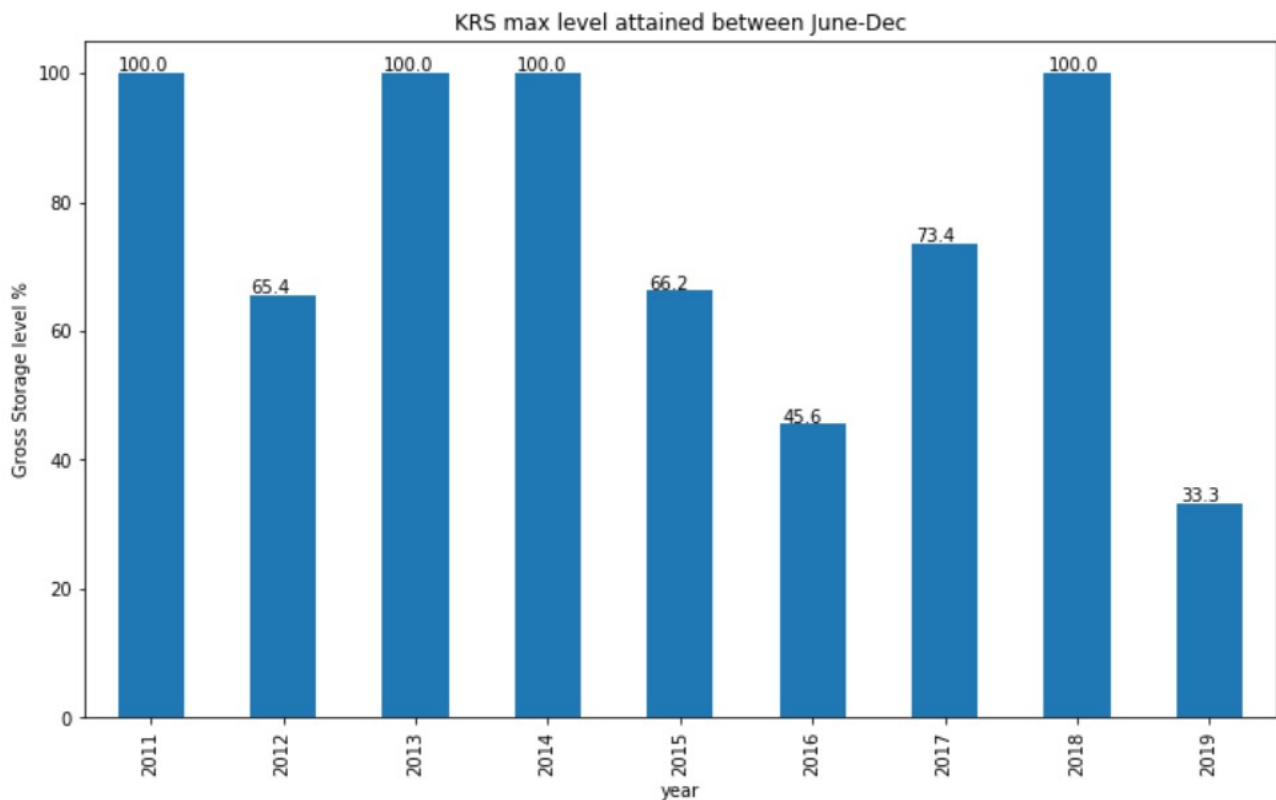


Analysis of the daily inflow, outflow & storage levels at KRS from 2011 – August 2019

1. How is the storage capacity placed against the inflows it receives over the year ?

Let's see the maximum capacity attained in the last 8 years

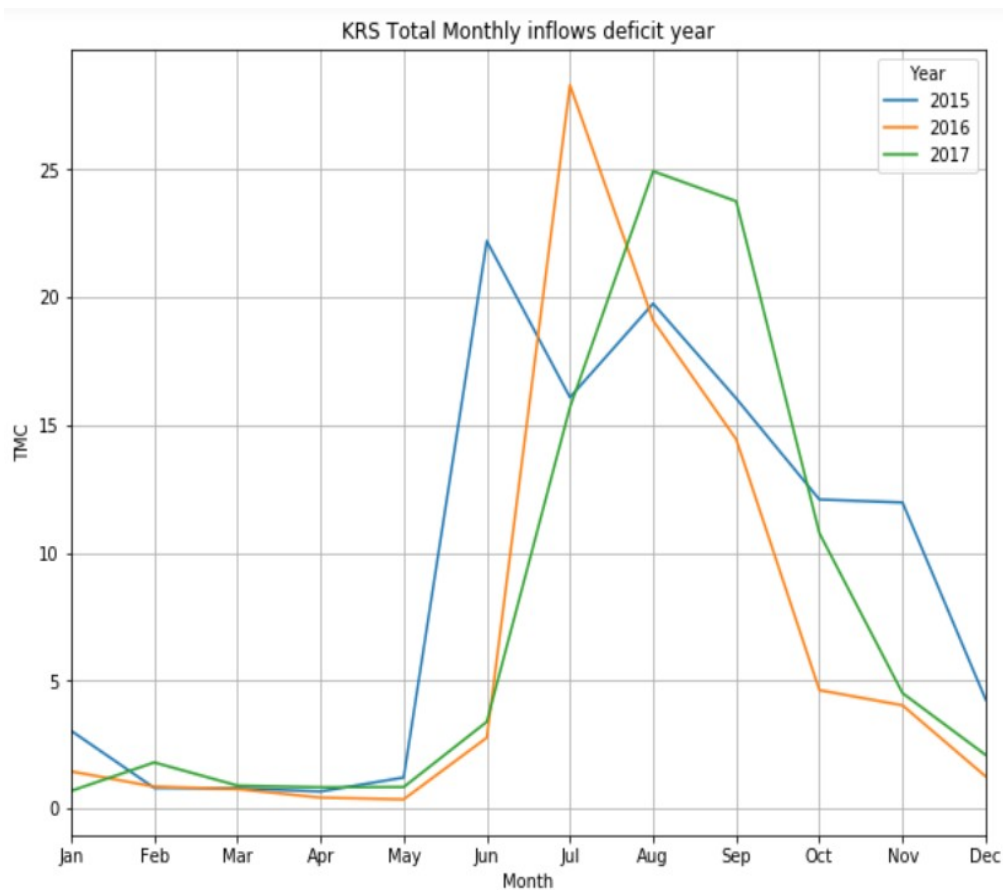
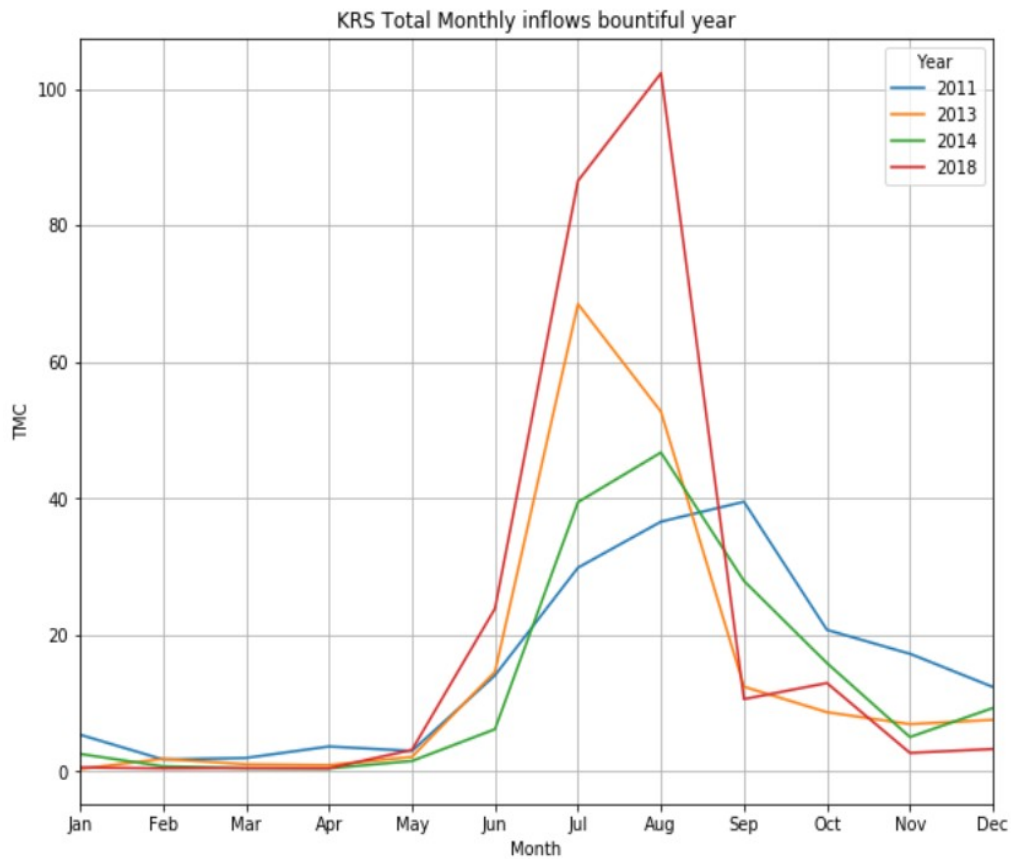


Only in 4/9 years KRS has attained FRL, worst being 2016 it was less than 50% full .
Govt has a proposal to build another dam at Mekedaatu.
In those years it filled up how much water did it receive.

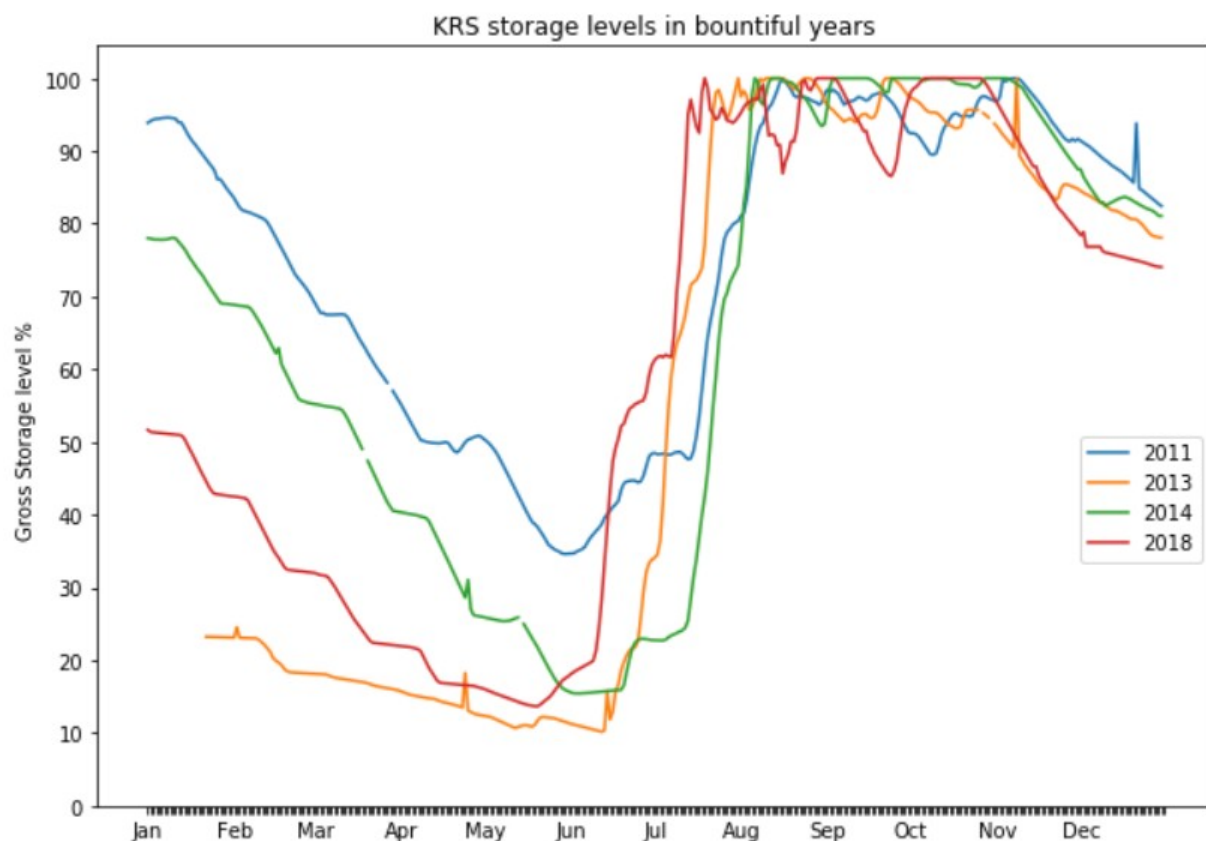
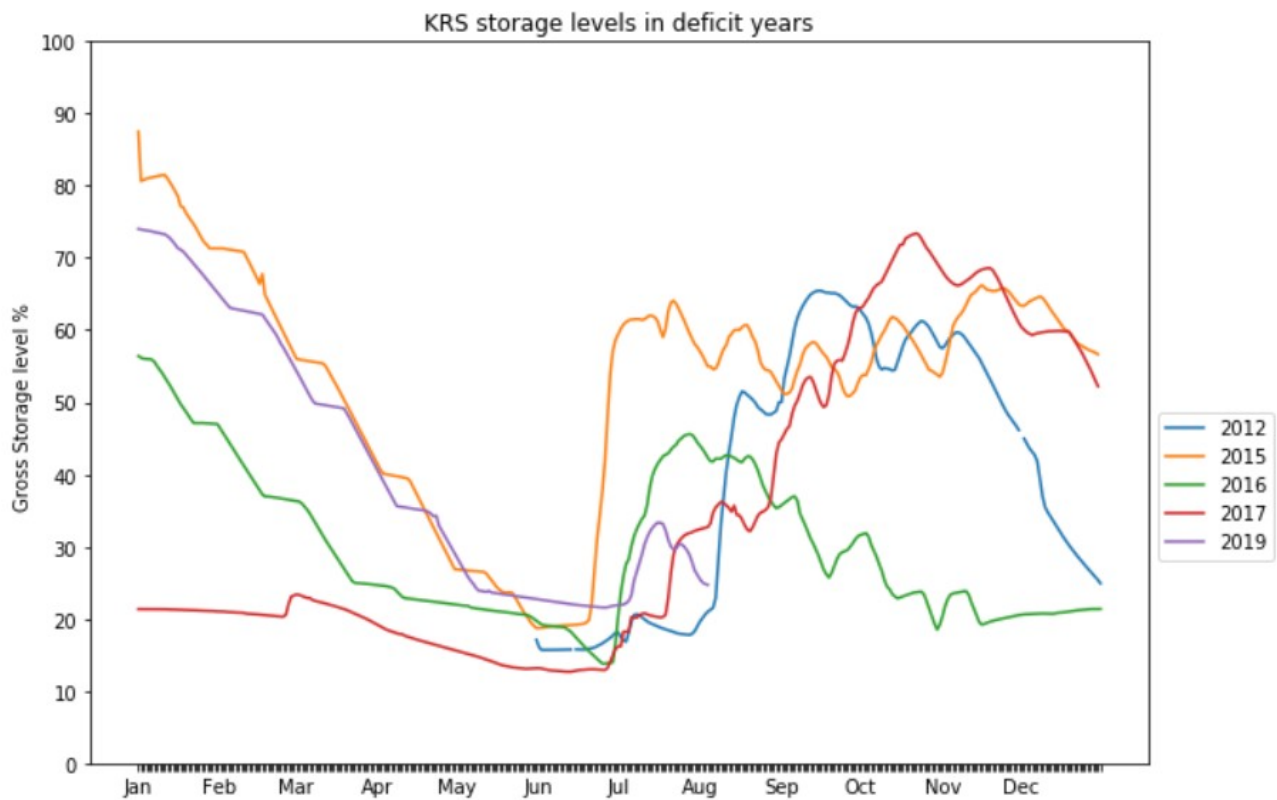
Year	2011	2013	2014	2018
Month				
Jan	5.343408	0.309139	2.521757	0.540086
Feb	1.708042	1.806538	0.710208	0.402538
Mar	1.930608	1.004141	0.432086	0.436147
Apr	3.615408	0.881798	0.400032	0.414374
May	2.964643	2.088374	1.487462	3.113510
Jun	14.033002	14.563325	6.143990	23.836982
Jul	29.833574	68.484960	39.434170	86.539450
Aug	36.571306	52.709530	46.711123	102.328790
Sep	39.494909	12.370320	27.892253	10.553674
Oct	20.718547	8.635334	15.842909	12.909283
Nov	17.206733	6.886598	4.991414	2.669328
Dec	12.328934	7.517318	9.256896	3.245098
Total	185.749114	177.257376	155.824301	246.989261

Gross storage capacity of KRS is 49 TMC, in a good year it has recieved inflows ranging from 3-5 times it's capacity. 2018 was an exceptional year.

2. July is considered as the rainiest month, in the last 8 years total inflows for a month peaked only twice in July, August is more likely



3. Until the rains picked over up over the past week, we were precariously balanced. Only in 2012 was the situation more grave. Gross storage 2 months into the monsoon was just a notch above 20%



Water levels have always risen sharply between July-August when the dam has filled up.

4. Our monthly requirement is ~2.5TMC. Cauvery is a perennial river, how much inflows can we expect post monsoon during a deficit year till the next monsoon.

Year	2012	2015	2016	2017	2019
Month					
Jan	0.425434	3.033936	1.444781	0.682214	0.88033
Feb		0.799027	0.850435	1.795910	0.458957
Mar		0.791683	0.755482	0.891734	0.306979
Apr		0.659664	0.419990	0.823565	0.311126
May	0.0291168	1.206058	0.352512	0.832205	0.401328
Jun	1.86201	22.199184	2.766096	3.386362	0.593309
Jul	8.64233	16.083965	28.300147	15.695510	11.089
Aug	22.2439	19.750608	19.090166	24.932794	2.46784
Sep	21.0377	16.041197	14.440550	23.757754	
Oct	12.3866	12.085200	4.623782	10.769155	
Nov	6.95546	11.967437	4.029264	4.506278	
Dec	5.60779	4.255546	1.247098	2.087683	
Total	79.1904	108.873504	78.320304	90.161165	16.5089

So far in a deficit year it's never been more than 30 TMC from Oct – May , lowest ~ 15 TMC. Following a deficit year it should be easy to take a call on if & when to start water rationing & spread the distress over the months rather than wait till it worsens in summer.

5. 13 June 2013 was a pretty scary day, lowest level recored in the last 8 years when the Live storage capacity was less than 1 TMC , was it apocalyptic ? . Dead storage capacity is 4.4 TMC. Why did it drop so low in 2013 summer even though 2016 monsoon was the worst. Did the elections keep the administration busy with those duties even though a water crisis was brewing .

Date	2013-06-13 00:00:00
Reservoir	K.R.S
Gross_Storage(TMC)	5.03
Reservoir_level(ft/m)	62.8
Inflow	481
Outflow	762
storage_level	10.1719