BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 18.04.2019)

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 18.04.2019, live storage available in these reservoirs is 44.459 BCM, which is 27% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 39.579 BCM and the average of last 10 years live storage was 43.118 BCM. Thus, the live storage available in 91 reservoirs as per 18.04.2019 Bulletin is 112% of the live storage of corresponding period of last year and 103% of storage of average of last ten years.

The overall storage position is **more than the** corresponding period of last year in the country as a whole and is also **more 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 18.04.2019, the total live storage available in these reservoirs is 8.96 BCM which is 50% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 20% 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 and is also better 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 18.04.2019, the total live storage available in these reservoirs is 6.94 BCM which is 37% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 40% 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 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 18.04.2019, the total live storage available in these reservoirs is 6.15 BCM which is 20% 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 30% 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 18.04.2019, 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 29% and average storage of last ten years during corresponding period was 30% of live storage capacity of these reservoirs. Thus, storage during current year is better than the storage of last year and is also 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 **18.04.2019**, the total live storage available in these reservoirs is **9.42 BCM** which is **18%** 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 **20%** 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 Indus, Narmada and West Flowing Rivers of South Close to Normal in Ganga, Mahi, Godavari, Krishna and Mahanadi & Neighbouring East Flowing Rivers. Deficient in Tapi, Sabarmati and Rivers of Kutch and Cauvery & neighbouring EFRs and Nil in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are 32 and reservoirs having storage more than average of last ten years are 36. The numbers of reservoirs having storage less than 20% with respect to last year is 5 and having storage less than 20% with reference to average of last ten years is 10. The number of reservoirs having storage less than or equal to 50% with respect to last year are 18 and having storage less than or equal to 50% with reference to average of last ten years are 20.

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 18.04.2019

- 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
 18.04.2019 is 44.459 BCM (27 percent of the live storage capacity at FRL). The current year's storage is nearly 112 percent of last year's storage and 103 percent of the average of last ten years.

3 Region wise storage status:

		Filling	positio	n of 91	reserv	oirs w	.r.t. FR	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		
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	1	1	1	1	-	1	1	3	H.P. PUNJAB RAJASTHAN	98 % 105 % 8 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	-	-	2	4	9	JHARKHAND ODISHA W. BENGAL TRIPURA	-11 % 10 % 25 % 118 %	
WEST (Guj.& Mah.), (27 Resv.)		-	-	-	-	-	5	22	GUJARAT MAH.	-29 % -39 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	1	2	8	U.P. UTTARAKHAND M.P. CHHATISGARH	-34 % 15 % 11 % -3 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	-	1	-	1	1	28	AP&TG A,P TG KARNATAKA KERALA T.N.	-44 % -82 % -29 % 19 % -10 %	
Status of 91 reservoirs	0	0	0	2	1	5	13	70		- / /	

4 Basin wise storage position:

Better than normal: Indus, Narmada, and West Flowing Rivers of South.

Close to normal: Ganga, Mahi, Godavari, Krishna and, Mahanadi & Neighbouring East Flowing Rivers.

Deficient: Tapi, Sabarmati, Rivers of Kutch and Cauvery & neighbouring EFRs.

Highly deficient:

5 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 20 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
YELDARI	0	DAMANAGANGA	
BHIMA(UJJANI)	0	UKAI	
JAYAKWADI(PAITHON)	0	DHOM	
SHOLAYAR	0		
GANDHI SAGAR	2		
BARNA	8		
PENCH (TOTALADOH)	8		
ALIYAR	8		
VANIVILAS SAGAR	14		
SOMASILA	18		
NAGARJUNA SAGAR	21		
MULA	28		
UPPER TAPI	32		
BHADAR	32		
BHANDARDARA	32		
TAWA	34		
TILAIYA	37		

!	upto 50% of normal										
	16 reservors										
	having storage 51%										
	to 80% of normal										
	storage.										
	51%	61%	71%								
	to	to	to								
	60% 70% 80%										
	4	8	4								

6 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 :- 18.04.2019												
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	7.464 26.57%	7.746 27.57%	8.127 28.93%	-8.16							
INDUS	14.730	8.070 54.79%	2.442 16.58%	4.040 27.43%	99.75							
NARMADA	21.608	6.429 29.75%	4.684 21.68%	4.878 22.57%	31.80							
TAPI	7.394	1.120 15.15%	1.643 22.22%	2.590 35.03%	-56.76							
MAHI	4.012	1.425 35.52%	1.629 40.60%	1.533 38.21%	-7.05							
SABARMATI	0.735	0.092 12.52%	0.130 17.69%	0.145 19.73%	-36.55							
RIVERS OF KUTCH	0.887	0.071 8.00%	0.205 23.11%	0.115 12.97%	-38.26							
GODAVARI	15.394	3.126 20.31%	3.728 24.22%	3.855 25.04%	-18.91							
KRISHNA	32.831	4.534 13.81%	4.750 14.47%	5.568 16.96%	-18.57							
MAHANADI & NEIGHBOURING EFRS	13.181	5.382 40.83%	6.383 48.43%	5.497 41.70%	-2.09							
CAUVERY& NEIGHBOURING EFRS	8.359	1.585 18.96%	1.172 14.02%	2.057 24.61%	-22.95							
WEST FLOWING RIVERS OF SOUTH	14.766	5.161 34.95%	5.067 34.32%	4.713 31.92%	9.51							
TOTAL	161.993	44.459	39.579	43.118								
PERCENTAGE					3.11							

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	18.04.2019			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	494.26	6.229	3.404	18-04-2019	55	19	26	676	1200
*2	PONG DAM PUNJAB	423.67	409.15	6.157	2.866	18-04-2019	47	13	25	-	360
*3	THEIN	527.91	521.18	2.344	1.800	18-04-2019	77	21	37	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	268.30	1.711	0.469	18-04-2019	27	35	26	63	140
5	JHAKAM	359.50	345.60	0.132	0.033	18-04-2019	25	30	20	28	-
*6	RANA PRATAP SAGAR	352.81	346.67	1.436	0.391	18-04-2019	27	37	25	229	172
	EASTERN REGION	-									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	257.72	0.821	0.333	18-04-2019	41	43	36	-	-
8	MAITHON	146.3	138.48	0.471	0.110	18-04-2019	23	69	44	342	-
*9	PANCHET HILL	124.97	123.32	0.184	0.110	18-04-2019	60	30	50	\$	80
10	KONAR	425.81	418.89	0.176	0.068	18-04-2019	39	28	47	\$	-
11	TILAIYA	368.81	364.00	0.142	0.010	18-04-2019	7	12	19	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	187.24	5.378	2.192	16-04-2019	41	40	38	153	307
*13	BALIMELA	462.08	451.90	2.676	1.167	17-04-2019	44	14	24	-	360
14	SALANADI	82.30	73.35	0.558	0.294	18-04-2019	53	41	24	42	-
*15	RENGALI	123.50	114.72	3.432	0.908	17-04-2019	26	56	38	3	200
*16	MACHKUND(JALPUT)	838.16	831.42	0.893	0.413	17-04-2019	46	51	44	-	115
*17	UPPER KOLAB	858.00	850.49	0.935	0.314	17-04-2019	34	31	30	89	320
*18	UPPER INDRAVATI	642.00	632.02	1.456	0.501	17-04-2019	34	40	35	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	110.22	0.480	0.084	18-04-2019	18	43	25	227	-
20	KANGSABATI	134.14	126.08	0.914	0.326	18-04-2019	36	46	23	341	-
	<u>TRIPURA</u>										
21	GUMTI	93.55	88.55	0.312	0.109	17-04-2019	35	54	16	-	15
	WESTERN REGION										
+00	GUJARAT	105.10				40.04.0040					
	UKAI	105.16	89.58			18-04-2019	15	22		348	300
	SABARMATI(DHAROI)	189.59	179.90		0.092	18-04-2019	13	18	20	95	1
	KADANA	127.7	121.36			18-04-2019	42	47	53		120
	SHETRUNJI BHADAR	55.53 107.89	48.87 100.55		0.034 0.012	18-04-2019 18-04-2019	11 6	16 22		36 27	-
	DAMANAGANGA DANTIWADA	79.86 184.1	67.80 167.52		0.081 0.025	18-04-2019 18-04-2019	16 6	41 29	40 6	51 45	1
	PANAM	127.41	122.95			18-04-2019	43	43		36	
	SARDAR SAROVAR	138.68	119.20			18-04-2019	19	0	13	2120	1450
	KARJAN	115.25	103.80			18-04-2019	47	54	48	51	3
51		. 10.20	100.00	0.020	J.274	.5 04 2019	71	54	70	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	18.04.2019		CENTRAL V	VATER COM	COMMISSION			
			QUIDDENT		R LIVERO .	10.04.2019	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												
32	JAYAKWADI(PAITHON)	463.91	455.14	2.171	0.000	18-04-2019	0	46	19	227	-		
*33	KOYANA	657.90	643.00	2.652	1.330	18-04-2019	50	56	46	-	1920		
34	BHIMA(UJJANI)	496.83	488.57	1.517	0.000	11-04-2019	0	31	23	125	12		
35	ISAPUR	441.00	429.94	0.965	0.174	18-04-2019	18	0	26	104	-		
36	MULA	552.30	536.72	0.609	0.051	18-04-2019	8	35	30	139	-		
37	YELDARI	461.77	445.96	0.809	0.000	18-04-2019	0	0	14	78	-		
38	GIRNA	398.07	386.57	0.524	0.099	17-04-2019	19	18	17	79	-		
39	KHADAKVASLA	582.47	580.16	0.056	0.027	18-04-2019	48	82	54	78	8		
*40	UPPER VAITARNA	603.50	596.55	0.331	0.130	18-04-2019	39	34	46	-	61		
41	UPPER TAPI	214.00	209.08	0.255	0.036	16-04-2019	14	30	45	45	-		
*42	PENCH (TOTALADOH)	490.00	465.74	1.091	0.022	18-04-2019	2	12	26	127	160		
43	UPPER WARDHA	342.50	335.49	0.564	0.108	16-04-2019	19	42	36	70	-		
44	BHATSA	142.07	115.91	0.942	0.380	18-04-2019	40	48	46	29.378	15		
45	DHOM	747.70	731.22	0.331	0.051	18-04-2019	15	35	33	36.2	2		
46	DUDHGANGA	646.00	627.14	0.664	0.185	18-04-2019	28	43	38	2.441	24		
47	MANIKDOH (KUKADI)	711.25	686.95		0.016	18-04-2019	6	21	9		6		
48	BHANDARDARA CENTRAL REGION	744.91	715.43	0.304	0.037	18-04-2019	12	50	38	63.74	46		
_	UTTAR PRADESH	-											
40	MATATILA	308.46	303.34	0.707	0.182	10-04-2019	26	25	42		30		
	RIHAND	268.22	256.00		0.162	18-04-2019	15	18	22		300		
50	UTTRAKHAND	200.22	230.00	3.043	0.041	10 04 2013	15	10	22		300		
*51	RAMGANGA	365.30	344.40	2.196	0.898	15-04-2019	41	23	37	1897	198		
	TEHRI	830.00	766.73		0.553	18-04-2019	21	12	17	2351	1000		
02	MADHYA PRADESH	000.00	700.70	2.010	0.000	10 01 2010	2.			2001	1000		
*53	GANDHI SAGAR	399.90	381.26	6.827	0.035	18-04-2019	1	18	25	220	115		
	TAWA	355.40	337.69		0.150	18-04-2019	. 8	9	23		-		
	BARGI	422.76	415.05		1.360	18-04-2019	43	59	37		90		
	BANSAGAR	341.64	337.56		3.408	18-04-2019	66	46	41	488	425		
	INDIRA SAGAR	262.13	253.73	9.745	3.565	18-04-2019	37	24	22	2380	1000		
58	BARNA	348.55	338.28	0.456	0.006	18-04-2019	1	9	17	546	-		
	CHHATTIS GARH												
*59	MINIMATA BANGOI	359.66	351.87	3.046	1.689	18-04-2019	55	57	56	-	120		
60	MAHANADI	348.70	342.66	0.767	0.299	10-04-2019	39	47	45	319	10		
;	SOUTHERN REGION	_											
	A.P & TG												
*61	SRISAILAM	269.75	246.46	8.288	0.851	18-04-2019	10	9	11	0	770		
*62	NAGARJUNA SAGAR	179.83	156.67	6.841	0.195	18-04-2019	3	2	14	895	810		
	ANDHRA PRADESH												
63	SOMASILA	100.58	79.70	1.994	0.130	18-04-2019	7	19	36	168	0		
	<u>TELANGANA</u>												
64	SRIRAMSAGAR	332.54	320.80	2.300	0.214	18-04-2019	9	9	14	411	27		
65	LOWER MANAIR	280.42	269.81	0.621	0.125	18-04-2019	20	18	25	199	60		

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	18.04.2019					
			OURRENT	10.75			STORAGE A	S % OF LIVE C FRL	CAPACITY 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	ЗА	3B
	KARNATAKA			•				•		•	•
66	KRISHNARAJA SAGRA	752.50	742.61	1.163	0.368	16-04-2019	32	10	20	79	-
*67	TUNGABHADRA	497.74	481.57	3.276	0.117	18-04-2019	4	4	6	529	72
68	GHATAPRABHA	662.95	641.71	1.391	0.236	16-04-2019	17	23	12	317	-
69	BHADRA	657.76	644.69	1.785	0.583	16-04-2019	33	17	35	106	39
70	LINGANAMAKKI	554.43	540.53	4.294	1.257	16-04-2019	29	23	27	-	55
71	NARAYANPUR	492.25	487.08	0.863	0.213	18-04-2019	25	27	29	425	-
72	MALAPRABHA(RENUKA)	633.83	621.93	0.972	0.069	16-04-2019	7	7	8	215	-
73	KABINI(Sancherla Tank)	696.16	689.77	0.444	0.132	16-04-2019	30	16	13	85	-
74	HEMAVATHY	890.63	873.63	0.927	0.113	16-04-2019	12	12	11	265	-
75	HARANGI	871.42	854.71	0.220	0.030	16-04-2019	14	17	14	53	-
76	SUPA	564.00	539.53	4.120	1.727	16-04-2019	42	39	31	-	-
77	VANIVILAS SAGAR	652.28	632.06	0.802	0.014	16-04-2019	2	1	13	123	-
*78	ALMATTI	519.60	511.00	3.105	0.647	18-04-2019	21	11	9	@	290
*79	GERUSOPPA	55.00	50.48	0.130	0.104	15-04-2019	80	90	86	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	105.22	0.507	0.267	16-04-2019	53	74	39	62	-
*81	IDAMALAYAR	169.00	137.94	1.018	0.270	16-04-2019	27	31	30	33	75
*82	IDUKKI	732.43	713.89	1.460	0.573	16-04-2019	39	37	32	-	780
*83	KAKKI	981.46	958.99	0.447	0.174	16-04-2019	39	52	41	23	300
*84	PERIYAR	867.41	859.74	0.173	0.021	16-04-2019	12	18	17	84	140
85	MALAPMUZHA	115.06	101.76	0.224	0.026	18-04-2019	12	14	20	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	265.73	0.792	0.177	16-04-2019	22	21	20	105	8
*87	METTUR(STANLEY)	240.79	221.09	2.647	0.604	16-04-2019	23	11	28	122	360
88	VAIGAI	279.20	270.27	0.172	0.031	16-04-2019	18	9	15	61	6
89	PARAMBIKULAM	556.26	544.21	0.380	0.148	16-04-2019	39	7	28	101	-
90	ALIYAR	320.04	301.78	0.095	0.003	16-04-2019	3	0	39	#	60
*91	SHOLAYAR	1002.79	955.25	0.143	0.000	16-04-2019	0	0	3	-	95
	TOTAL FOR 91 RESERVOIRS			161.993	44.459						

Sd/-

27

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

PERCENTAGE

Director W. M. , CWC

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

† SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

 $^{^{\}star}$ HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

[#] TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR