BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 18.05.2017)

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 18.05.2017, live storage available in these reservoirs is 35.622BCM, which is 23% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 28.961 BCM and the average of last 10 years live storage was 34.316 BCM. Thus, the live storage available in 91 reservoirs as per 18.05.2017 Bulletin is 123% of the live storage of corresponding period of last year and 104% 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 18.05.2017, the total live storage available in these reservoirs is 4.25 BCM which is 24% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 21% 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 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 18.05.2017, the total live storage available in these reservoirs is 5.88 BCM which is 31% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 25% 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 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 27.07 BCM. As per Reservoir Storage Bulletin dated 18.05.2017, the total live storage available in these reservoirs is 7.19 BCM which is 27% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 15% 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 storage of last year and is equal to 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 18.05.2017, the total live storage available in these reservoirs is 14.27 BCM which is 34% 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 21% 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 18.05.2017, the total live storage available in these reservoirs is 4.04 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 18% 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, Godavari, Tapi and Mahanadi & neighbouring East Flowing Rivers. Close to Normal in West Flowing Rivers of South. Deficient in Indus and Rivers of Kutch 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 **50** and reservoirs having storage more than average of last ten years are **40**. 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 **15**. The number of reservoirs having storage less than or equal to 50% with respect to last year are **13** and having storage less than or equal to 50% with reference to average of last ten years are **31**.

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 18.05.2017

- 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
 18.05.2017 is 35.622 BCM (23 percent of the live storage capacity at FRL). The current year's storage is nearly 123 percent of last year's storage and 104 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	-38 % 33 % -1 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	-	-	-	-	1	2	12	JHARKHAND ODISHA W. BENGAL TRIPURA	25 % 55 % 91 % 308 %	
WEST (Guj.& Mah.), (27 Resv.)	-	-	-	-	1	1	2	23	GUJARAT MAH.	15 % -26 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	-	-	2	1	9	U.P. UTTARAKHAND M.P. CHHATISGARH	108 % -82 % 90 % 26 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	-	1	-	-	-	30	AP&TG A,P TG KARNATAKA KERALA T.N.	-82 % -68 % 29 % -41 % -37 % -83 %	
Status of 91 reservoirs	0	0	0	1	1	5	5	79			

4 Basin wise storage position:

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

Close to normal: West Flowing Rivers of South.

Deficient: Indus and Rivers of Kutch

Highly deficient: Cauvery & neighbouring EFRS and Krishna.

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 31 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
SHOLAYAR	0	PENCH (TOTALADOH)	26
NAGARJUNA SAGAR	0	MATATILA	28
ALMATTI	0	LOWER BHAWANI	29
BHIMA(UJJANI)	0	SOMASILA	32
KABINI	0	ISAPUR	34
RAMGANGA	0	MANIKDOH	36
BHADRA	0	MALAMPUZHA	38
YELDARI	8	KRISHNARAJA SAGRA	39
BHADAR	8	SRISAILAM	40
METTUR(STANLEY)	12	DANTIWADA	43
PERIYAR	17	HEMAVATHY	44
TUNGABHADRA	17	KALLADA(PARAPPAR)	46
VAIGAI	18	KOYANA	46
PARAMBIKULAM	18	NARAYANPUR	47
VANIVILAS SAGAR	20	MALAPRABHA(RENUKA)	47
		ALIYAR	48

15 reservors									
having storage 51%									
to 80% of normal									
storage.									
51%	51% 61% 71%								
to	to	to							
60%	70%	80%							
9	2	4							

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

19 reservoirs.

NOTE: **Normal:** Average of previous ten years, **Close to normal:** Where shortfall is up to 20% of the normal, **Deficient:** Where shortfall is more than 20% of the normal and up to 60% of the normal, **Highly deficient:** Where shortfall is more than 60% of the normal

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

WEEK ENDING :- 18.05.2017

NAME OF BASIN	LIVE CAP. AT FRL		'EAR'S RAGE	LAST Y STOR	_	LAST 10 AVG. ST	YEARS' ORAGE	% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	10.004	35.61%	7.973	28.38%	6.271	22.32%	59.53
INDUS	14.730	3.264	22.16%	2.891	19.63%	4.095	27.80%	-20.29
NARMADA	17.414	5.101	29.29%	4.211	24.18%	3.320	19.07%	53.64
TAPI	7.394	2.533	34.26%	0.975	13.19%	1.990	26.91%	27.29
MAHI	4.012	1.617	40.30%	0.810	20.19%	1.389	34.62%	16.41
SABARMATI	0.735	0.176	23.95%	0.171	23.27%	0.146	19.86%	20.55
RIVERS OF KUTCH	0.887	0.051	5.75%	0.062	6.99%	0.069	7.78%	-26.09
GODAVARI	15.394	3.272	21.26%	2.517	16.35%	2.882	18.72%	13.53
KRISHNA	32.831	1.334	4.06%	1.245	3.79%	5.010	15.26%	-73.37
MAHANADI & NEIGHBOURING EFRS	13.181	4.822	36.58%	3.239	24.57%	3.299	25.03%	46.17
CAUVERY& NEIGHBOURING EFRS	8.359	0.553	6.62%	1.497	17.91%	2.275	27.22%	-75.69
WEST FLOWING RIVERS OF SOUTH	14.766	2.895	19.61%	3.370	22.82%	3.570	24.18%	-18.91
TOTAL	157.799	35.622		28.961		34.316		
PERCENTAGE								3.81

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	18.05.2017		CENTRAL V	VATER COM	/IIVII55IO	IN
					-		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
	NORTHERN REGION			I.							
	HIMACHAL PRADESH	1)									
*1	GOBIND SAGAR(BHAKRA)	512.06	468.26	6.229	1.050	18-05-2017	17	25	23	676	1200
*2	PONG DAM	423.67	394.97	6.157	0.854	18-05-2017	14	10	26	-	360
	<u>PUNJAB</u>										
*3	THEIN	527.91	514.17	2.344	1.360	18-05-2017	58	32	44	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	269.60	1.711	0.563	18-05-2017	33	20	22	63	140
5	JHAKAM	359.50	346.55	0.132	0.037	18-05-2017	28	8	16	28	-
*6	RANA PRATAP SAGAR	352.81	346.59	1.436	0.381	17-05-2017	27	37	42	229	172
	EASTERN REGION	•									
	JHARKHAND										
7	TENUGHAT	269.14	258.44	0.821	0.358	18-05-2017	44	33	32	-	-
8	MAITHON	146.3	139.55	0.471	0.143	18-05-2017	30	10	28	342	-
*9	PANCHET HILL	124.97	123.01	0.184	0.098	18-05-2017	53	3	33	\$	80
	KONAR	425.81	415.99	0.176	0.037	18-05-2017	21	29	36	\$	-
11	TILAIYA	368.81	365.47	0.142	0.040	18-05-2017	28	14	17	\$	4
	<u>ODISHA</u>										
	HIRAKUD	192.02	185.29	5.378	1.448	17-05-2017	27	25	23	153	307
	BALIMELA	462.08	449.03	2.676	0.843	17-05-2017	32	37	15	-	360
	SALANADI	82.30	67.24		0.162	17-05-2017	29	3			
	RENGALI	123.50	117.98			17-05-2017	37	20	11	3	200
	MACHKUND(JALPUT)	838.16	826.04	0.893	0.182	17-05-2017	20	33	40	-	115
	UPPER KOLAB	858.00	850.52		0.316	17-05-2017	34	23	16		320
*18	UPPER INDRAVATI	642.00	631.26	1.456	0.438	18-05-2017	30	31	23	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	111.25		0.105	18-05-2017	22	15	17		-
20	KANGSABATI	134.14	125.21	0.914	0.278	18-05-2017	30	20	13	341	-
04	TRIPURA	00.55	00.00	0.242	0.454	40.05.0047	40	40	40		45
21	GUMTI WESTERN REGION	93.55	89.80	0.312	0.151	16-05-2017	48	42	12	-	15
	GUJARAT	•									
*22	UKAI	105.16	95.71	6.615	2.362	18-05-2017	36	14	28	348	300
	SABARMATI(DHAROI)	189.59	182.08			18-05-2017	24	23	20	95	1
	KADANA	127.7	123.52			18-05-2017	54	23	49	200	120
	SHETRUNJI	55.53	49.62			18-05-2017	15	12		36	-
	BHADAR	107.89	98.75			18-05-2017	2	9	19	27	_
	DAMANAGANGA	79.86	67.75			18-05-2017	16	16	29		1
	DANTIWADA	184.1	163.04			18-05-2017	1	2			
	PANAM	127.41	121.05			18-05-2017	32	17	40	36	2
	SARDAR SAROVAR	121.92	118.58			18-05-2017	65	75	51	2120	1450
	KARJAN	115.25	99.12			18-05-2017	30	15	44	51	3
-							32				_

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA	WEEK ENDING 40.05.0043			CENTRAL WATER COMMISSION						
	- CALDESTAL				K ENDING :-	18.05.2017	STORAGE A	BENEFITS			
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	458.27	2.171	0.489	17-05-2017	23	0	15	227	-
*33	KOYANA	657.90	629.29	2.652	0.393	17-05-2017	15	9	32	-	1920
34	BHIMA(UJJANI)	496.83	488.87	1.517	0.000	18-05-2017	0	0	7	125	12
35	ISAPUR	441.00	428.02	0.965	0.091	17-05-2017	9	5	27	104	-
36	MULA	552.30	537.65	0.609	0.071	18-05-2017	12	7	15	139	-
37	YELDARI	461.77	448.00	0.809	0.007	17-05-2017	1	0	11	78	-
38	GIRNA	398.07	387.73	0.524	0.131	17-05-2017	25	0	14	79	-
39	KHADAKVASLA	582.47	580.00	0.056	0.025	17-05-2017	45	59	39	78	8
*40	UPPER VAITARNA	603.50	595.87	0.331	0.113	17-05-2017	34	30	34	-	61
41	UPPER TAPI	214.00	209.20	0.255	0.040	17-05-2017	16	9	31	45	-
*42	PENCH (TOTALADOH)	490.00	468.22	1.091	0.065	17-05-2017	6	11	23	127	160
43	UPPER WARDHA	342.50	337.65	0.564	0.214	18-05-2017	38	23	31	70	-
44	BHATSA	142.07	116.07	0.942	0.382	17-05-2017	41	35	36	29.378	15
45	DHOM	747.70	733.71	0.331	0.079	11-05-2017	24	22	30	36.2	2
46	DUDHGANGA	646.00	624.74	0.664	0.146	17-05-2017	22	2	25	2.441	24
	MANIKDOH (KUKADI)	711.25	685.65	0.288	0.004	17-05-2017	1	1 5	4 20	2.2	6 46
40	BHANDARDARA CENTRAL REGION	744.91	724.20	0.304	0.076	17-05-2017	25	5	20	63.74	40
	UTTAR PRADESH										
49	MATATILA	308.46	301.29	0.707	0.071	17-05-2017	10	13	36	_	30
	RIHAND	268.22	259.24	5.649	1.948	18-05-2017	34	18	13		300
	UTTRAKHAND										
*51	RAMGANGA	365.30	313.24	2.196	0.000	18-05-2017	0	38	33	1897	198
*52	TEHRI	830.00	748.65	2.615	0.159	18-05-2017	6	1	5	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	394.92	6.827	3.388	18-05-2017	50	41	22	220	115
54	TAWA	355.40	342.69	1.944	0.450	18-05-2017	23	6	20	247	-
*55	BARGI	422.76	412.05	3.180	0.927	18-05-2017	29	34	21	157	90
*56	BANSAGAR	341.64	336.00	5.166	2.847	18-05-2017	55	37	30	488	425
*57	INDIRA SAGAR	262.13	251.04	9.745	2.419	18-05-2017	25	18	12	2380	1000
58	BARNA	348.55	342.79	0.456	0.132	18-05-2017	29	6	14	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	352.72	3.046	1.804	15-05-2017	59	33	43	-	120
60	MAHANADI	348.70	339.45	0.767	0.127	17-05-2017	17	26	30	319	10
	SOUTHERN REGION										
	A.P & TG										
*61	SRISAILAM	269.75	236.22	8.288	0.428	18-05-2017	5	5	13	0	770
*62	NAGARJUNA SAGAR	179.83	153.59	6.841	0.000	18-05-2017	0	0	19	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	82.60	1.994	0.229	18-05-2017	11	35	36	168	0
	TELANGANA										
64	SRIRAMSAGAR	332.54	321.53	2.300	0.261	18-05-2017	11	6	10	411	27
65	LOWER MANAIR	280.42	272.63	0.621	0.219	18-05-2017	35	12	24	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	18.05.2017					
			OUDDENT	10/5			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
	KARNATAKA									•	
66	KRISHNARAJA SAGRA	752.50	735.55	1.163	0.067	18-05-2017	6	15	15	79	-
*67	TUNGABHADRA	497.74	478.60	3.276	0.034	18-05-2017	1	1	6	529	72
68	GHATAPRABHA	662.95	632.76	1.391	0.051	18-05-2017	4	3	5	317	-
69	BHADRA	657.76	631.57	1.785	0.001	18-05-2017	0	8	26	106	39
70	LINGANAMAKKI	554.43	532.17	4.294	0.426	18-05-2017	10	20	19	-	55
71	NARAYANPUR	492.25	485.68	0.863	0.127	18-05-2017	15	12	31	425	-
72	MALAPRABHA(RENUKA)	633.83	620.48	0.972	0.027	18-05-2017	3	2	6	215	-
73	KABINI(Sancherla Tank)	696.16	685.41	0.444	0.000	18-05-2017	0	0	8	85	-
74	HEMAVATHY	890.63	869.43	0.927	0.035	18-05-2017	4	10	9	265	-
75	HARANGI	871.42	855.45	0.220	0.034	18-05-2017	15	8	15	53	-
76	SUPA	564.00	531.61	4.120	1.191	18-05-2017	29	22	24	-	-
77	VANIVILAS SAGAR	652.28	632.43	0.802	0.019	18-05-2017	2	6	12	123	-
*78	ALMATTI	519.60	503.80	3.105	0.000	18-05-2017	0	2	7	@	290
*79	GERUSOPPA	55.00	49.80	0.130	0.101	18-05-2017	78	95	86	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	87.25	0.507	0.059	18-05-2017	12	47	25	62	-
*81	IDAMALAYAR	169.00	134.24	1.018	0.209	17-05-2017	21	20	21	33	75
*82	IDUKKI	732.43	702.50	1.460	0.194	18-05-2017	13	22	23	-	780
*83	KAKKI	981.46	941.37	0.447	0.070	18-05-2017	16	31	26	23	300
*84	PERIYAR	867.41	858.85	0.173	0.008	18-05-2017	5	9	28	84	140
85	MALAPMUZHA	115.06	100.52	0.224	0.018	18-05-2017	8	7	21	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	260.23	0.792	0.064	18-05-2017	8	6	28	105	8
*87	METTUR(STANLEY)	240.79	210.36	2.647	0.117	18-05-2017	4	17	37	122	360
88	VAIGAI	279.20	265.78	0.172	0.007	18-05-2017	4	8	23	61	6
89	PARAMBIKULAM	556.26	535.93	0.380	0.020	18-05-2017	5	9	29	101	-
90	ALIYAR	320.04	307.53	0.095	0.024	18-05-2017	25	26	53	#	60
*91	SHOLAYAR	1002.79	961.40	0.143	0.000	18-05-2017	0	0	5	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	35.622						
	PERCENTAGE						23	18	22		

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

[†] 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 $\,$