BRIEF NOTE ON LIVE STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 21.12.2017)

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 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 21.12.2017, live storage available in these reservoirs is 90.845 BCM, which is 56% of total live storage capacity of these reservoirs. However, last year the live storage available in these reservoirs for the corresponding period was 95.744 BCM and the average of last 10 years live storage was 95.966 BCM. Thus, the live storage available in 91 reservoirs as per 21.12.2017 Bulletin is 95% of the live storage of corresponding period of last year and 95% 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 and is also **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 21.12.2017, the total live storage available in these reservoirs is 10.50 BCM which is 58% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 51% and average storage of last ten years during corresponding period was 58% 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 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 21.12.2017, the total live storage available in these reservoirs is 14.00 BCM which is 74% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 80% and average storage of last ten years during corresponding period was 69% 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 21.12.2017, the total live storage available in these reservoirs is 18.00 BCM which is 58% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 63% and average storage of last ten years during corresponding period was 58% of live storage capacity of these reservoirs. Thus, storage during current year is less 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 21.12.2017, the total live storage available in these reservoirs is 22.44 BCM which is 53% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 77% and average storage of last ten years during corresponding period was 59% 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.

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 21.12.2017, the total live storage available in these reservoirs is 25.91 BCM which is 50% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 38% and average storage of last ten years during corresponding period was 58% 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 Ganga, Mahi, Indus, Sabarmati, Mahanadi & Neighbouring East Flowing Rivers and Rivers of Kutch. Close to Normal in Godavari, Krishna, Cauvery & neighbouring EFRs and West Flowing Rivers of South. Deficient in Narmada and Tapi basin and NIL in Highly Deficient.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storage more than last year are 57 and reservoirs having storage more than average of last ten years are 50. The numbers of reservoirs having storage less than 20% with respect to last year is 0 and having storage less than 20% with reference to average of last ten years is 2. The number of reservoirs having storage less than or equal to 50% with respect to last year are 4 and having storage less than or equal to 50% with reference to average of last ten years are 8.

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 21.12.2017

- 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
 21.12.2017 is 90.845 BCM (56 percent of the live storage capacity at FRL). The current year's storage is nearly 95 percent of last year's storage and 95 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	1	1	H.P. PUNJAB RAJASTHAN	5 % -10 % -5 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	2	3	3	1	1	2	3	-	JHARKHAND ODISHA W. BENGAL TRIPURA	10 % 2 % 113 % 90 %	
WEST (Guj.& Mah.), (27 Resv.)	1	5	5	4	4	3	1	4	GUJARAT MAH.	-17 % 17 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	-	2	3	2	3	2	U.P. UTTARAKHAND M.P. CHHATISGARH	16 % -4 % -16 % -10 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	1	2	2	7	5	4	10	AP&TG A,P TG KARNATAKA KERALA T.N.	-19 % -19 % 7 % -11 % 5 % -34 %	
Status of 91 reservoirs	3	9	11	10	16	13	12	17		- 1	

4 Basin wise storage position:

Better than normal: Ganga, Mahi, Indus, Sabarmati, Mahanadi & Neighbouring EFRS, and Rivers of Kutch .

Godavari, Krishna, Cauvery & neighbouring EFRS and West Flowing Rivers

Close to normal: of South .

Deficient: Narmada and Tapi. .

Highly deficient: NIL

5 Out of 91 reservoirs, 66 reservoirs reported more than 80% of normal storage & 25 reservoirs reported 80% or below of normal storage. Out of these 25 reservoirs 8 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%
VANIVILAS SAGAR	13		
SHOLAYAR	14		
ISAPUR	27		
YELDARI	38		
MALAPRABHA(RENUKA)	44		
PENCH (TOTALADOH)	47		
RANA PRATAP SAGAR	48		
ALIYAR	49		

17 reservors								
having storage 51%								
to 80% of normal								
storage.								
51%	61%	71%						
to	to	to						
60%	70%	80%						
5	5	7						

17

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION WEEK ENDING :- 21.12.2017

		1010 .	21.12.201	•				
NAME OF BASIN	LIVE CAP. AT FRL		THIS YEAR'S LAST YEAR'S LAST 10 YEARS' STORAGE STORAGE AVG. STORAGE		% DEPARTURE W.R.T. AVE. OF 10 YEARS'			
GANGA	28.096	16.537	58.86%	20.623	73.40%	15.257	54.30%	8.39
INDUS	14.730	8.613	58.47%	6.840	46.44%	8.379	56.88%	2.79
NARMADA	21.608	8.471	39.20%	13.467	62.32%	11.369	52.61%	-25.49
TAPI	7.394	3.279	44.35%	5.854	79.17%	5.025	67.96%	-34.75
MAHI	4.012	2.999	74.75%	3.130	78.02%	2.645	65.93%	13.38
SABARMATI	0.735	0.441	60.00%	0.559	76.05%	0.415	56.46%	6.27
RIVERS OF KUTCH	0.887	0.564	63.59%	0.243	27.40%	0.406	45.77%	38.92
GODAVARI	15.394	8.909	57.87%	11.505	74.74%	8.968	58.26%	-0.66
KRISHNA	32.831	17.825	54.29%	12.993	39.58%	18.973	57.79%	-6.05
MAHANADI & NEIGHBOURING EFRS	13.181	10.131	76.86%	10.815	82.05%	9.611	72.92%	5.41
CAUVERY& NEIGHBOURING EFRS	8.359	3.903	46.69%	1.959	23.44%	4.815	57.60%	-18.94
WEST FLOWING RIVERS OF SOUTH	14.766	9.173	62.12%	7.756	52.53%	10.103	68.42%	-9.21
TOTAL	161.993	90.845		95.744		95.966		
PERCENTAGE								-5.34

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	21.12.2017		CLIVITAL			
			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	501.14	6.229	4.313	21-12-2017	69	48	66	676	1200
*2	PONG DAM PUNJAB	423.67	411.76	6.157	3.336	21-12-2017	54	47	52	-	360
*3	THEIN	527.91	506.74	2.344	0.964	21-12-2017	41	40	46	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	278.75	1.711	1.446	21-12-2017	85	89	69	63	140
5	JHAKAM	359.50	355.85	0.132	0.097	21-12-2017	73	77	60	28	-
*6	RANA PRATAP SAGAR	352.81	346.33	1.436	0.343	20-12-2017	24	46	50	229	172
	EASTERN REGION	•									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	259.86	0.821	0.411	21-12-2017	50	52	44	-	-
8	MAITHON	146.3	149.15	0.471	0.471	21-12-2017	100	100	85	342	-
*9	PANCHET HILL	124.97	128.09	0.184	0.184	20-12-2017	100	100	85	\$	80
10	KONAR	425.81	423.14	0.176	0.130	21-12-2017	74	94	77	\$	-
11	TILAIYA	368.81	366.85	0.142	0.076	21-12-2017	54	100	74	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	191.32	5.378	4.375	19-12-2017	81	85	83	153	307
*13	BALIMELA	462.08	451.41	2.676	1.106	21-12-2017	41	78	60	-	360
14	SALANADI	82.30	71.12	0.558	0.240	21-12-2017	43	35	38	42	-
*15	RENGALI	123.50	122.80	3.432	3.213	21-12-2017	94	92	69	3	200
*16	MACHKUND(JALPUT)	838.16	837.56	0.893	0.838	21-12-2017	94	78	80	-	115
*17	UPPER KOLAB	858.00	853.90	0.935	0.569	21-12-2017	61	84	61	89	320
*18	UPPER INDRAVATI	642.00	636.06	1.456	0.849	20-12-2017	58	78	71	128	600
	WEST BENGAL										
19	MAYURAKSHI	121.31	120.44	0.480	0.457	21-12-2017	95	45	43	227	-
20	KANGSABATI	134.14	132.62	0.914	0.814	21-12-2017	89	63	43	341	-
	TRIPURA										
21	GUMTI	93.55	92.60	0.312	0.268	19-12-2017	86	73	45	-	15
	WESTERN REGION	i									
	<u>GUJARAT</u>										
	UKAI	105.16	96.74				41	79	69	348	300
	SABARMATI(DHAROI)	189.59	186.33			21-12-2017	60	76	56	95	1
	KADANA	127.7	125.60			21-12-2017	67	74	64		120
	SHETRUNJI	55.53	53.32			21-12-2017	52	55	68	36	-
	BHADAR	107.89	106.01	0.188		21-12-2017	62	9	51	27	
	DAMANAGANGA	79.86	79.25			21-12-2017	89	81	86		1
	DANTIWADA	184.1	181.20		0.293	21-12-2017	73	15	27		-
	PANAM CARRAR CAROVAR	127.41	126.25			21-12-2017	68	61	63		
	SARDAR SAROVAR	138.68	120.48			21-12-2017	23	20	22		1450
31	KARJAN	115.25	111.69	0.523	0.416	21-12-2017	80	60	79	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA WEEK ENDING :- 21.12.2017 CENTRAL WATER COMMISSI							CENTRAL V	VATER CON	MISSIO	N
					K ENDING	21.12.2017	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	ЗА	3B
	MAHARASHTRA										
32	JAYAKWADI(PAITHON)	463.91	463.41	2.171	1.980	07-12-2017	91	78	46	227	-
*33	KOYANA	657.90	657.00	2.652	2.544	20-12-2017	96	76	84	-	1920
34	BHIMA(UJJANI)	496.83	497.14	1.517	1.517	21-12-2017	100	99	71	125	12
35	ISAPUR	441.00	428.79	0.965	0.133	21-12-2017	14	43	51	104	-
36	MULA	552.30	551.85	0.609	0.585	20-12-2017	96	89	67	139	-
37	YELDARI	461.77	451.30	0.809	0.103	21-12-2017	13	28	34	78	-
38	GIRNA	398.07	393.86	0.524	0.323	20-12-2017	62	78	42	79	-
39	KHADAKVASLA	582.47	580.46	0.056	0.030	21-12-2017	54	52	57	78	8
*40	UPPER VAITARNA	603.50	603.11	0.331	0.319	20-12-2017	96	92	85	-	61
41	UPPER TAPI	214.00	213.52	0.255	0.226	20-12-2017	89	90	90	45	-
*42	PENCH (TOTALADOH)	490.00	476.30	1.091	0.267	21-12-2017	24	39	52	127	160
43	UPPER WARDHA	342.50	340.94	0.564	0.432	21-12-2017	77	76	73	70	-
44	BHATSA	142.07	135.97	0.942	0.783	20-12-2017	83	82	79	29.378	15
45	DHOM	747.70	744.54	0.331	0.261	20-12-2017	79	78	70	36.2	2
46	DUDHGANGA	646.00	643.55	0.664	0.598	20-12-2017	90	86	84	2.441	24
47	MANIKDOH (KUKADI)	711.25	708.13		0.234	21-12-2017	81	55	41	2.2	6
48	BHANDARDARA CENTRAL REGION	744.91	744.51	0.304	0.299	21-12-2017	98	98	79	63.74	46
	UTTAR PRADESH	i									
40	MATATILA	308.46	306.35	0.707	0.422	20-12-2017	60	46	57		30
	RIHAND	268.22	261.52		2.841	21-12-2017	50	66	43	-	300
30	UTTRAKHAND	200.22	201.32	5.049	2.041	21-12-2017	30	00	43		300
*51	RAMGANGA	365.30	352.89	2.196	1.337	21-12-2017	61	53	69	1897	198
	TEHRI	830.00	813.90	2.615	1.971	21-12-2017	75	73	74	2351	1000
02	MADHYA PRADESH	000.00	010.00	2.010	1.071	21 12 2011	70	70	, ,	2001	1000
*53	GANDHI SAGAR	399.90	394.24	6.827	3.572	21-12-2017	52	87	50	220	115
	TAWA	355.40	347.75		0.891	21-12-2017	46	74	70	247	-
	BARGI	422.76	420.20		2.506	21-12-2017	79	75	73	157	90
	BANSAGAR	341.64	337.09		3.240	21-12-2017	63	88	57	488	425
	INDIRA SAGAR	262.13	252.80		3.182	21-12-2017	33	80	59	2380	1000
58	BARNA	348.55	343.77		0.171	21-12-2017	38	74		546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	353.54	3.046	1.919	20-12-2017	63	69	64	_	120
60	MAHANADI	348.70	344.03	0.767	0.384	20-12-2017	50	99	79	319	10
;	SOUTHERN REGION										
	A.P & TG										
*61	SRISAILAM	269.75	265.33	8.288	3.974	21-12-2017	48	44	59	0	770
*62	NAGARJUNA SAGAR	179.83	167.73	6.841	2.231	21-12-2017	33	10	41	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	94.69	1.994	1.196	21-12-2017	60	54	74	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	328.57	2.300	1.337	21-12-2017	58	95	53	411	27
65	LOWER MANAIR	280.42	276.56	0.621	0.411	21-12-2017	66	93	65	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA		WEE	K ENDING :-	CENTRAL WATER COMMISSION						
				10/5		21.12.2017	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	747.31	1.163	0.712	20-12-2017	61	15	69	79	-
*67	TUNGABHADRA	497.74	492.28	3.276	1.300	21-12-2017	40	7	52	529	72
68	GHATAPRABHA	662.95	656.98	1.391	0.975	19-12-2017	70	62	57	317	-
69	BHADRA	657.76	652.97	1.785	1.266	19-12-2017	71	34	80	106	39
70	LINGANAMAKKI	554.43	546.51	4.294	2.256	21-12-2017	53	50	70	-	55
71	NARAYANPUR	492.25	491.03	0.863	0.589	21-12-2017	68	37	76	425	-
72	MALAPRABHA(RENUKA)	633.83	625.25	0.972	0.204	19-12-2017	21	20	47	215	-
73	KABINI(Sancherla Tank)	696.16	693.74	0.444	0.312	20-12-2017	70	26	30	85	-
74	HEMAVATHY	890.63	877.14	0.927	0.210	20-12-2017	23	11	38	265	-
75	HARANGI	871.42	858.87	0.220	0.058	20-12-2017	26	27	16	53	-
76	SUPA	564.00	546.44	4.120	2.269	21-12-2017	55	53	59	-	-
77	VANIVILAS SAGAR	652.28	632.21	0.802	0.019	20-12-2017	2	4	19	123	-
*78	ALMATTI	519.60	517.11	3.105	2.083	21-12-2017	67	58	60	@	290
*79	GERUSOPPA	55.00	51.23	0.130	0.108	21-12-2017	83	81	79	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	115.45	0.507	0.478	20-12-2017	94	40	79	62	-
*81	IDAMALAYAR	169.00	159.22	1.018	0.738	20-12-2017	72	60	70	33	75
*82	IDUKKI	732.43	723.41	1.460	0.983	20-12-2017	67	40	64	-	780
*83	KAKKI	981.46	978.39	0.447	0.393	20-12-2017	88	56	79	23	300
*84	PERIYAR	867.41	863.73	0.173	0.090	20-12-2017	52	12	60	84	140
85	MALAPMUZHA	115.06	109.04	0.224	0.105	21-12-2017	47	30	63	21	3
	TAMIL NADU										
86	LOWER BHAWANI	278.89	270.25	0.792	0.330	20-12-2017	42	13	56	105	8
*87	METTUR(STANLEY)	240.79	226.88	2.647	1.035	20-12-2017	39	12	56	122	360
88	VAIGAI	279.20	272.29	0.172	0.050	20-12-2017	29	3	52	61	6
89	PARAMBIKULAM	556.26	544.71	0.380	0.156	20-12-2017	41	22	74	101	-
90	ALIYAR	320.04	309.72	0.095	0.035	20-12-2017	37	9	76	#	60
*91	SHOLAYAR	1002.79	970.55	0.143	0.011	20-12-2017	8	0	55	-	95
	TOTAL FOR 91 RESERVOIRS			161.993	90.845						
	PERCENTAGE						56	59	59		

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

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