

4 Known Victorian areas with GDEs

An extensive literature review was conducted to identify locations within Victoria where field studies had established a groundwater connection with a landscape and highlighted areas that will contain GDEs. Known locations from the review are shown on Figure 1, along with locations where stream base flow measurements have been made. Base flow data are important for evaluating the groundwater dependency of wetland and base flow systems and are useful for understanding the hydrogeologic context for terrestrial systems. It was not the purpose of the review to critically evaluate previous research, but to determine the general landscape settings of known locations of potential GDEs within Victoria; some examples are provided in Table 1. The data set was used to assist in the model development, acting as a guide to likely locations for GDEs

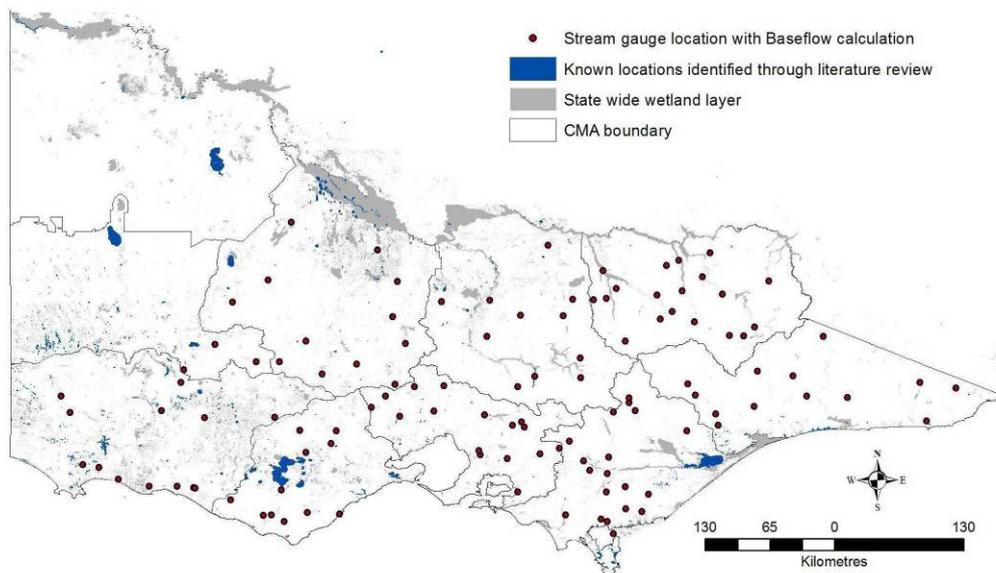


Figure 1. Distribution of wetlands where previous research has established a link with groundwater and location of stream gauges where base flow calculations have been made

Table 1 Some references of some research into groundwater-surface water interaction and groundwater use by vegetation within Victorian and adjacent landscapes

Landscape	Some cited literature
Murray River	Lamontagne et al. (2002); Lamontagne et al. (2005b)
Groundwater interaction streams	Hatton and Evans (1998); Nathan and Weinmann (1993), Lacey (1996).
Northern Loddon plains	Macumber (1991)
Palaeozoic Upland Springs	Shugg and Brumley (2003); Shugg (2009)
Basalt Plains wetlands	Barton et al. (2006)
Kerang Wetlands	Macumber (1991)
Avoca River wetlands	Macumber (2004)
West Wimmera wetlands	Fawcett and Huggins (2005)
Mallee Wetlands incl. Lake Tyrrell	Macumber (1980); Macumber (1991); Macumber (1992)
Terrestrial Vegetation	Macumber (2004); Benyon and Doody (2004); Benyon et al. (2006); Morris and Collopy (1999),
Southern Victorian wetlands	Fluvial Systems (2006); Mensforth (1996); Turnbull (2006)
Coastal setting Corangamite CMA.	Fitzpatrick et al. (2007)