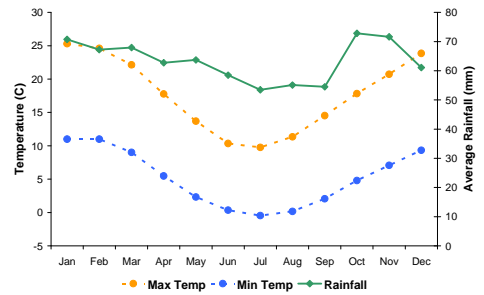


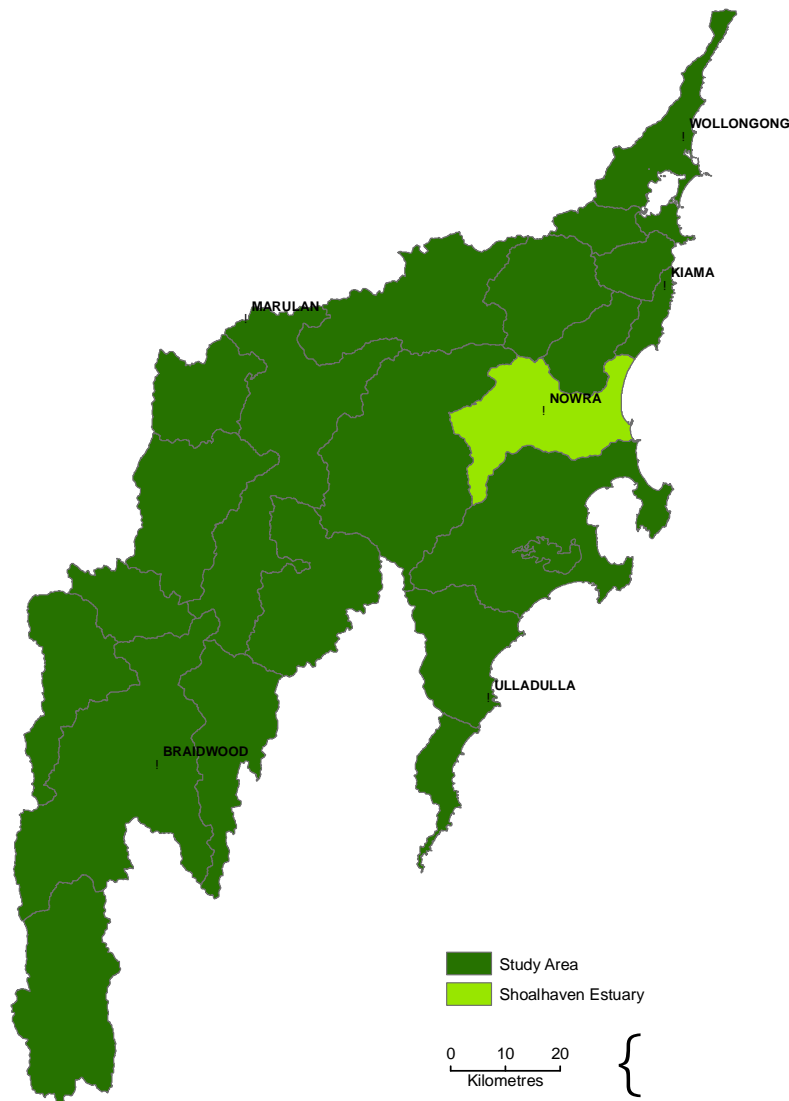
## Report Card - Shoalhaven Estuary

### General Information

<i>Sub-catchment size</i>	451 km <sup>2</sup>
<i>Riparian landscape area</i>	39 km <sup>2</sup>
<i>Average annual rainfall range</i>	980-1790 mm
<i>Median annual rainfall</i>	1160 mm
<i>Elevation range</i>	2-620 m
<i>Sub-catchment stream length</i>	1333 km
<i>Analysis area stream length</i>	911 km



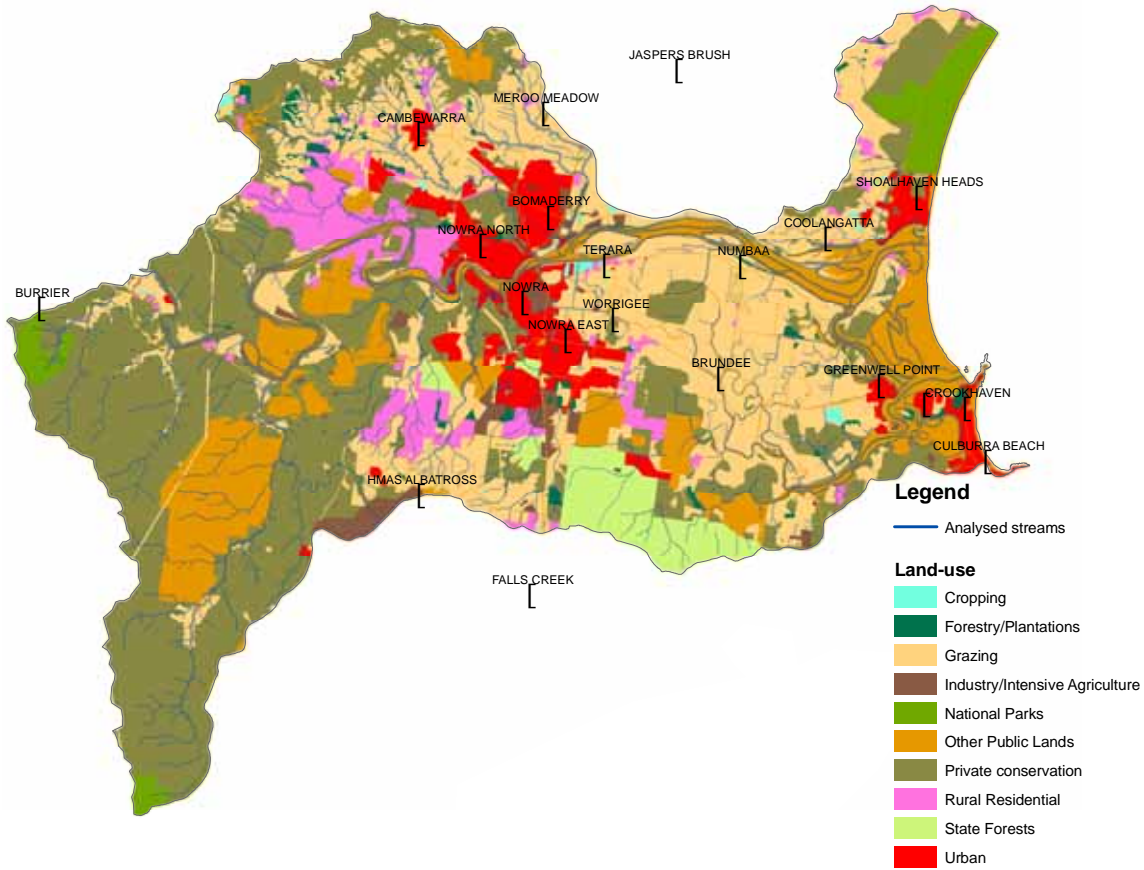
Average daily temperature and monthly rainfall data



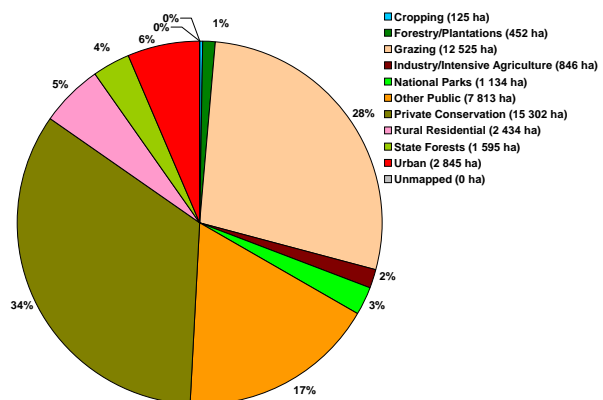
Location of Shoalhaven Estuary sub-catchment within study area

# Report Card

## Land Use



Land use Map for Shoalhaven Estuary sub-catchment

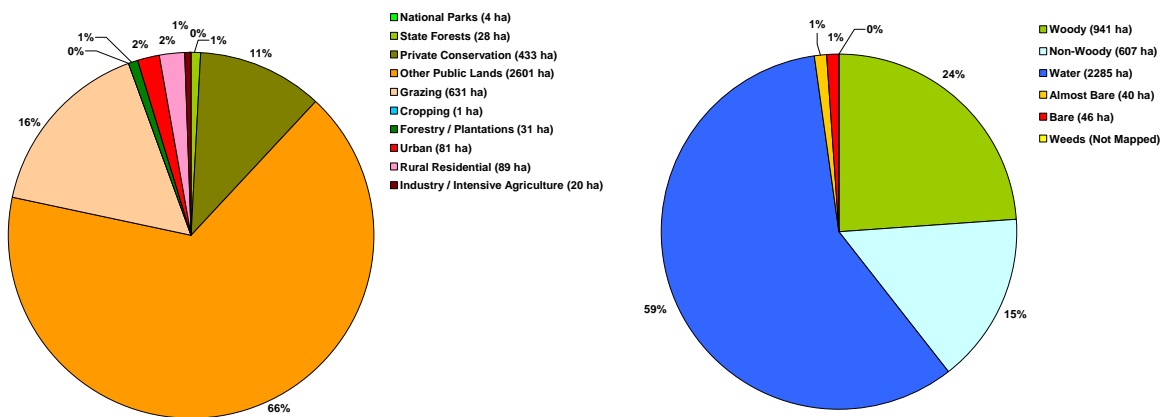


Land use within the sub-catchment

# Report Card

## Shoalhaven Estuary Sub-catchment Riparian Zone Summary

- Other Public Lands (mostly waterways with a Crown Land status) comprise the largest area within the riparian zone. Consequently, water dominates the riparian areas, covering approximately 59%.
- Woody riparian cover composes approximately 24% of the riparian area.



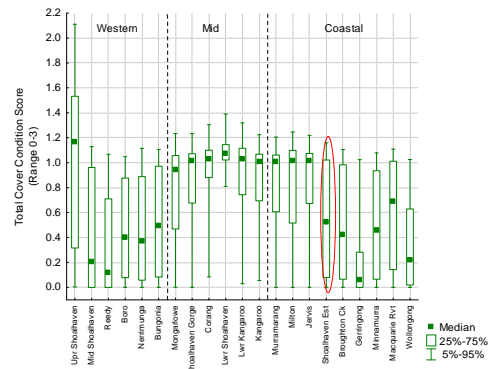
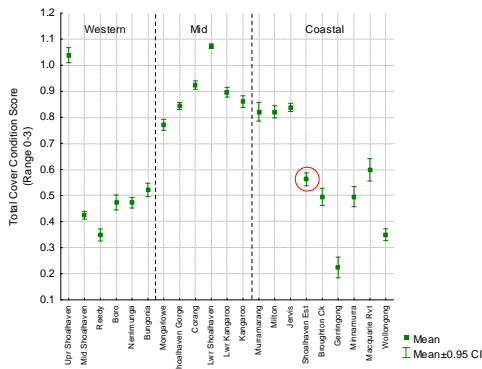
Land use within the riparian zone

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)	4.0	27.8	358.6	267.2	170.3	0.3	23.8	25.5	60.2	3.0
	% of Cover Class	0.4%	3.0%	38.1%	28.4%	18.1%	0.0%	2.5%	2.7%	6.4%	0.3%
Non-Woody	Area (ha)	0.0	0.3	50.4	73.5	411.9	0.9	3.0	35.5	23.1	8.9
	% of Cover Class	0.0%	0.0%	8.3%	12.1%	67.8%	0.1%	0.5%	5.9%	3.8%	1.5%
Water	Area (ha)	0.0	0.0	10.7	2220.7	29.9	0.0	4.1	12.2	3.2	4.1
	% of Cover Class	0.0%	0.0%	0.5%	97.2%	1.3%	0.0%	0.2%	0.5%	0.1%	0.2%
Almost Bare	Area (ha)	0.0	0.0	10.0	14.4	12.0	0.1	0.2	1.6	1.0	1.0
	% of Cover Class	0.0%	0.1%	24.7%	35.8%	29.9%	0.2%	0.4%	4.0%	2.5%	2.4%
Bare	Area (ha)	0.0	0.0	3.4	25.0	7.1	0.0	0.1	6.4	1.0	3.4
	% of Cover Class	0.0%	0.1%	7.3%	53.8%	15.3%	0.0%	0.3%	13.8%	2.2%	7.2%
Weeds	Area (ha)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	% of Cover Class	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

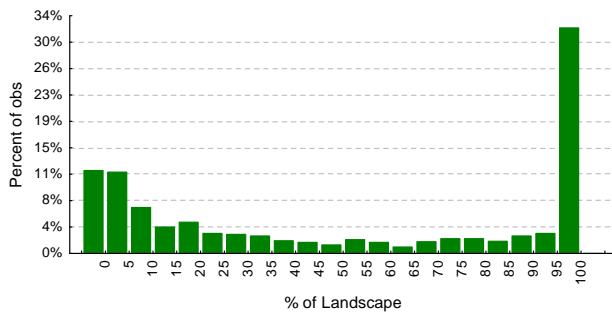
## Shoalhaven Estuary – Woody Cover



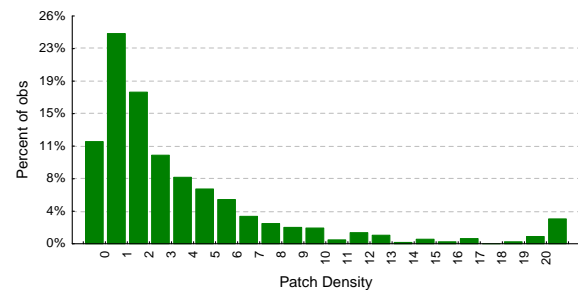
**Overall Rank: 12/21**  
**Zonal Rank: 5/9**  
*(Ranks are based on Sub-catchment Woody Cover Score)*

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

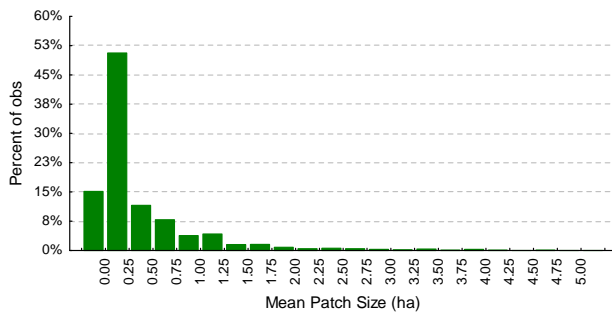
- The riparian zone in approximately 51% of the sub-catchment tiles, where woody vegetation cover is present, consists of between 50% and 100% woody cover, i.e. very little fragmentation. However, there are significant amount of tiles (approximately 37%) in which the woody riparian cover consists of less than 20% of the riparian area within a tile.
- The moderate values of the Patch Density graph indicate fragmented woody riparian cover in grid tiles where it exists. The low values of the Mean Patch Size graph indicate largely grainy woody riparian cover in tiles where it exists.



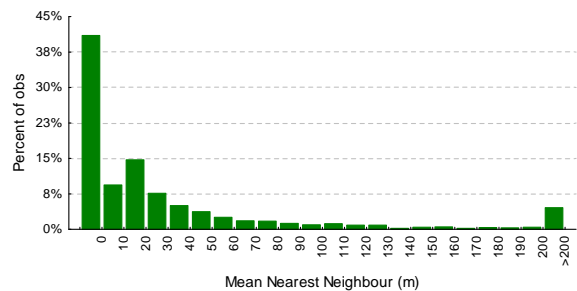
Distribution of the percentage of woody vegetation or **Percent of Landscape (PL)** within tiles in the riparian zones of the sub-catchment.



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

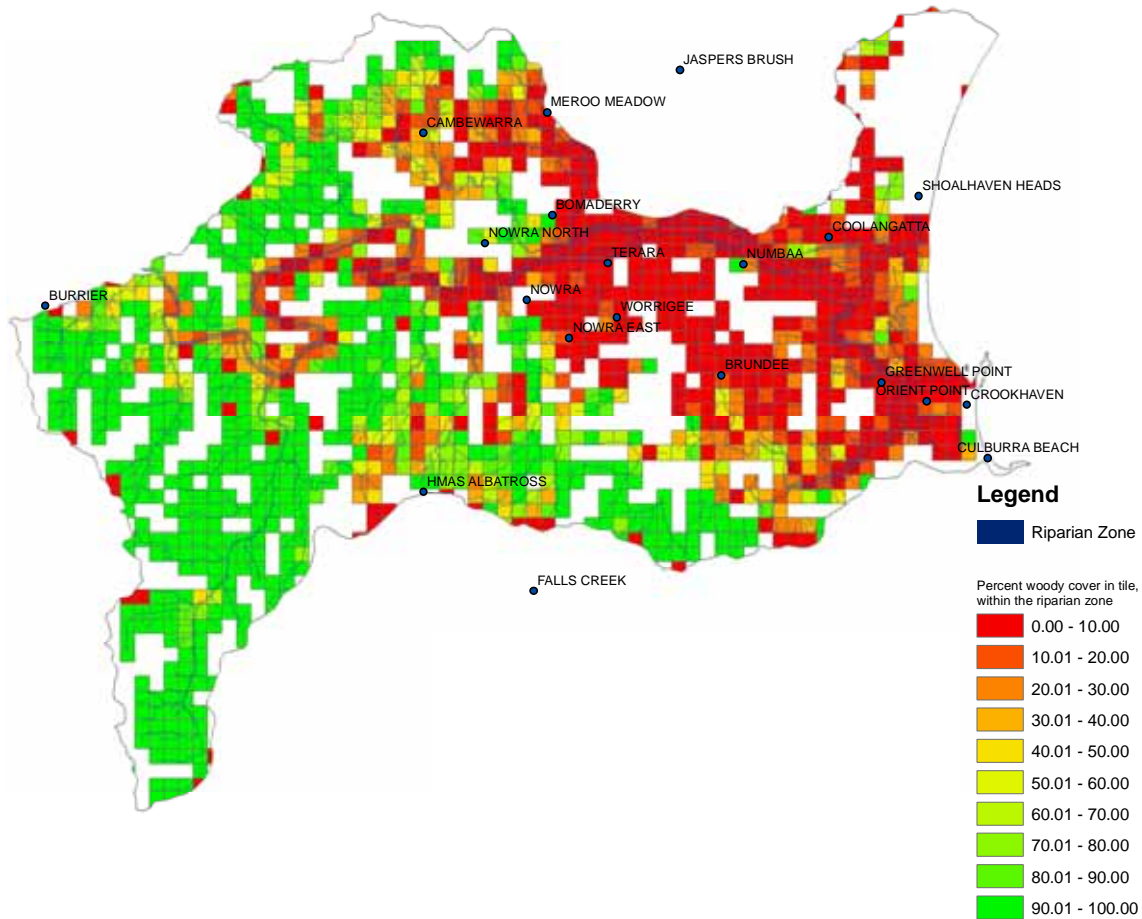


Distribution of mean patch size (ha) of woody vegetation in the riparian zones.



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

## Shoalhaven Estuary – Woody cover

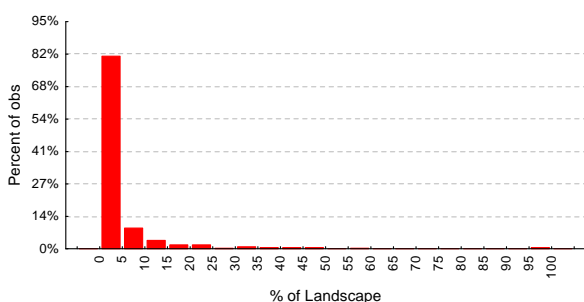


Woody cover map of Shoalhaven Estuary sub-catchment

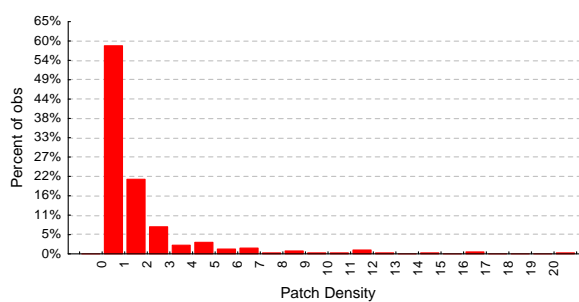
- The highest proportions of intact woody riparian vegetation cover are found along the tributaries of Shoalhaven River in the western and southern parts of the sub-catchment.
- Woody riparian vegetation cover in the central and eastern parts of the sub-catchment, where grazing is the predominant land use type, is less dominant and fragmented.
- Although significant amounts of woody riparian cover exist along the main trunk, Shoalhaven River, the broad width of the river ensures higher proportions of water areas in comparison to the other cover types when cover proportions are calculated. The proportions are based on total riparian zone area which includes the water.

## Shoalhaven Estuary – Bare

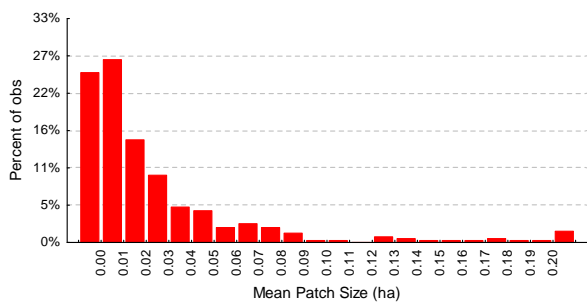
- Where the Bare areas are present within tiles, they compose less than 5% of the riparian zone in approximately 80% of the tiles.
- The Bare areas are generally small in size as indicated by the Mean Patch Size graph.



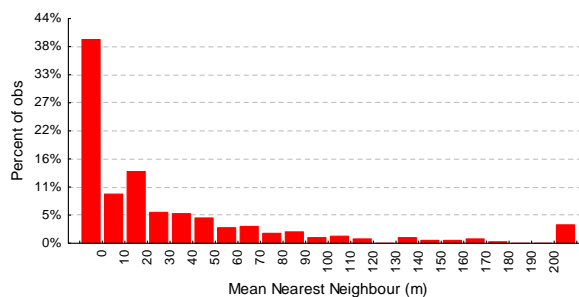
Distribution of the percentage of *Bare* area or **Percent of Landscape (PL)** within tiles in the riparian zones.



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

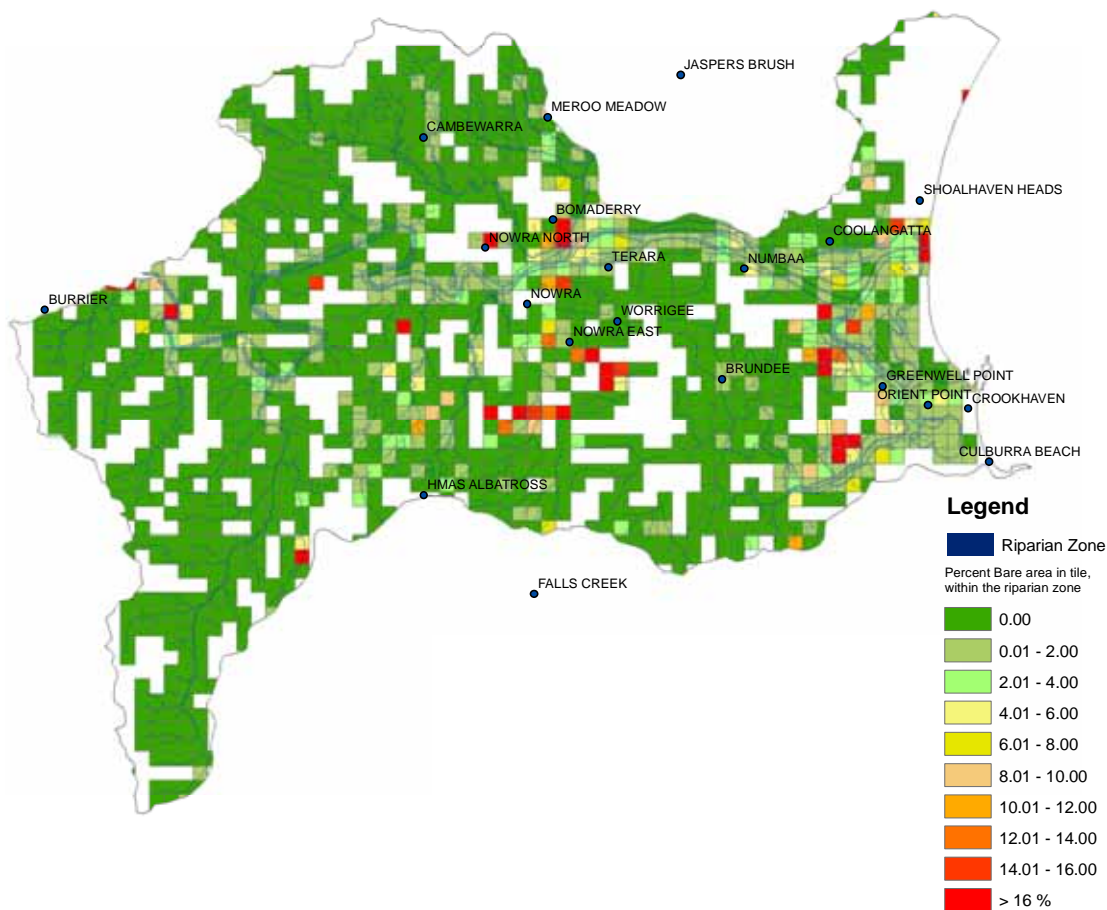


Distribution of mean patch size of *Bare* areas in the riparian zones.



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

## Shoalhaven Estuary – Bare

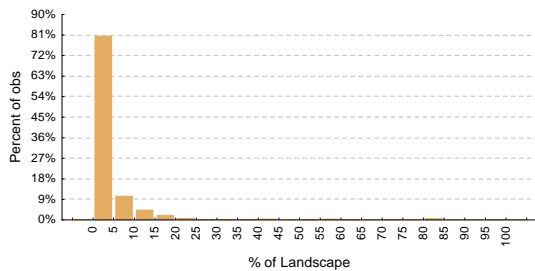


Bare map for Shoalhaven Estuary sub-catchment

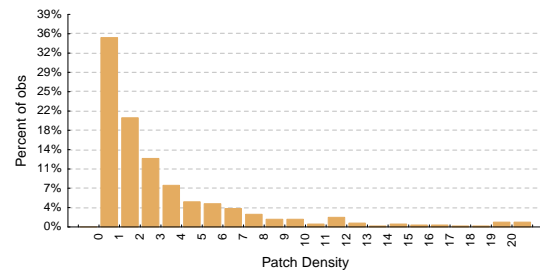
- Small patches of Bare areas are prevalent throughout the sub-catchment. Grid tiles with the highest proportions of Bare areas occur mostly in the Urban land use type.

## Shoalhaven Estuary – Almost Bare

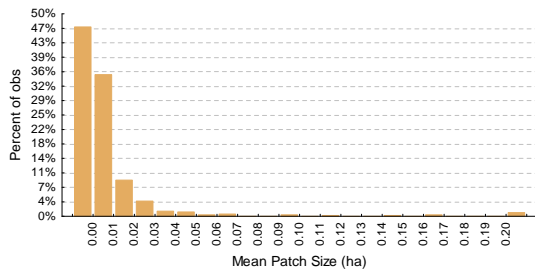
- In tiles where the Almost Bare area patches are present, the patches compose less than 5% of the riparian zone in over 81% of the tiles.
- Almost Bare patches are generally small in size as indicated by the Mean Patch Size graph.



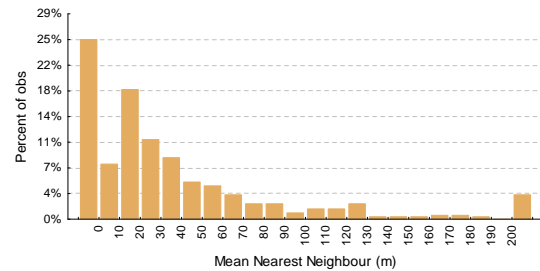
Distribution of the percentage of *Almost bare* area or **Percent of Landscape (PL)** within tiles in the riparian zones.



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

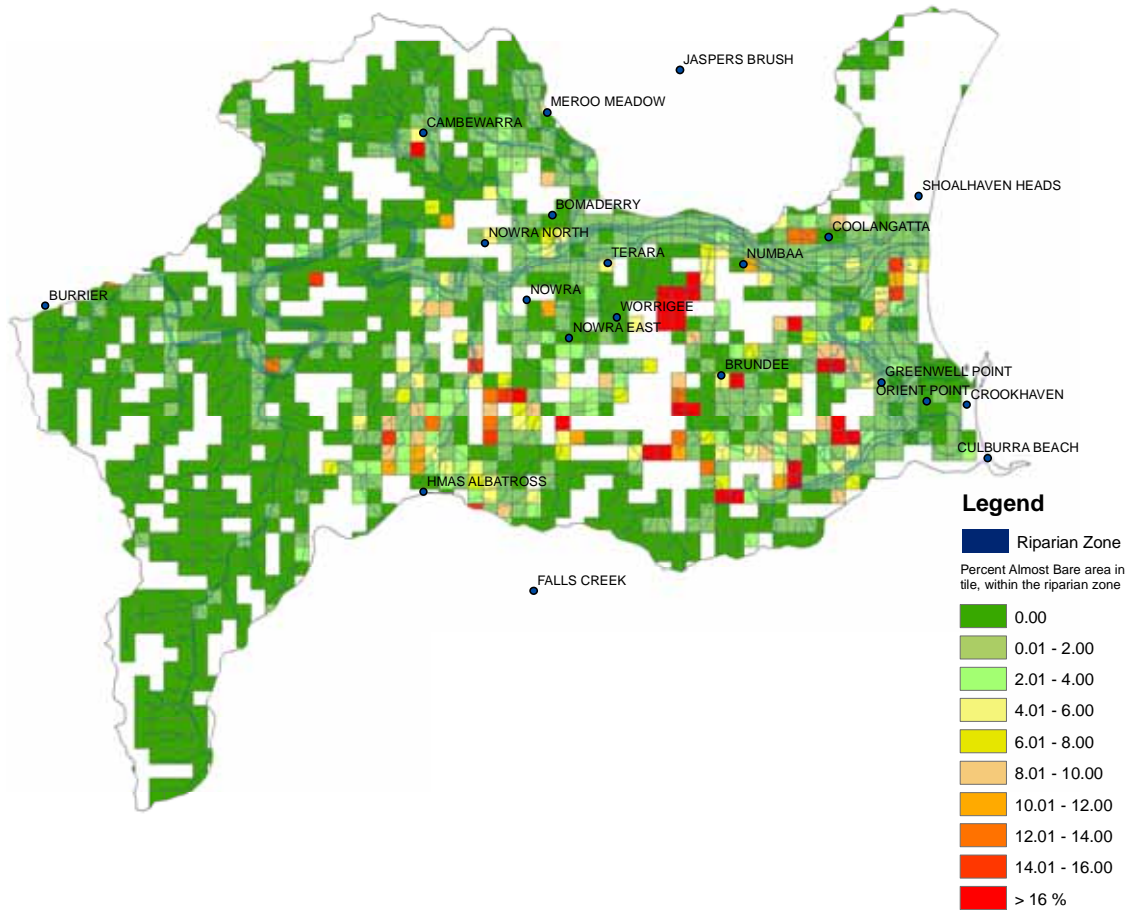


Distribution of mean patch size (Ha) of *Almost Bare* areas in the riparian zones.



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

## Shoalhaven Estuary – Almost Bare



Almost Bare map for Shoalhaven Estuary sub-catchment

- Small patches of Almost Bare areas are prevalent throughout the sub-catchment, predominantly in riparian zones where grazing is the land use. However, where the Almost Bare areas exist, they generally compose a small area proportion of the riparian zone.