

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 28.02.2019)

1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. Out of these reservoirs, 37 reservoirs have hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of these 91 reservoirs is 161.993 BCM which is about 63% of the live storage capacity of 257.812 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated **28.02.2019**, live storage available in these reservoirs is **65.536 BCM**, which is **40%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **58.280 BCM** and the average of last 10 years live storage was **62.953 BCM**. Thus, the live storage available in 91 reservoirs **as per 28.02.2019 Bulletin** is **112%** of the live storage of corresponding period of last year and **104%** of storage of average of last ten years.

The overall storage position is **more than the** corresponding period of last year in the country as a whole and is also **more than the** average storage of last ten years during the corresponding period.

2. REGION WISE STORAGE STATUS:

a) NORTHERN REGION

The northern region includes States of Himachal Pradesh, Punjab and Rajasthan. There are 6 reservoirs under CWC monitoring having total live storage capacity of 18.01 BCM. As per Reservoir Storage Bulletin dated **28.02.2019**, the total live storage available in these reservoirs is **9.91 BCM** which is **55%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **32%** and average storage of last ten years during corresponding period was **34%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is also better than the average storage of last ten years during the corresponding period.

b) EASTERN REGION

The Eastern region includes States of Jharkhand, Odisha, West Bengal and Tripura. There are 15 reservoirs under CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated **28.02.2019**, the total live storage available in these reservoirs is **9.61 BCM** which is **51%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **57%** and average storage of last ten years during corresponding period was **50%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year but is more than the average storage of last ten years during the corresponding period.

c) WESTERN REGION

The Western region includes States of Gujarat and Maharashtra. There are 27 reservoirs under CWC monitoring having total live storage capacity of 31.26 BCM. As per Reservoir Storage Bulletin dated **28.02.2019**, the total live storage available in these reservoirs is **8.46 BCM** which is **27%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **39%** and average storage of last ten years during corresponding period was **41%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and is also less than the average storage of last ten years during the corresponding period.

d) CENTRAL REGION

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs under CWC monitoring having total live storage capacity of 42.30 BCM. As per Reservoir Storage Bulletin dated **28.02.2019**, the total live storage available in these reservoirs is **21.90 BCM** which is **52%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **37%** and average storage of last ten years during corresponding period was **42%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year and is also better than the average storage of last ten years during the corresponding period.

e) SOUTHERN REGION

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG (2combined projects in both states), Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs under CWC monitoring having total live storage capacity of 51.59 BCM. As per Reservoir Storage Bulletin dated **28.02.2019**, the total live storage available in these reservoirs is **15.65 BCM** which is **30%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **27%** and average storage of last ten years during corresponding period was **33%** of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year but is less than the average storage of last ten years during the corresponding period.

The region wise and reservoir wise details are given in the following pages of the Bulletin.

BROAD ANALYSIS OF OTHER TABLES IN THE BULLETIN

- Normal storage means average storage of last ten years, Close to normal storage means where shortfall is upto 20% of normal, deficient storage is where shortfall is more than 20% of the normal and upto 60% of the normal, highly deficient means where shortfall is more than 60% of normal.
- In the table on page 4, better than normal storage is available in Indus, Narmada, Mahi and West Flowing Rivers of South . Close to Normal in Ganga, Godavari ,Mahanadi & Neighbouring East Flowing Rivers and Cauvery & neighbouring EFRs. Deficient in Tapi, Sabarmati Rivers of Kutch, and Krishna and Nil in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **33** and reservoirs having storage more than average of last ten years are **36**. The numbers of reservoirs having storage less than 20% with respect to last year is **3** and having storage less than 20% with reference to average of last ten years is **4**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **14** and having storage less than or equal to 50% with reference to average of last ten years are **18**.

Disclaimer: The Data contained in this Bulletin is as received from the State Government/Project Authorities.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

AS ON 28.02.2019

- Central Water Commission is monitoring storage status of 91 important reservoirs spread all over the country, in which 37 reservoirs have hydropower benefit each with installed capacity of more than 60 MW. These reservoirs are identified thus(*) in the enclosed weekly report.
- The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on **28.02.2019** is **65.536** BCM (**40** percent of the live storage capacity at FRL).The current year's storage is nearly **112** percent of last year's storage and **104** percent of the average of last ten years.

3 Region wise storage status:-

REGION (States), (Monitoring No. of Reservoirs)	Filling position of 91 reservoirs w.r.t. FRL								Departure from Normal storage	
	100%	91%-99%	81%-90%	71%-80%	61%-70%	51%-60%	41%-50%	40% & below		
NORTH (HP, Punjab & Rajasthan), (6 Resv.)	-	-	-	1	1	-	2	2	H.P.	55 %
									PUNJAB	159 %
									RAJASTHAN	17 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.)	-	-	-	1	3	4	2	5	JHARKHAND	-30 %
									ODISHA	5 %
									W. BENGAL	-10 %
									TRIPURA	114 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	1	2	4	2	18	GUJARAT	-38 %
									MAH.	-30 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	1	-	1	-	4	1	5	U.P.	-26 %
									UTTARAKHAND	-3 %
									M.P.	46 %
									CHHATISGARH	-2 %
SOUTH (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.)	-	-	-	2	2	6	2	19	AP&TG	-41 %
									A,P	-64 %
									TG	-16 %
									KARNATAKA	7 %
									KERALA	8 %
									T.N.	24 %
Status of 91 reservoirs	0	1	0	6	8	18	9	49		

4 Basin wise storage position:

Better than normal: Indus, Narmada, Mahi and West Flowing Rivers of South.

Close to normal: Ganga, Godavari , Mahanadi & Neighbouring East Flowing Rivers and Cauvery & neighbouring EFRs.

Deficient: Tapi, Sabarmati, Rivers of Kutch and Krishna .

Highly deficient:

- 5 Out of 91 reservoirs, **57** reservoirs reported more than 80% of normal storage & **34** reservoirs reported 80% or below of normal storage. Out of these **34** reservoirs **18** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0	MATATILA	48
ALIYAR	3		
VANIVILAS SAGAR	17		
JAYAKWADI(PAITHON)	19		
GANDHI SAGAR	23		
PENCH (TOTALADOH)	24		
BARNA	25		
TAWA	28		
TILAIYA	33		
BHIMA(UJJANI)	34		
MANIKDOH	34		
SOMASILA	36		
MULA	40		
SHETRANJI	42		
NARAYANPUR	43		
BHADAR	45		
UKAI	48		

16 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
7	5	4

- 6 Out of 37 reservoirs with significant(*) hydropower generation, the storage build up is less than or equal to normal in

20 reservoirs.

NOTE : **Normal:** Average of previous ten years, **Close to normal:** Where shortfall is up to 20% of the normal, **Deficient:** Where shortfall is more than 20% of the normal and up to 60% of the normal, **Highly deficient :** Where shortfall is more than 60% of the normal

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 28.02.2019

NAME OF BASIN	LIVE CAP. AT FRL	THIS YEAR'S STORAGE		LAST YEAR'S STORAGE		LAST 10 YEARS' AVG. STORAGE		% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	9.951	35.42%	11.101	39.51%	11.379	40.50%	-12.55
INDUS	14.730	8.618	58.51%	4.376	29.71%	5.080	34.49%	69.65
NARMADA	21.608	12.324	57.03%	5.300	24.53%	6.963	32.22%	76.99
TAPI	7.394	1.819	24.60%	2.378	32.16%	3.540	47.88%	-48.62
MAHI	4.012	1.875	46.73%	2.016	50.25%	1.871	46.64%	0.21
SABARMATI	0.735	0.117	15.92%	0.198	26.94%	0.227	30.88%	-48.46
RIVERS OF KUTCH	0.887	0.103	11.61%	0.332	37.43%	0.219	24.69%	-52.97
GODAVARI	15.394	5.423	35.23%	5.844	37.96%	5.966	38.76%	-9.10
KRISHNA	32.831	8.006	24.39%	9.384	28.58%	10.146	30.90%	-21.09
MAHANADI & NEIGHBOURING EFRS	13.181	6.887	52.25%	8.479	64.33%	7.591	57.59%	-9.27
CAUVERY & NEIGHBOURING EFRS	8.359	2.811	33.63%	1.770	21.17%	2.862	34.24%	-1.78
WEST FLOWING RIVERS OF SOUTH	14.766	7.602	51.48%	7.102	48.10%	7.109	48.14%	6.93
TOTAL	161.993	65.536		58.280		62.953		
PERCENTAGE								4.10

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 28.02.2019

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
<u>NORTHERN REGION</u>											
<u>HIMACHAL PRADESH</u>											
*1	GOBIND SAGAR(BHAKRA)	512.06	497.15	6.229	3.778	28-02-2019	61	37	38	676	1200
*2	PONG DAM	423.67	409.91	6.157	2.999	28-02-2019	49	26	33	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	521.53	2.344	1.841	28-02-2019	79	20	30	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	272.15	1.711	0.782	27-02-2019	46	52	40	63	140
5	JHAKAM	359.50	347.90	0.132	0.044	27-02-2019	33	34	27	28	-
*6	RANA PRATAP SAGAR	352.81	347.22	1.436	0.470	28-02-2019	33	27	27	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.31	0.821	0.253	28-02-2019	31	47	44	-	-
8	MAITHON	146.3	140.91	0.471	0.193	28-02-2019	41	100	71	342	-
*9	PANCHET HILL	124.97	123.95	0.184	0.136	28-02-2019	74	97	71	\$	80
10	KONAR	425.81	420.99	0.176	0.097	28-02-2019	55	40	64	\$	-
11	TILAIYA	368.81	364.34	0.142	0.016	28-02-2019	11	16	35	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	188.99	5.378	3.017	28-02-2019	56	59	58	153	307
*13	BALIMELA	462.08	456.62	2.676	1.777	28-02-2019	66	16	34	-	360
14	SALANADI	82.30	73.57	0.558	0.299	26-02-2019	54	41	30	42	-
*15	RENGALI	123.50	116.38	3.432	1.288	28-02-2019	38	83	57	3	200
*16	MACHKUND(JALPUT)	838.16	833.63	0.893	0.542	27-02-2019	61	83	64	-	115
*17	UPPER KOLAB	858.00	853.03	0.935	0.504	28-02-2019	54	46	42	89	320
*18	UPPER INDRAVATI	642.00	636.72	1.456	0.914	28-02-2019	63	46	56	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	110.87	0.480	0.097	28-02-2019	20	79	37	227	-
20	KANGSABATI	134.14	126.20	0.914	0.332	27-02-2019	36	62	33	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	89.70	0.312	0.148	27-02-2019	47	68	22	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	92.47	6.615	1.556	28-02-2019	24	31	49	348	300
23	SABARMATI(DHAROI)	189.59	180.65	0.735	0.117	27-02-2019	16	27	31	95	1
*24	KADANA	127.7	121.95	1.472	0.669	27-02-2019	45	48	55	200	120
25	SHETRUNJI	55.53	49.97	0.300	0.051	27-02-2019	17	32	40	36	-
26	BHADAR	107.89	101.63	0.188	0.023	27-02-2019	12	30	27	27	-
27	DAMANAGANGA	79.86	71.75	0.502	0.174	28-02-2019	35	65	62	51	1
28	DANTIWADA	184.1	168.11	0.399	0.029	27-02-2019	7	45	12	45	-
29	PANAM	127.41	124.60	0.697	0.380	27-02-2019	55	55	48	36	2
*30	SARDAR SAROVAR	138.68	115.80	5.760	0.618	28-02-2019	11	0	15	2120	1450
31	KARJAN	115.25	106.83	0.523	0.302	28-02-2019	58	66	63	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 28.02.2019

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
MAHARASHTRA											
32	JAYAKWADI(PAITHON)	463.91	456.27	2.171	0.120	28-02-2019	6	65	29	227	-
*33	KOYANA	657.90	650.27	2.652	1.925	28-02-2019	73	77	65	-	1920
34	BHIMA(UJJANI)	496.83	492.21	1.517	0.246	28-02-2019	16	76	48	125	12
35	ISAPUR	441.00	432.56	0.965	0.302	26-02-2019	31	5	36	104	-
36	MULA	552.30	539.63	0.609	0.117	28-02-2019	19	70	47	139	-
37	YELDARI	461.77	446.29	0.809	0.000	28-02-2019	0	5	26	78	-
38	GIRNA	398.07	388.36	0.524	0.149	26-02-2019	28	30	25	79	-
39	KHADAKVASLA	582.47	580.74	0.056	0.034	28-02-2019	61	73	54	78	8
*40	UPPER VAITARNA	603.50	599.68	0.331	0.212	26-02-2019	64	62	66	-	61
41	UPPER TAPI	214.00	211.28	0.255	0.114	27-02-2019	45	55	64	45	-
*42	PENCH (TOTALADOH)	490.00	469.63	1.091	0.088	26-02-2019	8	15	34	127	160
43	UPPER WARDHA	342.50	335.98	0.564	0.130	28-02-2019	23	50	45	70	-
44	BHATSA	142.07	123.48	0.942	0.512	26-02-2019	54	63	60	29.378	15
45	DHOM	747.70	735.96	0.331	0.111	28-02-2019	34	55	40	36.2	2
46	DUDHGANGA	646.00	634.65	0.664	0.342	28-02-2019	52	67	61	2.441	24
47	MANIKDOH (KUKADI)	711.25	690.28	0.288	0.034	27-02-2019	12	56	35	2.2	6
48	BHANDARDARA	744.91	728.52	0.304	0.104	26-02-2019	34	81	63	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	302.36	0.707	0.124	27-02-2019	18	20	36	-	30
*50	RIHAND	268.22	257.71	5.649	1.396	28-02-2019	25	27	32	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	347.62	2.196	1.054	28-02-2019	48	30	54	1897	198
*52	TEHRI	830.00	794.88	2.615	1.325	13-02-2019	51	45	49	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	384.36	6.827	0.562	28-02-2019	8	32	35	220	115
54	TAWA	355.40	337.69	1.944	0.150	28-02-2019	8	9	28	247	-
*55	BARGI	422.76	416.70	3.180	1.680	28-02-2019	53	66	54	157	90
*56	BANSAGAR	341.64	338.43	5.166	3.748	28-02-2019	73	53	50	488	425
*57	INDIRA SAGAR	262.13	261.83	9.745	9.542	28-02-2019	98	27	35	2380	1000
58	BARNA	348.55	339.46	0.456	0.032	28-02-2019	7	11	28	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	352.94	3.046	1.834	28-02-2019	60	60	61	-	120
60	MAHANADI	348.70	344.93	0.767	0.449	27-02-2019	59	53	62	319	10
SOUTHERN REGION											
A.P & TG											
*61	SRISAILAM	269.75	252.92	8.288	1.298	28-02-2019	16	21	30	0	770
*62	NAGARJUNA SAGAR	179.83	160.84	6.841	0.907	28-02-2019	13	10	18	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	84.94	1.994	0.347	28-02-2019	17	27	48	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	324.80	2.300	0.601	28-02-2019	26	30	31	411	27
65	LOWER MANAIR	280.42	272.77	0.621	0.224	28-02-2019	36	38	44	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 28.02.2019

S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	STORAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
							CURRENT YEAR	LAST YEAR	LAST 10 YEARS AVERAGE	IRR. (CCA) IN TH. HA	HYDEL IN MW
1	2	4	6	5	7	8	9	10	11	3A	3B
<u>KARNATAKA</u>											
66	KRISHNARAJA SAGRA	752.50	746.64	1.163	0.654	28-02-2019	56	28	41	79	-
*67	TUNGABHADRA	497.74	485.93	3.276	0.380	28-02-2019	12	9	17	529	72
68	GHATAPRABHA	662.95	643.89	1.391	0.343	28-02-2019	25	32	22	317	-
69	BHADRA	657.76	650.64	1.785	1.045	28-02-2019	59	42	57	106	39
70	LINGANAMAKKI	554.43	545.27	4.294	2.019	27-02-2019	47	37	45	-	55
71	NARAYANPUR	492.25	487.27	0.863	0.228	28-02-2019	26	45	62	425	-
72	MALAPRABHA(RENUKA)	633.83	623.96	0.972	0.144	28-02-2019	15	12	14	215	-
73	KABINI(Sancherla Tank)	696.16	692.94	0.444	0.271	28-02-2019	61	40	30	85	-
74	HEMAVATHY	890.63	874.93	0.927	0.146	28-02-2019	16	17	18	265	-
75	HARANGI	871.42	856.80	0.220	0.042	28-02-2019	19	23	15	53	-
76	SUPA	564.00	546.85	4.120	2.304	27-02-2019	56	50	46	-	-
77	VANIVILAS SAGAR	652.28	631.98	0.802	0.020	28-02-2019	2	2	15	123	-
*78	ALMATTI	519.60	512.75	3.105	0.949	28-02-2019	31	32	21	@	290
*79	GERUSOPPA	55.00	49.88	0.130	0.101	28-02-2019	78	88	80	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	110.90	0.507	0.379	28-02-2019	75	90	64	62	-
*81	IDAMALAYAR	169.00	147.86	1.018	0.468	28-02-2019	46	55	49	33	75
*82	IDUKKI	732.43	720.46	1.460	0.845	28-02-2019	58	53	47	-	780
*83	KAKKI	981.46	968.62	0.447	0.263	28-02-2019	59	76	64	23	300
*84	PERIYAR	867.41	860.53	0.173	0.033	28-02-2019	19	16	19	84	140
85	MALAPMUZHA	115.06	103.36	0.224	0.038	18-02-2019	17	16	24	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	272.38	0.792	0.424	28-02-2019	54	16	30	105	8
*87	METTUR(STANLEY)	240.79	224.97	2.647	0.880	28-02-2019	33	14	31	122	360
88	VAIGAI	279.20	271.98	0.172	0.047	28-02-2019	27	9	19	61	6
89	PARAMBIKULAM	556.26	549.51	0.380	0.244	28-02-2019	64	14	42	101	-
90	ALIYAR	320.04	301.34	0.095	0.001	28-02-2019	1	4	36	#	60
*91	SHOLAYAR	1002.79	969.47	0.143	0.009	28-02-2019	6	0	4	-	95
TOTAL FOR 91 RESERVOIRS				161.993	65.536						
PERCENTAGE							40	36	39		

Sd/-

Director

W. M. , CWC

* HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

@ TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

† SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.