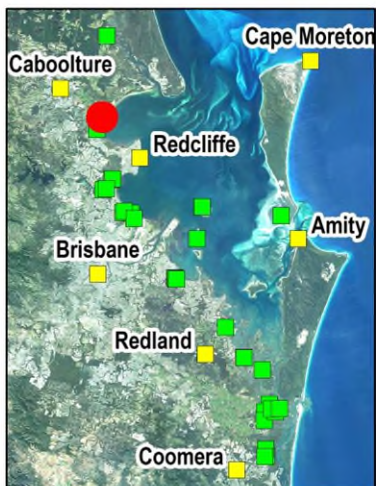
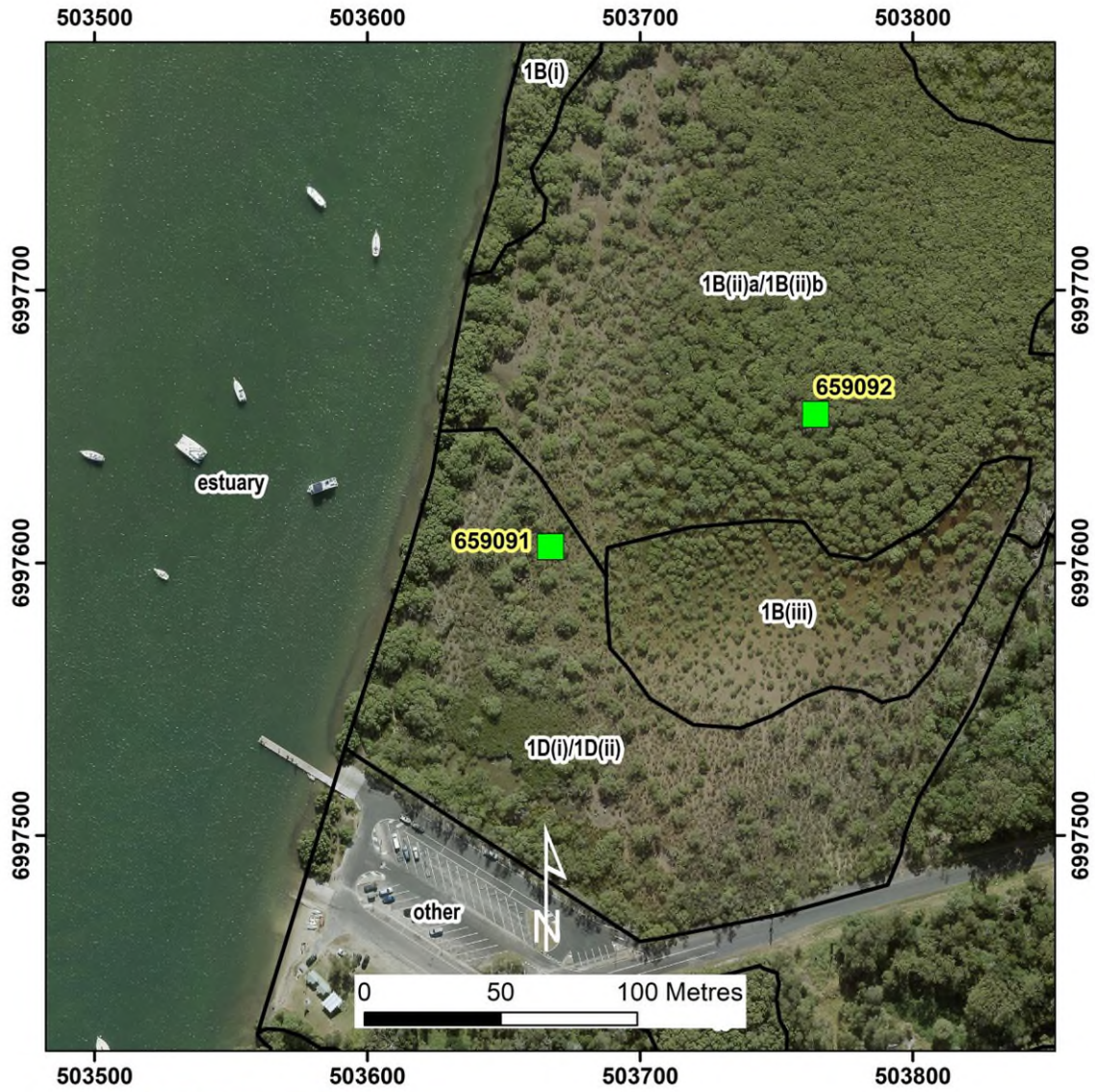


Beachmere Caboolture (site ID = 659091) Tall Open Shrubland



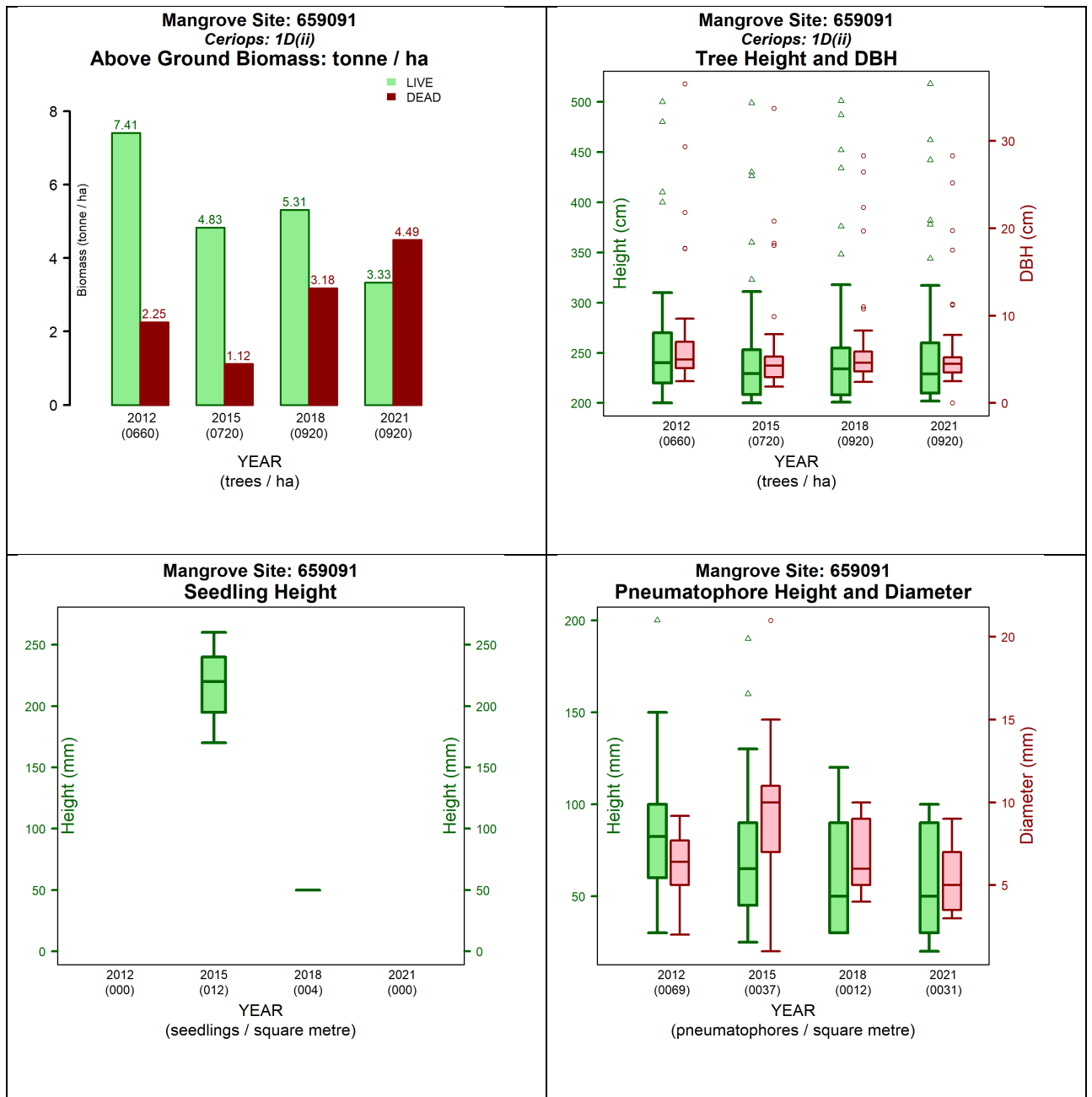


Figure 1. Measurements at site 659091 between 2012 and 2021 (left to right and top to bottom):

- 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.

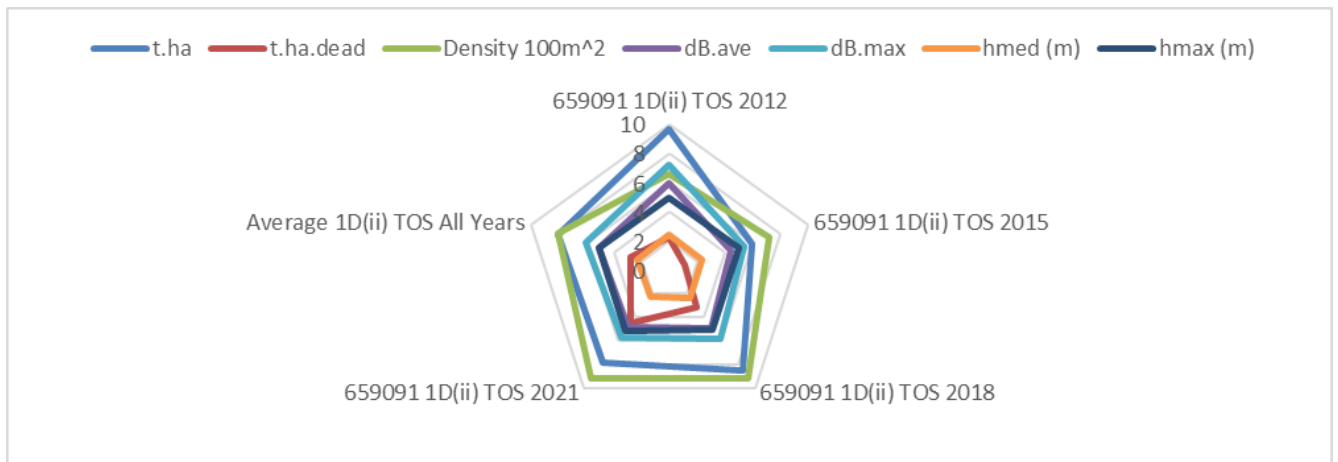


Figure 2. Structural changes over the years for Site 659091 in comparison to average of all sites of vegetation community type 1D(ii) by structural formations. The graph indices: t.ha is the live biomass (tonnes) in a hectare; t.ha.dead is the dead biomass (tonnes) in a hectare; Density 100m² is the number of trees in 100m square; dB.ave is the average diameter at breast height in centimetres; dB.max is 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 659091.

Date	16.05.2012	13.05.2015	11.05.2018	21.05.2021
E Spp.	<i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Avicennia marina</i> subsp. <i>australasica</i> ; <i>Dead tree</i>	<i>Avicennia marina</i> subsp. <i>australasica</i> ; <i>Dead tree</i>	<i>Avicennia marina</i> subsp. <i>australasica</i> ; <i>Dead tree</i>
T1 Spp.				
T1 Med Canopy Height	5	5	4.5	5.5
T1 Range low	4	4	4	4
T1 Range High	5.2	5.3	5.3	6
T1 Crown Cover	10	10	25	30
T1 Stem Count	3	3, 1	3, 1	2, 1
T2 Spp.				
T2 Med Canopy Height				
T2 Range low				
T2 Range high				
T2 Crown Cover				
T2 stem count				
S1 Spp.	<i>Ceriops australis</i>	<i>Ceriops australis</i>	<i>Ceriops australis</i>	<i>Ceriops australis</i>
S1 Med Canopy Height	2.2	2.2	2.2	2.2
S1 Range low	2	2	2	2
S1 Range high	2.5	5	2.5	2.5
S1 Crown Cover	5	5	5	5
S1 stem count	16	16	14	15

S2 Spp.	<i>Ceriops australis</i> ; <i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Ceriops australis</i> ; Dead Tree	<i>Ceriops australis</i> ; Dead Tree	<i>Ceriops australis</i> ; Dead Tree
S2 Med Canopy Height	1.5	1.5	1.5	1.5
S2 Range low	0.5	0.5	0.5	2.0
S2 Range high	2	2.0	2	0.5
S2 Crown Cover	40	45	45	45
S2 stem count	55; 15	144; 32	? ; 24	60, 19
G Spp.		<i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Avicennia marina</i> subsp. <i>Australasica</i> ; <i>Ceriops australis</i>
G Med Canopy Height		0.2	0.2	0.3
G Range low		0.1	0.1	0.2
G Range high		0.3	0.5	0.5
G Cover		1	1	5
Individual Covers		1	1	1, 4

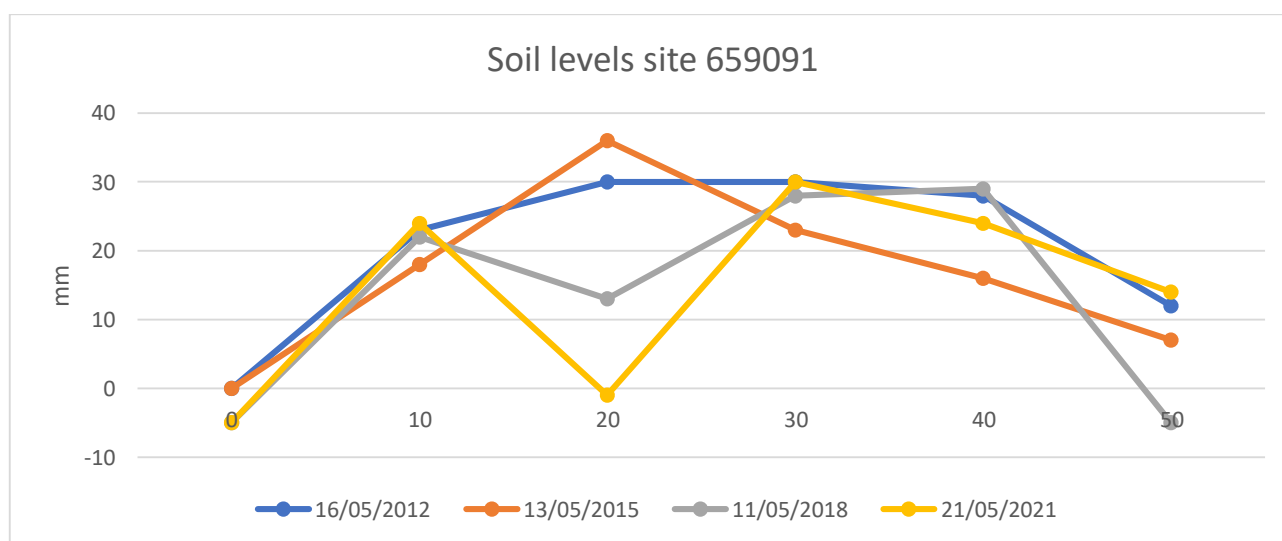


Figure 3. Soil surface elevation measurements (mm) are taken across the QBEIS sites using dumpy level.

Summary

1. Emergent layer with *Avicennia marina* subsp. *australasica*; and in later years one dead tree. S1 and S2 with *Ceriops australis* and ground layer in later years with *Avicennia marina* subsp. *australasica*.
2. S1 shrub heights and cover are stable; S2 shrub heights and cover are stable while stem count has increased over time; Ground cover and height and cover increased over the years.
3. Mean tree height and mean DBH are stable. Densities increased by 39% with increase of 11% of dead trees that led to a decrease of 10% in live above ground biomass in the site.
4. Increase (from 23% in 2012 to 58% in 2021) of the proportion of dead to live biomass within the site.

5. No Pneumatophores recorded within the site.
6. Twelve seedlings were recorded in 2015 and only four short seedlings in 2018 in our quadrats but seedlings are present during 2015, 2018 and 2021 across the site.
7. Soil max range level reduced by 4 mm to 34mm with erosion of up to 10mm.
8. Soil levels over the period have eroded or remain unchanged across the site.



Figure 4. Photograph of Site 659091 *Ceriops australis* community type 1D(ii) Tall Open Shrubland.