BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 22.06.2017)

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 22.06.2017, live storage available in these reservoirs is 29.409 BCM, which is 19% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 24.124 BCM and the average of last 10 years live storage was 30.119 BCM. Thus, the live storage available in 91 reservoirs as per 22.06.2017 Bulletin is 122% of the live storage of corresponding period of last year and 98% 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 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 22.06.2017, the total live storage available in these reservoirs is 4.56 BCM which is 25% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 23% 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 corresponding period of last year but is 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 reservoirsunder CWC monitoring having total live storage capacity of 18.83 BCM. As per Reservoir Storage Bulletin dated 22.06.2017, the total live storage available in these reservoirs is 3.09 BCM which is 16% 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 16% of live storage capacity of these reservoirs. Thus, storage during current year is equal to the corresponding period of last year and is also equal to 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 22.06.2017, the total live storage available in these reservoirs is 5.74 BCM which is 21% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 10% 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 storage of last year and is also 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 22.06.2017, the total live storage available in these reservoirs is 12.02 BCM which is 28% 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 16% 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 22.06.2017, the total live storage available in these reservoirs is 4.00 BCM which is 8 % of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 11% and average storage of last ten years during corresponding period was 19% 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 Narmada, Mahi, Ganga, Sabarmati, Tapi and Mahanadi & neighbouring East Flowing Rivers. Close to Normal in Godavari, Indus, Rivers of Kutch and West Flowing Rivers of South. Nil in Deficient and Highly Deficient in Cauvery & neighbouring EFR and Krishna basin.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are **40** 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 **5** and having storage less than 20% with reference to average of last ten years is **14.** The number of reservoirs having storage less than or equal to 50% with respect to last year are **21** and having storage less than or equal to 50% with reference to average of last ten years are **35.**

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 22.06.2017

- 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
 22.06.2017 is 29.409 BCM (19 percent of the live storage capacity at FRL). The current year's storage is nearly 122 percent of last year's storage and 98 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	-	5	H.P. PUNJAB RAJASTHAN	-31 % 24 % -1 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	-	1	-	-	14	JHARKHAND ODISHA W. BENGAL TRIPURA	-21 % 1 % 24 % 160 %
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	-	1	1	-	25	GUJARAT MAH.	31 % -32 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	-	2	1	9	U.P. UTTARAKHAND M.P. CHHATISGARH	96 % -93 % 125 % 26 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	-	1	-	-	-	30	AP&TG A,P TG KARNATAKA KERALA T.N.	-82 % -60 % 29 % -43 % -44 % -83 %
Status of 91 reservoirs	0	0	0	1	2	4	1	83	-	55,75

4 Basin wise storage position:

Better than normal: Ganga, Sabarmati, Mahi, Narmada, Tapi and Mahanadi & Neighbouring EFRS.

Close to normal: Indus, Godavari, Rivers of Kutch and West Flowing Rivers of South.

Deficient: NIL

Highly deficient: Cauvery & neighbouring EFRS and Krishna.

5 Out of 91 reservoirs, 40 reservoirs reported more than 80% of normal storage & 51 reservoirs reported 80% or below of normal storage. Out of these 51 reservoirs 35 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0	KOYANA	26
ALMATTI	0	LOWER BHAWANI	26
BHIMA(UJJANI)	0	YELDARI	27
RAMGANGA	0	TEHRI	29
BHADAR	0	MATATILA	31
TUNGABHADRA	5	DANTIWADA	33
SHOLAYAR	6	MALAMPUZHA	33
KABINI	12	ALIYAR	34
PERIYAR	12	SRISAILAM	39
ISAPUR	13	SOMASILA	40
VAIGAI	14	PONG DAM	41
METTUR(STANLEY)	14	KRISHNARAJA SAGRA	41
VANIVILAS SAGAR	16	UPPER TAPI	41
BHADRA	20	MULA	42
MALAPRABHA(RENUKA)	21	NARAYANPUR	43
PENCH (TOTALADOH)	21	MAHANADI	48
PARAMBIKULAM	22	DHOM	49
		HEMAVATHY	50

upto 30 /0 of Horrial									
16 reservors									
having	having storage 51%								
to 80% of normal									
storage	storage.								
51%	61%	71%							
to	to	to							
60%	70%	80%							
6	6	4							
)								

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

22 reservoirs.

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION WEEK ENDING :- 22.06.2017

WEEK ENDING :- 22.06.2017												
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	9.110	32.42%	6.959	24.77%	5.487	19.53%	66.03				
INDUS	14.730	3.579 2	24.30%	3.115	21.15%	4.327	29.38%	-17.29				
NARMADA	17.414	3.597 2	20.66%	2.771	15.91%	2.121	12.18%	69.59				
TAPI	7.394	2.006 2	27.13%	0.526	7.11%	1.371	18.54%	46.32				
MAHI	4.012	1.560	38.88%	0.693	17.27%	1.299	32.38%	20.09				
SABARMATI	0.735	0.137 1	18.64%	0.139	18.91%	0.123	16.73%	11.38				
RIVERS OF KUTCH	0.887	0.041	4.62%	0.047	5.30%	0.051	5.75%	-19.61				
GODAVARI	15.394	2.281 1	14.82%	2.063	13.40%	2.373	15.42%	-3.88				
KRISHNA	32.831	1.098	3.34%	2.020	6.15%	5.488	16.72%	-79.99				
MAHANADI & NEIGHBOURING EFRS	13.181	2.805 2	21.28%	1.723	13.07%	2.405	18.25%	16.63				
CAUVERY& NEIGHBOURING EFRS	8.359	0.596	7.13%	1.159	13.87%	2.160	25.84%	-72.41				
WEST FLOWING RIVERS OF SOUTH	14.766	2.599 1	17.60%	2.909	19.70%	2.914	19.73%	-10.81				
TOTAL	157.799	29.409		24.124	·	30.119						
PERCENTAGE								-2.36				

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	22.06.2017			VATER CON		
			CURRENT	LIVE			STORAGE AS	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										
	HIMACHAL PRADESH										
*1	GOBIND SAGAR(BHAKRA)	512.06	476.76	6.229	1.632	22-06-2017	26	30	29	676	1200
*2	PONG DAM PUNJAB	423.67	392.26	6.157	0.587	20-06-2017	10	6	23	-	360
*3	THEIN	527.91	513.87	2.344	1.360	22-06-2017	58	37	47	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	269.50	1.711	0.554	21-06-2017	32	20	21	63	140
5	JHAKAM	359.50	346.30	0.132	0.036	21-06-2017	27	6	16	28	-
*6	RANA PRATAP SAGAR	352.81	346.67	1.436	0.393	21-06-2017	27	50	43	229	172
	EASTERN REGION	i									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	255.48	0.821	0.267	21-06-2017	33	33	35	-	-
8	MAITHON	146.3	137.38	0.471	0.081	21-06-2017	17	12	29	342	-
*9	PANCHET HILL	124.97	121.94	0.184	0.060	21-06-2017	33	14	51	\$	80
10	KONAR	425.81	415.20	0.176	0.031	21-06-2017	18	22	31	\$	-
11	TILAIYA	368.81	365.21	0.142	0.034	21-06-2017	24	12	20	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	182.59	5.378	0.625	21-06-2017	12	10	11	153	307
*13	BALIMELA	462.08	444.73	2.676	0.441	21-06-2017	16	36	17	-	360
14	SALANADI	82.30	67.17	0.558	0.160	22-06-2017	29	4	26	42	-
*15	RENGALI	123.50	111.04	3.432	0.206	21-06-2017	6	1	7	3	200
*16	MACHKUND(JALPUT)	838.16	824.91	0.893	0.147	21-06-2017	16	23	32	-	115
*17	UPPER KOLAB	858.00	848.51	0.935	0.201	22-06-2017	21	16	12	89	320
*18	UPPER INDRAVATI	642.00	629.09	1.456	0.274	22-06-2017	19	22	15	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	112.00	0.480	0.122	21-06-2017	25	26	21	227	-
20	KANGSABATI	134.14	124.28	0.914	0.239	21-06-2017	26	20	21	341	-
	TRIPURA										
21	GUMTI WESTERN REGION	93.55	91.10	0.312	0.203	21-06-2017	65	47	25	-	15
	GUJARAT	•									
*22	UKAI	105.16	93.96	6.615	1.847	20-06-2017	28	8	19	348	300
	SABARMATI(DHAROI)	189.59	181.14			21-06-2017	19	19	17		1
	KADANA	127.7	123.06			21-06-2017	51	16	45		120
	SHETRUNJI	55.53	49.22			21-06-2017	13	10		36	-
	BHADAR	107.89	96.6			21-06-2017	0	5		27	
	DAMANAGANGA	79.86	66.50			20-06-2017	12	8	11	51	1
	DANTIWADA	184.1	162.61	0.399	0.002	21-06-2017	1	2	2		
	PANAM	127.41	120.80			21-06-2017	30	17	38		
	SARDAR SAROVAR	121.92	118.11	1.566		20-06-2017	61	45	35	2120	1450
	KARJAN	115.25	96.77			20-06-2017	24	8	31	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 22.06.2017											
							STORAGE A	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			I.							
32	JAYAKWADI(PAITHON)	463.91	457.90	2.171	0.414	22-06-2017	19	0	10	227	-
*33	KOYANA	657.90	623.62	2.652	0.171	21-06-2017	6	2	25	-	1920
34	BHIMA(UJJANI)	496.83	488.70	1.517	0.000	22-06-2017	0	0	5	125	12
35	ISAPUR	441.00	426.44	0.965	0.030	21-06-2017	3	1	24	104	-
36	MULA	552.30	534.77	0.609	0.014	22-06-2017	2	5	5	139	-
37	YELDARI	461.77	448.56	0.809	0.023	22-06-2017	3	0	10	78	-
38	GIRNA	398.07	387.96	0.524	0.138	21-06-2017	26	0	7	79	-
39	KHADAKVASLA	582.47	578.08	0.056	0.007	21-06-2017	13	14	20	78	8
*40	UPPER VAITARNA	603.50	593.43	0.331	0.068	21-06-2017	21	27	26	-	61
41	UPPER TAPI	214.00	208.55	0.255	0.021	21-06-2017	8	0	20	45	-
*42	PENCH (TOTALADOH)	490.00	466.91	1.091	0.039	21-06-2017	4	8	17	127	160
43	UPPER WARDHA	342.50	337.27	0.564	0.193	22-06-2017	34	20	30	70	-
44	BHATSA	142.07	111.90	0.942	0.319	21-06-2017	34	27	28	29.378	15
45	DHOM	747.70	729.60	0.331	0.034	21-06-2017	10	24	21	36.2	2
46	DUDHGANGA	646.00	620.70	0.664	0.092	21-06-2017	14	0	20	2.441	24
47	MANIKDOH (KUKADI)	711.25	685.28	0.288	0.008	21-06-2017	3	6	4	2.2	6
48	BHANDARDARA	744.91	716.60	0.304	0.042	21-06-2017	14	1	9	63.74	46
	CENTRAL REGION	•									
	UTTAR PRADESH										
49	MATATILA	308.46	301.02	0.707	0.059	21-06-2017	8	9	27	-	30
*50	RIHAND	268.22	257.59	5.649	1.354	22-06-2017	24	14	9	-	300
	<u>UTTRAKHAND</u>										
*51	RAMGANGA	365.30	298.56	2.196	0.000	22-06-2017	0	6	25	1897	198
*52	TEHRI	830.00	743.00	2.615	0.047	22-06-2017	2	5	6	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	394.52	6.827	3.699	22-06-2017	54	36	19	220	115
	TAWA	355.40	342.47	1.944	0.431	22-06-2017	22	6	21	247	-
	BARGI	422.76	409.95	3.180	0.669	22-06-2017	21	25	11	157	90
	BANSAGAR	341.64	335.05		2.521	22-06-2017	49	35	23	488	425
	INDIRA SAGAR	262.13	247.76			21-06-2017	13	11	6	2380	1000
58	BARNA	348.55	342.54	0.456	0.124	22-06-2017	27	5	14	546	-
	CHHATTIS GARH										
	MINIMATA BANGOI	359.66	352.12			19-06-2017	57			-	120
	MAHANADI	348.70	338.79	0.767	0.092	21-06-2017	12	21	25	319	10
	SOUTHERN REGION	•									
	A.P & TG										
	SRISAILAM	269.75	237.16				6	6	14	0	
*62	NAGARJUNA SAGAR	179.83	152.92	6.841	0.000	22-06-2017	0	0	21	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	82.23	1.994	0.212	22-06-2017	11	25	26	168	0
	<u>TELANGANA</u>										
	SRIRAMSAGAR	332.54	321.41	2.300			11	6	10	411	27
65	LOWER MANAIR	280.42	272.42	0.621	0.211	22-06-2017	34	11	23	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	22.06.2017					
			QUEDENT				STORAGE A	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
	KARNATAKA										
66	KRISHNARAJA SAGRA	752.50	735.21	1.163	0.057	22-06-2017	5	7	12	79	-
*67	TUNGABHADRA	497.74	478.25	3.276	0.027	21-06-2017	1	31	16	529	72
68	GHATAPRABHA	662.95	632.28	1.391	0.043	21-06-2017	3	2	6	317	-
69	BHADRA	657.76	634.75	1.785	0.091	21-06-2017	5	7	25	106	39
70	LINGANAMAKKI	554.43	532.59	4.294	0.457	21-06-2017	11	15	14	-	55
71	NARAYANPUR	492.25	485.88	0.863	0.137	22-06-2017	16	16	37	425	-
72	MALAPRABHA(RENUKA)	633.83	619.87	0.972	0.012	21-06-2017	1	1	6	215	-
73	KABINI(Sancherla Tank)	696.16	685.86	0.444	0.008	22-06-2017	2	0	15	85	-
74	HEMAVATHY	890.63	871.01	0.927	0.061	22-06-2017	7	10	13	265	-
75	HARANGI	871.42	858.00	0.220	0.051	22-06-2017	23	15	23	53	-
76	SUPA	564.00	530.08	4.120	1.099	21-06-2017	27	19	20	-	-
77	VANIVILAS SAGAR	652.28	632.16	0.802	0.016	19-06-2017	2	6	12	123	-
*78	ALMATTI	519.60	504.03	3.105	0.000	22-06-2017	0	2	13	@	290
*79	GERUSOPPA	55.00	49.78	0.130	0.101	22-06-2017	78	75	76	83	240
	<u>KERALA</u>										
80	KALLADA(PARAPPAR)	115.82	90.25	0.507	0.083	21-06-2017	16	51	26	62	-
*81	IDAMALAYAR	169.00	129.82	1.018	0.145	22-06-2017	14	18	18	33	75
*82	IDUKKI	732.43	701.05	1.460	0.151	22-06-2017	10	22	20	-	780
*83	KAKKI	981.46	936.70	0.447	0.052	22-06-2017	12	30	23	23	300
*84	PERIYAR	867.41	858.73	0.173	0.007	22-06-2017	4	12	34	84	140
85	MALAPMUZHA	115.06	100.97	0.224	0.021	22-06-2017	9	10	28	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	260.43	0.792	0.067	22-06-2017	8	9	32	105	8
*87	METTUR(STANLEY)	240.79	211.02	2.647	0.136	22-06-2017	5	14	37	122	360
88	VAIGAI	279.20	264.21	0.172	0.004	22-06-2017	2	5	17	61	6
89	PARAMBIKULAM	556.26	536.22	0.380	0.023	22-06-2017	6	9	28	101	-
90	ALIYAR	320.04	304.83	0.095	0.013	22-06-2017	14	27	40	#	60
*91	SHOLAYAR	1002.79	966.05	0.143	0.002	22-06-2017	1	8	24	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	29.409						
	PERCENTAGE						19	15	19		

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

 $^{@^{\}scriptscriptstyle |}$ 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