

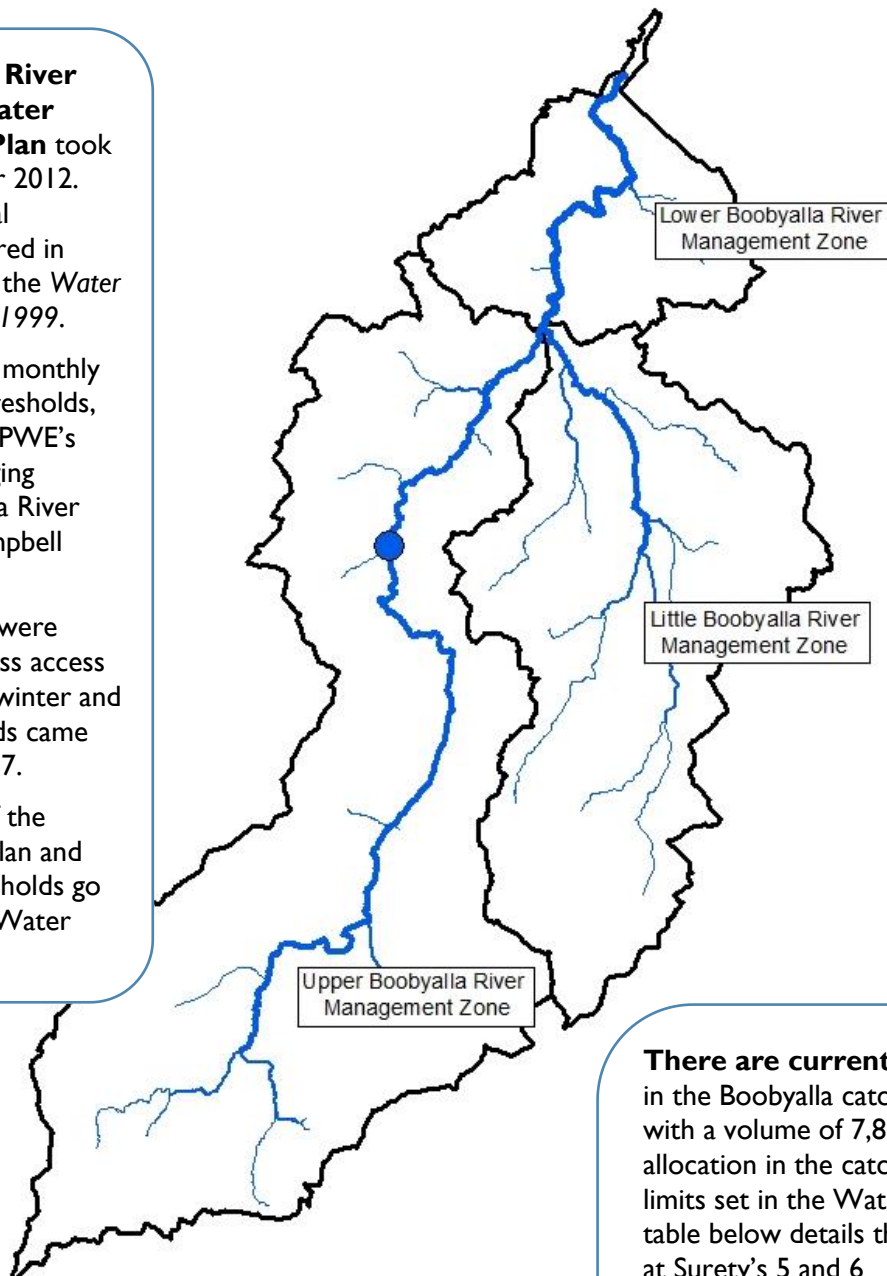
BOOBYALLA RIVER CATCHMENT ANNUAL REPORT 2020/21

The Boobyalla River Catchment Water Management Plan took effect in October 2012. The Plan is a legal document prepared in accordance with the *Water Management Act 1999*.

The Plan set out monthly cease to take thresholds, measured at DPIPWE's stream flow gauging station: Boobyalla River upstream of Campbell Creek.

CTT thresholds were reviewed to assess access to water during winter and revised thresholds came into effect in 2017.

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



The Boobyalla River catchment is located in the north-east of Tasmania and flows north approximately 43 km from Mount Horror to Ringarooma Bay. The catchment covers a total area of 298 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 22,100 ML/year.

There are currently 90 water allocations in the Boobyalla catchment under Surety's 1-6 with a volume of 7,814 ML. The volume of allocation in the catchment has reached the limits set in the Water Management Plan. The table below details the consumptive allocations at Surety's 5 and 6

CONSUMPTIVE WATER ALLOCATION

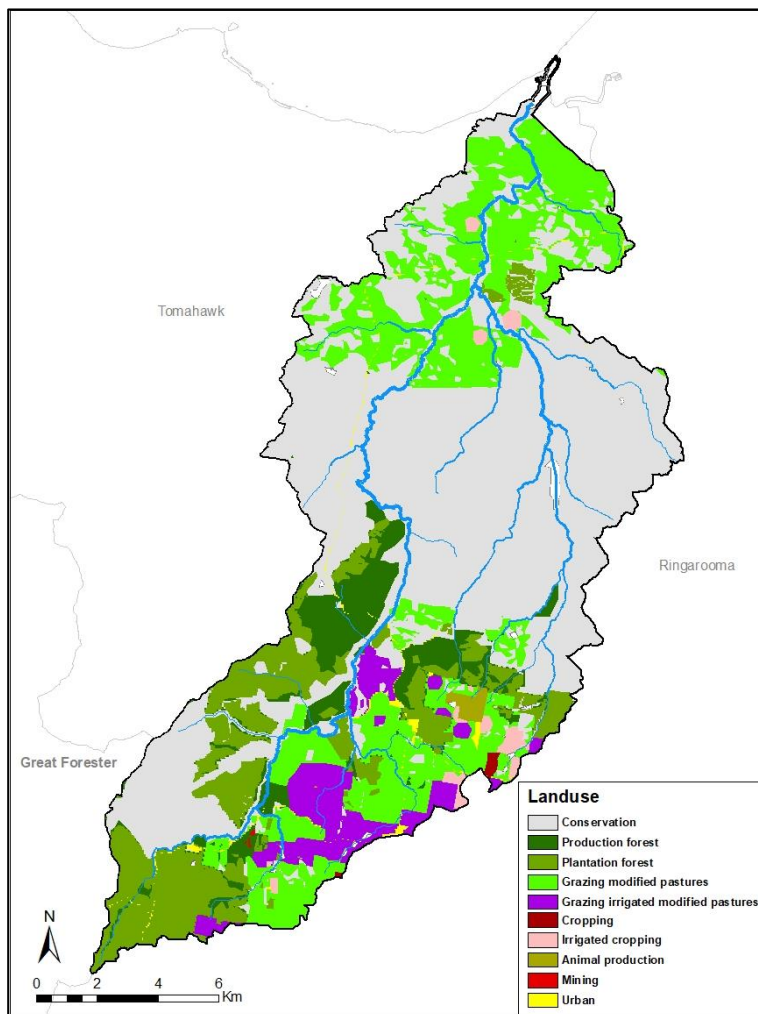
Surety Level	Summer Vol. (ML)	Winter Vol. (ML)	Overall Vol. (ML)
S 5	594	5060	5654
S 6	0	2082	2082
Total	594	7142	7736

CATCHMENT LAND USE

Approximately 19% of the catchment is under production native forests and plantation forestry. A further 28% is used for agricultural purposes with the remaining area supporting a diversity of land uses including mining, and conservation land. No townships sit within the Boobyalla catchment with the town of Winnaleah just to the south of the surface water catchment boundary.

RIVER HEALTH

DPIPWE recently established a long-term river health monitoring site on a mid-reach of the Boobyalla River immediately upstream of the river's estuary. Monitoring at this site and other sites in the river in recent years (2015-2018) indicates that the lower and mid reaches of the river are in moderate to good condition. Due to the COVID-19 situation, no field work was undertaken in the 2020-21 year.



HYDROLOGY SUMMARY

The following pages show plots of long term streamflow (full period of available record), short term flow and rainfall (last 5 water years), and last year's flow, rainfall and restriction data, split into winter (May 2020 – November 2020) and summer (December 2020 – April 2021) 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, 1981 - 2021

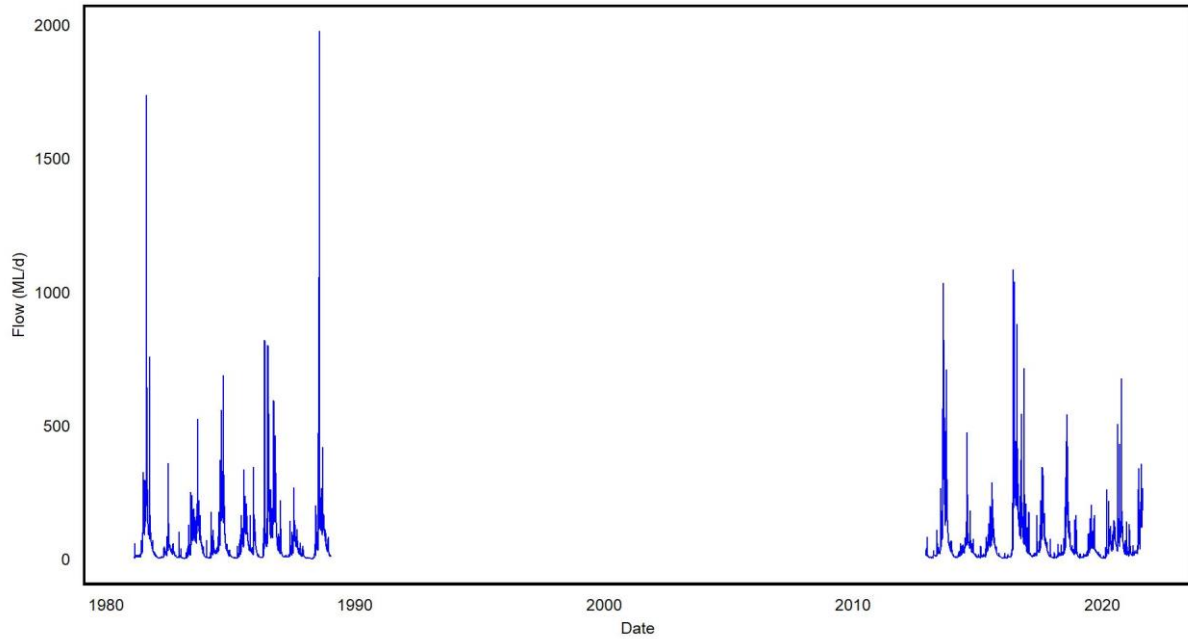


Figure 1. Mean daily flow at the Boobyalla River upstream Campbell Creek streamflow gauging station, whole of record.

Full record of yields in water years 1981 - 2020

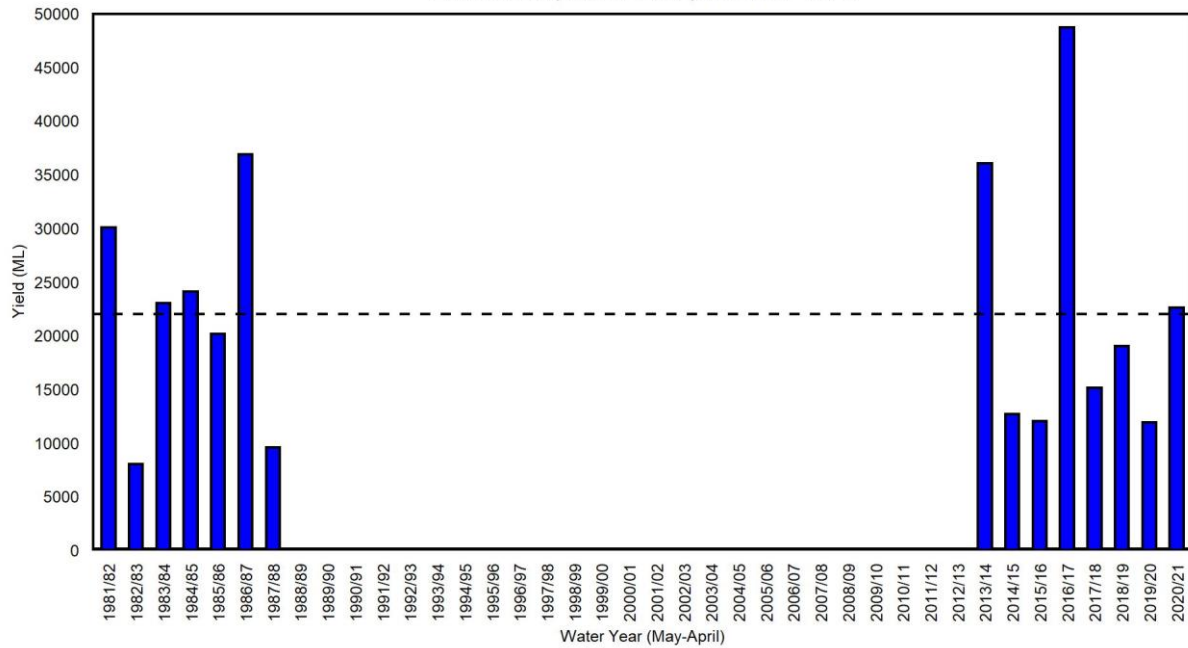


Figure 2. Yields in the Boobyalla River upstream Campbell Creek streamflow gauging station. Water years with <95% of the daily flow record available are excluded. The long-term mean yield is shown as the dashed horizontal black line (21 900 ML).

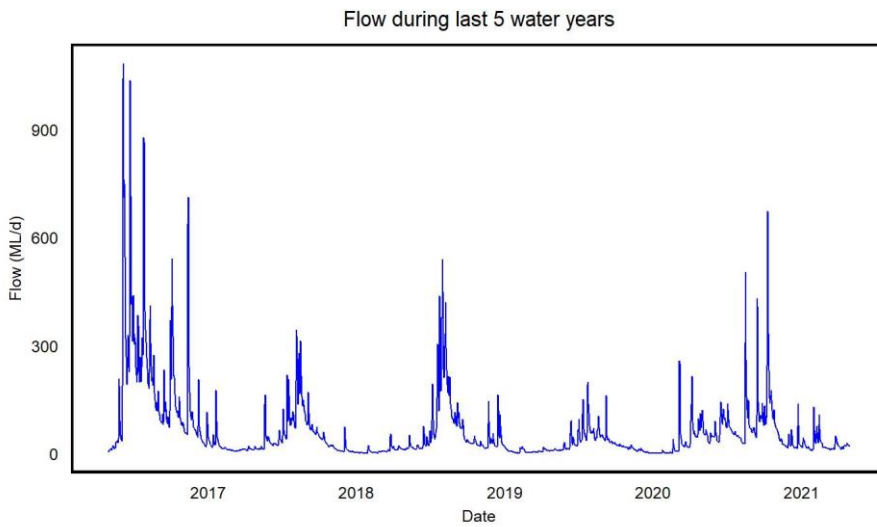


Figure 3 Mean daily flow in the Boobyalla River upstream Campbell Creek streamflow gauging station for the last five years.

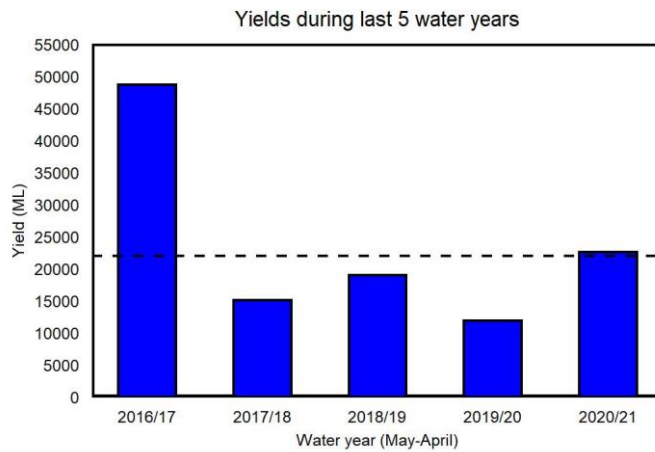


Figure 4. Yields in the Boobyalla River upstream Campbell Creek streamflow gauging station for the last five years. The long-term mean yield is shown as the dashed horizontal black line (21 900 ML).

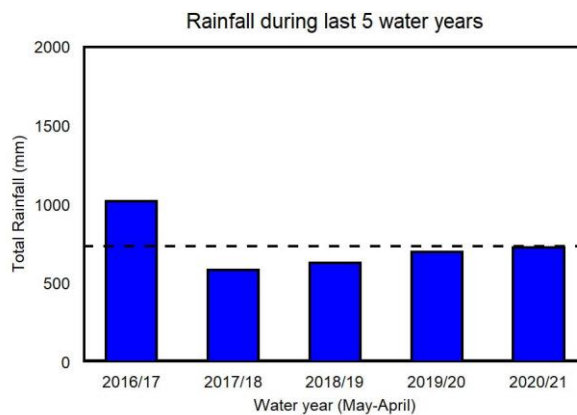


Figure 5. Total rainfall at the Tomahawk (Carisbrooke) BoM weather station during the last five water years. The long-term (1965-2020) mean total rainfall (730 mm) is shown as the black horizontal dashed line.

Rainfall, low flows and restriction periods during winter 2020/2021

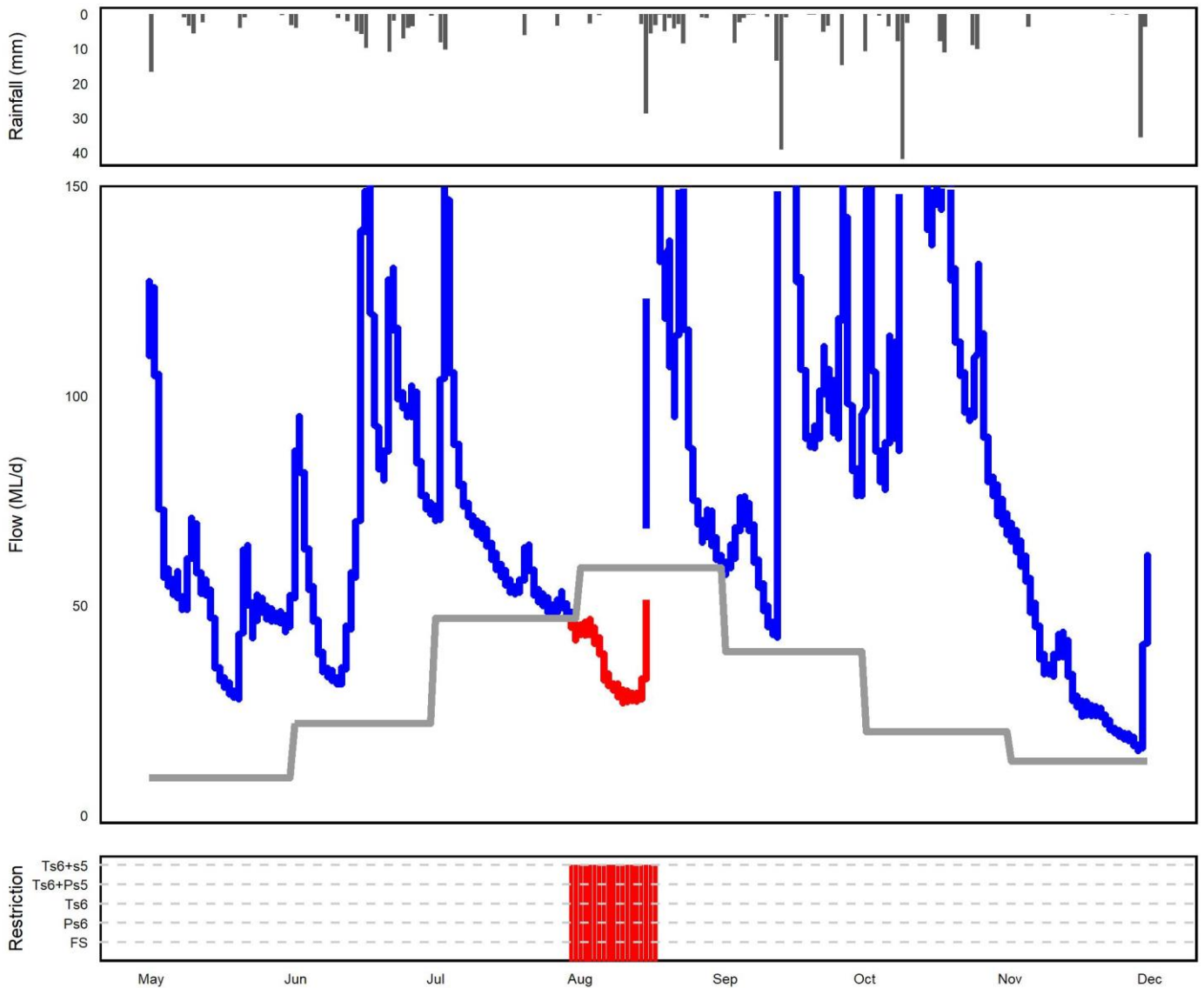


Figure 6. Summary of rainfall, low flows and restrictions in the Boobyalla River catchment during winter (May-November) 2020.
 Top plot: daily rainfall (Tomahawk (Carisbrooke) BoM site).
 Middle plot: instantaneous flow (<150 ML) Boobyalla River upstream Campbell Creekstation (compliance flow site).
 Bottom plot: days when restrictions were in place.

NOTE: Refer to the last page for a 'legend' and description on how to interpret these plots

Table 1 Restriction levels and total days at each level for the winter period (214 days: May - November 2020).

Restriction Type	Days at restriction level in 2019/20	Days at restriction level in 2020/21
Total Surety 6 + Total Surety 5	56	19

Rainfall, low flows and restriction periods during summer 2020/2021

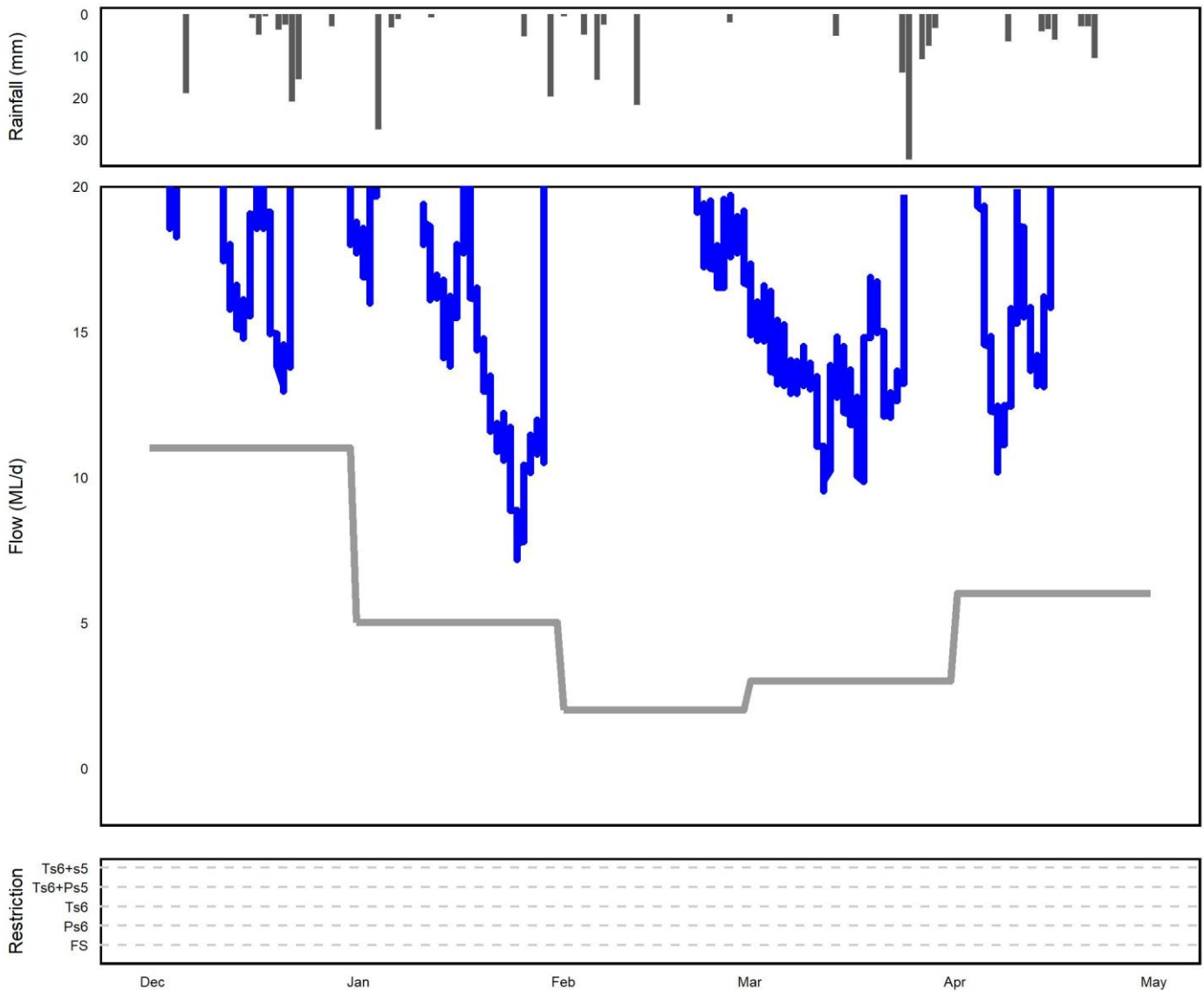


Figure 7. Summary of rainfall, low flows and restrictions in the Boobyalla River catchment during summer 2020/21 (Dec-April).

Top plot: daily rainfall (Tomahawk (Carisbrooke) BoM site).

Middle plot: instantaneous flow (<20 ML) Boobyalla River upstream Campbell Creekstation (compliance flow site).

Bottom plot: days when restrictions were in place.

NOTE: Refer to the last page for a 'legend' and description on how to interpret these plots

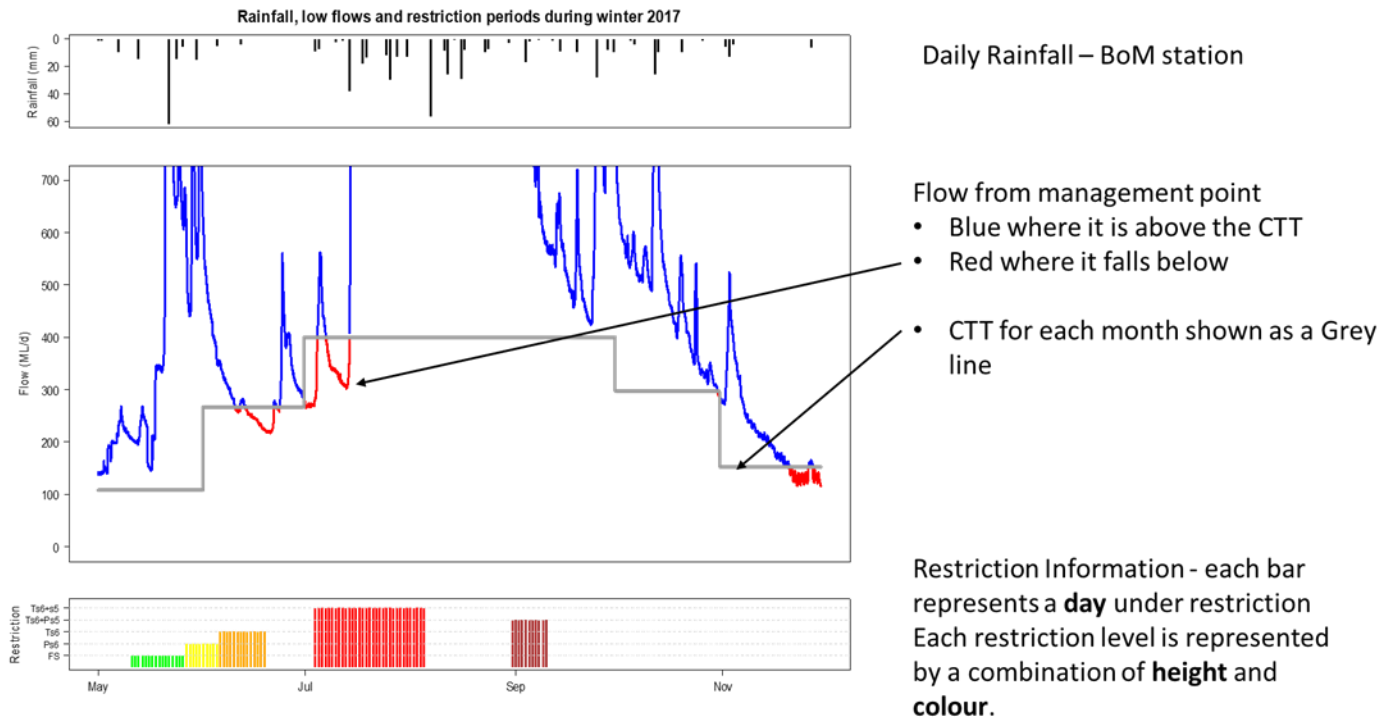
Table 2 Restriction levels and total days at each level for the summer period (151 days: Dec 2019 – April 2020).

Restriction Type	Days at restriction level in 2019/20	Days at restriction level in 2020/21
Total Surety 6 + Total Surety 5	54	0

EXAMPLE ONLY

Rainfall, flow and restriction plot legend

NOTE: This is a hypothetical example to assist in interpreting the plots in the main body of this document.



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

EXAMPLE ONLY

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