BRIEF NOTE ON STORAGE STATUS OF 91 RESERVOIRS IN THE COUNTRY (WITH REFERENCE TO RESERVOIR STORAGE BULLETIN OF 15.10.2015)

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 **15.10.2015**, live storage available in these reservoirs is **93.951 BCM**, which is **59%** of total live storage capacity of these reservoirs. This storage is **78%** of the storage of corresponding period of last year and **76%** 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 15.10.2015, the total live storage available in these reservoirs is 14.92 BCM which is 83% 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 82% 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 15.10.2015, the total live storage available in these reservoirs is 13.09 BCM which is 70% of total live storage capacity of these reservoirs. The storage during corresponding period of last year was 76% 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 15.10.2015, the total live storage available in these reservoirs is 16.30 BCM which is 60% 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 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 **15.10.2015**, the total live storage available in these reservoirs is **31.08** BCM which

is 73% 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 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 15.10.2015, the total live storage available in these reservoirs is 18.20 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 80% 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, Mahi and Mahanadi & neighbouring East Flowing Rivers. Deficient in Godavari, 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 17 and reservoirs having storage more than average of last ten years are 24. 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 20.

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
 15.10.2015 is 93.591 BCM (59 percent of the live storage capacity at FRL). The current year's storage is nearly 78 percent of last year's storage and 76 percent of the average of last ten years.

3 Region wise storage status:-

5		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	3	1	1	1	1	-	-	H.P. PUNJAB RAJASTHAN	3 % -12 % 4 %
EAST (Jharkhand,Odisha, Tripura & W.Bengal (15 Resv.)	1	3	3	1	-	3	1	4	JHARKHAND ODISHA W. BENGAL TRIPURA	-23 % -10 % -47 % 83 %
WEST (Guj.& Mah.), (27 Resv.)	1	4	4	6	1	3	1	7	GUJARAT MAH.	-11 % -42 %
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	1	1	3	1	3	1	1	1	U.P. UTTARAKHAND M.P. CHHATISGARH	-25 % 0 % 19 % -28 %
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), (31 Resv.)	-	-	1	1	5	7	2	15	AP&TG A,P TG KARNATAKA KERALA T.N.	-83 % -67 % -84 % -41 % -32 % -36 %
Status of 91 reservoirs	2	11	12	10	9	15	5	27		23 70

4 Basin wise storage position:

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

Close to normal: Tapi, Mahi, Mahanadi & Neighbouring EFRS.

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

Highly deficient: Krishna

5 Out of 91 reservoirs, 37 reservoirs reported more than 80% of normal storage & 54 reservoirs reported 80% or below of normal storage. Out of these 54 reservoirs 20 having storage upto 50% of normal

storage.

Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
NAGARJUNA SAGAR	0	MALAPRABHA(RENUKA	34		
JAYAKWADI(PAITHON)	10	MANIKDOH	39		
SRIRAMSAGAR	13	GHATAPRABHA	40		
BHIMA(UJJANI)	15	PANCHET HILL	42		
GIRNA	18	HEMAVATHY	42		
YELDARI	26	MAITHON	44		
LOWER MANAIR	26	SALANADI	45		
SRISAILAM	31	HARANGI	49		
SOMASILA	33	LOWER BHAWANI	49		
KHADAKVASLA	34	KALLADA(PARAPPAR)	50		

34 reservors								
having storage 51%								
to 80% of normal								
storage.								
51%	61%	71%						
to	to	to						
60%	70%	80%						
8	13	13						

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

CENTRAL WATER COMMISSION WEEK ENDING :- 15.10.2015

	WEERE	י. טאווטא	15.10.201	J				
NAME OF BASIN	LIVE CAP. AT FRL	_	ÆAR'S RAGE	LAST Y STOR		LAST 10 AVG. ST	YEARS' ORAGE	% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	18.385	65.44%	19.900	70.83%	17.190	61.18%	6.95
INDUS	14.730	12.084	82.04%	10.805	73.35%	11.944	81.09%	1.17
NARMADA	17.414	14.969	85.96%	16.079	92.33%	14.046	80.66%	6.57
TAPI	7.394	5.163	69.83%	6.036	81.63%	6.313	85.38%	-18.22
MAHI	4.012	2.980	74.28%	3.438	85.69%	3.231	80.53%	-7.77
SABARMATI	0.735	0.658	89.52%	0.511	69.52%	0.558	75.92%	17.92
RIVERS OF KUTCH	0.887	0.790	89.06%	0.313	35.29%	0.572	64.49%	38.11
GODAVARI	15.394	7.233	46.99%	10.625	69.02%	11.150	72.43%	-35.13
KRISHNA	32.831	11.219	34.17%	23.070	70.27%	28.401	86.51%	-60.50
MAHANADI & NEIGHBOURING EFRS	13.181	9.031	68.52%	10.463	79.38%	11.182	84.83%	-19.24
CAUVERY& NEIGHBOURING EFRS	8.359	2.969	35.52%	5.802	69.41%	5.358	64.10%	-44.59
WEST FLOWING RIVERS OF SOUTH	14.766	8.110	54.92%	12.778	86.54%	12.517	84.77%	-35.21
TOTAL	157.799	93.591	•	119.820		122.462		
PERCENTAGE								-23.58

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	OOVERNMENT OF INDIA			WEE	K ENDING :-	15.10.2015		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	510.57	6.229	5.724	12-10-2015	92	88	87	676	1200
*2	PONG DAM PUNJAB	423.67	419.96	6.157	5.042	14-10-2015	82	67	81	-	360
*3	THEIN	527.91	513.45	2.344	1.318	13-10-2015	56	51	64	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	280.60	1.711	1.701	13-10-2015	99	100	87	63	140
5	JHAKAM	359.50	358.45	0.132	0.122	13-10-2015	92	95	84	28	-
*6	RANA PRATAP SAGAR	352.81	350.48	1.436	1.015	15-10-2015	71	91	79	229	172
	EASTERN REGION										
	<u>JHARKHAND</u>	•									
7	TENUGHAT	269.14	260.21	0.821	0.425	15-10-2015	52	49	44	-	-
8	MAITHON	146.3	141.16	0.471	0.201	15-10-2015	43	95	96	342	-
*9	PANCHET HILL	124.97	122.37	0.184	0.074	15-10-2015	40	100	97	\$	80
10	KONAR	425.81	423.99	0.176	0.144	15-10-2015	82	100	90	\$	-
11	TILAIYA	368.81	368.70	0.142	0.137	15-10-2015	96	100	83	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	191.95	5.378	4.775	14-10-2015	89	71	94	153	307
*13	BALIMELA	462.08	457.69	2.676	1.924	14-10-2015	72	89	65	-	360
14	SALANADI	82.30	67.00	0.558	0.157	14-10-2015	28	64	62	42	-
*15	RENGALI	123.50	119.28	3.432	2.072	14-10-2015	60	85	87	3	200
*16	MACHKUND(JALPUT)	838.16	837.68	0.893	0.844	14-10-2015	95	96	88	-	115
*17	UPPER KOLAB	858.00	856.35	0.935	0.779	14-10-2015	83	84	68	89	320
*18	UPPER INDRAVATI	642.00	636.00	1.456	0.843	15-10-2015	58	90	79	128	600
	WEST BENGAL										
19	MAYURAKSHI	121.31	113.13	0.480	0.150	15-10-2015	31	34	61	227	-
20	KANGSABATI	134.14	124.98	0.914	0.266	15-10-2015	29	33	54	341	-
	TRIPURA										
21	GUMTI	93.55	93.35	0.312	0.303	14-10-2015	97	47	53	-	15
	WESTERN REGION	•									
	<u>GUJARAT</u>										
*22	UKAI	105.16	101.74	6.615	4.851	14-10-2015	73	84	87	348	300
	SABARMATI(DHAROI)	189.59	188.75		0.658	13-10-2015	90	70	76		
	KADANA	127.7	123.65			13-10-2015	55	73	72		
	SHETRUNJI	55.53	55.47			13-10-2015	98	47	81		
	BHADAR	107.89	107.20		0.157	13-10-2015	84	46	79		
	DAMANAGANGA	79.86	80.10			14-10-2015	97	94	98		
	DANTIWADA	184.1	182.64		0.338	13-10-2015	85	22			
	PANAM	127.41	124.05		0.351	13-10-2015	50	76			
	SARDAR SAROVAR	121.92	120.08		1.232	15-10-2015	79	70	72		
31	KARJAN	115.25	109.39	0.523	0.357	14-10-2015	68	99	99	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNIMENT OF INDIA			WEE	K ENDING :-	15.10.2015			VATER COM		
			CURRENT	LIVE			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
	MAHARASHTRA										
32	JAYAKWADI(PAITHON)	463.91	456.32	2.171	0.129	15-10-2015	6	42	62	227	-
*33	KOYANA	657.90	652.32	2.652	1.952	14-10-2015	74	98	98	-	1920
34	BHIMA(UJJANI)	496.83	492.03	1.517	0.206	14-10-2015	14	100	91	125	12
35	ISAPUR	441.00	433.22	0.965	0.351	14-10-2015	36	80	71	104	-
36	MULA	552.30	545.86	0.609	0.315	15-10-2015	52	94	85	139	-
37	YELDARI	461.77	451.77	0.809	0.122	14-10-2015	15	60	59	78	-
38	GIRNA	398.07	384.76	0.524	0.057	14-10-2015	11	47	60	79	-
39	KHADAKVASLA	582.47	578.97	0.056	0.015	14-10-2015	27	68	79	78	8
*40	UPPER VAITARNA	603.50	600.67	0.331	0.238	14-10-2015	72	98	96	-	61
41	UPPER TAPI	214.00	214.00	0.255	0.255	15-10-2015	100	100	98	45	-
*42	PENCH (TOTALADOH)	490.00	487.50	1.091	0.832	12-10-2015	76	71	80	127	160
43	UPPER WARDHA	342.50	342.45	0.564	0.559	14-10-2015	99	96	93	70	-
44	BHATSA	142.07	135.30	0.942	0.767	14-10-2015	81	96	96	29.378	15
45	DHOM	747.70	737.06	0.331	0.178	14-10-2015	54	98	94	36.2	2
46	DUDHGANGA	646.00	640.60	0.664	0.505	14-10-2015	76	103	102	2.441	24
47	MANIKDOH (KUKADI)	711.25	693.41	0.288	0.077	14-10-2015	27	66	68	2.2	6
48	BHANDARDARA	342.50	342.45	0.304	0.205	14-10-2015	99	96	93	70	-
_	CENTRAL REGION	•									
	UTTAR PRADESH										
	MATATILA	308.46	306.81	0.707		14-10-2015	66	70	91	-	30
*50	RIHAND	268.22	259.63	5.649	2.096	15-10-2015	37	43	49	-	300
	UTTRAKHAND										
	RAMGANGA	365.30	355.34	2.196	1.478	15-10-2015	67	86	72	1897	198
*52	TEHRI	830.00	820.50	2.615	2.226	12-10-2015	85	92	81	2351	1000
	MADHYA PRADESH										
	GANDHI SAGAR	399.90	399.22		6.203	14-10-2015	91	73	52	220	115
	TAWA	355.40	355.43			15-10-2015	100	100	98	247	-
	BARGI	422.76	421.25			15-10-2015	88	98	92	157	90
	BANSAGAR	341.64	336.98			14-10-2015	62	86	61	488	425
	INDIRA SAGAR	262.13	260.46			15-10-2015	85	93	74	2380	1000
58	BARNA CARD	348.55	346.51	0.456	0.323	14-10-2015	71	74	76	546	-
*50	CHHATTIS GARH MINIMATA BANGOI	250.66	251.65	2.046	1 660	12 10 2015	54	05	70		120
	MAHANADI	359.66 348.70	351.65 343.76			13-10-2015 14-10-2015	48	85 100	73 78	319	120 10
	SOUTHERN REGION	. 540.70	343.70	0.707	0.307	14-10-2013	40	100	70	319	10
	A.P & TG										
*61	SRISAILAM	269.75	258.50	8.288	2.055	15-10-2015	25	28	81	0	770
*62	NAGARJUNA SAGAR	179.83	155.60	6.841	0.024	15-10-2015	0	72	86	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	85.85	1.994	0.401	15-10-2015	20	65	61	168	0
	<u>TELANGANA</u>										
64	SRIRAMSAGAR	332.54	320.89	2.300	0.219	15-10-2015	10	31	73	411	27
65	LOWER MANAIR	280.42	269.27	0.621	0.111	15-10-2015	18	34	67	199	60

WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WEE	K ENDING :-	15.10.2015					
			CURRENT	10/5			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
	KARNATAKA			l							
66	KRISHNARAJA SAGRA	752.50	747.64	1.163	0.741	14-10-2015	64	100	89	79	-
*67	TUNGABHADRA	497.74	495.22	3.276	2.042	15-10-2015	62	87	86	529	72
68	GHATAPRABHA	662.95	648.66	1.391	0.535	14-10-2015	38	93	96	317	-
69	BHADRA	657.76	652.13	1.785	1.184	14-10-2015	66	100	96	106	39
70	LINGANAMAKKI	554.43	546.54	4.294	2.262	15-10-2015	53	95	92	-	55
71	NARAYANPUR	492.25	489.99	0.863	0.476	15-10-2015	55	77	91	425	-
72	MALAPRABHA(RENUKA)	633.83	626.51	0.972	0.277	14-10-2015	28	76	84	215	-
73	KABINI(Sancherla Tank)	696.16	692.60	0.444	0.255	14-10-2015	57	94	48	85	-
74	HEMAVATHY	890.63	879.91	0.927	0.315	14-10-2015	34	100	81	265	-
75	HARANGI	871.42	863.17	0.220	0.085	14-10-2015	39	92	80	53	-
76	SUPA	564.00	540.48	4.120	1.796	15-10-2015	44	78	77	-	-
77	VANIVILAS SAGAR	652.28	636.65	0.802	0.087	14-10-2015	11	6	16	123	-
*78	ALMATTI	519.60	515.61	3.105	1.606	15-10-2015	52	100	96	@	290
*79	GERUSOPPA	55.00	45.90	0.130	0.082	15-10-2015	63	83	78	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	101.62	0.507	0.212	12-10-2015	42	89	83	62	-
*81	IDAMALAYAR	169.00	151.26	1.018	0.544	14-10-2015	53	90	84	33	75
*82	IDUKKI	732.43	720.21	1.460	0.833	14-10-2015	57	72	72	-	780
*83	KAKKI	981.46	965.52	0.447	0.231	13-10-2015	52	71	83	23	300
*84	PERIYAR	867.41	861.54	0.173	0.064	14-10-2015	37	58	46	84	140
85	MALAPMUZHA	867.41	861.54	0.224	0.140	14-10-2015	37	58	46	84	140
	TAMIL NADU										
86	LOWER BHAWANI	278.89	267.49	0.792	0.230	14-10-2015	29	39	59	105	8
*87	METTUR(STANLEY)	240.79	225.12	2.647	0.891	14-10-2015	34	55	55	122	360
88	VAIGAI	279.20	272.33	0.172	0.051	14-10-2015	30	21	34	61	6
89	PARAMBIKULAM	556.26	551.18	0.380	0.276	14-10-2015	73	99	89	101	-
90	ALIYAR	320.04	318.33	0.095	0.084	14-10-2015	88	98	86	#	60
*91	SHOLAYAR	1002.79	992.08	0.143	0.093	14-10-2015	65	98	96	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	93.591						

Sd/-

76

78

59

\$ 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

 $^{^{\}star}$ 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