

BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 28.03.2018)

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 **28.03.2018**, live storage available in these reservoirs is **46.136 BCM**, which is **28%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **53.027 BCM** and the average of last 10 years live storage was **51.866 BCM**. Thus, the live storage available in 91 reservoirs **as per 28.03.2018 Bulletin** is **87%** of the live storage of corresponding period of last year and **89%** 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 **28.03.2018**, the total live storage available in these reservoirs is **3.91 BCM** which is **22%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **22%** 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 equal to the corresponding period of last year but is 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 **28.03.2018**, the total live storage available in these reservoirs is **8.99 BCM** which is **48%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **55%** and average storage of last ten years during corresponding period was **43%** 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 **28.03.2018**, the total live storage available in these reservoirs is **10.18 BCM** which is **33%** 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 **36%** 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 **28.03.2018**, the total live storage available in these reservoirs is **12.99 BCM** which is **31%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **46%** 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 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 **28.03.2018**, the total live storage available in these reservoirs is **10.07 BCM** which is **20%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **14%** and average storage of last ten years during corresponding period was **26%** 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 8, 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 9-11 of the bulletin. The numbers of reservoirs having storage more than last year are **49** 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 **13** and having storage less than or equal to 50% with reference to average of last ten years are **21**.

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 28.03.2018

- 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 **28.03.2018** is **46.136** BCM (**28** percent of the live storage capacity at FRL).The current year's storage is nearly **87** percent of last year's storage and **89** 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.)	-	-	-	-	-	-	-	6	H.P.	-31 %	
									PUNJAB	-38 %	
									RAJASTHAN	33 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	1	-	-	2	2	5	5	JHARKHAND	13 %	
									ODISHA	4 %	
									W. BENGAL	101 %	
									TRIPURA	253 %	
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	-	5	4	6	12	GUJARAT	-35 %	
									MAH.	21 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	1	2	8	U.P.	-24 %	
									UTTARAKHAND	-40 %	
									M.P.	-4 %	
									CHHATISGARH	2 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	1	1	-	3	25	AP&TG	-53 %	
									A,P	-54 %	
									TG	-13 %	
									KARNATAKA	-10 %	
									KERALA	21 %	
									T.N.	-64 %	
Status of 91 reservoirs	0	1	1	1	9	7	16	56			

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, **54** reservoirs reported more than 80% of normal storage & **37** reservoirs reported 80% or below of normal storage. Out of these **37** reservoirs **21** having storage upto 50% of normal storage.

Name of reservoir	%	Name of reservoir	%
SHOLAYAR	0	SRISAILAM	48
SARDAR SAROVAR	0	KRISHNARAJA SAGRA	49
ALIYAR	0	PONG DAM	50
YELDARI	1	SHETRUNJI	50
VANIVILAS SAGAR	10		
ISAPUR	13		
PARAMBIKULAM	20		
VAIGAI	32		
METTUR(STANLEY)	34		
BALIMELA	34		
TAWA	37		
NAGARJUNA SAGAR	44		
BARNA	45		
PENCH (TOTALADOH)	45		
SOMASILA	46		
PANCHET HILL	46		
RAMGANGA	46		

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

- 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 :- 28.03.2018

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	8.584	30.55%	13.449	47.87%	9.543	33.97%	-10.05
INDUS	14.730	2.647	17.97%	2.769	18.80%	3.896	26.45%	-32.06
NARMADA	21.608	4.930	22.82%	6.969	32.25%	5.569	25.77%	-11.47
TAPI	7.394	2.058	27.83%	4.120	55.72%	3.233	43.72%	-36.34
MAHI	4.012	1.765	43.99%	1.953	48.68%	1.665	41.50%	6.01
SABARMATI	0.735	0.142	19.32%	0.261	35.51%	0.181	24.63%	-21.55
RIVERS OF KUTCH	0.887	0.244	27.51%	0.073	8.23%	0.178	20.07%	37.08
GODAVARI	15.394	4.638	30.13%	6.056	39.34%	5.153	33.47%	-9.99
KRISHNA	32.831	6.461	19.68%	3.671	11.18%	7.585	23.10%	-14.82
MAHANADI & NEIGHBOURING EFRS	13.181	7.369	55.91%	8.137	61.73%	6.363	48.27%	15.81
CAUVERY& NEIGHBOURING EFRS	8.359	1.357	16.23%	0.891	10.66%	2.755	32.96%	-50.74
WEST FLOWING RIVERS OF SOUTH	14.766	5.941	40.23%	4.678	31.68%	5.745	38.91%	3.41
TOTAL	161.993	46.136		53.027		51.866		
PERCENTAGE								-11.05

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 28.03.2018

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	473.69	6.229	1.405	28-03-2018	23	13	26	676	1200
*2	PONG DAM	423.67	394.17	6.157	0.773	28-03-2018	13	17	25	-	360
<u>PUNJAB</u>											
*3	THEIN	527.91	495.81	2.344	0.469	28-03-2018	20	39	32	348	600
<u>RAJASTHAN</u>											
*4	MAHI BAJAJ SAGAR	280.75	270.90	1.711	0.679	28-03-2018	40	44	30	63	140
5	JHAKAM	359.50	347.25	0.132	0.040	28-03-2018	30	30	17	28	-
*6	RANA PRATAP SAGAR	352.81	347.77	1.436	0.547	28-03-2018	38	28	29	229	172
<u>EASTERN REGION</u>											
<u>JHARKHAND</u>											
7	TENUGHAT	269.14	258.52	0.821	0.360	28-03-2018	44	48	38	-	-
8	MAITHON	146.3	146.48	0.471	0.452	28-03-2018	96	94	58	342	-
*9	PANCHET HILL	124.97	121.76	0.184	0.055	28-03-2018	30	95	65	\$	80
10	KONAR	425.81	417.73	0.176	0.056	28-03-2018	32	35	53	\$	-
11	TILAIYA	368.81	364.53	0.142	0.020	28-03-2018	14	32	27	\$	4
<u>ODISHA</u>											
*12	HIRAKUD	192.02	188.19	5.378	2.632	26-03-2018	49	52	47	153	307
*13	BALIMELA	462.08	444.12	2.676	0.389	26-03-2018	15	51	42	-	360
14	SALANADI	82.30	70.46	0.558	0.227	28-03-2018	41	30	27	42	-
*15	RENGALI	123.50	120.08	3.432	2.341	27-03-2018	68	78	45	3	200
*16	MACHKUND(JALPUT)	838.16	834.63	0.893	0.611	27-03-2018	68	40	54	-	115
*17	UPPER KOLAB	858.00	850.94	0.935	0.347	27-03-2018	37	58	38	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	116.89	0.480	0.280	28-03-2018	58	31	28	227	-
20	KANGSABATI	134.14	127.86	0.914	0.422	28-03-2018	46	31	24	341	-
<u>TRIPURA</u>											
21	GUMTI	93.55	90.70	0.312	0.187	27-03-2018	60	44	17	-	15
<u>WESTERN REGION</u>											
<u>GUJARAT</u>											
*22	UKAI	105.16	93.85	6.615	1.828	28-03-2018	28	58	45	348	300
23	SABARMATI(DHAROI)	189.59	181.29	0.735	0.142	28-03-2018	19	36	25	95	1
*24	KADANA	127.7	122.51	1.472	0.713	28-03-2018	48	58	55	200	120
25	SHETRUNJI	55.53	50.22	0.300	0.055	28-03-2018	18	21	36	36	-
26	BHADAR	107.89	103.30	0.188	0.047	28-03-2018	25	4	23	27	-
27	DAMANAGANGA	79.86	74.65	0.502	0.264	28-03-2018	53	43	51	51	1
28	DANTIWADA	184.1	175.63	0.399	0.142	28-03-2018	36	1	6	45	-
29	PANAM	127.41	123.70	0.697	0.333	28-03-2018	48	44	46	36	2
*30	SARDAR SAROVAR	138.68	105.55	5.760	0.000	28-03-2018	0	19	15	2120	1450
31	KARJAN	115.25	107.73	0.523	0.318	28-03-2018	61	45	56	51	3

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 28.03.2018

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	461.03	2.171	1.187	27-03-2018	55	43	23	227	-
*33	KOYANA	657.90	648.28	2.652	1.762	28-03-2018	66	37	54	-	1920
34	BHIMA(UJJANI)	496.83	494.96	1.517	0.937	25-03-2018	62	22	33	125	12
35	ISAPUR	441.00	426.80	0.965	0.043	28-03-2018	4	24	35	104	-
36	MULA	552.30	545.05	0.609	0.294	28-03-2018	48	37	35	139	-
37	YELDARI	461.77	447.78	0.809	0.001	28-03-2018	0	9	19	78	-
38	GIRNA	398.07	388.09	0.524	0.141	28-03-2018	27	35	20	79	-
39	KHADAKVASLA	582.47	580.77	0.056	0.034	28-03-2018	61	88	45	78	8
*40	UPPER VAITARNA	603.50	597.38	0.331	0.149	28-03-2018	45	51	56	-	61
41	UPPER TAPI	214.00	210.69	0.255	0.089	28-03-2018	35	49	55	45	-
*42	PENCH (TOTALADOH)	490.00	472.37	1.091	0.150	28-03-2018	14	14	31	127	160
43	UPPER WARDHA	342.50	338.30	0.564	0.251	28-03-2018	45	46	37	70	-
44	BHATSA	142.07	123.22	0.942	0.507	28-03-2018	54	55	49	29.378	15
45	DHOM	747.70	738.85	0.331	0.156	28-03-2018	47	40	36	36.2	2
46	DUDHGANGA	646.00	635.33	0.664	0.358	28-03-2018	54	49	49	2.441	24
47	MANIKDOH (KUKADI)	711.25	693.48	0.288	0.084	28-03-2018	29	8	12	2.2	6
48	BHANDARDARA	744.91	738.27	0.304	0.196	28-03-2018	64	55	47	63.74	46
CENTRAL REGION											
UTTAR PRADESH											
49	MATATILA	308.46	303.34	0.707	0.182	28-03-2018	26	39	41	-	30
*50	RIHAND	268.22	256.98	5.649	1.152	28-03-2018	20	48	26	-	300
UTTRAKHAND											
*51	RAMGANGA	365.30	335.36	2.196	0.520	15-03-2018	24	21	51	1897	198
*52	TEHRI	830.00	767.65	2.615	0.575	28-03-2018	22	19	27	2351	1000
MADHYA PRADESH											
*53	GANDHI SAGAR	399.90	387.65	6.827	1.315	26-03-2018	19	59	30	220	115
54	TAWA	355.40	338.33	1.944	0.183	28-03-2018	9	24	25	247	-
*55	BARGI	422.76	418.15	3.180	1.983	28-03-2018	62	43	41	157	90
*56	BANSAGAR	341.64	334.85	5.166	2.461	26-03-2018	48	65	43	488	425
*57	INDIRA SAGAR	262.13	251.00	9.745	2.403	28-03-2018	25	38	26	2380	1000
58	BARNA	348.55	339.93	0.456	0.043	26-03-2018	9	32	21	546	-
CHHATTIS GARH											
*59	MINIMATA BANGOI	359.66	352.58	3.046	1.785	27-03-2018	59	66	57	-	120
60	MAHANADI	348.70	344.02	0.767	0.384	28-03-2018	50	63	51	319	10
SOUTHERN REGION											
A.P. & TG											
*61	SRISAILAM	269.75	246.61	8.288	0.859	28-03-2018	10	10	22	0	770
*62	NAGARJUNA SAGAR	179.83	158.47	6.841	0.493	28-03-2018	7	0	16	895	810
ANDHRA PRADESH											
63	SOMASILA	100.58	86.01	1.994	0.410	28-03-2018	21	18	45	168	0
TELANGANA											
64	SRIRAMSAGAR	332.54	323.27	2.300	0.403	28-03-2018	18	30	18	411	27
65	LOWER MANAIR	280.42	270.97	0.621	0.160	28-03-2018	26	36	36	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA CENTRAL WATER COMMISSION

WEEK ENDING :- **28.03.2018**

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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	738.96	1.163	0.186	28-03-2018	16	13	33	79	-
*67	TUNGABHADRA	497.74	482.17	3.276	0.142	28-03-2018	4	3	8	529	72
68	GHATAPRABHA	662.95	643.49	1.391	0.328	28-03-2018	24	17	14	317	-
69	BHADRA	657.76	642.59	1.785	0.451	28-03-2018	25	15	47	106	39
70	LINGANAMAKKI	554.43	540.43	4.294	1.243	28-03-2018	29	22	35	-	55
71	NARAYANPUR	492.25	488.29	0.863	0.312	28-03-2018	36	30	43	425	-
72	MALAPRABHA(RENUKA)	633.83	621.61	0.972	0.091	28-03-2018	9	6	9	215	-
73	KABINI(Sancherla Tank)	696.16	689.39	0.444	0.118	28-03-2018	27	3	19	85	-
74	HEMAVATHY	890.63	874.32	0.927	0.133	28-03-2018	14	6	16	265	-
75	HARANGI	871.42	856.62	0.220	0.041	28-03-2018	19	16	16	53	-
76	SUPA	564.00	540.93	4.120	1.829	28-03-2018	44	38	37	-	-
77	VANIVILAS SAGAR	652.28	631.76	0.802	0.011	28-03-2018	1	3	14	123	-
*78	ALMATTI	519.60	509.57	3.105	0.443	28-03-2018	14	1	11	@	290
*79	GERUSOPPA	55.00	52.77	0.130	0.117	28-03-2018	90	78	81	83	240
<u>KERALA</u>											
80	KALLADA(PARAPPAR)	115.82	112.20	0.507	0.407	28-03-2018	80	26	46	62	-
*81	IDAMALAYAR	169.00	145.28	1.018	0.413	28-03-2018	41	38	39	33	75
*82	IDUKKI	732.43	715.68	1.460	0.645	26-03-2018	44	27	38	-	780
*83	KAKKI	981.46	969.77	0.447	0.279	28-03-2018	62	39	50	23	300
*84	PERIYAR	867.41	860.04	0.173	0.026	28-03-2018	15	9	21	84	140
85	MALAPMUZHA	115.06	102.78	0.224	0.033	28-03-2018	15	12	21	21	3
<u>TAMIL NADU</u>											
86	LOWER BHAWANI	278.89	264.45	0.792	0.144	28-03-2018	18	9	32	105	8
*87	METTUR(STANLEY)	240.79	215.73	2.647	0.311	28-03-2018	12	7	34	122	360
88	VAIGAI	279.20	267.48	0.172	0.014	28-03-2018	8	3	26	61	6
89	PARAMBIKULAM	556.26	536.59	0.380	0.029	28-03-2018	8	6	38	101	-
90	ALIYAR	320.04	298.70	0.095	0.000	28-03-2018	0	12	44	#	60
*91	SHOLAYAR	1002.79	957.38	0.143	0.000	28-03-2018	0	0	3	-	95
TOTAL FOR 91 RESERVOIRS				161.993	46.136						
PERCENTAGE							28	33	32		

* 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