

Place Details

[Send Feedback](#)

Pitt Water (Part), Tasman Hwy, Sorell, TAS, Australia

Photographs:	
List:	Register of the National Estate
Class:	Natural
Legal Status:	Registered (28/09/1982)
Place ID:	11493
Place File No:	6/01/007/0008

Statement of Significance:

Pittwater, a Ramsar site, is of significance as the major (northern winter) feeding ground for migratory, palaeartic wading bird species. It has particular importance because it is at the southern limit of the migration route. The avifauna is both abundant and species-rich with at least 21 species occurring. The rocky shores of Pittwater are the major habitat of the small, endemic sea-star *PATIRIELLA VIVIPARA*. This species is of particular interest as one of the few viviparous sea stars known. Pittwater is the type locality of *PATIRIELLA VIVIPARA*. The saltmarsh communities present contain species with a restricted distribution in Tasmania: *LAWRENCIA SPICATA*, *LIMONIUM AUSTRALE* and *WILSONIA HUMILIS*. Pittwater is an important ongoing research site because of the problems of eutrophication and pollution, particularly in Orielton Lagoon associated with adjacent urban and agricultural landuse. A saltmarsh research site is found at Railway Point in the west of the area.

Official Values: Not Available

Description:

Pittwater-Orielton Lagoon, a Ramsar site, comprises an estuarine system with a large area of saltmarsh. Pittwater is an almost landlocked body of tidal salt water with a narrow entrance to Fredrick Henry Bay. The whole area is protected by the large adjacent sand bar of Seven Mile beach. Most of the area is open water fringed by saltmarsh communities and rocky shores. The area includes a number of small islands upon which sea birds nest.

Orielton Lagoon has been separated from Pittwater since 1868, when a causeway was constructed, restricting tidal flushing and creating a shallow lagoon. In 1995 additional culverts were created under the causeway allowing increased water exchange. Prior to this, seawater replenishment was only possible during high tides, and evaporation in the shallow (1.25 m) lagoon resulted in large changes in salinity. (Average annual rainfall in the area is 500-625 mm). Altered salinity combined with nutrient input from adjacent land uses led to eutrophication, and a series of algal blooms in the lagoon.

The geology of the area is complex, dominated by Holocene river alluvium, silt, fine sand, dune and

windblown sand with pockets of Triassic sandstone and shale.

The extensive saltmarshes often support large populations of waterfowl, including numerous wading and migratory bird species. Pittwater is the major summer (northern winter) feeding ground in Tasmania for Palaearctic migratory wading birds. The saltmarsh, at the northern end of the lagoon, is dominated by *SCLEROSTEGIA ARBUSCULA* and *SARCOCORNIA QUINQUEFLORA* and contain three plant species which have a restricted distribution in Tasmania: *LAWRENCIA SPICATA*, *LIMONIUM AUSTRALE* which is only reserved in one location in Tasmania and *WILSONIA HUMILIS*, which is unreserved in Tasmania. These three species are considered rare and at risk in Tasmania.

The rocky shores of Pittwater are the major habitat of the small endemic sea-star *PATIRIELLA VIVIPARA*. This species is of particular interest as one of the few viviparous sea stars known.

This place has been identified and assessed in the context of the Tasmanian Comprehensive Regional Assessment/Regional Forest Agreement (RFA) process. The national estate values identified in this RFA region are described in the Tasmanian national estate report (PLUC 1997) and its accompanying maps. Information from existing national estate listings has also been included.

This place has been defined by a 'best fit' boundary which has been drawn to include areas which have sufficient national estate significance to warrant listing, taking into account appropriate management considerations.

This information has been generated by the Commonwealth from data produced during the CRA process in Tasmania. It has not yet been verified by the State.

History: Not Available

Condition and Integrity:

The area, particularly Orielton Lagoon, has a serious eutrophication problem. This led to a blue-green algal bloom in 1992 and 1993. Some remedial work is to be undertaken but the threats to the area have been noted since the mid 1970's. The area is surrounded by urban development with a serious lack of effluent treatment. Some of the catchments are also intensively managed for agriculture.

The condition and integrity of this place was assessed using the biophysical naturalness scheme adopted in the Tasmanian comprehensive regional assessment. Biophysical naturalness is an indicator of the level of disturbance to the functioning of natural systems on a scale of 0 (high disturbance) to 5 (low disturbance). Datasets used in assessing biophysical naturalness are described in PLUC (1996).

0.1% of the area has a biophysical naturalness rating (BN) of 5 and 8.1% has a BN of 0. There is no BN data for 91.8% of the area.

It should be noted that some national estate values correlate very highly with naturalness, or the absence of human disturbance, (e.g. wilderness, old growth forest) while other values are unaffected by disturbance (e.g. some geological values) and other values are a product of human activity (e.g. historic roads, buildings)

and other structures).

The Regional Forest Agreement (RFA) sets out an agreed approach to the regional protection of forest-related national estate values in Tasmania. The RFA recognises that national estate values vary in their sensitivity to various types of disturbance and hence have different management requirements. Protection of some values will be achieved primarily through reservation within the CAR reserve system. Other values will be protected through management prescription in off-reserve locations, or through a combination of reservation and off-reserve management. Regional protection implies that national estate values will be adequately protected across the region as a whole, although some expressions of sensitive values may be locally impacted as a result of land use activities.

The decision to enter this place in the Register of the National Estate indicates that its values are protected through reservation in the CAR reserve system, by other measures appropriate to the value, or that its values will not be affected by timber harvesting. The place may also contain values which are sensitive and, if located in unreserved tenures, could be locally impacted by forest operations or other land use activities. Under the RFA, these values will continue to be protected at the regional level.

Location:

Approximately 3200ha, comprising that part of Pitt Water to High Water Mark between: (i) a line from Shark Point to Australian Map Grid point 8312- 'Derwent'- 395599, and (ii) a line from Gwynns Point to AMG point: 8412-'Prosser'-486576.

Bibliography:

Australian Nature Conservation Agency 1996, A Directory of Important Wetlands in Australia, 2nd edn, ANCA, Canberra.

Beattie D. 1992, Zooplankton and Fish in a Eutrophic Lagoon. Unpublished Hon. thesis, Dept of Zoology, University of Tasmania.

Boyes J. and Davies P. G. 1977, A Submission to the Sorell Council Concerning The Sorell Planning Scheme Planning Area 1. Unpublished Submission. The Bird Observers Association of Tasmania, Hobart.

Dartnall A. J. 1969, A viviparous species of Patiriella (Asteroidea, Asterinidea) from Tasmania. Proceedings of the Linnaean Society of NSW 93: 294-296.

DPWH Files RAMSAR listing Number 6.

Kirkpatrick J. B. and Glasby J. 1981, Salt Marshes in Tasmania: Their Distribution, Community and Conservation. Dept of Geography, University of Tasmania Occ. Pap. No 8.

Kirkpatrick J.B., Gilfedder L., Hickie J. and Harris S. 1991, Reservation and Conservation Status Of Tasmanian Native Higher Plants. Wildlife Division Technical Report 91/2. Department Of Parks, Wildlife And Heritage, Tasmania.

PLUC 1996, Environment and Heritage Report, Background Report Part C, 4 vols, Public Land Use Commission, Hobart.

PLUC 1997, National Estate Report Background Report Part H, Public Land Use Commission, Hobart.

Richardson A. M. pers. comm. Dept of Zoology, University of Tasmania.

Report Produced: Tue May 26 15:54:30 2009