# BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 19.07.2018)

#### 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 19.07.2018, live storage available in these reservoirs is 52.355 BCM, which is 32% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 41.789 BCM and the average of last 10 years live storage was 45.240 BCM. Thus, the live storage available in 91 reservoirs as per 19.07.2018 Bulletin is 125% of the live storage of corresponding period of last year and 116% 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 and is also **better 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 19.07.2018, the total live storage available in these reservoirs is 3.66 BCM which is 20% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 43% and average storage of last ten years during corresponding period was 39% 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 19.07.2018, the total live storage available in these reservoirs is 4.23 BCM which is 22% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 24% and average storage of last ten years during corresponding period was 23% 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 19.07.2018, the total live storage available in these reservoirs is 7.89 BCM which is 25% 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 24% 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.

#### 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 19.07.2018, the total live storage available in these reservoirs is 12.06 BCM which is 29% 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 28% 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 19.07.2018, the total live storage available in these reservoirs is 24.52 BCM which is 48% 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 28% 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, Krishna, Rivers of Kutch, Godavari, Mahanadi & Neighbouring East Flowing Rivers, West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Sabarmati. Deficient in Ganga, Indus and Tapi and NIL in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are 59 and reservoirs having storage more than average of last ten years are 55. 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 5. The number of reservoirs having storage less than or equal to 50% with respect to last year are 11 and having storage less than or equal to 50% with reference to average of last ten years are 10.

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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 19.07.2018

- 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
   19.07.2018 is 52.355 BCM ( 32 percent of the live storage capacity at FRL ). The current year's storage is nearly
   125 percent of last year's storage and
   116 percent of the average of last ten years.

3 Region wise storage status:-

Region wise storage status:											
		Filling	positio	n of 91	reserv	oirs w	<u>.r.t. FR</u>	L			
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	-	1	-	2	4	H.P. PUNJAB RAJASTHAN	-70 % -16 % 9 %	
<b>EAST</b> (Jharkhand,Odisha, Tripura & W.Bengal ( 15 Resv.)	-	1	-	-	-	1	2	11	JHARKHAND ODISHA W. BENGAL TRIPURA	-29 % -2 % 10 % 131 %	
WEST (Guj.& Mah.), (27 Resv.)	1	-	1	3	-	3	4	15	GUJARAT MAH.	-29 % 42 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	1	1	9	U.P. UTTARAKHAND M.P. CHHATISGARH	-48 % -29 % 15 % 12 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), ( 31 Resv.)	2	3	10	5	1	2	-	8	AP&TG A,P TG KARNATAKA KERALA T.N.	-62 % -30 % -21 % 92 % 118 % 122 %	
Status of 91 reservoirs	3	4	11	8	2	7	9	47		1 * *	

4 Basin wise storage position:

Better than normal: Mahi, Narmada, Krishna, Rivers of Kutch, West Flowing Rivers of South, Godavari, Mahanadi &

Neighbouring EFRS and Cauvery & neighbouring EFRS.

Close to normal: Sabarmati,

**Deficient:** Ganga, Indus and Tapi

Highly deficient: NIL

5 Out of 91 reservoirs, 68 reservoirs reported more than 80% of normal storage & 23 reservoirs reported 80% or below of normal storage. Out of these 23 reservoirs 10 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0		
NAGARJUNA SAGAR	4		
VANIVILAS SAGAR	5		
SARDAR SAROVAR	9		
TILAIYA	18		
MATATILA	24		
GOBIND SAGAR(BHAKR	28		
PONG DAM	32		
KONAR	47		
MACHKUND(JALPUT)	48		

13 reservors									
having storage 51%									
to 80% of normal									
storage.									
51%	61%	71%							
to	to	to							
60%	70%	80%							
2	5	6							

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

18 reservoirs.

# WEEKLY REPORT - BASINWISE

# GOVERNMENT OF INDIA

# CENTRAL WATER COMMISSION

# WEEK ENDING :- 19.07.2018

NAME OF BASIN	LIVE CAP. AT FRL		ÆAR'S RAGE	LAST Y STOR		LAST 10 AVG. ST	_	% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	7.194	25.61%	10.961	39.01%	8.237	29.32%	-12.66
INDUS	14.730	2.376	16.13%	6.323	42.93%	5.893	40.01%	-59.68
NARMADA	21.608	4.968	22.99%	3.635	16.82%	4.578	21.19%	8.52
TAPI	7.394	1.188	16.07%	1.930	26.10%	1.891	25.57%	-37.18
MAHI	4.012	1.684	41.97%	1.697	42.30%	1.448	36.09%	16.30
SABARMATI	0.735	0.127	17.28%	0.194	26.39%	0.143	19.46%	-11.19
RIVERS OF KUTCH	0.887	0.292	32.92%	0.101	11.39%	0.138	15.56%	111.59
GODAVARI	15.394	3.068	19.93%	3.291	21.38%	2.945	19.13%	4.18
KRISHNA	32.831	11.983	36.50%	4.513	13.75%	8.312	25.32%	44.17
MAHANADI & NEIGHBOURING EFRS	13.181	3.858	29.27%	3.434	26.05%	3.661	27.77%	5.38
CAUVERY& NEIGHBOURING EFRS	8.359	5.934	70.99%	1.127	13.48%	2.984	35.70%	98.86
WEST FLOWING RIVERS OF SOUTH	14.766	9.683	65.58%	4.583	31.04%	5.010	33.93%	93.27
TOTAL	161.993	52.355	·	41.789		45.240		
PERCENTAGE								15.73

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	CENTRAL WATER COMMISSION					
			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	463.82	6.229	0.790	19-07-2018	13	42	45	676	1200
*2	PONG DAM PUNJAB	423.67	392.65	6.157	0.622	19-07-2018	10	32	32	-	360
*3	THEIN	527.91	507.17	2.344	0.964	19-07-2018	41	73	49	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	271.90	1.711	0.759	19-07-2018	44	41	29	63	140
5	JHAKAM	359.50	348.50	0.132	0.046	19-07-2018	35	36	23	28	-
*6	RANA PRATAP SAGAR	352.81	347.30	1.436	0.481	19-07-2018	33	42	45	229	172
	EASTERN REGION	i									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	255.33	0.821	0.263	19-07-2018	32	40	40	-	-
8	MAITHON	146.3	140.14	0.471	0.162	19-07-2018	34	21	46	342	-
*9	PANCHET HILL	124.97	123.02	0.184	0.098	19-07-2018	53	84	70	\$	80
10	KONAR	425.81	415.84	0.176	0.036	19-07-2018	20	30	44	\$	-
11	TILAIYA	368.81	363.94	0.142	0.009	19-07-2018	6	42	36	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	184.17	5.378	1.076	19-07-2018	20	18	21	153	307
*13	BALIMELA	462.08	444.70	2.676	0.441	18-07-2018	16	25	13	-	360
14	SALANADI	82.30	71.83	0.558	0.257	19-07-2018	46	29	27	42	-
*15	RENGALI	123.50	112.31	3.432	0.433	18-07-2018	13	9	15	3	200
*16	MACHKUND(JALPUT)	838.16	824.48	0.893	0.134	18-07-2018	15	31	31	-	115
*17	UPPER KOLAB	858.00	847.49	0.935	0.154	18-07-2018	16	26	13	89	320
*18	UPPER INDRAVATI	642.00	629.47	1.456	0.296	18-07-2018	20	29	20	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	112.61	0.480	0.136	19-07-2018	28	44	42	227	-
20	KANGSABATI	134.14	128.06	0.914	0.434	19-07-2018	47	32	35	341	-
	TRIPURA										
21	GUMTI WESTERN REGION	93.55	93.20	0.312	0.296	17-07-2018	95	78	41	-	15
	GUJARAT	•									
*22	UKAI	105.16	90.11	6.615	1.080	19-07-2018	16	27	27	348	300
	SABARMATI(DHAROI)	189.59	180.90			19-07-2018	17	26	19	95	1
	KADANA	127.7	121.18			19-07-2018	42	50	43		120
	SHETRUNJI	55.53	52.87			19-07-2018	44	12		36	-
	BHADAR	107.89	105.29			18-07-2018	51	2		27	
	DAMANAGANGA	79.86	71.55			19-07-2018	33	31	27		1
	DANTIWADA	184.1	171.33		0.064	19-07-2018	16	15			
	PANAM	127.41	122.25			19-07-2018	38	32		36	
	SARDAR SAROVAR	138.68	111.23			19-07-2018	1	15		2120	1450
	KARJAN	115.25	102.33			19-07-2018	41	51	34	51	3

GOVERNMENT OF INDIA

## CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA	WEEK ENDING :- 19.07.2018			CENTRAL WATER COMMISSION						
			QUEDENT		IK ENDING .	19.07.2010	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	ЗА	3B
	<u>MAHARASHTRA</u>										
32	JAYAKWADI(PAITHON)	463.91	458.11	2.171	0.458	18-07-2018	21	22	8	227	-
*33	KOYANA	657.90	645.03	2.652	1.495	13-07-2018	56	35	39	-	1920
34	BHIMA(UJJANI)	496.83	491.50	1.517	0.095	18-07-2018	6	0	5	125	12
35	ISAPUR	441.00	431.56	0.965	0.263	18-07-2018	27	5	27	104	-
36	MULA	552.30	542.17	0.609	0.189	18-07-2018	31	29	17	139	-
37	YELDARI	461.77	447.51	0.809	0.000	18-07-2018	0	3	10	78	-
38	GIRNA	398.07	384.96	0.524	0.061	18-07-2018	12	29	8	79	-
39	KHADAKVASLA	582.47	582.47	0.056	0.056	18-07-2018	100	54	50	78	8
*40	UPPER VAITARNA	603.50	601.02	0.331	0.250	18-07-2018	76	65	42	-	61
41	UPPER TAPI	214.00	209.51	0.255	0.047	18-07-2018	18	6	30	45	-
*42	PENCH (TOTALADOH)	490.00	473.00	1.091	0.167	18-07-2018	15	6	28	127	160
43	UPPER WARDHA	342.50	338.15	0.564	0.242	19-07-2018	43	36	43	70	-
44	BHATSA	142.07	131.79	0.942	0.684	18-07-2018	73	72	47	29.378	15
45	DHOM	747.70	740.44	0.331	0.183	18-07-2018	55	29	33	36.2	2
	DUDHGANGA	646.00	642.02		0.549	18-07-2018	83	48	47	2.441	24
	MANIKDOH (KUKADI) BHANDARDARA	711.25 744.91	697.25 742.95		0.091 0.235	18-07-2018 18-07-2018	32 77	35 64	14 37	2.2 63.74	6 46
40	CENTRAL REGION	744.91	742.93	0.304	0.233	10-07-2016	,,	04	31	03.74	40
	UTTAR PRADESH										
49	MATATILA	308.46	301.39	0.707	0.076	18-07-2018	11	8	45	_	30
	RIHAND	268.22	255.00		0.555	19-07-2018	10	25	16	_	300
	UTTRAKHAND										
*51	RAMGANGA	365.30	325.50	2.196	0.375	19-07-2018	17	12	30	1897	198
*52	TEHRI	830.00	770.10	2.615	0.636	19-07-2018	24	36	29	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	387.98	6.827	1.399	19-07-2018	20	52	24	220	115
54	TAWA	355.40	344.67	1.944	0.619	19-07-2018	32	31	40	247	-
*55	BARGI	422.76	417.05	3.180	1.750	19-07-2018	55	28	30	157	90
*56	BANSAGAR	341.64	334.08	5.166	2.238	19-07-2018	43	53	36	488	425
*57	INDIRA SAGAR	262.13	250.12	9.745	2.201	19-07-2018	23	9	19	2380	1000
58	BARNA	348.55	342.36	0.456	0.118	19-07-2018	26	30	32	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	353.35	3.046	1.892	19-07-2018	62	61	54	-	120
60	MAHANADI	348.70	340.96	0.767	0.200	11-07-2018	26	20	27	319	10
	SOUTHERN REGION										
	A.P & TG										
*61	SRISAILAM	269.75	243.93	8.288	0.728	19-07-2018	9	5	11	0	770
*62	NAGARJUNA SAGAR	179.83	155.75	6.841	0.048	19-07-2018	1	0	17	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	84.39	1.994	0.317	19-07-2018	16	10	23	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	323.15	2.300	0.391	19-07-2018	17	12	21	411	27
65	LOWER MANAIR	280.42	268.73	0.621	0.098	19-07-2018	16	34	22	199	60

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

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	19.07.2018					
			QUEDENT				STORAGE AS	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	752.29	1.163	1.163	19-07-2018	100	14	39	79	-
*67	TUNGABHADRA	497.74	497.13	3.276	2.643	19-07-2018	81	14	35	529	72
68	GHATAPRABHA	662.95	657.05	1.391	0.979	19-07-2018	70	29	31	317	-
69	BHADRA	657.76	654.99	1.785	1.474	19-07-2018	83	19	49	106	39
70	LINGANAMAKKI	554.43	548.06	4.294	2.588	19-07-2018	60	23	32	-	55
71	NARAYANPUR	492.25	491.24	0.863	0.613	19-07-2018	71	15	46	425	-
72	MALAPRABHA(RENUKA)	633.83	626.64	0.972	0.285	19-07-2018	29	8	17	215	-
73	KABINI(Sancherla Tank)	696.16	695.56	0.444	0.408	19-07-2018	92	41	50	85	-
74	HEMAVATHY	890.63	889.80	0.927	0.927	19-07-2018	100	22	47	265	-
75	HARANGI	871.42	871.05	0.220	0.217	19-07-2018	99	55	73	53	-
76	SUPA	564.00	547.90	4.120	2.397	19-07-2018	58	36	28	-	-
77	VANIVILAS SAGAR	652.28	631.37	0.802	0.005	19-07-2018	1	2	11	123	-
*78	ALMATTI	519.60	518.75	3.105	2.739	19-07-2018	88	38	51	@	290
*79	GERUSOPPA	55.00	50.61	0.130	0.105	19-07-2018	81	77	79	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	114.49	0.507	0.456	19-07-2018	90	28	40	62	-
*81	IDAMALAYAR	169.00	159.72	1.018	0.752	19-07-2018	74	24	33	33	75
*82	IDUKKI	732.43	725.56	1.460	1.100	19-07-2018	75	21	33	-	780
*83	KAKKI	981.46	974.24	0.447	0.334	19-07-2018	75	22	39	23	300
*84	PERIYAR	867.41	866.29	0.173	0.143	19-07-2018	83	10	41	84	140
85	MALAPMUZHA	115.06	112.99	0.224	0.176	19-07-2018	79	18	40	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	276.76	0.792	0.668	19-07-2018	84	10	39	105	8
*87	METTUR(STANLEY)	240.79	237.45	2.647	2.181	19-07-2018	82	6	34	122	360
88	VAIGAI	279.20	272.80	0.172	0.053	19-07-2018	31	6	19	61	6
89	PARAMBIKULAM	556.26	553.21	0.380	0.316	19-07-2018	83	17	45	101	-
90	ALIYAR	320.04	317.30	0.095	0.078	19-07-2018	82	11	46	#	60
*91	SHOLAYAR	1002.79	1004.01	0.143	0.136	19-07-2018	95	15	57	-	95
	TOTAL FOR 91 RESERVOIRS			161.993	52.355						
	PERCENTAGE						32	26	28		

Sd/-

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

Director W. M. , CWC

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

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

 $<sup>@^{\</sup>scriptscriptstyle |}$  TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

<sup>†</sup> SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.