   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 10.2  | 9.8  | 10    | 10.8  |
| 12    | Bharatgarh Urf Sehdev Ka Nangla_265301 | Atal Jal | Piezometer | 28.0071     | 77.4872   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 16.1  | 20    |
| 13    | Bhavana_265277                         | Atal Jal | Dug Well   | 28.0431     | 77.4564   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 11.1  | 12.7 | 12.5  | 13.3  |
| 14    | Chovan Ka Nangla_265281                | Atal Jal | Bore Well  | 28.0290     | 77.4444   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 8.2   | 7.9  | 8.1   | 8.35  |
| 15    | Darana_28755                           | Atal Jal | Bore Well  | 27.9576     | 77.4614   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 9.5   | 9.1  | 9.3   | 9.95  |
| 16    | Fatiasikonagar_28756                   | Atal Jal | Tube Well  | 27.9898     | 77.5095   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 8.5   | 7.3  | 8.9   | 9.9   |
| 17    | Ghasera_28757                          | Atal Jal | Piezometer | 27.9890     | 77.4305   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 8.35  | 8.2   |
| 18    | Ghasera_28757                          | Atal Jal | Bore Well  | 27.9869     | 77.4304   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 8.4   | 8.2  | 9     | 9     |
| 19    | Gundvas_265328                         | Atal Jal | Piezometer | 28.0174     | 77.4126   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 5.6   | 7.15  |
| 20    | Gundvas_265328                         | Atal Jal | Bore Well  | 28.0173     | 77.4134   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 6.46  | 6.5  | 7.55  | 7.6   |
| 21    | Hafzabad_265357                        | Atal Jal | Tube Well  | 28.0189     | 77.4797   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 15.25 | 18.1 | 15.6  | 16.85 |
| 22    | Jatoli_28760                           | Atal Jal | Piezometer | 27.9908     | 77.4846   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 16.4  | 20.1  |
| 23    | Jatoli_28760                           | Atal Jal | Tube Well  | 27.9879     | 77.4861   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 15.9  | 18.1 | 16.4  | 17.7  |
| 24    | Kanwarka_28762                         | Atal Jal | Bore Well  | 28.0051     | 77.4159   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 15.3  | 15.1 | 16.4  | 16.3  |
| 25    | Karimpur_265279                        | Atal Jal | Bore Well  | 28.0256     | 77.4684   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 12.1  | 12.3 | 13.2  | 13.9  |
| 26    | Likhi_28766                            | Atal Jal | Piezometer | 27.9643     | 77.4627   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 11.05 | 11.3  |
| 27    | Lulwari_28767                          | Atal Jal | Bore Well  | 28.0756     | 77.4134   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 9.3   | 9.2  | 9.8   | 9.25  |
| 28    | Machipura_28768                        | Atal Jal | Piezometer | 27.9871     | 77.4632   | NA              | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA    | NA   | 12.9  | 14.6  |
| 29    | Machipura_28768                        | Atal Jal | Bore Well  | 27.9877     |           |                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |

| S.No. | Observation Point                      | Source   | Well Types | Co-ordinate |           | Water Level (m) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------|----------------------------------------|----------|------------|-------------|-----------|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|       |                                        |          |            | Latitude    | Longitude | 2015            |       | 2016  |       | 2017  |       | 2018  |       | 2019  |       | 2020  |       | 2021  |       | 2022  |       | 2023  |       | 2024  |       |
|       |                                        |          |            |             |           | Pre             | Post  | Pre   | Post  | Pre   | Post  | Pre   | Post  | Pre   | Post  | Pre   | Post  | Pre   | Post  | Pre   | Post  | Pre   | Post  | Pre   | Post  |
| 39    | Sehnoli_28777                          | Atal Jal | Tube Well  | 27.9656     | 77.4919   | NA              | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | 14.9  | 15.1  | 14.6  | 15.25 |
| 40    | Sheru Ka Nangla_265302                 | Atal Jal | Tube Well  | 27.9948     | 77.5071   | NA              | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | 8     | 6.9   | 8.4   | 9.65  |
| 41    | Tappa_265354                           | Atal Jal | Tube Well  | 28.0338     | 77.4920   | NA              | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | 6.75  | 6.3   | 7     | 9.35  |
| 42    | Vali Mohmadpur_28780                   | Atal Jal | Piezometer | 27.9843     | 77.5097   | NA              | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | 8.15  | 8.8   |
| 43    | Vali Mohmadpur_28780                   | Atal Jal | Tube Well  | 27.9826     | 77.5103   | NA              | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | NA    | 9.9   | 8.8   | 9.9   | 11.4  |
| 44    | Hassanpur_28759                        | CGWB     | Piezometer | 27.9622     | 77.5072   | 19              | 22.4  | 21.38 | NA    | 20.75 | 20.67 | 21.64 | 22.33 | 11.06 | 17.11 | 21.1  | 24.6  | 21.32 | 20.5  | 20.5  | 18.92 | 17.86 | NA    | 18.71 | 20.2  |
| 45    | Khambi_28763                           | CGWB     | Piezometer | 27.9809     | 77.4169   | 3.31            | 3.06  | 3.74  | 3.31  | 3.45  | 3.75  | 3.95  | 2.9   | 4.05  | 9.35  | 3.65  | 2.05  | 3.96  | 13.05 | NA    | NA    | NA    | NA    | NA    | NA    |
| 46    | Peergarhi_265356                       | CGWB     | Piezometer | 28.0444     | 77.4722   | 9.69            | 9.52  | 9.45  | 8.94  | 9.92  | 7.88  | NA    | 8.81  | 10.16 | NA    | 12.2  | 9.53  | 10.07 | 7.74  | 12.07 | 12.95 | 9.36  | 9.43  | 11.38 | 7.8   |
| 47    | Bata_28751                             | SGWD     | Dug Well   | 28.0475     | 77.4221   | 7.4             | 7.3   | 7.95  | 8.1   | 8.1   | 7.85  | 8.15  | 8.05  | 8.6   | 8.4   | 9.35  | 9.1   | 9.55  | 10.5  | 10.6  | 10.25 | 10.85 | 10    | 6.5   | 6.1   |
| 48    | Bharatgarh Urf Sehdev Ka Nangla_265301 | SGWD     | Dug Well   | 28.0070     | 77.5034   | 10.15           | 10.25 | 10.75 | 10.5  | 10.6  | 10.5  | 10.65 | 10.15 | 10.7  | 10.55 | 11.2  | 10.7  | NA    | NA    | 12    | NA    | 12.45 | 11.45 | 12.75 | 11.05 |
| 49    | Gulawad_28758                          | SGWD     | Dug Well   | 28.0152     | 77.4520   | 10.1            | 10.05 | 10.75 | 11    | 11.3  | 11.5  | 11.45 | 11.15 | 11.95 | 11.55 | 13.5  | 12.95 | NA    | NA    | 14.2  | NA    | 14.35 | 14.6  | 10.6  | 10.5  |
| 50    | Hassanpur_28759                        | SGWD     | Dug Well   | 27.9703     | 77.4904   | 18.6            | 18.68 | 19.4  | 19.7  | 20.7  | 20.4  | 21.15 | 20.2  | 21.7  | 21.6  | 22.55 | 22.2  | 24    | 20.55 | 24.3  | 22.4  | 24.65 | 22.05 | 20.9  | 15.05 |
| 51    | Hassanpur_28759                        | SGWD     | Piezometer | 27.9703     | 77.4904   | 18.6            | 18.72 | 19.25 | 19.25 | 19.4  | 19.5  | 19.49 | 19.1  | 20.1  | 19.85 | 20.7  | 20.6  | 19.8  | 19.1  | 19.6  | 19.15 | 19.4  | 19.05 | 19.1  | 18.8  |
| 52    | Likhi_28766                            | SGWD     | Dug Well   | 27.9631     | 77.4615   | 10.9            | 11.05 | 11.85 | 11.85 | 12.2  | 12    | 12.35 | 12.1  | 13.15 | 12.9  | 13.5  | 13.15 | 14    | 13    | 13.1  | 11.8  | 12.5  | 11.25 | 12.1  | 11.05 |
| 53    | Pingor_28773                           | SGWD     | Dug Well   | 28.0023     | 77.3957   | 5.75            | 5.7   | 6.6   | 6.7   | 7.1   | 6.9   | 7.15  | 6.95  | 7.35  | 7.25  | 7.85  | 7.65  | 7.8   | 8.2   | 8.4   | 9.7   | 9.95  | 9.65  | 10.05 | 10.1  |
| 54    | Ramgarh_28776                          | SGWD     | Dug Well   | 27.9500     | 77.4783   | 17.5            | 17.4  | 18.1  | 18.1  | 18.5  | 18.65 | 18.6  | 18.15 | 19.35 | 19    | 19.9  | 19.5  | 20.1  | 17.7  | 19.2  | 18.5  | 18.9  | 18.35 | 18    | 18.1  |

ANNEXURE: 3  
HISTORICAL WATER QUALITY (WQ) DATA OF MONITORING WELLS BY SGWB

|                                                   |         |          |           |       |           |
|---------------------------------------------------|---------|----------|-----------|-------|-----------|
| State                                             | Haryana | District | Faridabad | Block | Hassanpur |
| Month of Collection of samples for WQ monitoring* |         |          |           |       | June      |

| Gram Panchayat                         | Source   | Type of well | Latitude | Longitude | Year | pH   | EC    | TDS   | TH    | Ca    | Mg    | Na   | K  | CO <sub>3</sub> | HCO <sub>3</sub> | SO <sub>4</sub> | Cl    | F     | NO <sub>3</sub> |
|----------------------------------------|----------|--------------|----------|-----------|------|------|-------|-------|-------|-------|-------|------|----|-----------------|------------------|-----------------|-------|-------|-----------------|
| Ajijabad_265327                        | Atal Jal | Pizeometer   | 28.0199  | 77.4276   | 2024 | 7.5  | 19698 | 10881 | 1443  | 379.8 | 120.2 | 2452 | 16 | 3.745           | 1256             | 645.7           | 4040  | 9.8   | 129.3           |
| Amroli_28748                           | Atal Jal | Tubewell     | 28.052   | 77.4348   | 2024 | 7.36 | 1841  | 1060  | 142.9 | 36.79 | 12.4  | 239  | 2  | 0.258           | 119.7            | 62.4            | 397   | 0.97  | 7.25            |
| Atwa_28749                             | Atal Jal | Pizeometer   | 28.0277  | 77.498    | 2024 | 6.35 | 20220 | 11134 | 1474  | 392.2 | 120.2 | 2509 | 16 | 0.271           | 1290             | 660.3           | 4127  | 10.05 | 132.5           |
| Bamariyaka_265265                      | Atal Jal | Pizeometer   | 28.0364  | 77.4206   | 2024 | 7.95 | 3358  | 1892  | 247.4 | 66.05 | 20.03 | 426  | 3  | 1.843           | 218.1            | 227.8           | 703.9 | 1.6   | 17.75           |
| Bata_28751                             | Atal Jal | Pizeometer   | 28.0534  | 77.4151   | 2024 | 8.16 | 1799  | 1002  | 134   | 37.15 | 10.02 | 226  | 1  | 1.63            | 118.3            | 123.3           | 376.1 | 0.75  | 6.5             |
| Bela_28752                             | Atal Jal | Handpump     | 28.016   | 77.4258   | 2024 | 6.99 | 2870  | 1694  | 224.6 | 61.32 | 17.35 | 382  | 2  | 0.184           | 199.8            | 136.8           | 625.3 | 1.55  | 15              |
| Bhandoli_28753                         | Atal Jal | Pizeometer   | 27.9457  | 77.4708   | 2024 | 7.86 | 12505 | 8012  | 1062  | 280.7 | 87.62 | 1806 | 12 | 6.333           | 923.7            | 948             | 2970  | 7.2   | 93.75           |
| Bharatgarh Urf Sehdev Ka Nangla_265301 | Atal Jal | Pizeometer   | 28.0071  | 77.4872   | 2024 | 7.69 | 3680  | 2386  | 319.6 | 82.56 | 27.54 | 538  | 3  | 1.289           | 278.7            | 286.2           | 887.1 | 2     | 23.75           |
| Chovan Ka Nangla_265281                | Atal Jal | Borewell     | 28.028   | 77.4448   | 2024 | 7.93 | 6003  | 3771  | 500.2 | 130.8 | 42.15 | 850  | 5  | 3.52            | 436.5            | 381.4           | 1400  | 3.38  | 41              |
| Darana_28755                           | Atal Jal | Handpump     | 27.9533  | 77.4651   | 2024 | 6.15 | 5918  | 3424  | 449.2 | 118.6 | 37.19 | 772  | 5  | 0.053           | 399.9            | 340.8           | 1271  | 3.08  | 36.5            |
| Fatiaskonagar_28756                    | Atal Jal | Tubewell     | 27.9945  | 77.5155   | 2024 | 6.73 | 1204  | 738   | 102.1 | 24.53 | 9.91  | 166  | 1  | 0.045           | 89.95            | 23.2            | 277.9 | 0.68  | 3.25            |
| Ghasera_28757                          | Atal Jal | Pizeometer   | 27.989   | 77.4305   | 2024 | 7.62 | 8041  | 4628  | 608.2 | 161   | 50.07 | 1043 | 7  | 2.116           | 537.9            | 550.2           | 1716  | 4.05  | 51.5            |
| Gulawad_28758                          | Atal Jal | Borewell     | 28.0008  | 77.4504   | 2024 | 7.57 | 2725  | 1757  | 234.8 | 61.32 | 19.83 | 396  | 3  | 0.698           | 199.3            | 143.5           | 655.1 | 1.61  | 15.75           |
| Gundvas_265328                         | Atal Jal | Pizeometer   | 28.0174  | 77.4126   | 2024 | 7.03 | 3359  | 1922  | 257.7 | 66.05 | 22.53 | 433  | 3  | 0.222           | 219.8            | 231.1           | 713.5 | 1.6   | 17.75           |
| Hafzabad_265357                        | Atal Jal | Tubewell     | 28.0151  | 77.48     | 2024 | 7.67 | 7254  | 4132  | 551.2 | 143.1 | 47.1  | 931  | 6  | 2.11            | 477.9            | 423.2           | 1529  | 3.72  | 45.5            |
| Jatoli_28760                           | Atal Jal | Pizeometer   | 27.9908  | 77.4846   | 2024 | 7.54 | 2796  | 1742  | 226.8 | 61.92 | 17.52 | 393  | 3  | 0.652           | 199.3            | 209.8           | 646   | 1.45  | 15.5            |
| Kanwarka_28762                         | Atal Jal | Borewell     | 28.0046  | 77.4192   | 2024 | 6.85 | 2174  | 1401  | 183.8 | 49.06 | 14.87 | 316  | 2  | 0.106           | 159.9            | 101.6           | 516.2 | 1.28  | 11.5            |
| Likhi_28766                            | Atal Jal | Pizeometer   | 27.9643  | 77.4627   | 2024 | 6.82 | 3607  | 2005  | 268   | 70.18 | 22.53 | 452  | 3  | 0.143           | 229.9            | 241.2           | 742.5 | 1.65  | 18.75           |
| Lulwari_28767                          | Atal Jal | Tubewell     | 28.0698  | 77.4005   | 2024 | 7.25 | 3922  | 2445  | 326.7 | 85.85 | 27.27 | 551  | 4  | 0.468           | 279.5            | 224.6           | 903.3 | 2.18  | 24.25           |
| Machipura_28768                        | Atal Jal | Pizeometer   | 27.9871  | 77.4632   | 2024 | 7.05 | 5396  | 3436  | 453.6 | 119.7 | 37.55 | 774  | 5  | 0.422           | 399.6            | 409.8           | 1273  | 2.95  | 36.75           |
| Maholi_28769                           | Atal Jal | Pizeometer   | 27.9409  | 77.5106   | 2024 | 8.19 | 1593  | 1018  | 134   | 37.15 | 10.02 | 229  | 1  | 1.747           | 118.2            | 124.4           | 376.1 | 0.75  | 6.5             |
| Mirpur Kurali_28770                    | Atal Jal | Pizeometer   | 27.9995  | 77.4368   | 2024 | 8.28 | 1678  | 1085  | 144.3 | 37.15 | 12.52 | 245  | 2  | 2.328           | 127.6            | 132.2           | 405   | 0.8   | 7.5             |
| Murtajabad_28771                       | Atal Jal | Borewell     | 27.9779  | 77.5105   | 2024 | 6.41 | 1031  | 593   | 81.67 | 20.44 | 7.44  | 134  | 1  | 0.017           | 69.98            | 7               | 218.4 | 0.54  | 1.25            |
| Nai Nangla_265280                      | Atal Jal | Pizeometer   | 28.0319  | 77.4607   | 2024 | 7.67 | 1233  | 765   | 103.1 | 24.77 | 10.01 | 172  | 1  | 0.396           | 89.58            | 95.2            | 279.6 | 0.5   | 3.5             |
| Peergarhi_265356                       | Atal Jal | Tubewell     | 28.0192  | 77.4818   | 2024 | 7.45 | 2023  | 1231  | 163.3 | 44.97 | 12.39 | 277  | 2  | 0.371           | 139.6            | 81.4            | 456.6 | 1.13  | 9.25            |
| Pingor_28773                           | Atal Jal | Pizeometer   | 28.0023  | 77.3933   | 2024 | 7.9  | 7382  | 4583  | 608.2 | 161   | 50.07 | 1033 | 7  | 3.957           | 526              | 544.6           | 1697  | 4.05  | 51              |
| Ramgarh_28776                          | Atal Jal | Handpump     | 27.9509  | 77.4809   | 2024 | 6.16 | 1909  | 1130  | 153.1 | 40.88 | 12.4  | 255  | 2  | 0.018           | 130              | 70.5            | 416.9 | 1.04  | 8               |
| Sehnoli_28777                          | Atal Jal | Pizeometer   | 27.9649  | 77.4921   | 2024 | 7.33 | 11058 | 6389  | 845.3 | 222.9 | 70.1  | 1440 | 9  | 1.487           | 738.5            | 757             | 2372  | 5.7   | 73.5            |
| Sheru Ka Nangla_265302                 | Atal Jal | Tubewell     | 27.9951  | 77.5064   | 2024 | 6.77 | 4004  | 2521  | 336.9 | 89.94 | 27.27 | 568  | 4  | 0.161           | 289.8            | 234.1           | 933   | 2.26  | 25.5            |
| Tappa_265354                           | Atal Jal | Tubewell     | 28.0333  | 77.4893   | 2024 | 6.77 | 3971  | 2566  | 336.9 | 89.94 | 27.27 | 578  | 4  | 0.166           | 299.8            | 239.5           | 952.9 | 2.3   | 26              |
| Vali Mohmadpur_28780                   | Atal Jal | Pizeometer   | 27.9843  | 77.5097   | 2024 | 7.86 | 5094  | 3126  | 412.3 | 111.5 | 32.54 | 705  | 4  | 2.451           | 357.5            | 372.            |       |       |                 |

| Name of District | Name of Block | Source   | Name of village/ OW data               | Latitude | Longitude | EC<br>June 2020 | EC<br>June-2021 | EC<br>June-2022 | EC<br>June-2023 | EC<br>June-2024 |
|------------------|---------------|----------|----------------------------------------|----------|-----------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Palwal_619       | Hassanpur_465 | Atal Jal | Bharatgarh Urf Sehdev Ka Nangla_265301 | 28.0071  | 77.4872   | ND              | ND              | ND              | ND              | 3680            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Chovan Ka Nangla_265281                | 28.028   | 77.4448   | ND              | ND              | ND              | ND              | 6003            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Darana_28755                           | 27.9533  | 77.4651   | ND              | ND              | ND              | ND              | 5918            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Fatiaskonagar_28756                    | 27.9945  | 77.5155   | ND              | ND              | ND              | ND              | 1204            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Ghasera_28757                          | 27.989   | 77.4305   | ND              | ND              | ND              | ND              | 8041            |
| Palwal_619       | Hassanpur_465 | SGWB     | GULAWAD                                | 28.0152  | 77.452    | 2850            | 1500            | ND              | ND              | 1300            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Gulawad_28758                          | 28.0008  | 77.4504   | ND              | ND              | ND              | ND              | 2725            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Gundvas_265328                         | 28.0174  | 77.4126   | ND              | ND              | ND              | ND              | 3359            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Hafzabad_265357                        | 28.0151  | 77.48     | ND              | ND              | ND              | ND              | 7254            |
| Palwal_619       | Hassanpur_465 | SGWB     | HASSANPUR                              | 27.9703  | 77.4904   | 2300            | ND              | 2600            | 2200            | 2300            |
| Palwal_619       | Hassanpur_465 | SGWB     | HASSANPUR                              | 27.971   | 77.494    | 3250            | ND              | 1700            | 2200            | 2300            |
| Palwal_619       | Hassanpur_465 | SGWB     | JATAULY                                | 27.9858  | 77.4839   | 2600            | 2350            | 1800            | 2050            | 2100            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Jatoli_28760                           | 27.9908  | 77.4846   | ND              | ND              | ND              | ND              | 2796            |
| Palwal_619       | Hassanpur_465 | SGWB     | KAMBHT                                 | 28.0272  | 77.3292   | 1500            | 1550            | 1600            | 1350            | 1400            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Kanwarka_28762                         | 28.0046  | 77.4192   | ND              | ND              | ND              | ND              | 2174            |
| Palwal_619       | Hassanpur_465 | SGWB     | KASHIPUR                               | 28.007   | 77.5034   | 2200            | ND              | ND              | ND              | 500             |
| Palwal_619       | Hassanpur_465 | SGWB     | LALGARH                                | 27.9575  | 77.2726   | 3350            | 3350            | ND              | ND              | 2000            |
| Palwal_619       | Hassanpur_465 | SGWB     | LIKHI                                  | 27.9631  | 77.4615   | 2900            | ND              | 2100            | 2300            | 2500            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Likhi_28766                            | 27.9643  | 77.4627   | ND              | ND              | ND              | ND              | 3607            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Lulwari_28767                          | 28.0698  | 77.4005   | ND              | ND              | ND              | ND              | 3922            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Machipura_28768                        | 27.9871  | 77.4632   | ND              | ND              | ND              | ND              | 5396            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Maholi_28769                           | 27.9409  | 77.5106   | ND              | ND              | ND              | ND              | 1593            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Mirpur Kurali_28770                    | 27.9995  | 77.4368   | ND              | ND              | ND              | ND              | 1678            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Murtajabad_28771                       | 27.9779  | 77.5105   | ND              | ND              | ND              | ND              | 1031            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Nai Nangla_265280                      | 28.0319  | 77.4607   | ND              | ND              | ND              | ND              | 1233            |
| Palwal_619       | Hassanpur_465 | SGWB     | NANDGAON                               | 28.0475  | 77.4221   | 3550            | 3600            | 2300            | 2100            | 2200            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Peergarhi_265356                       | 28.0192  | 77.4818   | ND              | ND              | ND              | ND              | 2023            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Pingor_28773                           | 28.0023  | 77.3933   | ND              | ND              | ND              | ND              | 7382            |
| Palwal_619       | Hassanpur_465 | SGWB     | PINGORA                                | 28.0023  | 77.3957   | 3000            | 2950            | 1700            | 1350            | 1400            |
| Palwal_619       | Hassanpur_465 | SGWB     | RAHIMPUR                               | 27.9453  | 77.345    | 2600            | 2700            | ND              | ND              | 1400            |
| Palwal_619       | Hassanpur_465 | SGWB     | RAMGARH                                | 27.95    | 77.4783   | 2000            | 2000            | 2600            | 2200            | 2300            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Ramgarh_28776                          | 27.9509  | 77.4809   | ND              | ND              | ND              | ND              | 1909            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Sehnoli_28777                          | 27.9649  | 77.4921   | ND              | ND              | ND              | ND              | 11058           |
| Palwal_619       | Hassanpur_465 | Atal Jal | Sheru Ka Nangla_265302                 | 27.9951  | 77.5064   | ND              | ND              | ND              | ND              | 4004            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Tappa_265354                           | 28.0333  | 77.4893   | ND              | ND              | ND              | ND              | 3971            |
| Palwal_619       | Hassanpur_465 | Atal Jal | Vali Mohmadpur_28780                   | 27.9843  | 77.5097   | ND              | ND              | ND              | ND              | 5094            |