

Boondall 1 (site ID = Boondall1) Saltmarsh and Marine Couch

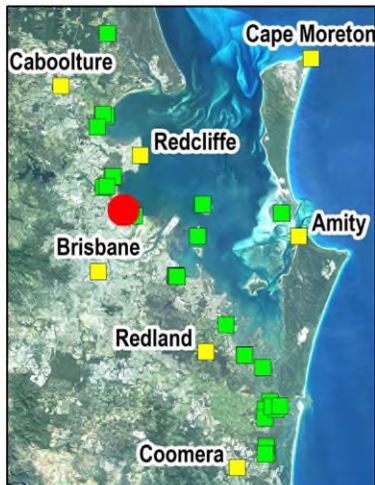
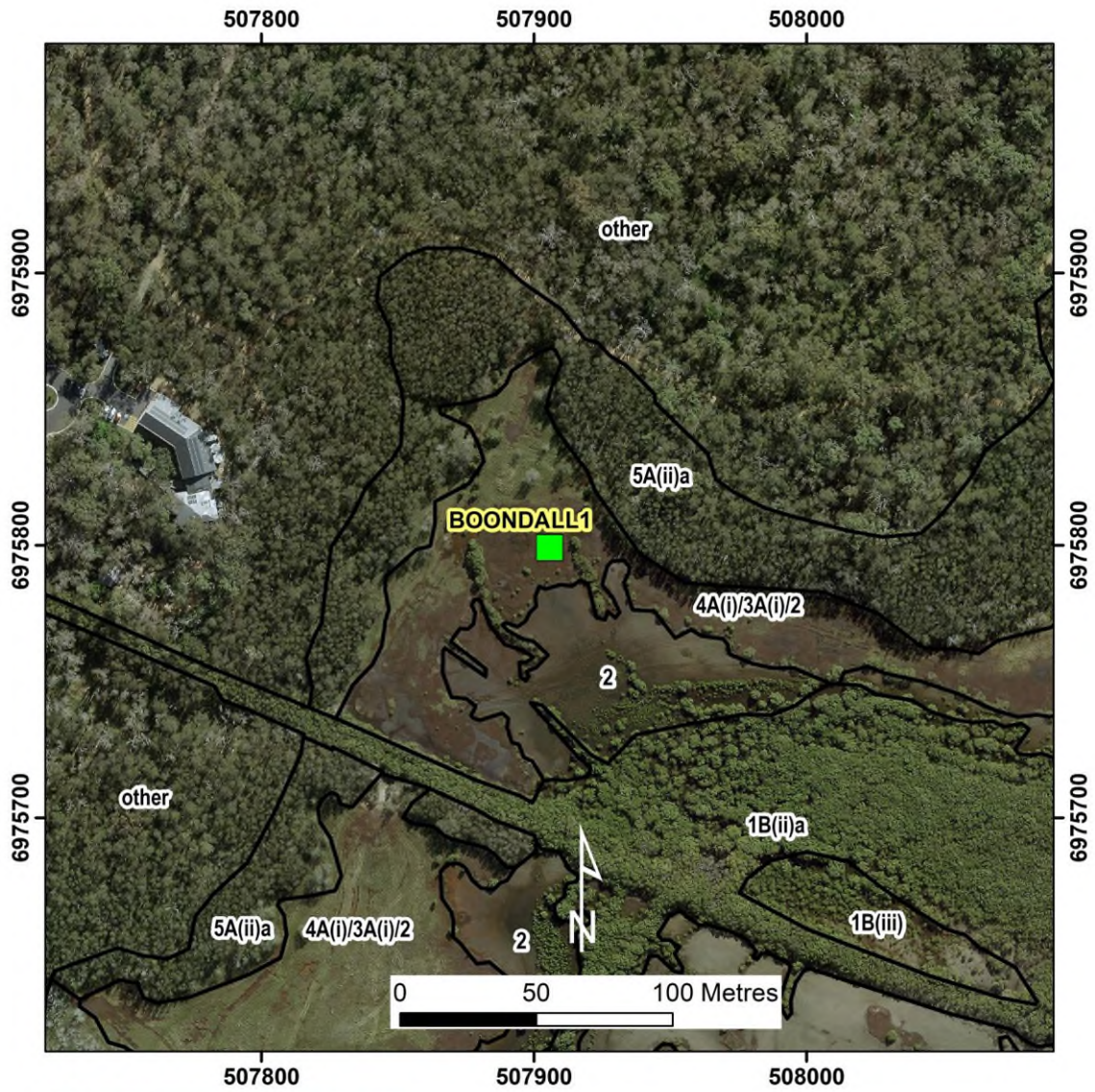


Table 1. Queensland Biodiversity Ecological Information System (QBEIS) temporal assessment for site Boondall 1.

Date	15.07.2016	20.09.2019	06.09.2022
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.	<i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Avicennia marina</i> subsp. <i>australasica</i>	<i>Avicennia marina</i> subsp. <i>australasica</i>
S1 Med Canopy Height	1	1	2.2
S1 Range low	0.2	0.4	2.2
S1 Range high	1.3	1.8	2.2
S1 Crown Cover	1	1	1
S1 stem count			
S2 Spp.			<i>Avicennia marina</i> subsp. <i>australasica</i>
S2 Med Canopy Height			1
S2 Range low			0.8
S2 Range high			1.8
S2 Crown Cover			1
S2 stem count			
G Spp.	<i>Sporobolus virginicus</i> <i>Salicornia quinqueflora</i> subsp. <i>quinqueflora</i>	<i>Sporobolus virginicus</i> <i>Salicornia quinqueflora</i> subsp. <i>quinqueflora</i> <i>Suaeda australis</i>	<i>Salicornia quinqueflora</i> subsp. <i>quinqueflora</i> <i>Suaeda australis</i> <i>Suaeda arbusculoides</i> <i>Sporobolus virginicus</i> <i>Fimbristylis polytrichoides</i>

G Med Canopy Height	0.3	0.2	0.2
G Range low	0.05	0.05	0.05
G Range high	0.4	0.3	0.3
G Cover	80	81	84
Individual Covers	38, 42	26, 55, +	51; 1; +; 32; +

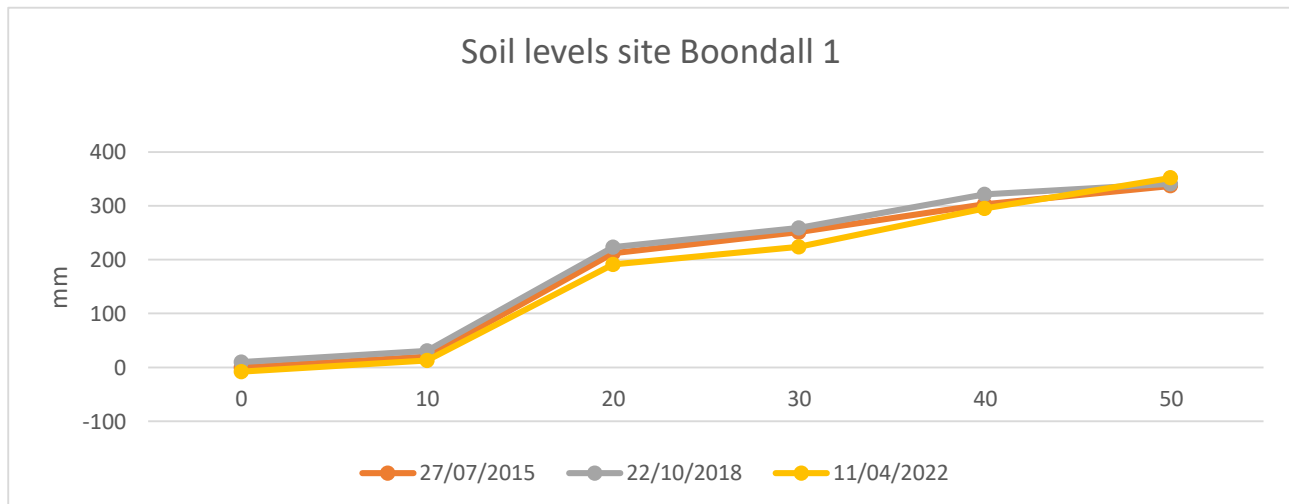


Figure 3. Soil surface elevation measurements (mm) are taken across the QBEIS sites using dumpy level.

Summary

1. S1 of *Avicennia marina* subsp. *australasica* invading the salt marsh and claypan.
2. S1 height doubles from 2016 to 2022 whereas cover remains stable.
3. S2 of *Avicennia marina* subsp. *australasica* colonising the salt marsh in 2022.
4. S2 height of 1 m and crown cover similar to S1.
5. Ground layers diverse with *Sporobolus virginicus* and *Salicornia quinqueflora* in 2016; *Suaeda australis* in 2019 and in 2022 greater diversity of species including *Salicornia quinqueflora* subsp. *quinqueflora*, *Suaeda australis*, *Suaeda arbusculooides*, *Sporobolus virginicus*, *Fimbristylis polytrichoides*.
6. Ground layer height reduces over the years from 0.3 to 0.2 whereas cover increases from 80% to 84% over the years.
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 Boondall 1 Saltmarsh and Marine Couch, communities 3A(i) and 4A(i).