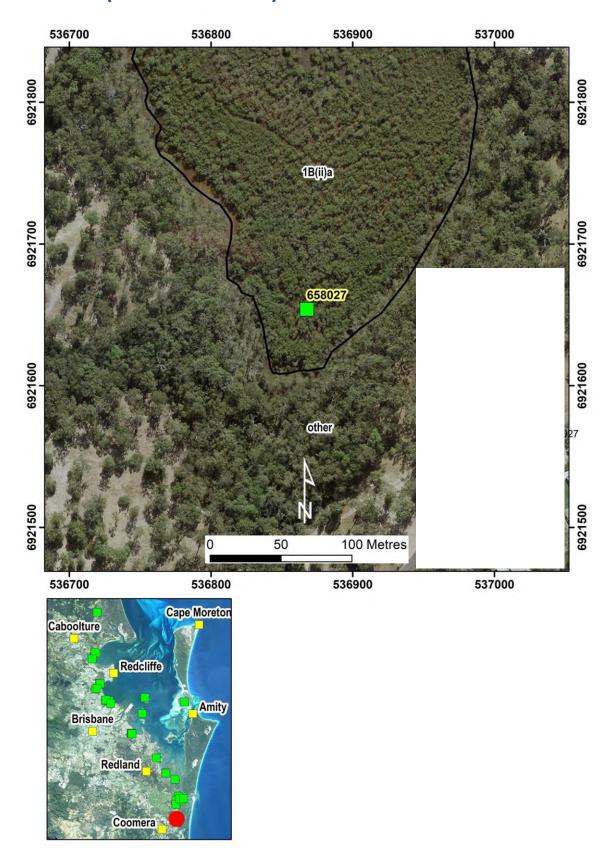
Coomera (site ID = 658027) Close Shrubland



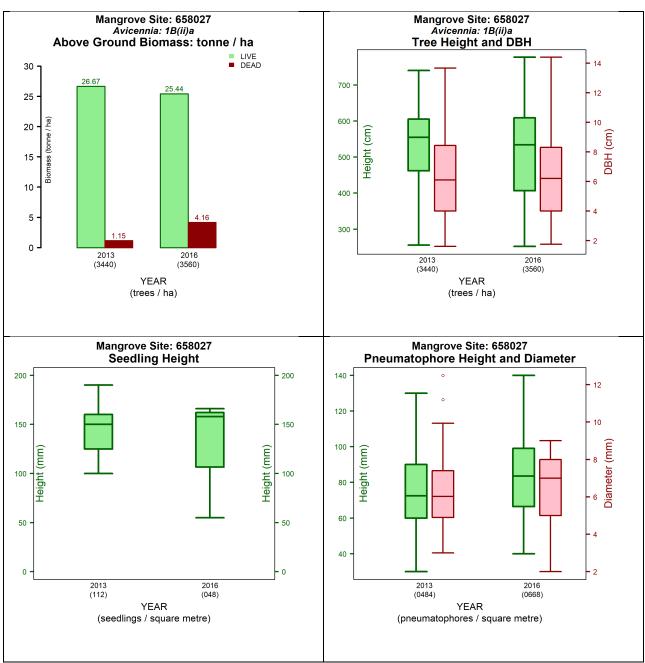


Figure 1. Measurements at site 658027 between 2013 and 2016 (left to right and top to bottom):

- 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.

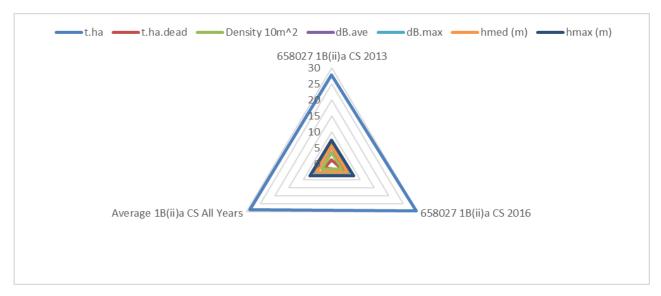


Figure 2. Structural changes over the years for Site 658027 in comparison to average of all sites of vegetation community type 1B(ii)a by structural formations. The graph indices: t.ha is the live biomass (tonnes) in a hectare; t.ha.dead is the dead biomass (tonnes) in a hectare; Density 10m^2 is the 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 658027

Date	7.03.2013	4.03.2016
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; Dead Tree
S1 Med Canopy Height	5.7	7
S1 Range low	5.5	6
S1 Range high	6.5	7.5
S1 Crown Cover	75	52
S1 stem count	80	24; 53

S2 Spp.	Avicennia marina subsp. australasica	Avicennia marina subsp. australasica; Dead Tree
S2 Med Canopy Height	3	3.5
S2 Range low	1.5	2
S2 Range high	4	5
S2 Crown Cover	10	5
S2 stem count	60	36; 38
G Spp.	Avicennia marina subsp. australasica	Avicennia marina subsp. australasica
G Med Canopy Height	0.2	0.2
G Range low	0.1	0.1
G Range high	0.3	0.5
G Cover	10	5
Individual Covers	10	5

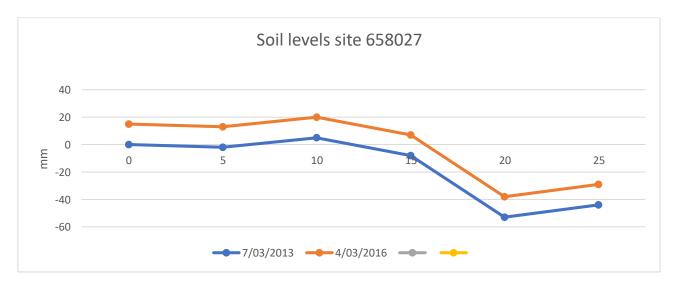


Figure 3. Soil surface elevation measurements (mm) are taken across the QBEIS sites using dumpy level.

Summary

- 1. Avicennia marina subsp. australasica with large numbers of dead trees in 2016 in S1, S2 and ground layer.
- 2. S1 shrub heights increased by 1.3m and S2 by 1.5 m; stem count of live *Avicennia marina* subsp. *australasica* has reduced.
- 3. Mean tree height has been slightly reduced but the range has increased. The mean DBH is stable over the years, whereas densities increased by 3% leading to an increase of 6% in above ground biomass in the site.
- 4. Increase (from 4.1% in 2013 to 14% in 2016) in the proportion of dead to live biomass within the site.

- 5. Pneumatophore mean height and girth has increased over the years.
- 6. Seedlings have increased in height and range but reduced over two-fold in density
- 7. Soil max range level reduced from 23mm to 9mm with accretion of up to 15mm



Figure 4. Photograph of Site 658027 *Avicennia marina* subsp. *australasica* community type 1B(ii)a Close Shrubland.