BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 11.04.2019)

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 11.04.2019, live storage available in these reservoirs is 46.513 BCM, which is 29% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 41.339 BCM and the average of last 10 years live storage was 45.162 BCM. Thus, the live storage available in 91 reservoirs as per 11.04.2019 Bulletin is 113% 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 11.04.2019, the total live storage available in these reservoirs is 8.75 BCM which is 49% 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 26% 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 11.04.2019, the total live storage available in these reservoirs is 7.45 BCM which is 40% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 42% and average storage of last ten years during corresponding period was 38% 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 11.04.2019, the total live storage available in these reservoirs is 6.54 BCM which is 21% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 28% 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 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 11.04.2019, the total live storage available in these reservoirs is 13.48 BCM which is 32% 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 31% 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 11.04.2019, the total live storage available in these reservoirs is 10.30 BCM which is 20% 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 20% of live storage capacity of these reservoirs. Thus, storage during current year is better than the corresponding period of last year and is equal to 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, Mahanadi & Neighbouring East Flowing Rivers and Cauvery & neighbouring EFRs. Deficient in Tapi, Sabarmati and Rivers of Kutch and Nil in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **34** and reservoirs having storage more than average of last ten years are **38**. 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 **11**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **17** 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 11.04.2019

- 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
 11.04.2019 is 46.513 BCM (29 percent of the live storage capacity at FRL). The current year's storage is nearly 113 percent of last year's storage and 103 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		
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-	1	1	1	1	1	1	3	H.P. PUNJAB RAJASTHAN	98 % 111 % 9 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	1	-	-	-	1	1	6	7	JHARKHAND ODISHA W. BENGAL TRIPURA	-12 % 6 % 18 % 115 %	
WEST (Guj.& Mah.), (27 Resv.)	1	-	-	-	-	2	5	20	GUJARAT MAH.	-31 % -36 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	1	2	8	U.P. UTTARAKHAND M.P. CHHATISGARH	-34 % 12 % 12 % -3 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	1	-	-	-	1	4	25	AP&TG A,P TG KARNATAKA KERALA T.N.	-39 % -81 % -35 % 24 % 10 % -1 %	
Status of 91 reservoirs	0	1	0	1	2	6	18	63		1 * *	

4 Basin wise storage position:

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

Ganga, Mahi, Godavari , Krishna, Mahanadi & Neighbouring East Flowing Riversand Cauvery & neighbouring

Close to normal: EFRs.

Deficient: Tapi, Sabarmati and Rivers of Kutch.

Highly deficient:

5 Out of 91 reservoirs, 56 reservoirs reported more than 80% of normal storage & 35 reservoirs reported 80% or below of normal storage. Out of these 35 reservoirs 20 having storage upto 50% of normal

43 46 50

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Name of reservoir	%	Name of reservoir
YELDARI	0	DAMANAGANGA
BHIMA(UJJANI)	0	MULA
JAYAKWADI(PAITHON)	0	MANIKDOH
SHOLAYAR	0	
GANDHI SAGAR	3	
BARNA	8	
PENCH (TOTALADOH)	11	
VANIVILAS SAGAR	14	
ALIYAR	19	
SOMASILA	19	
NAGARJUNA SAGAR	19	
BHANDARDARA	29	
TAWA	33	
BHADAR	35	
TILAIYA	39	
UKAI	39	
SHETRUNJI	42	

upto 50% of normal										
15	15 reservors									
having	having storage 51%									
to 80%	to 80% of normal									
storag	storage.									
51%	61%	71%								
to	to	to								
60%	70%	80%								
4	7	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 :- 11.04.2019

NAME OF BASIN	LIVE CAP. AT FRL	THIS YE STOR/	_	LAST Y STOR		LAST 10 AVG. ST	_	% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	7.736	27.53%	7.942	28.27%	8.262	29.41%	-6.37
INDUS	14.730	7.829	53.15%	2.422	16.44%	3.901	26.48%	100.69
NARMADA	21.608	6.678	30.91%	4.748	21.97%	5.159	23.88%	29.44
TAPI	7.394	1.163	15.73%	1.783	24.11%	2.751	37.21%	-57.72
MAHI	4.012	1.468	36.59%	1.685	42.00%	1.573	39.21%	-6.68
SABARMATI	0.735	0.096	13.06%	0.135	18.37%	0.152	20.68%	-36.84
RIVERS OF KUTCH	0.887	0.075	8.46%	0.217	24.46%	0.154	17.36%	-51.30
GODAVARI	15.394	3.463	22.50%	4.009	26.04%	4.232	27.49%	-18.17
KRISHNA	32.831	5.033	15.33%	5.047	15.37%	5.961	18.16%	-15.57
MAHANADI & NEIGHBOURING EFRS	13.181	5.636	42.76%	6.715	50.94%	5.960	45.22%	-5.44
CAUVERY& NEIGHBOURING EFRS	8.359	1.775	21.23%	1.290	15.43%	2.196	26.27%	-19.17
WEST FLOWING RIVERS OF SOUTH	14.766	5.561	37.66%	5.346	36.20%	4.861	32.92%	14.40
TOTAL	161.993	46.513		41.339		45.162		
PERCENTAGE			_			_		2.99

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	11.04.2019		CLIVITIAL	.,		
			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	493.03	6.229	3.256	11-04-2019	52	19	25	676	1200
*2	PONG DAM PUNJAB	423.67	408.86	6.157	2.813	11-04-2019	46	13	25	-	360
*3	THEIN	527.91	520.31	2.344	1.760	11-04-2019	75	20	36	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	268.50	1.711	0.486	10-04-2019	28	36	27	63	140
5	JHAKAM	359.50	345.65	0.132	0.033	10-04-2019	25	30	20	28	-
*6	RANA PRATAP SAGAR	352.81	346.71	1.436	0.398	11-04-2019	28	38	25	229	172
	EASTERN REGION										
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	257.82	0.821	0.337	11-04-2019	41	43	37	-	-
8	MAITHON	146.3	138.81	0.471	0.120	11-04-2019	25	70	49	342	-
*9	PANCHET HILL	124.97	123.46	0.184	0.116	11-04-2019	63	30	53	\$	80
10	KONAR	425.81	419.22	0.176	0.072	11-04-2019	41	30	50	\$	-
11	TILAIYA	368.81	364.06	0.142	0.011	11-04-2019	8	13	20	\$	4
	ODISHA										
*12	HIRAKUD	192.02	187.57	5.378	2.335	10-04-2019	43	42	41	153	307
*13	BALIMELA	462.08	452.63	2.676	1.255	10-04-2019	47	14	28	-	360
14	SALANADI	82.30	73.42	0.558	0.296	11-04-2019	53	41	18	42	-
*15	RENGALI	123.50	115.06	3.432	0.985	10-04-2019	29	61	46	3	200
*16	MACHKUND(JALPUT)	838.16	831.84	0.893	0.440	10-04-2019	49	56	45	-	115
*17	UPPER KOLAB	858.00	850.89	0.935	0.343	10-04-2019	37	34	37	89	320
*18	UPPER INDRAVATI	642.00	633.37	1.456	0.612	10-04-2019	42	36	38	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	110.26	0.480	0.085	11-04-2019	18	51	27	227	-
20	KANGSABATI	134.14	126.10	0.914	0.326	11-04-2019	36	46	24	341	-
	TRIPURA										
21	GUMTI WESTERN REGION	93.55	88.70	0.312	0.114	10-04-2019	37	55	17	-	15
		ı									
*22	GUJARAT UKAI	105.16	90.69	6 615	1.002	11-04-2019	15	24	20	240	300
	SABARMATI(DHAROI)	105.16 189.59	89.68 180.02		1.002 0.096	10-04-2019	15 13	24 18	39 21	348 95	300
	KADANA	127.7	121.57			10-04-2019	43	48	54		120
	SHETRUNJI	55.53	49.02			10-04-2019	12	17		36	-
	BHADAR	107.89	100.77		0.036	09-04-2019	7	23	29	27	
	DAMANAGANGA	79.86	68.50			11-04-2019	19	46	44		1
	DANTIWADA	184.1	167.62		0.025	10-04-2019	6	30	7		
	PANAM	127.41	123.20			10-04-2019	44	45	42		
	SARDAR SAROVAR	138.68	119.28			11-04-2019	19	0	13	2120	1450
	KARJAN	115.25	104.50			11-04-2019	49	55	50	51	3
	-					0	.0	30	30		,

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	11.04.2019					
			CURRENT	LIVE			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
	MAHARASHTRA	l		I.							<u> </u>
32	JAYAKWADI(PAITHON)	463.91	455.23	2.171	0.000	10-04-2019	0	49	21	227	_
*33	KOYANA	657.90	645.26	2.652	1.459	10-04-2019	55	60	51	-	1920
34	BHIMA(UJJANI)	496.83	488.66	1.517	0.000	09-04-2019	0	33	24	125	12
35	ISAPUR	441.00	430.23	0.965	0.187	10-04-2019	19	1	23	104	-
36	MULA	552.30	538.52	0.609	0.090	10-04-2019	15	39	32	139	-
37	YELDARI	461.77	446.03	0.809	0.000	11-04-2019	0	0	17	78	-
38	GIRNA	398.07	386.65	0.524	0.102	10-04-2019	19	21	18	79	-
39	KHADAKVASLA	582.47	580.37	0.056	0.029	04-04-2019	52	61	50	78	8
*40	UPPER VAITARNA	603.50	597.12	0.331	0.143	10-04-2019	43	38	47	-	61
41	UPPER TAPI	214.00	209.89	0.255	0.059	10-04-2019	23	32	42	45	-
*42	PENCH (TOTALADOH)	490.00	466.50	1.091	0.033	09-04-2019	3	12	27	127	160
43	UPPER WARDHA	342.50	335.55	0.564	0.111	11-04-2019	20	42	37	70	-
44	BHATSA	142.07	117.21	0.942	0.401	10-04-2019	43	50	48	29.378	15
45	DHOM	747.70	733.21	0.331	0.073	04-04-2019	22	44	36	36.2	2
46	DUDHGANGA	646.00	628.62	0.664	0.212	10-04-2019	32	47	42	2.441	24
47	MANIKDOH (KUKADI)	711.25	687.12	0.288	0.016	10-04-2019	6	21	11	2.2	6
48	BHANDARDARA CENTRAL REGION	744.91	715.47	0.304	0.037	10-04-2019	12	55	41	63.74	46
40	MATATILA	308.46	202.24	0.707	0.182	10.04.2010	26	0E	42		30
	RIHAND	268.22	303.34 256.21	5.649	0.162	10-04-2019 11-04-2019	26 16	25 19	24	-	300
30	UTTRAKHAND	200.22	250.21	3.049	0.909	11-04-2019	10	13	24	_	300
*51	RAMGANGA	365.30	344.40	2.196	0.898	09-04-2019	41	23	37	1897	198
	TEHRI	830.00	769.08	2.615	0.611	11-04-2019	23	15	20	2351	1000
32	MADHYA PRADESH	000.00	703.00	2.010	0.011	11 04 2015	25	13	20	2001	1000
*53	GANDHI SAGAR	399.90	381.32	6.827	0.044	11-04-2019	1	18	23	220	115
	TAWA	355.40	337.69	1.944		11-04-2019	. 8	9	24	247	-
	BARGI	422.76	415.30	3.180		11-04-2019	44	60	40	157	90
	BANSAGAR	341.64	337.85	5.166		11-04-2019	68	47	42	488	425
	INDIRA SAGAR	262.13	253.95	9.745		11-04-2019	38	24	24	2380	1000
58	BARNA	348.55	338.41	0.456		11-04-2019	2	9	21	546	_
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	352.11	3.046	1.721	11-04-2019	57	58	57	-	120
60	MAHANADI	348.70	342.66	0.767	0.299	10-04-2019	39	47	45	319	10
:	SOUTHERN REGION										
	A.P & TG	1									
*61	SRISAILAM	269.75	249.54	8.288	1.032	10-04-2019	12	9	13	0	770
	NAGARJUNA SAGAR	179.83	156.61	6.841	0.185	10-04-2019	3	3	14		810
	ANDHRA PRADESH										
63	SOMASILA	100.58	80.25	1.994	0.146	10-04-2019	7	19	38	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	321.05	2.300	0.228	10-04-2019	10	13	16	411	27
65	LOWER MANAIR	280.42	269.87	0.621	0.127	10-04-2019	20	22	28	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	11.04.2019		CENTRALV	VATER COM	COMMISSION			
			QUEENT	1075			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	742.87	1.163	0.384	08-04-2019	33	15	23	79	-		
*67	TUNGABHADRA	497.74	482.19	3.276	0.143	11-04-2019	4	4	5	529	72		
68	GHATAPRABHA	662.95	641.95	1.391	0.276	11-04-2019	20	23	13	317	-		
69	BHADRA	657.76	645.35	1.785	0.628	11-04-2019	35	18	38	106	39		
70	LINGANAMAKKI	554.43	541.22	4.294	1.350	11-04-2019	31	25	29	-	55		
71	NARAYANPUR	492.25	487.10	0.863	0.215	10-04-2019	25	27	31	425	-		
72	MALAPRABHA(RENUKA)	633.83	622.11	0.972	0.074	11-04-2019	8	7	8	215	-		
73	KABINI(Sancherla Tank)	696.16	690.60	0.444	0.166	08-04-2019	37	22	15	85	-		
74	HEMAVATHY	890.63	873.76	0.927	0.116	08-04-2019	13	14	12	265	-		
75	HARANGI	871.42	854.90	0.220	0.030	08-04-2019	14	17	15	53	-		
76	SUPA	564.00	540.68	4.120	1.811	11-04-2019	44	41	29	-	-		
77	VANIVILAS SAGAR	652.28	632.10	0.802	0.015	11-04-2019	2	1	13	123	-		
*78	ALMATTI	519.60	511.19	3.105	0.676	10-04-2019	22	12	10	@	290		
*79	GERUSOPPA	55.00	53.63	0.130	0.122	08-04-2019	94	92	80	83	240		
	<u>KERALA</u>												
80	KALLADA(PARAPPAR)	115.82	106.38	0.507	0.291	08-04-2019	57	75	44	62	-		
*81	IDAMALAYAR	169.00	139.88	1.018	0.307	08-04-2019	30	35	33	33	75		
*82	IDUKKI	732.43	715.16	1.460	0.624	08-04-2019	43	40	34	-	780		
*83	KAKKI	981.46	961.16	0.447	0.192	08-04-2019	43	55	45	23	300		
*84	PERIYAR	867.41	859.86	0.173	0.023	08-04-2019	13	13	16	84	140		
85	MALAPMUZHA	115.06	101.89	0.224	0.026	09-04-2019	12	14	20	21	3		
	TAMIL NADU												
86	LOWER BHAWANI	278.89	267.96	0.792	0.245	08-04-2019	31	20	23	105	8		
*87	METTUR(STANLEY)	240.79	221.86	2.647	0.655	08-04-2019	25	11	28	122	360		
88	VAIGAI	279.20	270.53	0.172	0.033	08-04-2019	19	8	16	61	6		
89	PARAMBIKULAM	556.26	545.42	0.380	0.169	08-04-2019	44	6	29	101	-		
90	ALIYAR	320.04	303.08	0.095	0.007	08-04-2019	7	0	39	#	60		
*91	SHOLAYAR	1002.79	956.60	0.143	0.000	08-04-2019	0	0	2	-	95		
	TOTAL FOR 91 RESERVOIRS			161.993	46.513								
	PERCENTAGE						29	26	28				

Sd/-

 $\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

Director W. M. , CWC

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

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

^{@&#}x27;TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

[†] SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.