

Annexures

Annexure 1.1 (Refer para 1.2.1)

Regional Offices of Central Ground Water Board

- 1.** North West Himalayan Region, Jammu
- 2.** North Himalayan Region, Dharamshala
- 3.** North Western Region, Chandigarh
- 4.** Uttaranchal Region, Dehradun
- 5.** Northern Region, Lucknow
- 6.** Western Region, Jaipur
- 7.** Mid-Eastern Region, Patna
- 8.** Eastern Region, Kolkata
- 9.** North Eastern Region, Guwahati
- 10.** West Central Region, Ahmedabad
- 11.** Central Region, Nagpur
- 12.** North Central Region, Bhopal
- 13.** North Central, Raipur
- 14.** South Eastern Region, Bhubaneswar
- 15.** Southern Region, Hyderabad
- 16.** South Western Region, Bangalore
- 17.** South Eastern Coastal Region, Chennai
- 18.** Kerala Region, Trivandrum

Annexure 2.1 (Refer para 2.1)**Categorization of Blocks/Mandals/Talukas in India (2017)**

Sl. No.	State/ UTs	Total No. of Assessed Units	Safe		Semi-Critical		Critical		Over-Exploited		Saline	
			Nos.	%	Nos.	%	Nos.	%	Nos.	%	Nos.	%
States												
1	Andhra Pradesh	670	501	75	60	9	24	4	45	7	40	6
2	Arunachal Pradesh	11	11	100	0	0	0	0	0	0	0	0
3	Assam	28	28	100	0	0	0	0	0	0	0	0
4	Bihar	534	432	81	72	13	18	3	12	2	0	0
5	Chhattisgarh	146	122	84	22	15	2	1	0	0	0	0
6	Delhi	34	3	9	7	21	2	6	22	65	0	0
7	Goa	12	12	100	0	0	0	0	0	0	0	0
8	Gujarat	248	194	78	11	4	5	2	25	10	13	5
9	Haryana	128	26	20	21	16	3	2	78	61	0	0
10	Himachal Pradesh	8	3	38	1	13	0	0	4	50	0	0
11	Jammu & Kashmir	22	22	100	0	0	0	0	0	0	0	0
12	Jharkhand	260	245	94	10	4	2	1	3	1	0	0
13	Karnataka	176	97	55	26	15	8	5	45	26	0	0
14	Kerala	152	129	78	30	20	2	1	1	1	0	0
15	Madhya Pradesh	313	240	77	44	14	7	2	22	7	0	0
16	Maharashtra	353	271	77	61	17	9	3	11	3	1	0
17	Manipur	9	9	100	0	0	0	0	0	0	0	0
18	Meghalaya	11	11	100	0	0	0	0	0	0	0	0
19	Mizoram	26	26	100	0	0	0	0	0	0	0	0
20	Nagaland	11	11	100	0	0	0	0	0	0	0	0
21	Odisha	314	303	96	5	2	0	0	0	0	6	2
22	Punjab	138	22	16	5	4	2	1	109	79	0	0
23	Rajasthan	295	45	15	29	10	33	11	185	63	3	1
24	Sikkim	4	4	100	0	0	0	0	0	0	0	0
25	Tamil Nadu	1,166	427	37	163	14	79	7	462	40	35	3
26	Telangana	584	278	48	169	29	67	11	70	12	0	0
27	Tripura	59	59	100	0	0	0	0	0	0	0	0
28	Uttar Pradesh*	830	540	65	151	18	48	6	91	11	0	0
29	Uttarakhand	18	13	72	5	28	0	0	0	0	0	0
30	West Bengal **	268	191	71	76	28	1	0	0	0	0	0
	Total	6,828	4,265	62	968	14	312	5	1,158	17	98	1
Union Territories												
1	Andaman & Nicobar	36	35	97	0	0	0	0	0	0	1	3
2	Chandigarh											
3	Dadra & Nagar Haveli	1	0	0	1	100	0	0	0	0	0	0
4	Daman & Diu	2	1	50	0	0	1	50	0	0	0	0
5	Lakshadweep	9	6	67	3	33	0	0	0	0	0	0
6	Puducherry	4	2	50	0	0	0	0	1	25	1	25
	Total UTs	53	45	85	4	8	1	2	1	2	2	4
	Grand Total	6,881	4,310	63	972	14	313	5	1,186	17	100	1

Blocks- Bihar, Chhattisgarh, Haryana, Jharkhand, Kerala, M.P., Manipur, Mizoram, Orissa, Punjab, Rajasthan, Tripura, UP; **Taluks**-Karnataka, Goa, Gujarat, Maharashtra; **Mandal** - Andhra Pradesh, Telangana; **Districts (Valley)** - Arunachal Pradesh, Assam, Himachal Pradesh, Jammu & Kashmir, Meghalaya, Mizoram, Nagaland; **Islands** - Lakshadweep, Andaman & Nicobar Islands; **Firka**-Tamil Nadu; **Region** - Puducherry

UT - Chandigarh, Dadar & Nagar Haveli, Daman & Diu; **Tehsil**-NCT Delhi

*Uttar Pradesh: There are total 820 blocks and ten cities.

** The Ground Water Resources Assessment as on 2013 has been considered for the State of West Bengal.

Annexure 2.2 (Refer para 2.2)

State-Wise Ground Water Resources of India, 2017 (in billion cubic meter)

Sl. No.	States / UTs	Ground Water Recharge					Total Natural Discharge	Annual Extractable Ground Water Resources	Current Annual Ground Water Extraction				Annual GW Allocation for the Domestic use as on 2025	Net Ground Water Availability for future use	Stage of Ground Water Extraction (%)
		Monsoon Season Recharge from rainfall	Monsoon Season Recharge from other sources	Non-monsoon Season Recharge from rainfall	Non-monsoon Season Recharge from other sources	Total Annual Ground Water Recharge			Irrigation	Industrial	Domestic	Total			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	States														
1	Andhra Pradesh	9.96	5.62	1.21	4.42	21.22	1.07	20.15	7.85	0.14	0.90	8.90	1.48	12.31	44.15
2	Arunachal Pradesh	1.89	0.18	0.95	0.01	3.02	0.36	2.67	0	0	0.01	0.01	0.03	2.64	0.28
3	Assam	20.22	0.43	7.28	0.74	28.67	4.42	214.26	1.97	0.06	0.69	2.73	0.79	21.43	11.25
4	Bihar	19.83	3.95	3.14	4.50	31.41	2.43	28.99	10.78	0.66	1.83	13.26	1.83	15.78	45.76
5	Chhattisgarh	7.82	1.86	0.76	1.64	11.57	1	10.57	3.98	0.05	0.67	4.70	0.79	5.76	44.43
6	Delhi	0.13	0.06	0.03	0.11	0.32	0.02	0.30	0.09	0.02	0.24	0.36	0.29	0.02	119.61
7	Goa	0.19	0.03	0.01	0.05	0.27	0.11	0.16	0.02	*	0.03	0.05	0.04	0.07	33.50
8	Gujarat	15.95	3.40	0	3.02	22.37	1.12	21.25	12.84	0.11	0.63	13.58	0.90	7.98	63.89
9	Haryana	3.56	2.55	1.03	3.00	10.15	1.01	9.13	11.53	0.34	0.63	12.50	0.72	0.87	136.91
10	Himachal Pradesh	0.34	0.02	0.11	0.04	0.51	0.05	0.46	0.20	0	0.19	0.39	0.34	0.16	86.37
11	Jammu & Kashmir	1.00	0.50	0.88	0.51	2.89	0.29	2.60	0.20	0.07	0.50	0.76	0.50	1.84	29.47
12	Jharkhand	5.25	0.13	0.41	0.42	6.21	0.52	5.69	0.80	0.22	0.56	1.58	0.56	4.13	27.73
13	Karnataka	6.59	4.36	2.67	3.22	16.84	2.05	14.79	9.39	*	0.95	10.34	1.14	5.41	69.87
14	Kerala	3.91	0.04	0.68	1.13	5.77	0.56	5.21	1.22	0.01	1.44	2.67	1.57	2.41	51.27
15	Madhya Pradesh	27.10	1.51	0.82	6.99	36.42	1.95	34.47	17.43	0.22	1.24	18.88	1.72	15.84	54.76
16	Maharashtra	20.59	2.29	0.53	8.23	31.64	1.74	29.90	15.10	0.003	1.22	16.33	2.28	12.91	54.62
17	Manipur	0.23	0.01	0.17	0.02	0.43	0.04	0.39	0	0	0	0.01	0.014	0.34	1.44
18	Meghalaya	1.37	0.01	0.43	0.02	1.83	0.19	1.64	0.03	0	0.01	0.04	0.02	1.59	2.28
19	Mizoram	0.16	0	0.05	0	0.21	0.02	0.19	0	0	0.01	0.01	0.01	0.18	3.82
20	Nagaland	1.65	0.03	0.52	0	2.20	0.22	1.98	0	0	0.02	0.02	0.02	1.96	0.99
21	Odisha	10.53	2.34	1.50	2.37	16.74	1.17	15.57	5.28	0.14	1.15	6.57	1.30	8.85	42.18
22	Punjab	5.54	11.83	1.31	5.25	23.93	2.345	21.58	34.56	0.20	1.01	35.78	1.41	1.09	165.77
23	Rajasthan	9.74	0.78	0.24	2.44	13.21	1.22	11.99	14.85	0	1.92	16.77	2.67	0.88	139.88
24	Sikkim	5.20	0	0.43	0	5.63	4.11	1.52	0	0	0	0	0.01	1.51	0.06
25	Tamil Nadu	6.67	9.41	1.89	2.26	20.22	2.02	18.20	13.06	0	1.67	14.73	1.85	5.66	80.94
26	Telangana	7.56	1.42	1.88	2.76	13.62	1.25	12.37	7.09	*	1.00	8.09	1.39	4.26	65.45
27	Tripura	0.80	0.06	0.40	0.26	1.53	1.29	1.24	0.02	0	0.08	0.10	0.11	1.11	7.88
28	Uttar Pradesh	37.73	11.67	1.59	18.93	69.92	4.60	65.32	40.89	*	4.95	45.84	5.96	20.36	70.18
29	Uttarakhand	1.15	0.93	0.09	0.87	3.04	0.15	2.89	1.30	0.13	0.22	1.64	0.22	1.25	56.83
30	West Bengal**	18.71	1.51	5.26	3.85	29.33	2.77	26.56	10.84	*	1.00	11.84	1.53	14.19	44.60

Sl. No.	States / UTs	Ground Water Recharge				Total Annual Ground Water Recharge	Total Natural Discharge	Annual Extractable Ground Water Resources	Current Annual Ground Water Extraction				Annual GW Allocation for the Domestic use as on 2025	Net Ground Water Availability for future use	Stage of Ground Water Extraction (%)
		Monsoon Season Recharge from rainfall	Season Recharge from other sources	Non-monsoon Season Recharge from rainfall	Season Recharge from other sources				Irrigation	Industrial	Domestic	Total			
	Total States	251.36	66.41	36.30	77.06	431.13	39.09	392.04	221.33	2.38	24.77	248.47	31.52	172.82	63.38
	Union Territories														
1	Andaman & Nicobar	0.35	0	0.02	0	0.37	0.04	0.33	0	0	0.01	0.01	0.01	0.32	2.74
2	Chandigarh	0.02	0.01	0	0.01	0.04	0	0.04	0	*	0.03	0.03	0.03	0	89.00
3	Dadra & Nagar Haveli	0.06	0	0	0.01	0.07	0	0.07	0.01	*	0.01	0.02	0.01	0.04	31.34
4	Daman & Diu	0.02	0	0	0	0.02	0	0.02	0.01	0	0	0.01	0	0	61.40
5	Lakshdweep	0.01	0	0	0	0.01	0.01	0.004	0	0	0.002	0.002	0	0	65.99
6	Puducherry	0.09	0.07	0.02	0.05	0.23	0.02	0.20	0.11	*	0.04	0.15	0.04	0.05	74.33
	Total UTs	0.54	0.08	0.05	0.07	0.73	0.08	0.66	0.13	0	0.10	0.23	0.10	0.43	34.51
	Grand Total	251.90	66.49	36.34	77.13	431.86	39.16	392.70	221.46	2.38	24.87	248.69	31.62	173.25	63.33

Note: *Industrial and domestic draft has not been estimated separately in Goa, Himachal Pradesh, Karnataka, Rajasthan, Tamil Nadu, Uttar Pradesh, Chandigarh, Dadra and Nagar Haveli and Puducherry **The Ground Water Resources Assessment as on 2013 has been considered for the state of West Bengal.

States/UTs having higher stage of extraction than the national average of 63%.

Annexure 2.3 (Refer para 2.4)**Observations wells of CGWB**

Sl. No.	Name of the State/UTs	No of Monitoring Stations for water quality (As on March 2019)
	STATES	
1	Andhra Pradesh	635
2	Arunachal Pradesh	29
3	Assam	389
4	Bihar	729
5	Chhattisgarh	935
6	Delhi	64
7	Goa	93
8	Gujarat	620
9	Haryana	460
10	Himachal Pradesh	114
11	Jammu & Kashmir	266
12	Jharkhand	472
13	Karnataka	1466
14	Kerala	364
15	Madhya Pradesh	1,210
16	Maharashtra	1,719
17	Manipur	0
18	Meghalaya	52
19	Nagaland	25
20	Orissa	1,278
21	Punjab	312
22	Rajasthan	703
23	Tamil Nadu	816
24	Telangana	469
25	Tripura	90
26	Uttar Pradesh	869
27	Uttarakhand	203
28	West Bengal	1,301
	UTs	
1	Andaman & Nicobar	112
2	Chandigarh	16
3	Dadra & Nagar Haveli	18
4	Daman & Diu	14
5	Puducherry	8
	TOTAL	15,851

Annexure 2.4 (Refer para 2.5.1)**State-wise Depth to water Level and Distribution of Percentage of Wells for the Period of November 2018**

Sl. No.	Name of State	No. of wells analysed	Depth to Water Level (mbgl)		Number & Percentage of Wells Showing Depth to Water Level (mbgl) in the Range of											
					0-2		2-5		5-10		10-20		20-40		> 40	
			Min	Max	No	%	No	%	No	%	No	%	No	%	No	%
1	Andaman & Nicobar Islands	102	0.10	6.49	91	89.22	10	9.80	1	1.0	0	0.00	0	0.00	0	0.00
2	Andhra Pradesh	730	0.00	44.27	219	30.00	256	35.07	172	23.6	77	10.55	5	0.68	1	0.14
3	Arunachal Pradesh	10	1.37	7.89	1	10.00	5	50.00	4	40.00	0	0.00	0	0.00	0	0.00
4	Assam	177	0.16	18.20	64	36.16	92	51.98	17	9.60	4	2.26	0	0.00	0	0.00
5	Bihar	654	0.64	13.50	77	11.77	375	57.34	183	27.98	19	2.91	0	0.00	0	0.00
6	Chandigarh	8	2.66	32.82	0	0.00	3	37.50	0	0.00	2	25.00	3	37.50	0	0.00
7	Chhattisgarh	599	1.12	24.10	19	3.17	365	60.93	191	31.89	20	3.34	4	0.67	0	0.00
8	Dadra & Nagar Haveli	17	1.46	10.78	2	11.76	9	52.94	5	29.41	1	5.88	0	0.00	0	0.00
9	Daman & Diu	11	0.55	6.16	5	45.45	4	36.36	2	18.18	0	0.00	0	0.00	0	0.00
10	Delhi	83	1.02	65.00	2	2.41	17	20.48	20	24.10	22	26.51	14	16.87	8	9.64
11	Goa	30	0.78	13.51	5	16.67	14	46.67	8	26.67	3	10.00	0	0.00	0	0.00
12	Gujarat	755	0.00	60.41	115	15.23	177	23.44	242	32.05	157	20.79	58	7.68	6	0.79
13	Haryana	315	0.04	102.00	37	11.75	52	16.51	70	22.22	89	28.25	51	16.19	16	5.08
14	Himachal Pradesh	103	0.31	31.58	30	29.13	36	34.95	19	18.45	14	13.59	4	3.88	0	0.00
15	Jammu & Kashmir	187	0.27	25.95	38	20.32	103	55.08	35	18.72	8	4.28	3	1.60	0	0.00
16	Jharkhand	281	0.64	15.90	21	7.47	145	51.60	107	38.08	8	2.85	0	0.00	0	0.00
17	Karnataka	1,380	0.05	30.70	220	15.94	482	34.93	499	36.16	165	11.96	14	1.01	0	0.00
18	Kerala	1,462	0.10	33.05	263	17.99	445	30.44	602	41.18	141	9.64	11	0.75	0	0.00
19	Madhya Pradesh	1,331	0.00	45.62	74	5.56	395	29.68	571	42.90	256	19.23	34	2.55	1	0.08
20	Maharashtra	1,659	0.01	50.80	180	10.85	571	34.42	586	35.32	282	17.00	39	2.35	1	0.06
21	Meghalaya	23	0.12	4.73	10	43.48	13	56.52	0	0.00	0	0.00	0	0.00	0	0.00
22	Nagaland	3	1.55	3.88	1	33.33	2	66.67	0	0.00	0	0.00	0	0.00	0	0.00
23	Odisha	1,290	0.00	13.69	420	32.56	698	54.11	165	12.79	7	0.54	0	0.00	0	0.00
24	Puducherry	4	1.31	2.85	3	75.00	1	25.00	0	0.00	0	0.00	0	0.00	0	0.00
25	Punjab	261	0.55	43.31	16	6.13	47	18.01	51	19.54	64	24.52	80	30.65	3	1.15
26	Rajasthan	1,034	0.20	130.20	43	4.16	150	14.51	228	22.05	217	20.99	188	18.18	208	20.12
27	Tamil Nadu	562	0.00	67.40	96	17.08	158	28.11	189	33.63	87	15.48	22	3.91	10	1.78
28	Telangana	567	0.00	99.70	60	10.58	175	30.86	170	29.98	113	19.93	41	7.23	8	1.41
29	Tripura	21	1.17	6.03	8	38.10	12	57.14	1	4.76	0	0.00	0	0.00	0	0.00
30	Uttar Pradesh	737	0.17	40.10	95	12.89	289	39.21	203	27.54	125	16.96	24	3.26	1	0.14
31	Uttarakhand	47	0.82	58.43	7	14.89	17	36.17	12	25.53	5	10.64	4	8.51	2	4.26
32	West Bengal	722	0.22	32.01	76	10.53	363	50.28	167	23.13	97	13.43	19	2.63	0	0.00
	Total	15165			2298	15.15	5481	36.14	4520	29.81	1983	13.08	618	4.08	265	1.7
	Range		0.00	130.20												

Annexure 2.5 (Refer para 2.5.1)**State-wise Decadal Water Level Fluctuation with Mean - November (2008 to 2017) and November 2018**

Sl. No.	Name of State	No. of wells analysed	Range in m				Rise						Fall						Rise		Fall		Wells showing no change	
			Rise		Fall		0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		No	%	No	%	No	%
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	Andhra Pradesh	730	0.01	9.93	0.01	18.37	173	23.7	14	1.9	8	1.1	352	48.2	110	15.1	73	10.0	195	27	535	73	0	0
2	Arunachal Pradesh	10	0.26	0.26	0.1	2.74	1	10.0	0	0.0	0	0.0	8	80.0	1	10.0	0	0.0	1	10	9	90	0	0
3	Assam	176	0.05	3.7	0.01	4.29	80	45.5	5	2.8	0	0.0	81	46.0	7	4.0	2	1.1	85	48	90	51	1	1
4	Bihar	638	0.01	6.68	0	8.4	207	32.4	23	3.6	1	0.2	312	48.9	72	11.3	23	3.6	231	36	407	64	0	0
5	Chandigarh	8	0.03	0.1	0.63	17.79	3	37.5	0	0.0	0	0.0	3	37.5	0	0.0	2	25.0	3	38	5	63	0	0
6	Chhattisgarh	513	0.02	9.68	0.02	17.7	86	16.8	21	4.1	9	1.8	289	56.3	92	17.9	16	3.1	116	23	397	77	0	0
7	Dadra & Nagar Haveli	17	0.34	2.73	0.1	5.26	2	11.8	1	5.9	0	0.0	11	64.7	1	5.9	2	11.8	3	18	14	82	0	0
8	Daman & Diu	11	0.08	2.99			9	81.8	2	18.2	0	0.0	0	0.0	0	0.0	0	0.0	11	100	0	0	0	0
9	Delhi	83	0.05	11.64	0	13.16	19	22.9	1	1.2	3	3.6	23	27.7	20	24.1	17	20.5	23	28	60	72	0	0
10	Goa	30	0.24	6.49	0.06	7.64	7	23.3	0	0.0	2	6.7	15	50.0	4	13.3	2	6.7	9	30	21	70	0	0
11	Gujarat	752	0.01	7.66	0.02	16.09	191	25.4	64	8.5	34	4.5	232	30.9	128	17.0	103	13.7	289	38	463	62	0	0
12	Haryana	305	0.02	15.05	0.01	16.03	90	29.5	12	3.9	6	2.0	109	35.7	51	16.7	37	12.1	108	35	197	65	0	0
13	Himachal Pradesh	110	0.05	10.49	0.06	13.27	74	67.3	6	5.5	10	9.1	18	16.4	1	0.9	1	0.9	90	82	20	18	0	0
14	Jammu & Kashmir	155	0.02	1.92	0.01	2.93	49	31.6	0	0.0	0	0.0	100	64.5	6	3.9	0	0.0	49	32	106	68	0	0
15	Jharkhand	276	0.01	3.28	0.01	4.7	110	39.9	3	1.1	1	0.4	128	46.4	29	10.5	4	1.4	114	41	161	58	1	0
16	Karnataka	1,373	0.01	8.33	0.01	19.23	413	30.1	68	5.0	32	2.3	581	42.3	163	11.9	114	8.3	513	37	858	62	2	0
17	Kerala	1,452	0.01	11.75	0.01	7.15	527	36.3	42	2.9	11	0.8	831	57.2	37	2.5	3	0.2	580	40	871	60	1	0
18	Madhya Pradesh	1,329	0.01	14.17	0.01	17.52	298	22.4	47	3.5	34	2.6	588	44.2	221	16.6	137	10.3	379	29	946	71	4	0
19	Maharashtra	1,633	0.01	15.94	0.01	19.43	330	20.2	49	3.0	21	1.3	763	46.7	263	16.1	207	12.7	400	24	1233	76	0	0
20	Meghalaya	23	0.03	4.26	0.03	1.66	11	47.8	0	0.0	1	4.3	11	47.8	0	0.0	0	0.0	12	52	11	48	0	0
21	Odisha	1,284	0.01	5.3	0	8.72	555	43.2	42	3.3	3	0.2	611	47.6	61	4.8	11	0.9	600	47	683	53	1	0
22	Puducherry	4	0.27	0.66	0.19	0.19	3	75.0	0	0.0	0	0.0	1	25.0	0	0.0	0	0.0	3	75	1	25	0	0
23	Punjab	249	0.04	4.43	0.04	11.69	56	22.5	9	3.6	1	0.4	94	37.8	37	14.9	52	20.9	66	27	183	73	0	0

Sl. No.	Name of State	No. of wells analysed	Range in m				Rise						Fall						Rise		Fall		Wells showing no change	
			Rise		Fall		0-2 m		2-4 m		>4 m		0-2 m		2-4 m		>4 m		No	%	No	%	No	%
			Min	Max	Min	Max	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
24	Rajasthan	618	0.02	17.05	0	17.9	155	25.1	48	7.8	43	7.0	178	28.8	92	14.9	102	16.5	246	40	372	60	0	0
25	Tamil Nadu	550	0.01	14.35	0.03	16.94	166	30.2	52	9.5	37	6.7	161	29.3	77	14.0	57	10.4	255	46	295	54	0	0
26	Telangana	560	0.01	13.6	0.01	17.93	165	29.5	29	5.2	11	2.0	162	28.9	86	15.4	107	19.1	205	37	355	63	0	0
27	Tripura	21	0.01	0.82	0.1	5.42	14	66.7	0	0.0	0	0.0	6	28.6	0	0.0	1	4.8	14	67	7	33	0	0
28	Uttar Pradesh	734	0.01	13.75	0.02	10.89	251	34.2	28	3.8	10	1.4	347	47.3	75	10.2	23	3.1	289	39	445	61	0	0
29	Uttarakhand	41	0.04	8.64	0.03	8.08	23	56.1	2	4.9	1	2.4	10	24.4	1	2.4	4	9.8	26	63	15	37	0	0
30	West Bengal	702	0.01	8.72	0	14.27	165	23.5	27	3.8	8	1.1	351	50.0	81	11.5	68	9.7	200	28	500	71	2	0
Total		14,387					4,233	29.4	595	4.1	287	2.0	6376	44.3	1,716	11.9	1,168	8.1	5,115	36	9,260	64.4	12	0

Annexure 2.6 (Refer para 2.9)**Details of posts for which amended RRs not finalized**

Sl. No.	Post	Date of sending the draft RRs to Ministry
1.	Chairman	06.04.2016
2.	Member	19.04.2017
3.	Regional Director (Scientific)	24.04.2017
4.	Group A (Scientific)	04.01.2017
5.	Artist	04.09.2017
6.	Assistant Chemist	06.04.2016
7.	Office Surveyor	06.04.2016
8.	Sr. Technical Assistant (Hydrometeorologist)	30.06.2017
9.	Surveyor	22.09.2017
10.	Draftsman	20.09.2017
11.	Photographer Grade II	21.09.2017
12.	Library and Information Officer	14.09.2016
13.	Sr. Private Secretary	24.11.2016

Annexure 3.1 (Refer para 3.1)

Mechanism for grant of NOC/ permission for Ground Water Extraction in 13 Self-Regulated States/UTs

Andhra Pradesh

In the year 2002, the Government of Andhra Pradesh (GoAP) had enacted the Andhra Pradesh Water Land & Trees Act (the Act). As required under the Act, GoAP constituted (2002) the AP Water Land & Trees Authority (APWALTA). As per the Act, the functions of the Authority, inter alia, were to (a) promote water conservation, (b) regulate exploitation of ground and surface water, and (c) advise Government on the Legislative and administrative measure to be taken for conservation of natural resources, etc.

The Ground Water & Water Audit (GW&WAD) Department acts as the technical agency in the matters relating to assessment, monitoring and management of Ground Water in the State and also grants permissions for drawl of Ground Water for industrial units. These permissions were termed as feasibility reports. However, APWALTA stated (October 2018) that it is unaware of the feasibility reports issued by GW&WAD.

Chandigarh

Chandigarh Administration notified "the Chandigarh Water Supply Bye-laws, 2011". The Act ibid was amended in May 2016. There was no separate dedicated Department/ Ground Water Management Cell under Chandigarh Administration/Municipal Corporation. In U.T Chandigarh three government agencies issued permission letter/NOC in respect of withdrawal of Ground Water. Municipal Corporation Chandigarh issued permission letters in respect of Urban areas, Chandigarh Engineering Department (Chandigarh Administration) issued permission letter in respect of Rural areas and Land Acquisition Officer issued permission letter in respect of irrigation purposes.

Delhi

Government of National Capital Territory of Delhi (GNCTD), Department of Environment has notified (July 2010) all the districts in National Capital Territory of Delhi as notified area for Ground Water Regulation and Management vide Notification issued under Section 5 of the Environment (Protection) Act 1986.

Directions in said notification provided that if any person, group, authority, association or institution, intended to draw Ground Water through bore well or tube well (both new as well as existing and drawing Ground Water without permission of CGWA) for domestic, commercial, agricultural and/ or industrial uses, he should take prior permission from 'Competent Authority' (i.e. Delhi Jal Board or New Delhi Municipal Corporation as the case may be). Such permission should be obtained through submission of an application to Zonal offices of the Competent Authority in the form specified by the Competent Authority. The notification also constituted Advisory Committee in all districts of Delhi under chairmanship of the Deputy Commissioner (Revenue) of concerned district with the representatives of Delhi Jal Board, Irrigation and Flood Control Department, Environment Department, CGWA and a prominent NGO in the area for Ground Water regulation. The cases for permission should be recommended by the Executive Engineer of the Competent Authority to the Advisory Committee based on ground facts. The cases recommended by the Advisory Committee should be forwarded to the Competent Authority for grant of permission.

Goa

In exercise of the powers conferred by Section 3 of the Goa Ground Water Regulation Act, 2002, the Government constituted (March 2003) 'Goa Ground Water Cell' to implement and to carry out the purpose of the Act. Goa Ground Water Cell functions under the aegis of Water Resource Department (WRD). The Chief Engineer (WRD) is the Ex-Officio Chairman of the Goa Ground Water Cell. The work relating to regulation of the

Ground Water in the State is entrusted to Executive Engineers of two Divisions of the WRD, who are designated as Ground Water Officer (GWO), for North and South Goa and are authorised to issue No Objection Certificate (NOCs) to the Ground Water Consumers.

The application for permission/ registration is received by the respective sub division offices under the jurisdiction of Ex Eng. WRD (Ground Water Officer) in the two districts of Goa. The application is scrutinized and site inspection carried out by the Asst Engineer of the respective Sub division. The detailed report is submitted to the respective Ground Water Officers (North & South). Reports received from Sub Division office are split up as per category and registration of existing open/bore well for domestic/ agriculture well are done at division level. Registration of tankers is issued at division level, registration of existing open/bore well for commercial purpose ie Industry, Infrastructure, Hotel and Commercial is forwarded to Goa Ground Water Cell board for approval. NOC for sinking open well for domestic/agriculture is issued at division level and for commercial purpose to GGWC board for approval.

Himachal Pradesh

a)The applicant seeking NOC has to apply in prescribed form along with required fees and other documents like revenue papers, site plan, memorandum of company, lease deed, HP Pollution Control Board permission, Industries NOC etc (b) site verification/other recommendation of the Groundwater Organization Una (c) HPSGWA issue instructions to concerned Executive Engineers and Gram Panchayats/Municipal Committees whose jurisdiction the area of NOC fall, for issuing public notice for finding if there is any objection n the local people with regard to grant of permit.(d) the Sub Committee of HPSGWA in its meeting discuss all the aspects and recommendations made regarding issuing of NOC.

Jammu & Kashmir

The application for grant of Registration Certificate (RC) for installation of bore/tube well for extraction of Ground Water is received in the office of the Chief Engineer PHE Department. The Chief Engineer forwards it to the Superintending Engineer (SE), Hydraulic & Mechanical Circle with direction to submit a detailed report along with comments and recommendations. The SE Hydraulic and SE Mechanical on receipt of the report and recommendations from the respective Civil and Mechanical Division re-submit the case along with its report and recommendations to the Chief Engineer PHE Department. On receipt of the report and recommendations the Chief Engineer either rejects or grants RC to the user for extraction and exploitation of Ground Water subject to certain condition for which compliance is to be ensured by the Divisional Head (Executive Engineer) of the respective division. Further, the raising of demand and recovery of the water usage charges from the licensee is also among the responsibilities of the Executive Engineer.

Karnataka

The Karnataka Ground Water Authority receives and evaluates the project proposals for Ground Water clearances. On receipt of the proposals for NOC to extract and use of groundwater, are referred to the District Groundwater Committee. The proposal along with the recommendations of the District Ground Water Committee will be placed before the State Level Technical Committee for further decisions regarding issuance of NOC by KGA.

Kerala

The State enacted Kerala Ground Water (Control and Regulation) Act, 2002 and relevant Rules. As per Section 7 of the Act, SGWA is the authority to issue permit/NOC. In Notified areas⁷⁹, conditional permit is being issued for domestic purpose limited to 1000L/Day by District Level Evaluation Committee (DLEC). Though Infrastructure projects, Industrial projects etc., also come under the purview of SGWA, the proposals for packaged drinking water projects alone were received till March 2018 and recommended to SGWA for granting NOC.

⁷⁹ Kerala SGWA has notified five blocks.

Lakshadweep

The Lakshadweep Ground Water (Development and Control) Regulation, 2001 was notified in August 2001 with the intention of developing and controlling extraction of Ground Water in UT of Lakshadweep. Sub section (1) of Section 3 of the Regulation stipulates that, a State level Ground Water Authority has to be constituted for Lakshadweep islands, which will advise the UTL Administration for notifying any island for the Ground Water Regulation and Management and issue permit for extraction of Ground Water. However, no such Ground Water Authority has been constituted in UT of Lakshadweep till date (August 2018) and therefore no island/area has been notified in Lakshadweep. No mechanism has been put in place for grant of NoC in Lakshadweep, as no authority was constituted and no guidelines were framed by LPWD. No application for NoC has been received so far.

Puducherry

Drinking water for individual households is supplied through public water supply system maintained by PWD. As per Government order issued in February 2005, PGWA issues permits to PWD for Ground Water extraction for supply of drinking water to individual households in UTP on priority basis. As per section 8 of the Act, 2002, all wells sunk in the UTP have to be registered including the non-notified areas and renewed every two years. Any user of Ground Water desiring to sink a well for any purpose and for registration of well sunk and for renewal, shall apply to the PGWA in a specified form. PGWA will make such inspection and inquiries to satisfy that there is no objection to grant such permit to sink a well. Permit is then issued by PGWA to the applicant with such condition as required. Applications seeking NOC for industrial and non-agricultural purposes received in SGWU&SC are placed before the Regional Committee constituted (July 2010) by GoP with Director of Agriculture as Chairman, Hydrogeologist, SGWU&SC, Puducherry as Member Secretary and five official members for evaluation. The recommendations of the Committee are forwarded to PGWA for issuance of NOC to the applicants.

Tamil Nadu

Processing of applications by the E.E, PWD-Ground Water Division and should send the field investigation report to S.E of concerned circle. Scrutiny of Report by the S.E and the report with the remarks to be forwarded to CE's Office. Decision on Field Report at C.E office and Post Approval Action Plan.

Telangana

WALTA Authority (Authority constituted under State Water, Land and Tree Act, 2002) in the State is the empowered for granting NOC/Permission in respect of drinking and agricultural bore wells. At Mandal level, MROs and at District level, District Collectors are WALTA authority. The NOC/Permission for drilling agriculture bore well is granted by concerned MRO (Mandal Authority), based on the feasibility given by SGWD. In respect of Industries, the power to grant NOC has been delegated to Ground Water Department (2005).

West Bengal

As per the West Bengal Ground Water Resource (Management Control & Regulation) Act 2005, any user desiring to sink a well/tube well for any purpose, excepting tube well fitted with hand-pump or a well from which extraction or use made without the help of any mechanical or electrical device, have to make an application for permit to extract Ground Water, to the concerned State/District/Corporation level authority, as the case may be.

Annexure 3.2 (Refer para 3.4)**State-wise details of NOC pending and renewal**

Information relating to Pendency in grant of NOC as on 31.03.2019								
Sl. No.	State/UT	Number of Pending Applications						
		Delay up to 31/03/2019	Less than 30 days	31 to 90 days	91 to 181 days	181 to 365 days	More than 1 to 3 year	More than 3 years
1	Andaman and Nicobar islands	13	0	0	13	0	0	0
2	Assam	12	0	0	1	9	2	0
3	Bihar	89	0	0	9	33	47	0
4	Chhattisgarh	863	0	0	259	568	36	0
5	Dadra and Nagar Haveli	27	0	0	8	13	6	0
6	Daman and Diu	11	0	0	0	5	6	0
7	Gujarat	1,978	0	0	247	598	1,133	0
8	Haryana	435	0	0	98	160	177	0
9	Jharkhand	80	0	0	13	49	18	0
10	Madhya Pradesh	248	0	0	39	127	82	0
11	Maharashtra	390	0	0	62	171	157	0
12	Manipur	3	0	0	1	2	0	0
13	Odisha	161	0	0	68	61	32	0
14	Punjab	1,144	0	0	176	328	640	0
15	Rajasthan	4,319	0	0	866	2,383	1,070	0
16	Sikkim	7	0	0	3	3	1	0
17	Tripura	1	0	0	0	1	0	0
18	Uttar Pradesh	552	0	0	256	164	132	0
19	Uttarakhand	425	0	0	64	80	281	0
	Total	10,758	0	0	2,183	4,755	3,820	0

Information relating to Pendency in grant of renewal of NOC as on 31st March 2019															
Sl. No.	State/UTs	Number of Applications Pending													
		Delay up to 31st March 2019													
		Delay up to 31/03/2019	Less than 30 days	31 to 90 days	91 to 180 days	181 to 365 days	More than one year to three years	More than three years							
1	A & N Islands	0	0	0	0	0	0	0							
2	Arunachal Pradesh	Not available													
3	Assam														
4	Bihar														
5	Chhattisgarh	Not available													
6	Dadra & Nagar Haveli														
7	Daman & Diu														
8	Gujarat	Not available													
9	Haryana								21	1	5	3	2	9	1
10	Jharkhand														
11	Madhya Pradesh	16	1	6	4	2	3	0							
12	Maharashtra	15	7	2	3	2	1	0							
13	Manipur	Not available													
14	Meghalaya														
15	Mizoram														
16	Nagaland														
17	Odisha														
18	Punjab	58	2	10	13	14	19	--							
19	Rajasthan	34	0	1	2	5	24	2							
20	Sikkim	0	0	0	0	0	0	0							
21	Tripura	Not available													
22	Uttar Pradesh														
23	Uttarakhand														
	TOTAL	144	11	24	25	25	56	3							

Annexure 3.3 (Refer para 3.10.1)**Violations of conditions of NOCs****(i) Number of Tube Wells**

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Tube well, Bore well, Dug well were constructed in excess of the number prescribed in NOC	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects for which compliance could not be ascertained in Audit (Partially)	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	6	0	6	0	
2. Assam	50	50	0	45	5	
3. Bihar	42	41	4	36	1	5 units not constructed any bore well
4. Chhattisgarh	50	50	2	48	0	
5. Dadra & Nagar Haveli	3	3	0	3	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	42	3	38	1	One project was not completed.
8. Haryana	35	35	6	25	4	
9. Jharkhand	20	16	1	9	6	7 projects yet to be started
10. Madhya Pradesh	50	47	12	30	5	
11. Maharashtra	50	50	0	50	0	
12. Manipur	3	3	0	3	0	
13. Meghalaya	4	4	0	4	0	
14. Nagaland	3	3	1	1	1	M/s Esther Beverages were abstracting Ground Water without obtaining renewal of NOC. Nagaland State Dairy Cooperative Federation Ltd. Yet to complete the boring well. Hence could not be ascertained.
15. Orissa	50	49	8	38	3	Three projects not yet started.
16. Punjab	50	50	4	44	2	
17. Rajasthan	44	40	1	39	0	
18. Tripura	13	13	2	9	2	
19. Uttar Pradesh	40	40	10	26	4	One project was sealed and 3 projects were not operated.
20. Uttarakhand	40	40	0	39	1	One project was not yet operational
TOTAL	595	582	54	493	35	

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Tube well, Bore well, Dug well were constructed in excess of the number prescribed in NOC	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects for which compliance could not be ascertained in Audit (Partially)	
NOTIFIED AREAS						
1. Diu & Daman UT	0	0	0	0	0	
2. Gujarat	0	0	0	0	0	
3. Haryana	30	30	3	26	1	
4. Madhya Pradesh	48	48	0	45	3	
5. Punjab	36	29	3	22	4	
6. Rajasthan	95	95	0	95	0	
7. Uttar Pradesh	0	0	0	0	0	
8. Tamil Nadu	2	2	1	1	0	
9. West Bengal	10	10	0	8	2	One project was not constructed, One project not found during site visit
TOTAL	221	214	7	197	10	
SELF REGULATED AREAS						
1. Andhra Pradesh	42	37	1	18	18	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	60	0	42	18	12 tube wells out of 60 sampled project were not constructed. 06 projects were closed.
4. Goa	40	40	0	40	0	
5. Himachal Pradesh	40	40	26	0	14	
6. Jammu & Kashmir	40	40	1	36	3	
7. Karnataka	60	60	0	53	7	
8. Kerala	40	40	7	24	9	Construction of wells do not require NOC. SGWA is issuing NOC for energized extraction of water from wells already constructed. Some projects are extracting water using additional pumps without Flow meter.
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	6	0	6	0	
11. Tamil Nadu (through Govt. Orders)	50	50	5	45	0	
12. Telangana	40	34	3	22	9	
13. West Bengal	40	35	0	31	4	Project was not started in four

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Tube well, Bore well, Dug well were constructed in excess of the number prescribed in NOC	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects for which compliance could not be ascertained in Audit (Partially)	
						projects; 5 (permits were for dewatering of mining)
TOTAL	472	442	43	317	82	
Grand Total	1,288	1,238	104	1,007	127	

(ii) Installation of Water Meter

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Water meters were not installed as prescribed in NOC	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects for which compliance could not be ascertained in Audit	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	5	4	1	0	
2. Assam	50	50	24	25	1	
3. Bihar	42	42	13	28	1	5 units not constructed any borewell
4. Chhattisgarh	50	50	24	26	0	
5. Dadra & Nagar Haveli	3	3	0	3	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	42	6	28	8	One project was not completed.
8. Haryana	35	35	16	10	9	
9. Jharkhand	20	16	4	6	6	7 projects yet to be started
10. Madhya Pradesh	50	50	27	15	8	
11. Maharashtra	50	50	21	27	2	
12. Manipur	3	3	0	3	0	
13. Meghalaya	4	4	3	1	0	
14. Nagaland	3	3	3	0	0	
15. Orissa	50	49	29	17	3	Three projects not yet started
16. Punjab	50	50	7	38	5	
17. Rajasthan	44	40	14	26	0	
18. Tripura	13	13	8	3	2	

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Water meters were not installed as prescribed in NOC	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects for which compliance could not be ascertained in Audit	
19. Uttar Pradesh	40	40	13	23	4	One project sealed and 3 were not operational
20. Uttarakhand	40	40	1	38	1	One project was not yet operational
TOTAL	595	585	217	318	50	
NOTIFIED AREAS						
1. Diu & Daman UT	0	0	0	0	0	
2. Gujarat	0	0	0	0	0	
3. Haryana	30	28	21	5	2	
4. Madhya Pradesh	48	0	0	0	0	
5. Punjab	36	31	8	19	4	
6. Rajasthan	95	11	11	0	0	
7. Uttar Pradesh	0	0	0	0	0	
8. Tamil Nadu	2	2	2	0	0	
9. West Bengal	10	10	7	1	2	One project was not constructed, One project not found during site visit
TOTAL	221	82	49	25	8	
SELF REGULATED STATES						
1. Andhra Pradesh	42	19	1	0	18	
2. Chandigarh (through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	22	13	6	03	3 tube wells closed/abandoned in due course
4. Goa	40	3	0	3	0	
5. Himachal Pradesh	40	40	15	11	14	
6. Jammu & Kashmir	40	40	20	17	3	
7. Karnataka	60	40	30	10	0	
8. Kerala	40	40	1	19	20	One project not installed water meter in the well permitted as per NOC. Two projects not installed water meter as operation was not started. Seven projects constructed additional wells and 11 projects installed additional pumps in the well-constructed as per NOC.
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	4	0	3	1	

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Water meters were not installed as prescribed in NOC	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects for which compliance could not be ascertained in Audit	
11. Tamil Nadu (through Govt. Orders)	50	50	13	37	0	Out of 37, 3 units not maintained flow meter readings, 19 initially maintained.
12. Telangana	40	2	0	1	1	
13. West Bengal	40	40	19	13	8	In 8 projects the construction and installation of tube wells and sump well not started
TOTAL	472	300	112	120	68	
Grand Total	1,288	967	378	463	126	

(iii) Installation of Piezometer

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects, that did not install Piezometer as prescribed in NOC	Number of Sampled Projects, that Comply with the NOC Condition	Number of Sampled Projects, that Compliance could not be ascertained in Audit	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	6	6	0	0	
2. Assam	50	50	29	20	1	
3. Bihar	42	39	23	15	1	
4. Chhattisgarh	50	48	23	25	0	
5. Dadra & Nagar Haveli	3	3	2	1	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	42	17	19	6	One project was not completed.
8. Haryana	35	35	18	13	4	
9. Jharkhand	20	20	10	3	7	7 projects yet to be started
10. Madhya Pradesh	50	50	16	13	21	
11. Maharashtra	50	50	24	26	0	
12. Manipur	3	3	1	2	0	
13. Meghalaya	4	4	3	1	0	
14. Nagaland	3	2	2	0	0	Installation of piezometer was not accorded in the NOC in respect of Power Grid Corporation of India Ltd. (PGCIL), Mokokchung as the NOC was approved for abstraction of

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects, that did not install Piezometer as prescribed in NOC	Number of Sampled Projects, that Comply with the NOC Condition	Number of Sampled Projects, that Compliance could not be ascertained in Audit	
						groundwater only for residential use.
15. Orissa	50	38	21	14	3	Three projects not yet started
16. Punjab	50	50	24	24	2	
17. Rajasthan	44	43	27	16	0	
18. Tripura	13	13	10	1	2	
19. Uttar Pradesh	40	38	14	20	4	One project sealed and 3 were not operational
20. Uttarakhand	40	33	18	15	0	Out of 18 projects which did not comply the NOC condition, 6 projects had installed less number of piezometers as compared to number mentioned in NOC. 11 projects had not installed any piezometer and one project was not yet operational.
TOTAL	595	567	288	228	51	
NOTIFIED AREAS						
1. Diu & Daman UT	0	0	0	0	0	
2. Gujarat	0	0	0	0	0	
3. Haryana	30	3	2	0	1	
4. Madhya Pradesh	48	0	0	0	0	
5. Punjab	36	10	9	1	0	
6. Rajasthan	95	0	0	0	0	
7. Uttar Pradesh	0	0	0	0	0	
8. Tamil Nadu	2	2	2	0	0	
9. West Bengal	10	0	0	0	0	No provision in the permit for the piezometer
TOTAL	221	15	13	1	1	
SELF REGULATED STATES						
1. Andhra Pradesh	42	36	13	5	18	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	0	0	0	0	
4. Goa	40	0	0	0	0	
5. Himachal Pradesh	40	0	0	0	0	
6. Jammu & Kashmir	40	0	0	0	0	
7. Karnataka	60	5	5	0	0	
8. Kerala	40	0	0	0	0	Installation of Piezometer was not insisted in the NOC. Hence not installed in any project.

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects, that did not install Piezometer as prescribed in NOC	Number of Sampled Projects, that Comply with the NOC Condition	Number of Sampled Projects, that Compliance could not be ascertained in Audit	
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	0	0	0	0	
11. Tamil Nadu (through Govt. Orders)	50	50	15	35	0	Out of 35, 14 units handed over belatedly
12. Telangana	40	36	17	1	18	
13. West Bengal	40	0	0	0	0	As per State Ground Water Act, there was no provision of piezometer in the permits
TOTAL	472	127	50	41	36	
Grand Total	1,288	709	351	270	88	

(iv) Installation of Automatic Water Level Recorder

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which AWLR was not installed	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	1	1	0	0	
2. Assam	50	24	19	4	1	
3. Bihar	42	22	10	11	1	
4. Chhattisgarh	50	28	17	11	0	
5. Dadra & Nagar Haveli	3	3	1	2	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	17	10	4	3	Sugala Limestone Mines, (Six months was not completed.
8. Haryana	35	26	19	3	4	
9. Jharkhand	20	14	5	2	7	7 projects yet to be started
10. Madhya Pradesh	50	30	24	6	0	
11. Maharashtra	50	26	19	7	0	
12. Manipur	3	0	0	0	0	
13. Meghalaya	4	0	0	0	0	
14. Nagaland	3	2	2	0	0	Installation of AWLR was not specified in the NOC of PGCIL
15. Orissa	50	24	18	6	0	
16. Punjab	50	22	15	5	2	
17. Rajasthan	44	18	13	5	0	
18. Tripura	13	0	0	0	0	

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which AWLR was not installed	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
19. Uttar Pradesh	40	26	8	14	4	One project sealed and 3 were not operational
20. Uttarakhand	40	23	13	10	0	Out of 13 projects which did not comply the NOC conditions, four projects had installed less number of AWLR as compared to number mentioned in NOC, eight project had not installed any AWLR and one project was not yet operational.
TOTAL	595	306	194	90	22	
NOTIFIED AREAS						
1. Diu & Daman UT	0	0	0	0	0	
2. Gujarat	0	0	0	0	0	
3. Haryana	30	3	2	0	1	
4. Madhya Pradesh	48	0	0	0	0	
5. Punjab	36	7	7	0	0	
6. Rajasthan	95	0	0	0	0	
7. Uttar Pradesh	0	0	0	0	0	
8. Tamil Nadu	2	0	0	0	0	
9. West Bengal	10	0	0	0	0	No provision
TOTAL	221	10	9	0	1	
SELF REGULATED STATES						
1. Andhra Pradesh	42	26	7	1	18	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	0	0	0	0	
4. Goa	40	0	0	0	0	
5. Himachal Pradesh	40	0	0	0	0	
6. Jammu & Kashmir	40	0	0	0	0	
7. Karnataka	60	0	0	0	0	
8. Kerala	40	0	0	0	0	Installation of AWLR was not insisted in the NOC. Hence not installed in any project.
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	0	0	0	0	
11. Tamil Nadu (through Govt. Orders)	50	0	0	0	0	
12. Telangana	40	0	0	0	0	
13. West Bengal	40	0	0	0	0	As per State Ground Water Act, there

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which AWLR was not installed	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
						was no provision in the permits
TOTAL	472	26	7	1	18	
Grand Total	1,288	342	210	91	41	

(v) Monitoring of Pre and Post Monsoon Ground Water Quality

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Ground Water quality was not monitored twice in a year during pre-monsoon and post monsoon periods	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	6	6	0	0	
2. Assam	50	50	24	25	1	
3. Bihar	42	41	22	17	2	
4. Chhattisgarh	50	50	23	27	0	
5. Dadra & Nagar Haveli	3	3	1	2	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	42	14	5	23	1. Sugala Limestone Mines, (Six months was not completed) 2. Raksha Shakti University, (Unit was not in operation)
8. Haryana	35	35	26	5	4	
9. Jharkhand	20	20	6	7	7	7 projects yet to be started
10. Madhya Pradesh	50	50	22	28	0	
11. Maharashtra	50	50	7	31	12	
12. Manipur	3	3	1	2	0	
13. Meghalaya	4	4	4	0	0	
14. Nagaland	3	2	2	0	0	Monitoring of quality data was not conditioned in the NOC in respect of PGCIL
15. Orissa	50	40	20	17	3	Three projects not started.

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Ground Water quality was not monitored twice in a year during pre-monsoon and post monsoon periods	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
16. Punjab	50	50	26	22	2	
17. Rajasthan	44	44	21	23	0	
18. Tripura	13	13	11	0	2	
19. Uttar Pradesh	40	40	8	28	4	One project sealed and 3 were not operational
20. Uttarakhand	40	34	11	23	0	Out of 11 projects which did not comply the NOC conditions, eight projects were monitoring quality data of water once in year, two were not monitoring quality and one project was not yet operational.
TOTAL	595	577	255	262	60	
SELF REGULATED AREAS						
1. Andhra Pradesh	42	37	6	12	19	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	0	0	0	0	
4. Goa	40	0	0	0	0	
5. Himachal Pradesh	40	0	0	0	0	
6. Jammu & Kashmir	40	0	0	0	0	
7. Karnataka	60	5	5	0	0	
8. Kerala	40	0	0	0	0	Monitoring of quality data was not insisted in the NOC. Hence not monitored by any project.
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	0	0	0	0	
11. Tamil Nadu (through Govt. Orders)	50	0	0	0	0	
12. Telangana	40	40	19	1	20	
13. West Bengal	40	0	0	0	0	As per State Ground Water Act, there was no provision in the permits

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			
			Number of Sampled Projects in which Ground Water quality was not monitored twice in a year during pre-monsoon and post monsoon periods	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	Remarks, if any
TOTAL	472	82	30	13	39	
Grand Total	1,067	659	285	275	99	

(vi) Monitoring of water level data of wells

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			
			Number of Sampled Projects in which Ground Water level data was not monitored through piezometer	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	Remarks, if any
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	6	6	0	0	
2. Assam	50	50	32	17	1	
3. Bihar	42	39	25	12	2	
4. Chhattisgarh	50	50	24	26	0	
5. Dadra & Nagar Haveli	3	3	0	3	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	42	21	16	5	One project was not completed.
8. Haryana	35	35	29	2	4	
9. Jharkhand	20	20	8	5	7	7 projects yet to be started
10. Madhya Pradesh	50	50	28	22	0	
11. Maharashtra	50	50	14	24	12	
12. Manipur	3	3	2	1	0	
13. Meghalaya	4	4	4	0	0	
14. Nagaland	3	2	2	0	0	Monitoring of water level data was not conditioned in the NOC in respect of PGCIL
15. Orissa	50	38	18	17	3	Three project not started
16. Punjab	50	50	28	19	3	
17. Rajasthan	44	44	25	19	0	
18. Tripura	13	13	11	0	2	

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Ground Water level data was not monitored through piezometer	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
19. Uttar Pradesh	40	38	14	20	4	One project sealed and 3 were not operational
20. Uttarakhand	40	33	12	20	1	One project was not operational
TOTAL	595	570	303	223	44	
SELF REGULATED AREAS						
1. Andhra Pradesh	42	23	2	3	18	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	0	0	0	0	
4. Goa	40	0	0	0	0	
5. Himachal Pradesh	40	0	0	0	0	
6. Jammu & Kashmir	40	0	0	0	0	
7. Karnataka	60	5	5	0	0	
8. Kerala	40	0	0	0	0	Monitoring of water Level data was not insisted in the NOC. Hence not monitored by any project.
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	0	0	0	0	
11. Tamil Nadu (through Govt. Orders)	50	50	5	30	15	
12. Telangana	40	40	19	1	20	
13. West Bengal	40	0	0	0	0	As per State Ground Water Act, there was no provision in the permits
TOTAL	472	118	31	34	53	
Grand Total	1,067	688	334	257	97	

(vii) Rain Water Harvesting Structures

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Rain Water Harvesting Structures were not constructed as prescribed in NOC	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	6	4	2	0	
2. Assam	50	50	16	33	1	
3. Bihar	42	42	28	13	1	
4. Chhattisgarh	50	50	23	27	0	
5. Dadra & Nagar Haveli	3	3	2	1	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	35	6	18	11	
8. Haryana	35	35	23	8	4	
9. Jharkhand	20	20	4	9	7	7 projects yet to be started
10. Madhya Pradesh	50	50	16	28	6	
11. Maharashtra	50	50	5	45	0	
12. Manipur	3	3	2	1	0	
13. Meghalaya	4	4	4	0	0	
14. Nagaland	3	3	1	2	0	M/s. Esther Beverages did not comply with the construction of water harvesting for artificial recharge since the issue of NOC.
15. Orissa	50	44	21	20	3	Three projects not started.
16. Punjab	50	39	8	18	13	
17. Rajasthan	44	44	15	29	0	
18. Tripura	13	13	7	4	2	
19. Uttar Pradesh	40	32	12	16	4	One project sealed and 3 were not operational
20. Uttarakhand	40	40	23	17	0	Out of 23 projects which did not comply the NOC condition, 13 projects complied partially and one was not yet operational
TOTAL	595	563	220	291	52	
NOTIFIED AREAS						
1. Diu & Daman UT	0	0	0	0	0	
2. Gujarat	0	0	0	0	0	
3. Haryana	30	27	10	16	1	
4. Madhya Pradesh	48	48	43	2	3	
5. Punjab	36	35	16	10	9	
6. Rajasthan	95	39	35	4	0	
7. Uttar Pradesh	0	0	0	0	0	
8. Tamil Nadu	2	2	2	0	0	

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which Rain Water Harvesting Structures were not constructed as prescribed in NOC	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
9. West Bengal	10	0	0	0	0	In the permit, no provision of artificial recharge of GW. However, there is a provision of rooftop rain water harvesting
TOTAL	221	151	106	32	13	
SELF REGULATED AREAS						
1. Andhra Pradesh	42	35	7	10	18	
2. Chandigarh(through Govt. Orders)	14	3	0	3	0	-
3. Delhi	60	23	7	13	3	
4. Goa	40	0	0	0	0	
5. Himachal Pradesh	40	40	20	6	14	
6. Jammu & Kashmir	40	0	0	0	0	
7. Karnataka	60	39	24	15	0	
8. Kerala	40	0	21	19	0	Specific directions not given in NOC regarding AR. RWH not mentioned in any NOC. 19 Projects. (17 Projects constructed AR structures and 2 projects constructed RWH structure)
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	3	0	2	1	
11. Tamil Nadu (through Govt. Orders)	50	50	09	41	0	
12. Telangana	40	40	15	5	20	
13. West Bengal	40	0	0	0	0	No provision in the permit for Artificial recharge
TOTAL	472	273	103	114	56	
Grand Total	1,288	987	429	437	121	

(viii) Maintenance of rain water recharge structures

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which rain water harvesting structures were not maintained properly	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	0	0	0	0	
2. Assam	50	50	10	23	17	
3. Bihar	42	42	28	13	1	
4. Chhattisgarh	50	50	23	27	0	
5. Dadra & Nagar Haveli	3	3	2	1	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	35	5	30	0	Sugala Limestone Mines, (Six months was not completed.
8. Haryana	35	35	23	8	4	
9. Jharkhand	20	13	2	4	7	7 projects yet to be started
10. Madhya Pradesh	50	50	23	23	4	
11. Maharashtra	50	50	5	45	0	
12. Manipur	3	2	2	0	0	
13. Meghalaya	4	4	4	0	0	
14. Nagaland	3	0	0	0	0	Not conditioned in the NOC in respect of the three units.
15. Orissa	50	20	16	4	0	
16. Punjab	50	39	7	30	2	
17. Rajasthan	44	0	0	0	0	
18. Tripura	13	6	2	2	2	
19. Uttar Pradesh	40	20	11	5	4	One project sealed and 3 were not operational
20. Uttarakhand	40	40	22	17	1	One project was not yet operational
TOTAL	595	459	185	232	42	
NOTIFIED AREAS						
1. Diu & Daman UT	0	0	0	0	0	
2. Gujarat	0	0	0	0	0	
3. Haryana	30	27	16	10	1	
4. Madhya Pradesh	48	0	0	0	0	
5. Punjab	36	35	16	19	0	
6. Rajasthan	95	0	0	0	0	
7. Uttar Pradesh	0	0	0	0	0	
8. Tamil Nadu	2	2	2	0	0	
9. West Bengal	10	0	0	0	0	No provision
TOTAL	221	64	34	29	1	
SELF REGULATED AREAS						
1. Andhra Pradesh	42	35	1	9	25	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	0	0	0	0	
4. Goa	40	0	0	0	0	
5. Himachal Pradesh	40	0	0	0	0	

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			
			Number of Sampled Projects in which rain water harvesting structures were not maintained properly	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	Remarks, if any
6. Jammu & Kashmir	40	0	0	0	0	
7. Karnataka	60	0	0	0	0	
8. Kerala	40	0	0	0	0	No NOC condition on maintenance of AR and RWH. Not done by any project.
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	0	0	0	0	
11. Tamil Nadu (through Govt. Orders)	50	0	0	0	0	
12. Telangana	40	0	0	0	0	
13. West Bengal	40	0	0	0	0	No provision in State GW Act.
TOTAL	472	35	1	9	25	
Grand Total	1,288	558	220	270	68	

(ix) Submission of Compliance Reports

Name of the State/ UTs	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			
			Number of Sampled Projects in which compliance reports were not submitted	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	Remarks, if any
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	6	6	0	0	
2. Assam	50	50	38	11	1	
3. Bihar	42	42	26	10	6	For 6 six units, one year not completed
4. Chhattisgarh	50	50	40	10	0	
5. Dadra & Nagar Haveli	3	3	1	2	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	42	15	13	14	
8. Haryana	35	35	23	3	9	
9. Jharkhand	20	20	8	5	7	7 projects yet to be stated.
10. Madhya Pradesh	50	50	27	20	3	
11. Maharashtra	50	50	13	24	13	
12. Manipur	3	3	2	1	0	
13. Meghalaya	4	4	4	0	0	
14. Nagaland	3	3	3	0	0	Not submitted by the 3 units as of date.
15. Orissa	50	50	33	5	12	

Name of the State/ UTs	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which compliance reports were not submitted	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
16. Punjab	50	50	6	18	26	
17. Rajasthan	44	44	30	11	3	
18. Tripura	13	13	11	0	2	
19. Uttar Pradesh	40	40	15	14	11	One project sealed and 3 were not operational
20. Uttarakhand	40	23	7	16	0	17 projects did not complete one year of operation since the date of issue of NOC till date of site inspection. Out of seven projects which had not complied the NOC conditions, four projects had not submitted any compliance report, two projects had submitted less number of compliance report and one project was not yet operational. Renewal of NOC of 34 projects was not due till date of site inspection.
TOTAL	595	578	308	163	107	
SELF REGULATED AREAS						
1. Andhra Pradesh	42	34	7	8	19	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	0	0	0	0	
4. Goa	40	0	0	0	0	
5. Himachal Pradesh	40	0	0	0	0	
6. Jammu & Kashmir	40	0	0	0	0	
7. Karnataka	60	35	35	0	0	
8. Kerala	40	0	0	0	0	No NOC condition. Not done by any project
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	0	0	0	0	
11. Tamil Nadu (through Govt. Orders)	50	50	47	3	0	
12. Telangana	40	39	20	0	19	
13. West Bengal	40	40	21	10	9	Chemical quality of test report of GW was required to be submitted to SWID office. In 9 projects construction and installation work of tubewell and sump well has not started.
TOTAL	472	198	130	21	47	

Name of the State/ UTs	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects in which compliance reports were not submitted	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
Grand Total	1,067	776	438	184	154	

(x) Withdrawal of yearly Ground Water in excess of prescribed limit

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects that were drawing excess Ground Water (Yearly)	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	6	0	0	6	No log book was maintained by any firm even through it was specified in the NOC.
2. Assam	50	50	0	17	33	One industry was closed and log book was not maintained in 32 projects
3. Bihar	42	41	1	11	29	In 11 units one year period not completed
4. Chhattisgarh	50	50	0	22	28	
5. Dadra & Nagar Haveli	3	3	0	3	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	42	9	30	3	One project was not completed
8. Haryana	35	35	13	22	0	
9. Jharkhand	20	16	0	4	12	
10. Madhya Pradesh	50	50	0	13	37	-
11. Maharashtra	50	50	2	27	21	
12. Manipur	3	3	0	1	2	
13. Meghalaya	4	4	0	0	4	
14. Nagaland	3	3	1	1	1	M/s Esther Beverages were abstracting Ground Water without obtaining renewal of NOC. Nagaland State Dairy Cooperative Federation Ltd. Yet to complete the boring well. Hence could not be ascertained.

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects that were drawing excess Ground Water (Yearly)	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
15. Orissa	50	49	0	11	38	Three project not yet started.
16. Punjab	50	50	0	29	21	
17. Rajasthan	44	44	0	30	14	
18. Tripura	13	13	11	0	2	
19. Uttar Pradesh	40	40	1	24	15	One industry was sealed and 3 were not operational.
20. Uttarakhand	40	40	8	30	2	One project was not operational
TOTAL	595	589	46	275	268	
NOTIFIED AREAS						
1. Diu & Daman UT	0	0	0	0	0	
2. Gujarat	0	0	0	0	0	
3. Haryana	30	18	14	2	2	
4. Madhya Pradesh	48	0	0	0	0	-
5. Punjab	36	25	1	6	18	
6. Rajasthan	95	0	0	0	0	
7. Uttar Pradesh	0	0	0	0	0	
8. Tamil Nadu	2	0	0	0	0	
9. West Bengal	10	10	0	1	9	One project was not constructed, One project not found during site visit
TOTAL	221	53	15	9	29	
SELF REGULATED STATES						
1. Andhra Pradesh	42	18	0	0	18	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	
3. Delhi	60	0	0	0	0	
4. Goa	40	0	0	0	0	Although daily water abstraction condition was there. Out of 40 projects, 24 did not comply with the provision
5. Himachal Pradesh	40	0	0	0	0	
6. Jammu & Kashmir	40	40	0	12	28	
7. Karnataka	60	12	0	3	9	
8. Kerala	40	40	0	12	28	Flow meter reading and logbook reading disagree. Delivery line between pump and flow meter was buried under ground. Additional pumps without water meter was installed in the same well.
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	0	0	0	0	Yearly quantum of withdrawal is not

Name of the State/UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects that were drawing excess Ground Water (Yearly)	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
						fixed in the permits issued by PGWA
11. Tamil Nadu (through Govt. Orders)	50	0	0	0	0	
12. Telangana	40	0	0	0	0	
13. West Bengal	40	35	0	9	26	Project was not started in four projects; Abstraction was not started in one project; (due to non-maintenance of log book)
TOTAL	472	145	0	36	109	
Grand Total	1,288	787	61	320	406	

(xi) Installation of STP/ETP

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects that did not ensure proper recycling and reuse of waste water after adequate treatment	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
NON-NOTIFIED AREAS						
1. Arunachal Pradesh	6	6	3	3	0	
2. Assam	50	50	27	22	1	
3. Bihar	42	42	20	18	4	3 units were under construction
4. Chhattisgarh	50	50	25	25	0	
5. Dadra & Nagar Haveli	3	3	0	3	0	
6. Daman & Diu	0	0	0	0	0	
7. Gujarat	42	41	4	31	6	One project was not completed.
8. Haryana	35	33	18	11	4	
9. Jharkhand	20	20	3	10	7	7 projects yet to be started
10. Madhya Pradesh	50	50	14	33	3	
11. Maharashtra	50	50	3	47	0	
12. Manipur	3	0	0	0	0	
13. Meghalaya	4	4	4	0	0	
14. Nagaland	3	0	0	0	0	Not conditioned in the NOC in respect of the three units.
15. Orissa	50	50	31	16	3	

Name of the State/ UT	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects that did not ensure proper recycling and reuse of waste water after adequate treatment	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
16. Punjab	50	50	16	32	2	
17. Rajasthan	44	44	18	26	0	
18. Tripura	13	13	11	0	2	
19. Uttar Pradesh	40	40	9	27	4	One project sealed and 3 were not operational
20. Uttarakhand	40	40	10	30	0	
TOTAL	595	586	216	334	36	
SELF REGULATED AREAS						
1. Andhra Pradesh	42	35	1	16	18	
2. Chandigarh(through Govt. Orders)	14	0	0	0	0	-
3. Delhi	60	0	0	0	0	
4. Goa	40	0	0	0	0	
5. Himachal Pradesh	40	0	0	0	0	
6. Jammu & Kashmir	40	0	0	0	0	
7. Karnataka	60	5	0	5	0	
8. Kerala	40	0	0	0	0	No NOC condition on recycle and reuse. Not done by any project
9. Lakshadweep	0	0	0	0	0	
10. Puducherry (PGWA)	6	2	0	0	2	
11. Tamil Nadu (through Govt. Orders)	50	0	0	0	0	
12. Telangana	40	37	16	4	17	
13. West Bengal	40	8	4	4	0	
TOTAL	472	87	21	29	37	
Grand Total	1,067	673	237	363	73	

Annexure 3.4 (Refer para 3.10.1)**Violation of conditions specific to Notified Areas****(i) Diameter of the Tube well/ Bore well**

Name of the State	Number of Sampled projects	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects where the diameter of Tube well/ Bore well was in excess of the prescribed limit	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit	
Haryana	30	26	8	16	2	
Madhya Pradesh	48	43	30	10	3	-
Punjab	36	30	1	29	0	
Rajasthan	95	33	1	32	0	
Delhi	60	10	0	7	3	
Tamil Nadu	2	0	0	0	0	
West Bengal	10	10	0	8	2	One project was not constructed, one project not found during site visit
TOTAL	281	152	40	102	10	

(ii) Capacity of the Pump

Name of the State	Number of Sampled project	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects where capacity of the pump was in excess of the prescribed limit	Number of Sampled Projects that complied with the NOC Condition	Number of Sampled Projects in which compliance could not be ascertained in Audit (Partially)	
Haryana	30	26	8	16	2	
Madhya Pradesh	48	43	31	6	6	
Punjab	36	35	4	25	6	
Rajasthan	95	16	14	2	0	
Tamil Nadu	2	0	0	0	0	
West Bengal	10	10	0	8	2	One project was not constructed, One project not found during site visit
TOTAL	221	130	57	57	16	

(iii) Formation encountered to be sent to CGWB, RO

Name of the State	Number of Sampled project	Number of Sampled Projects where condition was specified	Out of projects where such condition was specified			Remarks, if any
			Number of Sampled Projects where formation encountered was not sent to CGWB	Number of Sampled Projects that complied with the condition of NOC	Number of Sampled Projects in which compliance could not be ascertained in Audit (Partially)	
Haryana	30	30	25	2	3	
Madhya Pradesh	48	0	0	0	0	
Punjab	36	36	31	1	4	
Rajasthan	95	0	0	0	0	
Delhi	60	19	19	0	0	
West Bengal	10	0	0	0	0	No provision
TOTAL	279	85	75	3	7	

Annexure 4.1 (Refer para 4.3.4)**Projects Completed/Foreclosed/Rescinded**

Sl. No.	Tender Title	No. of Wells to be constructed/Actually constructed		Financial Progress (in Crore)		Date of Signing of contract	Originally Targeted date of Completion	Date of Completion	Delay
		Exploratory wells	Observatory wells	Total	Amount released				
1.	Tender for Construction of Exploratory and Observation Wells in Haryana	57/54	57/53	12.14	8.33	12.05.17	06.02.18	10.11.18	277
2.	Tender for Construction of Exploratory and Observation Wells in Rajasthan (Package-3)	201/201	100/44	14.67	6.75	21.07.18	04.06.19	04.06.19	Nil
3.	Tender for construction of Exploratory and observation wells in arsenic affected areas of Bihar	40/19	5/1	9.84	3.78	-	04.03.18	13.09.19	558
4.	Tender for Construction of Exploratory and Observation Wells in Arsenic affected areas of West Bengal	67/67	6/6	-	-	25.04.17	19.01.18	15.04.18	86
5.	Tender for construction of exploratory and observation wells in Tamil Nadu	213/192	179/115	22.27	13.43	-	07.08.18	15.03.19	220
6.	Tender for Construction of Exploratory and Observation Wells in Karnataka	342/342	140/126	16.34	14.29	26.02.2018	26.02.18	17.12.18	294
7.	Data Generation in Punjab and Ghazipur (UP) year 2017-18 (WAPCOS Project)	97/97	27/27	32.23	26.81	(September 2017)	31.07.18	31.03.19	243
8.	Tender for Construction of Exploratory and Observation Wells in Rajasthan (Package-2) Project foreclosed by the ministry	101/86	50/21	5.34	3.67	24.04.17	19.01.18	Foreclosed on 22.02.2016	-
9.	Tender for Construction of Exploratory and Observation Wells in Arsenic affected areas of Jharkhand	40/5	9/0	3.76	0	02.05.17	22.01.18	Forfeited performance guarantee after rescinding of contract	-

Ongoing Projects

Sl. No.	Tender Title	No. of Wells to be constructed/Actually constructed		Financial Progress (in Crore)		Date of Signing of contract	Originally Targeted date of Completion	Delay as of November 2019
		Exploratory wells	Observatory wells	Total	Amount released			
1.	Tender for Construction of Exploratory and Observation Wells in Rajasthan (Package-4)	146/128	103/91	38.12	30.14	19.04.17	14.03.18	626
2.	Tender for Construction of Exploratory and Observation Wells in Telangana	206/191	34/33	5.01	3.03	30.11.18	30.08.19	92
3.	Tender for Construction of Exploratory and Observation Wells in Gujarat	227/66	94/16	45.87	9.69	20.06.17	17.03.18	623
4.	Tender for Geophysical Investigation, Exploratory Drilling and Chemical Analysis of Water Samples in 11 districts of Bundelkhand (except Lalitpur and Jhansi)	356/141	158/25	28.89	5.21	25.01.18	20.09.18	436
5.	WAPCOS Project for Hydro geological Data Generation for Aquifer Mapping in 13 States of India ⁸⁰ (Drilling, construction & pumping test of Exploratory wells and Observatory wells) 4 contracts were selected in audit							
	West Bengal	114/105	60/54	24.72	24.08	September 2017	31.07.18	487
	Andhra Pradesh	107/63	57/39	19.12	11.49			
	Tamil Nadu	92/90	46/19	4.50	3.38			
	Uttar Pradesh	114/114	114/114	30.96	30.31			

⁸⁰ Site selection was to be done within 60 days and all 2,169 sites were to be provided. However, CGWB was able to hand over only 1680 sites to WAPCOS/ Contractors as of March 2019.

Annexure 4.2 (Refer para 4.3.7)**Position of action taken by States on Aquifer Management Reports**

Sl. No.	State/UT	Block/districts for which Aquifer Mapping Reports are prepared and placed on website	Audit Observations
1.	Andhra Pradesh	Anantapur, Chittoor , West Godavari (Parts)	GW&WAD has informed that it has taken up water conservation activity like desilting of tanks, construction of check dams etc. Some of the recommendations in the report have been considered in these projects.
2.	Arunachal Pradesh	Parts of Papum Pare & East Kameng	No action was taken on recommendations made in the reports.
3.	Assam	Lakhimpur(Parts), Karbi-Anglong(Parts), Dhemaji(Parts)	Although State Ground Water Coordination Committee had already been constituted by the Government of Assam in 2013, no action was taken on the reports.
4.	Bihar	Parts of Bhojpur, Vaishali(Parts), Begusarai(Parts)	State Government had not taken any action on the recommendations made in the reports.
5.	Chhattisgarh	Korba(Parts), Raigarh(Parts), Balod(Parts)	State Government had not taken any action on the three sampled Aquifer Mapping Reports. DoWR,RD&GR informed (October 2019) that CGWB had provided (in 2019) 15 block-wise Aquifer Mapping Reports to State Government for incorporation of Aquifer mapping data in preparation of Project on 'NaruaGaruaGhuruwa Bari' of the Government of Chhattisgarh. However, the reply was silent about the implementation.
6.	Dadra & Nagar Haveli	D&NH	No action was taken on recommendation made by CGWB
7.	Delhi	All Tehsils	Only one report of NAQUIM relating to Delhi was prepared by CGWB. In the 4th meeting of SGWCC, Chaired by the Principal Secretary (UD), the NAQUIM report was appreciated and it was decided that DJB will identify water deficient areas based on above report and accordingly schemes will be framed. It was also decided that DJB will avoid drawing water from contaminated areas. A Pilot project was decided to be started for desalinating the groundwater. Further action was awaited.
8.	Gujarat	Junagarh, Porbandar	Reports were yet to be approved by the SGWCC.
9.	Haryana	Sirsa,Fatehabad,Karnal,Kurukshetra	The reports were shared with the field offices of Ground Water cell, Haryana and were used in identified location for artificial recharge, assessment of Ground Water resources and identified quality/quantity of distributions of aquifer in the State. However, further action taken by the State on the recommendations in the reports was not available.
10.	Jammu & Kashmir	Kashmir Valley in parts of districts of Anantnag, Badgam, Baramulla	As per recommendations of the NAQUIM study it was decided to take up 1-2 recharge boreholes in the bed of Ranbir Canal for recharge to Ground Water in Kandi areas on experimental

Sl. No.	State/UT	Block/districts for which Aquifer Mapping Reports are prepared and placed on website	Audit Observations
			basis. However, action taken in this regard was not available.
11.	Jharkhand	Ranchi (Parts), Ramgarh, Dhanbad (Parts)	The recommendations were shared with the State administration during the SGWCC meetings held in May 2015 and March 2016. However, further action taken by the State on the recommendations in the reports was not available.
12.	Karnataka	Chikballapur, Tumkur(Parts), Kolar	<p>Aquifer Mapping and Management Report has not been implemented effectively in Karnataka due to following shortcomings:</p> <ul style="list-style-type: none"> • AMP reports submitted by CGWB are in the Power Point Presentation form and not as complete reports except the Pilot Basin Report and Kolar Report. • No funds were received either from CGWB or from the Central Government for implementing the reports in the field. • The map scale was very small and it was difficult to locate the location exactly. CGWB had replied that the locations are marked on the map without field check and that GWD officers are good in the field and can locate the suitable sites on their own. • With shortage of staff and no budget available with the Department for the implementation of this programme, it was stated to be very difficult for GWD to carry out such detailed field checks.
13.	Kerala	Alapuzha, Ernakulum(Parts), Trichur(Parts)	The Secretary, Water Resources Department (WRD) stated that the department was making all out efforts to implement the Ground Water Management Plans in the State wherever such activities were being carried out in the State. The State Ground Water Department uses the aquifer maps, wherever prepared by CGWB, to implement Ground Water Management Plans in the State. However, separate funding is not provided, either by the Government of India or by the State Government, to implement Ground Water Management Plans recommended in the reports of CGWB in this regard. The Department stated (October 2019) that the State Government makes use of these reports in its flag ship project 'HarithaKeralam', an endeavour in achieving water security and environmental protection of the State.
14.	Madhya Pradesh	Ujjain, Dewas, Sagar	MPSEGC (Madhya Pradesh State Employment Guarantee Council) was implementing the Water Conservation and Artificial Recharge interventions proposed in the water stressed block Badnagar, Ujjain district under the technical guidance of CGWB. These

Sl. No.	State/UT	Block/districts for which Aquifer Mapping Reports are prepared and placed on website	Audit Observations
			interventions are proposed on the basis of Aquifer Mapping and Management Plan of Ujjain district prepared by CGWB. This project covers 150 villages with an area of 1,055.10 sq km falling in Chamala and Chambal watershed of Badnagar block. So far, a total of 79 structures have been constructed in Badnagar block.
15.	Maharashtra	Ahmednagar(Parts), Buldhana(Parts), Jalgaon(Parts)	No action was taken by the State Government on the three sampled Aquifer Mapping Reports due to the following reasons: <ul style="list-style-type: none"> • The Aquifer maps were provided on the 1:50,000 scale, which was a broader scale. • The numbers of water conservation structures like percolation tanks, recharge shafts, check dams were suggested. However, the actual field locations were not given. • There was no budgetary provision from CGWB, Nagpur or Central Government during 2013-18, for the implementation of Management Plans.
16.	Manipur	Imphal West (Part)	No action has been taken on the recommendations made in the reports.
17.	Meghalaya	South Garo Hills, East Garo Hills, Ri-Bhoi	No action was taken by the State Government on the three sampled Aquifer Mapping Reports.
18.	Nagaland	Dimapur(Parts)	No action was taken by State Government on the recommendation.
19.	Odisha	Bhadrak, Balasore, Angul(Parts)	A meeting of SGWCC was held in May, 2016. State Government (Directorate of Ground Water Development, Odisha, Bhubaneswar) has not taken any action on the three sampled Aquifer Mapping Reports for implementation on recommendation.
20.	Punjab	Gurdaspur, Ludhiana, Patiala, Sangrur	Audit observed that in the draft report on Aquifer Mapping and Management Plan (2016), in three (districts Gurdaspur, Ludhiana and Sangrur), out of four selected districts, the information on geophysical and geological data were not compiled and analysis of land use pattern were not prepared. In Sangrur, geochemical data was also not compiled. Reply of CGWB in this regard is still awaited (March 2019).
21.	Rajasthan	Alwar, Bhilwara, Jaipur	<ul style="list-style-type: none"> • Recommendations were made that sprinkler irrigation system should be adopted instead of traditional irrigation and cropping pattern be changed from wheat to gram. • Advisories were given during meeting of gram sabha / ratri gram chopal and through advertisements in newspapers for adopting

Sl. No.	State/UT	Block/districts for which Aquifer Mapping Reports are prepared and placed on website	Audit Observations
			sprinkler irrigation system and change of crop pattern from wheat to gram.
22.	Tamil Nadu	Amaravathi, Bhavani, Chennai, Upper Ponnaiyar, Tirupur (Parts)	Out of five NAQUIM reports selected, the State had taken partial action in two cases. WRO department directed the plan formulation wing to give priority for constructing the Artificial Recharge Structure at the recommended site locations after field verification and geo-physical surveys in Chennai aquifer system and Upper Ponnaiyar basin.
23.	Telangana	Nalgonda , Nizamabad districts	The details of action taken on two sampled reports by Government were awaited from the Commissioner, Rural Development Department.
24.	Tripura	South Tripura (Parts)	There was only one report of Aquifer Management Plan for the Parts of South Tripura District. There were four recommendations in the report and all the recommendations were partially implemented.
25.	Uttar Pradesh	Meerut, Bulandshahar, Muzaffarnagar	Government of UP was implementing State Ground Water Mission in the identified areas of Uttar Pradesh having Ground Water problems. The Mission envisaged carrying out comprehensive study on Ground Water resources and implementation of various techniques of water conservation and management in an integrated way on the basis of area-wise micro-planning. DoWR,RD&GR informed (October 2019) that Ground Water Department, UP had utilized the Aquifer Mapping carried out by CGWB in preparation of plans for above purpose. However, specific details were not furnished.
26.	Uttarakhand	Haridwar, Udham Singh Nagar (parts)	No follow up action was undertaken by the State Government on the decision of State Level Ground Water Coordination Committee (SLGWCC). The State Government had no information about recommendations of SLGWCC and action thereon.
27.	West Bengal	Murshidabad (Parts) , Nadia (Parts), North 24 Parganas (Parts)	No recommendation was made by the committee regarding implementation of the Management Plan.

Annexure 4.3 (Refer para 4.5.1)**Details of equipment and software****(₹ in crore)**

Sl. No.	Description of Equipment, Software, Rigs etc. to be procured	No. of items to be procured	Amount allocated	No. of items procured	Expenditure (2012-19)
1	Hydrological Equipment	3,560	52.05	Nil	Nil
2	Scientific equipment (Chemical and Geophysical)	875	58.94	407	15.51
3	Scientific Software	503	12.36	67	4.8
4	Drilling equipment	55	181.82	40	87.54
		Total	305.17		107.85

Annexure 5.1 (Refer para 5.2.1)**Districts having high stage of extraction of Ground Water**

Sl. No.	State/UT	No. of total districts	No. of districts having SoE more than 70 per cent	Percentage of districts having SoE more than 70 per cent	Range of SoE in per cent
1	Andhra Pradesh	13	1	8	89
2	Andaman & Nicobar Islands	3	0	0	-
3	Arunachal Pradesh	16	0	0	-
4	Assam	28	0	0	
5	Bihar	38	2	5	73 to 96
6	Chandigarh	1	1	100	89
7	Chhattisgarh	27	2	7	78 to 83
8	Dadra & Nagar Haveli	1	0	0	-
9	Daman & Diu	2	1	50	91
10	Delhi	12	10	83	84 to 255
11	Goa	2	0	0	-
12	Gujarat	33	7	21	72 to 115
13	Haryana	22	19	86	91 to 244
14	Himachal Pradesh	8	5	63	76 to 385
15	Jammu & Kashmir	22	0	0	-
16	Jharkhand	24	2	8	71 to 76
17	Karnataka	33	12	36	76 to 211
18	Kerala	14	1	7	80
19	Lakshadweep	9	3	33	74 to 83
20	Madhya Pradesh	51	10	20	73 to 127
21	Maharashtra	34	7	21	72 to 88
22	Manipur	10	0	0	-
23	Meghalaya	11	0	0	-
24	Mizoram	8	0	0	-
25	Nagaland	11	0	0	-
26	Odisha	30	0	0	-
27	Puducherry	3	1	33	102
28	Punjab	22	22	100	74 to 260
29	Rajasthan	33	29	88	84 to 293
30	Sikkim	4	0	0	-
31	Tamil Nadu	32	19	59	75 to 172
32	Telangana	31	14	45	71 to 341
33	Tripura	8	0	0	-
34	Uttar Pradesh	75	32	43	71 to 128
35	Uttarakhand	4	0	0	-
36	West Bengal	17	2	12	87 to 92
	TOTAL	692	202	29	

