BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 08.10.2015)

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 **08.10.2015**, live storage available in these reservoirs is **94.63 BCM**, which is **60%** of total live storage capacity of these reservoirs. This storage is **78%** of the storage of corresponding period of last year and **77%** of storage of average of last ten years.

As per Table-01, 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 **08.10.2015**, the total live storage available in these reservoirs is **15.18** BCM which is **84%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **79%** and average storage of last ten years during corresponding period was **83%** 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 **08.10.2015**, the total live storage available in these reservoirs is **12.93** BCM which is **69%** 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 **79%** 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 **08.10.2015**, the total live storage available in these reservoirs is **16.61** BCM which is **61%** 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 **83%** 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 **08.10.2015**, the total live storage available in these reservoirs is **31.83** BCM which

is **75%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **82%** 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 storage of last year but is better than the average storage of last ten years during the corresponding period.

e) SOUTHERN REGION

The region includes Southern 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 08.10.2015, the total live storage available in these reservoirs is 18.07 BCM which is 35% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 69% and average storage of last ten years during corresponding period was 81% 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 6, better than normal storage is available in Ganga, Indus, Narmada, Sabarmati and Rivers of Kutch. Close to Normal in Tapi and Mahi. Deficient in 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 storage more than last year are 21 and reservoirs having storage more than average of last ten years are 25. The numbers of reservoirs having storage less than 20% with respect to last year is 3 and having storage less than 20% with reference to average of last ten years is 5. The number of reservoirs having storage less than or equal to 50% with respect to last year are 19 and having storage less than or equal to 50% with reference to average of last ten years are 19.

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
 08.10.2015 is 94.630 BCM (60 percent of the live storage capacity at FRL). The current year's storage is nearly 78 percent of last year's storage and 77 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	-	from Normal rage	
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-	3	1	1	-	1	-	-	H.P. PUNJAB RAJASTHAN	3 % -13 % 6 %	
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	1	2	3	1	-	3	3	2	JHARKHAND ODISHA W. BENGAL TRIPURA	-20 % -11 % -41 % 90 %	
WEST (Guj.& Mah.), (27 Resv.)	3	2	5	5	1	4	-	7	GUJARAT MAH.	-8 % -42 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	1	2	2	1	3	2	-	1	U.P. UTTARAKHAND M.P. CHHATISGARH	-24 % 4 % 20 % -26 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	2	3	7	4	14	AP&TG A,P TG KARNATAKA KERALA T.N.	-85 % -69 % -84 % -42 % -34 % -37 %	
Status of 91 reservoirs	5	9	12	10	7	17	7	24		/ -	

4 Basin wise storage position:

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

Close to normal: Tapi,Mahi.

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

Highly deficient: Krishna

5 Out of 91 reservoirs, 38 reservoirs reported more than 80% of normal storage & 53 reservoirs reported 80% or below of normal storage. Out of these 53 reservoirs 19 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	1	MANIKDOH	39		
BHIMA(UJJANI)	10	KHADAKVASLA	41		
JAYAKWADI(PAITHON)	11	HEMAVATHY	42		
SRIRAMSAGAR	13	GHATAPRABHA	43		
GIRNA	19	PANCHET HILL	43		
YELDARI	25	KALLADA(PARAPPAR)	46		
LOWER MANAIR	27	MAITHON	47		
SRISAILAM	28	HARANGI	48		
SOMASILA	31	KANGSABATI	50		
MALAPRABHA(RENUKA	34				

34 reservors									
having storage 51%									
to 80% of normal									
storage.									
51% 61% 71%									
to	to	to							
60%	70%	80%							
9	13	12							

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

26 reservoirs.

WEEKLY REPORT - BASINWISE

GOVERNMENT OF INDIA

WEEK ENDING :- 08.10.2015

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	18.875	67.18%	20.392	72.58%	17.332	61.69%	8.90
INDUS	14.730	12.274	83.33%	11.061	75.09%	12.118	82.27%	1.29
NARMADA	17.414	15.314	87.94%	16.249	93.31%	14.184	81.45%	7.97
TAPI	7.394	5.318	71.92%	6.197	83.81%	6.299	85.19%	-15.57
MAHI	4.012	3.036	75.67%	3.550	88.48%	3.264	81.36%	-6.99
SABARMATI	0.735	0.664	90.34%	0.515	70.07%	0.552	75.10%	20.29
RIVERS OF KUTCH	0.887	0.784	88.39%	0.309	34.84%	0.564	63.59%	39.01
GODAVARI	15.394	7.305	47.45%	10.346	67.21%	10.962	71.21%	-33.36
KRISHNA	32.831	11.103	33.82%	22.950	69.90%	28.556	86.98%	-61.12
MAHANADI & NEIGHBOURING EFRS	13.181	8.902	67.54%	11.529	87.47%	11.366	86.23%	-21.68
CAUVERY& NEIGHBOURING EFRS	8.359	2.930	35.05%	5.709	68.30%	5.515	65.98%	-46.87
WEST FLOWING RIVERS OF SOUTH	14.766	8.125	55.03%	12.948	87.69%	12.586	85.24%	-35.44
TOTAL	157.799	94.630		121.755		123.298		
PERCENTAGE								-23.25

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	OOVERNMENT OF INDIA			WEE	K ENDING :-	08.10.2015		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			•							
	HIMACHAL PRADESH										
*1	GOBIND SAGAR(BHAKRA)	512.06	510.96	6.229	5.784	08-10-2015	93	90	88	676	1200
*2	PONG DAM PUNJAB	423.67	420.55	6.157	5.172	08-10-2015	84	68	83	-	360
*3	THEIN	527.91	513.68	2.344	1.318	08-10-2015	56	54	65	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	280.60	1.711	1.701	07-10-2015	99	100	87	63	140
5	JHAKAM	359.50	358.45	0.132	0.122	07-10-2015	92	95	84	28	-
*6	RANA PRATAP SAGAR	352.81	350.98	1.436	1.080	08-10-2015	75	96	80	229	172
	EASTERN REGION	•									
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	260.27	0.821	0.428	08-10-2015	52	51	43	-	-
8	MAITHON	146.3	141.54	0.471	0.215	08-10-2015	46	96	96	342	-
*9	PANCHET HILL	124.97	122.45	0.184	0.076	08-10-2015	41	99	96	\$	80
10	KONAR	425.81	424.13	0.176	0.146	08-10-2015	83	100	89	\$	-
11	TILAIYA ODISHA	368.81	368.88	0.142	0.142	08-10-2015	100	100	80	\$	4
*12	HIRAKUD	192.02	191.97	5.378	4.479	07-10-2015	83	90	95	153	307
*13	BALIMELA	462.08	457.60	2.676	1.911	07-10-2015	71	76	59	-	360
14	SALANADI	82.30	68.80	0.558	0.192	08-10-2015	34	63	65	42	-
*15	RENGALI	123.50	119.22	3.432	2.053	07-10-2015	60	89	86	3	200
*16	MACHKUND(JALPUT)	838.16	837.65	0.893	0.842	07-10-2015	94	77	85	-	115
*17	UPPER KOLAB	858.00	856.41	0.935	0.784	07-10-2015	84	74	65	89	320
*18	UPPER INDRAVATI	642.00	636.16	1.456	0.859	08-10-2015	59	96	81	128	600
	WEST BENGAL										
19	MAYURAKSHI	121.31	115.61	0.480	0.230	08-10-2015	48	47	63	227	-
20	KANGSABATI TRIPURA	134.14	124.98	0.914	0.266	08-10-2015	29	43	58	341	-
	GUMTI WESTERN REGION	93.55	93.50	0.312	0.310	06-10-2015	99	48	52	-	15
	GUJARAT	•									
*22	UKAI	105.16	102.06	6.615	5.005	07-10-2015	76	86	87	348	300
	SABARMATI(DHAROI)	189.59	188.81	0.735		07-10-2015	90	70	75		300
	KADANA	127.7	124.18			07-10-2015	58	80	75 75		120
	SHETRUNJI	55.53	55.33			06-10-2015	94	47	80		120
	BHADAR	107.89	107.26			06-10-2015	85	44	79		-
	DAMANAGANGA	79.86	80.10			07-10-2015	99	97	97		1
	DANTIWADA	184.1	182.73			07-10-2015	85	22	44		
	PANAM	127.41	124.25			07-10-2015	52	77	81	36	2
	SARDAR SAROVAR	121.92	120.37			07-10-2015	82	78	75		1450
	KARJAN	115.25	109.42			07-10-2015	68	99	99		3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

_				WEE	K ENDING :-	08.10.2015					
			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	ЗА	3B
	MAHARASHTRA										
32	JAYAKWADI(PAITHON)	463.91	456.41	2.171	0.143	07-10-2015	7	44	62	227	-
*33	KOYANA	657.90	652.55	2.652	1.969	07-10-2015	74	94	99	-	1920
34	BHIMA(UJJANI)	496.83	491.67	1.517	0.130	07-10-2015	9	100	90	125	12
35	ISAPUR	441.00	433.21	0.965	0.350	07-10-2015	36	81	71	104	-
36	MULA	552.30	545.89	0.609	0.316	08-10-2015	52	95	88	139	-
37	YELDARI	461.77	451.70	0.809	0.119	07-10-2015	15	63	59	78	-
38	GIRNA	398.07	384.83	0.524	0.058	07-10-2015	11	47	59	79	-
39	KHADAKVASLA	582.47	579.36	0.056	0.019	07-10-2015	34	75	82	78	8
*40	UPPER VAITARNA	603.50	600.67	0.331	0.238	07-10-2015	72	100	96	-	61
41	UPPER TAPI	214.00	214.00	0.255	0.255	07-10-2015	100	98	98	45	-
*42	PENCH (TOTALADOH)	490.00	488.00	1.091	0.867	07-10-2015	79	74	81	127	160
43	UPPER WARDHA	342.50	342.50	0.564	0.564	08-10-2015	100	99	93	70	-
44	BHATSA	142.07	135.42		0.804	07-10-2015	85	97		29.378	15
	DHOM	747.70	737.05	0.331	0.178	07-10-2015	54	99	94	36.2	2
46	DUDHGANGA	646.00	640.59	0.664	0.505	07-10-2015	76	103	102	2.441	24
	MANIKDOH (KUKADI) BHANDARDARA	711.25 342.50	693.48 342.50	0.288 0.304	0.077 0.215	07-10-2015 08-10-2015	27 100	67 99	68 93	2.2 70	6
-10	CENTRAL REGION	012.00	012.00	0.001	0.210	00 10 2010	100	00	00	70	
	UTTAR PRADESH	•									
49	MATATILA	308.46	307.09	0.707	0.495	07-10-2015	70	83	93	-	30
*50	RIHAND	268.22	259.75	5.649	2.143	08-10-2015	38	45	50	-	300
	<u>UTTRAKHAND</u>										
*51	RAMGANGA	365.30	356.42	2.196	1.545	08-10-2015	70	86	71	1897	198
*52	TEHRI	830.00	821.40	2.615	2.262	08-10-2015	87	91	81	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	399.24	6.827	6.218	07-10-2015	91	74	52	220	115
54	TAWA	355.40	355.43	1.944	1.944	08-10-2015	100	100	98	247	-
*55	BARGI	422.76	421.60	3.180	2.898	08-10-2015	91	97	93	157	90
*56	BANSAGAR	341.64	337.31	5.166	3.319	07-10-2015	64	86	62	488	425
*57	INDIRA SAGAR	262.13	260.68	9.745	8.483	08-10-2015	87	93	75	2380	1000
58	BARNA	348.55	346.88	0.456	0.347	07-10-2015	76	85	80	546	-
	CHHATTIS GARH										
	MINIMATA BANGOI	359.66	352.40			07-10-2015	58	87	76	-	120
	MAHANADI SOUTHERN REGION	348.70	344.53	0.767	0.417	08-10-2015	54	82	82	319	10
	A.P & TG										
*61	SRISAILAM	269.75	257.60	8.288	1.896	08-10-2015	23	27	82	0	770
*62	NAGARJUNA SAGAR	179.83	155.66	6.841	0.034	08-10-2015	0	72	86	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	85.02	1.994	0.352	08-10-2015	18	59	57	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	320.95	2.300	0.222	08-10-2015	10	34	72	411	27
65	LOWER MANAIR	280.42	269.34	0.621	0.113	08-10-2015	18	40	67	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	08.10.2015					
							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										1
66	KRISHNARAJA SAGRA	752.50	746.87	1.163	0.674	07-10-2015	58	100	88	79	-
*67	TUNGABHADRA	497.74	495.23	3.276	2.044	08-10-2015	62	87	88	529	72
68	GHATAPRABHA	662.95	648.53	1.391	0.572	07-10-2015	41	98	96	317	-
69	BHADRA	657.76	652.22	1.785	1.192	07-10-2015	67	100	96	106	39
70	LINGANAMAKKI	554.43	546.48	4.294	2.250	08-10-2015	52	97	93	-	55
71	NARAYANPUR	492.25	490.31	0.863	0.510	08-10-2015	59	83	88	425	-
72	MALAPRABHA(RENUKA)	633.83	626.36	0.972	0.267	07-10-2015	27	75	81	215	-
73	KABINI	696.16	692.29	0.444	0.240	07-10-2015	54	97	51	85	-
74	HEMAVATHY	890.63	880.80	0.927	0.356	07-10-2015	38	100	91	265	-
75	HARANGI	871.42	864.11	0.220	0.091	07-10-2015	41	96	85	53	-
76	SUPA	564.00	540.60	4.120	1.804	08-10-2015	44	79	78	-	-
77	VANIVILAS SAGAR	652.28	636.13	0.802	0.078	08-10-2015	10	6	15	123	-
*78	ALMATTI	519.60	515.70	3.105	1.632	08-10-2015	53	100	97	@	290
*79	GERUSOPPA	55.00	48.83	0.130	0.096	07-10-2015	74	70	78	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	100.25	0.507	0.196	07-10-2015	39	90	83	62	-
*81	IDAMALAYAR	169.00	151.00	1.018	0.539	07-10-2015	53	91	85	33	75
*82	IDUKKI	732.43	719.96	1.460	0.822	07-10-2015	56	72	72	-	780
*83	KAKKI	981.46	964.75	0.447	0.224	07-10-2015	50	72	83	23	300
*84	PERIYAR	867.41	861.17	0.173	0.058	07-10-2015	34	67	50	84	140
85	MALAPMUZHA	867.41	861.17	0.224	0.138	07-10-2015	34	67	50	84	140
	TAMIL NADU										
86	LOWER BHAWANI	278.89	268.05	0.792	0.248	07-10-2015	31	41	61	105	8
*87	METTUR(STANLEY)	240.79	225.43	2.647	0.916	07-10-2015	35	54	59	122	360
88	VAIGAI	279.20	272.50	0.172	0.053	07-10-2015	31	23	35	61	6
89	PARAMBIKULAM	556.26	551.22	0.380	0.277	07-10-2015	73	100	90	101	-
90	ALIYAR	320.04	318.21	0.095	0.084	07-10-2015	88	99	87	#	60
*91	SHOLAYAR	1002.79	992.77	0.143	0.096	07-10-2015	67	100	97	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	94.630						
	PERCENTAGE						60	77	78		

Sd/-

\$ TOTAL CCA 342 TH. HA OF DVC SYSTEM

Director W. M. , CWC

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

 $^{^{\}star}$ 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. 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