sunwater

APRIL 2020

NOGOA MACKENZIE WSS INFORMATION BULLETIN

Fairbairn Dam Storage Volume

Some much needed inflows were received into Fairbairn Dam during January and March, as a result of these inflow events the storage peaked at 238,367ML (18.32%) on the 11th March 2020. The announced allocation for Medium Priority increased from 27% to 45% as at the 1st of April 2020, this includes Tartrus Weir increasing from 30% to 45% for MP AA

Start of Water Year (1 July 2020) Announced Allocation Scenarios

The table below shows what the forecast HP and MP announced allocations on 1 July 2020 may be depending on the volume of water within Fairbairn Dam at that time. These scenarios are calculated by applying the water sharing rules in the Nogoa Mackenzie Operations Manual to the potential future storage volume held in Bedford, Bingegang and Tartrus Weirs as projected on 1 July 2020.

These are PREDICTIONS ONLY and are intended to provide you an indication of what the forecast Announced Allocation and carryover volumes may be at the start of the new water year.

Prediction of 2020-2021 Start of Water Year Announced Allocation

The predicted Announced Allocation for 1 July 2020 as at 23 April 2020

- High Priority is **predicted** to be 100%
- Medium Priority is predicted to be 0% (plus any carryover that individuals may have approved)

	Scenario	Date	Storage	Assumed level of Fairbairn Dam 1 July 2020 from Storage Forecast Storage Model			Forecast Announced Allocation		Forecast Carryover
				mAHD	% of Capacity	Volume (ML)	НР	MP	ML
	1	1/07/2020	Fairbairn	192.91	13.78	179355	100%	0%	25,000
	2	1/07/2020	Fairbairn	193.01	14.20	184826	23%	0%	75,000

Scenario 1 is based on Weir levels the last time Fairbairn Dam was at 192.91, therefore, Bedford Weir 122.45 m AHD (72.77%), Bingegang Weir 100.12 m AHD (40.35%) and Tartrus Weir 80.86 m AHD (80.89%). Scenario 2 assumes Weir levels are at FSL.

Sunwater understands that some customers are concerned about the potential outcomes of the water sharing rules if the water levels in Fairbairn Dam at the start of the water year were to be at the levels projected above. In particular, the forecast HP announced allocation appears to drop off significantly if the projected water level in the dam were to be just above 193.01m AHD. If the projected water level were to be just above or below this, then the forecast HP announced allocation would increase. This appears to be a perverse outcome of the large step-change in the carryover volume that occurs at 193.00m.

In addition, HP customers have alerted us to a problem that arises in the situation when Fairbairn Dam drops to very low levels (as was expected to happen before the recent inflows occurred). This second problem relates to the water sharing rules locking up a disproportionate volume of stored water to provide for future losses when the dam is at very low levels.

Sunwater will consult with customers about these issues – and potential alternatives for tweaking the scheme water sharing parameters – in the coming weeks. You can access Sunwater's model for forecasting the storage level at Fairbairn Dam at https://storagelevels.sunwater.com.au/storageforecast/Forecast_Portal.htm#Fairbairn

From 1 July 2020 Sunwater will calculate the actual start of water year Announced Allocations for 2020-2021 and will notify customers by email and/or SMS and will be made available on the Sunwater website. Please call us on 13 15 89 if you need to update your contact details.

Useful Links:

Help guide for SunWater Online:

https://www.sunwater.com.au/wp-content/uploads/Home/Customer/Managing-your-account/SunWater Online instructions.pdf

NMWSS Carryover Application Form:

https://www.sunwater.com.au/wp-content/uploads/Home/Customer/Forms/Carryover Form - Nogoa Mackenzie.pdf

Announced Allocation

For current water year: HP - 100%, MP - 45%

Fairbairn Dam - Full Supply
Capacity 1,301,129 ML

Capacity @ 1/4/2020 224,786ML (17.3%)

EL193.701mAHD

Water Use Data: 1 July 2019 to 31 March 2020

- Channel 35,300ML
- River 37,896ML
- Pipeline 4,420ML

Total usage to date 77,859ML

Remaining Allocation (at 1st April 2020)

(includes unused carryover) Channel 53,458ML River 57,233ML Pipeline 6,669ML Total remaining Allocation 117,359ML

<u>Unused Carryover</u> (at 1st April 2020) 4,927ML

Water orders April 2020 (to date)

- Channel 2,900ML
- River 5,400ML
- Pipeline 1,200ML

Dates to Remember

Shutdowns

Selma - 1^{st} July to 14^{th} July Nogoa River – 1^{st} July to 14^{th} July Weemah – 1^{st} July to 14^{th} July