Commonwealth of Australia

Amendment to the list of threatened species, threatened ecological communities and key threatening processes under sections 178, 181 and 183 of the *Environment Protection and Biodiversity Conservation Act 1999* (EC132)

I, MELISSA PRICE, Minister for the Environment, pursuant to paragraph 184(1)(a) of the *Environment Protection and Biodiversity Conservation Act 1999*, hereby amend the list referred to in section 181 of that Act by:

including in the list in the **endangered** category

Assemblages of species associated with open-coast salt-wedge estuaries of western and central Victoria ecological community

as described in the Schedule to this instrument.

Dated this 22 day of October 2018

MELISSA PRICE
Minister for the Environment

SCHEDULE

Assemblages of species associated with open-coast salt-wedge estuaries of western and central Victoria

The ecological community consists of the assemblages of native plants, animals and micro-organisms that are associated with the dynamic open-coast salt-wedge estuary systems found in the temperate climate, microtidal regime (< 2 m) and high wave energy coastline of western and central Victoria.

Geomorphically, the estuaries where the ecological community occurs are drowned river-valley and barrier built systems. They are generally narrow and shallow, although some may have wider lagoons or deeper pools along their length. The mouths of the estuaries are west- and east-facing and typically form a sandbar (or berm) which may overlay a sill. These estuaries are influenced by seasonal longshore sand drift and characterised by intermittent mouths (sometimes open and sometimes closed).

The ecological community occurs within 25 salt-wedge forming estuaries in the coastal region defined by the border between South Australia and Victoria (to the west) and the most southerly point of Wilsons Promontory (to the east). They typically have a highly stratified water column, with saline bottom waters forming a wedge (salt-wedge) below the inflowing freshwater layer from the parent river system. They usually have a well-formed halocline boundary layer between the two water-column layers, which may vary from a few centimetres to over 1.5 m.

Salt-wedge estuaries are typically ecosystems of high ecological value which are increasingly under threat. They contribute high levels of productivity to coastal and nearshore marine environments, and provide important refuge, nursery or breeding habitat for a wide range of invertebrates, fish and birds. Many estuaries also support rare and threatened flora and fauna, in addition to internationally significant bird species.

The ecological community requires a natural seasonal hydrological regime that supports salinity stratification and salt-wedge dynamics, and connectivity and ecological function between the estuary, river and ocean (and floodplain wetland components).

The 25 river systems identified as having salt-wedge estuaries that are part of the ecological community are: Glenelg River, Surry River, Fitzroy River, Eumeralla River, Merri River, Hopkins River, Curdies River, Sherbrook River, Gellibrand River, Johanna River, Aire River, Barham River, Kennett River, Wye River, St George River, Erskine River, Painkalac Creek, Anglesea River, Spring Creek, Thompson Creek, Powlett River, Darby River, Tidal River and Growlers Creek. The length of the salt-wedge estuary varies considerably between the individual estuaries.

The ecological community includes a variety of flora and fauna species, including species that are listed as threatened at a national or state level.