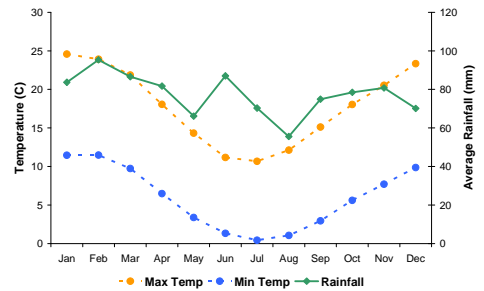


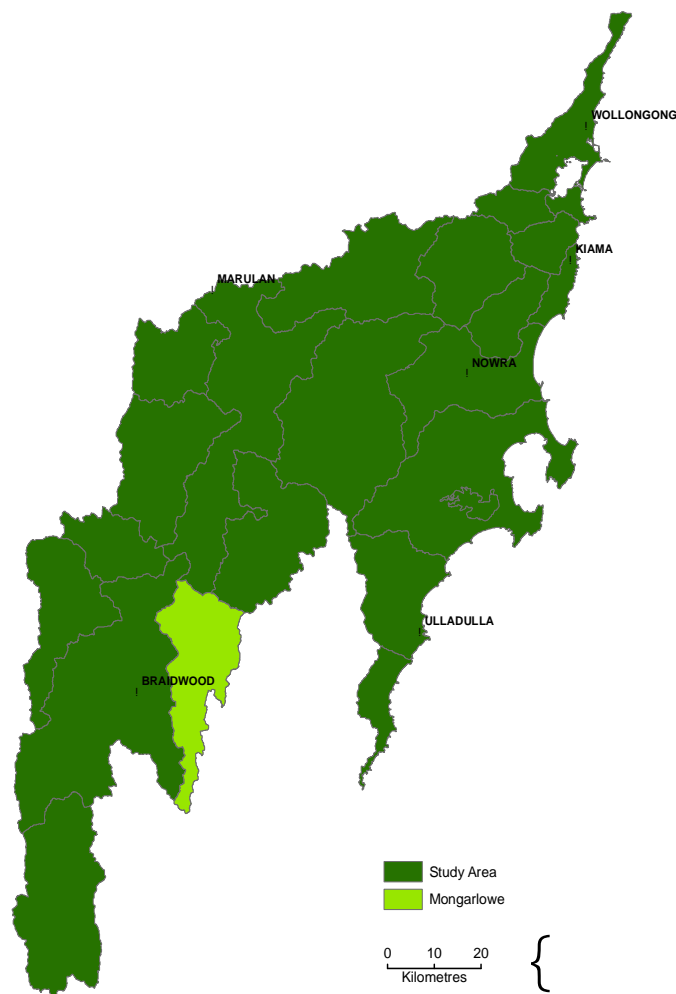
Report Card - Mongarlowe

General Information

<i>Sub-catchment size</i>	414 km ²
<i>Riparian landscape area</i>	20 km ²
<i>Average annual rainfall range</i>	715-1270 mm
<i>Median annual rainfall</i>	930 mm
<i>Elevation range</i>	549 – 1129 m
<i>Sub-catchment stream length</i>	1561 km
<i>Analysis area stream length</i>	990 km

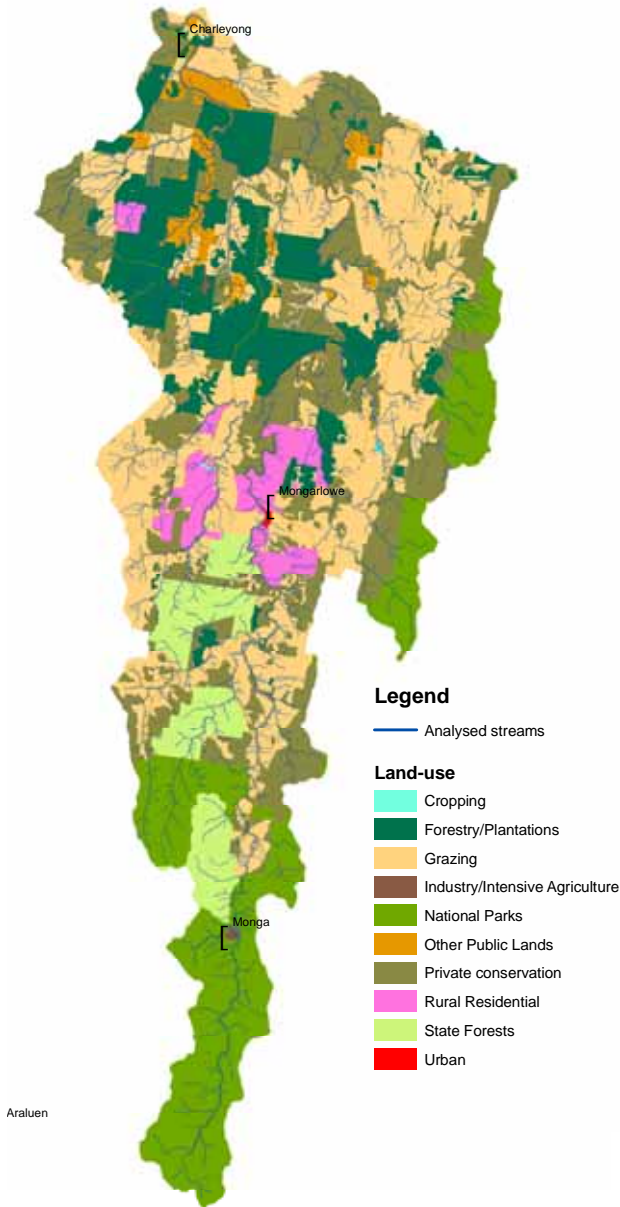


Average daily temperature and monthly rainfall data

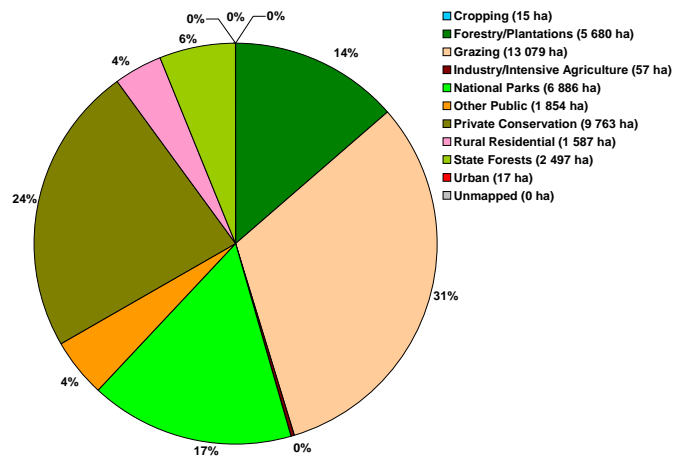


Location of Mongarlowe sub-catchment within study area

Land Use



Land use Map for Mongarlowe sub-catchment

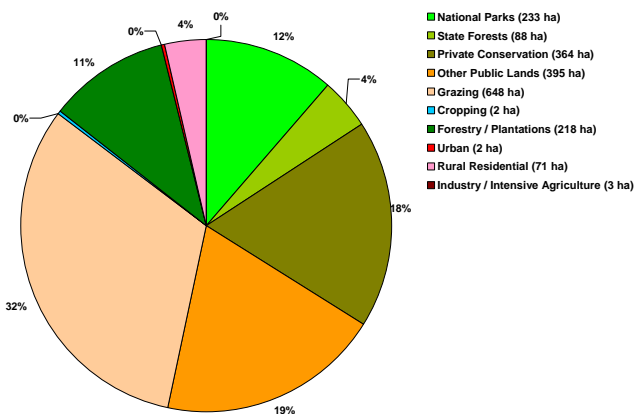


Land use within the sub-catchment

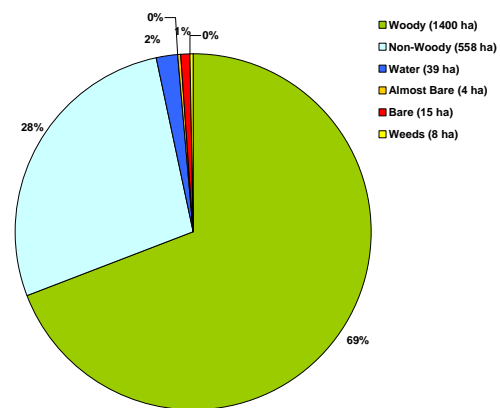
Report Card

Mongarlowe Sub-catchment Riparian Zone Summary

- Grazing comprises the largest area within the riparian zone (32%).
- Woody riparian cover dominates the riparian area comprising 69% and approximately 20% of the woody riparian cover occurs within National Parks and/or State Forests.
- Weeds (mostly willows) compose less than 1% of the riparian area and approximately two thirds (67%) of the weed areas are within the grazing land use type.



Land use within the riparian zone



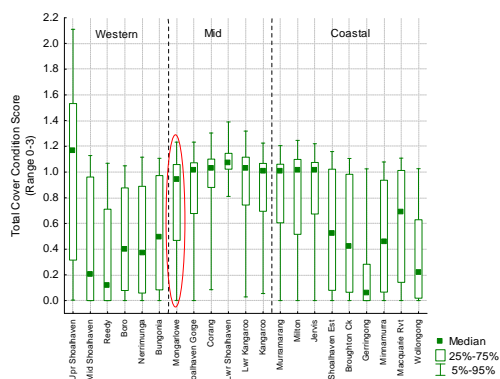
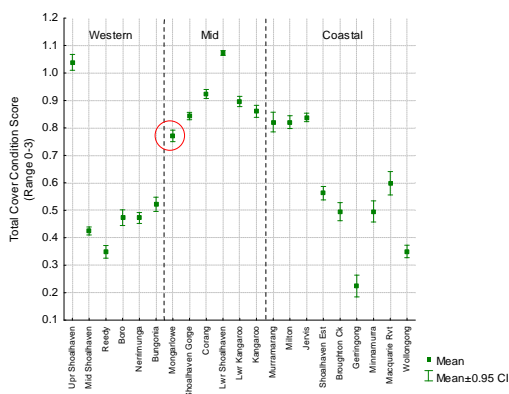
Land cover classes within the riparian zone

Cover Class by land use within the riparian zone

Cover Class	Landuse	Conservation		Other Conservation		Agriculture			Other		
		National Parks	State Forests	Private Conservation	Other Public Lands	Grazing	Cropping	Forestry / Plantations	Urban	Rural Residential	Industry / Intensive Agriculture
Woody	Area (ha)	231.8	83.0	325.1	262.8	257.2	0.8	184.9	2.3	50.7	1.0
	% of Cover Class	16.6%	5.9%	23.2%	18.8%	18.4%	0.1%	13.2%	0.2%	3.6%	0.1%
Non-Woody	Area (ha)	1.0	4.6	36.2	92.2	373.5	1.0	28.6	0.0	19.3	1.6
	% of Cover Class	0.2%	0.8%	6.5%	16.5%	66.9%	0.2%	5.1%	0.0%	3.5%	0.3%
Water	Area (ha)	0.0	0.0	1.0	32.0	4.0	0.1	2.0	0.0	0.2	0.0
	% of Cover Class	0.0%	0.0%	2.5%	81.6%	10.1%	0.2%	5.0%	0.0%	0.6%	0.0%
Almost Bare	Area (ha)	0.0	0.1	0.2	0.5	2.5	0.0	0.3	0.0	0.1	0.0
	% of Cover Class	0.0%	3.0%	6.0%	13.6%	65.0%	0.6%	8.8%	0.1%	2.1%	0.8%
Bare	Area (ha)	0.0	0.1	0.9	6.4	5.1	0.2	1.9	0.0	0.3	0.0
	% of Cover Class	0.0%	0.9%	5.9%	42.4%	34.2%	1.5%	12.8%	0.1%	2.0%	0.1%
Weeds	Area (ha)	0.0	0.0	0.9	0.7	5.4	0.1	0.3	0.0	0.6	0.0
	% of Cover Class	0.0%	0.2%	11.2%	8.6%	66.6%	1.5%	3.9%	0.0%	7.9%	0.0%

Report Card - Woody cover

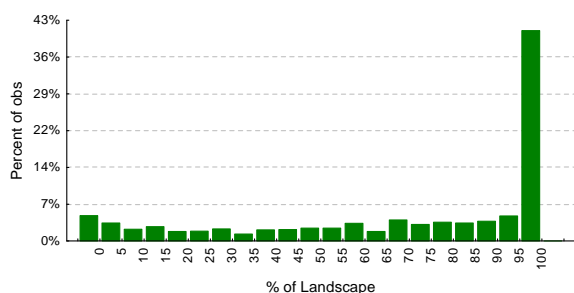
Mongarlowe – Woody Cover



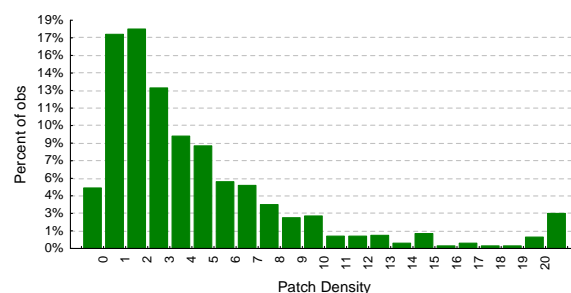
Overall Rank: 6/21
Zonal Rank: 4/6
(Ranks are based on the Sub-catchment Woody Cover Score)

Comparison of mean and median woody cover scores across study area.

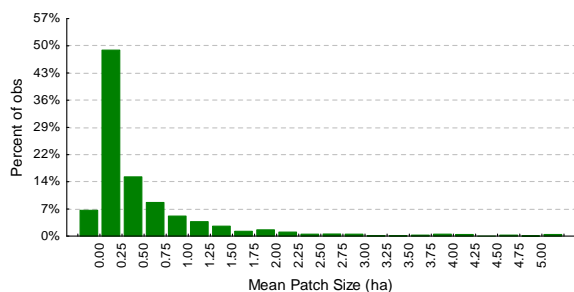
- The riparian zone in approximately 63% of the sub-catchment tiles, where woody vegetation cover is present, consists of 50% or more woody cover, i.e. woody cover is very dominant in the riparian zones of these tiles. However, woody riparian cover is much less dominant in 35% of the sub-catchment tiles, where it consists of 14% or less of the riparian area within a tile.
- The moderate values of the Patch Density graph indicate moderate fragmentation while the low values of the Mean Patch Size graph indicate that the woody riparian cover is grainy in many grid tiles.



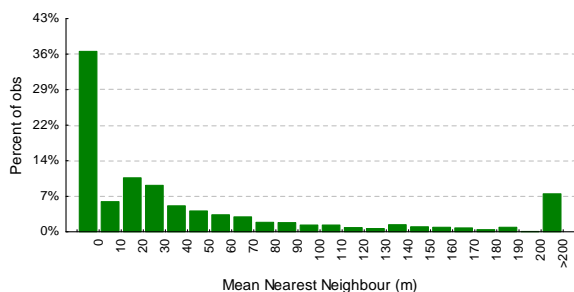
Distribution of the percentage of woody vegetation or **Percent of Landscape (PL)** within tiles in the riparian zones of the sub-catchment.



Distribution of the woody vegetation Patch Density (ha) within tiles in the riparian zones.



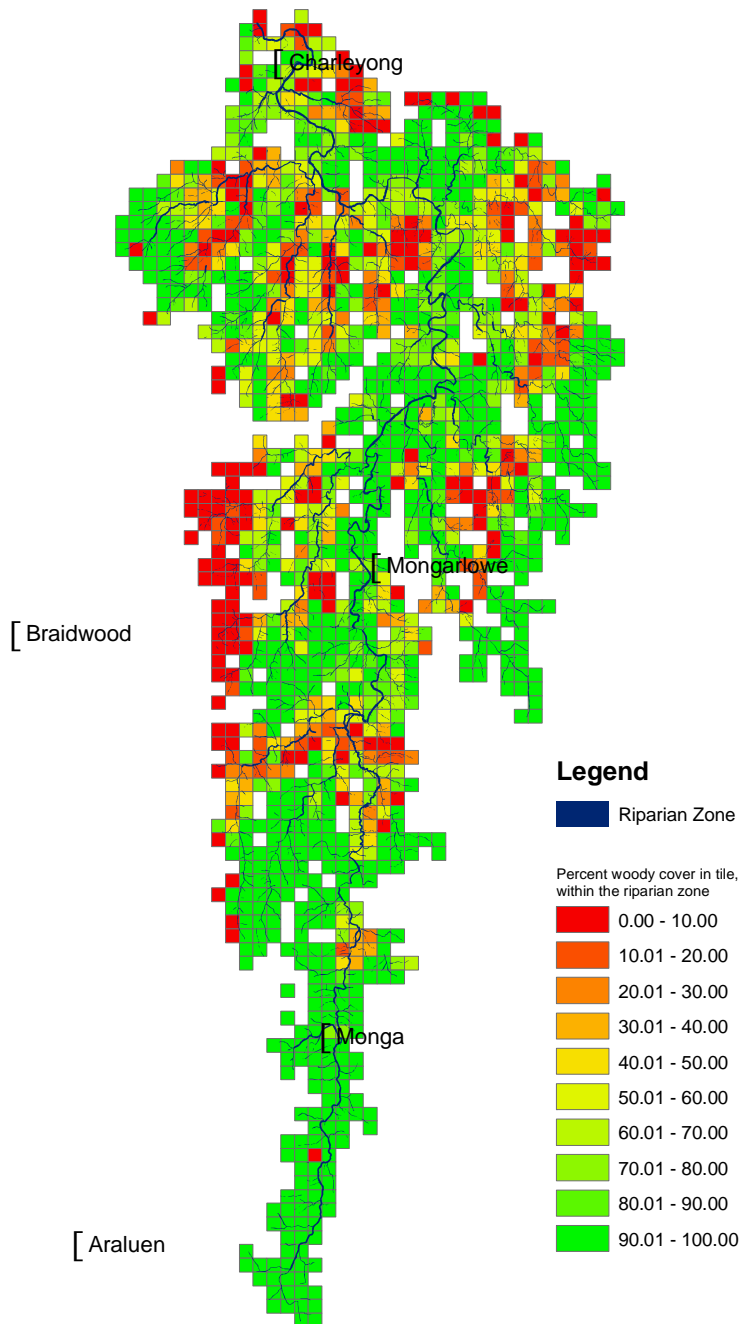
Distribution of mean patch size (ha) of woody vegetation in the riparian zones.



Distribution of the Mean Nearest Neighbour (Metres) distance between woody vegetation patches within tiles in the riparian zones.

Report Card - **Woody cover**

Mongarlowe – Woody cover



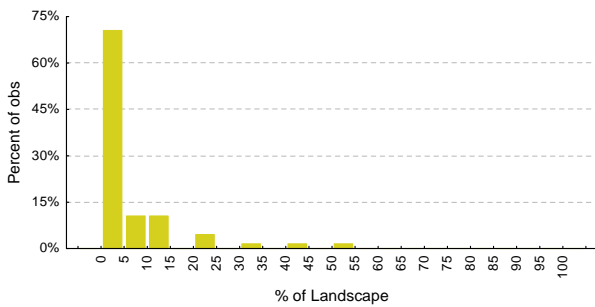
Woody cover map of Mongarlowe sub-catchment

- Woody riparian cover along the main trunk stream, Mongarlowe River, is more dominant and intact compared to the riparian zones of most of its tributaries.
- The upper (southern) reaches of the sub-catchment, where National Parks and State Forests are the predominant land use types, have the highest proportions of intact woody riparian cover.
- The woody riparian cover in the central west and north east and northern parts of the sub-catchment, where grazing is the main land use type, is fragmented and less dominant.

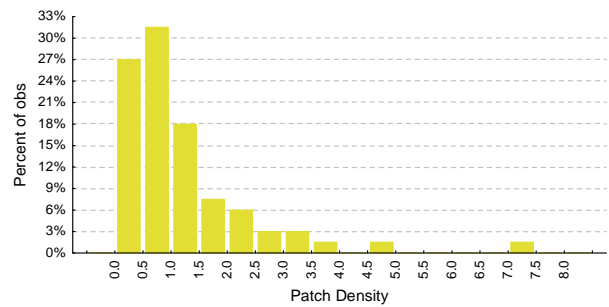
Report Card - Weeds (Willows)

Mongarlowe – Weeds (Willows)

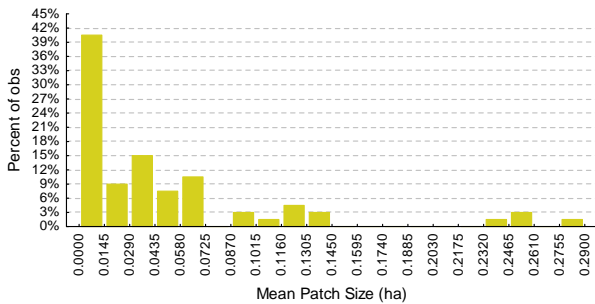
- The % of Landscape graph indicates that weeds generally do not dominate the riparian zone in the sub-catchment tiles. In approximately 70% of the tiles where the weeds (mostly Willows) exist, they occupy 5% or less of the riparian zone.
- Where Weeds are present, they exist in small size patches.



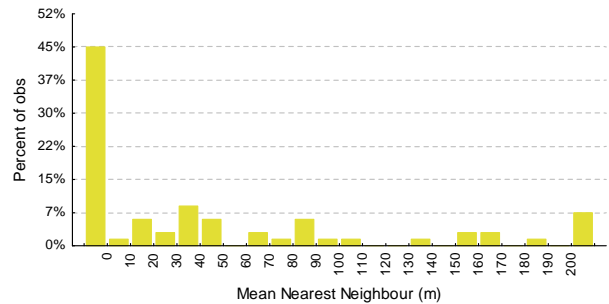
Distribution of the percentage of Weeds or Percent of Landscape (PL) within tiles in the riparian zone.



Distribution of the Weeds Patch Density (PD) within tiles in the riparian zones.



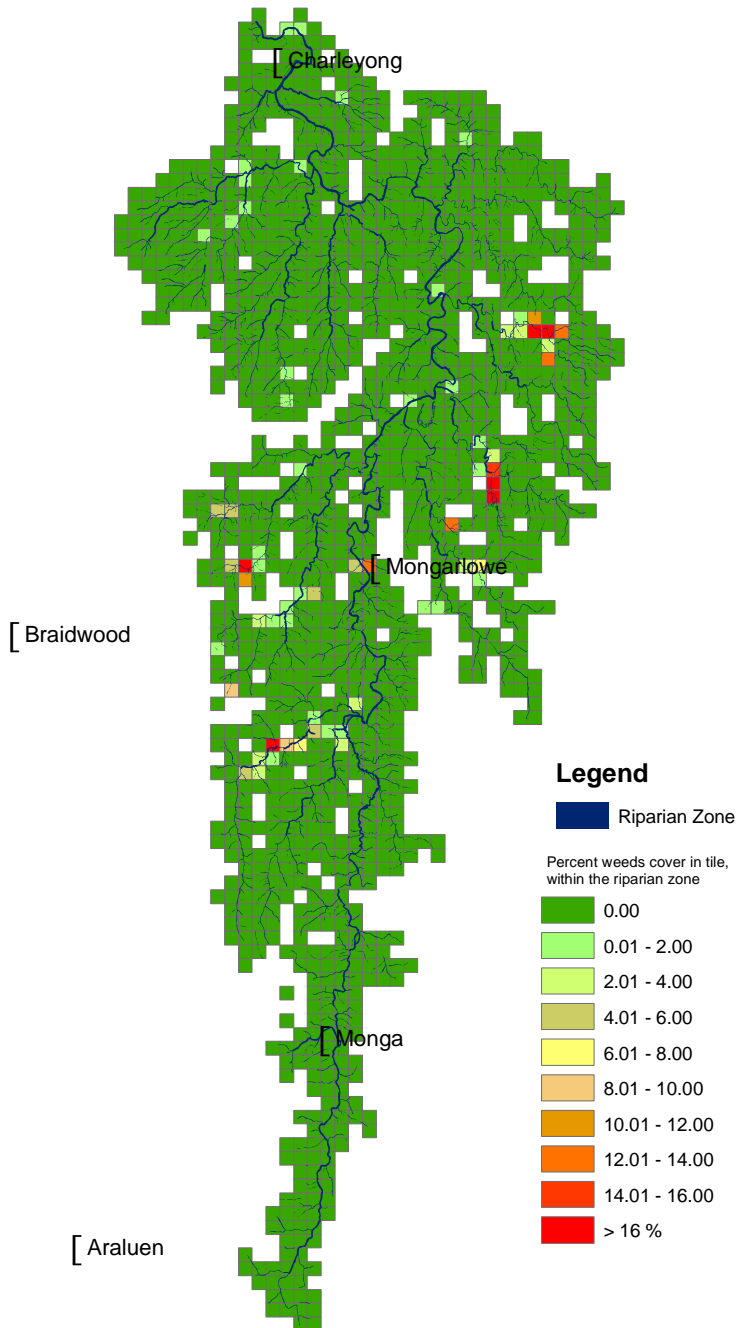
Distribution of mean patch size (ha) of weeds in the riparian zones.



Distribution of the Mean Nearest Neighbour (Metres) distance between Weeds patches within tiles in the riparian zones.

Report Card - Weeds (Willows)

Mongarlowe – Weeds (Willows)

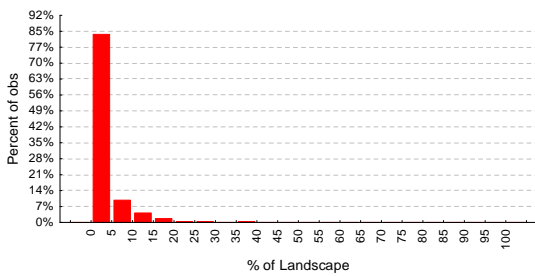


- Weeds (mainly Willows) appear to be localised in distribution. Riparian zones with the highest proportion of Weeds are located predominantly on the smaller tributaries of Mongarlowe River.
- The main trunk stream, Mongarlowe River, appears to have minor areas of weeds (mainly Willows) within the riparian zone.

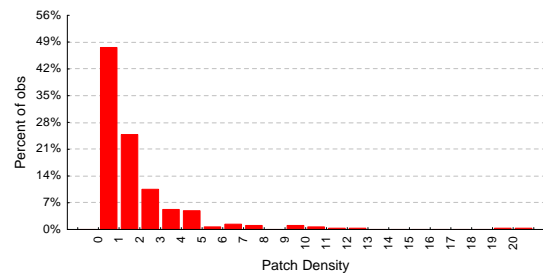
Weeds map of Mongarlowe sub-catchment

Mongarlowe – Bare

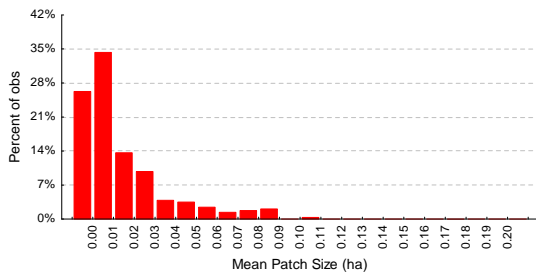
- Where the Bare areas are present within tiles, they generally do not dominate a grid tile's riparian zone. In over 80% of the tiles the Bare areas occupy less than 5% of the riparian zone.
- Bare areas are generally small in size as indicated by the Mean Patch Size graph.



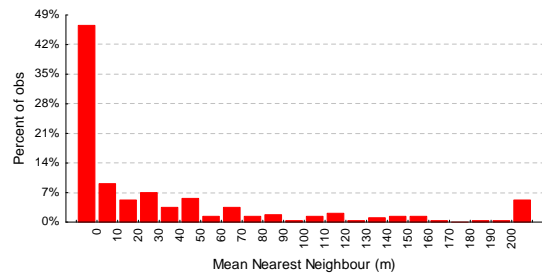
Distribution of the percentage of *Bare* area or **Percent of Landscape (PL)** within tiles in the riparian zones.



Distribution of the *Bare* Patch Density (PD) within tiles in the riparian zones.

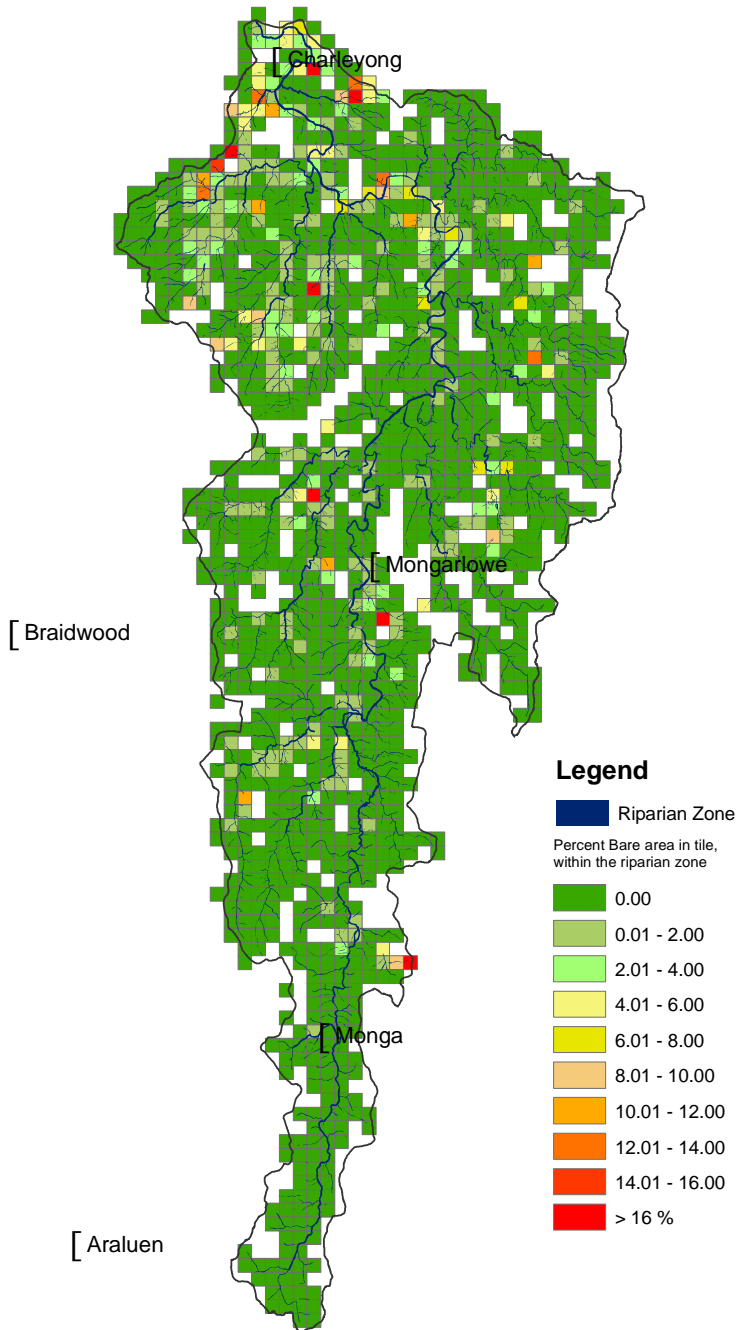


Distribution of mean patch size of *Bare* areas in the riparian zones.



Distribution of the Mean Nearest Neighbour (MNN) distance between *Bare* patches within tiles in the riparian zones.

Mongarlowe – Bare



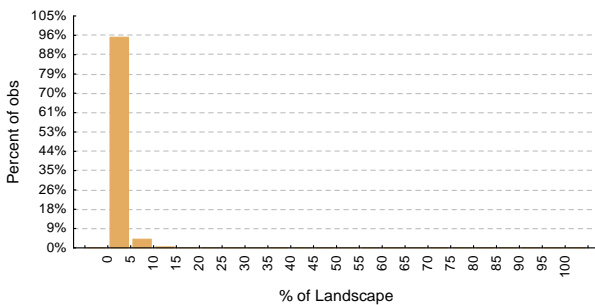
- Bare areas exist predominantly in riparian zones where grazing is the main land use.
- Where Bare areas exist, they generally compose a small proportion of the riparian zone.

Almost Bare cover map of Mongarlowe sub-catchment

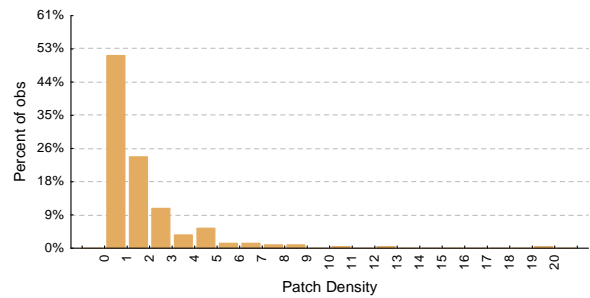
Report Card - Almost Bare

Mongarlowe – Almost Bare

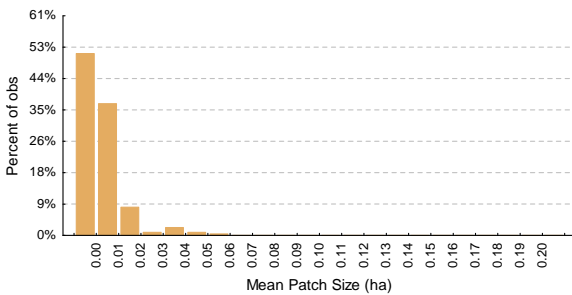
- Where the Almost Bare areas are present within tiles, they generally do not dominate a grid tile's riparian zone. In approximately 96% of the tiles the Almost Bare areas occupy less than 5% of the riparian zone.
- Bare areas are generally small in size as indicated by the Mean Patch Size graph.



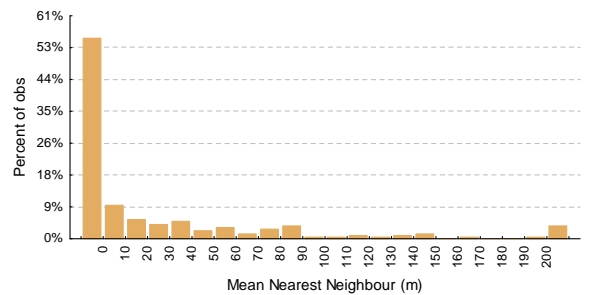
Distribution of the percentage of *Almost bare* area or **Percent of Landscape (PL)** within tiles in the riparian zones.



Distribution of the *Almost Bare* Patch Density (Ha) within tiles in the riparian zones.



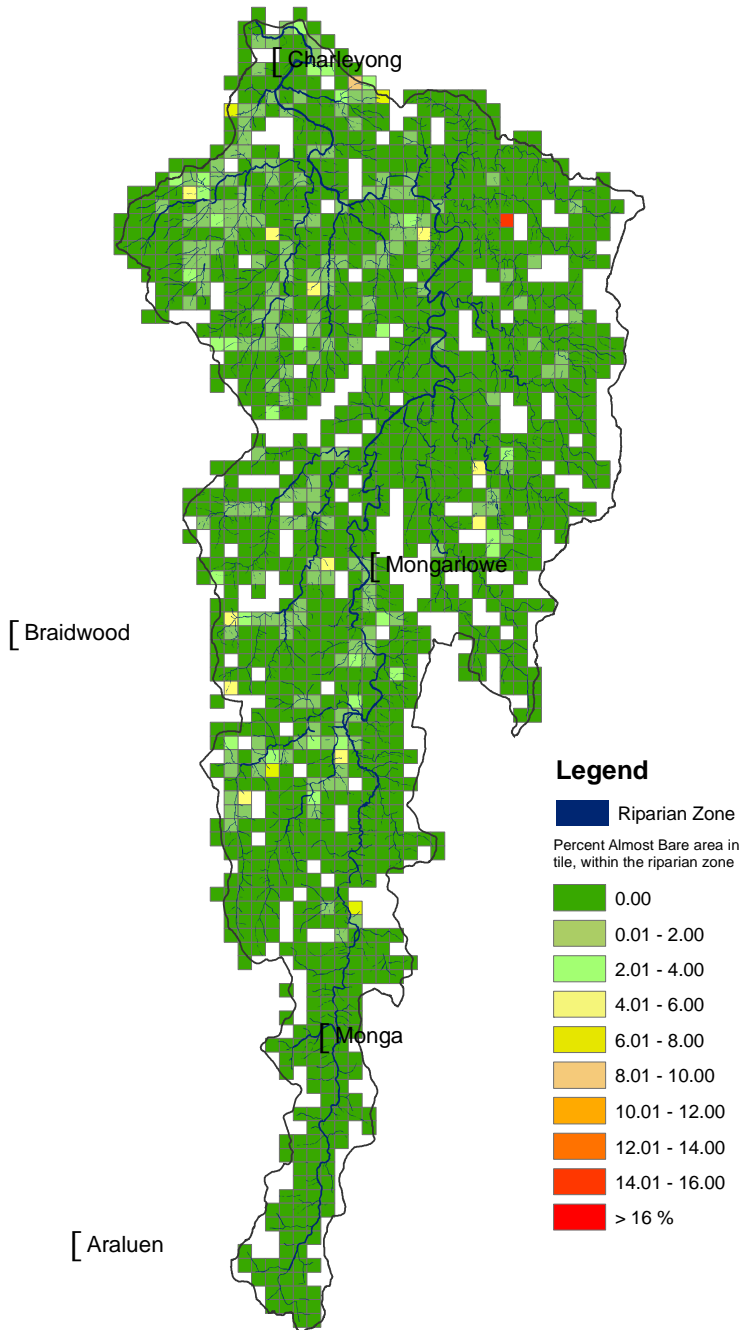
Distribution of mean patch size (Ha) of *Almost Bare* areas in the riparian zones.



Distribution of the Mean Nearest Neighbour (metres) distance between *Almost Bare* patches within tiles in the riparian zones.

Report Card - Almost Bare

Mongarlowe – Almost Bare



Almost Bare map of Mongarlowe sub-catchment

- Almost Bare areas exist predominantly in riparian zones where grazing is the land main use.
- Where Almost Bare areas exist, they generally compose a very small proportion of the riparian zone.