



***GRIFFITHS ISLAND
MANAGEMENT
PLAN 2011-2016
(draft)***

Prepared By:

Moyne Shire Council and the Friends of Griffiths Island.

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EXECUTIVE SUMMARY

The Griffiths Island Management Plan 2011-2016, developed in partnership between Moyne Shire Council and the Friends of Griffiths Island (FoGI), seeks to protect and enhance the natural & cultural environment of Griffiths Island and its vicinity for the next five years.

A vast number of people representing more than a dozen different island stakeholders were asked to comment on drafts of this plan, with their valuable feedback incorporated into the final document.

The plan has seen the collation of an enormous amount of detailed data on the existing conditions of Griffiths Island – its geology, soils, vegetation, fauna, pests, and of course its rich history – providing by far the most comprehensive, single-volume synopsis ever undertaken.

In a bid to build on a comprehensive analysis conducted by the local community on Griffiths Island's Strengths, Weaknesses, Opportunities and Threats, 24 specific actions covering management issues such as Information, Flora, Fauna, Tracks & Walkways, Causeway Access control, Heritage and Monitoring were derived by the FoGI leadership group that require implementation during the life of this plan. The highest priority of these being:

- To continue to control pest animals (e.g. Red Fox) on the island; &
- To continue to manage the removal of specified (e.g African Boxthorn, Italian Buckthorn, Kikuyu grass, New Zealand Mirror bush) non-indigenous plants.

The plan also lists a further eight recurrent actions that should be performed at set times each year to adequately maintain existing values.

Seven appendix documents are incorporated with the plan, providing further specific details on government legislation/policies/plans, the island's heritage registration, DSE datasets, official regulations and documents used to help produce this plan.

INTRODUCTION

The Study Area

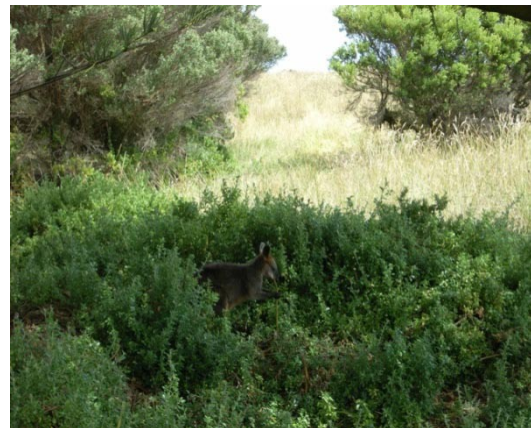
Griffiths Island is a small island at the mouth of the Moyne River, within the bounds of the township of Port Fairy. Port Fairy is the largest urban township within the Moyne Shire (population approx. 2,500) and is located some 3½ hours West of Melbourne on the Princes Highway.

The island forms part of the Port Fairy and Belfast Coastline Protection Reserve and is approximately 1.5 kilometres in length, 800 metres at its widest point, with a total area of around 31 hectares. It is connected to the mainland via a causeway across the South West Passage.

Prominent features of the island include the Griffiths Island Lighthouse and the Short-tailed Shearwater breeding colony. A walking track, including some beach walking, circumnavigates the island. The Island is valued for its Shearwater Colony, its wild and rugged beauty, its unique (though highly modified) natural environment and its value as an iconic tourist attraction. It also features a rich Indigenous and European history with many historic sites present including the lighthouse, keepers' cottage ruins and the stone river training walls. Because of its historic aspects, the entire island is classified under the *Victorian Heritage Act (1987)*.



Short-tailed Shearwater nesting site.



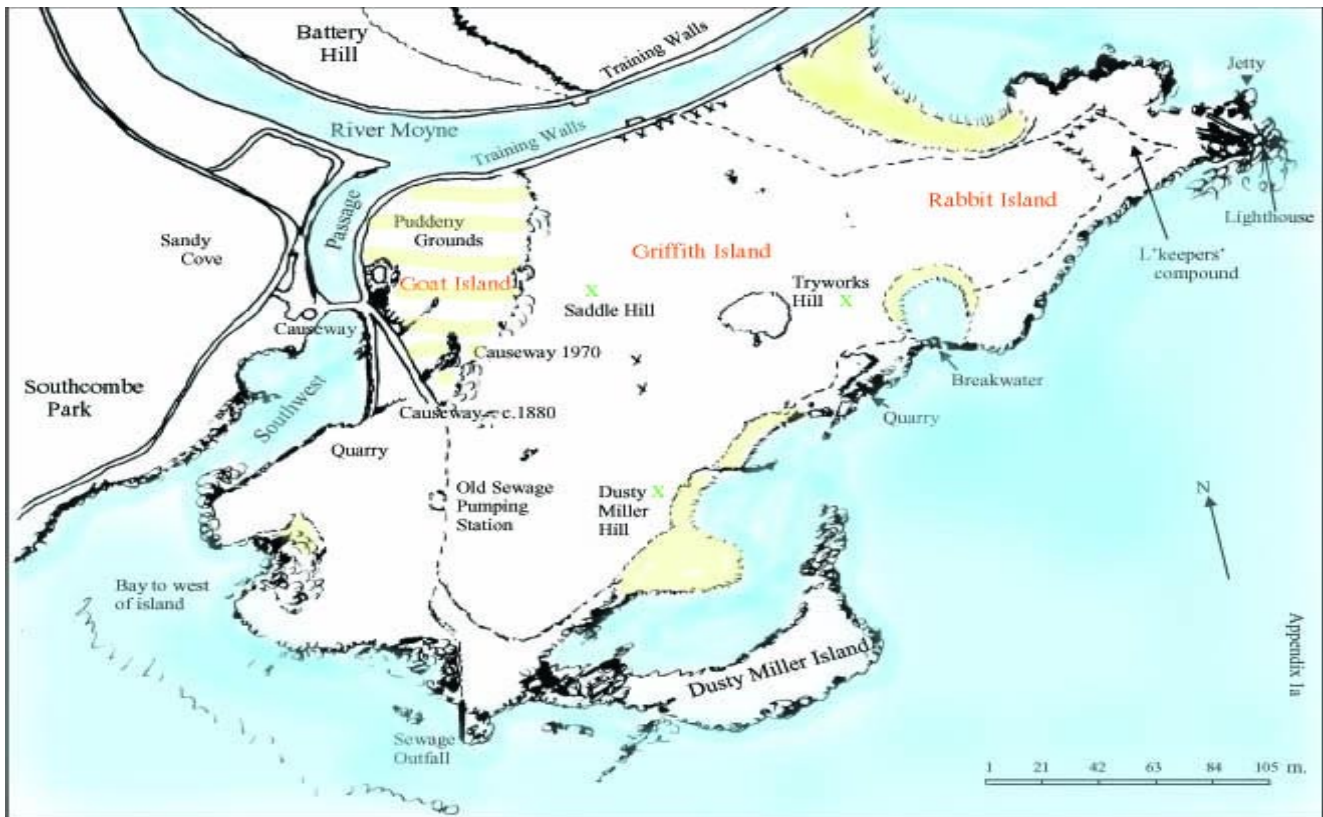
Black-faced Wallaby feeding.



The Lighthouse precinct.



Looking back towards Lighthouse from Dusty Miller Hill.



Features of Griffiths Island (Marten Syme 2011, based upon charts by Townsend, Barrow and Stanley & Larkin *et al*).

PLAN METHODOLOGY, CONSULTATION & RESPONSIBILITIES

Methodology

This plan was prepared by Moyne Shire Council's Environmental Unit and the Friends of Griffiths Island (FoGI) to guide the future management, protection and sustainable development of the Island. On 24 October 2010 members of FoGI attended a public workshop facilitated by the FoGI leadership group to determine, through a SWOT exercise, the various issues faced in managing the Island. The results of the SWOT exercise were then used to form the basis of the management actions listed within this document. Over the ensuing five months Council officers and the FoGI leadership group met frequently to progress the development of the management plan with each person asked to contribute research and/or other information towards sections allocated to them. In the final two months, management actions were fine tuned and prioritised with the draft document presented to Council in June 2011.

Consultation

Throughout the development of this plan there were a great deal of telephone conversations, research of historical records, discussions with various Local, State and Federal Government representatives, informal talks with interested citizens and interaction with community groups from the township of Port Fairy. Additional stakeholders will be consulted for formal comment on the draft plan including:

- Moyne Shire Council (various departments)
- Department of Sustainability and Environment (various departments)
- Aboriginal Affairs Victoria

- Department of Primary Industries
- Glenelg Hopkins Catchment Management Authority
- Port Fairy Angling Club
- Port Fairy Yacht Club
- Port of Port Fairy
- Lions Club of Port Fairy-Belfast and Rotary Club of Port Fairy.
- Port Fairy Tourist Association
- South West Bird Observers Club
- Port Fairy Historical Society
- Heritage Victoria
- Wannon Water

Land Status

The official title of Griffiths Island – crown reserve Rs01156, part of Crown Allotment D1 Parish of Belfast – is “Griffiths & Rabbit Islands Public Park”. Griffiths and Rabbit Islands was originally (temporarily) reserved as site for a Public Park by an Order in Council dated 18 April 1902 and notice published in the Victorian Government Gazette dated 30 April 1902 on page 1581, (Rs 1156).

The Council of the Borough of Port Fairy was originally appointed as Committee of Management by notice published on the Victorian Government Gazette dated 11 June 1902 on page 2056. The Moyne Shire Council is successor in law to the Borough of Port Fairy and therefore remains the duly appointed Committee of Management (S.Beaton (DSE), pers. comm. 2010).

In 1928 the reserve was vested in the Port Fairy Harbour Board until the Harbour Board was abolished in 1983. The Harbour Board dealings were deemed not to have affected the reservation or original 1902 appointment (S.Beaton (DSE), pers. comm. 2010).

Regulations for the Griffiths Island area were promulgated and published in the Victorian Government Gazette dated 21 March 1979 (pages 769-770). The full list of regulations is detailed in Appendix 6.

In 1983 the Griffiths Island reserve was incorporated into the permanent Port Fairy Coastline Protection Reserve by Order in Council dated 16 March 1983 and notice published in the Victorian Government Gazette dated 23 March 1983 on page 654 (Rs 10890).

Management Responsibilities

As a crown land reserve, the **Department of Sustainability and Environment** (DSE) is considered the 'landowner' and has the overall management responsibility for Griffiths Island. DSE delegates its responsibilities to its appointed Committee of Management in **Moyne Shire Council** (MSC). The appointment of MSC allows it to make and administer regulations for the use of the reserve, as long as these:

- Manage, maintain, develop and improve the land in accordance with the purpose of the Reservation
- Comply with any rule, regulation or requirement imposed by other legislation.

MSC also has its own Planning Scheme Zones and Overlays that govern sustainable development and management of the Reserve. These are detailed further in Appendix 1.

In a bid to encourage greater community involvement in the day to day management of Griffiths Island, MSC called a public meeting on 21 June 2010 seeking interested people to form a 'Friends of' group. Within three months the **Friends of Griffiths Island** (FoGI) was a fully incorporated group with a leadership group of eight people and a membership of around 40 individuals. While the group has no officially delegated management rights or responsibilities, MSC now considers this group the primary source for community action and positive change on Griffiths Island (R.Hodgens (MSC), pers. comm. 2011).

Two other parties in **Wannon Water Authority** and the **Port of Port Fairy** have direct responsibility for the management of sewerage and port-related infrastructure respectively. More details are stipulated in the Infrastructure section of this plan.

PRINCIPLE MANAGEMENT DIRECTIONS

Vision Statement

The overall vision of Moyne Shire Council and the Friends of Griffiths Island is:

"To protect and enhance the natural & cultural environment of Griffiths Island and its vicinity".

Objectives:

The key objectives of Moyne Shire Council and the Friends of Griffiths Island are:

- *To protect indigenous flora and fauna and migratory bird species with particular attention to Short-tailed Shearwater nesting sites on Griffiths Island*
- *To protect Griffiths Island's geological features*
- *To conserve Indigenous and European heritage sites on Griffiths Island*
- *To revegetate Griffiths Island with native flora (using endemic species wherever practical)*
- *To eradicate vermin and exotic wildlife predators from Griffiths Island*
- *To enhance visitor experience by the provision of appropriate facilities with minimal reduction to the environmental value of Griffiths Island*
- *To utilise Griffiths Island's natural features as a place of education for the community*

EXISTING CONDITIONS

Aerial Photo



Aerial photograph of Griffiths Island (Moyne Shire Council 2008)

Geology

The Griffiths Island of 2011 is 31 hectares in extent but was originally formed from three distinct islands: Griffith, Rabbit and Goat. These islands were dominated by black basalt boulders deposited over early Pleistocene limestone as a part of a lava flow from Mount Rouse, a volcano near Penshurst, that reached the coast some 3-400,000 years ago (Gill 1973, Bird 1993). On south side of the Island, more recent limestone can be seen, approximately 100,000 years old.

The South West Passage is probably a collapsed lava tunnel (Gill 1973) with such geological formations considered rare on the Victorian coast.

Extensive basalt rock platforms stretch south, east and west from the lighthouse, forming a shallow reef. The charts of Townsend (1843) and Barrow (1854) indicate that prior to the construction of the training walls and a small stone breakwater, a sand bar formed across the mouth of the Moyne River in a similar fashion to that of other rivers on the South-west coast. Since construction (and with subsequent mechanical dredging), the island serves a vital purpose by protecting the exit of the Moyne River and sheltering Port Fairy bay.

Soils

The land form is covered with wind blown sand forming impressive dunes, composed of finely crushed seashell. Gill (1973) dates the Holocene coastal dune formations at Port Fairy (Griffiths Island) at 6,000 years (Bird 1993).

There are two evident sand compositions: a darker grey material containing large quantities of crushed marine shell and a lighter, yellow, wind-blown sand generally forming the dunes on the Island. Bird (1993) notes the formation of a beach on the east side of Griffiths Island (north of Rabbit Island and commonly called "Lighthouse Bay") composed of fine grey sand washed up from the floor of the bay. With the exception of some sand immediately behind the 1859 breakwater connecting Rabbit & Griffiths Islands, the bulk of the material now filling what was a shallow sea floor, is dredged river sand, distributed there as part of the construction of the training walls and river dredging between 1870 and 1950. No analysis of this material has been undertaken, though it is likely to contain some contamination from agricultural run-off and/or early industries that discharged into the Moyne River.

The bulk of the soil above sea level is windblown sand, the lower shape of which (on the windward (south) side) is continually changed by wind and wild seas and the upper level (approx. 4m above high water level) is stabilised by Marram Grass (*Ammophila arenaria*). In the older areas of the island (i.e. present prior to the three islands being joined) or those largely protected from the wind the growth of vegetative material and by-products of the Shearwater colony have built up organic matter to produce a darker soil of some cohesion, highly suitable for the extensive burrows made by Short-tailed Shearwaters. These burrows occupy protected sand areas in both the "original" dune formation and within the area of dredged sand deposition (i.e. of less than 150 years of placement).

Erosion

There is considerable ongoing wind erosion on every exposed surface on Griffiths Island. Letters and articles published in the Port Fairy Gazette between 1892-1902 show that by the turn of the century grazing by livestock and rabbits had removed much of the vegetation on the dunes. This was moderated by the extensive planting of Marram Grass (*Ammophila arenaria*) to inhibit such wind erosion from the 1890s. Marram Grass is known to substantially alter dune profiles, however the general shape of the dunes appears similar to that depicted in early European images and charts of the landform (without specific data regarding dune height and mass) made prior to its planting.

There is some erosion due to waves (on the southern side of the southern training wall at the river exit (due to undermining of the footings) and from the impact of severe storms (both from the south/south-west and the east). Such storms tend to remove large quantities of sand from dune faces around Lighthouse Bay and along the Southern shore (particularly around Dusty Miller Hill). Some sand does redeposit over Summer, but dune faces on the South and East side are often steep/undercut. There is increasing evidence of erosion of infrastructure assets. The western end of the southern training wall facing the South West Passage is a notable site where concrete slabs on the top of the wall have been dislodged. This could be caused by a number of factors including: increased siltation and blockage of the Passage, greater wave impact on the basalt wall, and/or the age and lack of maintenance of the structure.

There is also evidence of sand accretion in several areas: the South West Passage (since the construction of the causeway in 1911), in the Puddeny Grounds (including dredged material deposited until 1990) and, most dramatically, inland of the breakwater thereby connecting Rabbit and Griffith Island.

Drainage

The Island has no natural drainage channels, although there is a depressed area in the centre of the Island which, according to relatives of Hugh Haldane, received run-off and supported a small ploughed vegetable patch for Mangelwurzels (*Beta vulgaris*). More recently this area has become overrun with Kikuyu grass (*Pennisetum clandestinum*). No other area on the island holds surface water for any period other than that below sea level. The training walls include several culverts to allow water to move into and out of the Puddeny Grounds as sea level changes.

Coastal processes and climate change

Most coastal areas are subject to constant change because of the combined effects of wind and water. The Victorian Coastal Strategy (VCC 2008) recommends that a policy of planning for sea level rise of not less than 0.8 metres by 2100 should be implemented. Climate change impacts and risks in coastal areas will be caused by the combined effects of sea level rise, the impact of tides, storm surges, wave processes and local conditions such as topography, elevation and geology (VCC 2008). Given the low-lying nature of much of the Island, these are likely to have a significant effect on values of the Island and access around the Island.

Ecological Vegetation Classes

There is no Ecological Vegetation Classes (EVC) mapping available for Griffiths Island. Based upon EVC mapping for nearby coastal areas, it is highly likely that the perimeter of the island is made up of a combination of Coastal Dune Scrub Mosaic (EVC 1), Coastal Dune Scrub (EVC 160) and Coastal Tussock Grassland (EVC 163) as its main Ecological Vegetation Classes – these can be broadly grouped together as 'Coastal Scrubs, Grassland & Woodlands'. Key identifying species include Coast Beard Heath (*Leucopogon parviflorus*), Seaberry Saltbush (*Rhagodia candolleana* spp. *candolleana*) and Coast Everlasting (*Ozothamnus turbinatus*). This type of vegetation is considered to have a conservation status of 'Depleted'.

The interior is Bird Colony Succulent Herbland (EVC 155) where sandy substrates are dominated by succulent herbs such as Bower Spinach (*Tetragonia implexicoma*). This EVC type is almost entirely restricted to offshore seabird breeding colonies but is not considered endangered.

There are also areas of Coastal Landfill/Sand Accretion (EVC 797) at areas near the Moyne River training walls – a legacy of many years of mechanical dredging of the river mouth. While most remains as bare sand, some has been colonised by saltmarsh vegetation dominated by Beaded Glasswort (*Sarcocornia quinqueflora*). It is highly likely that Griffiths Island has dozens of EVC within its waters and fringing vegetation. To date, no aquatic vegetation surveying or mapping has occurred. However, studies of nearby estuarine areas like the Eumeralla, Surrey and Fitzroy Rivers have uncovered a myriad of small pockets of different EVC so the Moyne estuary and Griffiths Island, despite their high levels of human modification, should be somewhat similar (R.Hodgens (MSC), pers. comm. 2011).

Biosites

Griffiths Island is situated in the Warrnambool Plain Bioregion. This Bioregion is the third most cleared bioregion in the state with only 17% of pre-European settlement native vegetation remaining (VEAC 2010).

The Island is a declared Biosite (#4465) in reference to the Short-tailed Shearwater, (*Ardenne tenuirostris*). This declaration is very rudimentary and highlights the need for further study to be carried out on Griffiths Island. A copy of the Biosite report is attached as Appendix 2.

Flora

The extant vegetation is a highly modified version of the original Coastal Scrubs, Grassland & Woodlands, due to significant human intervention. Predominant indigenous species typical of part of the EVC range include Bower Spinach (*Tetragonia implexicoma*), Small leaved Clematis (*Clematis microphylla* var. *microphylla*), Seaberry Saltbush (*Rhagodia candolleana* ssp. *candolleana*), Coast Beard-heath (*Leucopogon parviflorus*), Cushion Bush (*Leucophyta brownii*), Karkalla (*Carpobrotus rossii*), Common Boobialla (*Myoporum insulare*), Knobby Club-sedge (*Ficinia nodosa*), Coast Spear-grass (*Austrostipa flavescens*), Coast Sword-sedge (*Lepidosperma gladiatum*), Kangaroo Apple (*Solanum facinatum*), Coast Daisy Bush (*Olearia axillaris*), Coast Tussock-grass (*Poa poiformis*), *Danthonia* spp, Hairy Spinifex (*Spinifex sericeus*), and Bidgee-widgee (*Acaena novae-zealandiae*). A complete list of all flora species on Griffiths Island appears in Appendix 4.

Pest Plants

There has been substantial human intervention into the landscape including: dredged soil deposition, extensive ripping to destroy rabbit burrows, quarrying, the sewage comminuter pipeline and pumping station, domestic habitation, training wall construction, road and path formation and even annual burning-off in earlier periods. These works, with supporting haulage animals, machinery and vehicles, introduced a considerable variety of weed species, as did the deliberate introduction of exotic plants for European style gardening purposes (like New Zealand Mirror Bush (*Coprosma repens*), Iris (*Iris germanica* "Florentino"), Fairy Crassula (*Crassula multicava*), White Freesia (*Freesia alba*), Blue Periwinkle (*Vinca major*), Daffodil (*Narcissus tazetta*), Geranium (*Pelargonium* spp.), Beach Salvia (*Salvia Africana-lutea*), Arum Lily (*Zantedeschia aethiopica*), Angled Onion Weed (*Allium triquetrum*), Elephant Garlic (*Allium ampeloprasume*) and Century Plant (*Agave americana*). Nineteen Norfolk Island Pines (*Araucaria heterophylla*) were planted by Hugh Haldane along the river bank, near the ploughed paddock and to the west and north of the government lighthouse compound in the late 1930's. Other exotic plantings include Buffalo Grass (*Stenotaphrum secundatum*), Kikuyu Grass (*Pennisetum clandestinum*), and Marrum Grass (*Ammophila arenaria*), presumably to attempt to reduce erosion. Isolated examples of African Boxthorn (*Lycium ferocissimum*), Italian Buckthorn (*Rhamnus aeternus*) and New Zealand Mirror Bush (*Coprosma repens*) are found across the island, probably from bird defæcation. Other weed species, such as Sea Spurge (*Euphorbia paralias*), Coast Tea-tree (*Leptospermum laevigatum*), European Sea Rocket (*Cakile maritima*), Purple Groundsel (*Senecio elegans*), Hare's-tail Grass (*Lagurus ovatus*), Scotch Thistle (*Cirsium vulgare*), and Sea Lavender

(*Limonium australa*), are found widely around the island. In the autumn to spring season, there is a considerable annual flowering and growth of Cape Weed (*Arctotheca calendula*), which dies back soon after the arrival of the Shearwaters, followed by Sand Rocket (*Diplotaxis tenuifolia*) for several months, while other annual grass dies back with the arrival of higher temperatures and reduced rainfall.

The introduced "garden" species are located in or close to the lighthouse compound at the eastern tip of Griffiths Island and are contained in the area and present little management difficulty. The Rhamnus, Coprosma, Cirsium, Leptospermum laevagatum and Lycium have a wider spread, presumably due to bird and wind blown seed spread. While some of these species may provide some protection and shade for the fauna, there is little doubt that these weeds will continue to spread via the bird or wind vector if not positively controlled. Of the three species, the Coprosma is the most widespread (varying from small plants in rock fissures to large examples which have layered branches into the soil, increasing plant spread). It seems likely that the considerable ground cover of such mature plants probably provides fox den habitat and reduces shearwater burrow space. They do, however, provide foliage fodder for the Black Wallabies (*Wallabia bicolor*) located on the island, although it is not known if this forms an important part of their diet.

Fauna - Birds

A rich avifauna is present on Griffiths Island with 78 native and six introduced species having being recorded on the Department of Sustainability and Environment (DSE) database (Appendix 5). Of these:

12 are listed under both the Japan and China Australia Migratory Bird Agreement:

Bar-tailed Godwit	<i>Limosa lapponica</i>
Common Sandpiper	<i>Actitis hypoleucos</i>
Common Greenshank	<i>Tringa nebularia</i>
Marsh Sandpiper	<i>Tringa stagnatilis</i>
Red-necked Stint	<i>Calidris ruficollis</i>
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>
Sanderling	<i>Calidris alba</i>
Latham's Snipe	<i>Gallinago hardwickii</i>
Eastern Great Egret	<i>Ardea modesta</i>
Ruddy Turnstone	<i>Arenaria interpres</i>
Caspian Tern	<i>Hydroprogne caspia</i>

2 are listed solely under the Japan Australia Migratory Bird Agreement:

Arctic Jaeger	<i>Stercorarius parasiticus</i>
Short-tailed Shearwater	<i>Ardenna tenuirostris</i>

7 are listed under the *Flora and Fauna Guarantee Act 1998*:

Shy Albatross	<i>Thalassarche cauta</i>
Caspian Tern	<i>Hydroprogne caspia</i>
Fairy Tern	<i>Sternula nereis nereis</i>
Hooded Plover	<i>Thinornis rubricollis rubricollis</i>
Grey-tailed Tattler	<i>Heteroscelus brevipes</i>
Little Egret	<i>Egretta garzetta nigripes</i>
Eastern Great Egret	<i>Ardea modesta</i>

2 are listed under the *Environment Protection and Biodiversity Conservation Act 1999*, as vulnerable:

Black-browed Albatross	<i>Thalassarche melanophris melanophris</i>
Shy Albatross	<i>Thalassarche cauta</i>

In addition 16 birds are listed under the 2007 Advisory List of Threatened Vertebrate Fauna in Victoria:

1 bird is listed as critically endangered:

Grey-tailed Tattler	<i>Heteroscelus brevipes</i>
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2 as endangered:

Fairy Tern	<i>Sternula nereis nereis</i>
Little Egret	<i>Egretta garzetta nigripes</i>

6 as vulnerable:

Shy Albatross	<i>Thalassarche cauta</i>
Black-browed Albatross	<i>Thalassarche melanophris melanophris</i>
Hooded Plover	<i>Thinornis rubricollis rubricollis</i>
Common Sandpiper	<i>Actitis hypoleucos</i>
Royal Spoonbill	<i>Platalea regia</i>
Eastern Great Egret	<i>Ardea modesta</i>

7 as near threatened:

Black-faced Cormorant	<i>Phalacrocorax fuscescens</i>
Pied Cormorant	<i>Phalacrocorax varius</i>
Caspian Tern	<i>Hydroprogne caspia</i>
Sooty Oystercatcher	<i>Haematopus fuliginosus</i>
Sanderling	<i>Calidris alba</i>
Latham's Snipe	<i>Gallinago hardwickii</i>
Pacific Gull	<i>Larus pacificus pacificus</i>

Subsequent to, and separate from, the DSE records three further birds have been positively identified on the Island by local field naturalists and bird experts Kelvin Thomson and Lex Thomson:

Curlew Sandpiper	<i>Calidris ferruginea</i>
Southern Giant Petrel	<i>Macronectes giganteus</i>
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>

Note: Although not listed on any known databases for Griffiths Island, it seems highly likely that Orange Bellied Parrots would have wintered on the Island in earlier times.

Of these, the most abundant is the Short-tailed Shearwater with an estimated 100,000 burrows, with probably less than half of these occupied (J.Honan (DSE), pers. comm. 2011). Adult birds leave the Island in April on their 15,000 kilometre migratory flight to Siberia and Alaska. The young birds follow a few weeks later. The birds return to Griffiths Island in September.

Fauna - Other

Apart from birds, no detailed survey of the fauna species on Griffiths Island has been taken. The Department of Sustainability and Environment (DSE) database (Appendix 5) lists a handful of mammalian species including: the Black/Swamp Wallaby (*Wallabia bicolor*) – these remain numerous on the Island, the Australian Sea Lion (*Neophoca cinerea*), Australian Fur Seal (*Arctocephalus pusillus*) and Sperm Whale (*Physeter macrocephalus*). Members of the Friends of Griffiths Island have regularly seen Short-beaked Echidna (*Tachyglossus aculeatus*), Tiger Snakes (*Notechis scutatus*), Blue-tongue lizards (*Tiliqua spp.*) and numerous unidentified skinks. Other sightings of interest include Southern Right Whales (*Eubalaena Australis*), Humpback Whales (*Megaptera Vovaeangliae*) on their migratory journey, Conger Eels (*Conger Conger*) and the huge and spectacular Maori Octopus (*Octopus Maorum*). Members of the Port Fairy Angling Club catch a wide variety of species from the bays of Griffiths Island and the adjoining Moyne River. Species include Southern Black Bream (*Acanthopagrus butcheri*), Yellow Eye Mullet (*Aldrichetta forsteri*), Sand Mullet (*Myxus elongates*), Mulloway (*Sciaena Antarctica*), Southern Blue-spotted Flathead (*Platycephalus speculator*), King George Whiting (*Sillaginodes punctata*), Luderick (*Girella tricuspidate*), Australian Salmon (*Arripis trutta*), Snapper (*Pagrus auratus*) and the Silver Trevally (*Caranx nobilis*). Large crustaceans that can be found include Australian Southern Rocklobster (*Jasus edwardsii*), Blacklip Abalone (*Haliotis rubra*) and the Greenlip Abalone (*Haliotis laerigata*).

Pest Animals

Introduced predators have easy access to Griffiths Island across the causeway connecting Martins Point/Southcombe Park with the Island. Notable species include: the Red Fox (*Vulpes vulpes*), the Black Rat (*Rattus rattus*), stray/feral cats (*Felis catus*) and domestic dogs (*Canis lupus familiaris*). Dogs are taken onto the island by people or roam freely. Appropriate signage has reduced the incidence of people deliberately walking dogs on the Island, however, it still occurs.

There have been ongoing efforts over a number of years to remove foxes in a bid to reduce the predation on burrowing Short-tailed Shearwaters (*Ardenna tenuirostris*). Authorised shooting and den fumigation/destruction have been the main methods of control employed when the Shearwaters are absent on their migration.

Rats play an important role in "cleaning up" the nesting colony after the Shearwaters depart. However, they may also prey on eggs or young of Shearwaters or other nesting shore birds such as the vulnerable Hooded Plover (*Thinornis rubricollis rubricollis*). Any control works need to consider the potential positive and negative effects upon indigenous flora and fauna.

Cultural and Historical – Indigenous Heritage, European History

There is little obvious evidence of Aboriginal activity on the island, although it was often visited, and was known to the Mallun-gundidj custodians as “Moleen”. The lack of widespread physical evidence of aboriginal occupation may be attributed to sand movement on the island, exacerbated since European occupation, with the introduction of grazing, rabbits, rabbit burrow destruction, as well as the planting of Marrum Grass (*Ammophila arenaria*) and the arrival of exotic weeds.

It should be noted that the island is variously spelt “Griffith” and “Griffiths” Island. All nautical references and charts refer to Griffith Island, while Victorian Government references use the style “Griffiths Island” (Victorian Government Gazette, Blake), although Duncan uses the style “Griffith Island” in reference to the lighthouse location. It is indisputable that the largest mass island was named after John Griffiths, the Launceston entrepreneur and merchant, and therefore should carry the “s”, but nautical priority has meant that the spelling has not been changed.

The island was originally three distinct basalt formations (Griffith, Rabbit and Goat Island), but these are now joined by sand or wall connections, following efforts to improve the anchorage in the bay and, subsequently, the navigability of the river for shipping. The location of the islands provided protection for vessels anchored in Port Fairy bay from the prevailing south/south-westerly wind and Bass Strait rollers, which thereby allowed the loading and unloading of passengers and cargo in relative safety. James Atkinson, who acquired a Special Survey at Port Fairy in 1843, also purchased the freehold of the islands so that he might construct a stone breakwater between a “chasm twenty feet wide and varying in depth between five and twenty feet” to encourage maritime trade. The islands themselves had no significant economic use other than as a land base for bay whaling activities, although today they are an important component of the tourist appeal of Port Fairy.

Bay whaling became attractive to entrepreneurs in northern Van Diemen’s Land in the early 1830s when the tariff for colonial whale oil was reduced and it was realised how easy it was to harvest southern right whales, which used the shallow waters along the southern Victorian coastline to calve and nurture their young. It appears that whaling started at Port Fairy in 1833 and the whaling station was located on Rabbit Island (as it was then). The whaling station is noted on the Thomas Townsend survey, (c.2/1840) as Messrs Connolly & Co. whaling establishment. A few years later, the James Atkinson town lands survey plan drawn for Robert Woodward (undated, 1850) notes the “Whaling Establishment of Mr John Griffiths” in effectively the same location, which is supported by the first bay chart, prepared by Assistant Surveyor John Barrow which records “old whaling buildings” in approximately the same location. The “Woodward” plan notes “Outer House, Abandoned Whaling Establishment” at the eastern tip of Rabbit Island.

The whaling enterprise was commercially viable only while the whales continued to migrate to the area for calving, but numbers rapidly declined, and by 1843 it seems that the returns did not justify the cost of equipping a gang to reside in the area for several months. The wooden buildings (Woodward notes three, Barrow two) were then used by Mrs Flora Rachel Wallace Dunlop, widow of Alexander Cuninghame Fairlie Wallace Dunlop (1809-52), who used the buildings as house, farm, schoolroom and dormitory for a “mission” for the benefit of young Aboriginals (Powling). The main house, apparently built for John Griffiths c.1837 (Powling) was a two storied hip roofed timber dwelling and would have met Mrs Dunlop’s purpose, but, following the

advertised sale of Mrs Dunlop's possessions, boats and livestock on the island (*Warrnambool Examiner*), there is no subsequent reference to the building, and it was probably dismantled soon afterwards. Other than some whalebones, since removed, no remnants of whaling activity on the island have been located, but a letter in the *Port Fairy Gazette* indicates that relics were found in 1928, and it is possible that a detailed archaeological survey might discover additional material. It is also claimed (Fawcett) that three whalers are buried (at unidentified locations) on the Island.

In 1843 James Atkinson acquired 5120 acres (2072 hectares) from the Colonial government on the mainland adjacent to Griffiths Island, and he commenced the development of a town he called Belfast at Port Fairy. An important step to the commercial success of the town was a safe port, and Atkinson realised that a crucial initiative would be the construction of a breakwater between Rabbit Island (the largely basalt island furthest east) and Griffith Island, the largest island generally overlain with sand and low vegetation. Atkinson purchased the islands from the Crown in 1847 and arranged for a breakwater to be established by placing basalt boulders in the channel. The wall was destroyed before completion by stormy seas. By 1859, the Victorian colonial government had commenced construction of a small, Fourth order, lighthouse at the south-east tip of Rabbit Island (Lights are divided into "orders" in relation to their power and range, and Fourth Order were harbour lights, with a simple fixed light flashing once every three minutes), as part of a program for establishment of four such "harbour" lights.

The site was purchased from Atkinson for £100 in December, 1858 and the 39' high basalt tower and light keeper's quarters were built by McKenzie and McCowan. The structure was finished with an imported lantern and officially lit on 31/8/1859 (*Victorian Government Gazette*). The light has continued in operation ever since, although the site was "de-manned" in the mid 1950's, following the resignation of the last keeper, Hugh Haldane. John Mason, a local "architect" and contractor, gained the government tender to construct the breakwater across the gap between the islands for £462 and a basalt jetty for the lightkeepers. The quarry for the stone for both the breakwater and the lighthouse is evident on the southern side of Griffith Island, together with embedded iron pins used in the quarry gantry.

Powling notes the construction of a sea-going vessel, *The Brothers*, on Griffith Island in 1847. This 63 ton brigantine (55' long, 15' beam) was registered at Sydney, before being sold to Hobart merchants in 1853. Hugh Haldane's three sons also built two fishing boats on the island in 1933 and in 1940 (*Amaryllis*, 39' long and 13' beam, and *Dolphin*, 40' long).

The Islands were not accessible from the mainland other than by boat, as the tidal and wave surge through the South West Passage was strong and the channel deep. It was possible to reach the island at low tide by way of the bar at the mouth of the Moyne (into Port Fairy bay, to the east), but this required crossing the river near the Lough, travelling south along the east bank of the river, crossing to the beach through the cutting made for the pier into the bay and then traversing the bar to locate the shallow channel to cross to the northern side of Griffith Island. The construction of the breakwater slowly encouraged the build up of sand behind the wall, and subsequent dredging of the Moyne river bed, and deposition of the spoil between Rabbit and Griffith Islands led to the "joining" of the two formations.

The vegetation on the main island ("Good pasture, clear of timber" according to Townsend, 1840) was indicative of its suitability for arable farming, and the lightkeepers established a garden in which they grew corn, potatoes, onions, cabbages; they also brought geese, cattle, horses, sheep, pigs and bees onto Rabbit Island.

Pearson recorded rabbits, "native cats" (western quolls?), emu, kangaroo and a brown snake there between 1859 and 1864. Atkinson, the owner of the island, allowed the keepers to agist 1 cow each on Griffith Island initially, and Pearson was granted a lease for 14 years for grazing stock in 1864 @ £20 per annum.

Subsequent lessees included Thomas Paton. The Haldanes kept a milking cow and pigs. Remnants of post and rail fencing and yards can still be seen on the Island. The efforts to make the bay a safe harbour were not entirely successful; the water depth was inadequate and the pier built in 1857 was (until the breakwater between Rabbit and Griffiths Island was completed) exposed to wave surge, while the bay was very exposed if the waves were driven by the easterly winds.

Instead, from 1869 onwards, efforts were directed to making the river navigable. A necessary element was the construction of "training walls" for the containment of the river within the channel (rather than spreading over the river flats) and quarries were opened on the island to supply the basalt for the walls. To transport the basalt, a horse drawn "tramway" was established, including a timber viaduct and elevating bridge and a whim, both along the northern edge of the Island and the opposite (southern) side of Battery Hill.

The visit of the eminent maritime engineer, Sir John Coode, to Australia in 1878, led to his advice being sought on this and other Victorian port projects. His major task was the re-design of the Yarra to allow Melbourne to become a modern port (Scurfield), and he visited Portland, Port Fairy, Warrnambool and Lakes Entrance to advise the projects then underway. At Port Fairy, an important recommendation was that to enclose the "Puddeny Grounds" (tidal flats on the northern side of the island) with a sinuous training wall constructed around Goat Island (another source of basalt from Gibson's quarry) that would harness the wave power coursing through the South West Passage to flush the lower reaches of the river and project silt laden water into Port Fairy bay.

Coode's plan was perhaps too successful, as the power of the waves racing along the "canal" was sufficient to force the slowly moving coastal steamer, *Eumeralla* onto the river walls and aground in 1909, and the "surge" at the Martin's Point junction of the Passage and the river frustrated fishing boats attempting to reach their moorings upstream.

With the completion of the rail connection to Warrnambool in 1890, and a growing appreciation of the natural environment, there was community interest for public access to Griffiths Island. A pedestrian bridge was built to connect the training walls on the northern side of the island with the mainland to permit visitor access in 1900. (*Port Fairy Gazette*). For the first time, the short-tailed shearwaters ("*mutton birds*") (*Ardenna tenuirostris*) are referred to in the press with concern for protection of the rookery and the chicks. Griffiths Island (including Rabbit Island and "reclaimed lands", other than the lighthouse reserve), and amounting to 76 acres, 12 perches was gazetted as a Public Park, with the Council of the Borough of Port Fairy as Committee of Management in 1902 (*Victorian Government Gazette*). There were efforts to re-vegetate the island by planting marram grass and she-oaks, but much of

the effort was frustrated by the cattle agisted on the island (*Port Fairy Gazette*). The pasture licence was not renewed when it expired soon afterwards and marram grass is now evident in filled areas (between Rabbit and Griffith Islands) and on the southern dunes, interspersed with native vegetation.

Between the 1870s and the 1920s, there was a steady flow of government funding for works to improve the navigability of the Moyne for steamers and the increasingly regular dredging of the entrance and the lower river, with the spoil being deposited behind the training wall on the northern side of the island and in the area behind the breakwater between Rabbit and Griffith Islands, so that the island steadily increased in size to the north east and north. There was silt deposition near the confluence of the Passage waters and the slower moving river at Martin's Point following the construction of a causeway between the Griffith Island training walls and the mainland in 1911. Sand was carried through the walls from the Puddeny Grounds into the river, and the requirement for dredging grew.

Dredging was not unusual in Victoria's western ports; Warrnambool's "new" harbour was rapidly filling with sand, and government dredging vessels were in steady demand around the coast to alleviate the problems. The Moyne harboured a number of silt barges, while the river bank contains a number of warping/mooring posts used to locate the vessels or assist their movement.

Transport of quarried stone for the river training walls was enabled by a light tramway system, with horse drawn hoppers. The system was light and flexible and able to be relocated as required. Quarries were developed where there was suitable stone, and led to the almost complete removal of Goat Island (a ring of basalt remains) and another quarry was opened to supply stone for the second stage of the Warrnambool harbour works in 1916 (*Port Fairy Gazette*) with a line laid to carry the basalt blocks from the quarry over the causeway and to the rail spur at the government wharf, for transhipment to Warrnambool. The work was suspended shortly after because of labour availability, and was resumed about 1924. There are remnants (lengths of light rail, hoppers and bogies) of the system remaining on the Island.

The causeway was not removed with the cessation of coastal navigation during World War 2, due to the remote servicing by vehicle, and sand deposited in the Puddeny Grounds began to flow through the walls and into the river, considerably constricting the river channel. Dredging spoil was pumped into the "Puddeny Grounds" and metal sheeting was driven into the sand in an attempt to stop the sand drifting back into the river.

Until the 1950s, the Island was comparatively isolated, as the connecting causeway and Island walls had no "formed" surface, making crossing hazardous. The Lighthouse keeper and his family occupied the cottage at the eastern tip, and used boats to travel to the town, although a telephone line to the station had been erected across the island about 1910, following a false alarm of shipwreck. The signalling station, previously located at Flagstaff Hill, was moved to a position just behind the Light keepers quarters after 1895 (*Port Fairy Gazette*), and a 140' high flagstaff erected, to signal steamers departing Warrnambool advice of the tide height in the river.

This mode of life was coming to an end, however, with the beginnings of light automation and greater requirement for port activity within the mooring area. Following the Haldane's departure in 1951, the next Harbour Master, Fred Rogers, demolished the living quarters on the island after his new house was built near Battery Lane and he embarked on works to level the top of the Island training wall, as part of a roadway for access to the lighthouse.

In the 1950s there was gradual recognition that the island had attraction as a tourist destination, and the decade saw proposals to construct a motel, as well as a road around the island, although concern was expressed that visitors were killing mutton birds (*Port Fairy Gazette*). Perhaps the biggest challenge came following the selection of Port Fairy as a site for annual Citizen Military Force (CMF) camps for anti-aircraft batteries, which commenced in 1953. Initially located in Southcombe Park, the Army saw the island as a suitable location for the camp, noting all that was required was a water supply and a heavy duty road and bridge. Such services were a problem even at Southcombe Park, and the Army's proposal was quashed when the Public Works Department advised that the island may be part of the area required for any future harbour development at Port Fairy.

The CMF camps ceased with the abolition of National Service the following year (*Port Fairy Gazette*). A section of the Island had been used as a rifle range over 700 yards between 1920 and 1952. (*Australian Archives, Port Fairy Gazette*).

The Vermin & Noxious Weeds Destruction Board undertook extensive work to remove rabbits from the Island, by burrow ripping, poisoning and gassing in the 1950s (*Environmental Survey, Port Fairy*) to reduce the loss of vegetation, although the arrival of myxomatosis probably had greater effect.

The last major intrusion was the construction of a sewerage outfall pipe and pumping station, with overhead electricity supply, in c. 1970/71. The town was unsewered until this time, and primary treated sewage was moved by an underground pipe to a mesh fenced comminutor and settling ponds on the island, before being pumped into an outfall that ran into the ocean on the southern coast (Environment Studies Association of Victoria). In c.2000, the sewage was treated elsewhere in town, and the pumping equipment located below ground level and the fence and overhead power lines were subsequently removed.

In the late seventies/early eighties, some signs and track formation work was undertaken, together with a timber viewing area for shearwater observation. A larger walkway for shearwater observation was constructed in the late eighties/early nineties, and both these structures have since been removed, replaced with a universal access viewing platform in 2004. Deposition of dredge spoil in the Puddeny Grounds was discontinued in 1991 (*Griffiths Island Habitat Protection and Enhancement Master Works Plan*). A project funded by Parks Victoria removed substantial quantities of exotic weeds from around the lighthouse compound in 2000. A combined Port Fairy/Warrnambool Rotary Club initiative saw refurbishment of signs, pathways and some noxious weed destruction in 2009/10.

Infrastructure

Griffiths Island infrastructure includes: nautical aids, pedestrian needs, other historic features and town sewerage.

Nautical Aids include the Lighthouse, training walls and causeway, jetties (in the Moyne River), the trig point and other associated aids, as well as the vehicle track used to access the first three. These remain the management responsibility of the Port of Port Fairy.

Pedestrian Needs include walking tracks, seats, directional signs and bollards, safety fencing, interpretive signs, quarry boardwalk and viewing platform. These assets are maintained by Moyne Shire Council.

Other historic features such as the foundations of the Lighthouse keeper's cottage, the old tramway, quarry sites and Norfolk Island Pine trees are also the responsibility of Moyne Shire Council.

Town Sewerage runs to an ocean outfall on the South of the island. This includes pipes, a pumping station and a vehicle access track that are all the responsibility of Wannon Water.

The Moyne River cuts between Battery Hill, Sandy Cove Reserve and Griffiths Island with management of the channel falling to the Port of Port Fairy. Management of the actual water is the responsibility of Glenelg Hopkins Catchment Management Authority.

On the mainland adjacent to the causeway to Griffiths Island is a carpark that includes an information rotunda, seats, signs and a rubbish bin. Public toilets are located nearby at Martins Point. This land is all managed by Moyne Shire Council.

Activities

Griffiths Island is a popular area with both local residents and visitors to Port Fairy. The Port Fairy Visitor Information Centre contains several popular information brochures/booklets specifically focussing on Griffiths Island and its Short-tailed Shearwaters – one of the few locations within Moyne Shire to have such detailed information readily available.

Active pursuits include walking, jogging, bicycle riding, fishing, bait collecting, bird watching, swimming, surfing and diving.

There are also a number of passive activities possible on the Island such as painting, photography and study.

Educational institutions often use the Island as a part of their curriculum, with or without a local guide/leader. They, along with other research groups, have spent countless hours on the island attempting to contribute either to the knowledge base or to enhancing the natural environment.



Fishing and walking along the Training Walls at Griffiths Island.

ISSUES

SWOT Analysis

A SWOT (Strengths/Weaknesses/Opportunities/Threats) Analysis was held on Sunday 24th October 2010 at Reardon Theatre, Port Fairy. Members of the public were encouraged to attend with 16 people present on the day, and a further seven apologies received. People were randomly allocated into a group of four and each group then proceeded to work through the SWOT exercise with a report back after each session by one particular group.

Following this day, Council officers and members of the Friends of Griffiths Island leadership group considered the extensive lists of all the strengths, weaknesses, opportunities and threats that were identified. Over the next few weeks these were then amalgamated (if consistent), condensed (if similar), or even culled (if unclear or unrelated) to derive several consistent points and enable workable objectives to be determined.

The final list was as follows:

Strengths

Interesting fauna especially Short-tailed Shearwater, shore birds and wallabies.

Diversity of flora, landscape and habitat in a natural environment

Historic Lighthouse

Rich history both Indigenous and European

Location close to Port Fairy

Views of and from the Island

Passive recreation including walking tracks, some parts with wheel chair access, fishing

Tourist attraction

Island is Heritage protected.

Weaknesses

Foxes and other pest/feral animals
Weeds and other exotic flora
Difficulty revegetating due to wallabies and climate influences
Lack of publicity in regard to the Island
Causeway influenced problems – restriction on water and sand flow, access for feral animals
Human misuse causing dune erosion, damage to shearwater colony, bait collection, litter, rubbish removal
Lack of adequate tracks in some parts of the Island
Wannon Water sewerage pipe.

Opportunities

To open the causeway to allow water flow and Island access through construction of a bridge
Better maintenance of specific areas on the Island e.g. Lighthouse precinct
For replanting appropriate vegetation, control of weeds and pest animals, and the re-introduction of indigenous fauna (e.g. Eastern Quoll)
To educate the public in all aspects of Island life
Upgrade of the walking loop, whilst maintaining the natural environment
Climbing steps to a platform on Dusty Miller Hill.

Threats

Foxes and other pest animals and weeds
Inappropriate developments
Erosion caused by climate change and overuse by humans
Non-enforcement of regulations e.g. over exploitation of fishing bait particularly giant spew worms
Dredging.



An example of human caused erosion – the 'track' up Dusty Miller Hill.

FUTURE DIRECTIONS.

Management issue	Management aim	Management action	Priority	Responsible group	Cost estimate
Information	To provide the public with appropriate information regarding Griffiths Island	Develop education resources as appropriate – may include brochures, tours, signage, electronic, etc.	Medium	Lead: FoGI, Other: MSC, PF Schools, PF Historical society	\$5k over 3 years
Pest Plants	To continue to manage the removal of specified non indigenous plants.	Develop a weed hierarchy for weed management.	Immediate	Lead: FoGI, Other: MSC, DPI, DSE GHCMA, Private contractors CFA	\$0 in first year
		Undertake works including working bees and use of contractors to remove non indigenous plants.	High		\$5k per year
		Develop a policy regarding disposal of green waste.	High		\$0
		Implement recommendations from policy.	High		\$1k per year
Indigenous Flora	To re-establish the Island's original flora as far as practicable.	Develop a policy and plan of indigenous flora based upon likely EVCs including plant height & location.	Medium	Lead: FoGI, Other: DSE, MSC, GHCMA, Local naturalist groups PF Schools Community Volunteers	\$0
		Seek funding.	High		\$0
		Hold Working bees.	High		\$500 per year
		Establish some trial plots with upgraded wind & grazing protection for the planting of indigenous flora.	Medium		\$2k per year for 3 years

Management issue	Management aim	Management action	Priority	Responsible group	Cost estimate
Pest Animals	To control pest animals on the Island.	Maintain existing fox control including: traps, fumigation, shoots, den closure, etc. Ongoing surveying and monitoring for signs and implications of pest animals.	Immediate High	Lead: MSC Other: FoGI DSE, Private Contractors	\$6k per year \$0
Indigenous Fauna	To increase biodiversity through protecting existing, and ultimately re-introducing, indigenous species.	Through collaboration with local groups, investigate the possibility of setting up control area/s for the re-introduction of species. Support and encourage surveys, research & monitoring of biodiversity values on the Island. Develop a 'Code of Conduct' for schools and other groups visiting the Island.	Medium Medium Low	Lead: FoGI, Other: DSE, MSC, Local naturalist groups.	\$unknown \$unknown \$0
Causeway Access Control	To improve habitat values on Griffiths Island for native fauna.	Investigate options available to isolate the island from the mainland such as: removal or alterations to the existing causeway, construction of a suitable bridge, opening of the South West Passage, etc.	Medium	Lead: DSE Other: MSC, Port of PF FoGI	\$unknown

Management issue	Management aim	Management action	Priority	Responsible group	Cost estimate
Causeway Access Control (cont)		Educate and involve the community & general public throughout the investigation process.	Medium		\$unknown
Island tracks and walkways	To maintain Island tracks in accordance with existing current (2010) form.	Conduct a review/ study of tracks and walkways (including route, boardwalks, steps, all-ability access, erosion management, seats, etc).	High	Lead: MSC, Other: FoGI, Port of PF, DSE, Heritage Vic	\$12k in first year
		Ensure that the main track to the Lighthouse precinct is maintained.	High		\$4k per year
		Maintain a walking track around the south part of the Island that ensures safety with minimal impact.	Medium		\$500 per year
		Implement recommendations from review/study where practicable.	High		\$unknown
Island Heritage Areas	To support the appreciation, restoration and maintenance of heritage areas on the Island.	Regularly review the status of heritage assets in consultation with Heritage Victoria, AAV and other organisations as appropriate.	Low	Lead: MSC Other: FoGI, Port of PF	\$0 until a project is identified

Management issue	Management aim	Management action	Priority	Responsible group	Cost estimate
Island Heritage Areas (cont)		Implement any actions resulting from review/s.	High		\$0
		Formalise process of opening lighthouse.	High		\$0
Monitoring	To measure human and natural impacts on the Island.	Develop measures to record impact/progress of remedial programs.	Medium	Lead: DSE Other: FoGI, MSC	\$unknown

Priority Key:

Immediate: implementation commenced within the first year of plan being approved

High: implementation commenced within the first two years of plan being approved

Medium: implementation commenced within two to four years of plan being approved

Low: implementation not a pressing priority within four years of plan being approved.

BUDGET ANALYSIS**Recent Income and Expenditure:**

Griffiths Island Income and Expenditure 2003-2011			
Year:	Title:	Source:	Amount:
2003	Risk Funding – old quarry site fencing	DSE	\$2.2k
2003	Track Maintenance	Port of Port Fairy	Unknown – \$2k (est)
2004-05	Master Works Plan	Moyne Shire Council	\$6k
2004-05	Signage & Access Works	Glenelg Hopkins CMA	\$43k
2007	Removal of sewerage infrastructure	Wannon Water	Unknown – \$25k (est)
2009-10	Griffiths Island Revival Project	Rotary (via Federal Government grant)	\$50k
2010	Revegetation trial with mature plants and large guards	Basalt to Bay Landcare Network	\$2k
2010-11	Coastal Reserve Maintenance	Moyne Shire Council	\$10k
2010-11	Griffiths Island Entrance Works	Moyne Shire Council	\$9k
2011	Boxthorn Removal	Glenelg Hopkins CMA	\$4k

Projected Revenue (for next 5 years):

Griffiths Island Projected Revenue 2011-2015			
Year:	Title:	Source:	Amount:
2011-12	Coastal Reserve Maintenance	Moyne Shire Council	\$10.5k
2012-13	Coastal Reserve Maintenance	Moyne Shire Council	\$11k
2013-14	Coastal Reserve Maintenance	Moyne Shire Council	\$11.5k
2015-15	Coastal Reserve Maintenance	Moyne Shire Council	\$12k
2016-16	Coastal Reserve Maintenance	Moyne Shire Council	\$12.5k

* Maintenance expected to cover items like working bees, specialist weed contractors, revegetation supplies, minor tool purchases, track repairs, education resources and recurrent actions.

** External grants are likely to be applied for and hopefully funded particularly for items such as weed control and revegetation. These have not been listed due to the ever changing characteristics of grant programs and their generally short-term nature.

Funding of Island Infrastructure

There are a number of major and minor infrastructure items either presently existing on Griffiths Island (e.g. Lighthouse, access track, Shearwater viewing platform) or potentially required (e.g. Steps to the top of Dusty Miller Hill). As the Committee of Management, Moyne Shire Council should always be proactive in allocating budget towards worthwhile projects and/or seek adequate funding from other government and/or non-government sources to develop and maintain such infrastructure.



An example of suitable infrastructure – the all ability Shearwater viewing platform.

Workspan

The following recurrent actions should be undertaken each year:

Management Action	Due Date/Frequency	Responsibility
Inspect infrastructure for risk issues (e.g. decking)	Monthly and after potential risk events (e.g. Storm surges)	MSC
Path maintenance	Monthly with any major works conducted after the summer tourist season.	MSC FoGI Wannon Water
Weeding	Monthly basis through working bees and when the need arises.	FoGI MSC
Maintain lighthouse precinct	6 monthly - trimming hedge and removal of non-indigenous weed species.	FoGI MSC
Grass cutting/slashing (on sides of path)	Monthly or when appropriate.	MSC
Fox control	Bi-monthly between April to September Only during Shearwater season when and where appropriate.	MSC FoGI
Shearwater banding & monitoring	Annually in May	DSE FoGI
Signage condition & maintenance	Regularly/on-going (minimum monthly)	MSC FoGI

Monitoring, Review, Evaluation and Reporting to DSE

In July each year Moyne Shire Council and the Friends of Griffiths Island (FoGI) should undertake a review of the worksplan for the following year. After the review, the worksplan should be adjusted to include any outstanding actions from the previous year/s or to bring forward actions that might be achieved earlier than originally predicted.

The entire Management Plan should begin being reviewed in January 2015 and a fully updated version prepared soon after. This process should include a thorough review of the progress made during the life of the 2011 Plan.

Regular two-way communication between the Department of Sustainability and Environment and Moyne Shire Council (with significant input from the Friends of Griffiths Island) should always be encouraged to ensure the best possible environmental, social and economic management outcomes for Griffiths Island.

Appendix 1

Details of legislation, frameworks and policies.

The following is an overview of the key legislation, frameworks and policies that directly affect and direct the management of Griffiths Island.

Commonwealth

The ***Environment Protection and Biodiversity Conservation Act 1999*** delineates areas of Commonwealth and State responsibility for the natural environment. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places. This Act applies to Griffiths Island due to its habitat for migratory bird species – particularly Short-tailed Shearwaters.

Other federal acts of potential relevance to Griffiths Island include:

- *Aboriginal and Torres Strait Islander Heritage Protection Act 2005*
- *Native Title Act 1993*

State

The ***Crown Land (Reserves) Act 1978*** provides for the reservation of Crown land for a variety of public purposes, the appointment of committees of management to manage those reserves and for leasing and licensing of reserves for purposes approved by the Minister for Environment and Climate Change.

The ***Coastal Management Act 1995*** establishes a framework for coordinated strategic coastal planning in Victoria and provides for the use, development and protection of coastal Crown Land. Amongst other things, the Act provides for the preparation of the Victorian Coastal Strategy (VCS), Coast Action Plans (CAPs) and site specific management plans. Once developed, the latter two documents are integrated with planning schemes at the regional and local level to provide detail and give attention to regional and local issues.

The ***Aboriginal Heritage Act 2006*** provides legislative protection for all Aboriginal cultural heritage sites, places and objects, with the involvement of Aboriginal people. Under the Act, coastal areas are considered to have high cultural heritage sensitivity and where works include high impact activities, a Cultural Heritage Management plan is required to be prepared.

The Act recognises Aboriginal people as the “primary guardians, keepers and knowledge holders of Aboriginal cultural heritage” and establishes the Aboriginal Heritage Council of 11 traditional owners and Registered Aboriginal Parties (RAPs). RAPs play a lead role in administering the Act, including evaluating Cultural Heritage Management Plans and providing advice on applications for Cultural Heritage Permits.

There are currently two overlapping RAPs for the Griffiths Island area - the Gunditj Mirring Traditional Owners Aboriginal Corporation and Ella Maar Aboriginal Corporation.

The ***Environment Protection Act 1970*** provides the legal framework by which environmental objectives, regulations and goals are established throughout the State for industry, commerce and the general public. The Act reflects the precautionary principle, the protection of intergenerational equity, the polluter pays principle, and the protection of biodiversity. It puts the responsibility for sound environmental management on Victorian businesses, communities and individuals. The Act aims to achieve greater environmental performance through shifting to collaboration and co-regulation as opposed to the traditional 'command and control'.

The ***Flora and Fauna Guarantee Act 1988*** provides the legal framework to conserve Victoria's native plants and animals. Its broad aim is to prevent the extinction of any more plants and animals and to ensure that native flora and fauna survive, flourish and retain their potential for evolutionary development in the wild.

The ***Wildlife Act 1975*** was passed to establish procedures in order to promote the protection and conservation of wildlife, the prevention of taxa of wildlife from becoming extinct, the sustainable use of and access to wildlife and to prohibit and regulate the conduct of persons engaged in activities concerning or related to wildlife. Permits to keep wildlife are issued pursuant to this Act.

The ***Planning and Environment Act 1987*** establishes State planning and land use processes including provisions for planning schemes for individual council areas. A planning scheme is a statutory document which sets out objectives, policies and provisions relating to the use, development, protection and conservation of land in the area to which it applies. A planning scheme regulates the use and development of land through planning provisions to achieve those objectives and policies. Every planning scheme includes the State Planning Policy Framework. This Framework consists of general principles for land use and development in Victoria and specific policies dealing with settlement, environment, housing, economic development, infrastructure, and particular uses and development. The Local Planning Policy Framework sets a local and regional strategic policy context for a municipality including Crown land. It comprises the Municipal Strategic Statement and specific local planning policies.

The ***Victorian Coastal Strategy 2008*** provides a long-term vision for the planning, management and sustainable use of the Victorian Coast. It is also a framework to assist in the development and implementation of other locally and regionally specific plans such as Management Plans, Coastal Action Plans and local government planning schemes. The Strategy aims to ensure long-term outcomes that: provide for the protection of significant environmental and cultural values; undertake integrated planning and provide clear direction for the future; and ensure the sustainable use of natural coastal resources.

Specific objectives identified in the Victorian Coastal Strategy 2008 that relate to Griffiths Island include:

- Protect and improve the ecological integrity of onshore coastal environments (VCS 1.3, Policy 2)
- Restore, rehabilitate and nurture coastal biodiversity and vegetation under regionally and locally determined priorities (VCS 1.3, Policy 9)
- Identify and protect Aboriginal cultural heritage along the coast, which may include restricting access to certain areas (VCS 1.5, Policy 1)
- Ensure sharing of information and research between governments, coastal, estuarine and marine agencies, research institutions and the wider community (VCS 2.3, Policy 3)
- Ensure ongoing and meaningful community engagement and active involvement in planning, management, and decision-making (VCS 2.4, Policy 2)
- Manage demand for coastal recreation, including Crown land access, to protect natural and cultural values and optimise visitor experiences (VCS 3.1.1, Policy 2)
- Ensure public safety considerations are addressed where public access to the coast is provided, readily available or encouraged (VCS 3.1.1, Policy 5)
- Address recreational fishing impacts through education, enforcement and suitable facilities (VCS 3.2, Policy 3)
- Improve and enhance tourists' and visitors' experience and understanding of the coast, while protecting sensitive and significant areas (VCS 2.3, Policy 4)
- Support investment in activity nodes and key recreation nodes with significant community benefit outcomes, and where a genuine need is identified (VCS 4.3, Policy 4)
- Ensure all local ports operate efficiently and effectively, and contribute positively to local character, amenity, recreation, economy and environmental values (VCS 4.3.1, Policy 1).

Victoria's Native Vegetation Management – A Framework for Action 2002 establishes the strategic direction for the protection, enhancement and revegetation of native vegetation across Victoria. It establishes the primary goal for native vegetation management – to achieve “a reversal, across the entire landscape, of the long term decline in the extent and quality of native vegetation, leading to a Net Gain.” If native vegetation is proposed to be removed as part of a land use or development proposal, planning and responsible authorities should achieve a Net Gain outcome, as defined in the Framework.

This is achieved firstly, as a priority, by avoiding adverse impacts, particularly native vegetation clearance; secondly, if impacts cannot be avoided, by minimising impacts through appropriate consideration in planning processes and expert input into project design or management; and thirdly, by identifying appropriate offset actions. The criteria for determining the appropriate response and offsets are contained within the Framework.

In addition to the key legislation listed above, others that may influence or interact with Griffiths Island include:

- *Archaeological and Aboriginal Relics Preservation Act 1972*
- *Catchment and Land Protection Act 1994*
- *Fisheries Act 1995*
- *Local Government Act 1989*
- *Port Services Act 1995*
- *Water Act 1989*
- *Marine Act 1988.*

The ***Great South Coast Regional Strategic Plan 2011*** is a practical strategy for the long term sustainable growth of the Great South Coast region – essentially the municipalities of Glenelg, Southern Grampians, Warrnambool, Corangamite, Colac Otway and Moyne.

Funded by the six Councils and Regional Development Victoria, the plan addresses the challenges and opportunities that the region will face across many key areas including the Environment.

The Plan lists 9 Environmental strategic goals and three further items for immediate action. Of these, the most relevant one to Griffiths Island calls for Federal and State Governments to “invest in measures to ensure nature based tourism locations and experiences are environmentally sustainable”.

The ***Great Ocean Road Tourism Development Strategy 1996*** was commissioned by the then Country Victoria Tourism Council (Tourism Alliance Victoria since 2004). It aimed to turn the entire region into the premier visitor destination in Southern Australia by 2001 by encouraging investment in a raft of often quite specific actions. Three of these are relevant to Griffiths Island, namely:

- Improve highway signage to key wildlife viewing areas such as Griffiths Island
- Develop improved interpretation, defined walking trails and another Shearwater viewing area (together with continued protection of the colony) on Griffiths Island
- Upgrade and increase the promotion of the Mahogany Walking Track.

Local

The ***Moyne Shire Council Planning Scheme*** sets out policies and controls for the use, development and protection of land. The strategic framework and directions for the future use of the municipalities are outlined in their ***Municipal Strategic Statements*** (MSS). The MSS states the strategic vision for the municipality and provides the rationale for the policies and planning controls that form part of the Moyne Shire Council Planning Scheme. It provides the strategic basis for the application of the zones, overlays and particular provisions in the planning scheme and decision making by the responsible authority.

The MSS recognises that the Shire contains limited areas of its original natural vegetation cover which primarily consisted of native forests and a combination of grasslands, woodlands and wetlands. Much of the remaining remnant vegetation exists only in small fragments, many of which are in poor health and restricted to small parcels of public land, scattered throughout the Shire. Most of the extensive areas of remaining native vegetation are on public land with limited areas of remnant vegetation located on private land. The remaining areas of native vegetation support a diverse range of flora and fauna and, with a large proportion of the Shire developed for agriculture, the MSS states that it is essential that these areas – particularly those within parks and reserves, coastal reserves and other pockets of remnant vegetation - be increased and managed to ensure the survival of all species.

Other key issues of relevance to Griffiths Island raised in the MSS include:

- Recognise and prevent the degradation of scenic landscapes including the coast, estuaries, wetlands, river valleys and inland ridgelines
- Recognise and address environmental problems affecting the municipality such as degraded land, erosion, the need for pest eradication and the lack of riparian vegetation
- Maintain biodiversity by protecting and enhancing the habitat of rare and threatened species
- Identify and protect significant exotic and indigenous trees, which contribute to the overall character of the Municipality, including avoidance of removal and lopping of such trees to facilitate the construction of buildings and works and installation of utility services
- Improve public access to the rivers and coast at appropriate locations
- Degraded riverbanks and adjacent land areas must be given high priority for restoration work and inappropriate development will be excluded
- It is vital that the qualities of the Shire's coastline not be compromised in the future through mismanagement of sewerage and waste water, improper tourism and housing development, and pollution of the various streams and creeks that feed into the sea
- There is a need to protect significant environmental features, and to establish clear directions in terms of future use and development of the coast
- The coastal and estuarine environment is being affected by activities, uses and development occurring outside and adjacent to the coastal area
- The hazard of development on the coast and close to estuaries and coastal wetlands disturbing acid sulphate soils and being affected by rising sea levels associated with climate change

- There is a need to develop programs that actively restore or protect further the important elements of the coastal environment
- Development in coastal areas must occur in a sensitive manner that does not impact upon the environmental significance and sensitivity of the coast
- There needs to be a greater understanding of coastal processes in order to protect the coastal attributes present in Moyne Shire
- Coastal access needs to be improved through the acquisition of land adjacent to the coast and providing fenced access points for the public
- The need to control further clearing, given that most of the Shire has already been cleared for agriculture
- The need to maintain the natural and man-made landscapes of the Shire
- The need to develop strategies to protect or enhance areas of environmental significance
- The need for coordinated management of public and private land to provide a diversity of flora and wildlife refuge areas.
- The need to protect remnant areas of native vegetation and associated habitats.
- The need for effective management of pest plants and animals that damage native flora and fauna.
- The need to retain the dominance of the landscape from key viewing locations throughout the Region.

The Reserve is zoned Public Park and Recreation Zone (PPRZ) with a Heritage Overlay (HO15) in place for the entire island as a result of its listing on the Victorian Heritage Register. The purposes of the Heritage Overlay are:

- To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.
- To conserve and enhance heritage places of natural or cultural significance.
- To conserve and enhance those elements which contribute to the significance of heritage places.
- To ensure that development does not adversely affect the significance of heritage places.
- To conserve specifically identified heritage places by allowing a use that would otherwise be prohibited if this will demonstrably assist with the conservation of the significance of the heritage place.

Under the Heritage Overlay, a planning permit would be required from Moyne Shire Council to:

- Demolish or remove a building (including part of a building).
- Construct a building (including part of a building) or a fence.
- Externally alter a building.
- Construct or carry out works (including installing bicycle pathways or trails).
- Construct or display a sign.
- Externally paint an unpainted surface
- Carry out works, repairs and routine maintenance that change the appearance of the heritage place or that are not undertaken to the same details, specifications and materials.

In some instances, control over trees may also apply.

Building on the recommendations of the Moyne Shire Coastal Area Study 1996 (CAS) – a management document for coastal recreation, tourism, rehabilitation and conservation adopted by Council in 1997 – the ***Moyne Coastal Action Plan 2001*** (CAP) presents a framework for the strategic development and future management of the Moyne Coast by identifying necessary priorities, actions or outcomes that are consistent with the VCS.

Within the CAP, Recommendation 14 contains the only specific action relating to Griffiths Island, this being:

- Prepare and implement a Management Plan for Griffiths Island...as a Semi-Developed Natural Visitor Area that:
 - Protects dune, beach and reef systems and the Shearwater colonies
 - Protects the area's historic and cultural values
 - Protects Aboriginal archaeological sites
 - Maintains and enhances visitor facilities and amenities
 - Provides linked interpretation of the natural and cultural features of the area.

The ***Moyne Shire Environmental Sustainability Strategy 2005*** seeks to provide a coordinated decision making framework and reference point for the protection and management of all key environmental assets within the Shire.

The strategy contains three actions that can broadly be related to Griffiths Island:

- Undertake a pest plant and animal control program on all council managed land identified as having a high conservation value;
- Identify weed species on Council managed land and, where appropriate, replace with indigenous or non-invasive species
- Encourage and support the participation and formation of groups focusing on local environmental and sustainability issues

The ***Moyne Shire Recreation Strategy 1997*** identifies Griffiths Island as an important recreational destination for tourists and locals who walk around the island. It recommends that remedial works be undertaken to restore safe access around the island and for Council to embark on a program of ongoing improvements to maintain access around the island.

The ***Moyne Shire Open Space Strategy 2003*** established a future direction and long-term planning framework for the development and management of open space within the Shire. The strategy concentrated on improving recreational opportunities through open space development, rather than focussing primarily on the environmental values of specific areas of open space. However, it did list the circular walking trail around Griffiths Island as a part of the "existing track network" which in turn means this trail is included in the following recommendations:

- Upgrade and/or new footpaths/signage and maintenance programs
- Identify and map trails for signage and visitor information
- Improve links to other trails (e.g. Southcombe Park) including the provision of a new safe crossing point/refuges across Ocean Drive.

The ***Moyne Shire Community Access Plan 2009-2013*** seeks to meet Council's obligation to comply with relevant disability standards, regulations and legislation to ensure equitable access and participation by all people to Council operations, services and facilities – whether part of the built, social, economic and/or natural environment. The following three actions listed within this plan are loosely appropriate to Griffiths Island:

- Develop and implement townscape upgrades that include improving universal access (by adopting a priority program for upgrades to footpaths, walkways and kerbed crossings as per Community Footpath Program)
- Develop and implement improvements to recreational facilities and open space amenities (by adopting a priority program to provide enhanced access to recreational and open space facilities including the beach at Port Fairy)
- Major tourist projects are inclusive of all community members (by ensuring the needs of people with disabilities are incorporated into strategic plans).

The ***Moyne Shire Community Safety Plan 2010-2014*** is Council's key policy document providing strategic direction for Council policies and programs to address community safety in the municipality. Its vision is around continuously improving community confidence to access and participate in all aspects of life at all times of the day. The plan lists 46 actions, seven of which could be deemed as pertinent to Griffiths Island, these being:

- Ensure streets and public spaces are clean
- Review and enhance signage in public spaces
- Enhance universal access and pathways to public toilets and recreation facilities
- Promote dog safety
- Water safety awareness education and signage
- Promote walking trails/safe bike paths
- Community education and awareness of shared use of facilities (e.g. pedestrian/cyclist signage)

Despite Griffiths Island being an extremely highly visited natural attraction, The ***Moyne Shire Tourism & Marketing Strategy 2010*** makes no specific recommendations relating to Griffiths Island. It does state that "Moyne should preserve its natural attractions and enhance their tourism popularity through greater marketing and focusing on these natural attributes as a tourism selling point" (p.56). It goes on to recognise that there is a compelling case for Council to take a more proactive role in tourism and, amongst other things, that Council is the provider and manager of infrastructure and services used by tourists. It does list three 'opportunities' that could be relevant/applicable to actions within this plan, namely:

- Enhance interpretive and directional signage to key natural attractions within the Shire
- Explore opportunities to promote shipwrecks off Port Fairy as dive experiences
- Improve walking/cycling tracks around Port Fairy.

Previous management plan/s

Under the original CAS, Griffiths Island was one of six specific locations where an ***Interpretive Master Plan 1996*** was developed. The key recommendation of this plan was to identify interpretive signage at 16 points, and associated topics. To date half of these have been developed and installed. Most of the other recommendations have been implemented or found to be impractical. The few actions that may still have some relevance include:

- Conduct further flora and fauna investigations to recommend a comprehensive weed and pest control program and re-vegetation plan
- Installation of a sign at the island entrance indicating the location of public toilets
- Involvement of representatives of the local community in the preparation of interpretive materials and programs for visitors.

Having received a sizeable government grant, Moyne Shire Council convened a nine member Griffiths Island Habitat Protection and Enhancement Steering Committee to oversee the development and implementation of a ***Master Works Plan 2004***. The plan aimed to enhance the island's natural features and functions by focussing on issues that, at the time, affected the island, recommending actions to resolve these within the set project funding timeframe. To a lesser extent, it provided a framework and justification for future works that would occur in ensuing years.

Although implementation of this plan took well over six years, few actions remain outstanding. The main two areas where little progress has been made are:

- Tracks – auditing; zoning; & associated signage
- Signage – installation of specific welcome and regulatory signs

There are many actions such as pest plant and animal control that, though at the time completed were completed, are required as ongoing maintenance.

Appendix 2

Details of BioSite 4465, Griffiths Island.

Griffith Island (Site # 4465)

Significance Level: Local Status: Draft

DESCRIPTION

Habitat

Office Portland

Bioregion

Region South West

Initial Observer

Name

Date

Destroyed

LOCALITY

Latitude 38 Deg 24 Min 0Sec

Longitude 142 Deg 15 Min 0 Sec

Zone 54

Full Easting 609150

Full Northing 5749048

Short Easting 91

Short Northing 490

Datum AGD 66

GIS Location Verified No

Map sheet Name

Main Map sheet

Map sheet Number

Scale

Site Shape Non-linear

Area (Ha)

Altitude (m)

Description of site size and shape coastal island

Linear Reserves

Type

Width (m)

Length (m)

Boundary Derivation Aerial photography (medium scale > 1:10 000 & < 1:25 000)

How to get there

Grid 10

ASSETS

Animal Species

Short-tailed Shearwater *Ardenna tenuirostris*

ESP FFG AROT

VROT

Origin 0

Confidential No

Location Information

Habitat Details

Management Information breeding population 43400 - 44700 burrows (1978)

Threat

Pollution/toxins - Chemicals - oil spills

Immediacy

Likely

Proximity

Directly affecting asset

Impact

Minor

Comments

oil spills, food shortage, predation, (Admin generated Immediacy), (Admin generated

Impact)

Other Asset Historical site (transferred from Site Register)

Confidential No

Location Information

Habitat Details

Management Information

Other Asset Breeding site

Confidential No

Location Information

Habitat Details

Management Information

MANAGEMENT

Public or Private Land Not Known

Local Government Authority Moyne Shire

Monitoring of site needed Yes

Monitoring of site occurring No

Relevant Information Sources The seabirds of the Victorian islands., Harris, M.P.

Relevant Information Sources

Distribution and status of coastal colonies of seabirds in Victoria, Harris, M.P. & Norman, F.I.

Total Sites for selection criteria Single Site: 1

Please note when using these reports that the BioSite database has a number of constraints that must be taken into consideration:

- The BioSites database is not complete, and information regularly changes.
- Data quality is variable and not necessarily current. In particular, in the Port Phillip Region when the last major BioSite data update was undertaken the EVC mapping had not been finalised, therefore the significance of the vegetation may not be accurate.
- The "Standard criteria for sites of biological significance in Victoria" (DSE 2004 - see web link below) was not finalised for use in the last major data update undertaken by the Port Phillip Region.
- It is also possible that surveys have occurred since which may have identified additional threatened species or vegetation types that are not recorded in the BioSites database.
- Council may have undertaken their own studies or sites of significance projects and may have information that is not recorded in the BioSites database.
- In addition, further losses of vegetation over the years is likely to increase the importance of the remaining vegetation.

In summary the significance level of a BioSite is likely to be higher, rather than lower, than that which is currently recorded in the BioSite database.

DSE does not guarantee that this data is complete or without flaw of any kind and therefore disclaims all liability which may arise from reliance on this data.

These BioSite reports should only be used as a guide and can not replace the need for an on-ground site assessment.

Appendix 3

Victorian Heritage Register Entry for Griffiths Island.

CATEGORY: Heritage Place

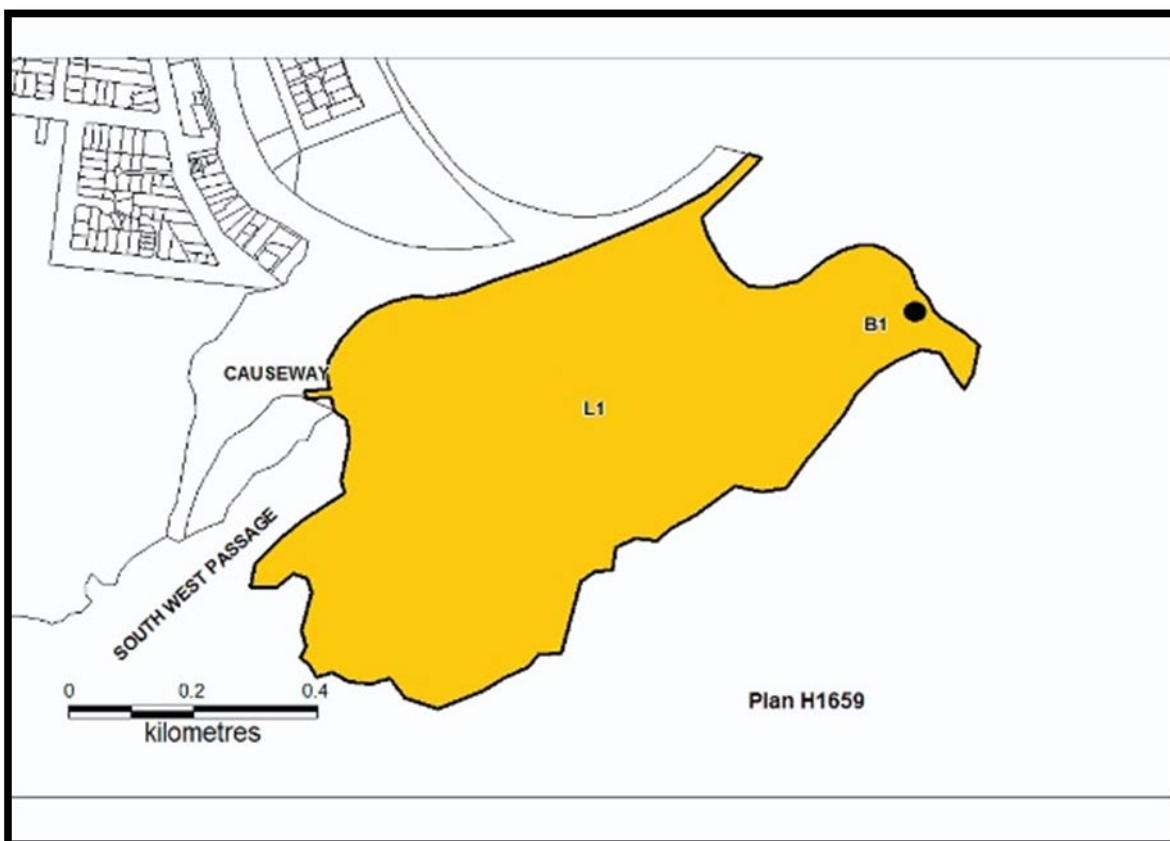
NAME: Griffith Island File 602953

LOCATION: GRIFFITHS ISLAND PORT FAIRY, Moyne Shire

VHR NUMBER: H1659

Extent of Registration:

To the extent of: All of the place known as Griffiths Island, Port Fairy, being marked L1 on plan H1659 held by the Executive Director, and all the building known as the Griffith Island lighthouse, marked B1 on plan H1659 held by the Executive Director



HERITAGE REGISTER NUMBER: H1659

NAME: GRIFFITH ISLAND LIGHTHOUSE

STATEMENT OF CULTURAL HERITAGE SIGNIFICANCE:

What is significant?

Griffiths Island, Port Fairy, is an unusual geological landform, consisting of an isolated basalt outcrop, overlain with calcareous sand, and partly bounded by possible collapsed lava tunnels. It lies to the south east of the town of Port Fairy, at the mouth of the Moyne River, and at the extremity of the Mount Rouse lava flow. At the time of European settlement, the island consisted of three separate islands (Griffiths, Rabbit and Goat Island), but these have now been joined into one as a result of altered environmental conditions, effected to improve the quality of the bay anchorage and navigability of the Moyne River.

The first European use of the island was as a base for a bay whaling station in the mid 1830s. Historic plans identify a whaling station, owned initially by "Messrs Connolly & Co" and later by "Mr John Griffiths" located at the eastern tip of Rabbit Island. Old whaling buildings and a "Trywork Hill" are also shown on Griffiths Island on 1850s charts. The whaling operations ceased by about 1843, as the industry fell into terminal decline.

The whalers' wooden buildings were re-used by Flora Rachel Wallace Dunlop as a house, farm, schoolroom and dormitory for the benefit of young Aborigines. Dunlop occupied the island until 1854, and it is likely that the whaling buildings were dismantled sometime following her departure. Ship building also took place on Griffiths Island in the 1840s. The sea-going vessel *The Brothers* is recorded as being constructed on the island in 1847.

The Port Fairy lighthouse was erected on a one acre site on Rabbit Island in 1859 to mark the entrance to the Moyne River and Port Fairy Harbour, at a time when the town was a thriving trading port for western Victoria. The Public Works Department designed a circular basalt lighthouse with machicolated capital and domed metal lantern, and the local firm of McKenzie and McGowan were responsible for its construction. Erected unusually at sea level, the lighthouse stands almost eleven metres above high water level and contains a notable spiral stone staircase, with each step inserted in a course of stonework in the outside wall.

Lighthouse keepers' quarters were also built at this time, the senior keeper's house being of standard Public Works Department design, slightly modified for the site. A flagstaff, for signalling tide heights, was erected on a high point to the west, and a small basalt jetty was constructed to service the lighthouse with fuel and supplies. The lighthouse keepers' quarters and compound were demolished after the Harbour Master was relocated to near Battery Hill in 1956, and the lighthouse now operates remotely. The foundations of the lighthouse keepers' quarters are still discernible, and a group of Norfolk Island pines marks the compound perimeter.

Numerous harbour improvement works since the 1860s have contributed to the changing form of Griffiths Island. The northernmost extent of the island is formed by training walls, constructed from the 1860s and extended until the 1920s with advice from notable marine engineer Sir John Coode to enable the Moyne River to be self-scouring. Quarries to supply stone for the works are still evident on the island. The island has a large mutton bird colony.

How is it significant?

Griffiths Island is of historical and archaeological significance to the State of Victoria.

Why is it significant?

Griffiths Island is historically significant as the location of an important bay whaling station in the 1830s and 1840s. It has strong archaeological potential to reveal evidence of whaling buildings and processes, and to contain artefacts and other deposits relating to the earliest period of European economic activity in Victoria. The archaeological potential is particularly high because of the sand, fill and vegetation which has accumulated since the 1860s.

Griffiths Island is of historic significance for its contribution to the development of the port of Port Fairy, one of the most significant of the historic early ports in western Victoria. It is evidence of Victoria's early maritime heritage and of the importance of regional ports in the process of colonial expansion. The training walls and other harbour works were one of Victoria's major maritime infrastructure works programs. The lighthouse, one of four harbour lights constructed by the Public Works Department in 1859, is the only one to remain in its original location. The lighthouse is also significant for its unusual location at sea level. There is strong archaeological potential to reveal more evidence of the keepers' quarters and gardens.

HERITAGE REGISTER NUMBER H1659

NAME: GRIFFITH ISLAND LIGHTHOUSE

EXEMPTIONS FROM PERMITS

Classes of works or activities which may be undertaken without a permit under Part 4 of the Heritage Act 1995.

Griffiths Island is a highly modified landscape that is significant for both historical and archaeological values. The values to be protected by the Act relate to the lighthouse, and the archaeological potential of the whaling stations, and the lighthouse keepers quarters and gardens, the quarries, and exotic vegetation associated with these early phases of European occupation and use. The archaeological record of the whaling stations is likely to be well preserved because of the substantial physical changes (largely due to sand accumulation to the original islands of Griffiths Island and Rabbit Island) since whaling ceased in the mid 1840s.

The management and control of exotic vegetation requires close liaison with DSE and the Committee of Management to ensure that both cultural and natural values can be maintained. Any weed management or biodiversity plans to be prepared or modified should be referred to Heritage Victoria for comment before adoption.

Species that are known historic plantings should be "contained" to their original areas and not removed, but are able to be removed from outside these areas if they are impacting on other values of the island.

Infrastructure works such as boardwalks and viewing platforms for the shearwater bird colony will require a permit.

The purpose of the permit exemptions is to allow a level of management works that do not impact on the significant heritage values.

Permit Exemptions

Provisional, 16 Nov 2006

Regular Site Maintenance: The following site maintenance works are permit exempt under section 66 of the Heritage Act 1995:

- a) regular site maintenance provided the works do not involve the removal or destruction of any significant above-ground features or sub-surface archaeological artefacts or deposits;
- b) the maintenance of an item to retain its conditions or operation without the removal of or damage to the existing fabric or the introduction of new materials;
- c) cleaning including the removal of surface deposits, organic growths, or graffiti by the use of low pressure water and natural detergents and mild brushing and scrubbing;
- d) repairs, conservation and maintenance to plaques, memorials, roads and paths, fences and gates and drainage and irrigation;
- e) the replacement of existing services such as cabling, plumbing, wiring and fire services that uses existing routes, conduits or voids, and does not involve damage to or the removal of significant fabric.

Note: Surface patina which has developed on the fabric may be an important part of the item's significance and if so needs to be preserved during maintenance and cleaning.

Note: Any new materials used for repair must not exacerbate the decay of existing fabric due to chemical incompatibility, obscure existing fabric or limit access to existing fabric for future maintenance. Repair must maximize protection and retention of fabric and include the conservation of existing details or elements.

Fire Suppression Duties: The following fire suppression duties are permit exempt under section 66 of the Heritage Act 1995:

- a) Fire suppression and fire fighting duties provided the works do not involve the removal or destruction of any significant above-ground features or sub-surface archaeological artefacts or deposits;
- b) Fire suppression activities such as fuel reduction burns, and fire control line construction, provided all significant historical and archaeological features are appropriately recognized and protected;

Note: Fire management authorities should be aware of the location, extent and significance of historical and archaeological places when developing fire suppression and fire fighting strategies. The importance of places listed in the Heritage Register must be considered when strategies for fire suppression and management are being developed.

Weed and Vermin Control: The following weed and vermin control activities are permit exempt under section 66 of the Heritage Act 1995:

- a) Weed and vermin control activities provided the works do not involve the removal or destruction of any significant above-ground features or sub-surface archaeological artefacts or deposits;

Note: Particular care must be taken with weed and vermin control works where such activities may have a detrimental affect on the significant fabric of a place. Such works may include the removal of ivy, moss or lichen from an historic structure or feature, or the removal of burrows from a site that has archaeological values.

Landscape Maintenance: The following landscape maintenance works are permit exempt under section 66 of the Heritage Act 1995:

- a) landscape maintenance works provided the activities do not involve the removal or destruction of any significant above-ground features or sub-surface archaeological artefacts or deposits;
- b) watering, mowing, top-dressing and fertilizing necessary for the continued health of plants, without damage or major alterations to layout, contours, plant species or other significant landscape features;
- c) management of trees in accordance with Australian Standard; Pruning of Amenity Trees AS 4373.

Public Safety and Security: The following public safety and security activities are permit exempt under section 66 of the Heritage Act 1995:

- a) public safety and security activities provided the works do not involve the removal or destruction of any significant above-ground structures or sub-surface archaeological artefacts or deposits;
- b) the erection of temporary security fencing, scaffolding, hoardings or surveillance systems to prevent unauthorized access or secure public safety which will not adversely affect significant fabric of the place including archaeological features;
- c) development including emergency stabilization necessary to secure safety where a site feature has been irreparably damaged or destabilized and represents a safety risk to its users or the public.

Note: Urgent or emergency site works are to be undertaken by an appropriately qualified specialist such as a structural engineer, or other heritage professional.

Signage and Site Interpretation: The following Signage and Site Interpretation activities are permit exempt under section 66 of the Heritage Act 1995:

- a) signage and site interpretation activities provided the works do not involve the removal or destruction of any significant above-ground structures or sub-surface archaeological artefacts or deposits;
- b) the erection of non-illuminated signage for the purpose of ensuring public safety or to assist in the interpretation of the heritage significance of the place or object and which will not adversely affect significant fabric including landscape or archaeological features of the place or obstruct significant views of and from heritage values or items;
- c) signage and site interpretation products must be located and be of a suitable size so as not to obscure or damage significant fabric of the place;

d) signage and site interpretation products must be able to be later removed without causing damage to the significant fabric of the place;

Note: The development of signage and site interpretation products must be consistent in the use of format, text, logos, themes and other display materials.

Note: Where possible, the signage and interpretation material should be consistent with other schemes developed on similar or associated sites. It may be necessary to consult with land managers and other stakeholders concerning existing schemes and strategies for signage and site interpretation.

Minor Works:

Note: Any Minor Works that in the opinion of the Executive Director will not adversely affect the heritage significance of the place may be exempt from the permit requirements of the Heritage Act. A person proposing to undertake minor works may submit a proposal to the Executive Director. If the Executive Director is satisfied that the proposed works will not adversely affect the heritage values of the site, the applicant may be exempted from the requirement to obtain a heritage permit. If an applicant is uncertain whether a heritage permit is required, it is recommended that the permits co-ordinator be contacted.

Appendix 4

Griffiths Island Flora.

TAXON_CDE	ORIGIN	FFG	VICADV	EPBC	SCIENTIFIC NAME	COMMON NAME
500105					<i>Acaena novae-zelandiae</i>	Bidgee-widgee
500127					<i>Actites megalocarpa</i>	Dune Thistle
500145	Introduced				<i>Elytrigia repens</i>	English Couch
500179	Introduced				<i>Allium triquetrum</i>	Angled Onion
500183	Introduced				<i>Alopecurus pratensis</i>	Meadow Fox-tail
500205	Introduced				<i>Ammophila arenaria</i>	Marram Grass
500223	Introduced				<i>Anagallis arvensis</i>	Pimpernel
500226	Introduced				<i>Anchusa capensis</i>	Cape Forget-me-not
500247					<i>Apium prostratum</i> subsp. <i>prostratum</i>	Sea Celery
500255	Introduced				<i>Arctotheca calendula</i>	Cape Weed
500316					<i>Atriplex cinerea</i>	Coast Saltbush
500318	Introduced				<i>Atriplex prostrata</i>	Hastate Orache
500326			R		<i>Atriplex paludosa</i> subsp. <i>paludosa</i>	Marsh Saltbush
500384	Introduced				<i>Bellis perennis</i>	English Daisy
500394					<i>Beyeria lechenaultii</i>	Pale Turpentine-bush
500469					<i>Brachyscome parvula</i>	Coast Daisy
500498	Introduced				<i>Bromus catharticus</i>	Prairie Grass
500500	Introduced				<i>Bromus diandrus</i>	Great Brome
500520	Introduced				<i>Cakile edentula</i>	American Sea Rocket
500581					<i>Leucophyta brownii</i>	Cushion Bush
500621	Introduced				<i>Carduus tenuiflorus</i>	Winged Slender-thistle
500657					<i>Carpobrotus rossii</i>	Karkalla
500687	Introduced				<i>Catapodium rigidum</i>	Fern Grass
500719	Introduced				<i>Cerastium glomeratum</i> s.l.	Common Mouse-ear Chickweed
500729	Introduced				<i>Chasmanthe floribunda</i>	African Cornflag
500736	Introduced				<i>Chenopodium album</i>	Fat Hen

Griffiths Island Management Plan (draft) June 2011

TAXON_CDE	ORIGIN	FFG	VICADV	EPBC	SCIENTIFIC NAME	COMMON NAME
500746	Introduced				<i>Chenopodium murale</i>	Sowbane
500790					<i>Clematis microphylla</i> s.l.	Small-leaved Clematis
500823	Introduced				<i>Coprosma repens</i>	Mirror Bush
500846					<i>Cotula australis</i>	Common Cotula
500908					<i>Cynoglossum australe</i>	Australian Hound's-tongue
501036					<i>Dichondra repens</i>	Kidney-weed
501065	Introduced				<i>Diplotaxis muralis</i>	Wall Rocket
501066	Introduced				<i>Diplotaxis tenuifolia</i>	Sand Rocket
501073					<i>Disphyma crassifolium</i> subsp. <i>clavellatum</i>	Rounded Noon-flower
501076					<i>Distichlis distichophylla</i>	Australian Salt-grass
501139					<i>Eleocharis acuta</i>	Common Spike-sedge
501147	Introduced				<i>Eleusine indica</i>	Goose-grass
501332	Introduced				<i>Euphorbia peplus</i>	Petty Spurge
501361			R		<i>Austrofestuca littoralis</i>	Coast Fescue
501370	Introduced				<i>Foeniculum vulgare</i>	Fennel
501412	Introduced				<i>Galium murale</i>	Small Goosegrass
501426	Introduced				<i>Geranium dissectum</i>	Cut-leaf Crane's-bill
501428	Introduced				<i>Geranium molle</i> var. <i>molle</i>	Dove's Foot
501654					<i>Hemarthria uncinata</i> var. <i>uncinata</i>	Mat Grass
501656					<i>Hemichroa pentandra</i>	Trailing Hemichroa
501692	Introduced				<i>Holcus lanatus</i>	Yorkshire Fog
501741					<i>Hypericum gramineum</i>	Small St John's Wort
501748	Introduced				<i>Hypochaeris radicata</i>	Flatweed
501760	Native but some stands may be alien				<i>Imperata cylindrica</i>	Blady Grass
501782					<i>Ficinia nodosa</i>	Knobby Club-sedge
501864	Introduced				<i>Lagurus ovatus</i>	Hare's-tail Grass
501922					<i>Lepidosperma gladiatum</i>	Coast Sword-sedge
501987					<i>Leucopogon parviflorus</i>	Coast Beard-heath
502078	Introduced				<i>Lycium ferocissimum</i>	African Box-thorn
502092					<i>Lythrum hyssopifolia</i>	Small Loosestrife

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TAXON_CDE	ORIGIN	FFG	VICADV	EPBC	SCIENTIFIC NAME	COMMON NAME
502180			E		<i>Microlepidium pilosulum</i>	Hairy Shepherd's Purse
502239	Native but some stands may be alien				<i>Myoporum insulare</i>	Common Boobialla
502379					<i>Oxalis corniculata</i> s.l.	Yellow Wood-sorrel
502418	Introduced				<i>Parapholis incurva</i>	Coast Barb-grass
502511	Introduced				<i>Helminthotheca echioides</i>	Ox-tongue
502553	Introduced				<i>Plantago coronopus</i>	Buck's-horn Plantain
502584					<i>Poa clelandii</i>	Noah's Ark
502592			R		<i>Poa fax</i>	Scaly Poa
502605					<i>Poa poiformis</i>	Coast Tussock-grass
502622	Introduced				<i>Polycarpon tetraphyllum</i>	Four-leaved Allseed
502650					<i>Pomaderris aspera</i>	Hazel Pomaderris
502671					<i>Pomaderris racemosa</i>	Cluster Pomaderris
502912					<i>Ranunculus sessiliflorus</i>	Annual Buttercup
502917	Introduced				<i>Raphanus raphanistrum</i>	Wild Radish
502927					<i>Rhagodia candolleana</i> subsp. <i>candolleana</i>	Seaberry Saltbush
502932	Introduced				<i>Rhamnus alaternus</i>	Italian Buckthorn
502969	Introduced				<i>Rumex conglomeratus</i>	Clustered Dock
502985	Introduced				<i>Sagina apetala</i>	Common Pearlwort
503001					<i>Samolus repens</i>	Creeping Brookweed
503011					<i>Sarcocornia blackiana</i>	Thick-head Glasswort
503027	Introduced				<i>Schinus molle</i>	Pepper Tree
503084					<i>Tecticornia arbuscula</i>	Shrubby Glasswort
503100					<i>Selliera radicans</i>	Shiny Swamp-mat
503105	Introduced				<i>Senecio elegans</i>	Purple Groundsel
503107					<i>Senecio glomeratus</i>	Annual Fireweed
503114					<i>Senecio pinnatifolius</i>	Variable Groundsel
503119					<i>Senecio minimus</i>	Shrubby Fireweed
503138	Introduced				<i>Sherardia arvensis</i>	Field Madder
503204	Introduced				<i>Sonchus oleraceus</i>	Common Sow-thistle
503222					<i>Spinifex sericeus</i>	Hairy Spinifex
503226	Introduced				<i>Sporobolus africanus</i>	Rat-tail Grass

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TAXON_CDE	ORIGIN	FFG	VICADV	EPBC	SCIENTIFIC NAME	COMMON NAME
503251	Introduced				<i>Stellaria media</i>	Chickweed
503260	Introduced				<i>Stenotaphrum secundatum</i>	Buffalo Grass
503276					<i>Austrostipa flavescens</i>	Coast Spear-grass
503312					<i>Suaeda australis</i>	Austral Seablite
503343					<i>Tetragonia implexicoma</i>	Bower Spinach
503360		L	X		<i>Atriplex billardierei</i>	Glistening Saltbush
503427	Introduced				<i>Trifolium dubium</i>	Suckling Clover
503449					<i>Triglochin striata</i>	Streaked Arrowgrass
503477	Introduced				<i>Urtica urens</i>	Small Nettle
503621					<i>Atriplex australasica</i>	Native Orache
503695	Introduced				<i>Hordeum murinum</i> s.l.	Barley-grass
503840	Introduced				<i>Limonium hyblaenum</i>	Sicilian Sea-lavender
503947					<i>Pomaderris paniculosa</i> subsp. <i>paralia</i>	Coast Pomaderris
504312					<i>Clematis microphylla</i> var. <i>microphylla</i> spp. agg.	Small-leaved Clematis
504444					<i>Epilobium billardierianum</i> subsp. <i>billardierianum</i>	Smooth Willow-herb
504445					<i>Epilobium billardierianum</i> subsp. <i>cinereum</i>	Grey Willow-herb
504755			V		<i>Adriana quadripartita</i>	Coast Bitter-bush
505502	Introduced				<i>Osteospermum fruticosum</i>	Dimorphotheca
506585					<i>Ptychomitrium australe</i>	Pincushion
506694					<i>Barbula calycina</i>	Common Beard-moss
506703					<i>Tortula muralis</i>	Common Wall-moss
506751					<i>Zygodon menziesii</i>	Zygodon
506752					<i>Zygodon minutus</i>	Zygodon

Appendix 5

Griffith Island Fauna.

TAXON_CDE	ORIGIN	FFG	VICADV	EPBC	TREATY	SCIENTIFIC NAME	COMMON NAME
10005						<i>Eudyptula minor</i>	Little Penguin
10046						<i>Gallirallus philippensis</i>	Buff-banded Rail
10055						<i>Gallinula ventralis</i>	Black-tailed Native-hen
10056						<i>Gallinula tenebrosa</i>	Dusky Moorhen
10062						<i>Polioccephalus poliocephalus</i>	Hoary-headed Grebe
10068						<i>Puffinus gavia</i>	Fluttering Shearwater
10071					JAMBA	<i>Ardenna tenuirostris</i>	Short-tailed Shearwater
10074						<i>Fulmarus glacialoides</i>	Southern Fulmar
10088			VU	VU		<i>Thalassarche melanophris melanophris</i>	Black-browed Albatross
10091		L	VU	VU		<i>Thalassarche cauta</i>	Shy Albatross
10096						<i>Phalacrocorax carbo</i>	Great Cormorant
10097						<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant
10098			NT			<i>Phalacrocorax fuscescens</i>	Black-faced Cormorant
10099			NT			<i>Phalacrocorax varius</i>	Pied Cormorant
10100						<i>Microcarbo melanoleucos</i>	Little Pied Cormorant
10104						<i>Morus serrator</i>	Australasian Gannet
10112		L	NT		CAMBA JAMBA	<i>Hydroprogne caspia</i>	Caspian Tern
10115						<i>Thalaseus bergii</i>	Crested Tern
10118		L	EN			<i>Sternula nereis nereis</i>	Fairy Tern
10125						<i>Chroicocephalus novaehollandiae</i>	Silver Gull
10128					JAMBA	<i>Stercorarius parasiticus</i>	Arctic Jaeger
10129					CAMBA JAMBA	<i>Arenaria interpres</i>	Ruddy Turnstone
10130						<i>Haematopus longirostris</i>	Pied Oystercatcher
10131			NT			<i>Haematopus fuliginosus</i>	Sooty Oystercatcher
10133						<i>Vanellus miles</i>	Masked Lapwing
10138		L	VU			<i>Thinornis rubricollis rubricollis</i>	Hooded Plover

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TAXON_CDE	ORIGIN	FFG	VICADV	EPBC	TREATY	SCIENTIFIC NAME	COMMON NAME
10143						<i>Charadrius ruficapillus</i>	Red-capped Plover
10146						<i>Himantopus himantopus</i>	Black-winged Stilt
10147						<i>Cladorhynchus leucocephalus</i>	Banded Stilt
10153					CAMBA JAMBA	<i>Limosa lapponica</i>	Bar-tailed Godwit
10155		L	CR		CAMBA JAMBA	<i>Heteroscelus brevipes</i>	Grey-tailed Tattler
10157			VU		CAMBA JAMBA	<i>Actitis hypoleucos</i>	Common Sandpiper
10158					CAMBA JAMBA	<i>Tringa nebularia</i>	Common Greenshank
10159					CAMBA JAMBA	<i>Tringa stagnatilis</i>	Marsh Sandpiper
10162					CAMBA JAMBA	<i>Calidris ruficollis</i>	Red-necked Stint
10163					CAMBA JAMBA	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper
10166			NT		CAMBA JAMBA	<i>Calidris alba</i>	Sanderling
10168			NT		CAMBA JAMBA	<i>Gallinago hardwickii</i>	Latham's Snipe
10179						<i>Threskiornis molucca</i>	Australian White Ibis
10180						<i>Threskiornis spinicollis</i>	Straw-necked Ibis
10181			VU			<i>Platalea regia</i>	Royal Spoonbill
10185		L	EN			<i>Egretta garzetta nigripes</i>	Little Egret
10187		L	VU		CAMBA JAMBA	<i>Ardea modesta</i>	Eastern Great Egret
10188						<i>Egretta novaehollandiae</i>	White-faced Heron
10203						<i>Cygnus atratus</i>	Black Swan
10207						<i>Tadorna tadornoides</i>	Australian Shelduck
10208						<i>Anas superciliosa</i>	Pacific Black Duck
10210						<i>Anas castanea</i>	Chestnut Teal
10211						<i>Anas gracilis</i>	Grey Teal
10213						<i>Malacorhynchus membranaceus</i>	Pink-eared Duck
10219						<i>Circus approximans</i>	Swamp Harrier

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TAXON_CDE	ORIGIN	FFG	VICADV	EPBC	TREATY	SCIENTIFIC NAME	COMMON NAME
10232						Elanus axillaris	Black-shouldered Kite
10239						Falco berigora	Brown Falcon
10240						Falco cenchroides	Nankeen Kestrel
10241						Pandion cristatus	Osprey
10272						Cacatua tenuirostris	Long-billed Corella
10326						Todiramphus sanctus	Sacred Kingfisher
10357						Hirundo neoxena	Welcome Swallow
10361						Rhipidura albiscarpa	Grey Fantail
10364						Rhipidura leucophrys	Willie Wagtail
10366						Myiagra cyanoleuca	Satin Flycatcher
10415						Grallina cyanoleuca	Magpie-lark
10448						Epthianura albifrons	White-fronted Chat
10475						Acanthiza pusilla	Brown Thornbill
10486						Acanthiza chrysorrhoa	Yellow-rumped Thornbill
10508						Cincloramphus cruralis	Brown Songlark
10574						Zosterops lateralis	Silvereye
10578						Melithreptus lunatus	White-naped Honeyeater
10608						Lichenostomus virescens	Singing Honeyeater
10614						Lichenostomus chrysops	Yellow-faced Honeyeater
10638						Anthochaera carunculata	Red Wattlebird
10647						Anthus novaeseelandiae	Australasian Pipit
10705						Gymnorhina tibicen	Australian Magpie
10868						Corvus tasmanicus	Forest Raven
10930						Corvus coronoides	Australian Raven
10954						Corvus mellori	Little Raven
10981						Larus dominicanus	Kelp Gull
10991	Introduced					Turdus merula	Common Blackbird
10993	Introduced					Alauda arvensis	European Skylark
10995	Introduced					Passer domesticus	House Sparrow
10996	Introduced					Carduelis carduelis	European Goldfinch
10997	Introduced					Carduelis chloris	European Greenfinch
10999	Introduced					Sturnus vulgaris	Common Starling

TAXON_CDE	ORIGIN	FFG	VICADV	EPBC	TREATY	SCIENTIFIC NAME	COMMON NAME
11242						Wallabia bicolor	Black Wallaby
11408	Introduced					Rattus rattus	Black Rat
11532	Introduced					Vulpes vulpes	Red Fox
11539						Neophoca cinerea	Australian Sea Lion
11542						Arctocephalus pusillus	Australian Fur Seal
11578						Physeter macrocephalus	Sperm Whale
60126			NT			Larus pacificus pacificus	Pacific Gull

ACKNOWLEDGEMENT OF DATA SOURCES FOR APPENDICES NUMBER 4 AND 5.

1. Data Source: 'Victorian Flora Site Database', © The State of Victoria, Department of Sustainability and Environment (accessed via the 'Flora Information System', [month] [year] - © Viridans Biological Databases). The contribution of the Royal Botanical Gardens Melbourne to the database is acknowledged.

2. Data Source: 'Atlas of Victorian Wildlife', © The State of Victoria, Department of Sustainability and Environment (accessed via the 'Victorian Fauna Database', [month] [year] - © Viridans Biological Databases).

3. Data Source: 'Aquatic Fauna Database', © The State of Victoria, Department of Sustainability and Environment

Appendix 6

Griffiths Island Management Regulations.

The following regulations pertain to Griffiths Island and were advertised in the Victorian Government Gazette on 21 March 1979 (pages 769 & 770):

1. No person shall –
 - (a) Enter or remain in the Reserve who may offend against decency as regards to dress, language or conduct or who may behave in a disorderly, unseemly or offensive manner or create or take part in any disturbance;
 - (b) Enter or remain in the Reserve whilst under the influence of liquor or drugs;
 - (c) Behave in a manner which tends to frighten unduly or disturb any bird or animal in the Reserve;
 - (d) Play at or engage in any game or athletic sport or gymnastic exercise in the Reserve;
 - (e) Light or cause to be lit any fire in the Reserve;
 - (f) Throw down or drop any lighted tobacco, cigarette, cigar, match or any other burning material or thing in the reserve;
 - (g) Bring into or allow any animal of any kind to enter or remain in the reserve; any dog or cat found in the Reserve shall be liable to be destroyed and any horses or cattle...found trespassing within the Reserve shall be liable to be impounded;
 - (h) Obstruct, disturb or annoy any officer or employee of the Committee in the lawful execution of his work or duty.
2. No person shall, unless authorised in writing by the Committee –
 - (a) Carry or bring into the Reserve any trap, poison, snare, firearm or any weapon capable of discharging a missile;
 - (b) Trap, poison, snare, catch or otherwise destroy or interfere with or take away any animal or bird found in the Reserve or interfere with or take away therefrom any skin, egg, feather or nest;
 - (c) Bring into the Reserve any seed or any portion of any plant or tree;
 - (d) Offer or expose for sale in the Reserve any article of food or drink or any other merchandise whatsoever;
 - (e) Deposit in the Reserve any rubbish, litter or refuse of any kind except in receptacles provided for the purpose;
 - (f) Break, cut, damage, dig-up or injure in any way or take away the whole or portion of any tree, shrub, plant, seed, scrub, undergrowth, fern, flower, soil or any other vegetation or property in the Reserve;
 - (g) Cut or paint names or letters, marks or other matter on the trees, gates, posts or fences in or around the Reserve or otherwise deface the same or post any bills or advertisements thereto;
 - (h) Remove, displace or damage any board or fitting, written or printed notice for exhibition of any regulations, or any notice fixed or set up by the Committee in the Reserve;

- (i) Ride or drive any motor vehicle, motor cycle, trail bike, mini-bike or similar recreational vehicle within the Reserve;
- (j) Camp or erect or place any building, tent, booth or other structure in any part of the Reserve;
- (k) Enter or use any area in the Reserve set aside for any particular purpose or activity whilst a sign is displayed prohibiting entry into or prohibiting or regulating the use of any such area.

Every person infringing this regulation in any respect shall be liable to expulsion from the Reserve in addition to any other penalty to which such person may be liable.

3. For the purpose of good order, any person authorised by the Committee may refuse admission to any person to the Reserve.
4. No person shall remain in the Reserve at any time when lawfully directed by a member or employee of the Committee, a member of the Police Force or a Crown Lands Bailiff, to leave the same.

Every person who contravenes or fails to comply with these regulations shall be liable to penalties prescribed in section 13 of the *Crown Land (Reserves) Act 1978*.

Appendix 7

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