

GREAT FORESTER RIVER CATCHMENT ANNUAL REPORT 2019/20

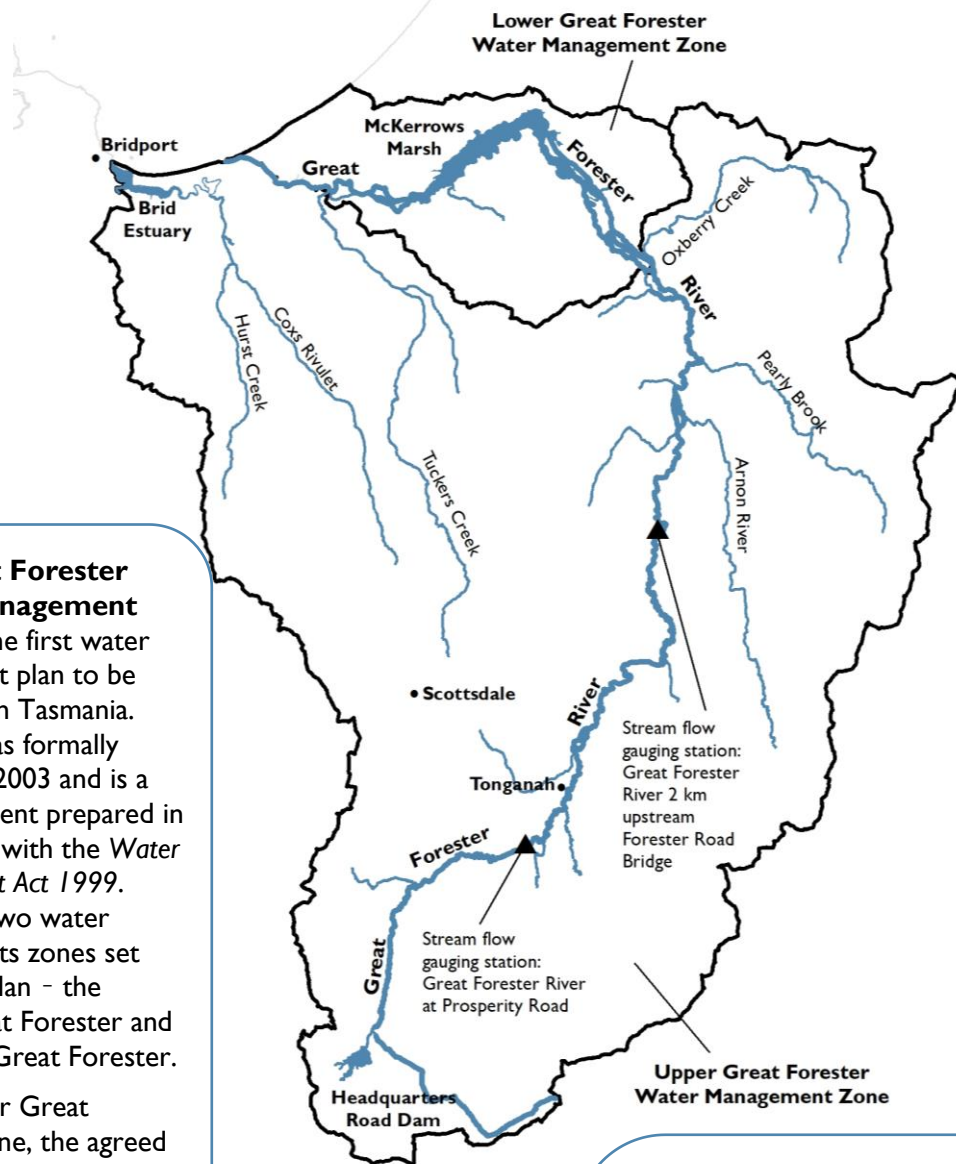
The Great Forester River catchment is located in the north-east of Tasmania and flows 95 km in a northerly direction from Mount Maurice to Bass Strait near Bridport. The catchment covers a total area of 626 km².

The river system is unregulated with a largely natural flow regime that shows a strong seasonal flow pattern (wetter in winter and drier in summer). The average annual water yield is 149,400 ML/year.

The Great Forester Water Management Plan was the first water management plan to be developed in Tasmania. The Plan was formally adopted in 2003 and is a legal document prepared in accordance with the *Water Management Act 1999*. There are two water managements zones set out in the Plan - the Upper Great Forester and the Lower Great Forester.

In the Upper Great Forester zone, the agreed managed minimum flow for the summer period is 30 ML/day, measured at DPIPWE's stream flow gauging station on the Great Forester River 2km upstream of the Forester Road Bridge.

For full details of the current Water Plan go to the DPIPWE Water website.



There are currently 415 water allocations across the Great Forester catchment with a combined volume of 39,169 ML/year. The majority of consumptive water use in the catchment occurs in the upper reaches of the Great Forester River, as well as in the upper reaches of Tuckers and Hurst creeks.

Surety Level	Summer Vol.(ML)	Winter Vol. (ML)	Overall Vol. (ML)
S 5	3121	10542	13663
S 6	18336	4950	23286
S 7	0	2220	2220
Total	21457	17712	39169

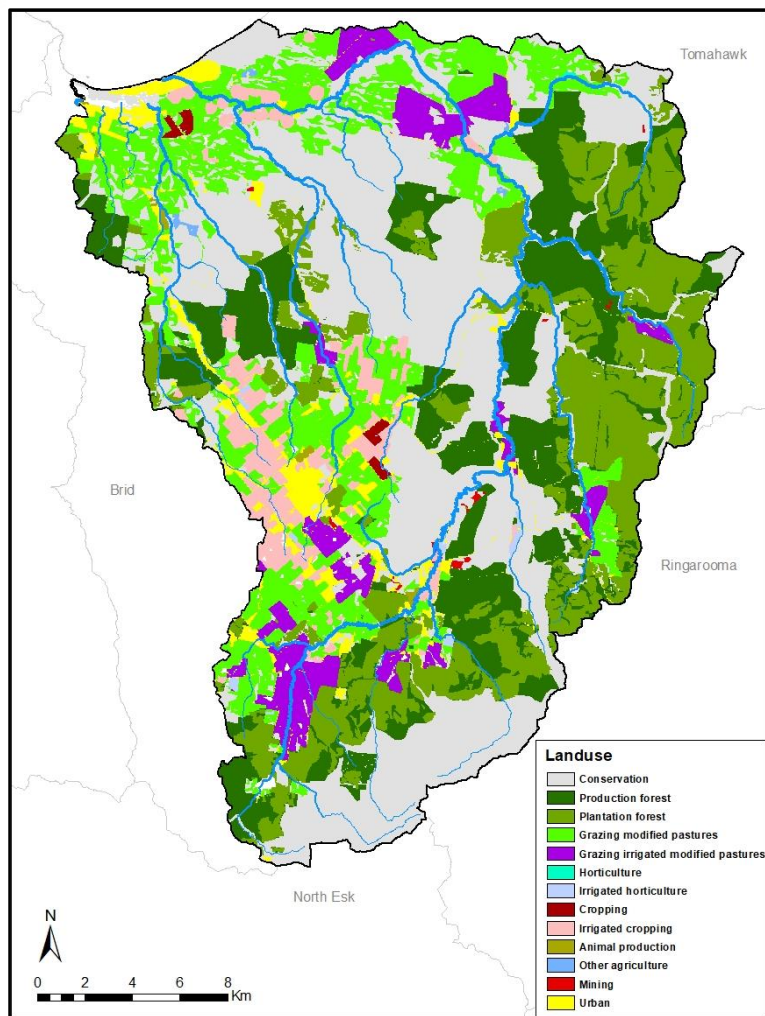
CATCHMENT LAND USE

Roughly 35% of the catchment is under production native forests and plantation forestry. A further 25% is used for agricultural purposes with the remaining area supporting a diversity of land uses including mining, urban areas and conservation land. The catchment includes the township of Scottsdale as its major settlement.

RIVER HEALTH

The Great Forester River catchment supports a number of important freshwater dependent values including giant freshwater crayfish, native Australian grayling and unique paperbark swamp ecosystems such as McKerrows Marsh.

DPIPWE have a long-term river health monitoring site on the Great Forester River at Prosperity Road in the upper catchment. At this site, river health over the long-term has been good, but in recent years the condition has declined marginally and fine deposited sediment appears to be impacting on the health of the river.



HYDROLOGY SUMMARY

The following pages show plots of long term streamflow (full period of available record), short term (last 5 water years) streamflow and rainfall, and last years flow, rainfall and restriction data, split into winter (May 2019 – November 2020) and summer (December 2019 – April 2020) seasons.



For further information contact your local Regional Water Management Officer at the Department of Primary Industries, Parks, Water and Environment:
Phone: 1300 368 550
Email: Water.Operations@dPIPWE.tas.gov.au
dPIPWE.tas.gov.au/water

Full flow record, 1970 - 2020

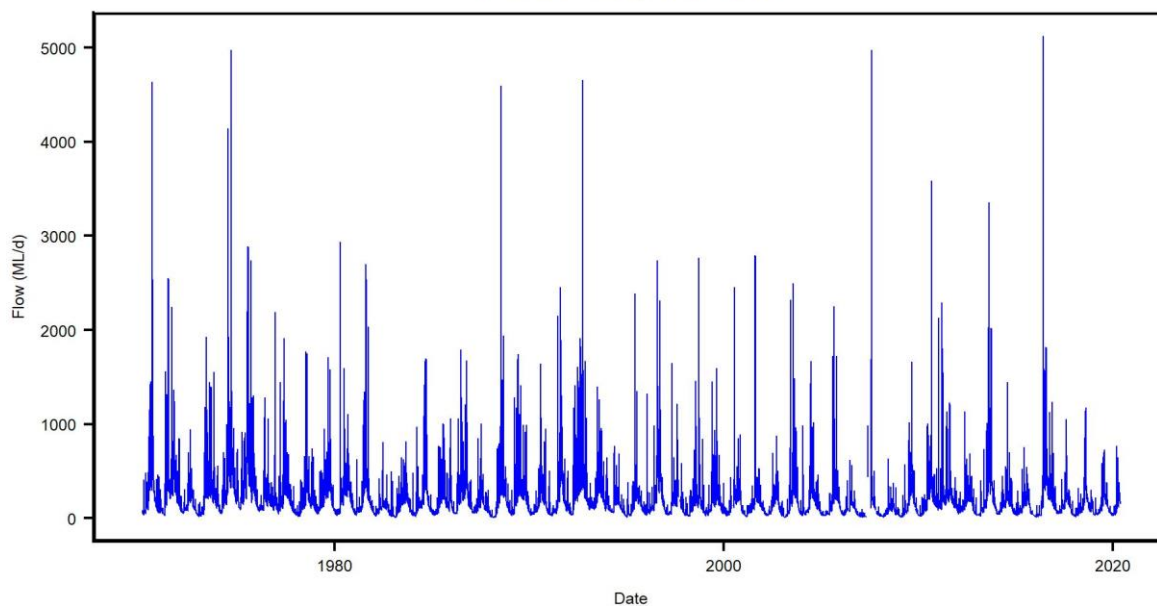


Figure 1. Mean daily flow in the Great Forester River at the Forester Road streamflow gauging station, whole of record.

Full record of yields in water years 1970 - 2019

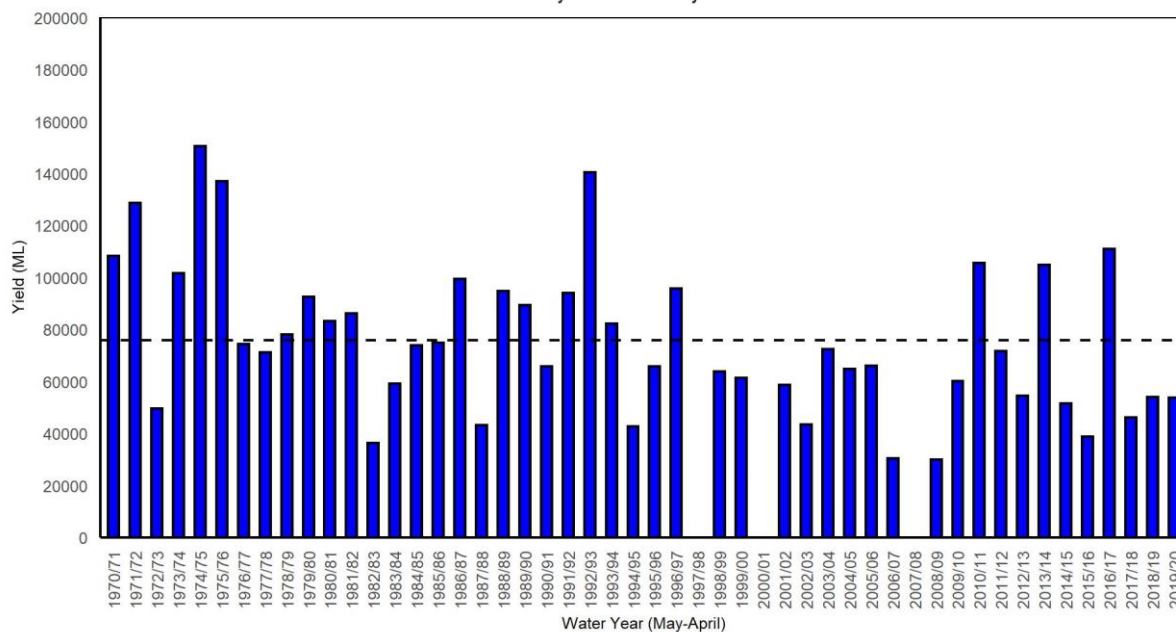


Figure 2. Yields in the Great Forester River at the Forester Road streamflow gauging station. Water years with <95% of the daily flow record available are excluded. The long-term mean yield is shown as the dashed horizontal black line (75 500 ML).

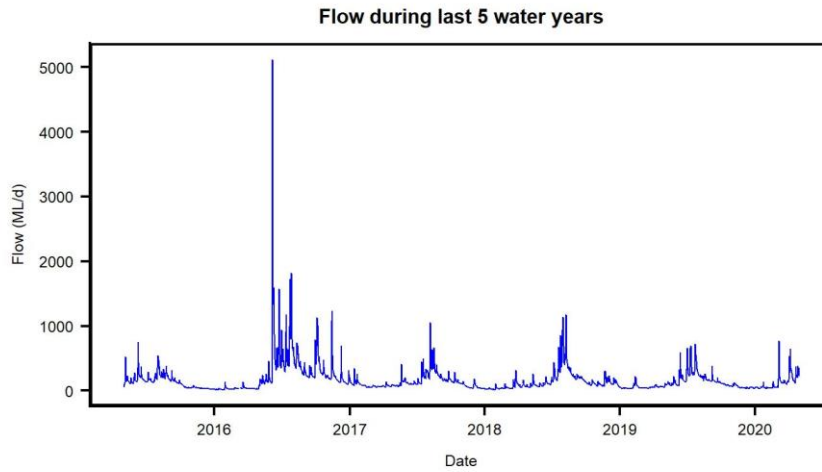


Figure 3. Mean daily flow in the Great Forester River at the Forester Road streamflow gauging station, last five years.

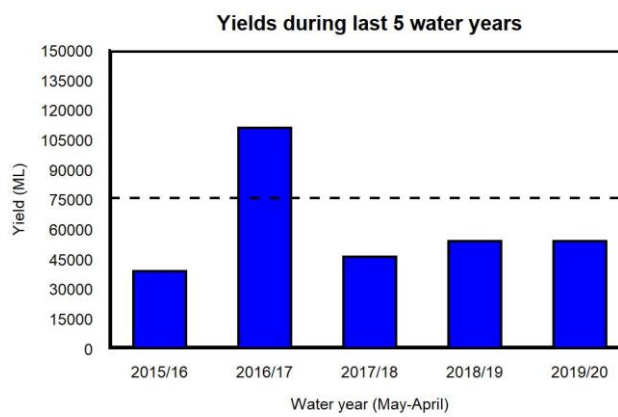


Figure 4. Yields in the Great Forester River at the Forester Road streamflow gauging station for the last five years. The long-term mean yield is shown as the dashed horizontal black line (75 000 ML).

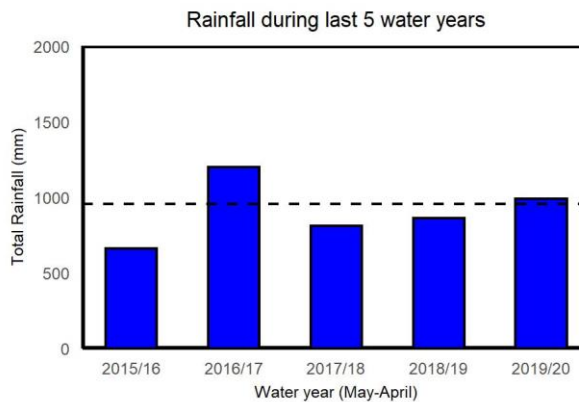


Figure 5. Total rainfall at the Scottsdale BoM weather station during the last five water years. The long-term (1971-2019) mean total rainfall (969 mm) is shown as the black horizontal dashed line.

Rainfall, low flows and restriction periods during winter 2019/2020

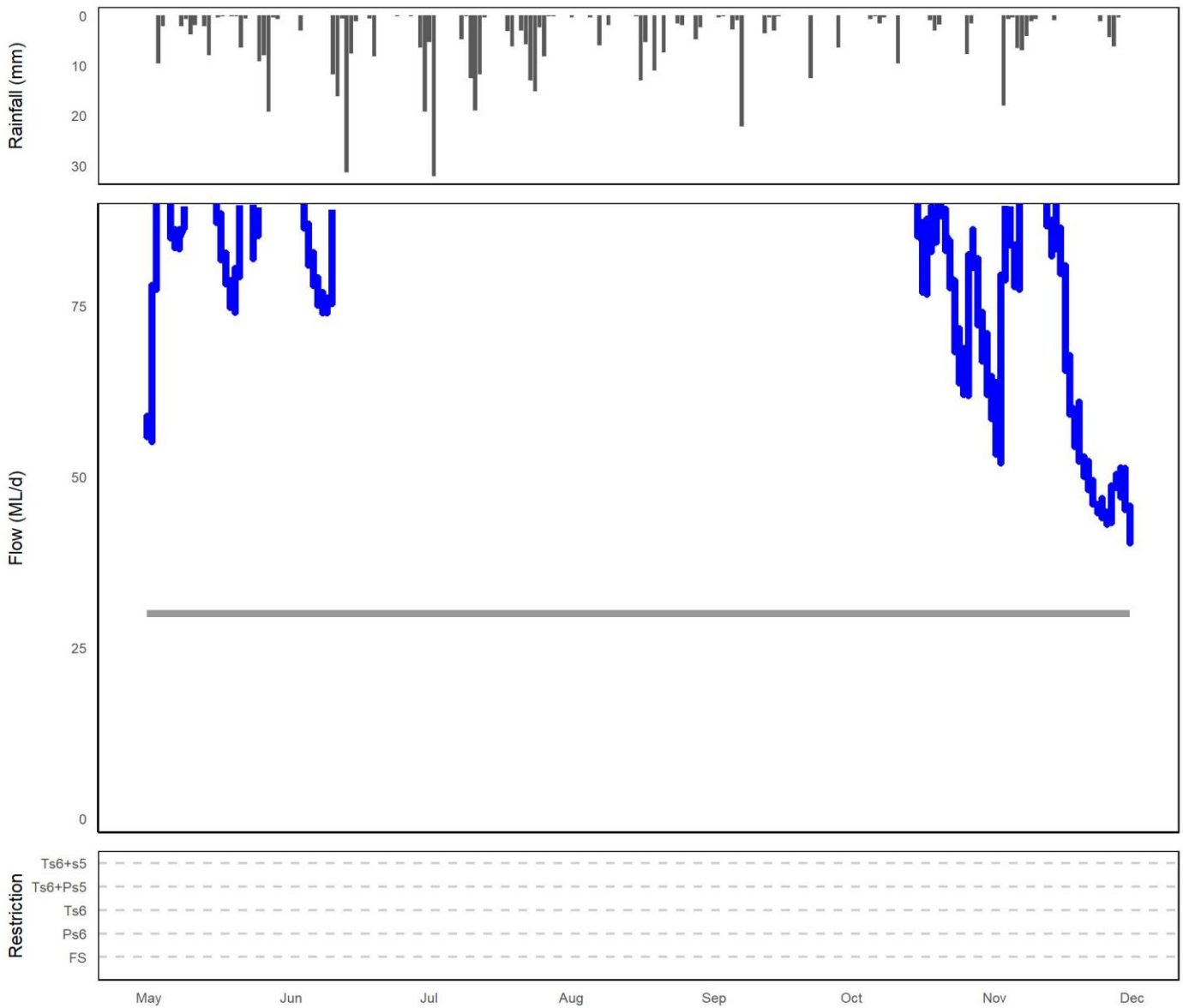


Figure 7. Summary of rainfall, low flows and restrictions in the Great Forester catchment during winter (May-November) 2019.

Top plot: total daily rainfall (Scottsdale BoM site).

Middle plot: instantaneous flow (<100 ML) Great Forester River at Forester Road station (compliance flow site).

Bottom plot: days when restrictions were in place.

Table 1 Restriction levels and total days at each level for the winter period (May - November 2019)

Restriction Type	Days at restriction level in 2018/19	Days at restriction level in 2019/20
Flow Sharing	0	0
Partial Surety 6	0	0
Total Surety 6	0	0
Total Surety 6 + Partial Surety 5	0	0
Total Surety 6 + Total Surety 5	0	0

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Rainfall, low flows and restriction periods during summer 2019/2020

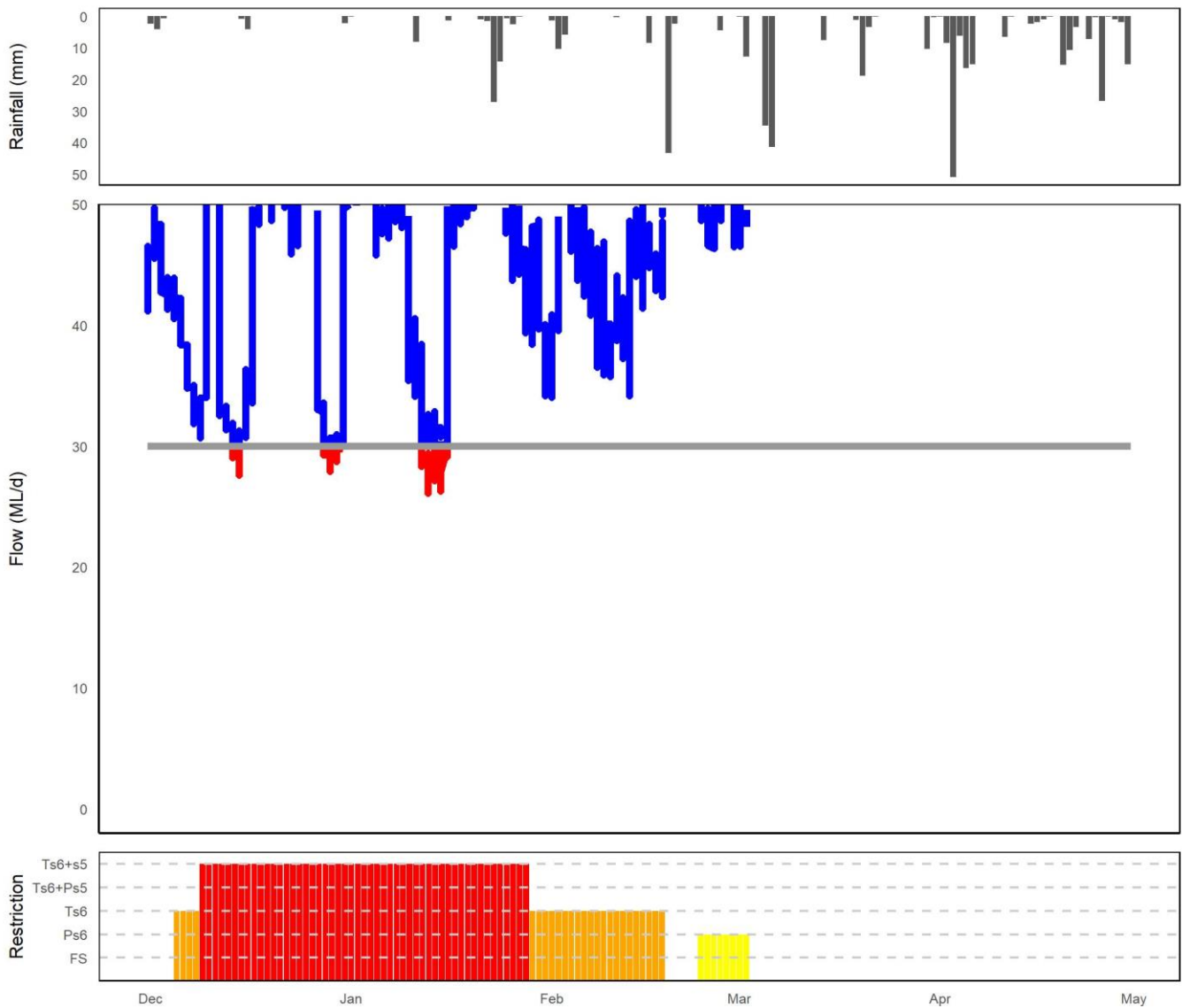


Figure 9. Summary of rainfall, low flows and restrictions in the Great Forester catchment during summer 2019/20 (Dec-April).

Top plot: total daily rainfall (Scottsdale BoM site).

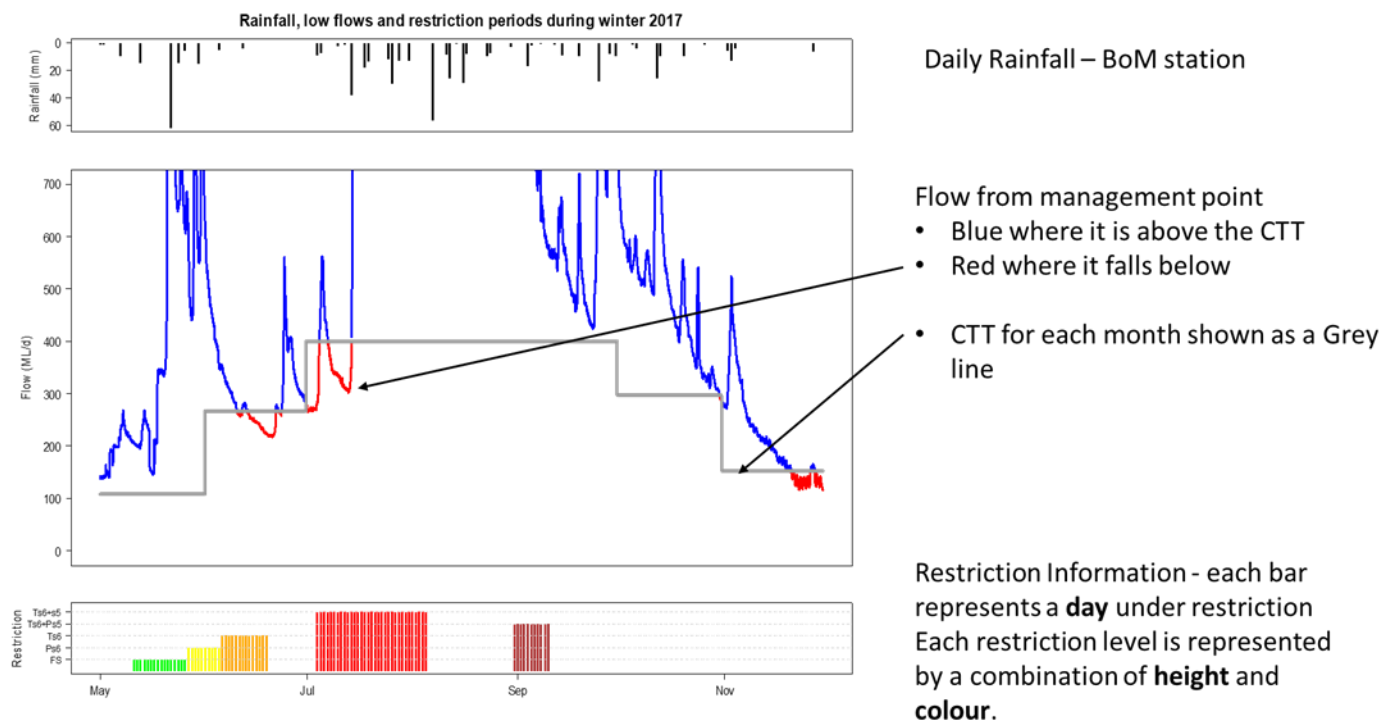
Middle plot: instantaneous flow (<50 ML) Great Forester River at Forester Road station (compliance flow site).

Bottom plot: days when restrictions were in place.

Table 2 Restriction levels and total days at each level for the summer period (Dec 2019 – April 2020).

Restriction Type	Days at restriction level in 2018/19	Days at restriction level in 2019/20
Flow Sharing	0	0
Partial Surety 6	50	8
Total Surety 6	10	25
Total Surety 6 + Partial Surety 5	0	0
Total Surety 6 + Total Surety 5	0	51

Restriction plot legend:



Flow Restriction definitions:

- FS = flow sharing (only some catchments), shown in **GREEN**
- Ps6 = partial surety 6 ban, shown in **YELLOW**
- Ts6 = total surety 6 ban, shown in **ORANGE**
- Ts6+Ps5 = total surety 6 and partial surety 5 ban, shown in **BROWN**
- Ts6+s5 = total surety 5 and 6 ban, shown in **RED**