# BRIEF NOTE ON STORAGE STATUS OF 91 IMPORTANT RESERVOIRS IN THE COUNTRY(WITH REFERENCE TO RESERVOIR BULLETIN OF 14.05.2015)

#### 1. ALL INDIA STATUS

Central Water Commission is monitoring live storage status of 91 important reservoirs of the country on weekly basis and is issuing weekly bulletin on every Thursday. These reservoirs include 37 reservoirs having hydropower benefit with installed capacity of more than 60 MW. The total live storage capacity of these 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 bulletin of 14.05.2015, live storage available in these reservoirs was 46.0838 BCM which is 29% of total live storage capacity of these reservoirs. This storage is 95% of the storage of corresponding period of last year and 129% of storage of average of last ten years. The present storage position during current year is less than the storage position of last year but is better than the storage of average of last ten years.

As per Table-01, the overall storage position is **less than** corresponding period of last year in the country as a whole but is 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 in this region having total live storage capacity of 18.01 BCM. The total live storage available in these reservoirs is **7.51** BCM which is **42%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **36%** and average storage of last ten years during corresponding period was **29%** 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 reservoirs in this region having total live storage capacity of 18.83 BCM. The total live storage available in these reservoirs is **7.10** BCM which is **38%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **41%** and average storage of last ten years during corresponding period was **22%** 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 in this region having total live storage capacity of 27.07 BCM. The total live storage available in these reservoirs is **8.06** BCM which is **30%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **36%** and average storage of last ten years during corresponding period was **31%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year and also less than the average storage of last ten years.

## d) CENTRAL REGION

The Central region includes States of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Chhattisgarh. There are 12 reservoirs in this region having total live

storage capacity of 42.30BCM. The total live storage available in these reservoirs is **15.00** BCM which is **35%** of total live storage capacity of these reservoirs. The storage during corresponding period of last year was **39%** and average storage of last ten years during corresponding period was **19%** of live storage capacity of these reservoirs. Thus, storage during current year is less than the storage of last year but better than the average storage of last ten years.

# e) SOUTHERN REGION

The Southern region includes States of Andhra Pradesh, Telangana, AP&TG(2combined project in both states) Karnataka, Kerala and Tamil Nadu. There are 31 reservoirs in this region having total live storage capacity of 51.59 BCM. The total live storage available in these reservoirs is **8.41** BCM which is **16%** 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 **20%** 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 6, better than normal storage is available in Ganga, Indus, Narmada, Mahi, Rivers of Kutch, Godavari, Mahanadi & neighbouring East Flowing Rivers, and West Flowing Rivers of South. Close to Normal in Tapi and Deficient in Sabarmati, Krishna and Cauvery& neighbouring EFRs.
- Table on page 5: IMD has divided India in 36 meteorological sub-divisions. The data in respect of reservoir storage as compared with observed rainfall is given in the table.
- Table on page 6: Normal, Close to normal, Deficient and Highly Deficient having the same meaning as given at Bullet No.1.
- Table on page 7-9 of the bulletin. The numbers of reservoirs having storagemore than last year are 42 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 2 and having storage less than 20% with reference to average of last ten years is 3. The numbers of reservoirs having storage less than 50% with respect to last year are 13 and having storage less than 50% with reference to average of last ten years are 11.

States having better storage than last year for corresponding period: Himachal Pradesh, Punjab, Tripura, Uttarakhand, Karnataka, Kerala and Tamil Nadu.

States having equal storage to last year for corresponding period: NIL

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

#### 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 14.05.2015 BCM ( 29 percent of the storage capacity at FRL ). The current year's storage is nearly 95 percent of last year's storage and **129** 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 for stor		
NORTH (HP,Punjab & Rajasthan), (6 Resv.)	-	1	1	1	1	-	-	5	H.P. PUNJAB RAJASTHAN	52 % 89 % -18 %	
<b>EAST</b> (Jharkhand,Odisha, Tripura & W.Bengal ( 15 Resv.)	-	-	-	1	-	2	4	9	JHARKHAND ODISHA W. BENGAL TRIPURA	13 % 84 % 57 % -57 %	
<b>WEST</b> (Guj.& Mah.), (27 Resv.)	-	-	1	2	3	-	2	19	GUJARAT MAH.	8 % -16 %	
CENTRAL (MP,UP,Uttarakhand & Chh.), (12 Resv)	-	-	1	1	2	-	-	8	U.P. UTTARAKHAND M.P. CHHATISGARH	57 % 130 % 109 % 43 %	
SOUTH (Karnataka,TN,AP&TG,AP, TG, & Kerala), ( 31 Resv.)	-	-	2	-	-	-	2	27	AP&TG A,P TG KARNATAKA KERALA T.N.	-93 % -55 % 37 % 34 % 41 % -26 %	
Status of 91 reservoirs	0	0	5	3	5	2	8	68			

## 4 Basin wise storage position:

Better than normal: Ganga,Indus,Narmada,Mahi,,Rivers of Kutch,Godavari,Mahanadi & Neighbouring EFRS, and West

Flowing rivers of south.

Close to normal: Tapi.

Sabarmati, Krishna and Cauvery & neighbouring EFRS. Deficient:

Highly deficient:

5 Out of 91 reservoirs, 65 reservoirs reported more than 80% of normal storage & 26 reservoirs reported 80% or below of normal storage.

		1			
Out of these 26	reservoirs	11 having	storage	upto 50% of normal stor	age
Name of reservoir	%	Name of reservoir	%	Name of reservoir	%
SRISAILAM	0	VAIGAI	49		
BHIMA(UJJANI)	0				
NAGARJUNA SAGAR	13				
JAYAKWADI(PAITHON)	31				
VANIVILAS SAGAR	33				
MAHANADI	33				
RANA PRATAP SAGAR	42				
GUMTI	43				
SOMASILA	45				
DAMANAGANGA	17				

15 reservors									
having storage 51%									
to 80% of normal									
storage.									
51%	51% 61%								
to	to	to							
60%	70%	80%							
3	6	6							

reservoirs.

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

# WEEKLY REPORT - BASINWISE

# GOVERNMENT OF INDIA

PERCENTAGE

CENTRAL WATER COMMISSION

28.68

	WEEK EN	NDING :-	14.05.201	5				
NAME OF BASIN	LIVE CAP. AT FRL		/EAR'S RAGE	LAST Y STOR		LAST 10 AVG. ST		% DEPARTURE W.R.T. AVE. OF 10 YEARS'
GANGA	28.096	10.239	36.44%	13.231	47.09%	5.410	19.26%	89.26
INDUS	14.730	6.714	45.58%	5.680	38.56%	4.172	28.32%	60.93
NARMADA	17.414	5.008	28.76%	3.502	20.11%	3.002	17.24%	66.82
TAPI	7.394	1.860	25.16%	2.902	39.25%	2.088	28.24%	-10.92
MAHI	4.012	1.753	43.69%	1.739	43.34%	1.414	35.24%	23.97
SABARMATI	0.735	0.099	13.47%	0.136	18.50%	0.156	21.22%	-36.54
RIVERS OF KUTCH	0.887	0.091	10.26%	0.145	16.35%	0.068	7.67%	33.82
GODAVARI	15.394	4.214	27.37%	6.079	39.49%	3.218	20.90%	30.95
KRISHNA	32.831	3.833	11.67%	2.864	8.72%	6.239	19.00%	-38.56
MAHANADI & NEIGHBOURING EFRS	13.181	5.824	44.18%	6.285	47.68%	3.748	28.43%	55.39
CAUVERY& NEIGHBOURING EFRS	8.359	1.937	23.17%	1.845	22.07%	2.437	29.15%	-20.52
WEST FLOWING RIVERS OF SOUTH	14.766	4.512	30.56%	4.126	27.94%	3.862	26.15%	16.83
TOTAL	157.799	46.084		48.534		35.814		

#### WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA			10/5	EK ENDING :	14.05.2015		CENTRAL V	VATER CO	MMISSIO	N
			CURRENT	LIVE	EK ENDING :-	14.05.2015	STORAGE A	S % OF LIVE C	APACITY AT	BENE	EFITS
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
N	IORTHERN REGION										
	HIMACHAL PRADESH										
*1	GOBIND SAGAR(BHAKRA)	512.06	486.30	6.229	2.507	5/14/2015	40	33	22	676	1200
*2	PONG DAM PUNJAB	423.67	405.34	6.157	2.208	5/14/2015	36	31	28	-	360
*3	THEIN	527.91	523.70	2.344	1.999	5/14/2015	85	75	45	348	600
	RAJASTHAN										
*4	MAHI BAJAJ SAGAR	280.75	268.85	1.711	0.512	5/13/2015	30	10	20	63	140
5	JHAKAM	359.50	343.50	0.132	0.024	5/13/2015	18	36	17	28	-
	RANA PRATAP SAGAR EASTERN REGION	352.81	346.19	1.436	0.262	5/14/2015	18	41	43	229	172
	<u>JHARKHAND</u>										
7	TENUGHAT	269.14	257.82	0.821	0.336	5/14/2015	41	48	30	-	-
8	MAITHON	146.3	137.62	0.471	0.087	5/14/2015	18	50	32	342	-
*9	PANCHET HILL	124.97	121.74	0.184	0.055	5/14/2015	30	80	32	\$	80
10	KONAR	425.81	420.26	0.176	0.086	5/14/2015	49	57	35	\$	-
11	TILAIYA	368.81	365.79	0.142	0.047	5/14/2015	33	37	20	\$	4
	<u>ODISHA</u>										
*12	HIRAKUD	192.02	184.82	5.378	1.285	5/13/2015	24	31	26	153	307
*13	BALIMELA	462.08	453.66	2.676	1.391	5/13/2015	52	53	17	-	360
14	SALANADI	82.30	69.90	0.558	0.215	5/13/2015	39	78	22	42	-
*15	RENGALI	123.50	118.95	3.432	1.966	5/13/2015	57	45	18	3	200
	MACHKUND(JALPUT)	838.16	828.57	0.893	0.280	5/13/2015	31	49	39	-	115
	UPPER KOLAB	858.00	852.13	0.935	0.436	5/13/2015	47	36	20	89	320
*18	UPPER INDRAVATI	642.00	633.68	1.456	0.637	5/14/2015	44	38	21	128	600
	WEST BENGAL										
	MAYURAKSHI	121.31	109.50	0.480	0.071	5/14/2015	15	25	17	227	-
20	KANGSABATI	134.14	123.00	0.914	0.191	5/14/2015	21	40	10	341	-
0.4	TRIPURA	00.55	04.00	0.040	20/2	E/40/004=		-	40		45
	GUMTI WESTERN REGION	93.55	84.60	0.312	0.013	5/12/2015	4	0	10	-	15
	GUJARAT										
*22	UKAI	105.16	92.67	6.615	1.601	5/13/2015	24	40	29	348	300
	SABARMATI(DHAROI)	189.59			0.099	5/13/2015 5/13/2015	13	19	29	95	
	KADANA	127.7			0.891	5/13/2015	61	76	52	200	120
	SHETRUNJI	55.53			0.031	5/11/2015	15	18	8	36	
	BHADAR	107.89			0.030	5/11/2015	16	43	20	27	
	DAMANAGANGA	79.86			0.098	5/14/2015	19	19	41	51	1
	DANTIWADA	184.1			0.015	5/13/2015	4	3	2	45	-
29	PANAM	127.41			0.326	5/13/2015	47	58	42		2
	SARDAR SAROVAR	121.92			1.265	5/13/2015	81	38	36	2120	1450
31	KARJAN	115.25				5/12/2015	36	50	52	51	3

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

	GOVERNMENT OF INDIA	WEEK ENDING :- 14.05.2015			VIIVIISSIC	/IN					
			CURRENT	LIVE	LIVE LIVE IVO	14.00.2010	STORAGE A	S % OF LIVE C	CAPACITY AT	BENI	EFITS
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	456.47	2.171	0.153	5/14/2015	7	10	22	227	-
*33	KOYANA	657.90	639.78	2.652	0.930	5/13/2015	35	14	35	-	1920
34	BHIMA(UJJANI)	496.83	490.24	1.517	0.000	5/13/2015	0	2	10	125	12
35	ISAPUR	441.00	430.18	0.965	0.197	5/13/2015	20	58	27	104	-
36	MULA	552.30	537.95	0.609	0.078	5/13/2015	13	23	19	139	-
37	YELDARI	461.77	449.76	0.809	0.057	5/13/2015	7	46	11	78	-
38	GIRNA	398.07	385.54	0.524	0.075	5/7/2015	14	15	19	79	-
39	KHADAKVASLA	582.47	581.31	0.056	0.041	5/13/2015	73	70	30	78	8
*40	UPPER VAITARNA	603.50	595.09	0.331	0.094	5/13/2015	28	50	37	-	61
41	UPPER TAPI	214.00	212.78	0.255	0.184	5/13/2015	72	65	29	45	-
*42	PENCH (TOTALADOH)	490.00	472.30	1.091	0.163	5/13/2015	15	50	22	127	160
43	UPPER WARDHA	342.50	337.11	0.564	0.185	5/13/2015	33	40	34	70	-
44	BHATSA	142.07	117.35	0.942	0.403	4/16/2015	43	49	45	29.378	15
45	DHOM	747.70	742.53	0.331	0.222	1/31/2015	67	71	60	36.2	2
	DUDHGANGA	646.00	638.02	0.664	0.429	2/28/2015	65	57	65	2.441	24
	MANIKDOH (KUKADI) BHANDARDARA	711.25	699.44	0.288	0.115	12/31/2014	40	66	49	2.2	6
	CENTRAL REGION	342.50	337.11	0.304	0.185	5/13/2015	33	40	34	70	-
	UTTAR PRADESH	-									
49	MATATILA	308.46	307.94	0.707	0.586	5/13/2015	83	46	32	_	30
	RIHAND	268.22	256.19	5.649		5/14/2015	16	26	13	_	300
	UTTRAKHAND										
*51	RAMGANGA	365.30	353.48	2.196	1.369	5/13/2015	62	67	27	1897	198
*52	TEHRI	830.00	756.30	2.615	0.317	5/14/2015	12	7	5	2351	1000
	MADHYA PRADESH										
*53	GANDHI SAGAR	399.90	392.24	6.827	2.755	5/13/2015	40	65	19	220	115
54	TAWA	355.40	344.49	1.944	0.603	5/13/2015	31	15	20	247	-
*55	BARGI	422.76	411.45	3.180	0.851	5/13/2015	27	25	18	157	90
*56	BANSAGAR	341.64	336.88	5.166	3.164	5/13/2015	61	65	21	488	425
*57	INDIRA SAGAR	262.13	249.53	9.745	1.994	5/13/2015	20	14	11	2380	1000
58	BARNA	348.55	342.01	0.456	0.106	5/13/2015	23	37	16	546	-
	CHHATTIS GARH										
*59	MINIMATA BANGOI	359.66	355.83	3.046	2.259	5/13/2015	74	78	44	-	120
60	MAHANADI	348.70	338.87	0.767	0.099	5/13/2015	13	35	39	319	10
_ 8	OUTHERN REGION	-									
	A.P & TG										
*61	SRISAILAM	269.75	244.43	8.288	0.000	5/13/2015	0	0	16	0	770
*62	NAGARJUNA SAGAR	179.83	156.82	6.841	0.220	5/13/2015	3	6	25	895	810
	ANDHRA PRADESH										
63	SOMASILA	100.58	84.33	1.994	0.314	5/13/2015	16	45	35	168	0
	<u>TELANGANA</u>										
	SRIRAMSAGAR	332.54	322.48	2.300		5/14/2015	14	33	8	411	27
65	LOWER MANAIR	280.42	270.05	0.621	0.132	5/14/2015	21	47	25	199	60

#### WEEKLY REPORT OF 91 IMPORTANT RESERVOIRS OF INDIA

GOVERNMENT OF INDIA

CENTRAL WATER COMMISSION

				WE	EK ENDING :-	14.05.2015					
			CURRENT	LIVE			STORAGE A	S % OF LIVE CAPACITY AT FRL		BENE	EFITS
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
	KARNATAKA					•					
66	KRISHNARAJA SAGRA	752.50	740.33	1.163	0.247	5/11/2015	21	20	15	79	-
*67	TUNGABHADRA	497.74	480.09	3.276	0.676	5/14/2015	21	6	4	529	72
68	GHATAPRABHA	662.95	635.11	1.391	0.093	5/12/2015	7	1	5	317	-
69	BHADRA	657.76	644.83	1.785	0.594	5/12/2015	33	28	28	106	39
70	LINGANAMAKKI	554.43	536.34	4.294	0.773	5/14/2015	18	17	21	-	55
71	NARAYANPUR	492.25	486.59	0.863	0.179	5/13/2015	21	28	34	425	-
72	MALAPRABHA(RENUKA)	633.83	622.27	0.972	0.081	5/12/2015	8	3	6	215	-
73	KABINI	696.16	691.06	0.444	0.185	5/11/2015	42	39	4	85	-
74	HEMAVATHY	890.63	874.19	0.927	0.129	5/11/2015	14	14	8	265	-
75	HARANGI	871.42	853.86	0.220	0.025	5/11/2015	11	19	15	53	-
76	SUPA	564.00	537.44	4.120	1.579	5/14/2015	38	36	25	-	-
77	VANIVILAS SAGAR	652.28	633.63	0.802	0.035	5/12/2015	4	4	13	123	-
*78	ALMATTI	519.60	507.58	3.105	0.218	5/13/2015	7	7	6	@	290
*79	GERUSOPPA	55.00	52.71	0.130	0.117	5/14/2015	90	75	89	83	240
	KERALA										
80	KALLADA(PARAPPAR)	115.82	97.55	0.507	0.157	5/11/2015	31	26	25	62	-
*81	IDAMALAYAR	169.00	139.10	1.018	0.292	5/11/2015	29	27	22	33	75
*82	IDUKKI	732.43	714.75	1.460	0.608	5/11/2015	42	31	23	-	780
*83	KAKKI	981.46	955.21	0.447	0.144	5/11/2015	32	13	28	23	300
*84	PERIYAR	867.41	860.84	0.173	0.052	5/13/2015	30	28	31	84	140
85	MALAPMUZHA	867.41	860.84	0.224	0.052	5/13/2015	30	28	31	84	140
	TAMIL NADU										
86	LOWER BHAWANI	278.89	264.99	0.792	0.158	5/13/2015	20	11	34	105	8
*87	METTUR(STANLEY)	240.79	224.67	2.647	0.857	5/13/2015	32	10	42	122	360
88	VAIGAI	279.20	269.09	0.172	0.022	5/13/2015	13	6	26	61	6
89	PARAMBIKULAM	556.26	538.99	0.380	0.063	5/13/2015	17	16	32	101	-
90	ALIYAR	320.04	317.33	0.095	0.078	5/13/2015	82	26	47	#	60
*91	SHOLAYAR	1002.79	960.28	0.143	0.007	5/13/2015	5	2	5	-	95
	TOTAL FOR 91 RESERVOIRS			157.799	46.095						
	PERCENTAGE						29	31	23		

Sd/-

Director W. M., CWC

 $<sup>^{\</sup>star}$  HYDEL POWER CAPACITY HAVING CAPACITY MORE THAN 60MW

<sup>\$</sup> TOTAL CCA 342 TH. HA OF DVC SYSTEM

<sup>#</sup> TOTAL CCA 101 TH. HA OF PARAMBIKULAM & ALIYAR

<sup>@&#</sup>x27; TOTAL CCA 425 TH. HA. OF NARAYANPUR AND ALMATTI

<sup>†</sup> 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

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