

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 14.02.2019)

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 **14.02.2019**, live storage available in these reservoirs is **66.26 BCM**, which is **41%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **63.957 BCM** and the average of last 10 years live storage was **69.169 BCM**. Thus, the live storage available in 91 reservoirs **as per 14.02.2019 Bulletin** is **104%** of the live storage of corresponding period of last year and **96%** 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 but is less **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 **14.02.2019**, the total live storage available in these reservoirs is **10.03 BCM** which is **56%** 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 **38%** 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 **14.02.2019**, the total live storage available in these reservoirs is **10.36 BCM** which is **55%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **61%** and average storage of last ten years during corresponding period was **56%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year and is also less 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 **14.02.2019**, the total live storage available in these reservoirs is **9.48 BCM** which is **30%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **42%** and average storage of last ten years during corresponding period was **45%** 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 **14.02.2019**, the total live storage available in these reservoirs is **18.88 BCM** which is **45%** 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 **44%** 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 **14.02.2019**, the total live storage available in these reservoirs is **17.50 BCM** which is **34%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **31%** and average storage of last ten years during corresponding period was **37%** 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, West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Ganga, Godavari and Mahanadi & Neighbouring East Flowing Rivers 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 **35**. 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 **3**. 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 **20**.

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 14.02.2019

- 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 **14.02.2019** is **66.260** BCM (**41** percent of the live storage capacity at FRL).The current year's storage is nearly **104** percent of last year's storage and **96** 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.)	-	-	-	-	2	2	1	1	H.P.	42 %
									PUNJAB	117 %
									RAJASTHAN	21 %
EAST (Jharkhand, Odisha, Tripura & W. Bengal (15 Resv.)	-	-	-	1	3	4	4	3	JHARKHAND	-20 %
									ODISHA	1 %
									W. BENGAL	-15 %
									TRIPURA	93 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	1	2	4	2	18	GUJARAT	-36 %
									MAH.	-29 %
CENTRAL (MP, UP, Uttarakhand & Chh.), (12 Resv)	-	-	-	1	2	3	1	5	U.P.	-18 %
									UTTARAKHAND	1 %
									M.P.	6 %
									CHHATISGARH	-2 %
SOUTH (Karnataka, TN, AP&TG, AP, TG, & Kerala), (31 Resv.)	-	-	2	-	5	5	1	18	AP&TG	-43 %
									A,P	-53 %
									TG	-16 %
									KARNATAKA	4 %
									KERALA	7 %
									T.N.	27 %
Status of 91 reservoirs	0	0	2	3	14	18	9	45		

4 Basin wise storage position:

Better than normal: Indus, Narmada, Mahi, and West Flowing Rivers of South and Cauvery & neighbouring EFRs..

Close to normal: Ganga, Godavari and Mahanadi & Neighbouring East Flowing Rivers

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

Highly deficient:

- 5 Out of 91 reservoirs, **61** reservoirs reported more than 80% of normal storage & **30** reservoirs reported 80% or below of normal storage. Out of these **30** reservoirs **20** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0	SOMASILA	47
ALIYAR	6	SABARMATI(DHAROI)	48
VANIVILAS SAGAR	17	UPPER WARDHA	48
PENCH (TOTALADOH)	23		
TAWA	24		
TILAIYA	31		
JAYAKWADI(PAITHON)	32		
GANDHI SAGAR	35		
BARNA	38		
SHETRANJI	38		
MULA	39		
NARAYANPUR	40		
BHIMA(UJJANI)	41		
MANIKDOH	42		
BHADAR	45		
UKAI	45		
SRISAILAM	47		

10 reservoirs having storage 51% to 80% of normal storage.		
51% to 60%	61% to 70%	71% to 80%
5	4	1

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

19 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 :- 14.02.2019

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	10.878	38.72%	11.804	42.01%	11.750	41.82%	-7.42
INDUS	14.730	8.583	58.27%	5.194	35.26%	5.670	38.49%	51.38
NARMADA	21.608	8.848	40.95%	5.540	25.64%	7.767	35.95%	13.92
TAPI	7.394	1.924	26.02%	2.794	37.79%	3.987	53.92%	-51.74
MAHI	4.012	2.092	52.14%	2.244	55.93%	2.026	50.50%	3.26
SABARMATI	0.735	0.125	17.01%	0.232	31.56%	0.263	35.78%	-52.47
RIVERS OF KUTCH	0.887	0.108	12.18%	0.372	41.94%	0.253	28.52%	-57.31
GODAVARI	15.394	6.032	39.18%	6.410	41.64%	6.678	43.38%	-9.67
KRISHNA	32.831	8.939	27.23%	10.994	33.49%	11.732	35.73%	-23.81
MAHANADI & NEIGHBOURING EFRS	13.181	7.248	54.99%	8.834	67.02%	8.213	62.31%	-11.75
CAUVERY & NEIGHBOURING EFRS	8.359	3.181	38.05%	2.049	24.51%	3.117	37.29%	2.05
WEST FLOWING RIVERS OF SOUTH	14.766	8.302	56.22%	7.490	50.72%	7.713	52.23%	7.64
TOTAL	161.993	66.260		63.957		69.169		
PERCENTAGE								-4.21

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 14.02.2019

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	497.97	6.229	3.884	14-02-2019	62	44	44	676	1200
*2	PONG DAM	423.67	410.64	6.157	3.131	14-02-2019	51	32	36	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	517.60	2.344	1.568	14-02-2019	67	20	31	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	273.50	1.711	0.897	13-02-2019	52	59	46	63	140
5	JHAKAM	359.50	350.50	0.132	0.057	13-02-2019	43	43	33	28	-
*6	RANA PRATAP SAGAR	352.81	347.37	1.436	0.496	14-02-2019	35	26	25	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.42	0.821	0.357	14-02-2019	43	48	45	-	-
8	MAITHON	146.3	141.61	0.471	0.218	14-02-2019	46	100	76	342	-
*9	PANCHET HILL	124.97	123.92	0.184	0.135	14-02-2019	73	100	77	\$	80
10	KONAR	425.81	421.48	0.176	0.104	14-02-2019	59	47	68	\$	-
11	TILAIYA	368.81	364.40	0.142	0.017	14-02-2019	12	20	39	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	189.37	5.378	3.226	14-02-2019	60	64	64	153	307
*13	BALIMELA	462.08	457.39	2.676	1.882	14-02-2019	70	20	42	-	360
14	SALANADI	82.30	73.66	0.558	0.301	14-02-2019	54	42	31	42	-
*15	RENGALI	123.50	116.82	3.432	1.391	14-02-2019	41	85	64	3	200
*16	MACHKUND(JALPUT)	838.16	834.38	0.893	0.595	14-02-2019	67	85	65	-	115
*17	UPPER KOLAB	858.00	853.73	0.935	0.555	14-02-2019	59	50	50	89	320
*18	UPPER INDRAVATI	642.00	637.49	1.456	0.989	14-02-2019	68	50	58	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	111.01	0.480	0.100	14-02-2019	21	84	39	227	-
20	KANGSABATI	134.14	126.25	0.914	0.334	14-02-2019	37	69	35	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	89.95	0.312	0.156	13-02-2019	50	72	26	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	92.89	6.615	1.647	14-02-2019	25	37	55	348	300
23	SABARMATI(DHAROI)	189.59	180.85	0.735	0.125	13-02-2019	17	32	36	95	1
*24	KADANA	127.7	122.73	1.472	0.731	13-02-2019	50	52	57	200	120
25	SHETRUNJI	55.53	50.07	0.300	0.052	13-02-2019	17	35	45	36	-
26	BHADAR	107.89	101.86	0.188	0.026	12-02-2019	14	33	31	27	-
27	DAMANAGANGA	79.86	72.50	0.502	0.196	14-02-2019	39	69	67	51	1
28	DANTIWADA	184.1	168.22	0.399	0.030	13-02-2019	8	51	15	45	-
29	PANAM	127.41	125.10	0.697	0.407	12-02-2019	58	59	52	36	2
*30	SARDAR SAROVAR	138.68	118.02	5.760	0.935	14-02-2019	16	1	17	2120	1450
31	KARJAN	115.25	107.95	0.523	0.325	14-02-2019	62	68	66	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 14.02.2019

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	456.93	2.171	0.229	14-02-2019	11	70	33	227	-
*33	KOYANA	657.90	651.15	2.652	1.999	14-02-2019	75	83	69	-	1920
34	BHIMA(UJJANI)	496.83	492.62	1.517	0.338	14-02-2019	22	79	55	125	12
35	ISAPUR	441.00	433.41	0.965	0.349	14-02-2019	36	6	39	104	-
36	MULA	552.30	539.84	0.609	0.123	14-02-2019	20	74	52	139	-
37	YELDARI	461.77	446.36	0.809	0.000	14-02-2019	0	5	26	78	-
38	GIRNA	398.07	388.45	0.524	0.151	14-02-2019	29	31	27	79	-
39	KHADAKVASLA	582.47	580.52	0.056	0.031	14-02-2019	55	54	59	78	8
*40	UPPER VAITARNA	603.50	600.24	0.331	0.226	14-02-2019	68	69	70	-	61
41	UPPER TAPI	214.00	211.54	0.255	0.126	14-02-2019	49	63	70	45	-
*42	PENCH (TOTALADOH)	490.00	469.88	1.091	0.093	14-02-2019	9	16	37	127	160
43	UPPER WARDHA	342.50	336.11	0.564	0.136	14-02-2019	24	57	50	70	-
44	BHATSA	142.07	125.10	0.942	0.543	14-02-2019	58	66	63	29.378	15
45	DHOM	747.70	736.44	0.331	0.118	14-02-2019	36	63	44	36.2	2
46	DUDHGANGA	646.00	636.55	0.664	0.390	14-02-2019	59	71	66	2.441	24
47	MANIKDOH (KUKADI)	711.25	690.54	0.288	0.036	14-02-2019	13	60	30	2.2	6
48	BHANDARDARA	744.91	730.65	0.304	0.122	14-02-2019	40	82	68	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	303.22	0.707	0.174	13-02-2019	25	34	42	-	30
*50	RIHAND	268.22	258.41	5.649	1.642	14-02-2019	29	32	34	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	347.73	2.196	1.061	12-02-2019	48	35	49	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	385.84	6.827	0.872	14-02-2019	13	33	37	220	115
54	TAWA	355.40	337.84	1.944	0.158	14-02-2019	8	9	34	247	-
*55	BARGI	422.76	417.20	3.180	1.782	14-02-2019	56	67	58	157	90
*56	BANSAGAR	341.64	338.76	5.166	3.887	14-02-2019	75	53	51	488	425
*57	INDIRA SAGAR	262.13	256.74	9.745	5.589	14-02-2019	57	28	39	2380	1000
58	BARNA	348.55	340.49	0.456	0.059	14-02-2019	13	16	34	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	353.07	3.046	1.852	14-02-2019	61	60	62	-	120
60	MAHANADI	348.70	345.30	0.767	0.478	13-02-2019	62	54	63	319	10
SOUTHERN REGION											
A.P & TG											
*61	SRISAILAM	269.75	253.96	8.288	1.401	14-02-2019	17	27	36	0	770
*62	NAGARJUNA SAGAR	179.83	161.85	6.841	1.089	14-02-2019	16	12	20	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	87.12	1.994	0.481	14-02-2019	24	35	51	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	325.47	2.300	0.707	14-02-2019	31	35	36	411	27
65	LOWER MANAIR	280.42	273.44	0.621	0.252	14-02-2019	41	46	49	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 14.02.2019

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	747.72	1.163	0.749	14-02-2019	64	33	48	79	-
*67	TUNGABHADRA	497.74	486.91	3.276	0.473	14-02-2019	14	15	23	529	72
68	GHATAPRABHA	662.95	647.32	1.391	0.477	14-02-2019	34	45	27	317	-
69	BHADRA	657.76	651.98	1.785	1.169	14-02-2019	65	49	64	106	39
70	LINGANAMAKKI	554.43	546.52	4.294	2.259	14-02-2019	53	39	50	-	55
71	NARAYANPUR	492.25	487.38	0.863	0.236	14-02-2019	27	49	69	425	-
72	MALAPRABHA(RENUKA)	633.83	624.29	0.972	0.158	14-02-2019	16	15	17	215	-
73	KABINI(Sancherla Tank)	696.16	693.43	0.444	0.295	14-02-2019	66	48	35	85	-
74	HEMAVATHY	890.63	875.43	0.927	0.155	14-02-2019	17	19	21	265	-
75	HARANGI	871.42	856.73	0.220	0.042	14-02-2019	19	28	17	53	-
76	SUPA	564.00	548.60	4.120	2.460	14-02-2019	60	51	49	-	-
77	VANIVILAS SAGAR	652.28	632.56	0.802	0.021	14-02-2019	3	2	15	123	-
*78	ALMATTI	519.60	513.03	3.105	1.003	14-02-2019	32	34	28	@	290
*79	GERUSOPPA	55.00	52.55	0.130	0.116	14-02-2019	89	95	86	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	112.37	0.507	0.410	14-02-2019	81	92	69	62	-
*81	IDAMALAYAR	169.00	150.36	1.018	0.524	14-02-2019	51	59	55	33	75
*82	IDUKKI	732.43	722.24	1.460	0.928	14-02-2019	64	57	51	-	780
*83	KAKKI	981.46	968.90	0.447	0.266	14-02-2019	60	79	68	23	300
*84	PERIYAR	867.41	860.85	0.173	0.039	14-02-2019	23	18	24	84	140
85	MALAPMUZHA	115.06	103.75	0.224	0.041	14-02-2019	18	17	25	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	273.46	0.792	0.478	14-02-2019	60	15	32	105	8
*87	METTUR(STANLEY)	240.79	225.53	2.647	0.924	14-02-2019	35	15	32	122	360
88	VAIGAI	279.20	272.81	0.172	0.057	14-02-2019	33	15	24	61	6
89	PARAMBIKULAM	556.26	550.00	0.380	0.253	14-02-2019	67	17	48	101	-
90	ALIYAR	320.04	301.49	0.095	0.002	14-02-2019	2	0	37	#	60
*91	SHOLAYAR	1002.79	981.11	0.143	0.039	14-02-2019	27	0	6	-	95
TOTAL FOR 91 RESERVOIRS				161.993	66.260						
PERCENTAGE							41	39	43		

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.