BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 20.07.2017)

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 157.799 BCM which is about 62% of the live storage capacity of 253.388 BCM which is estimated to have been created in the country. As per reservoir storage bulletin dated 20.07.2017, live storage available in these reservoirs is 43.732 BCM, which is 28% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 53.86 BCM and the average of last 10 years live storage was 50.840 BCM. Thus, the live storage available in 91 reservoirs as per 20.07.2017 Bulletin is 81% of the live storage of corresponding period of last year and 86% of storage of average of last ten years.

The overall storage position is **less 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 20.07.2017, the total live storage available in these reservoirs is 7.94 BCM which is 44% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 33% and average storage of last ten years during corresponding period was 41% 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 reservoirsunder CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated 20.07.2017, the total live storage available in these reservoirs is 4.75 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 26% 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 27.07 BCM. As per Reservoir Storage Bulletin dated 20.07.2017, the total live storage available in these reservoirs is 8.53 BCM which is 31% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 31% and average storage of last ten years during corresponding period was 32% of live storage capacity of these reservoirs. Thus, storage during current year is equal to the storage of last year but is 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 20.07.2017, the total live storage available in these reservoirs is 13.88 BCM which is 33% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 48% 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 20.07.2017, the total live storage available in these reservoirs is 8.64 BCM which is 17 % 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 35% 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.

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, Sabarmati, Godavari, Mahi and Ganga. Close to Normal in Tapi, Mahanadi & neighbouring East Flowing Rivers and West Flowing Rivers of South. Deficient in Narmada, Krishna and Rivers of Kutch and Highly Deficient in Cauvery & neighbouring EFR basin.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **36** and reservoirs having storage more than average of last ten years are **35**. 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 **20** and having storage less than or equal to 50% with reference to average of last ten years are **29**.

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 20.07.2017

- 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

20.07.2017 BCM (28 percent of the live storage capacity at FRL). The current year's storage 43.732 **86** percent of the average of last ten years. is nearly 81 percent of last year's storage and

3 Region wise storage status:-

DECION (C: :)		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	-	-	3	2	H.P. PUNJAB RAJASTHAN	-2 % 63 % 3 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	1	1	-	-	2	11	JHARKHAND ODISHA W. BENGAL TRIPURA	-24 % -2 % -9 % 110 %	
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	1	3	3	2	18	GUJARAT MAH.	-3 % -2 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	1	2	-	9	U.P. UTTARAKHAND M.P. CHHATISGARH	26 % -12 % 23 % 11 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	-	-	1	3	26	AP&TG A,P TG KARNATAKA KERALA T.N.	-87 % -59 % -25 % -37 % -43 % -81 %	
Status of 91 reservoirs	0	0	2	3	4	6	10	66			

4 Basin wise storage position:

Ganga, Mahi, Indus, Sabarmati and Godavari. Better than normal:

Close to normal: Tapi, Mahanadi & Neighbouring EFRS and West Flowing Rivers of South.

Deficient: Narmada, Rivers of Kutch and Krishna **Highly deficient:** Cauvery & neighbouring EFRS.

5 Out of 91 reservoirs, 45 reservoirs reported more than 80% of normal storage & 46 reservoirs reported 80% or below of normal storage. Out of these 46 reservoirs 29 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0	KRISHNARAJA SAGRA	29
BHIMA(UJJANI)	0	TUNGABHADRA	32
VANIVILAS SAGAR	14	PARAMBIKULAM	34
METTUR(STANLEY)	14	SHETRUNJI	35
BHADAR	15	BHADRA	35
ISAPUR	17	MALAPRABHA(RENUKA)	36
MATATILA	18	MAITHON	38
PENCH (TOTALADOH)	18	RAMGANGA	40
ALIYAR	19	HEMAVATHY	40
PERIYAR	20	SOMASILA	41
UPPER TAPI	20	MALAMPUZHA	42
LOWER BHAWANI	23	INDIRA SAGAR	49
NARAYANPUR	23		
SHOLAYAR	24		
YELDARI	27		
SRISAILAM	28		
VAIGAI	28		

17 reservors having storage 51% to 80% of normal								
storage.								
51%	61%	71%						
to	to	to						
60%	70%	80%						
4	4	9						

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 :- 20.07.2017												
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	10.923	38.88%	10.371	36.91%	7.973	28.38%	37.00				
INDUS	14.730	6.570	44.60%	4.451	30.22%	5.985	40.63%	9.77				
NARMADA	17.414	4.015	23.06%	11.701	67.19%	5.147	29.56%	-21.99				
TAPI	7.394	1.935	26.17%	2.276	30.78%	2.155	29.15%	-10.21				
MAHI	4.012	1.714	42.72%	1.275	31.78%	1.591	39.66%	7.73				
SABARMATI	0.735	0.195	26.53%	0.183	24.90%	0.180	24.49%	8.33				
RIVERS OF KUTCH	0.887	0.107	12.06%	0.073	8.23%	0.193	21.76%	-44.56				
GODAVARI	15.394	3.621	23.52%	4.201	27.29%	3.549	23.05%	2.03				
KRISHNA	32.831	4.994	15.21%	8.491	25.86%	11.009	33.53%	-54.64				
MAHANADI & NEIGHBOURING EFRS	13.181	3.536	26.83%	2.642	20.04%	3.902	29.60%	-9.38				
CAUVERY& NEIGHBOURING EFRS	8.359	1.136	13.59%	2.516	30.10%	3.576	42.78%	-68.23				
WEST FLOWING RIVERS OF SOUTH	14.766	4.986	33.77%	5.680	38.47%	5.580	37.79%	-10.65				
TOTAL	157.799	43.732		53.860		50.840						
PERCENTAGE								-13.98				

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA	K ENDING :-	20.07.2017		CLIVITAL	.,					
			CURRENT	LIVE			STORAGE A	S % OF LIVE C FRL	APACITY AT	BENE	FITS
S. NO	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
	NORTHERN REGION	i									
	HIMACHAL PRADESH										
*1	GOBIND SAGAR(BHAKRA)	512.06	488.02	6.229	2.683	20-07-2017	43	37	46	676	1200
*2	PONG DAM PUNJAB	423.67	404.33	6.157	2.087	20-07-2017	34	20	33	-	360
*3	THEIN	527.91	520.99	2.344	1.800	20-07-2017	77	40	47	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	271.40	1.711	0.717	20-07-2017	42	35	35	63	140
5	JHAKAM	359.50	348.60	0.132	0.047	20-07-2017	36	8	23	28	-
*6	RANA PRATAP SAGAR	352.81	348.18	1.436	0.605	19-07-2017	42	67	49	229	172
	EASTERN REGION	•									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	255.97	0.821	0.281	20-07-2017	34	47	40	-	-
8	MAITHON	146.3	138.02	0.471	0.097	20-07-2017	21	44	54	342	-
*9	PANCHET HILL	124.97	124.49	0.184	0.161	20-07-2017	88	84	73	\$	80
10	KONAR	425.81	417.42	0.176	0.052	20-07-2017	30	41	48	\$	-
11	TILAIYA	368.81	366.29	0.142	0.060	20-07-2017	42	25	37	\$	4
	ODISHA										
	HIRAKUD	192.02	183.77	5.378	0.960	19-07-2017	18	14	23	153	307
*13	BALIMELA	462.08	448.06	2.676	0.748	19-07-2017	28	43	18	-	360
14	SALANADI	82.30	67.28	0.558	0.162	19-07-2017	29	8	29	42	-
	RENGALI	123.50	111.77		0.334	19-07-2017	10	12	19	3	200
	MACHKUND(JALPUT)	838.16	829.82		0.335	19-07-2017	38	38	39	-	115
	UPPER KOLAB	858.00	849.89		0.271	19-07-2017	29	29	20	89	320
*18	UPPER INDRAVATI	642.00	632.46	1.456	0.537	20-07-2017	37	34	25	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	115.05		0.210	20-07-2017	44	39	42	227	-
20	KANGSABATI	134.14	125.56	0.914	0.297	20-07-2017	32	22	39	341	-
	TRIPURA										
21	GUMTI WESTERN REGION	93.55	92.10	0.312	0.244	18-07-2017	78	53	37	-	15
_		•									
*22	GUJARAT UKAI	105.16	02.40	6 615	1 760	20-07-2017	27	22	21	240	200
	SABARMATI(DHAROI)	189.59	93.49 182.50				27 27	33 25	31 24	348 95	300
	KADANA	127.7	122.68			20-07-2017 20-07-2017	49	32			120
	SHETRUNJI	55.53	49.12			20-07-2017	12	20		36	-
	BHADAR	107.89	99.88			20-07-2017	4	3		27	
	DAMANAGANGA	79.86	71.75			20-07-2017	35	48	29		1
	DANTIWADA	184.1	171.18		0.174	20-07-2017	16	2		45	
	PANAM	127.41	121.10			20-07-2017	32	27	45	36	
	SARDAR SAROVAR	121.92	117.51			20-07-2017	55	52		2120	1450
	KARJAN	115.25	105.61	0.523			52	8		51	3
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GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA		WEE	K ENDING .	00 07 0047	CENTRAL WATER COMMISSION					
					K ENDING :-	20.07.2017	STORAGE A	S % OF LIVE C	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										
32	JAYAKWADI(PAITHON)	463.91	458.35	2.171	0.506	20-07-2017	23	0	12	227	-
*33	KOYANA	657.90	644.04	2.652	1.270	19-07-2017	48	46	50	-	1920
34	BHIMA(UJJANI)	496.83	491.00	1.517	0.000	20-07-2017	0	0	14	125	12
35	ISAPUR	441.00	427.00	0.965	0.051	19-07-2017	5	7	32	104	-
36	MULA	552.30	542.68	0.609	0.205	20-07-2017	34	42	22	139	-
37	YELDARI	461.77	448.67	0.809	0.026	20-07-2017	3	0	12	78	-
38	GIRNA	398.07	388.65	0.524	0.157	19-07-2017	30	3	10	79	-
39	KHADAKVASLA	582.47	580.86	0.056	0.035	19-07-2017	63	91	52	78	8
*40	UPPER VAITARNA	603.50	599.94	0.331	0.219	19-07-2017	66	56	43	-	61
41	UPPER TAPI	214.00	208.34	0.255	0.016	19-07-2017	6	18	32	45	-
*42	PENCH (TOTALADOH)	490.00	468.30	1.091	0.063	19-07-2017	6	51	32	127	160
43	UPPER WARDHA	342.50	337.42	0.564	0.201	19-07-2017	36	57	46	70	-
44	BHATSA	142.07	132.32	0.942	0.696	19-07-2017	74	68	46	29.378	15
45	DHOM	747.70	735.75	0.331	0.110	19-07-2017	33	51	37	36.2	2
46	DUDHGANGA	646.00	634.67	0.664	0.342	19-07-2017	52	44	50	2.441	24
	MANIKDOH (KUKADI)	711.25	698.50	0.288	0.104	19-07-2017	36	32	15	2.2	6
48	BHANDARDARA CENTRAL REGION	744.91	738.72	0.304	0.202	19-07-2017	66	54	39	63.74	46
	UTTAR PRADESH										
49	MATATILA	308.46	301.02	0.707	0.059	19-07-2017	8	64	47	_	30
	RIHAND	268.22	257.65	5.649	1.375	20-07-2017	24	13	14		300
	UTTRAKHAND										
*51	RAMGANGA	365.30	320.76	2.196	0.274	20-07-2017	12	17	31	1897	198
*52	TEHRI	830.00	782.00	2.615	0.947	19-07-2017	36	34	27	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	394.16	6.827	3.534	20-07-2017	52	41	24	220	115
54	TAWA	355.40	345.64	1.944	0.702	20-07-2017	36	82	46	247	-
*55	BARGI	422.76	412.35	3.180	0.968	20-07-2017	30	60	30	157	90
*56	BANSAGAR	341.64	335.65	5.166	2.727	20-07-2017	53	53	31	488	425
*57	INDIRA SAGAR	262.13	246.89	9.745	1.073	20-07-2017	11	72	23	2380	1000
58	BARNA	348.55	342.97	0.456	0.138	20-07-2017	30	82	34	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	353.12	3.046	1.860	19-07-2017	61	36	52	-	120
60	MAHANADI	348.70	341.39	0.767	0.220	19-07-2017	29	41	38	319	10
	SOUTHERN REGION										
	A.P & TG										
*61	SRISAILAM	269.75	236.74	8.288	0.445	20-07-2017	5	7	20	0	770
*62	NAGARJUNA SAGAR	179.83	152.89	6.841	0.000	20-07-2017	0	0	26	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	82.14	1.994	0.209	20-07-2017	10	18	26	168	0
	TELANGANA										
64	SRIRAMSAGAR	332.54	321.59	2.300	0.265	20-07-2017	12	22	21	411	27
65	LOWER MANAIR	280.42	272.43	0.621	0.211	20-07-2017	34	11	24	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-						
			QUEDENT				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	738.30	1.163	0.159	19-07-2017	14	41	48	79	-
*67	TUNGABHADRA	497.74	486.98	3.276	0.480	20-07-2017	15	34	45	529	72
68	GHATAPRABHA	662.95	645.41	1.391	0.400	19-07-2017	29	37	38	317	-
69	BHADRA	657.76	640.64	1.785	0.341	19-07-2017	19	35	55	106	39
70	LINGANAMAKKI	554.43	539.80	4.294	1.161	20-07-2017	27	34	38	-	55
71	NARAYANPUR	492.25	485.25	0.863	0.107	20-07-2017	12	79	53	425	-
72	MALAPRABHA(RENUKA)	633.83	622.22	0.972	0.078	19-07-2017	8	13	22	215	-
73	KABINI(Sancherla Tank)	696.16	690.96	0.444	0.181	19-07-2017	41	55	51	85	-
74	HEMAVATHY	890.63	876.89	0.927	0.202	19-07-2017	22	49	55	265	-
75	HARANGI	871.42	866.99	0.220	0.120	19-07-2017	55	99	78	53	-
76	SUPA	564.00	538.80	4.120	1.674	20-07-2017	41	31	31	-	-
77	VANIVILAS SAGAR	652.28	631.96	0.802	0.013	20-07-2017	2	6	12	123	-
*78	ALMATTI	519.60	514.30	3.105	1.269	20-07-2017	41	96	58	@	290
*79	GERUSOPPA	55.00	50.68	0.130	0.106	20-07-2017	82	72	82	83	240
	<u>KERALA</u>										
80	KALLADA(PARAPPAR)	115.82	96.48	0.507	0.144	19-07-2017	28	59	42	62	-
*81	IDAMALAYAR	169.00	136.62	1.018	0.246	19-07-2017	24	38	38	33	75
*82	IDUKKI	732.43	706.27	1.460	0.307	19-07-2017	21	37	36	-	780
*83	KAKKI	981.46	947.71	0.447	0.098	19-07-2017	22	51	43	23	300
*84	PERIYAR	867.41	859.46	0.173	0.017	20-07-2017	10	35	50	84	140
85	MALAPMUZHA	115.06	104.06	0.224	0.044	20-07-2017	20	28	47	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	261.78	0.792	0.089	20-07-2017	11	25	49	105	8
*87	METTUR(STANLEY)	240.79	211.99	2.647	0.166	20-07-2017	6	22	45	122	360
88	VAIGAI	279.20	266.72	0.172	0.010	20-07-2017	6	4	21	61	6
89	PARAMBIKULAM	556.26	539.21	0.380	0.067	20-07-2017	18	29	53	101	-
90	ALIYAR	320.04	303.93	0.095	0.010	20-07-2017	11	24	55	#	60
*91	SHOLAYAR	1002.79	975.39	0.143	0.023	20-07-2017	16	55	67	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	43.732						
	PERCENTAGE						28	34	32		

Sd/-

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

Director W. M. , CWC

^{*} 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

 $[\]dagger$ SABARMATI RESERVOIR IS SUPPLEMENTED WITH NARMADA WATER THROUGH PIPELINE.

SI. No. 30th The FRL of S.S.P. 138.38 M and Live capacity at FRL will be 5.760 BCM. However at present the lowest block of the dam is at the level of 121.92 M. and the live capacity at this level is 1.566 BCM