

Review of Regional Claypan Occurrences (Ecoedge, 2019a)



Memorandum

Client:	GHD MRWA BORR team
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Subject:	Review of Potential Claypan Occurrences in the BORR Southern Section

Background

In July 2019 Ecoedge was requested by the Bunbury Outer Ring Road (BORR) Integrated Planning Team to carry out a desktop review of the BORR Southern Referral Corridor for the location of potential claypan wetlands that could be occurrences of the Commonwealth-listed Threatened Ecological Community (TEC) 'Clay pans of the Swan Coastal Plain'. Any areas of potential claypan wetland would then be visited with Andrew Webb from Department of Conservation and Attractions (DBCA) and a Main Roads WA (MRWA) representative to verify its conservation status.

Methods and Results

Previous vegetation mapping of the BORR Southern Section GHD (2012), recent high quality aerial imagery together with mapping of soil-landscape phases (Schoknecht *et al.*, 2004) was used to evaluate potential claypan areas within the BORR Southern Section. Only one potential claypan wetland was identified, situated on privately managed property lots 5 and 160 south of Centenary Road (**Figure 1**). This area had previously been mapped as 'Low open forest of *Melaleuca preissiana* and *Melaleuca viminea* over sedgeland' by GHD (2012) and was situated partly on Pinjarra Plain soil and partly on Bassendean sand.

The site was visited on 1 August 2019 by Ecoedge Botanists (Russell Smith & Colin Spencer), DBCA Senior Botanist (Andrew Webb) and a MRWA representative, Senior Environmental Officer (Freea Itzstein-Davey).

The wetland was found not to be a claypan community, the soil being a sandy-loam at the surface. The vegetation was dominated by *Melaleuca raphiophylla* and *M. viminea*, with an open sedgeland of *Lepidosperma longitudinale* over a grassland of *Sporobolus virginicus*. On Lot 160 *Opercularia hispidula* is one of the understorey species (**Figure 2**). With normal winter rains the wetland is inundated to a depth of 0.5-0.7 m.

Conclusion

The wetland visited on Lots 5 and 160 south of Centenary Road was found not to be a clay-based wetland, and therefore is not a potential occurrence of the 'Clay pans of the Swan Coastal Plain' TEC.

References

GHD (2012). Report for Bunbury Outer Ring Road - Southern Section (South Western Highway to Bussell Highway) Environmental Impact Assessment. Report for Main Roads WA.

Schoknecht, N., Tille, P., and Purdie, B. (2004). Soil-landscape mapping in south-western Australia. Resource Management Technical Report 280. Department of Agriculture and Food, 3 Baron-Hay Court, South Perth, Western Australia, 6155.

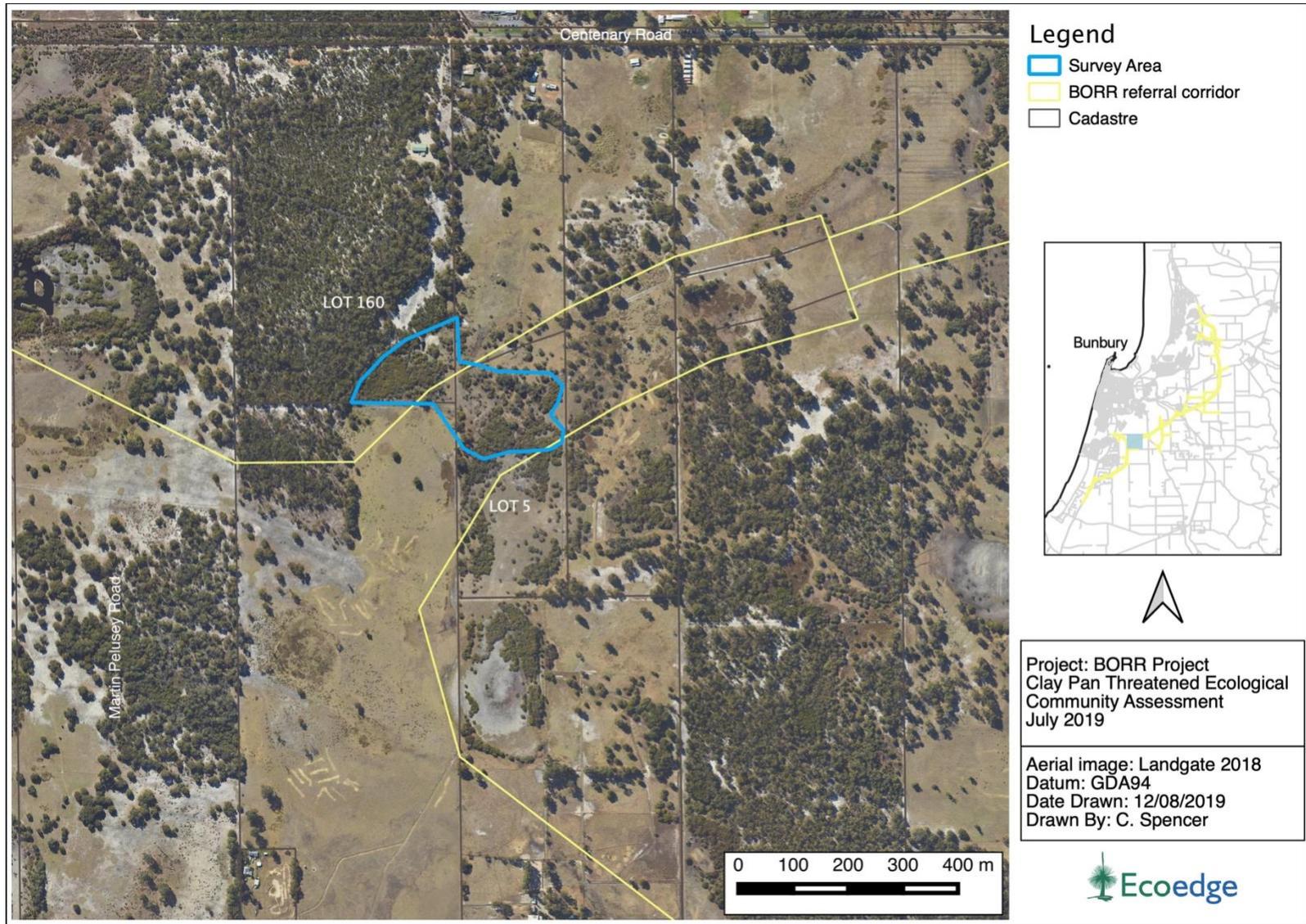


Figure 1. Location of the Survey Area, Lot 160 and Lot 5 with BORR footprint overlay.



Figure 2. Photograph of the wetland where it extends into Lot 160.