# BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 05.07.2018)

#### 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 **05.07.2018**, live storage available in these reservoirs is **32.847 BCM**, which is **20%** of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was **32.742 BCM** and the average of last 10 years live storage was **34.317 BCM**. Thus, the live storage available in 91 reservoirs **as per 05.07.2018 Bulletin** is **100%** 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 **better 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 05.07.2018, the total live storage available in these reservoirs is 3.00 BCM which is 17% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 30% and average storage of last ten years during corresponding period was 31% 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 **05.07.2018**, the total live storage available in these reservoirs is **3.17 BCM** which is **17%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **17%** and average storage of last ten years during corresponding period was **18%** 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.

# 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 **05.07.2018**, the total live storage available in these reservoirs is **4.48 BCM** which is **14%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **21%** and average storage of last ten years during corresponding period was **19%** 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 **05.07.2018**, the total live storage available in these reservoirs is **9.13 BCM** which is **22%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **26%** and average storage of last ten years during corresponding period was **20%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year but is 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 **05.07.2018**, the total live storage available in these reservoirs is **13.08 BCM** which is **25%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **12%** and average storage of last ten years during corresponding period was **21%** 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.

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, Narmada, Mahanadi & Neighbouring East Flowing Rivers, Rivers of Kutch, West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Ganga, Sabarmati and Krishna. Deficient in Indus, Tapi and Godavari 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 51 and reservoirs having storage more than average of last ten years are 48. 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 5. 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 17.

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**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 05.07.2018

- 1 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.
- 2 The total live storage in 91 important reservoirs in different parts of the country, monitored by CWC as on 05.07.2018 BCM ( 20 percent of the live storage capacity at FRL ). The current year's storage 32.847 is nearly 100 percent of last year's storage and **96** percent of the average of last ten years.

3 Region wise storage status:-

Region wise storage status:						oirs w				
REGION (States), (Monitoring No. of Reservoirs)	100%	91%- 99%	81%- 90%	71%- 80%	61%- 70%	51%- 60%	41%- 50%	40% & below	Departure fr stor	
<b>NORTH</b> (HP,Punjab & Rajasthan), (6 Resv.)	-	-1	-	-	1	-	-	6	H.P. PUNJAB RAJASTHAN	-71 % -17 % 13 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal ( 15 Resv.)	-	1	-	-	-	1	2	I 11	JHARKHAND ODISHA W. BENGAL TRIPURA	-11 % -22 % 40 % 152 %
WEST (Guj.& Mah.), (27 Resv.)	1	-	-	-	-	-	1	26	GUJARAT MAH.	-37 % -7 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	-	1	1	10	U.P. UTTARAKHAND M.P. CHHATISGARH	-32 % -61 % 28 % 7 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), ( 31 Resv.)	-	2	-	4	1	2	5	17	AP&TG A,P TG KARNATAKA KERALA T.N.	-62 % -33 % 0 % 44 % 82 % 8 %
Status of 91 reservoirs	0	3	0	4	1	4	9	70		

4 Basin wise storage position:

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

& neighbouring EFRS.

Close to normal: Ganga, Sabarmati and Krishna .

**Deficient:** Indus, Tapi and Godavari

**Highly deficient:** NIL

5 Out of 91 reservoirs, 59 reservoirs reported more than 80% of normal storage & 32 reservoirs reported 80% or below of normal storage. Out of these 17 having storage upto 50% of normal 32 reservoirs

storage.	1		- T
Name of reservoir	%	Name of reservoir	%
SARDAR SAROVAR	0		
YELDARI	0		
BHIMA(UJJANI)	0	_	
NAGARJUNA SAGAR	4		
VANIVILAS SAGAR	6	_	
GOBIND SAGAR(BHAKR	22		
MULA	22		
ISAPUR	22		
BARNA	22		
MATATILA	23		
PENCH (TOTALADOH)	23		
TILAIYA	27		
RAMGANGA	30		
BALIMELA	34		
PONG DAM	38		
UKAI	41		
MACHKUND(JALPUT)	47		

51% 61% 71% to to to 80% 70% 60% 5 4 6

15 reservors having storage 51% to 80% of normal

storage.

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

reservoirs.

# WEEKLY REPORT - BASINWISE

# GOVERNMENT OF INDIA

# CENTRAL WATER COMMISSION

# WEEK ENDING :- 05.07.2018

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	6.127	21.81%	8.596	30.60%	6.530	23.24%	-6.17
INDUS	14.730	1.901	12.91%	4.394	29.83%	4.612	31.31%	-58.78
NARMADA	21.608	3.239	14.99%	3.014	13.95%	2.635	12.19%	22.92
TAPI	7.394	0.645	8.72%	1.977	26.74%	1.474	19.94%	-56.24
MAHI	4.012	1.550	38.63%	1.574	39.23%	1.279	31.88%	21.19
SABARMATI	0.735	0.111	15.10%	0.140	19.05%	0.113	15.37%	-1.77
RIVERS OF KUTCH	0.887	0.116	13.08%	0.056	6.31%	0.098	11.05%	18.37
GODAVARI	15.394	1.765	11.47%	2.595	16.86%	2.515	16.34%	-29.82
KRISHNA	32.831	5.142	15.66%	2.945	8.97%	6.102	18.59%	-15.73
MAHANADI & NEIGHBOURING EFRS	13.181	3.020	22.91%	2.744	20.82%	2.724	20.67%	10.87
CAUVERY& NEIGHBOURING EFRS	8.359	3.536	42.30%	0.880	10.53%	2.449	29.30%	44.39
WEST FLOWING RIVERS OF SOUTH	14.766	5.695	38.57%	3.827	25.92%	3.786	25.64%	50.42
TOTAL	161.993	32.847		32.742	·	34.317		
PERCENTAGE								-4.28

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	05.07.2018		02	VATER CON		
			CURRENT	LIVE			STORAGE AS	S % OF LIVE C FRL	APACITY AT	BENE	FITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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										
	HIMACHAL PRADESH										
*1	GOBIND SAGAR(BHAKRA)	512.06	457.01	6.229	0.459	05-07-2018	7	30	34	676	1200
*2	PONG DAM PUNJAB	423.67	391.86	6.157	0.550	05-07-2018	9	17	23	-	360
*3	THEIN	527.91	505.66	2.344	0.892	05-07-2018	38	62	46	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	270.40	1.711	0.624	05-07-2018	36	32	22	63	140
5	JHAKAM	359.50	347.45	0.132	0.041	04-07-2018	31	28	17	28	-
*6	RANA PRATAP SAGAR	352.81	346.93	1.436	0.429	05-07-2018	30	33	39	229	172
	EASTERN REGION	•									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	255.09	0.821	0.257	05-07-2018	31	38	36	-	-
8	MAITHON	146.3	140.12	0.471	0.163	05-07-2018	35	16	34	342	-
*9	PANCHET HILL	124.97	123.32	0.184	0.110	05-07-2018	60	21	51	\$	80
10	KONAR	425.81	416.14	0.176	0.039	05-07-2018	22	30	35	\$	-
11	TILAIYA	368.81	363.99	0.142	0.010	05-07-2018	7	34	26	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	182.82	5.378	0.692	04-07-2018	13	10	10	153	307
*13	BALIMELA	462.08	441.41	2.676	0.179	04-07-2018	7	22	20	-	360
14	SALANADI	82.30	71.56	0.558	0.250	05-07-2018	45	29	28	42	-
*15	RENGALI	123.50	111.32	3.432	0.253	04-07-2018	7	3	9	3	200
*16	MACHKUND(JALPUT)	838.16	824.06	0.893	0.122	04-07-2018	14	19	29	-	115
*17	UPPER KOLAB	858.00	845.80	0.935	0.072	04-07-2018	8	22	15	89	320
*18	UPPER INDRAVATI	642.00	627.17	1.456	0.145	04-07-2018	10	18	16	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	112.88	0.480	0.144	05-07-2018	30	27	30	227	-
20	KANGSABATI	134.14	127.86	0.914	0.422	05-07-2018	46	28	29	341	-
	TRIPURA										
21	GUMTI WESTERN REGION	93.55	93.45	0.312	0.308	03-07-2018	99	72	39	-	15
		•									
*00	GUJARAT	405.40	00.00	0.045	0.557	05 07 0040	0	00	04	240	200
	UKAI SABARMATI(DHAROI)	105.16	86.88			05-07-2018	8	28	21	348	300
	KADANA	189.59 127.7	180.48 121.54		0.111 0.638	04-07-2018	15 43	19 53	15 42	95 200	1 120
						04-07-2018 04-07-2018					
	SHETRUNJI BHADAR	55.53 107.89	48.87 101.27		0.034 0.019	04-07-2018	11 10	13	19 19	36 27	-
	DAMANAGANGA	79.86	71.30			05-07-2018	32	31	19		1
	DANTIWADA	184.1	171.28		0.162	04-07-2018	16	5	2		
	PANAM	127.41	121.75			04-07-2018	35	31	38	36	
	SARDAR SAROVAR	138.68	108.78			05-07-2018	0	10	9	2120	1450
	KARJAN	115.25	99.72			05-07-2018	33	42	30	51	3
31	1 100 11 1		30.12	3.020	3.170	J. 2010		12	50	01	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

		1		WEE	K ENDING :-	05.07.2018				•	
			OUDDENT	10/5			STORAGE A	S % OF LIVE C	APACITY AT	BENE	FITS
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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			I.							
32	JAYAKWADI(PAITHON)	463.91	458.05	2.171	0.444	04-07-2018	20	18	8	227	-
*33	KOYANA	657.90	633.98	2.652	0.757	04-07-2018	29	29	31	-	1920
34	BHIMA(UJJANI)	496.83	489.45	1.517	0.000	05-07-2018	0	0	4	125	12
35	ISAPUR	441.00	426.94	0.965	0.049	04-07-2018	5	5	23	104	-
36	MULA	552.30	534.40	0.609	0.008	04-07-2018	1	9	6	139	-
37	YELDARI	461.77	447.36	0.809	0.000	04-07-2018	0	3	9	78	-
38	GIRNA	398.07	384.52	0.524	0.052	04-07-2018	10	26	8	79	-
39	KHADAKVASLA	582.47	579.49	0.056	0.020	04-07-2018	36	20	32	78	8
*40	UPPER VAITARNA	603.50	595.88	0.331	0.113	04-07-2018	34	41	29	-	61
41	UPPER TAPI	214.00	209.07	0.255	0.036	04-07-2018	14	6	27	45	-
*42	PENCH (TOTALADOH)	490.00	467.33	1.091	0.046	04-07-2018	4	5	18	127	160
43	UPPER WARDHA	342.50	337.32	0.564	0.196	05-07-2018	35	35	34	70	-
44	BHATSA	142.07	114.44	0.942	0.357	04-07-2018	38	51	34	29.378	15
45	DHOM	747.70	731.48	0.331	0.053	04-07-2018	16	15	23	36.2	2
46	DUDHGANGA	646.00	628.86	0.664	0.216	04-07-2018	33	31	30	2.441	24
	MANIKDOH (KUKADI)	711.25	688.15		0.024	04-07-2018	8	14	6	2.2	6
48	BHANDARDARA CENTRAL RECION	744.91	727.57	0.304	0.098	04-07-2018	32	38	19	63.74	46
	CENTRAL REGION	•									
40	UTTAR PRADESH	000.40	004.00	0.707	0.050	04.07.0040			0.7		00
	MATATILA	308.46	301.02		0.059	04-07-2018	8	9	37	-	30
-50	RIHAND UTTRAKHAND	268.22	254.97	5.649	0.546	05-07-2018	10	21	11	-	300
*54	RAMGANGA	265.20	323.99	2 106	0.167	04.07.2049	0	0	25	1897	100
	TEHRI	365.30	750.15	2.196 2.615	0.167	04-07-2018 05-07-2018	8 7	10	13	2351	198 1000
52	MADHYA PRADESH	830.00	750.15	2.015	0.189	05-07-2016	,	10	13	2331	1000
*53	GANDHI SAGAR	399.90	386.84	6.827	1.110	05-07-2018	16	53	22	220	115
	TAWA	355.40	340.04			05-07-2018	14	26	27	247	113
	BARGI	422.76	414.40			05-07-2018	39	20	17	157	90
	BANSAGAR	341.64	333.86			05-07-2018	42	36	29	488	425
	INDIRA SAGAR	262.13	248.36			05-07-2018	16	10	9	2380	1000
	BARNA	348.55	338.95			05-07-2018	4	27	19	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	351.40	3.046	1.628	05-07-2018	53	59	49	_	120
60	MAHANADI	348.70	340.90	0.767	0.197	05-07-2018	26	16	25	319	10
,	SOUTHERN REGION										
	A.P & TG	1)									
*61	SRISAILAM	269.75	243.87	8.288	0.725	05-07-2018	9	6	10	0	770
*62	NAGARJUNA SAGAR	179.83	155.78		0.053	05-07-2018	1	0	18	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	84.60	1.994	0.329	05-07-2018	16	11	25	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	322.24	2.300	0.309	05-07-2018	13	12	12	411	27
65	LOWER MANAIR	280.42	268.68	0.621	0.097	05-07-2018	16	34	22	199	60

#### WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

#### CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			CENTRAL WATER COMMIS WEEK ENDING :- 05.07.2018								
			QUEDENT	10/5			STORAGE A	S % OF LIVE C FRL	APACITY AT	BENE	EFITS	
S. NO	NAME OF RESERVOIR	FRL (m)	CURRENT RESERVOIR LEVEL (m)	LIVE CAPACITY AT FRL (BCM)	CURRENT LIVE STORAGE (BCM)	DATE	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	
	KARNATAKA											
66	KRISHNARAJA SAGRA	752.50	747.66	1.163	0.744	05-07-2018	64	11	24	79	-	
*67	TUNGABHADRA	497.74	491.55	3.276	1.152	05-07-2018	35	7	24	529	72	
68	GHATAPRABHA	662.95	640.74	1.391	0.237	05-07-2018	17	16	16	317	-	
69	BHADRA	657.76	646.48	1.785	0.708	05-07-2018	40	13	34	106	39	
70	LINGANAMAKKI	554.43	540.79	4.294	1.291	05-07-2018	30	19	23	-	55	
71	NARAYANPUR	492.25	488.89	0.863	0.367	05-07-2018	43	16	34	425	-	
72	MALAPRABHA(RENUKA)	633.83	622.42	0.972	0.085	05-07-2018	9	4	11	215	-	
73	KABINI(Sancherla Tank)	696.16	695.66	0.444	0.414	05-07-2018	93	28	35	85	-	
74	HEMAVATHY	890.63	886.24	0.927	0.668	05-07-2018	72	14	27	265	-	
75	HARANGI	871.42	868.96	0.220	0.161	05-07-2018	73	35	47	53	-	
76	SUPA	564.00	535.85	4.120	1.469	05-07-2018	36	31	22	-	-	
77	VANIVILAS SAGAR	652.28	631.40	0.802	0.006	05-07-2018	1	2	12	123	-	
*78	ALMATTI	519.60	511.57	3.105	0.739	05-07-2018	24	17	23	@	290	
*79	GERUSOPPA	55.00	49.66	0.130	0.100	05-07-2018	77	73	77	83	240	
	<b>KERALA</b>											
80	KALLADA(PARAPPAR)	115.82	110.45	0.507	0.371	05-07-2018	73	26	32	62	-	
*81	IDAMALAYAR	169.00	146.24	1.018	0.433	05-07-2018	43	21	24	33	75	
*82	IDUKKI	732.43	717.21	1.460	0.707	05-07-2018	48	19	26	-	780	
*83	KAKKI	981.46	965.09	0.447	0.227	05-07-2018	51	22	31	23	300	
*84	PERIYAR	867.41	863.37	0.173	0.083	05-07-2018	48	13	38	84	140	
85	MALAPMUZHA	115.06	108.87	0.224	0.102	05-07-2018	46	15	31	21	3	
	TAMIL NADU											
86	LOWER BHAWANI	278.89	272.13	0.792	0.412	05-07-2018	52	10	34	105	8	
*87	METTUR(STANLEY)	240.79	223.30	2.647	0.755	05-07-2018	29	5	33	122	360	
88	VAIGAI	279.20	272.52	0.172	0.053	05-07-2018	31	4	17	61	6	
89	PARAMBIKULAM	556.26	542.80	0.380	0.124	05-07-2018	33	11	34	101	-	
90	ALIYAR	320.04	307.89	0.095	0.026	05-07-2018	27	13	41	#	60	
*91	SHOLAYAR	1002.79	1003.07	0.143	0.130	05-07-2018	91	22	41	-	95	
	TOTAL FOR 91 RESERVOIRS			161.993	32.847							
	PERCENTAGE						20	20	21			

Sd/-

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

Director W. M. , CWC

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

† SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

 $<sup>^{\</sup>star}$  HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

<sup>#</sup> TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR