

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 22.03.2018)

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 **22.03.2018**, live storage available in these reservoirs is **47.771 BCM**, which is **29%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **55.561 BCM** and the average of last 10 years live storage was **54.292 BCM**. Thus, the live storage available in 91 reservoirs **as per 22.03.2018 Bulletin** is **86%** of the live storage of corresponding period of last year and **88%** of storage of average of last ten years.

The overall storage position is **less than the** corresponding period of last year in the country as a whole and is also **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 **22.03.2018**, the total live storage available in these reservoirs is **3.34 BCM** which is **19%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **23%** and average storage of last ten years during corresponding period was **28%** 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.

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 **22.03.2018**, the total live storage available in these reservoirs is **9.45 BCM** which is **50%** 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 **46%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the corresponding period of last year but is better 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 **22.03.2018**, the total live storage available in these reservoirs is **10.67 BCM** which is **34%** 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 **37%** 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 **22.03.2018**, the total live storage available in these reservoirs is **13.35 BCM** which is **32%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **48%** and average storage of last ten years during corresponding period was **35%** 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.

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 **22.03.2018**, the total live storage available in these reservoirs is **10.97 BCM** which is **21%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **16%** and average storage of last ten years during corresponding period was **27%** 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 Mahi, Mahanadi & Neighbouring East Flowing Rivers, Rivers of Kutch and West Flowing Rivers of South. Close to Normal in Ganga, Narmada Godavari and Krishna. Deficient in, Indus, Tapi Sabarmati, and Cauvery & neighbouring EFRs basin and NIL in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **52** and reservoirs having storage more than average of last ten years are **43**. The numbers of reservoirs having storage less than 20% with respect to last year is **4** and having storage less than 20% with reference to average of last ten years is **7**. 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 **19**.

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 22.03.2018

- 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 **22.03.2018** is **47.771** BCM (**29** percent of the live storage capacity at FRL).The current year's storage is nearly **86** percent of last year's storage and **88** percent of the average of last ten years.

3 Region wise storage status:-

REGION (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	5	H.P.	-50 %	
									PUNJAB	-38 %	
									RAJASTHAN	24 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	1	-	-	2	2	1	5	4	JHARKHAND	14 %	
									ODISHA	2 %	
									W. BENGAL	99 %	
									TRIPURA	227 %	
WEST (Guj.& Mah.), (27 Resv.)	-	-	1	-	4	6	5	11	GUJARAT	-35 %	
									MAH.	23 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	2	1	8	U.P.	-23 %	
									UTTARAKHAND	-38 %	
									M.P.	-4 %	
									CHHATISGARH	1 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	1	1	-	1	-	4	24	AP&TG	-50 %	
									A,P	-54 %	
									TG	-12 %	
									KARNATAKA	-8 %	
									KERALA	20 %	
									T.N.	-64 %	
Status of 91 reservoirs	1	1	2	2	8	9	16	52			

4 Basin wise storage position:

Better than normal: Mahi, Mahanadi & Neighbouring EFRS, Rivers of Kutch and West Flowing Rivers of South . . .

Close to normal: Ganga,Narmada,Godavari,Krishna

Deficient: Indus, Tapi, Sabarmati and Cauvery & neighbouring EFRS.

Highly deficient: NIL

- Out of 91 reservoirs, **55** reservoirs reported more than 80% of normal storage & **36** reservoirs reported 80% or below of normal storage. Out of these **36** reservoirs **19** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
SHOLAYAR	0	SRISAILAM	48
SARDAR SAROVAR	0	BARNA	50
ALIYAR	0		
PONG DAM	6		
VANIVILAS SAGAR	10		
YELDARI	12		
ISAPUR	13		
PARAMBIKULAM	22		
VAIGAI	31		
METTUR(STANLEY)	35		
BALIMELA	35		
TAWA	37		
PENCH (TOTALADOH)	45		
KRISHNARAJA SAGRA	46		
RAMGANGA	46		
SOMASILA	46		
TUNGABHADRA	47		

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

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

23 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 :- 22.03.2018

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	8.895	31.66%	13.835	49.24%	9.729	34.63%	-8.57
INDUS	14.730	2.122	14.41%	2.917	19.80%	4.088	27.75%	-48.09
NARMADA	21.608	5.008	23.18%	7.295	33.76%	5.848	27.06%	-14.36
TAPI	7.394	2.152	29.10%	4.255	57.55%	3.356	45.39%	-35.88
MAHI	4.012	1.789	44.59%	2.004	49.95%	1.697	42.30%	5.42
SABARMATI	0.735	0.146	19.86%	0.269	36.60%	0.189	25.71%	-22.75
RIVERS OF KUTCH	0.887	0.252	28.41%	0.088	9.92%	0.166	18.71%	51.81
GODAVARI	15.394	4.921	31.97%	6.473	42.05%	5.423	35.23%	-9.26
KRISHNA	32.831	7.241	22.06%	4.091	12.46%	8.100	24.67%	-10.60
MAHANADI & NEIGHBOURING EFRS	13.181	7.662	58.13%	8.404	63.76%	6.816	51.71%	12.41
CAUVERY& NEIGHBOURING EFRS	8.359	1.404	16.80%	0.947	11.33%	2.834	33.90%	-50.46
WEST FLOWING RIVERS OF SOUTH	14.766	6.179	41.85%	4.983	33.75%	6.046	40.95%	2.20
TOTAL	161.993	47.771		55.561		54.292		
PERCENTAGE								-12.01

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 22.03.2018

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
NORTHERN REGION											
<u>HIMACHAL PRADESH</u>											
*1	GOBIND SAGAR(BHAKRA)	512.06	476.04	6.229	1.572	22-03-2018	25	15	27	676	1200
*2	PONG DAM	423.67	396.34	6.157	0.100	19-03-2018	2	18	27	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	495.71	2.344	0.450	15-03-2018	19	37	31	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	271.25	1.711	0.704	22-03-2018	41	47	31	63	140
5	JHAKAM	359.50	347.30	0.132	0.041	22-03-2018	31	30	17	28	-
*6	RANA PRATAP SAGAR	352.81	347.25	1.436	0.474	22-03-2018	33	25	30	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.62	0.821	0.364	22-03-2018	44	48	38	-	-
8	MAITHON	146.3	146.78	0.471	0.470	22-03-2018	100	98	64	342	-
*9	PANCHET HILL	124.97	122.51	0.184	0.079	22-03-2018	43	93	71	\$	80
10	KONAR	425.81	417.91	0.176	0.057	22-03-2018	32	40	53	\$	-
11	TILAIYA	368.81	364.57	0.142	0.021	22-03-2018	15	32	25	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	188.47	5.378	2.767	20-03-2018	51	55	51	153	307
*13	BALIMELA	462.08	444.31	2.676	0.407	22-03-2018	15	54	43	-	360
14	SALANADI	82.30	70.49	0.558	0.227	22-03-2018	41	30	29	42	-
*15	RENGALI	123.50	120.52	3.432	2.487	22-03-2018	72	80	52	3	200
*16	MACHKUND(JALPUT)	838.16	835.15	0.893	0.648	22-03-2018	73	42	57	-	115
*17	UPPER KOLAB	858.00	851.18	0.935	0.365	22-03-2018	39	61	45	89	320
*18	UPPER INDRAVATI	642.00	633.30	1.456	0.606	20-03-2018	42	57	45	128	600
<u>WEST BENGAL</u>											
19	MAYURAKSHI	121.31	117.68	0.480	0.314	22-03-2018	65	32	31	227	-
20	KANGSABATI	134.14	128.20	0.914	0.444	22-03-2018	49	31	26	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	90.85	0.312	0.193	20-03-2018	62	47	19	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	94.21	6.615	1.895	22-03-2018	29	59	47	348	300
23	SABARMATI(DHAROI)	189.59	181.38	0.735	0.146	22-03-2018	20	37	26	95	1
*24	KADANA	127.7	122.35	1.472	0.701	22-03-2018	48	57	55	200	120
25	SHETRUNJI	55.53	50.27	0.300	0.056	22-03-2018	19	25	31	36	-
26	BHADAR	107.89	103.39	0.188	0.049	22-03-2018	26	4	24	27	-
27	DAMANAGANGA	79.86	74.85	0.502	0.271	22-03-2018	54	46	54	51	1
28	DANTIWADA	184.1	175.84	0.399	0.147	22-03-2018	37	1	7	45	-
29	PANAM	127.41	123.90	0.697	0.343	22-03-2018	49	45	47	36	2
*30	SARDAR SAROVAR	138.68	105.75	5.760	0.000	22-03-2018	0	19	15	2120	1450
31	KARJAN	115.25	107.77	0.523	0.321	22-03-2018	61	46	57	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 22.03.2018

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	461.27	2.171	1.260	19-03-2018	58	46	24	227	-
*33	KOYANA	657.90	649.25	2.652	1.841	21-03-2018	69	41	57	-	1920
34	BHIMA(UJJANI)	496.83	495.13	1.517	0.986	22-03-2018	65	24	34	125	12
35	ISAPUR	441.00	426.86	0.965	0.045	21-03-2018	5	28	36	104	-
36	MULA	552.30	546.09	0.609	0.323	22-03-2018	53	41	37	139	-
37	YELDARI	461.77	448.45	0.809	0.020	21-03-2018	2	9	21	78	-
38	GIRNA	398.07	388.20	0.524	0.145	21-03-2018	28	36	21	79	-
39	KHADAKVASLA	582.47	581.71	0.056	0.046	21-03-2018	82	77	46	78	8
*40	UPPER VAITARNA	603.50	597.93	0.331	0.163	21-03-2018	49	56	59	-	61
41	UPPER TAPI	214.00	211.23	0.255	0.112	21-03-2018	44	52	58	45	-
*42	PENCH (TOTALADOH)	490.00	472.50	1.091	0.154	21-03-2018	14	15	32	127	160
43	UPPER WARDHA	342.50	338.40	0.564	0.257	22-03-2018	46	46	38	70	-
44	BHATSA	142.07	124.16	0.942	0.524	21-03-2018	56	57	51	29.378	15
45	DHOM	747.70	739.69	0.331	0.170	21-03-2018	51	44	38	36.2	2
46	DUDHGANGA	646.00	636.06	0.664	0.377	21-03-2018	57	53	52	2.441	24
47	MANIKDOH (KUKADI)	711.25	698.38	0.288	0.103	21-03-2018	36	8	14	2.2	6
48	BHANDARDARA	744.91	739.44	0.304	0.211	21-03-2018	69	60	51	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	303.34	0.707	0.152	21-03-2018	21	39	40	-	30
*50	RIHAND	268.22	257.28	5.649	1.251	20-03-2018	22	49	27	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	335.36	2.196	0.520	15-03-2018	24	21	51	1897	198
*52	TEHRI	830.00	771.15	2.615	0.663	22-03-2018	25	22	30	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	388.03	6.827	1.412	22-03-2018	21	62	31	220	115
54	TAWA	355.40	338.36	1.944	0.184	22-03-2018	9	24	26	247	-
*55	BARGI	422.76	418.30	3.180	2.016	22-03-2018	63	45	43	157	90
*56	BANSAGAR	341.64	334.92	5.166	2.481	22-03-2018	48	66	41	488	425
*57	INDIRA SAGAR	262.13	251.10	9.745	2.443	22-03-2018	25	40	28	2380	1000
58	BARNA	348.55	339.96	0.456	0.044	22-03-2018	10	33	19	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	352.63	3.046	1.792	22-03-2018	59	67	57	-	120
60	MAHANADI	348.70	344.10	0.767	0.389	21-03-2018	51	68	54	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	247.99	8.288	0.935	22-03-2018	11	11	23	0	770
*62	NAGARJUNA SAGAR	179.83	159.08	6.841	0.597	22-03-2018	9	0	16	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	86.31	1.994	0.429	22-03-2018	22	20	46	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	323.58	2.300	0.437	22-03-2018	19	35	21	411	27
65	LOWER MANAIR	280.42	271.79	0.621	0.188	22-03-2018	30	43	38	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- 22.03.2018

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							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	739.10	1.163	0.191	22-03-2018	16	15	36	79	-
*67	TUNGABHADRA	497.74	482.85	3.276	0.173	20-03-2018	5	3	11	529	72
68	GHATAPRABHA	662.95	643.70	1.391	0.336	18-03-2018	24	18	15	317	-
69	BHADRA	657.76	644.71	1.785	0.584	18-03-2018	33	19	51	106	39
70	LINGANAMAKKI	554.43	540.90	4.294	1.305	22-03-2018	30	25	38	-	55
71	NARAYANPUR	492.25	489.07	0.863	0.384	22-03-2018	44	28	42	425	-
72	MALAPRABHA(RENUKA)	633.83	621.91	0.972	0.102	18-03-2018	10	6	10	215	-
73	KABINI(Sancherla Tank)	696.16	689.62	0.444	0.126	22-03-2018	28	3	21	85	-
74	HEMAVATHY	890.63	874.56	0.927	0.138	22-03-2018	15	6	16	265	-
75	HARANGI	871.42	857.86	0.220	0.049	22-03-2018	22	16	15	53	-
76	SUPA	564.00	541.73	4.120	1.888	22-03-2018	46	40	39	-	-
77	VANIVILAS SAGAR	652.28	631.81	0.802	0.011	22-03-2018	1	3	14	123	-
*78	ALMATTI	519.60	510.67	3.105	0.596	22-03-2018	19	4	13	@	290
*79	GERUSOPPA	55.00	52.93	0.130	0.118	22-03-2018	91	77	78	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	112.85	0.507	0.419	22-03-2018	83	27	49	62	-
*81	IDAMALAYAR	169.00	146.57	1.018	0.440	22-03-2018	43	40	41	33	75
*82	IDUKKI	732.43	716.09	1.460	0.662	22-03-2018	45	28	40	-	780
*83	KAKKI	981.46	971.18	0.447	0.294	22-03-2018	66	42	53	23	300
*84	PERIYAR	867.41	860.18	0.173	0.028	22-03-2018	16	10	21	84	140
85	MALAPMUZHA	115.06	102.84	0.224	0.034	22-03-2018	15	12	22	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	264.05	0.792	0.135	22-03-2018	17	9	33	105	8
*87	METTUR(STANLEY)	240.79	216.01	2.647	0.323	22-03-2018	12	8	34	122	360
88	VAIGAI	279.20	267.40	0.172	0.013	22-03-2018	8	2	24	61	6
89	PARAMBIKULAM	556.26	536.89	0.380	0.033	21-03-2018	9	6	39	101	-
90	ALIYAR	320.04	299.19	0.095	0.000	22-03-2018	0	8	44	#	60
*91	SHOLAYAR	1002.79	957.34	0.143	0.000	22-03-2018	0	0	4	-	95
TOTAL FOR 91 RESERVOIRS				161.993	47.771						
PERCENTAGE							29	34	34		

* 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.

Sd/-

Director

W. M. , CWC