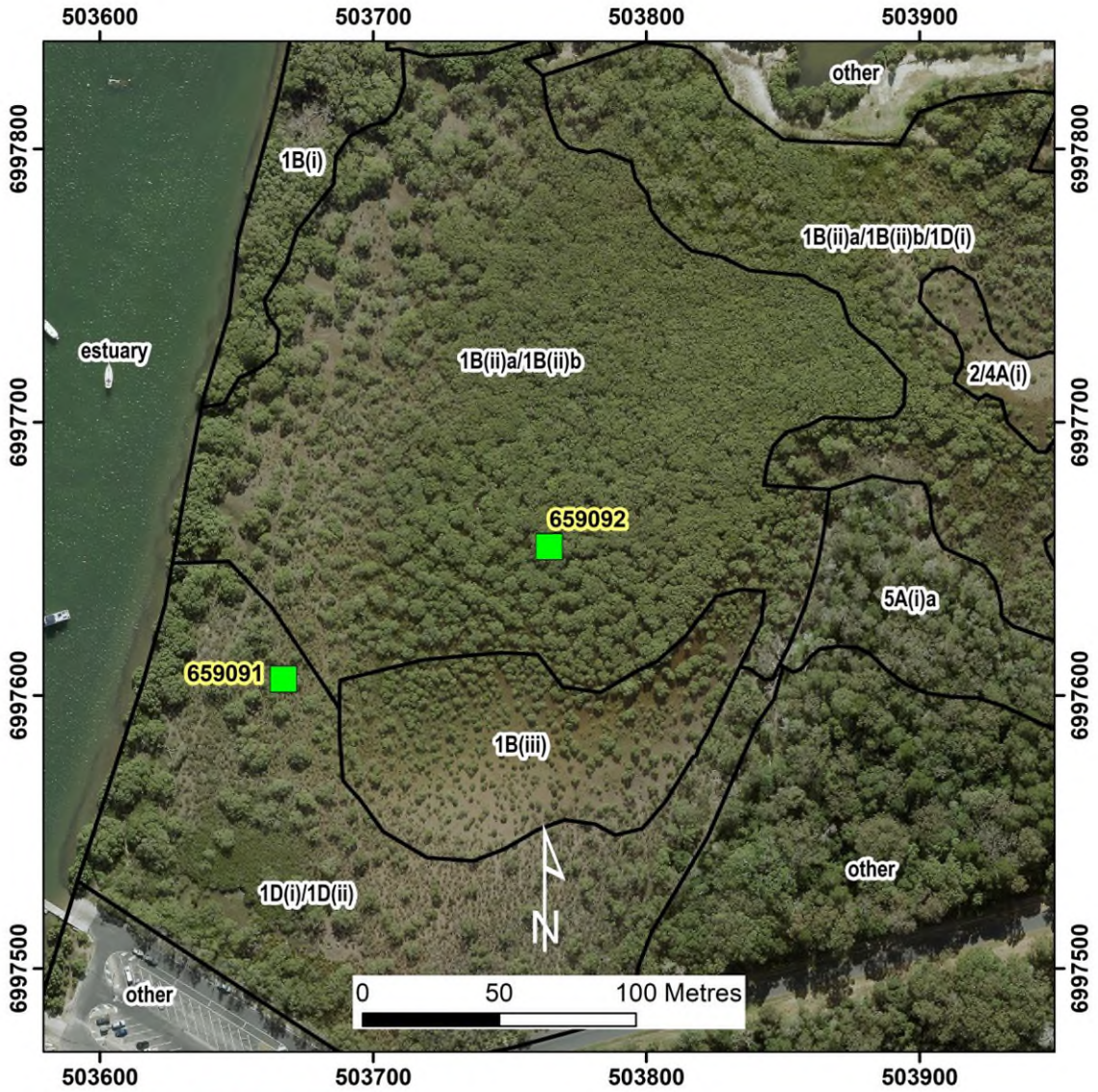
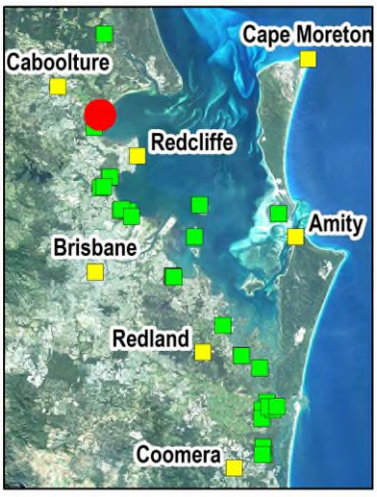
Beachmere Caboolture (site ID = 659092) Open Shrubland





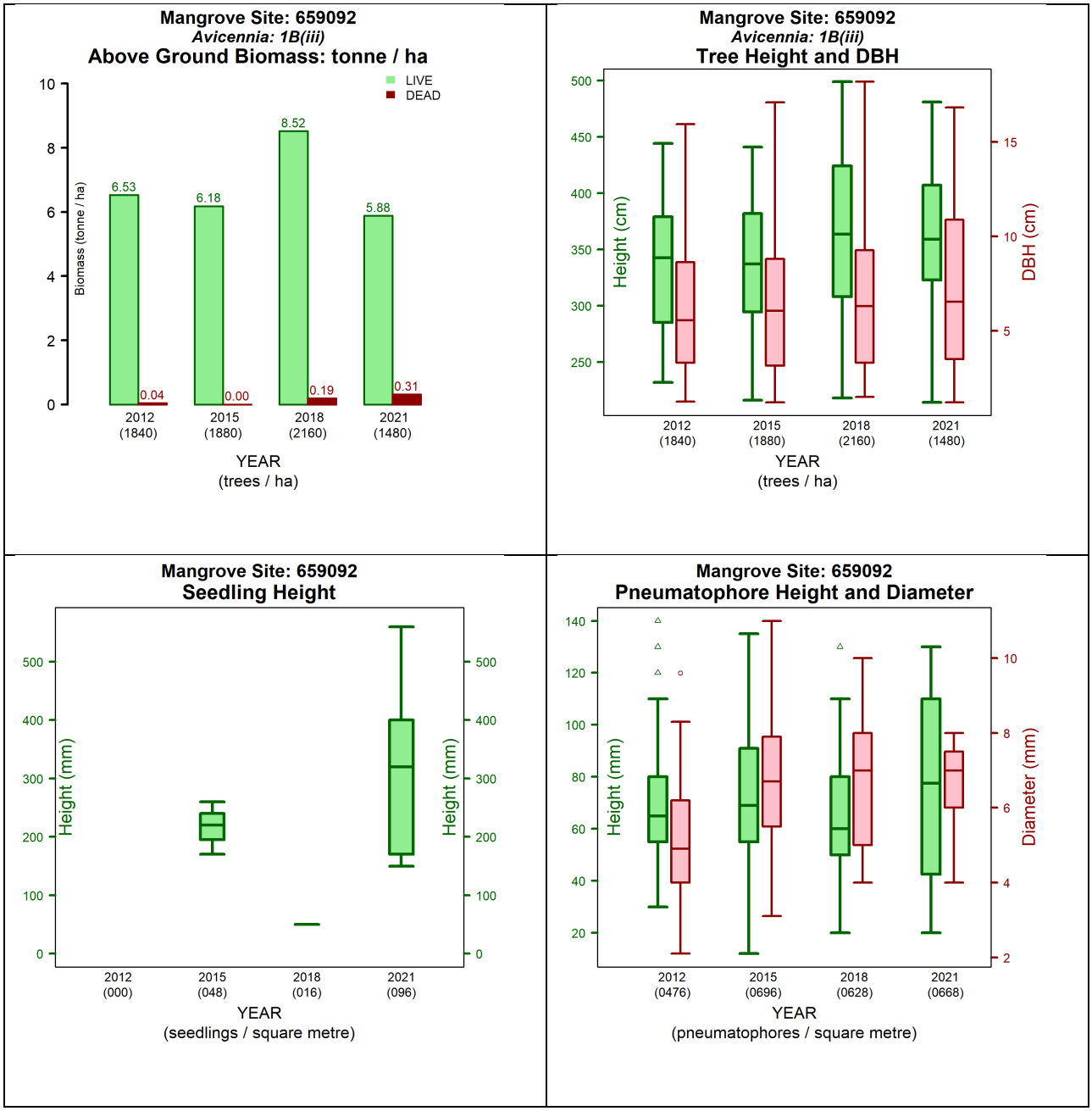


Figure 1. Measurements at site 658092 between 2012 and 2021 (left to right and top to bottom):

- **Above ground biomass and density temporal assessment**
- **Tree height, diameter at breast height (DBH) and stem density temporal assessment**
- **Pneumatophores height, diameter, and density temporal assessment**

Seedling height and density temporal assessment.

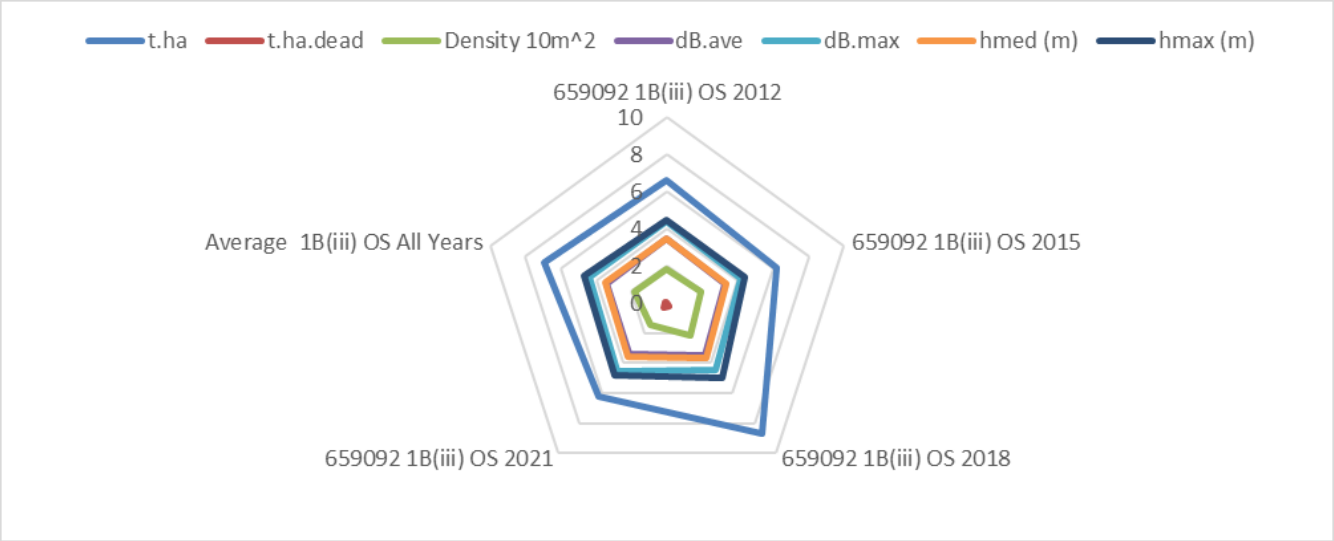


Figure 2. Structural changes over the years for Site 659092 in comparison to average of all sites of vegetation community type 1B(iii) by structural formations. The graph indices: t.ha is the live biomass (tonnes) in a hectare; t.ha.dead is the dead biomass (tonnes) in a hectare; Density 10m^2 is the number of trees in 10m square; dB.ave is the average diameter at breast height in centimetres; dB.maxis the maximum diameter at breast height in centimetres; hmed (m) is the median tree height (meters); hmax (m) is the maximum tree height (meters).

Table 1. Queensland Biodiversity Ecological Information System (QBEIS) temporal assessment for site 659092

Date	17.05.2012	14.05.2015	10.05.2018	07.05.2021
E Spp.				
T1 Spp.				
T1 Med Canopy Height				
T1 Range low				
T1 Range High				
T1 Crown Cover				
T1 Stem Count				
T2 Spp.				
T2 Med Canopy Height				
T2 Range low				
T2 Range high				
T2 Crown Cover				
T2 stem count				
S1 Spp.	*Avicennia marina* subsp. *australasica*	*Avicennia marina* subsp. *australasica*	*Avicennia marina* subsp. *australasica*	*Avicennia marina* subsp. *australasica*
S1 Med Canopy Height	4	4	4	4
S1 Range low	3	3	3	3
S1 Range high	5	5	5	5
S1 Crown Cover	65	70	74	80
S1 stem count	41	38	62	63

S2 Spp.	*Avicennia marina* subsp. *australasica*	*Avicennia marina* subsp. *australasica; Ceriops australis*	*Avicennia marina* subsp. *australasica; Ceriops australis; Aegiceras corniculatum*	*Avicennia marina* subsp. *australasica; Ceriops australis; Aegiceras corniculatum*
S2 Med Canopy Height	2.1	1.7	1.7	1.8
S2 Range low	2	1	1	1
S2 Range high	2.2	2	2	2
S2 Crown Cover	2	12	8	10
S2 stem count	16	16,14	32; 46; 3	22; 21; 2
G Spp.	*Avicennia marina* subsp. *australasica; Ceriops australis*	*Avicennia marina* subsp. *australasica; Ceriops australis; Aegiceras corniculatum*	*Avicennia marina* subsp. *australasica; Ceriops australis*	*Avicennia marina* subsp. *australasica; Ceriops australis; Aegiceras corniculatum*
G Med Canopy Height	1.2	0.4	0.4	0.5
G Range low	0.5	0.1	0.1	0.1
G Range high	1.2	1	1	1
G Cover	20	15	9	14
Individual Covers	10; 10	10; 5; +	8; 1	8; 5; 1

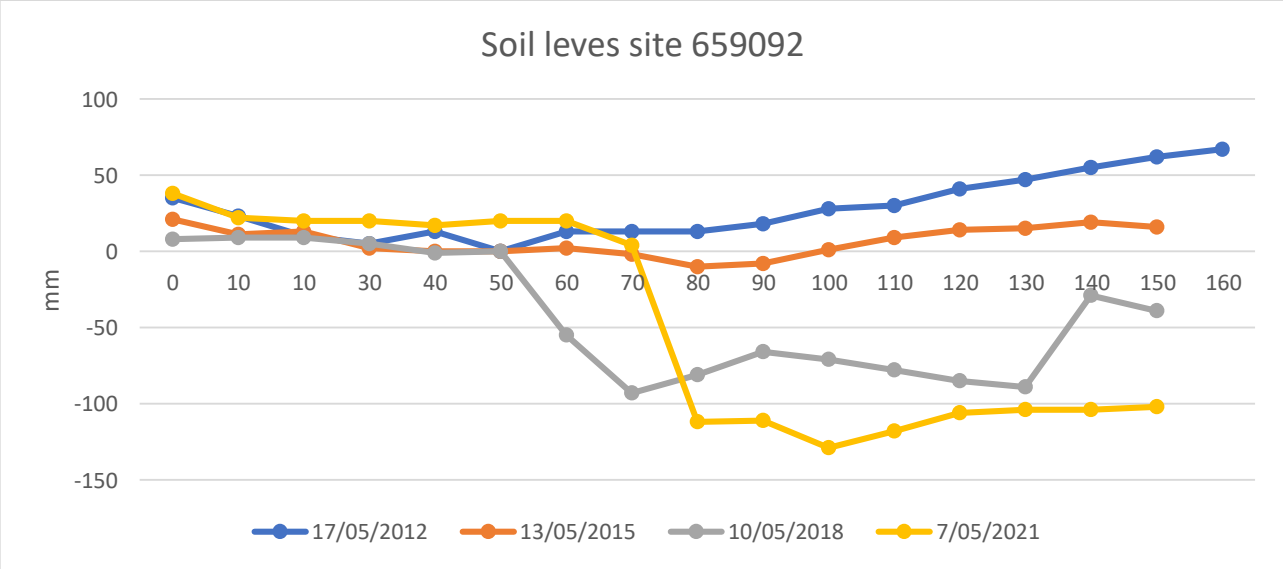


Figure 3. Soil surface elevation measurements (mm) are taken across the QBEIS sites using dumpy level.

Summary

1. S1 species composition *Avicennia marina* subsp. *australasica* is stable over the years, S2 and ground layer with *Avicennia marina* subsp. *australasica*; and on and off occurrence of *Ceriops australis* and *Aegiceras corniculatum*.

2. S1 tree height is stable while stem count is increasing; S2 tree heights slightly decreased, and stem count increased; ground cover and height has decreased.

3. Mean tree height and mean DBH has increased. Densities increased by 17% leading to an increase of 32.6% in above ground biomass in the site.

4. Fluctuation (from 0.6% in 2012; 0% in 2015 to 2.2% in 2018) of the proportion of dead to live biomass within the site.

5. Pneumatophore mean height decreased while mean girth has increased over the years.

6. Seedlings have been reduced in size and densities; no seedlings were recorded in 2012 in the quadrats but are present during all years across the site.

7. Soil max range level reduced by 9mm to 53mm with erosion of up to 3mm.

8. Soil levels over the period have remained unchanged on one end and eroded on the other.

Figure 4. Photograph of Site 659092 *Avicennia marina* subsp. *australasica* community type 1B(iii) Open Shrubland.