

Supplementary Materials

Table S1. Distribution of 350 monitoring wells selected for the study.

WELL ID	DISTRICT	UPAZILA	VILLAGE	WELL ID	DISTRICT	UPAZILA	VILLAGE
GT8112001	Rajshahi	Baghmara	Tahirpur	GT8172033	Rajshahi	Paba	Bagdhanihat
GT8112002	Rajshahi	Baghmara	Bhabaniganj	GT8172035	Rajshahi	Paba	Hatgodagari
GT8112003	Rajshahi	Baghmara	Birkutsha	GT8172036	Rajshahi	Paba	Paba
GT8122005	Rajshahi	Boalia	Master para	GT8172037	Rajshahi	Paba	Namobhadra
GT8125006	Rajshahi	Charghat	Mullikbagha	GT8172038	Rajshahi	Paba	Bhodra
GT8125008	Rajshahi	Charghat	Holidagachi	GT8172039	Rajshahi	Paba	Talaimari
GT8125009	Rajshahi	Charghat	Moktarpur	GT8172040	Rajshahi	Paba	Haripur
GT8125010	Rajshahi	Charghat	Gorshohurpur	GT8182041	Rajshahi	Puthia	Puthia
GT8125011	Rajshahi	Charghat	Yousufpur	GT8182042	Rajshahi	Puthia	Jhokrakul
GT8125012	Rajshahi	Charghat	Moshidpur	GT8194046	Rajshahi	Tanore	Shamashpur
GT8131015	Rajshahi	Durgapur	Alipur	GT8194048	Rajshahi	Tanore	Gollapara
GT8134016	Rajshahi	Godagari	Kazipara	GT8194049	Rajshahi	Tanore	Tanore
GT8134017	Rajshahi	Godagari	Godagari	GT8194047	Rajshahi	Tanore	Mundumalahat
GT8134018	Rajshahi	Godagari	Rajapurhat	GT1006001	Bogra	Adamdighi	Talshoes
GT8134019	Rajshahi	Godagari	Poshunda	GT1006002	Bogra	Adamdighi	Sontehar
GT8134020	Rajshahi	Godagari	Gorermath	GT1006003	Bogra	Adamdighi	Sontehar
GT8134021	Rajshahi	Godagari	Madarpur	GT1020004	Bogra	Bogra sadar	Sutrapur
GT8134022	Rajshahi	Godagari	Dumuria	GT1020005	Bogra	Bogra sadar	Gukul
GT8134027	Rajshahi	Godagari	Bhogobontapur	GT1020006	Bogra	Bogra sadar	Sonaidighi
GT8134028	Rajshahi	Godagari	Sreemontapur	GT1020007	Bogra	Bogra sadar	Malotinagar
GT8153030	Rajshahi	Mohanpur	Lalich	GT1027008	Bogra	Dhunat	Dhunut
GT8153031	Rajshahi	Mohanpur	Mohanpur	GT1033009	Bogra	Dhupsanchia	Barogram
GT8172032	Rajshahi	Paba	Damkurahat	GT1040010	Bogra	Gabtali	Baladighi

Table S1: Distribution of 350 monitoring wells selected for the study (continued).

WELL ID	DISTRICT	UPAZILA	VILLAGE	WELL ID	DISTRICT	UPAZILA	VILLAGE
GT1040011	Bogra	Gabtali	Gabtali	GT2721011	Dinajpur	Bochaganj	Jinore
GT1040012	Bogra	Gabtali	Saudabari	GT2721502	Dinajpur	Bochaganj	Bajnia
GT1054013	Bogra	Kahaloo	Kazipur	GT2721503	Dinajpur	Bochaganj	Bairkuri
GT1054014	Bogra	Kahaloo	Mohespur	GT2730012	Dinajpur	Chirirbandar	Bhushirbandar
GT1067015	Bogra	Nandigram	Nandigram	GT2730013	Dinajpur	Chirirbandar	Ranirbandar
GT1081016	Bogra	Sariakandi	Ramnagar	GT2730014	Dinajpur	Chirirbandar	Kishmotfaizan
GT1081017	Bogra	Sariakandi	Gossaibari	GT2730015	Dinajpur	Chirirbandar	Saskandar
GT1081018	Bogra	Sariakandi	Ramsandrapur	GT2730016	Dinajpur	Chirirbandar	Chirirbandar
GT1081019	Bogra	Sariakandi	Fulbari	GT2738017	Dinajpur	Fulbari	Phulbari
GT1081020	Bogra	Sariakandi	Boraikandi	GT2738018	Dinajpur	Fulbari	Rangamati
GT1088021	Bogra	Sherpur	Sherpurshospa	GT2743019	Dinajpur	Ghoraghat	Lalbag
GT1088022	Bogra	Sherpur	Laximkone	GT2747021	Dinajpur	Hakimpur	Hakimpur
GT1088023	Bogra	Sherpur	Kalshimati	GT2756023	Dinajpur	Kaharole	Mukundapur
GT1094024	Bogra	Shibganj	Shibgonj	GT2756024	Dinajpur	Kaharole	Purbasadipur
GT1094025	Bogra	Shibganj	Alladipur	GT2756026	Dinajpur	Kaharole	Kashipur
GT1095026	Bogra	Sonatola	Sukkanpukur	GT2760029	Dinajpur	Khansama	Jahangirpur
GT1095027	Bogra	Sonatola	Sonatala	GT2764030	Dinajpur	Sadar	Dinajpur town
GT2710001	Dinajpur	Birampur	East jaganathp	GT2764031	Dinajpur	Sadar	Uttar gobindap
GT2712002	Dinajpur	Birganj	Bishnupur	GT2764033	Dinajpur	Sadar	Nasipur
GT2712003	Dinajpur	Birganj	Birganj	GT2764034	Dinajpur	Sadar	Goaldhihi
GT2712004	Dinajpur	Birganj	Kabirajhat	GT2764035	Dinajpur	Sadar	Tajpur
GT2712005	Dinajpur	Birganj	Dolua	GT2764036	Dinajpur	Sadar	Mohanpur
GT2712006	Dinajpur	Birganj	Daulatpur	GT2764037	Dinajpur	Sadar	Panchbari
GT2717008	Dinajpur	Biral	Mangalpur	GT2764038	Dinajpur	Sadar	Nimnagar
GT2717009	Dinajpur	Biral	Biral	GT2764039	Dinajpur	Sadar	Madhabpur
GT2717501	Dinajpur	Biral	Kazipara	GT2769040	Dinajpur	Nawabganj	Tapanghat
GT2721010	Dinajpur	Bochaganj	Setabganj	GT2777042	Dinajpur	Parbatipur	Madhya para

Table S1: Distribution of 350 monitoring wells selected for the study (continued).

WELL ID	DISTRICT	UPAZILA	VILLAGE	WELL ID	DISTRICT	UPAZILA	VILLAGE
GT2777043	Dinajpur	Parbatipur	Parbatipur	GT4952003	Kurigram	sadar	Kurigram
GT3224001	Gaibandha	Sadar	Station road	GT4952004	Kurigram	sadar	Sora
GT3224002	Gaibandha	Sadar	Mohimagonj	GT4952005	Kurigram	sadar	Pateshani
GT3224003	Gaibandha	Sadar	Tulshighat	GT4961007	Kurigram	Nageshwari	Sreepur
GT3230005	Gaibandha	Gobindaganj	Sinjeni	GT4994008	Kurigram	Ulipur	Ulipur
GT3230006	Gaibandha	Gobindaganj	Pargayra	GT4994009	Kurigram	Ulipur	Durgapur
GT3267008	Gaibandha	Palashbari	Nuniagari	GT5233001	Lalmonirh. ¹	Hatibandha	Barakhata
GT3267009	Gaibandha	Palashbari	Jhalingi	GT5233002	Lalmonirh.	Hatibandha	Hatibanda
GT3282010	Gaibandha	Sadullapur	Dhaperhat	GT5233004	Lalmonirh.	Hatibandha	Daikhawa
GT3282011	Gaibandha	Sadullapur	Sadullapur	GT5239005	Lalmonirh.	Kaliganj	Ttarmusratmo
GT3288014	Gaibandha	Saghatta	Ullah(gazaria)	GT5239006	Lalmonirh.	Kaliganj	Aditmari
GT3288015	Gaibandha	Saghatta	Bonarpara	GT5239007	Lalmonirh.	Kaliganj	Bairati
GT3291017	Gaibandha	Sundarganj	Bamandanga	GT5239008	Lalmonirh.	Kaliganj	Baninagar
GT3291018	Gaibandha	Sundarganj	Chachiamirja	GT5255009	Lalmonirh.	Sadar	Lalmonirhat
GT3282012	Gaibandha	Sadullapur	Hasanpara	GT5255010	Lalmonirh.	Sadar	Tiestakutubkh
GT3230004	Gaibandha	Gobindaganj	Gobindagonj	GT5255011	Lalmonirh.	Sadar	Gokunda
GT3230007	Gaibandha	Gobindaganj	Gobindagonj	GT5255012	Lalmonirh.	Sadar	Khodrasaptana
GT3282013	Gaibandha	Sadullapur	Hasanpara	GT5270013	Lalmonirh.	Patgram	Ufarmara
GT3847001	Joypurhat	Sadar	Joypurhat w.d.	GT5270015	Lalmonirh.	Patgram	Islam nagar
GT3847002	Joypurhat	Sadar	Chakbarket	GT5233003	Lalmonirh.	Hatibandha	Archimbichad
GT3847003	Joypurhat	Sadar	Parbatipur	GT6403001	Naogaon	Atrai	Singsara
GT3861004	Joypurhat	Khetlal	Nischintapur	GT6403002	Naogaon	Atrai	Palsha
GT3861005	Joypurhat	Khetlal	Khetlal	GT6403003	Naogaon	Atrai	Bhaproboalia
GT3874006	Joypurhat	Panchbibi	Panchabibi	GT6406004	Naogaon	Badalgachhi	Badalgachhi
GT3874007	Joypurhat	Panchbibi	Dowypur	GT6406005	Naogaon	Badalgachhi	Gopalpur
GT3874008	Joypurhat	Panchbibi		GT6406006	Naogaon	Badalgachhi	Jagadishpur
GT4909002	Kurigram	Chilmari	Ramna	GT6428007	Naogaon	Dhamoirhat	Kashipur

Table S1: Distribution of 350 monitoring wells selected for the study (continued).

WELL ID	DISTRICT	UPAZILA	VILLAGE	WELL ID	DISTRICT	UPAZILA	VILLAGE
GT6428008	Naogaon	Dhamoirhat	Kharampur	GT6915004	Natore	Baraigram	Jalsuka
GT6428009	Naogaon	Dhamoirhat	Jotsrirampur	GT6941001	Natore	Gurudaspur	Patharia
GT6428010	Naogaon	Dhamoirhat	Fatepur	GT6941005	Natore	Gurudaspur	Gurudaspur
GT6428011	Naogaon	Dhamoirhat	Debipur	GT6944006	Natore	Lalpur	Lalpur
GT6447021	Naogaon	Manda	Baddapur	GT6944007	Natore	Lalpur	Bilmaria
GT6450015	Naogaon	Mahadebpur	Kumrail	GT6944009	Natore	Lalpur	Lalpur
GT6450016	Naogaon	Mahadebpur	Enayetpur	GT6944010	Natore	Lalpur	Lalpur
GT6450017	Naogaon	Mahadebpur	Khajur	GT6963012	Natore	Natore sadar	Gobindapur
GT6450018	Naogaon	Mahadebpur	Joanpur	GT6991013	Natore	Singra	Karacmaria
GT6450019	Naogaon	Mahadebpur	Binodpur	GT6991014	Natore	Singra	Pakuria
GT6460025	Naogaon	Sadar	Dubulhati	GT6991015	Natore	Singra	Singra
GT6460026	Naogaon	Sadar	Kirtipur	GT6991016	Natore	Singra	Parsinaga
GT6460027	Naogaon	Sadar	Par naogaon	GT7037001	Nawabg. ²	Gomastapur	Parbatipur
GT6475036	Naogaon	Patnitala	Madhyanagar	GT7037003	Nawabg.	Gomastapur	Khorkadanga
GT6475037	Naogaon	Patnitala	Gaganpur	GT7037004	Nawabg.	Gomastapur	Sahebgram
GT6475038	Naogaon	Patnitala	Shibpurhat	GT7037005	Nawabg.	Gomastapur	Rahanpur
GT6475039	Naogaon	Patnitala	Jamalpur	GT7056006	Nawabg.	Nachole	Nizampur
GT6475040	Naogaon	Patnitala	Nazirpur	GT7056007	Nawabg.	Nachole	Nachole
GT6475041	Naogaon	Patnitala	Nadhuni	GT7056009	Nawabg.	Nachole	Fazilpur
GT6479044	Naogaon	Porsha	Nithpur	GT7056010	Nawabg.	Nachole	Molliqepur
GT6479046	Naogaon	Porsha	Khairpur	GT7066012	Nawabg.	Sadar	Amnura
GT6485047	Naogaon	Raninagar	Abedpur	GT7066013	Nawabg.	Sadar	Chapai polsha
GT6485048	Naogaon	Raninagar	Raninagar	GT7066014	Nawabg.	Sadar	Nawabgonj
GT6486049	Naogaon	Sapahar	Jabai	GT7066015	Nawabg.	Sadar	Debinagar
GT6486051	Naogaon	Sapahar	Nischintapur	GT7066016	Nawabg.	Sadar	Chunakhali
GT6486052	Naogaon	Sapahar	Ramrampur	GT7066018	Nawabg.	Sadar	Ramjibonpur
GT6915002	Natore	Baraigram	Garmati	GT7088020	Nawabg.	Shibganj	Baliadighi

Table S1: Distribution of 350 monitoring wells selected for the study (continued).

WELL ID	DISTRICT	UPAZILA	VILLAGE	WELL ID	DISTRICT	UPAZILA	VILLAGE
GT7088021	Nawabg.	Shibganj	Shibgonj bazar	GT7385026	Nilphama.	Saidpur	Nizbari
GT7088022	Nawabg.	Shibganj	Parkrishnapur	GT7385027	Nilphama.	Saidpur	Bangalipur
GT7088023	Nawabg.	Shibganj	Monkhasa	GT7605001	Pabna	Atgharia	Atghoria
GT7088024	Nawabg.	Shibganj	Roshia	GT7605002	Pabna	Atgharia	Atghoria
GT7088025	Nawabg.	Shibganj	Dubra	GT7605003	Pabna	Atgharia	Durgapur
GT7088029	Nawabg.	Shibganj	Dhaninagar	GT7616004	Pabna	Bera	Nutanpara
GT7312001	Nilphama. ³	Dimla	Thakurgaon	GT7616005	Pabna	Bera	Natiabari
GT7312002	Nilphama.	Dimla	Khogakharibari	GT7616006	Pabna	Bera	Talimnagar
GT7312003	Nilphama.	Dimla	Ramdanga	GT7616007	Pabna	Bera	Horidebpur
GT7312004	Nilphama.	Dimla	Khalishachapa	GT7616008	Pabna	Bera	Natunmirpur
GT7312005	Nilphama.	Dimla	North jhunagac	GT7616009	Pabna	Bera	Bijoygonj
GT7312006	Nilphama.	Dimla	Uttar goyabari	GT7616010	Pabna	Bera	Bijoygonj
GT7315007	Nilphama.	Domar	Chilahati	GT7616011	Pabna	Bera	Bijoygonj
GT7315008	Nilphama.	Domar	Gomnati	GT7616012	Pabna	Bera	Nolbhanga
GT7315009	Nilphama.	Domar	Mirzagonj	GT7622013	Pabna	Chatmohar	Chatmohor
GT7315010	Nilphama.	Domar	Domar	GT7639017	Pabna	Ishwardi	F.mohamadp
GT7315011	Nilphama.	Domar	Baragacha	GT7639018	Pabna	Ishwardi	Pearpur
GT7315012	Nilphama.	Domar	Kumarbamnia	GT7639019	Pabna	Ishwardi	Sarajhaudia
GT7315013	Nilphama.	Domar	Harinchara	GT7639020	Pabna	Ishwardi	Sarajhaudia
GT7315014	Nilphama.	Domar	Domar	GT7655022	Pabna	Sadar	Atuadakhnpar
GT7336016	Nilphama.	Jaldhaka	Balagram	GT7655025	Pabna	Sadar	Daponia
GT7336017	Nilphama.	Jaldhaka	Jaldhaka	GT7655026	Pabna	Sadar	Hemayetpur
GT7336018	Nilphama.	Jaldhaka	Kherkatibazer	GT7655027	Pabna	Sadar	Hemayetpur
GT7336019	Nilphama.	Jaldhaka	Kaligonj(golna	GT7683030	Pabna	Sujanagar	Shujanagar
GT7336020	Nilphama.	Jaldhaka	Shalongram	GT7683031	Pabna	Sujanagar	Dulai
GT7345022	Nilphama.	Kishoreganj	Magura	GT7683032	Pabna	Sujanagar	Nayagram
GT7345023	Nilphama.	Kishoreganj	Baravita	GT7683033	Pabna	Sujanagar	Satbaria

Table S1: Distribution of 350 monitoring wells selected for the study (continued).

WELL ID	DISTRICT	UPAZILA	VILLAGE	WELL ID	DISTRICT	UPAZILA	VILLAGE
GT7364025	Nilphama.	Sadar	Nilphamari rly	GT8549006	Rangpur	Sadar	Gangachara
GT7683034	Pabna	Sujanagar	Satbaria	GT8549007	Rangpur	Sadar	Jafarganj
GT7683035	Pabna	Sujanagar	Satbaria	GT8558008	Rangpur	Mithapukur	Mithapukur
GT7704001	Panchag. ⁴	Atwari	Puratonatwari	GT8558009	Rangpur	Mithapukur	Chuhat
GT7704002	Panchag.	Atwari	Tarai	GT8558010	Rangpur	Mithapukur	Shantipurbaza
GT7704003	Panchag.	Atwari	Alokhawa	GT8573011	Rangpur	Pirgachha	Pirgacha
GT7704501	Panchag.	Atwari	Toreya	GT8576012	Rangpur	Pirganj	Pirganj
GT7704502	Panchag.	Atwari	Jugikata	GT8576013	Rangpur	Pirganj	Baradarga
GT7725004	Panchag.	Boda	Tasherpara	GT8592014	Rangpur	Taraganj	Fazilpur
GT7725005	Panchag.	Boda	Boda bazar	GT8811001	Sirajganj	Belkuchi	Shrenagar
GT7725006	Panchag.	Boda	Sakowa	GT8811002	Sirajganj	Belkuchi	Chala
GT7725008	Panchag.	Boda	Maraya colony	GT8827003	Sirajganj	Chauhali	Betil-hatkhola
GT7734009	Panchag.	Debiganj	Kalupir	GT8844005	Sirajganj	Kamrkhanda	Kamarkhanda
GT7734010	Panchag.	Debiganj	Lakshmirhat	GT8850006	Sirajganj	Kazipur	Roibari
GT7734011	Panchag.	Debiganj	Sonahar	GT8850008	Sirajganj	Kazipur	Ratankandi
GT7734012	Panchag.	Debiganj	Debiganj	GT8861009	Sirajganj	Royganj	Raygonj
GT7734013	Panchag.	Debiganj	Tokrabasha	GT8861010	Sirajganj	Royganj	Solonga
GT7773014	Panchag.	Sadar	Jagdal	GT8861011	Sirajganj	Royganj	Chandikona
GT7773015	Panchag.	Sadar	Bodinajot	GT8867012	Sirajganj	Shahjadpur	Dariapur
GT7773016	Panchag.	Sadar	Panchagarh	GT8867013	Sirajganj	Shahjadpur	Kashipur
GT7773018	Panchag.	Sadar	Dafadarpara	GT8878014	Sirajganj	Sadar	Sirajganj
GT7790020	Panchag.	Tentulia	Burabarihat	GT8878015	Sirajganj	Sadar	Harina
GT7790021	Panchag.	Tentulia	Bangla bandh	GT8878016	Sirajganj	Sadar	New bogara
GT7790022	Panchag.	Tentulia	Shalbahan	GT8878017	Sirajganj	Sadar	Daulatpur
GT7790023	Panchag.	Tentulia	Tentulia	GT8878018	Sirajganj	Sadar	Ditpuralal
GT8503001	Rangpur	Badarganj	Badarganj	GT8878019	Sirajganj	Sadar	Sialkoal
GT8527003	Rangpur	Gangachara	Lalchandpur	GT8878020	Sirajganj	Sadar	Ponsosuratia

Table S1: Distribution of 350 monitoring wells selected for the study (continued).

WELL ID	DISTRICT	UPAZILA	VILLAGE	WELL ID	DISTRICT	UPAZILA	VILLAGE
GT8549005	Rangpur	Sadar	Nababganj	GT9482503	Thakurg.	Pirganj	Tanshia
GT8889022	Sirajganj	Tarash	Nimgachi	GT9486011	Thakurg.	Ranisankail	Chandnchaha
GT8889023	Sirajganj	Tarash	Gunta	GT9486012	Thakurg.	Ranisankail	Ranisankail
GT8894024	Sirajganj	Ullah para	Ullapara	GT9486014	Thakurg.	Ranisankail	Ranisankail
GT8894025	Sirajganj	Ullah para	Charmohanpur	GT9494015	Thakurg.	Sadar	Ruheha
GT8894026	Sirajganj	Ullah para	Binayekpur	GT9494016	Thakurg.	Sadar	Farabari
GT8894027	Sirajganj	Ullah para	Hatkamrul	GT9494017	Thakurg.	Sadar	Hariharpur
GT9408001	Thakurg. ⁵	Baliadangi	Lahiri	GT9494019	Thakurg.	Sadar	Goryagoplpu
GT9408002	Thakurg.	Baliadangi	Baliadangi	GT9494020	Thakurg.	Sadar	Bhelajan
GT9408003	Thakurg.	Baliadangi	Lalapur	GT9494021	Thakurg.	Sadar	Madhabpur
GT9408501	Thakurg.	Baliadangi	Barabari	GT9494022	Thakurg.	Sadar	Singia
GT9451004	Thakurg.	Haripur	Haripur	GT9494023	Thakurg.	Sadar	Saltahari
GT9451005	Thakurg.	Haripur	Monnatali	GT9494025	Thakurg.	Sadar	Doulatpur
GT9451502	Thakurg.	Haripur	Pahargaon	GT9494027	Thakurg.	Sadar	Khalishakuri
GT9482006	Thakurg.	Pirganj	Saidpur	GT9494028	Thakurg.	Sadar	Singpara
GT9482008	Thakurg.	Pirganj	Chandpur	GT9494029	Thakurg.	Sadar	Thakurgaon
GT9482010	Thakurg.	Pirganj	Pirganj	GT9494030	Thakurg.	Sadar	Kalibari

¹Lalmonirhat; ²Chapai Nawabganj; ³Nilphamari; ⁴Panchagar; ⁵Thakurgaon.

Table S2: MAKESENS trend analysis results for annual maximum groundwater levels.

Well ID	Test Z	Slope	Remarks	Signif. ¹	Well ID	Test Z	Slope	Remarks	Signif.
GT8112001	3.42	0.16	Increasing	S ²	GT8172038	5.79	0.198	Increasing	S
GT8112002	4.38	0.229	Increasing	S	GT8172039	2.35	0.057	Increasing	S
GT8112003	1.44	0.061	Increasing	N ³	GT8172040	6.18	0.240	Increasing	S
GT8122005	5.64	0.189	Increasing	S	GT8182041	5.16	0.127	Increasing	S
GT8125006	4.71	0.063	Increasing	S	GT8182042	5.60	0.263	Increasing	S
GT8125008	5.21	0.101	Increasing	S	GT8194046	6.99	0.236	Increasing	S
GT8125009	4.36	0.173	Increasing	S	GT8194048	6.91	0.369	Increasing	S
GT8125010	1.25	0.013	Increasing	N	GT8194049	7.25	0.256	Increasing	S
GT8125011	4.64	0.166	Increasing	S	GT8194047	3.10	0.257	Increasing	S
GT8125012	-1.82	-0.020	Decreasing	N	GT1006001	5.68	0.086	Increasing	S
GT8131015	5.40	0.364	Increasing	S	GT1006002	3.65	0.033	Increasing	S
GT8134016	5.89	0.245	Increasing	S	GT1006003	5.87	0.066	Increasing	S
GT8134017	6.07	0.114	Increasing	S	GT1020004	-2.86	-0.043	Decreasing	S
GT8134018	3.73	0.150	Increasing	S	GT1020005	0.50	0.006	Increasing	N
GT8134019	6.42	0.447	Increasing	S	GT1020006	5.13	0.057	Increasing	S
GT8134020	5.92	0.165	Increasing	S	GT1020007	3.16	0.027	Increasing	S
GT8134021	4.38	0.079	Increasing	S	GT1027008	-0.08	-0.001	Decreasing	N
GT8134022	5.37	0.127	Increasing	S	GT1033009	4.23	0.110	Increasing	S
GT8134027	3.24	0.053	Increasing	S	GT1040010	-0.08	0.000	Decreasing	N
GT8134028	4.57	0.084	Increasing	S	GT1040011	-1.85	-0.017	Decreasing	N
GT8153030	6.42	0.250	Increasing	S	GT1040012	3.99	0.042	Increasing	S
GT8153031	6.97	0.479	Increasing	S	GT1054013	2.21	0.045	Increasing	S
GT8172032	5.30	0.381	Increasing	S	GT1054014	5.79	0.070	Increasing	S
GT8172033	6.78	0.333	Increasing	S	GT1067015	-3.45	-0.081	Decreasing	S
GT8172035	6.04	0.300	Increasing	S	GT1081016	-5.01	-0.115	Decreasing	S
GT8172036	4.47	0.157	Increasing	S	GT1081017	3.30	0.046	Increasing	S
GT8172037	4.91	0.120	Increasing	S	GT1081018	2.70	0.072	Increasing	S

Table S2: MAKESENS trend analysis results for annual maximum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT1081019	-3.07	-0.030	Decreasing	S	GT2738017	5.95	0.190	Increasing	S
GT1081020	1.10	0.018	Increasing	N	GT2738018	5.32	0.102	Increasing	S
GT1088021	1.15	0.014	Increasing	N	GT2743019	3.59	0.041	Increasing	S
GT1088022	3.30	0.029	Increasing	S	GT2747021	4.88	0.064	Increasing	S
GT1088023	5.02	0.108	Increasing	S	GT2756023	3.30	0.023	Increasing	S
GT1094024	5.02	0.108	Increasing	S	GT2756024	2.98	0.032	Increasing	S
GT1094025	5.39	0.071	Increasing	S	GT2756026	2.95	0.075	Increasing	S
GT1095026	1.62	0.012	Increasing	N	GT2760029	3.51	0.031	Increasing	S
GT1095027	5.58	0.108	Increasing	S	GT2764030	3.80	0.031	Increasing	S
GT2710001	2.51	0.040	Increasing	S	GT2764031	2.86	0.025	Increasing	S
GT2712002	4.59	0.180	Increasing	S	GT2764033	3.46	0.032	Increasing	S
GT2712003	2.06	0.017	Increasing	S	GT2764034	3.45	0.103	Increasing	S
GT2712004	3.62	0.054	Increasing	S	GT2764035	5.88	0.182	Increasing	S
GT2712005	2.70	0.028	Increasing	S	GT2764036	4.27	0.061	Increasing	S
GT2712006	2.07	0.024	Increasing	S	GT2764037	5.38	0.158	Increasing	S
GT2717008	4.59	0.098	Increasing	S	GT2764038	5.45	0.085	Increasing	S
GT2717009	4.59	0.098	Increasing	S	GT2764039	4.36	0.169	Increasing	S
GT2717501	5.77	0.050	Increasing	S	GT2769040	4.10	0.044	Increasing	S
GT2721010	4.67	0.053	Increasing	S	GT2777042	6.21	0.125	Increasing	S
GT2721011	4.17	0.043	Increasing	S	GT2777043	5.86	0.093	Increasing	S
GT2721502	5.40	0.103	Increasing	S	GT3224001	3.18	0.029	Increasing	S
GT2721503	4.51	0.049	Increasing	S	GT3224002	-3.37	-0.044	Decreasing	S
GT2730012	4.15	0.100	Increasing	S	GT3224003	2.67	0.031	Increasing	S
GT2730013	3.66	0.033	Increasing	S	GT3230005	-1.19	-0.007	Decreasing	N
GT2730014	2.64	0.033	Increasing	S	GT3230006	2.95	0.016	Increasing	S
GT2730015	3.40	0.034	Increasing	S	GT3267008	-1.88	-0.025	Decreasing	N
GT2730016	5.40	0.074	Increasing	S	GT3267009	-1.65	-0.016	Decreasing	N

Table S2: MAKESENS trend analysis results for annual maximum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT3282010	2.96	0.043	Increasing	S	GT5233004	2.11	0.019	Increasing	S
GT3282011	2.78	0.023	Increasing	S	GT5239005	-1.40	-0.024	Decreasing	N
GT3288014	2.32	0.020	Increasing	S	GT5239006	3.73	0.023	Increasing	S
GT3288015	2.06	0.017	Increasing	S	GT5239007	4.82	0.042	Increasing	S
GT3291017	0.39	0.002	Increasing	N	GT5239008	5.03	0.041	Increasing	S
GT3291018	1.02	0.017	Increasing	N	GT5255009	3.91	0.045	Increasing	S
GT3282012	4.81	0.058	Increasing	S	GT5255010	3.54	0.020	Increasing	S
GT3230004	3.08	0.025	Increasing	S	GT5255011	4.45	0.039	Increasing	S
GT3230007	6.28	0.097	Increasing	S	GT5255012	4.58	0.067	Increasing	S
GT3282013	-2.22	-0.050	Decreasing	S	GT5270013	1.20	0.008	Increasing	N
GT3847001	4.48	0.041	Increasing	S	GT5270015	0.37	0.004	Increasing	N
GT3847002	3.09	0.190	Increasing	S	GT5233003	1.70	0.027	Increasing	N
GT3847003	5.56	0.170	Increasing	S	GT6403001	4.69	0.149	Increasing	S
GT3861004	6.12	0.137	Increasing	S	GT6403002	5.03	0.056	Increasing	S
GT3861005	5.66	0.085	Increasing	S	GT6403003	0.73	0.028	Increasing	N
GT3874006	5.64	0.105	Increasing	S	GT6406004	3.50	0.064	Increasing	S
GT3874007	3.10	0.062	Increasing	S	GT6406005	5.27	0.120	Increasing	S
GT3874008	3.03	0.077	Increasing	S	GT6406006	3.51	0.183	Increasing	S
GT4909002	5.65	0.070	Increasing	S	GT6428007	6.21	0.179	Increasing	S
GT4952003	1.80	0.016	Increasing	N	GT6428008	1.46	0.015	Increasing	N
GT4952004	-1.25	-0.027	Decreasing	N	GT6428009	4.19	0.050	Increasing	S
GT4952005	1.19	0.006	Increasing	N	GT6428010	3.87	0.060	Increasing	S
GT4961007	1.72	0.012	Increasing	N	GT6428011	5.21	0.155	Increasing	S
GT4994008	2.26	0.018	Increasing	S	GT6447021	5.80	0.094	Increasing	S
GT4994009	4.35	0.055	Increasing	S	GT6450015	5.27	0.074	Increasing	S
GT5233001	0.42	0.002	Increasing	N	GT6450016	4.69	0.082	Increasing	S
GT5233002	3.81	0.026	Increasing	S	GT6450017	7.35	0.163	Increasing	S

Table S2: MAKESENS trend analysis results for annual maximum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT6450018	4.87	0.086	Increasing	S	GT6991013	5.75	0.067	Increasing	S
GT6450019	-1.43	-0.039	Decreasing	N	GT6991014	1.66	0.017	Increasing	N
GT6460025	5.08	0.140	Increasing	S	GT6991015	2.84	0.069	Increasing	S
GT6460026	4.21	0.073	Increasing	S	GT6991016	1.30	0.046	Increasing	N
GT6460027	4.20	0.081	Increasing	S	GT7037001	3.70	0.050	Increasing	S
GT6475036	7.07	0.178	Increasing	S	GT7037003	6.41	0.812	Increasing	S
GT6475037	5.52	0.126	Increasing	S	GT7037004	1.12	0.020	Increasing	N
GT6475038	4.56	0.117	Increasing	S	GT7037005	3.52	0.140	Increasing	S
GT6475039	5.82	0.197	Increasing	S	GT7056006	5.95	0.509	Increasing	S
GT6475040	3.29	0.057	Increasing	S	GT7056007	7.05	0.448	Increasing	S
GT6475041	4.54	0.068	Increasing	S	GT7056009	4.30	0.459	Increasing	S
GT6479044	2.27	0.132	Increasing	S	GT7056010	4.97	0.068	Increasing	S
GT6479046	7.10	0.166	Increasing	S	GT7066012	6.31	0.509	Increasing	S
GT6485047	5.90	0.085	Increasing	S	GT7066013	0.68	0.021	Increasing	N
GT6485048	5.02	0.066	Increasing	S	GT7066014	0.00	0.000	No trend	N
GT6486049	4.29	1.140	Increasing	S	GT7066015	5.87	0.071	Increasing	S
GT6486051	4.41	1.229	Increasing	S	GT7066016	3.28	0.040	Increasing	S
GT6486052	3.65	1.608	Increasing	S	GT7066018	2.76	0.071	Increasing	S
GT6915002	4.32	0.150	Increasing	S	GT7088020	1.25	0.056	Increasing	N
GT6915004	3.18	0.083	Increasing	S	GT7088021	-0.81	-0.014	Decreasing	N
GT6941001	3.57	0.200	Increasing	S	GT7088022	0.00	0.000	No trend	N
GT6941005	4.30	0.147	Increasing	S	GT7088023	4.71	0.058	Increasing	S
GT6944006	-0.66	-0.013	Decreasing	N	GT7088024	4.08	0.036	Increasing	S
GT6944007	-1.44	-0.042	Decreasing	N	GT7088025	5.52	0.163	Increasing	S
GT6944009	-1.21	-0.017	Decreasing	N	GT7088029	4.66	0.050	Increasing	S
GT6944010	-0.88	-0.013	Decreasing	N	GT7312001	-2.18	-0.011	Decreasing	S
GT6963012	1.65	0.054	Increasing	N	GT7312002	3.76	0.027	Increasing	S

Table S2: MAKESENS trend analysis results for annual maximum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT7312003	3.44	0.028	Increasing	S	GT7616006	1.22	0.034	Increasing	N
GT7312004	-3.00	-0.033	Decreasing	S	GT7616007	2.66	0.028	Increasing	S
GT7312005	-0.67	-0.005	Decreasing	N	GT7616008	3.32	0.035	Increasing	S
GT7312006	4.35	0.058	Increasing	S	GT7616009	-0.71	-0.015	Decreasing	N
GT7315007	4.54	0.051	Increasing	S	GT7616010	1.80	0.037	Increasing	N
GT7315008	1.02	0.008	Increasing	N	GT7616011	0.16	0.001	Increasing	N
GT7315009	5.27	0.069	Increasing	S	GT7616012	-3.39	-0.031	Decreasing	S
GT7315010	3.54	0.037	Increasing	S	GT7622013	4.45	0.147	Increasing	S
GT7315011	5.53	0.077	Increasing	S	GT7639017	3.23	0.061	Increasing	S
GT7315012	6.48	0.166	Increasing	S	GT7639018	-0.23	-0.003	Decreasing	N
GT7315013	5.58	0.036	Increasing	S	GT7639019	1.62	0.016	Increasing	N
GT7315014	3.18	0.041	Increasing	S	GT7639020	3.76	0.040	Increasing	S
GT7336016	-2.98	-0.025	Decreasing	S	GT7655022	3.73	0.067	Increasing	S
GT7336017	-4.43	-0.051	Decreasing	S	GT7655025	2.23	0.050	Increasing	S
GT7336018	2.37	0.042	Increasing	S	GT7655026	4.39	0.053	Increasing	S
GT7336019	4.30	0.030	Increasing	S	GT7655027	4.07	0.054	Increasing	S
GT7336020	-4.51	-0.043	Decreasing	S	GT7683030	1.66	0.021	Increasing	N
GT7345022	-2.53	-0.022	Decreasing	S	GT7683031	3.05	0.061	Increasing	S
GT7345023	-3.05	-0.035	Decreasing	S	GT7683032	-1.58	-0.061	Decreasing	N
GT7364025	3.76	0.069	Increasing	S	GT7683033	2.55	0.038	Increasing	S
GT7385026	2.03	0.038	Increasing	S	GT7683034	1.89	0.017	Increasing	N
GT7385027	0.24	0.010	Increasing	N	GT7683035	1.39	0.025	Increasing	N
GT7605001	3.76	0.101	Increasing	S	GT7704001	3.64	0.052	Increasing	S
GT7605002	4.53	0.119	Increasing	S	GT7704002	0.34	0.002	Increasing	N
GT7605003	4.72	0.133	Increasing	S	GT7704003	-0.37	-0.006	Decreasing	N
GT7616004	-1.38	-0.011	Decreasing	N	GT7704501	3.07	0.019	Increasing	S
GT7616005	-0.24	-0.004	Decreasing	N	GT7704502	1.83	0.018	Increasing	N

Table S2: MAKESENS trend analysis results for annual maximum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT7725004	1.14	0.021	Increasing	N	GT8576013	1.48	0.044	Increasing	N
GT7725005	1.29	0.022	Increasing	N	GT8592014	2.43	0.026	Increasing	S
GT7725006	1.49	0.029	Increasing	N	GT8811001	-2.42	-0.028	Decreasing	S
GT7725008	3.97	0.027	Increasing	S	GT8811002	0.88	0.008	Increasing	N
GT7734009	3.94	0.090	Increasing	S	GT8827003	0.86	0.025	Increasing	N
GT7734010	0.78	0.012	Increasing	N	GT8844005	3.31	0.029	Increasing	S
GT7734011	5.52	0.063	Increasing	S	GT8850006	0.39	0.001	Increasing	N
GT7734012	1.12	0.003	Increasing	N	GT8850008	5.58	0.057	Increasing	S
GT7734013	2.21	0.039	Increasing	S	GT8861009	1.54	0.036	Increasing	N
GT7773014	2.09	0.022	Increasing	S	GT8861010	2.45	0.026	Increasing	S
GT7773015	-2.17	-0.021	Decreasing	S	GT8861011	4.43	0.102	Increasing	S
GT7773016	0.29	0.003	Increasing	N	GT8867012	4.15	0.052	Increasing	S
GT7773018	5.29	0.065	Increasing	S	GT8867013	2.77	0.063	Increasing	S
GT7790020	-0.62	-0.006	Decreasing	N	GT8878014	0.42	0.003	Increasing	N
GT7790021	-0.08	-0.001	Decreasing	N	GT8878015	3.49	0.035	Increasing	S
GT7790022	1.60	0.012	Increasing	N	GT8878016	3.64	0.023	Increasing	S
GT7790023	5.18	0.039	Increasing	S	GT8878017	4.72	0.062	Increasing	S
GT8503001	2.56	0.026	Increasing	S	GT8878018	0.55	0.003	Increasing	N
GT8527003	2.25	0.024	Increasing	S	GT8878019	1.80	0.015	Increasing	N
GT8549005	-0.88	-0.010	Decreasing	N	GT8878020	2.38	0.071	Increasing	S
GT8549006	-0.93	-0.008	Decreasing	N	GT8889022	-2.18	-0.065	Decreasing	S
GT8549007	0.76	0.005	Increasing	N	GT8889023	5.16	0.048	Increasing	S
GT8558008	-1.41	-0.016	Decreasing	N	GT8894024	1.02	0.013	Increasing	N
GT8558009	1.66	0.012	Increasing	N	GT8894025	4.78	0.061	Increasing	S
GT8558010	2.74	0.053	Increasing	S	GT8894026	1.84	0.026	Increasing	N
GT8573011	-1.69	-0.012	Decreasing	N	GT8894027	2.14	0.084	Increasing	S
GT8576012	3.13	0.064	Increasing	S	GT9408001	0.50	0.006	Increasing	N

Table S2: MAKESENS trend analysis results for annual maximum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT9408002	2.93	0.019	Increasing	S	GT9494015	3.89	0.055	Increasing	S
GT9408003	-0.50	-0.008	Decreasing	N	GT9494016	-0.29	-0.006	Decreasing	N
GT9408501	4.09	0.049	Increasing	S	GT9494017	2.66	0.020	Increasing	S
GT9451004	3.57	0.051	Increasing	S	GT9494019	2.91	0.052	Increasing	S
GT9451005	4.49	0.050	Increasing	S	GT9494020	2.87	0.050	Increasing	S
GT9451502	2.11	0.026	Increasing	S	GT9494021	2.91	0.035	Increasing	S
GT9482006	3.49	0.044	Increasing	S	GT9494022	5.23	0.071	Increasing	S
GT9482008	2.64	0.034	Increasing	S	GT9494023	3.20	0.028	Increasing	S
GT9482010	3.08	0.045	Increasing	S	GT9494025	2.04	0.037	Increasing	S
GT9482503	5.17	0.058	Increasing	S	GT9494027	3.88	0.056	Increasing	S
GT9486011	1.10	0.012	Increasing	N	GT9494028	-1.84	-0.035	Decreasing	N
GT9486012	3.42	0.026	Increasing	S	GT9494029	6.31	0.070	Increasing	S
GT9486014	4.59	0.036	Increasing	S	GT9494030	1.76	0.020	Increasing	N

¹Statistical Significance; ²Significant (p=0.05); ³Not significant (p=0.05).

Table S3: MAKESENS trend analysis results for annual minimum groundwater levels.

Well ID	Test Z	Slope	Remarks	Signif. ¹	Well ID	Test Z	Slope	Remarks	Signif.
GT8112001	2.58	0.055	Increasing	S ²	GT8172038	5.97	0.130	Increasing	S
GT8112002	5.11	0.108	Increasing	S	GT8172039	3.69	0.086	Increasing	S
GT8112003	2.83	0.089	Increasing	S	GT8172040	4.15	0.081	Increasing	S
GT8122005	5.64	0.154	Increasing	S	GT8182041	3.62	0.038	Increasing	S
GT8125006	5.64	0.154	Increasing	S	GT8182042	3.10	0.037	Increasing	S
GT8125008	3.54	0.062	Increasing	S	GT8194046	7.22	0.435	Increasing	S
GT8125009	4.43	0.084	Increasing	S	GT8194048	7.44	0.454	Increasing	S
GT8125010	3.31	0.066	Increasing	S	GT8194049	7.53	0.450	Increasing	S
GT8125011	3.29	0.067	Increasing	S	GT8194047	4.12	0.423	Increasing	S
GT8125012	3.08	0.076	Increasing	S	GT1006001	6.05	0.306	Increasing	S
GT8131015	2.99	0.034	Increasing	S	GT1006002	4.70	0.141	Increasing	S
GT8134016	0.98	0.155	Increasing	N ³	GT1006003	5.85	0.300	Increasing	S
GT8134017	5.11	0.178	Increasing	S	GT1020004	3.58	0.108	Increasing	S
GT8134018	2.66	0.202	Increasing	S	GT1020005	3.33	0.082	Increasing	S
GT8134019	6.89	0.644	Increasing	S	GT1020006	4.33	0.153	Increasing	S
GT8134020	6.50	0.285	Increasing	S	GT1020007	4.80	0.142	Increasing	S
GT8134021	5.09	0.156	Increasing	S	GT1027008	3.28	0.088	Increasing	S
GT8134022	3.75	0.066	Increasing	S	GT1033009	4.61	0.160	Increasing	S
GT8134027	3.68	0.083	Increasing	S	GT1040010	2.60	0.050	Increasing	S
GT8134028	4.22	0.096	Increasing	S	GT1040011	1.64	0.023	Increasing	N
GT8153030	6.08	0.219	Increasing	S	GT1040012	3.97	0.068	Increasing	S
GT8153031	6.02	0.197	Increasing	S	GT1054013	4.56	0.201	Increasing	S
GT8172032	2.94	0.081	Increasing	S	GT1054014	5.40	0.234	Increasing	S
GT8172033	6.39	0.304	Increasing	S	GT1067015	5.32	0.137	Increasing	S
GT8172035	3.52	0.058	Increasing	S	GT1081016	0.86	0.003	Increasing	N
GT8172036	5.23	0.057	Increasing	S	GT1081017	2.43	0.042	Increasing	S
GT8172037	5.27	0.105	Increasing	S	GT1081018	2.30	0.046	Increasing	S

Table S3: MAKESENS trend analysis results for annual minimum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT1081019	1.17	0.020	Increasing	N	GT2738017	4.78	0.139	Increasing	S
GT1081020	2.19	0.027	Increasing	S	GT2738018	5.27	0.086	Increasing	S
GT1088021	3.23	0.082	Increasing	S	GT2743019	1.04	0.020	Increasing	N
GT1088022	3.70	0.163	Increasing	S	GT2747021	4.20	0.072	Increasing	S
GT1088023	4.09	0.063	Increasing	S	GT2756023	0.61	0.005	Increasing	N
GT1094024	4.09	0.063	Increasing	S	GT2756024	5.33	0.088	Increasing	S
GT1094025	4.57	0.100	Increasing	S	GT2756026	4.05	0.041	Increasing	S
GT1095026	3.16	0.043	Increasing	S	GT2760029	0.88	0.006	Increasing	N
GT1095027	4.37	0.096	Increasing	S	GT2764030	1.05	0.013	Increasing	N
GT2710001	3.13	0.108	Increasing	S	GT2764031	0.20	0.005	Increasing	N
GT2712002	4.80	0.055	Increasing	S	GT2764033	0.41	0.005	Increasing	N
GT2712003	3.24	0.066	Increasing	S	GT2764034	1.84	0.010	Increasing	N
GT2712004	1.35	0.012	Increasing	N	GT2764035	5.42	0.083	Increasing	S
GT2712005	1.26	0.008	Increasing	N	GT2764036	2.84	0.049	Increasing	S
GT2712006	1.36	0.017	Increasing	N	GT2764037	2.97	0.037	Increasing	S
GT2717008	2.88	0.028	Increasing	S	GT2764038	4.33	0.119	Increasing	S
GT2717009	2.88	0.028	Increasing	S	GT2764039	3.23	0.027	Increasing	S
GT2717501	4.72	0.095	Increasing	S	GT2769040	4.56	0.099	Increasing	S
GT2721010	2.06	0.021	Increasing	S	GT2777042	3.55	0.022	Increasing	S
GT2721011	1.84	0.004	Increasing	N	GT2777043	5.69	0.132	Increasing	S
GT2721502	3.67	0.016	Increasing	S	GT3224001	5.69	0.132	Increasing	S
GT2721503	0.37	0.001	Increasing	N	GT3224002	0.60	0.013	Increasing	N
GT2730012	3.63	0.047	Increasing	S	GT3224003	1.76	0.010	Increasing	N
GT2730013	-1.31	-0.012	Decreasing	N	GT3230005	0.36	0.004	Increasing	N
GT2730014	1.45	0.007	Increasing	N	GT3230006	4.48	0.049	Increasing	S
GT2730015	1.17	0.013	Increasing	N	GT3267008	0.00	0.000	No trend	N
GT2730016	1.29	0.014	Increasing	N	GT3267009	-0.28	-0.004	Decreasing	N

Table S3: MAKESENS trend analysis results for annual minimum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT3282010	2.78	0.058	Increasing	S	GT5233004	1.88	0.011	Increasing	N
GT3282011	0.00	0.000	No trend	N	GT5239005	-1.69	-0.015	Decreasing	N
GT3288014	-3.36	-0.042	Decreasing	S	GT5239006	0.53	0.005	Increasing	N
GT3288015	1.56	0.023	Increasing	N	GT5239007	1.40	0.009	Increasing	N
GT3291017	1.36	0.021	Increasing	N	GT5239008	2.32	0.012	Increasing	S
GT3291018	1.95	0.025	Increasing	N	GT5255009	-0.26	-0.001	Decreasing	N
GT3282012	2.26	0.025	Increasing	S	GT5255010	-0.78	-0.004	Decreasing	N
GT3230004	3.20	0.040	Increasing	S	GT5255011	0.50	0.003	Increasing	N
GT3230007	6.44	0.257	Increasing	S	GT5255012	3.58	0.044	Increasing	S
GT3282013	2.66	0.047	Increasing	S	GT5270013	3.11	0.023	Increasing	S
GT3847001	5.31	0.170	Increasing	S	GT5270015	1.48	0.013	Increasing	N
GT3847002	2.96	0.106	Increasing	S	GT5233003	4.43	0.049	Increasing	S
GT3847003	4.91	0.117	Increasing	S	GT6403001	1.02	0.020	Increasing	N
GT3861004	6.51	0.244	Increasing	S	GT6403002	3.91	0.051	Increasing	S
GT3861005	4.90	0.209	Increasing	S	GT6403003	2.04	0.047	Increasing	S
GT3874006	5.71	0.109	Increasing	S	GT6406004	3.28	0.103	Increasing	S
GT3874007	4.32	0.156	Increasing	S	GT6406005	3.20	0.073	Increasing	S
GT3874008	1.49	0.023	Increasing	N	GT6406006	4.86	0.153	Increasing	S
GT4909002	0.73	0.007	Increasing	N	GT6428007	6.63	0.384	Increasing	S
GT4952003	4.70	0.056	Increasing	S	GT6428008	2.06	0.053	Increasing	S
GT4952004	1.12	0.014	Increasing	N	GT6428009	5.50	0.160	Increasing	S
GT4952005	-0.36	-0.004	Decreasing	N	GT6428010	4.27	0.187	Increasing	S
GT4961007	0.06	0.001	Increasing	N	GT6428011	5.87	0.359	Increasing	S
GT4994008	1.79	0.008	Increasing	N	GT6447021	4.12	0.107	Increasing	S
GT4994009	2.40	0.020	Increasing	S	GT6450015	5.91	0.200	Increasing	S
GT5233001	-1.22	-0.005	Decreasing	N	GT6450016	4.36	0.121	Increasing	S
GT5233002	1.63	0.012	Increasing	N	GT6450017	7.14	0.304	Increasing	S

Table S3: MAKESENS trend analysis results for annual minimum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT6450018	5.42	0.285	Increasing	S	GT6991013	3.83	0.151	Increasing	S
GT6450019	5.71	0.118	Increasing	S	GT6991014	2.84	0.056	Increasing	S
GT6460025	4.10	0.076	Increasing	S	GT6991015	2.24	0.035	Increasing	S
GT6460026	4.55	0.110	Increasing	S	GT6991016	1.82	0.037	Increasing	N
GT6460027	4.27	0.157	Increasing	S	GT7037001	3.23	0.157	Increasing	S
GT6475036	5.42	0.383	Increasing	S	GT7037003	5.61	0.268	Increasing	S
GT6475037	6.12	0.336	Increasing	S	GT7037004	1.77	0.061	Increasing	N
GT6475038	5.44	0.311	Increasing	S	GT7037005	4.50	0.338	Increasing	S
GT6475039	6.70	0.399	Increasing	S	GT7056006	3.82	0.550	Increasing	S
GT6475040	5.61	0.141	Increasing	S	GT7056007	3.91	0.677	Increasing	S
GT6475041	5.34	0.257	Increasing	S	GT7056009	3.09	0.401	Increasing	S
GT6479044	3.75	0.300	Increasing	S	GT7056010	3.86	0.142	Increasing	S
GT6479046	6.96	0.360	Increasing	S	GT7066012	4.22	0.390	Increasing	S
GT6485047	6.37	0.310	Increasing	S	GT7066013	2.21	0.041	Increasing	S
GT6485048	4.39	0.159	Increasing	S	GT7066014	2.35	0.071	Increasing	S
GT6486049	3.96	0.444	Increasing	S	GT7066015	2.64	0.103	Increasing	S
GT6486051	3.67	0.419	Increasing	S	GT7066016	3.49	0.117	Increasing	S
GT6486052	1.53	0.101	Increasing	N	GT7066018	1.74	0.042	Increasing	N
GT6915002	1.27	0.017	Increasing	N	GT7088020	-0.28	-0.010	Decreasing	N
GT6915004	2.90	0.040	Increasing	S	GT7088021	2.94	0.075	Increasing	S
GT6941001	4.83	0.060	Increasing	S	GT7088022	2.43	0.108	Increasing	S
GT6941005	3.78	0.070	Increasing	S	GT7088023	1.64	0.040	Increasing	N
GT6944006	3.33	0.167	Increasing	S	GT7088024	2.48	0.058	Increasing	S
GT6944007	2.04	0.040	Increasing	S	GT7088025	4.48	0.097	Increasing	S
GT6944009	3.46	0.100	Increasing	S	GT7088029	2.81	0.070	Increasing	S
GT6944010	3.64	0.079	Increasing	S	GT7312001	-1.85	-0.005	Decreasing	N
GT6963012	2.98	0.080	Increasing	S	GT7312002	-1.47	-0.002	Decreasing	N

Table S3: MAKESENS trend analysis results for annual minimum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT7312003	4.45	0.020	Increasing	S	GT7616006	-0.55	-0.007	Decreasing	N
GT7312004	-0.59	-0.001	Decreasing	N	GT7616007	2.18	0.045	Increasing	S
GT7312005	-3.15	-0.008	Decreasing	S	GT7616008	3.62	0.050	Increasing	S
GT7312006	4.38	0.019	Increasing	S	GT7616009	-0.18	0.000	No trend	N
GT7315007	1.96	0.009	Increasing	S	GT7616010	2.76	0.060	Increasing	S
GT7315008	0.77	0.006	Increasing	N	GT7616011	2.00	0.012	Increasing	S
GT7315009	0.21	0.001	Increasing	N	GT7616012	3.24	0.014	Increasing	S
GT7315010	0.37	0.004	Increasing	N	GT7622013	3.51	0.115	Increasing	S
GT7315011	-0.62	-0.002	Decreasing	N	GT7639017	3.47	0.067	Increasing	S
GT7315012	1.87	0.010	Increasing	N	GT7639018	1.03	0.020	Increasing	N
GT7315013	4.15	0.046	Increasing	S	GT7639019	2.58	0.047	Increasing	S
GT7315014	-1.32	-0.007	Decreasing	N	GT7639020	1.62	0.031	Increasing	N
GT7336016	-2.41	-0.009	Decreasing	S	GT7655022	3.88	0.099	Increasing	S
GT7336017	-3.77	-0.017	Decreasing	S	GT7655025	2.93	0.062	Increasing	S
GT7336018	1.21	0.013	Increasing	N	GT7655026	3.30	0.094	Increasing	S
GT7336019	4.48	0.025	Increasing	S	GT7655027	3.28	0.079	Increasing	S
GT7336020	0.09	0.001	Increasing	N	GT7683030	2.69	0.047	Increasing	S
GT7345022	1.66	0.013	Increasing	N	GT7683031	3.85	0.060	Increasing	S
GT7345023	-0.11	-0.001	Decreasing	N	GT7683032	0.36	0.005	Increasing	N
GT7364025	0.44	0.002	Increasing	N	GT7683033	2.23	0.029	Increasing	S
GT7385026	2.16	0.035	Increasing	S	GT7683034	2.12	0.020	Increasing	S
GT7385027	0.42	0.002	Increasing	N	GT7683035	3.05	0.044	Increasing	S
GT7605001	3.50	0.087	Increasing	S	GT7704001	1.92	0.009	Increasing	N
GT7605002	3.90	0.092	Increasing	S	GT7704002	1.72	0.005	Increasing	N
GT7605003	4.24	0.090	Increasing	S	GT7704003	1.12	0.003	Increasing	N
GT7616004	1.53	0.017	Increasing	N	GT7704501	2.34	0.016	Increasing	S
GT7616005	0.60	0.005	Increasing	N	GT7704502	3.37	0.015	Increasing	S

Table S3: MAKESENS trend analysis results for annual minimum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT7725004	-0.24	-0.002	Decreasing	N	GT8576013	0.60	0.006	Increasing	N
GT7725005	0.94	0.008	Increasing	N	GT8592014	3.50	0.045	Increasing	S
GT7725006	2.69	0.028	Increasing	S	GT8811001	1.14	0.022	Increasing	N
GT7725008	3.47	0.043	Increasing	S	GT8811002	3.34	0.090	Increasing	S
GT7734009	2.33	0.022	Increasing	S	GT8827003	0.77	0.011	Increasing	N
GT7734010	0.41	0.006	Increasing	N	GT8844005	1.89	0.036	Increasing	N
GT7734011	2.79	0.025	Increasing	S	GT8850006	2.01	0.035	Increasing	S
GT7734012	2.74	0.054	Increasing	S	GT8850008	1.02	0.019	Increasing	N
GT7734013	1.24	0.006	Increasing	N	GT8861009	3.27	0.138	Increasing	S
GT7773014	0.24	0.008	Increasing	N	GT8861010	2.14	0.050	Increasing	S
GT7773015	2.13	0.007	Increasing	S	GT8861011	3.00	0.058	Increasing	S
GT7773016	3.83	0.035	Increasing	S	GT8867012	0.73	0.020	Increasing	N
GT7773018	2.65	0.009	Increasing	S	GT8867013	1.41	0.022	Increasing	N
GT7790020	-1.28	-0.012	Decreasing	N	GT8878014	0.88	0.019	Increasing	N
GT7790021	6.73	0.045	Increasing	S	GT8878015	2.14	0.048	Increasing	S
GT7790022	1.57	0.013	Increasing	N	GT8878016	2.28	0.035	Increasing	S
GT7790023	0.00	0.000	Increasing	N	GT8878017	-0.06	-0.002	Decreasing	N
GT8503001	-0.41	-0.011	Decreasing	N	GT8878018	1.04	0.022	Increasing	N
GT8527003	3.77	0.024	Increasing	S	GT8878019	1.72	0.042	Increasing	N
GT8549005	-1.80	-0.037	Decreasing	N	GT8878020	2.63	0.102	Increasing	S
GT8549006	0.75	0.008	Increasing	N	GT8889022	-0.54	-0.011	Decreasing	N
GT8549007	-1.30	-0.011	Decreasing	N	GT8889023	5.14	0.058	Increasing	S
GT8558008	0.88	0.014	Increasing	N	GT8894024	0.65	0.014	Increasing	N
GT8558009	2.92	0.030	Increasing	S	GT8894025	0.92	0.023	Increasing	N
GT8558010	3.64	0.020	Increasing	S	GT8894026	0.83	0.020	Increasing	N
GT8573011	0.68	0.004	Increasing	N	GT8894027	3.23	0.078	Increasing	S
GT8576012	1.46	0.009	Increasing	N	GT9408001	2.19	0.010	Increasing	S

Table S3: MAKESENS trend analysis results for annual minimum groundwater levels (continued).

Well ID	Test Z	Slope	Remarks	Signif.	Well ID	Test Z	Slope	Remarks	Signif.
GT9408002	2.02	0.015	Increasing	S	GT9494015	5.71	0.033	Increasing	S
GT9408003	-4.79	-0.021	Decreasing	S	GT9494016	-0.18	0.000	No trend	N
GT9408501	2.97	0.007	Increasing	S	GT9494017	-0.15	-0.001	Decreasing	N
GT9451004	4.37	0.054	Increasing	S	GT9494019	-0.97	-0.004	Decreasing	N
GT9451005	4.29	0.038	Increasing	S	GT9494020	-1.12	-0.003	Decreasing	N
GT9451502	1.80	0.034	Increasing	N	GT9494021	4.06	0.026	Increasing	S
GT9482006	-2.84	-0.012	Decreasing	S	GT9494022	4.35	0.030	Increasing	S
GT9482008	2.57	0.036	Increasing	S	GT9494023	1.12	0.004	Increasing	N
GT9482010	3.35	0.056	Increasing	S	GT9494025	2.46	0.024	Increasing	S
GT9482503	3.99	0.013	Increasing	S	GT9494027	2.96	0.010	Increasing	S
GT9486011	5.06	0.025	Increasing	S	GT9494028	3.42	0.017	Increasing	S
GT9486012	2.24	0.023	Increasing	S	GT9494029	3.67	0.060	Increasing	S
GT9486014	2.48	0.031	Increasing	S	GT9494030	4.15	0.072	Increasing	S

¹Statistical Significance; ²Significant (p=0.05); ³Not significant (p=0.05).

Table S4: List of monitoring well–types based on suction limit (6 m).

Type 1: Wells having groundwater level always below suction limit.

GT8134016	GT8172033	GT1006003	GT3861005	GT6450017	GT6475041	GT7037003
GT8134018	GT8194046	GT1033009	GT6428007	GT6450018	GT6479046	GT7037005
GT8134019	GT8194048	GT1054013	GT6428009	GT6475036	GT6485047	GT7056006
GT8134020	GT8194049	GT1054014	GT6428010	GT6475037	GT6486051	GT7056007
GT8153030	GT8194047	GT1088022	GT6428011	GT6475038	GT6486052	GT7056009
GT8153031	GT1006001	GT3861004	GT6450015	GT6475039	GT3230007	GT7066012

Type 2: Wells having groundwater level always above suction limit.

GT1095026	GT3224003	GT5233001	GT5233003	GT7315014	GT7704501	GT7790021	GT9486011
GT2712005	GT3230005	GT5233002	GT7312001	GT7336016	GT7704502	GT8527003	GT9486012
GT2712006	GT3230006	GT5233004	GT7312002	GT7336017	GT7725004	GT8549005	GT9494016
GT2721010	GT3267008	GT5239005	GT7312003	GT7336018	GT7725005	GT8549006	GT9494017
GT2721011	GT3267009	GT5239006	GT7312004	GT7336019	GT7725008	GT8549007	GT9494021
GT2721503	GT3282011	GT5239007	GT7312005	GT7336020	GT7734010	GT8558008	GT9494023
GT2730013	GT3288015	GT5239008	GT7312006	GT7345022	GT7734011	GT8558009	GT9494028
GT2730014	GT3291017	GT5255009	GT7315007	GT7345023	GT7734012	GT8573011	GT9494030
GT2730015	GT3291018	GT5255010	GT7315008	GT7364025	GT7734013	GT9408001	
GT2756023	GT3230004	GT5255011	GT7315009	GT7385026	GT7773015	GT9408003	
GT2760029	GT4952004	GT5255012	GT7315010	GT7704001	GT7773016	GT9408501	
GT2764031	GT4961007	GT5270013	GT7315011	GT7704002	GT7773018	GT9482006	
GT3224001	GT4994008	GT5270015	GT7315013	GT7704003	GT7790020	GT9482503	

Type 3: Wells having groundwater level below suction limit maintaining an annual cycle.

GT8112001	GT1020005	GT2730016	GT3874007	GT6944006	GT7605002	GT7734009	GT8889022
GT8112002	GT1020006	GT2738017	GT3874008	GT6944007	GT7605003	GT7773014	GT8889023
GT8112003	GT1020007	GT2738018	GT4909002	GT6944009	GT7616004	GT7790022	GT8894024
GT8122005	GT1027008	GT2743019	GT4952003	GT6944010	GT7616005	GT7790023	GT8894025
GT8125006	GT1040010	GT2747021	GT4952005	GT6963012	GT7616006	GT8503001	GT8894026
GT8125008	GT1040011	GT2756024	GT4994009	GT6991013	GT7616007	GT8558010	GT8894027
GT8125009	GT1040012	GT2756026	GT6403001	GT6991014	GT7616008	GT8576012	GT9408002
GT8125010	GT1067015	GT2764030	GT6403002	GT6991015	GT7616009	GT8576013	GT9451004
GT8125011	GT1081016	GT2764033	GT6403003	GT6991016	GT7616010	GT8592014	GT9451005
GT8125012	GT1081017	GT2764034	GT6406004	GT7037001	GT7616011	GT8811001	GT9451502
GT8131015	GT1081018	GT2764035	GT6406005	GT7037004	GT7616012	GT8811002	GT9482008
GT8134017	GT1081019	GT2764036	GT6406006	GT7056010	GT7622013	GT8827003	GT9482010
GT8134021	GT1081020	GT2764037	GT6428008	GT7066013	GT7639017	GT8844005	GT9486014
GT8134022	GT1088021	GT2764038	GT6447021	GT7066014	GT7639018	GT8850006	GT9494015
GT8134027	GT1088023	GT2764039	GT6450016	GT7066015	GT7639019	GT8850008	GT9494019
GT8134028	GT1094024	GT2769040	GT6450019	GT7066016	GT7639020	GT8861009	GT9494020
GT8172032	GT1094025	GT2777042	GT6460025	GT7066018	GT7655022	GT8861010	GT9494022
GT8172035	GT1095027	GT2777043	GT6460026	GT7088020	GT7655025	GT8861011	GT9494025
GT8172036	GT2710001	GT3224002	GT6460027	GT7088021	GT7655026	GT8867012	GT9494027
GT8172037	GT2712002	GT3282010	GT6475040	GT7088022	GT7655027	GT8867013	GT9494029
GT8172038	GT2712003	GT3288014	GT6479044	GT7088023	GT7683030	GT8878014	
GT8172039	GT2712004	GT3282012	GT6485048	GT7088024	GT7683031	GT8878015	
GT8172040	GT2717008	GT3282013	GT6486049	GT7088025	GT7683032	GT8878016	
GT8182041	GT2717009	GT3847001	GT6915002	GT7088029	GT7683033	GT8878017	
GT8182042	GT2717501	GT3847002	GT6915004	GT7315012	GT7683034	GT8878018	
GT1006002	GT2721502	GT3847003	GT6941001	GT7385027	GT7683035	GT8878019	
GT1020004	GT2730012	GT3874006	GT6941005	GT7605001	GT7725006	GT8878020	