# BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 23.08.2018)

#### 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 23.08.2018, live storage available in these reservoirs is 101.286 BCM, which is 63% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 79.304 BCM and the average of last 10 years live storage was 94.862 BCM. Thus, the live storage available in 91 reservoirs as per 23.08.2018 Bulletin is 128% of the live storage of corresponding period of last year and 107% 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 23.08.2018, the total live storage available in these reservoirs is 11.22 BCM which is 62% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 82% and average storage of last ten years during corresponding period was 74% 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 23.08.2018, the total live storage available in these reservoirs is 12.26 BCM which is 65% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 53% and average storage of last ten years during corresponding period was 51% 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.

#### 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 23.08.2018, the total live storage available in these reservoirs is 14.15 BCM which is 45% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 51% and average storage of last ten years during corresponding period was 54% 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 23.08.2018, the total live storage available in these reservoirs is 24.21 BCM which is 57% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 53% and average storage of last ten years during corresponding period was 62% of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year but is 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 23.08.2018, the total live storage available in these reservoirs is 39.45 BCM which is 76% 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 56% 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 Krishna, Godavari, Mahanadi & Neighbouring East Flowing Rivers, West Flowing Rivers of South and Cauvery & neighbouring EFRs. Close to Normal in Ganga, Indus, Narmada and Mahi and Deficient in Rivers of Kutch, Sabarmati 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 54 and reservoirs having storage more than average of last ten years are 57. The numbers of reservoirs having storage less than 20% with respect to last year is 1 and having storage less than 20% with reference to average of last ten years is 2. The number of reservoirs having storage less than or equal to 50% with respect to last year are 8 and having storage less than or equal to 50% with reference to average of last ten years are 9.

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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 23.08.2018

- 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 23.08.2018 is 101.286 BCM ( 63 percent of the live storage capacity at FRL ). The current year's storage is nearly 128 percent of last year's storage and 107 percent of the average of last ten years.

3 Region wise storage status:-

DEGION	Filli	ng po	sition								
REGION (States), (Monitoring No. of Reservoirs)	100%	91%- 99%	81%- 90%	71%- 80%	61%- 70%			40% & below	Departure fi stor		
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	ı	-	-	1	3	2	ı		H.P. PUNJAB RAJASTHAN	-20 % 4 % -17 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal ( 15 Resy )	-	1	2	3	3	2	1	- 3	JHARKHAND ODISHA W. BENGAL TRIPURA	-18 % 39 % -16 % 87 %	
<b>WEST</b> (Guj.& Mah.), (27 Resv.)	3	4	-	2	5	1	3	9	GUJARAT MAH.	-38 % 5 %	
CENTRAL (MP,UP,Uttarakhand & Chh.),(12 Resv)	-	2	-	2	1	2	1	4	U.P. UTTARAKHAND M.P. CHHATISGARH	-16 % -14 % -9 % 17 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), ( 31 Resv.)	5	12	5	2	3	-	-	4	AP&TG A,P TG KARNATAKA KERALA T.N.	39 % -24 % 90 % 24 % 73 % 80 %	
Status of 91 reservoirs	8	19	7	10	15	7	5	20		111	

4 Basin wise storage position:

Better than normal: Godavari, Krishna, West Flowing Rivers of South, Mahanadi & Neighbouring EFRS and Cauvery &

neighbouring EFRS .

Close to normal: Ganga ,Indus, Narmada and Mahi .

Deficient: Tapi, Rivers of Kutch and sabarmati.

Highly deficient:

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 9 having storage upto 50% of normal

50% of below of normal storage

storage.			
Name of reservoir	%	Name of reservoir	%
SHETRUNJI	9		
VANIVILAS SAGAR	17		
YELDARI	30		
PENCH (TOTALADOH)	35		
KONAR	38		
LOWER MANAIR	43		
TILAIYA	43		
SABARMATI(DHAROI)	44		
UKAI	48		

14 reservors								
having storage 51%								
to 80% of normal								
storage.								
51%	51% 61%							
to	to	to						
60%	70%	80%						
4	6	1						
-	0	7						

14 reservoirs

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

# WEEKLY REPORT - BASINWISE

# **GOVERNMENT OF INDIA**

# CENTRAL WATER COMMISSION WEEK ENDING: 23.08.2018

WEEK ENDING :- 23.08.2018												
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	13.630	48.51%	17.631	62.75%	16.216	57.72%	-15.95				
INDUS	14.730	9.232	62.67%	12.181	82.70%	11.036	74.92%	-16.35				
NARMADA	21.608	11.388	52.70%	7.636	35.34%	12.310	56.97%	-7.49				
TAPI	7.394	2.287	30.93%	2.977	40.26%	4.350	58.83%	-47.43				
MAHI	4.012	2.443	60.89%	3.388	84.45%	2.726	67.95%	-10.38				
SABARMATI	0.735	0.175	23.81%	0.686	93.33%	0.397	54.01%	-55.92				
RIVERS OF KUTCH	0.887	0.186	20.97%	0.605	68.21%	0.345	38.90%	-46.09				
GODAVARI	15.394	9.275	60.25%	5.519	35.85%	6.527	42.40%	42.10				
KRISHNA	32.831	23.423	71.34%	11.924	36.32%	19.546	59.54%	19.84				
MAHANADI & NEIGHBOURING EFRS	13.181	8.769	66.53%	7.384	56.02%	7.675	58.23%	14.25				
CAUVERY& NEIGHBOURING EFRS	8.359	6.585	78.78%	2.105	25.18%	4.391	52.53%	49.97				
WEST FLOWING RIVERS OF SOUTH	14.766	13.893	94.09%	7.268	49.22%	9.343	63.27%	48.70				
TOTAL	161.993	101.286		79.304		94.862						
PERCENTAGE			•					6.77				

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 23.08.2018											
			CURRENT	LIVE			STORAGE A	S % OF LIVE C FRL	CAPACITY AT	BENE	EFITS
S. NO	NAME OF RESERVOIR	NAME OF RESERVOIR FRL (m)	RESERVOIR LEVEL (m)	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
1	ORTHERN REGION	<del>!</del>		!	<del>!</del>	<del>.</del>				l	l l
	HIMACHAL PRADESH										
*1	GOBIND SAGAR(BHAKRA)	512.06	496.27	6.229	3.664	23-08-2018	59	84	78	676	1200
*2	PONG DAM PUNJAB	423.67	414.71	6.157	3.908	23-08-2018	63	83	74	-	360
*3	THEIN	527.91	518.91	2.344	1.660	23-08-2018	71	79	68	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	276.15	1.711	1.116	23-08-2018	65	97	75	63	140
5	JHAKAM	359.50	354.65	0.132	0.088	23-08-2018	67	100	77	28	-
	RANA PRATAP SAGAR	352.81	349.25	1.436	0.783	23-08-2018	55	53	69	229	172
	EASTERN REGION										
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	259.31	0.821	0.389	23-08-2018	47	41	43		-
8	MAITHON	146.30	143.56		0.299	23-08-2018	63	75	80		
*9	PANCHET HILL	124.97	123.92			23-08-2018	72		86		80
	KONAR	425.81	417.07			23-08-2018	28		73		-
11	TILAIYA	368.81	365.65	0.142	0.044	23-08-2018	31	100	72	\$	4
***	<u>ODISHA</u>										
	HIRAKUD	192.02	189.21	5.378		23-08-2018	58	48	53		
	BALIMELA	462.08	458.30			23-08-2018	75 69	33	30		
	SALANADI RENGALI	82.30 123.50	76.48 119.52			16-08-2018 23-08-2018	68 63	35 69	34 58		
	MACHKUND(JALPUT)	838.16	837.07			23-08-2018	88	47	56		115
	UPPER KOLAB	858.00	855.90			23-08-2018	79	35	38		
	UPPER INDRAVATI	642.00	639.51	1.456		23-08-2018	81	46	56		
.0	WEST BENGAL	0.2.00	000.01			20 00 20 10	0.		00	.20	000
19	MAYURAKSHI	121.31	113.83	0.480	0.171	23-08-2018	36	86	57	227	-
	KANGSABATI	134.14	128.81	0.914		23-08-2018	54		56		-
	TRIPURA										
21	GUMTI	93.55	93.20	0.312	0.296	22-08-2018	95	96	51	-	15
	WESTERN REGION										
	<u>GUJARAT</u>										
*22	UKAI	105.16	94.51	6.615	1.953	23-08-2018	30	39	62	348	300
23	SABARMATI(DHAROI)	189.59	182.04	0.735	0.175	23-08-2018	24	93	54	95	1
*24	KADANA	127.70	123.09	1.472	0.760	23-08-2018	52	75	63	200	120
25	SHETRUNJI	55.53	52.82	0.300	0.013	23-08-2018	4	44	48	36	-
26	BHADAR	107.89	105.28	0.188	0.094	23-08-2018	50	57	46	27	-
27	DAMANAGANGA	79.86	75.80	0.502	0.305	23-08-2018	61	56	57	51	1
28	DANTIWADA	184.10	172.39	0.399	0.079	23-08-2018	20	92	28	45	-
	PANAM	127.41	126.30			23-08-2018	69	70	60		
	SARDAR SAROVAR	138.68	117.48			23-08-2018	15				
31	KARJAN	115.25	110.95	0.523	0.395	23-08-2018	76	67	62	51	3
	MAHARASHTRA										
	JAYAKWADI(PAITHON)	463.91	458.79		0.597	16-08-2018	27	50	26		
*33	KOYANA	657.90	658.83	2.652	2.652	23-08-2018	100	91	93	-	1920

34	BHIMA(UJJANI)	496.83	495.80	1.517	1.186	23-08-2018	78	63	53	125	12
35	ISAPUR	441.00	437.06	0.965	0.610	23-08-2018	63	7	47	104	-
36	MULA	552.30	548.07	0.609	0.404	23-08-2018	66	72	64	139	-
37	YELDARI	461.77	449.60	0.809	0.052	23-08-2018	6	4	22	78	-
38	GIRNA	398.07	391.28	0.524	0.233	23-08-2018	44	53	25	79	-
39	KHADAKVASLA	582.47	582.47	0.056	0.056	23-08-2018	100	88	66	78	8
*40	UPPER VAITARNA	603.50	602.74	0.331	0.307	23-08-2018	93	96	82	-	61
41	UPPER TAPI	214.00	210.98	0.255	0.101	23-08-2018	40	48	59	45	-
*42	PENCH (TOTALADOH)	490.00	475.17	1.091	0.230	23-08-2018	21	10	60	127	160
43	UPPER WARDHA	342.50	338.52	0.564	0.264	23-08-2018	47	46	75	70	-
44	BHATSA	142.07	139.94	0.942	0.884	23-08-2018	94	94	83	29.378	15
45	DHOM	747.70	746.70	0.331	0.308	23-08-2018	93	73	76	36.2	2
46	DUDHGANGA	646.00	645.18	0.664	0.651	23-08-2018	98	89	90	2.441	24
47	MANIKDOH (KUKADI)	711.25	705.55	0.288	0.195	23-08-2018	68	66	46	2.2	6
	BHANDARDARA	744.91	744.73	0.304	0.304	23-08-2018	100	100	92	63.74	46
	CENTRAL REGION	-									
	UTTAR PRADESH										
49	MATATILA	308.46	304.50	0.707	0.263	21-08-2018	37	20	73	-	30
*50	RIHAND	268.22	260.30	5.649	2.360	23-08-2018	42	66	46	-	300
	<u>UTTRAKHAND</u>										
*51	RAMGANGA	365.30	339.83	2.196	0.706	23-08-2018	32	35	55	1897	198
*52	TEHRI	830.00	815.10	2.615	2.016	23-08-2018	77	72	75	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	390.19	6.827	2.052	23-08-2018	30	60	50	220	115
54	TAWA	355.40	349.73	1.944	1.127	23-08-2018	58	49	86	247	-
*55	BARGI	422.76	422.20	3.180	3.056	23-08-2018	96	61	77	157	90
*56	BANSAGAR	341.64	338.03	5.166	3.579	23-08-2018	69	71	68	488	425
*57	INDIRA SAGAR	262.13	256.92	9.745	5.768	23-08-2018	59	26	62	2380	1000
58	BARNA	348.55	344.06	0.456	0.184	23-08-2018	40	52	75	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	356.50	3.046	2.365	22-08-2018	78	70	72	-	120
60	MAHANADI	348.70	348.37	0.767	0.736	23-08-2018	96	17	60	319	10
_ (	SOUTHERN REGION	_									
	A.P & TG										
*61	SRISAILAM	269.75	269.23	8.288	5.739	23-08-2018	69	6	47	0	770
*62	NAGARJUNA SAGAR	179.83	169.53	6.841	2.605	23-08-2018	38	0	31	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	84.64	1.994	0.333	23-08-2018	17	9	22	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	331.04	2.300	1.992	23-08-2018	87	31	38	411	27
65	LOWER MANAIR	280.42	268.91	0.621	0.102	23-08-2018	16	33	38	199	60
	<b>KARNATAKA</b>										
66	KRISHNARAJA SAGRA	752.50	751.53	1.163	1.155	21-08-2018	99	28	71	79	-
*67	TUNGABHADRA	497.74	497.18	3.276	2.660	23-08-2018	81	47	77	529	72
68	GHATAPRABHA	662.95	662.94	1.391	1.387	23-08-2018	100	56	82	317	-
69	BHADRA	657.76	657.14	1.785	1.713	23-08-2018	96	46	79	106	39
70	LINGANAMAKKI	554.43	554.25	4.294	4.240	23-08-2018	99	46	70	-	55
71	NARAYANPUR	492.25	491.72	0.863	0.671	23-08-2018	78	75	84	425	-
72	MALAPRABHA(RENUKA)	633.83	630.51	0.972	0.596	23-08-2018	61	24	50	215	-
73	KABINI(Sancherla Tank)	696.16	695.34	0.444	0.396	21-08-2018	89	43	59	85	-
74	HEMAVATHY	890.63	889.74	0.927	0.927	21-08-2018	100	45	81	265	-
75	HARANGI	871.42	869.72	0.220	0.177	21-08-2018	80	100	97	53	-
76	SUPA	564.00	561.50	4.120	3.816	23-08-2018	93	52	57	-	-
77	VANIVILAS SAGAR	652.28	632.05	0.802	0.014	23-08-2018	2	2	10	123	-

*78	ALMATTI	519.60	519.30	3.105	2.990	23-08-2018	96	95	92	@	290
*79	GERUSOPPA	55.00	46.97	0.130	0.087	22-08-2018	67	82	77	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	114.52	0.507	0.456	23-08-2018	90	38	55	62	-
*81	IDAMALAYAR	169.00	167.76	1.018	0.982	23-08-2018	96	44	58	33	75
*82	IDUKKI	732.43	731.69	1.460	1.417	23-08-2018	97	34	51	-	780
*83	KAKKI	981.46	981.03	0.447	0.438	23-08-2018	98	39	62	23	300
*84	PERIYAR	867.41	868.24	0.173	0.173	23-08-2018	100	21	45	84	140
85	MALAPMUZHA	115.06	114.03	0.224	0.198	22-08-2018	88	31	62	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	279.50	0.792	0.792	23-08-2018	100	21	50	105	8
*87	METTUR(STANLEY)	240.79	240.86	2.647	2.647	23-08-2018	100	22	55	122	360
88	VAIGAI	279.20	278.59	0.172	0.158	23-08-2018	92	5	31	61	6
89	PARAMBIKULAM	556.26	555.64	0.380	0.366	23-08-2018	96	27	68	101	-
90	ALIYAR	320.04	319.58	0.095	0.092	23-08-2018	97	11	67	#	60
*91	SHOLAYAR	1002.79	1003.34	0.143	0.132	23-08-2018	92	19	75	-	95
	TOTAL FOR 91 RESERVOIRS			161.993	101.286						
	PERCENTAGE						63	49	59		

Sd/-

Director

W. M. , CWC

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

<sup>\*</sup> HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

<sup>\$</sup> TOTAL CCA 342 TH. HA OF DVC SYSTEM

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

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