BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY(WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 05.11.2015)

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 **05.11.2015**, live storage available in these reservoirs is **86.414 BCM**, which is **55%** of total live storage capacity of these reservoirs. This storage is **75%** of the storage of corresponding period of last year and **73%** of storage of average of last ten years.

The overall storageposition 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 05.11.2015, the total live storage available in these reservoirs is 13.71 BCM which is 76% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 70% and average storage of last ten years during corresponding period was 76% 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.

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 **05.11.2015**, the total live storage available in these reservoirs is **12.04** BCM which is **64%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **81%** and average storage of last ten years during corresponding period was **76%** 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 27.07BCM. As per Reservoir Storage Bulletin dated **05.11.2015**, the total live storage available in these reservoirs is **15.00** BCM which is **55%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **75%** and average storage of last ten years during corresponding period was **80%** 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 42.30BCM. As per Reservoir Storage Bulletin dated

05.11.2015, the total live storage available in these reservoirs is **29.11** BCM which is **69%** 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 **66%** 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 **05.11.2015**, the total live storage available in these reservoirs is **16.56** BCM which is **32%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **64%** and average storage of last ten years during corresponding period was **78%** 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 8, better than normal storage is available in Ganga, Indus, Narmada, Sabarmati and Rivers of Kutch. Close to Normal in Mahi. Deficient in Tapi, Godavari, Mahanadi & neighbouring East Flowing Rivers, Cauvery & neighbouring EFRs and West Flowing rivers of South and Highly Deficient in Krishna basin.
- Table on page 5-7 of the bulletin. The numbers of reservoirs having storagemore than last year are 14 and reservoirs having storage more than average of last ten years are 18. 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 6. 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 22.

States having better storage (in %) than last year for corresponding period: Himachal Pradesh, Punjab and Tripura.

States having equal storage (in %) to last year for corresponding period: NIL

States having lesser storage (in %) than last year for corresponding period: Rajasthan, Jharkhand, Odisha, West Bengal, Gujarat, Maharashtra, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Chhattisgarh, AP&TG (2combined project in both states), Andhra Pradesh, Telangana, Karnataka, Kerala and Tamil Nadu.

STORAGE STATUS OF IMPORTANT RESERVOIRS IN THE COUNTRY

- 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
 05.11.2015 is 86.414 BCM (55 percent of the live storage capacity at FRL). The current year's storage is nearly 75 percent of last year's storage and 73 percent of the average of last ten years.

3 Region wise storage status:-

		Filling	positio							
REGION (States), (Monitoring No. of Reservoirs)	100%	91%- 99%	81%- 90%	71%- 80%	61%- 70%	51%- 60%	41%- 50%	40% & below	Departure fi stor	rom Normal age
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-	2	1	1	-	-	2	-	H.P. PUNJAB RAJASTHAN	4 % -18 % -8 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	-	2	2	3	-	2	1	5	JHARKHAND ODISHA W. BENGAL TRIPURA	-29 % -14 % -47 % 86 %
WEST (Guj.& Mah.), (27 Resv.)	1	2	3	5	4	3	2	7	GUJARAT MAH.	-13 % -46 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	1	3	1	2	1	2	2	U.P. UTTARAKHAND M.P. CHHATISGARH	-30 % -5 % 19 % -33 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	1	4	7	4	14	AP&TG A,P TG KARNATAKA KERALA T.N.	-85 % -69 % -84 % -46 % -29 % -48 %
Status of 91 reservoirs	1	7	10	11	10	13	11	28	-	,,,

4 Basin wise storage position:

Better than normal: Ganga, Indus, Narmada, Sabarmati, Rivers of Kutch.

Close to normal: Mahi.

Deficient: Tapi, Godavari, Mahanadi & Neighbouring EFRS, Cauvery & neighbouring EFRS and West Flowing rivers of south

Highly deficient: Krishna.

5 Out of 91 reservoirs, 36 reservoirs reported more than 80% of normal storage & 55 reservoirs reported 80% or below of normal storage. Out of these 55 reservoirs 22 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0	SRISAILAM	27	MATATILA	49
JAYAKWADI(PAITHON)	8	SOMASILA	31	METTUR(STANLEY)	50
BHIMA(UJJANI)	13	HARANGI	33		
SRIRAMSAGAR	13	MALAPRABHA(RENUKA)	36		
GIRNA	17	LOWER BHAWANI	37		
SALANADI	19	MANIKDOH	39		
YELDARI	25	ALMATTI	41		
LOWER MANAIR	25	GHATAPRABHA	43		
PANCHET HILL	27	MAITHON	44		
HEMAVATHY	27	MAYURAKSHI	49		

33 reservors								
having storage 51%								
to 80% of normal								
storage.								
51%	61%	71%						
to	to	to						
60%	70%	80%						
11	13	9						

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

27 reservoirs.

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

WEEK ENDING :- 05.11.2015

CENTRAL WATER COMMISSION

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	16.989	60.47%	19.175	68.25%	16.565	58.96%	2.56
INDUS	14.730	11.308	76.77%	9.828	66.72%	11.154	75.72%	1.38
NARMADA	17.414	14.001	80.40%	15.739	90.38%	13.237	76.01%	5.77
TAPI	7.394	4.723	63.88%	5.553	75.10%	5.913	79.97%	-20.13
MAHI	4.012	2.852	71.09%	3.498	87.19%	3.133	78.09%	-8.97
SABARMATI	0.735	0.609	82.86%	0.491	66.80%	0.531	72.24%	14.69
RIVERS OF KUTCH	0.887	0.736	82.98%	0.289	32.58%	0.545	61.44%	35.05
GODAVARI	15.394	6.783	44.06%	10.416	67.66%	10.846	70.46%	-37.46
KRISHNA	32.831	9.610	29.27%	19.920	60.67%	26.954	82.10%	-64.35
MAHANADI & NEIGHBOURING EFRS	13.181	8.010	60.77%	11.269	85.49%	10.691	81.11%	-25.08
CAUVERY& NEIGHBOURING EFRS	8.359	2.584	30.91%	6.401	76.58%	5.693	68.11%	-54.61
WEST FLOWING RIVERS OF SOUTH	14.766	8.209	55.59%	12.717	86.12%	12.338	83.56%	-33.47
TOTAL	157.799	86.414		115.296		117.600		
PERCENTAGE								-26.52

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			WEE	K ENDING :-	05.11.2015		CENTRALV	VATER CON	/IIVII33IU	IN
							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	ЗА	3B
	NORTHERN REGION										
	HIMACHAL PRADESH	-									
*1	GOBIND SAGAR(BHAKRA)	512.06	509.18	6.229	5.507	04-11-2015	88	82	84	676	1200
*2	PONG DAM	423.67	418.24	6.157	4.660	05-11-2015	76	59	73	-	360
	<u>PUNJAB</u>										
*3	THEIN	527.91	510.58	2.344	1.141	04-11-2015	49	47	60	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	280.20	1.711	1.650	04-11-2015	96	100	86	63	140
5	JHAKAM	359.50	358.25	0.132	0.120	04-11-2015	91	95	83	28	-
*6	RANA PRATAP SAGAR	352.81	348.32	1.436	0.628	04-11-2015	44	63	72	229	172
	EASTERN REGION	•									
	<u>JHARKHAND</u>										
	TENUGHAT	269.14	259.16		0.384	05-11-2015	47	51	44	-	-
8	MAITHON	146.3	140.81	0.471	0.188	05-11-2015	40	83	91	342	-
*9	PANCHET HILL	124.97	121.32		0.043	05-11-2015	23	47	88	\$	80
	KONAR	425.81	423.57		0.136	05-11-2015	77	99	86	\$	-
11	TILAIYA ODISHA	368.81	368.18	0.142	0.120	05-11-2015	85	100	83	\$	4
*12	HIRAKUD	192.02	190.99	5.378	4.167	04-11-2015	77	88	92	153	307
	BALIMELA	462.08	457.50			04-11-2015	71	98	64	-	360
	SALANADI	82.30	58.70		0.054	04-11-2015	10	48	51	42	
	RENGALI	123.50	119.08			04-11-2015	58	86	81	3	
	MACHKUND(JALPUT)	838.16	837.53		0.831	04-11-2015	93	98	90	-	
	UPPER KOLAB	858.00	856.95			04-11-2015	89	89	66	89	320
	UPPER INDRAVATI	642.00	635.08			05-11-2015	52	89	78	128	600
	WEST BENGAL										
19	MAYURAKSHI	121.31	111.18	0.480	0.103	05-11-2015	21	23	44	227	-
20	KANGSABATI	134.14	124.01	0.914	0.229	05-11-2015	25	27	46	341	_
	TRIPURA										
21	GUMTI	93.55	93.00	0.312	0.287	04-11-2015	92	39	49	-	15
	WESTERN REGION										
	<u>GUJARAT</u>										
*22	UKAI	105.16	100.83	6.615	4.416	05-11-2015	67	77	81	348	300
23	SABARMATI(DHAROI)	189.59	188.23	0.735	0.609	04-11-2015	83	67	72	95	1
*24	KADANA	127.7	123.14	1.472	0.765	04-11-2015	52	79	69	200	120
25	SHETRUNJI	55.53	55.27	0.300	0.279	04-11-2015	93	43	79	36	-
26	BHADAR	107.89	106.64	0.188	0.138	04-11-2015	73	42	76	27	-
27	DAMANAGANGA	79.86	79.80	0.502	0.475	05-11-2015	95	91	98	51	1
28	DANTIWADA	184.1	182.06	0.399	0.319	04-11-2015	80	20	42	45	-
29	PANAM	127.41	123.35	0.697	0.317	04-11-2015	45	72	76	36	2
*30	SARDAR SAROVAR	121.92	119.97	1.566	1.214	04-11-2015	78	79	74	2120	1450
31	KARJAN	115.25	108.08	0.523	0.326	05-11-2015	62	89	97	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA	NMENT OF INDIA		WEE	WEEK ENDING :- 05.11.2015			MMISSION			
			CURRENT	LIVE			STORAGE A	TORAGE AS % OF LIVE CAPACITY AT FRL		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
	MAHARASHTRA									•	•
32	JAYAKWADI(PAITHON)	463.91	456.17	2.171	0.104	05-11-2015	5	36	60	227	-
*33	KOYANA	657.90	650.47	2.652	1.797	04-11-2015	68	95	97	-	1920
34	BHIMA(UJJANI)	496.83	491.92	1.517	0.183	04-11-2015	12	96	91	125	12
35	ISAPUR	441.00	433.18	0.965	0.348	29-10-2015	36	76	71	104	-
36	MULA	552.30	545.04	0.609	0.285	04-11-2015	47	87	88	139	-
37	YELDARI	461.77	451.72	0.809	0.120	04-11-2015	15	58	59	78	-
38	GIRNA	398.07	384.57	0.524	0.052	04-11-2015	10	45	57	79	-
39	KHADAKVASLA	582.47	579.64	0.056	0.021	04-11-2015	38	77	54	78	8
*40	UPPER VAITARNA	603.50	600.23	0.331	0.226	04-11-2015	68	89	94	-	61
41	UPPER TAPI	214.00	214.00	0.255	0.255	04-11-2015	100	100	100	45	-
*42	PENCH (TOTALADOH)	490.00	484.34	1.091	0.632	04-11-2015	58	55	71	127	160
43	UPPER WARDHA	342.50	341.65	0.564	0.490	05-11-2015	87	90	91	70	-
44	BHATSA	142.07	133.88	0.942	0.732	04-11-2015	78	90	92	29.378	15
45	DHOM	747.70	737.17	0.331	0.180	04-11-2015	54	97	89	36.2	2
46	DUDHGANGA	646.00	639.54	0.664	0.473	04-11-2015	71	102	99	2.441	24
	MANIKDOH (KUKADI)	711.25	693.20		0.075	04-11-2015	26	64	67	2.2	6
48	BHANDARDARA CENTRAL RECION	342.50	341.65	0.304	0.167	05-11-2015	87	90	91	70	-
	CENTRAL REGION	-									
40	UTTAR PRADESH	000.40	004.05	0.707	0.074	04.44.0045	00	50	70		00
	MATATILA	308.46	304.65		0.274	04-11-2015	39	59	79	-	30
50	RIHAND UTTRAKHAND	268.22	259.27	5.649	1.960	03-11-2015	35	41	47	-	300
*51	RAMGANGA	365.30	354.06	2.196	1.402	05-11-2015	64	86	73	1897	198
	TEHRI	830.00	817.50		2.108	01-11-2015	81	90	80		1000
52	MADHYA PRADESH	630.00	617.50	2.015	2.100	01-11-2015	01	90	80	2331	1000
*53	GANDHI SAGAR	399.90	399.13	6.827	6.154	05-11-2015	90	73	54	220	115
	TAWA	355.40	354.57			04-11-2015	97	100			113
	BARGI	422.76	421.15			04-11-2015	87	98	88		90
	BANSAGAR	341.64	336.35			05-11-2015	58	90			425
	INDIRA SAGAR	262.13	259.52			05-11-2015	77	89			1000
	BARNA	348.55	346.40			05-11-2015	69	72			
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	349.70	3.046	1.414	03-11-2015	46	86	68	-	120
60	MAHANADI	348.70	343.77	0.767	0.368	04-11-2015	48	91	76	319	10
;	SOUTHERN REGION										
	A.P & TG	_									
*61	SRISAILAM	269.75	256.78	8.288	1.757	04-11-2015	21	4	77	0	770
	NAGARJUNA SAGAR	179.83	155.54		0.014	04-11-2015	0	66			810
	ANDHRA PRADESH										
63	SOMASILA	100.58	86.00	1.994	0.410	05-11-2015	21	65	66	168	0
	TELANGANA										
64	SRIRAMSAGAR	332.54	320.74	2.300	0.211	05-11-2015	9	29	68	411	27
	LOWER MANAIR	280.42	269.09		0.107	05-11-2015	17				60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	05.11.2015						
			CURRENT	LIVE			STORAGE A	DRAGE AS % OF LIVE CAPACITY AT FRL			BENEFITS	
S. NO	NAME OF RESERVOIR	FRL (m)	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	746.85	1.163	0.672	04-11-2015	58	100	89	79		
*67	TUNGABHADRA	497.74	493.36	3.276	1.545	05-11-2015	47	86	82	529	7:	
68	GHATAPRABHA	662.95	648.53	1.391	0.530	05-11-2015	38	94	89	317		
69	BHADRA	657.76	650.80	1.785	1.060	05-11-2015	59	96	93	106	3	
70	LINGANAMAKKI	554.43	546.57	4.294	2.269	05-11-2015	53	91	89	-	5	
71	NARAYANPUR	492.25	489.83	0.863	0.459	04-11-2015	53	65	89	425		
72	MALAPRABHA(RENUKA)	633.83	626.37	0.972	0.268	05-11-2015	28	74	76	215		
73	KABINI(Sancherla Tank)	696.16	691.47	0.444	0.203	04-11-2015	46	89	46	85		
74	HEMAVATHY	890.63	876.80	0.927	0.199	04-11-2015	21	94	80	265		
75	HARANGI	871.42	857.43	0.220	0.046	04-11-2015	21	60	63	53		
76	SUPA	564.00	540.81	4.120	1.820	05-11-2015	44	78	75	-		
77	VANIVILAS SAGAR	652.28	637.05	0.802	0.094	05-11-2015	12	10	18	123		
*78	ALMATTI	519.60	513.78	3.105	1.154	04-11-2015	37	86	90	@	290	
*79	GERUSOPPA	55.00	48.56	0.130	0.095	04-11-2015	73	75	88	83	24	
	KERALA											
80	KALLADA(PARAPPAR)	115.82	108.15	0.507	0.326	04-11-2015	64	97	88	62		
*81	IDAMALAYAR	169.00	151.18	1.018	0.543	04-11-2015	53	92	84	33	7	
*82	IDUKKI	732.43	719.80	1.460	0.814	04-11-2015	56	79	74	-	78	
*83	KAKKI	981.46	967.46	0.447	0.250	04-11-2015	56	77	87	23	300	
*84	PERIYAR	867.41	863.85	0.173	0.106	04-11-2015	61	100	64	84	140	
85	MALAPMUZHA	867.41	863.85	0.224	0.146	04-11-2015	61	100	64	84	140	
	TAMIL NADU											
86	LOWER BHAWANI	278.89	266.28	0.792	0.193	04-11-2015	24	66	67	105	;	
*87	METTUR(STANLEY)	240.79	224.01	2.647	0.807	04-11-2015	30	73	62	122	360	
88	VAIGAI	279.20	272.60	0.172	0.054	04-11-2015	31	42	56	61		
89	PARAMBIKULAM	556.26	550.41	0.380	0.261	04-11-2015	69	99	89	101		
90	ALIYAR	320.04	317.21	0.095	0.077	04-11-2015	81	100	93	#	6	
*91	SHOLAYAR	1002.79	985.92	0.143	0.069	04-11-2015	48	99	92	-	9	
	TOTAL FOR 91 RESERVOIRS			157.799	86.414							

Sd/-

75

55

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

PERCENTAGE

Director W. M. , CWC

(At sl. 30th) 0.444 BCM, Live storage at FRL of Kabini reservoir is intrim

^{*} 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. 19th 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