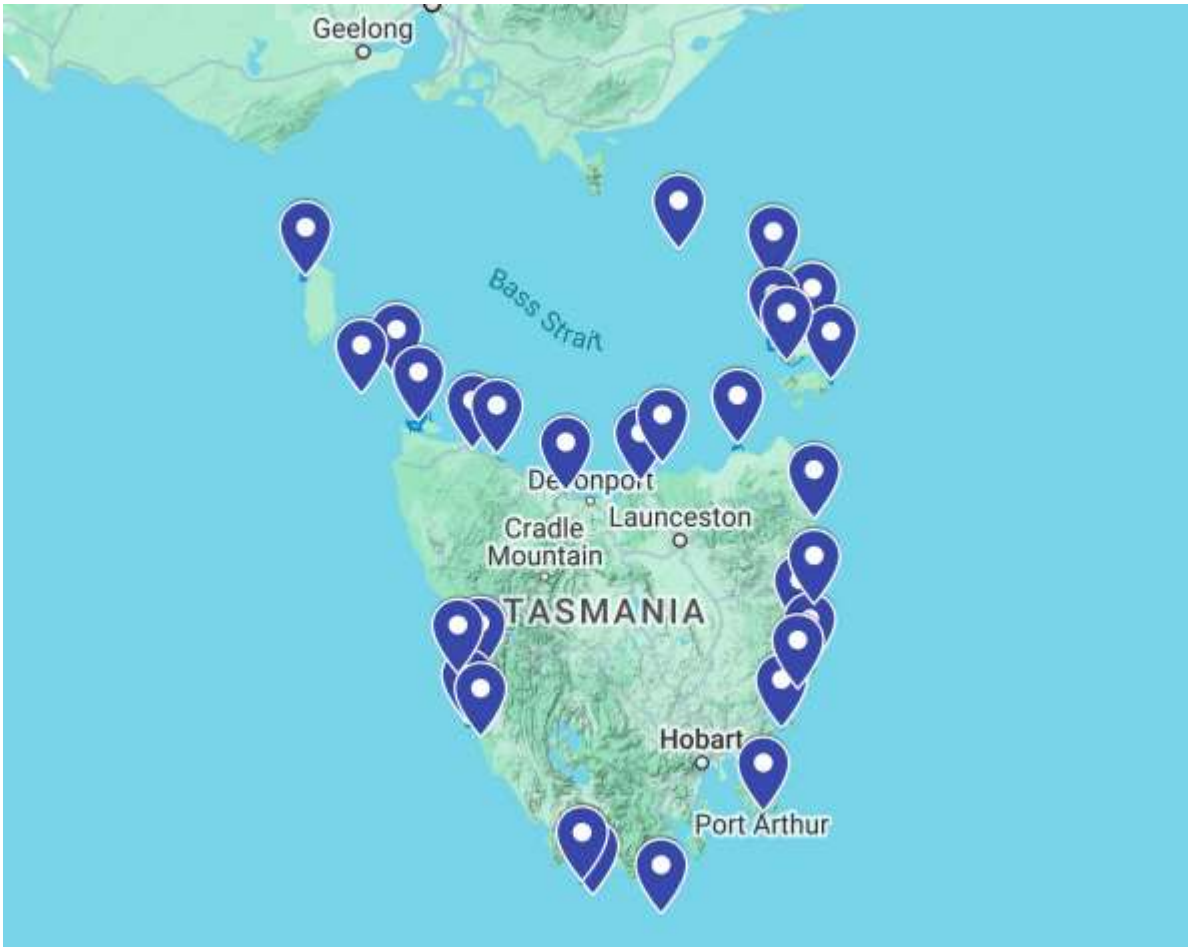
Summary of Tasmanian Bioregions and Areas considered for protection as marine parks



New Proposed MPAS

MARINE LIFE NETWORK

Facebook: At the “Tasmanians for Marine Parks” site,
Instagram: tasmanians_for_marine_parks, Website: http://marinelife.org.au,
Email: moremarineparks@gmail.com

Flinders Bioregion (Furneaux Gp in eastern Bass Strait)

Current status - no marine parks currently exist in this bioregion

PROPOSED NEW MARINE PARKS

Badger Corner–Trouser Point area (southwest Flinders Island) /Franklin Sound

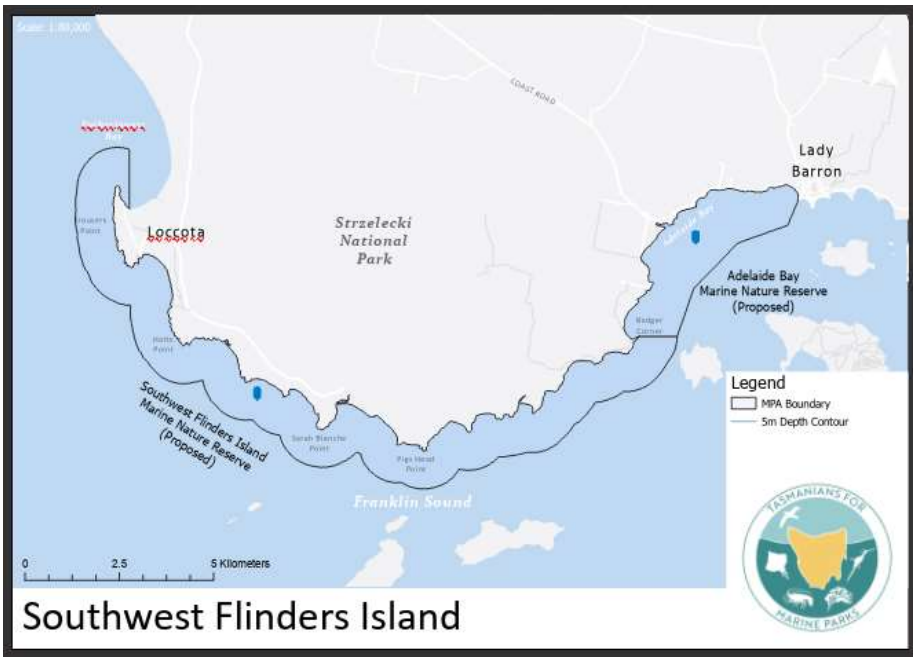
Source of recommendation - Adjacent to an existing national park

Prof. Graham Edgar recommendation.

Dr Woehler comments - Adelaide Bay (Badger Corner to Lady Barron) is an important roosting and feeding area for migratory shorebirds from Northern Hemisphere (many species are listed as Threatened under EPBC Act)

Several islands in Franklin Sound support nesting White-fronted Terns. Total Australian population is fewer than 100 birds. These birds feed on juvenile fish almost exclusively.

Dr Parsons - The area of southwestern Flinders Island from Badger Corner to Trousers Point and extending for1 km offshore is considered to be most representative of the high values of Franklin Sound.



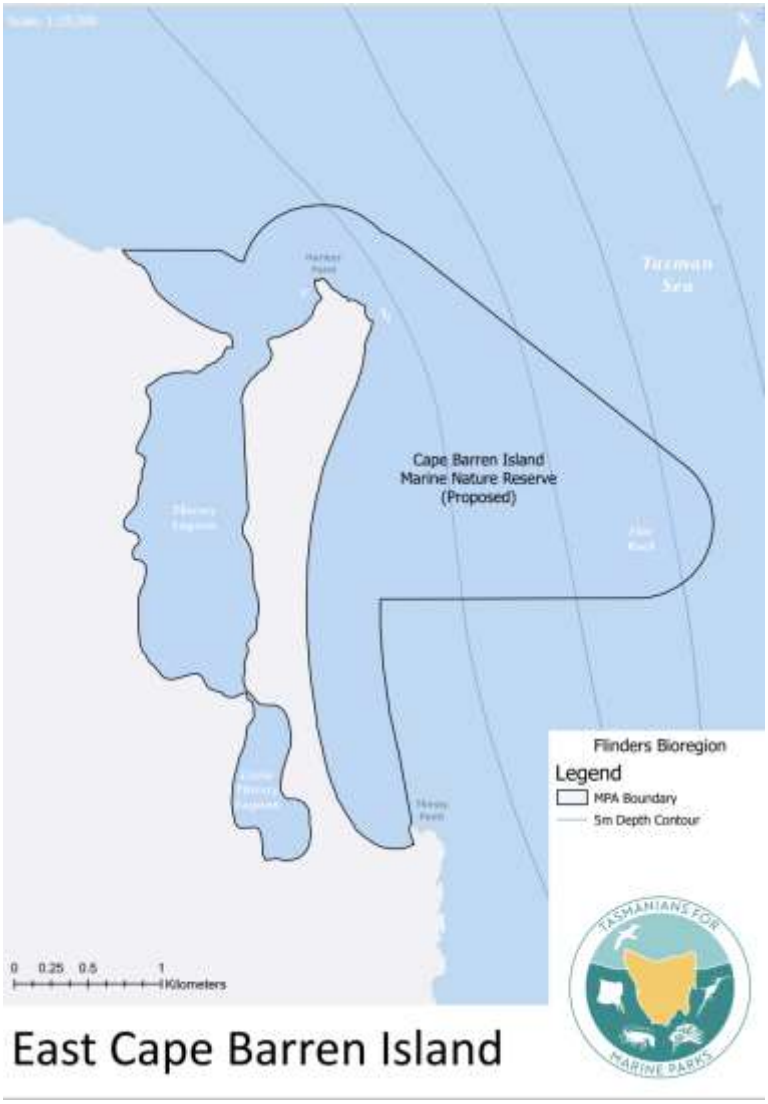
East Cape Barren Island

Source of recommendation - Proposed at Marine Reserves 1996 Bronte Workshop

Prof Edgar Comment - A total of 24 out of the 90 Tasmanian mainland estuary catchments were considered to be pristine. These catchments were nearly all in the south and west of the state and on Cape Barren Island. Thirsty Lagoon is a Class A estuary.

Significant indigenous community interests in this area.

500 metres off beach and reef includes thirsty lagoon to HWL



West Furneaux seagrass beds

Source of recommendation –

High Value Site – Nowhere else on earth report

Dr Parsons - exceptional seagrass beds along the western shores of Flinders Island that are impressive in magnitude, density and unusually large depth range…are likely to be a major. This area is only one of two locations in Tasmania where the Fibrous Strapweed has been observed.

Cameron Inlet

Source of recommendation –

Partly within Logan and Lakrana conservation Area.

Prof. Graham Edgar recommendation, Marine Reserves 1996 Bronte Workshop

Dr Woehler comments - Likely to be part of network of areas important to birdlife. SE Flinders Island (Sellars + Camerons + Logans) lagoons – Logans is a Ramsar listed site, so likely to support internationally significant values as birds move among lagoons with tide, weather, water levels etc.

Beaches HWL to 500m offshore plus lagoons to HWL

North East Inlet

Source of recommendation –

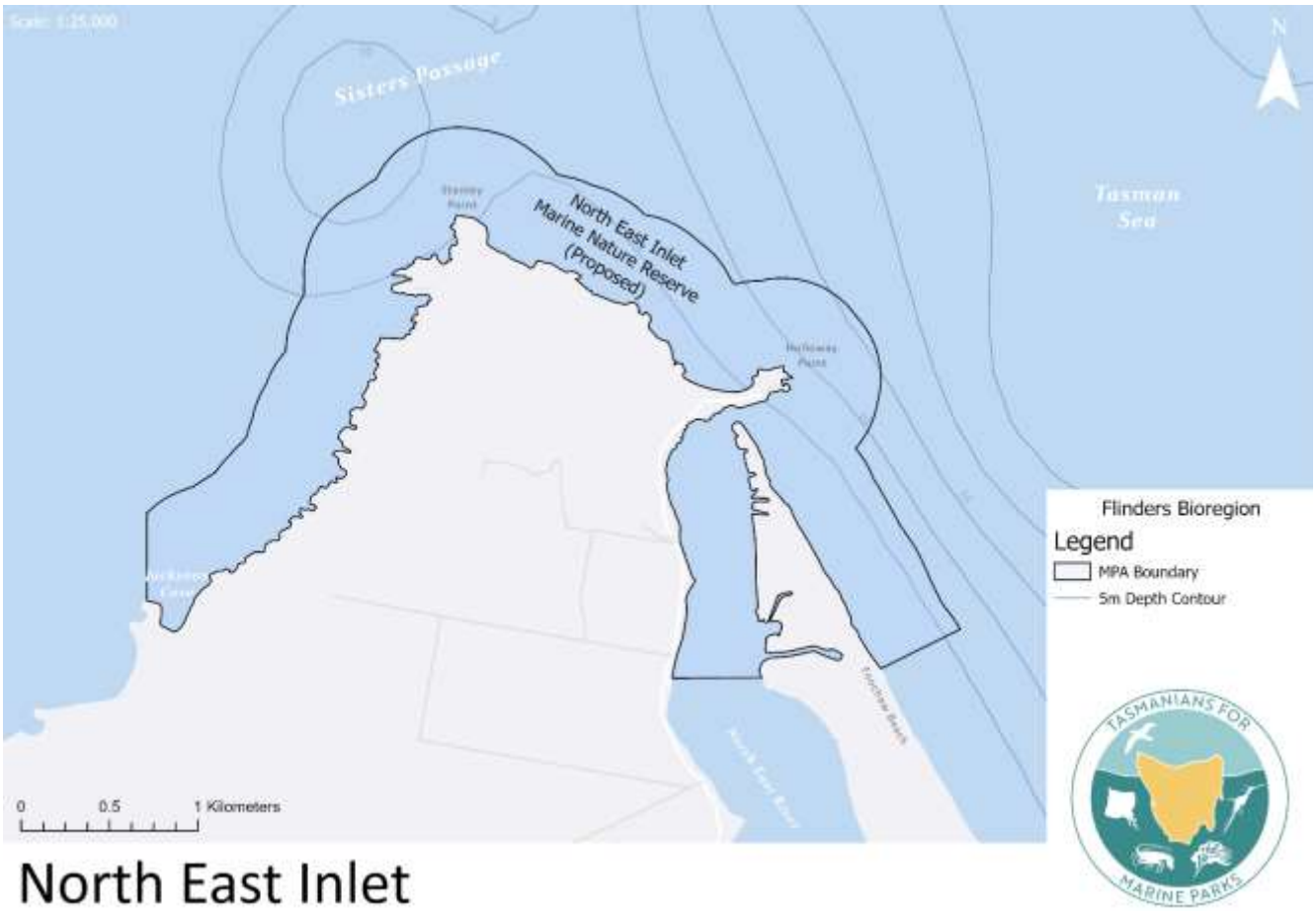
Only out to 500M offshore, from low water mark. Rocky shore incorporate to provide rocky reef duplication in the bioregion

High Value Site – Nowhere else on earth report

Dr Parsons - While much of the Flinders Island coastline is important for shorebirds, the extensive east coast beaches between Pot Boil Point and North East Inlet are of particular significance and contain a disproportionately high number of resident shorebirds.

Prof G. Edgar – Highest invertebrate count of any studied estuary and also contains species not found elsewhere in Tasmania.

Rated Class A estuary, pristine with high environmental values extending northward for a distance of 1.5 km from the latitude of the junction of Edens Road and North East Inlet Road



North East Inlet

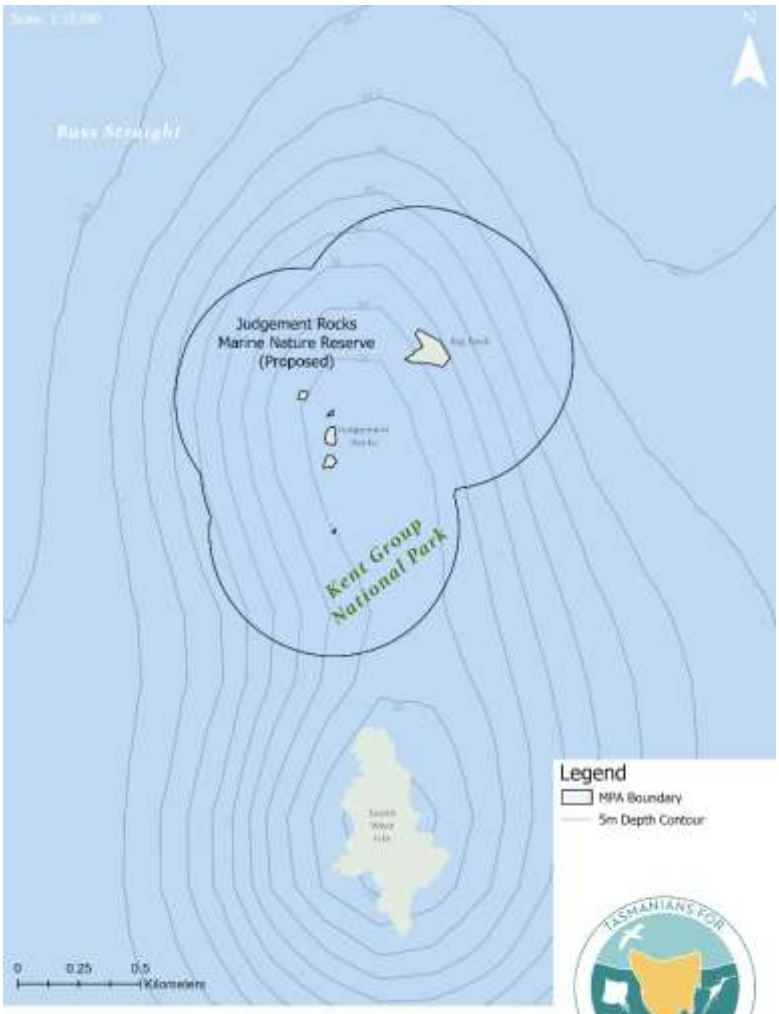
Judgement Rocks

Adjacent to land-based conservation area

Needs exclusion of fishing within 500 metres of rock, netting at least

High Value Site – Nowhere else on earth report

Dr Parsons - Judgement Rocks are a remote and spectacular group of rocky islets located to the north west of the Furneaux Group. They are the most important site for the Australian Fur Seal in Tasmanian waters, supporting by far the largest breeding colony, with nearly 2,500 pups recorded in most recent annual counts.



Judgement Rocks

AREAS CONSIDERED BUT NOT PROPOSED FOR MARINE PARKS

Prime Seal Island

Proposed at Marine Reserves 1996 Bronte Workshop

Adjacent to land-based conservation area

Supporting data on the areas natural values of the marine environment is missing.

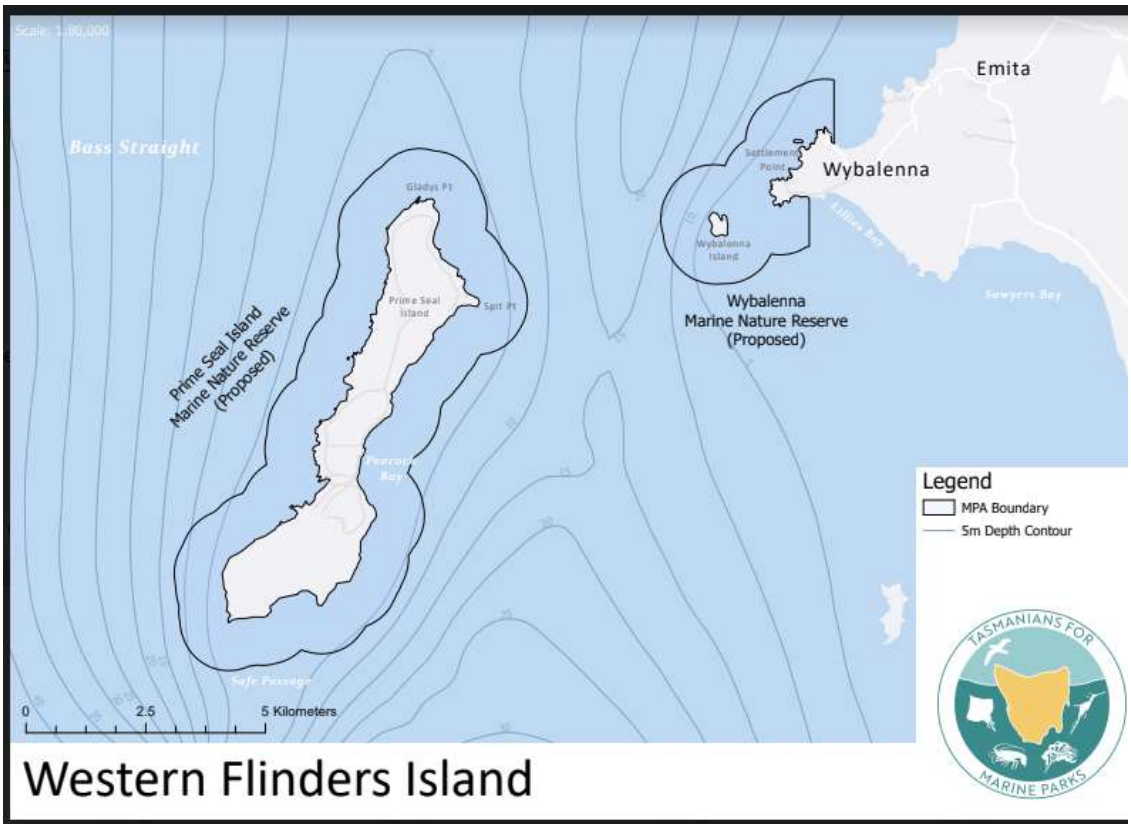
Wybalenna

Proposed at Marine Reserves 1996 Bronte Workshop.

An area of significance to the indigenous community.

Adjacent to land-based conservation area.

Specific supporting data on the area's natural values of the marine environment is missing



Otway Bioregion (King Island)

Current status - No marine parks

Christmas and New Year Islands (northwest King Island)

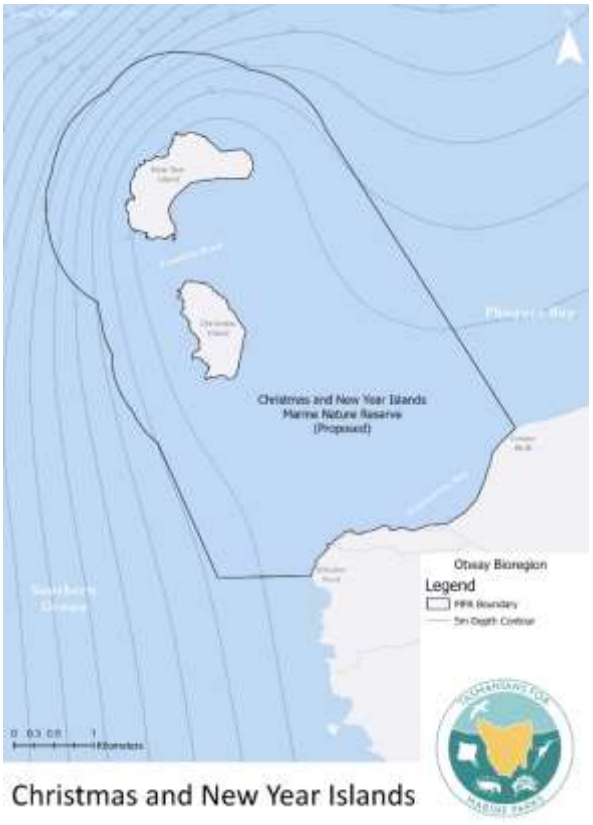
Prof. Graham Edgar recommendation - the best diversity of habitats was at New Years Island and the adjacent Christmas Island, off the northwest coast of King Island.

"surprising range of delicate algae like Acrocarpia and various species of Cystophora and Sargassum". "more diverse life",

"An investigation of the eastern coasts of the New Year Islands revealed extensive seagrass beds dominated by Posidonia sp. and these were the only seagrass beds found during the King Island survey".

"species not generally found south of Bass Strait and not presently represented in existing Tasmanian marine reserves".

"The waters surrounding the New Years Islands appear to be the most appropriate area to protect as a marine reserve. They encompass a wide range of habitats including deep and shallow reef, exposed reef, sheltered reef, and seagrass, all within close proximity. Of the sites investigated during the King Island survey, New Year Island had the greatest fish diversity."



Christmas and New Year Islands

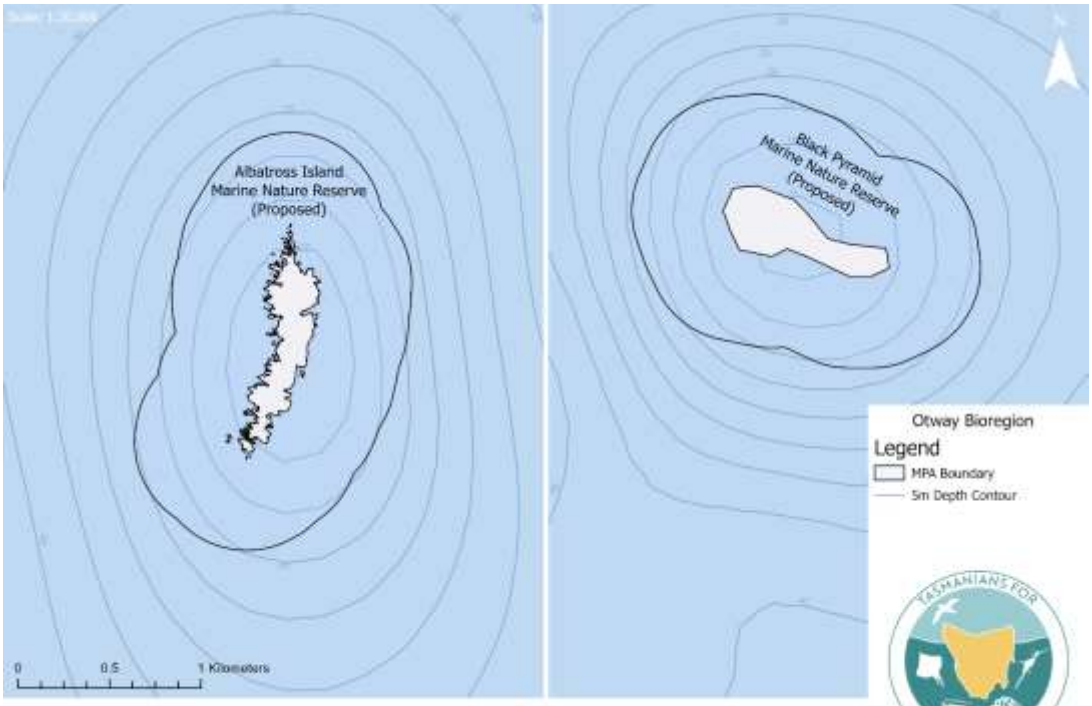
Seabird Islands: Albatross Island and Black Pyramid

Adjacent to land-based conservation area

High Value Site – Dr Parsons Nowhere else on earth report, Black Pyramid Rock is a spectacular tear-drop shaped island with sheer cliffs surrounding much of the island. It is on this isolated rocky outcrop that more than 12,000 pairs of the Australasian Gannet.

Albatross Island has been described as appearing 'almost white with birds' and is home to 5000 pairs of the Tasmanian endemic and Vulnerable Shy Albatross36, representing 40% of the total known population of this species. To cap off its status as a seabird haven, this island also supports breeding populations of six additional species, including 30,000-50,000 breeding pairs of the Fairy Prion. It is a regular haul-out for both the Australian Fur Seal and the Rare New Zealand Fur Seal, and is occasionally visited by Endangered Southern Elephant Seals and Vulnerable Australian Sea Lions.

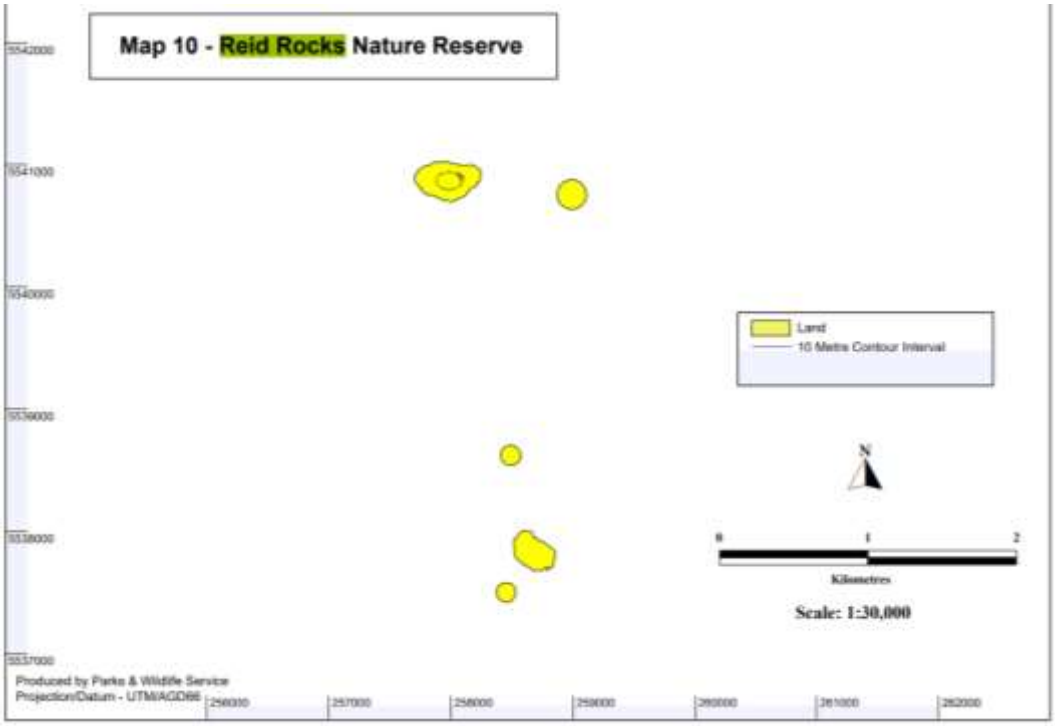
The current management plan already recommends no netting within 500 metres of the shore.



Albatross Island and Black Pyramid

Reid Rocks

Reid Rocks



“Reid Rocks are situated approximately 21.5 kilometres east-south-east of Stokes Point at the southern extremity of King Island in western Bass Strait. The main islet is approximately 500 metres long and rises to 13 metres above sea level. Reservation History Reid Rocks became a Nature Reserve on 5 April 1978 due to their importance as an Australian fur seal breeding colony. Geology Reid Rocks are composed of Tertiary basalt with well developed columnar jointing (Dixon, 1996). Significant Values Reid Rocks Nature Reserve is the only breeding site for Australian fur seals in western Bass Strait. Access Reid Rocks can be accessed by boat from King Island”. Bass Strait Island Nature Reserves - Draft Management Plan, October 2000

Reid Rocks, South Reid Rock and Bell Reef lie sin a cluster. It is also nearby South Brig Rock and Stanley Rocks. The latitude of Reid Rocks Nature Reserve is -40.25477, and the longitude is 144.16225 with the gps coordinates of 40° 15′ 17.17″ S and 144° 09′ 44.10″ E.

• Over the past four years there has been a marked decline in the number of seal pups recorded on Reid Rocks from 2891 in 1995 to only 244 in 1998. This is possibly attributable to the intense storms in western Bass Strait during the breeding season, causing the pups to be washed from the rocks. The annual mean seal pup production over the past ten years is 1501 with a range of 207 to 2891 (Hume and Gales, 1999). The lack of success in breeding has serious implications given that Reid Rocks is the only Australian fur seal breeding colony in western Bass Strait.

• Reid Rocks Nature Reserve was identified by consultants as being a potential site for ecotourist operations from King Island. The current lack of control over ecotourism is a cause of concern in ensuring the protection of the colony from disturbance.

• Fishing activities which take place close to the shore at Reid Rocks could adversely impact on the seals' breeding success (Shaughnessy et. al., 1999). 1

The island itself is a nature reserve. It is remote and difficult to visit with few landing places.

"To ensure an undisturbed breeding environment for the Australian fur seals. Seal watching in close offshore waters may occur outside of October 1 to January 31, the breeding season". Bass Strait Island Nature Reserves - Draft Management Plan, October 2000

No netting within 500 metres of the island was recommended by the management plan for the reserve but not enacted.

Recommended Protection

IUCN II national park or IUCN IV marine conservation area.

Areas Considered but not accepted for marine parks	
Sea Elephant Bay	Proposed at Marine Reserves 1996 Bronte Workshop. Site specific supporting data on the natural values of the marine environment is missing
Phoques Bay	Proposed at Marine Reserves 1996 Bronte Workshop. Site specific information is missing. See New Year Island
King Island (non-specific)	Supporting data on specific sites and their marine natural values is missing. High Value Site – Nowhere else on earth report, but not site specific. Dr Woehler comments - There is an exploration lease west of King Island over shelf and shelf break. Some concerns are held regarding overlaps with foraging areas of Shy Albatross and potentially Little Penguins from some of the large colonies on West coast of King Island.

[1] Bass Strait Island Nature Reserves - Draft Management Plan, October 2000

Boags Bioregion (Bass Strait)

Current Status – no marine parks

Boags Bioregion

Rocky Cape–Boat Harbour

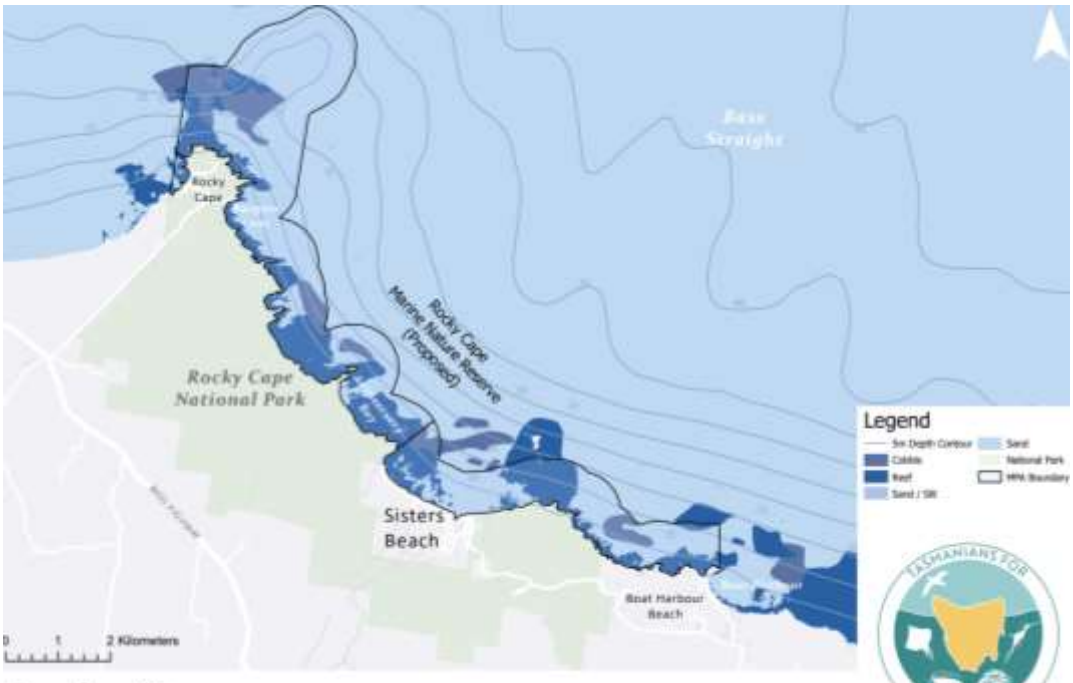
Adjacent to land-based national park

Prof. Graham Edgar recommendation 1981

Ocean Rescue, Rocky Cape was identified as the "most biologically suitable location on Tasmania's north coast due to its diverse range of habitats and species abundance. The entire section of coast from Rocky Cape to Jacobs Boat Harbour contains areas suitable for a marine reserve, and no one section was identified as having a higher conservation value than any other."

Dr Barrett - The two best options for a reserve would be to either protect all waters 500 m offshore from the seaward reef edge from Rocky Cape Beach to the western end of Sisters Beach (including Outer Reef) or alternatively protect a similar distance offshore from the eastern end of Sisters Beach to the western end of Boat Harbour Beach (including Sisters Island) [with allowances for the operation of boat ramps]. An alternative - the reef system from the northern tip of Rocky Cape seaward to include Outer Reef with a suitable buffer zone around the reef margin, and eastwards to the eastern side of Anniversary Point, in addition to the waters extending 500m offshore [make it 800m to take in reef edge] from the seaward extension of reef extending from the eastern end of Sisters Beach [national park boundary] to the western shore of Western Bay.[id extend that to the tip of point at Boat Harbour]

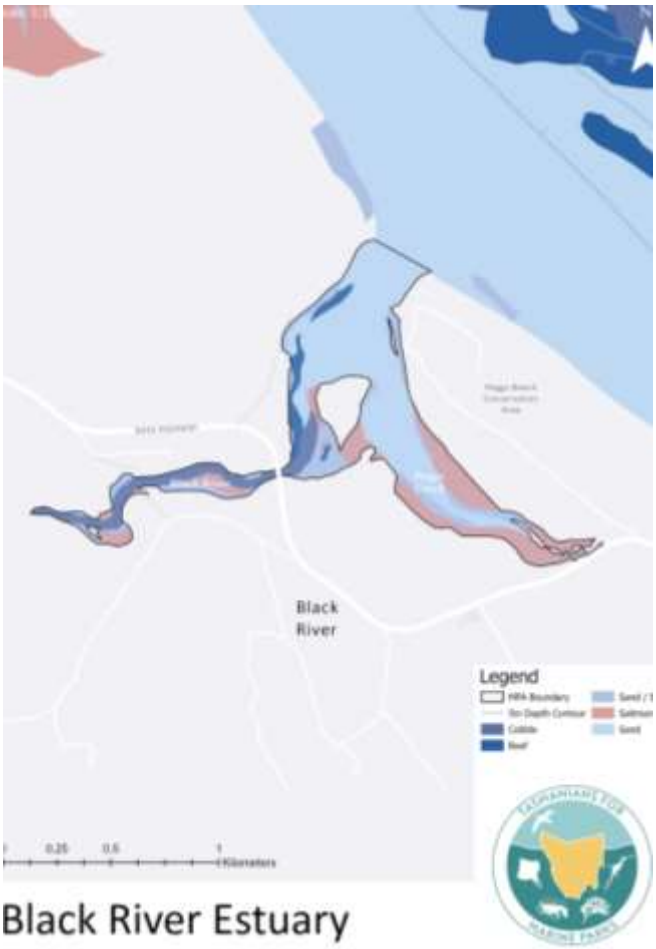
High Value Site – Dr Parsons Nowhere else on earth report, Rocky Cape lies at the eastern boundary of a marine biological province known as the 'Western Bass Strait Transition'. The highly diverse communities of algae, invertebrate and fish at Rocky Cape contain representatives of this province that are absent or uncommon in more eastern parts of the Boags Bioregion or elsewhere to the south.



Rocky Cape

Black River estuary

Rated Class A estuary, pristine with high environmental values.



Waterhouse Island

Adjacent to land-based conservation area

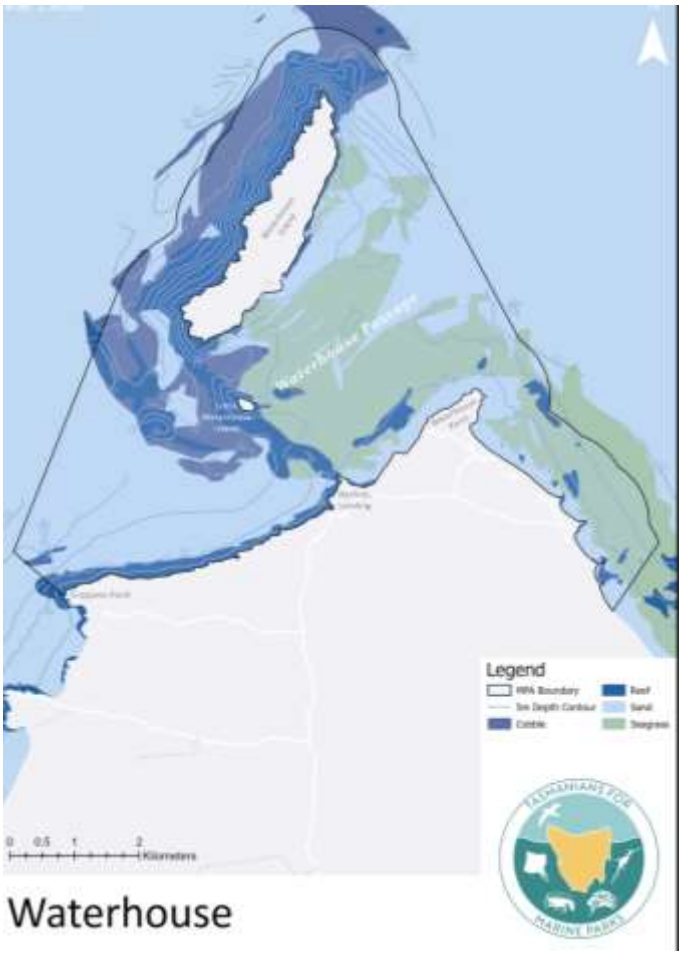
Prof. Graham Edgar recommendation,

Ocean Rescue - After Rocky Cape, the next most desirable location in the Bass Strait region for marine reserves.

Waterhouse Island offers a wide range of habitats from deep reef to shallow reef, and from the sheltered seagrass beds on the eastern side to the exposed coastline of the western side. It also offers the longest section of unbroken reef habitat in the region, as the remainder of the coastline consists of small isolated rocky headlands separated by long sections of sandy beaches.

High Value Site – Dr Parsons Nowhere else on earth report

Dr Barratt - Waterhouse Island to at least one kilometre offshore, including the exposed western shore reefs, sheltered eastern shore reefs and the high current and deep reefs at the northern tip. Seagrass beds in Waterhouse Passage from one kilometre east of Waterhouse Point to the northern tip of Waterhouse Island and westwards to Little Waterhouse Island. Additionally the reef extending from the beach to the south of North Croppies Point through to Little Waterhouse Island and Barrett Rocks.



Low Head–She Oak Pt , Tamar

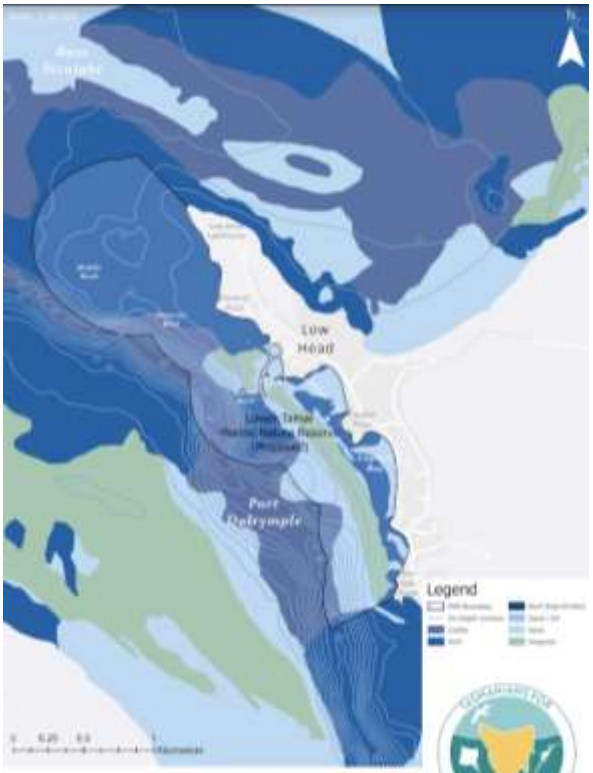
Prof Edgar and Dr Barratt recommendation,

Dr Parsons - Tamar Estuary is totally unique within Tasmania, drowned river valley with a large tidal range, very deep habitats. An extremely diverse range of marine habitats and coastal vegetation utilised by seabirds. The Tamar Estuary is unusual in possessing extremely high algal, invertebrate and fish diversities, and a large component of species not recorded in other Tasmanian estuaries.

Extensive, spectacular 'sponge gardens' that are dominated cover an estimated 5.4 km2 in depths ranging from 15 to 55 m.

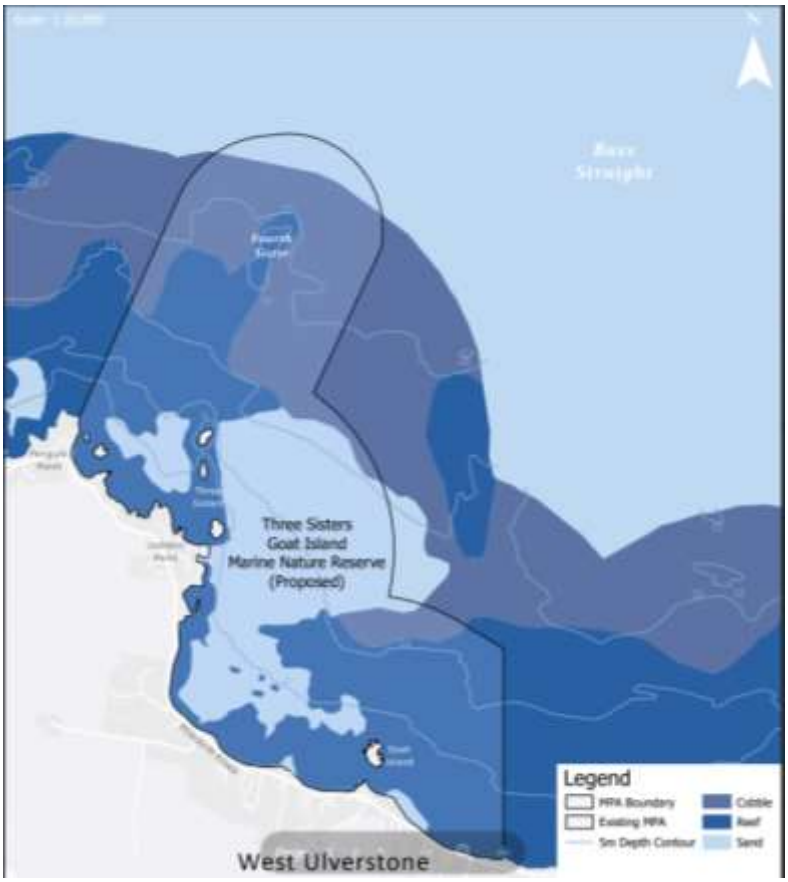
The only other estuary containing such highly developed sessile invertebrate communities is Bathurst Channel in the south-west, but the two systems are totally different.

Prof G. Edgar – exceptional estuarine biodiversity. The Lower Tamar is rated a Class A estuary, pristine with high environmental values.



Lower Tamar Estuary

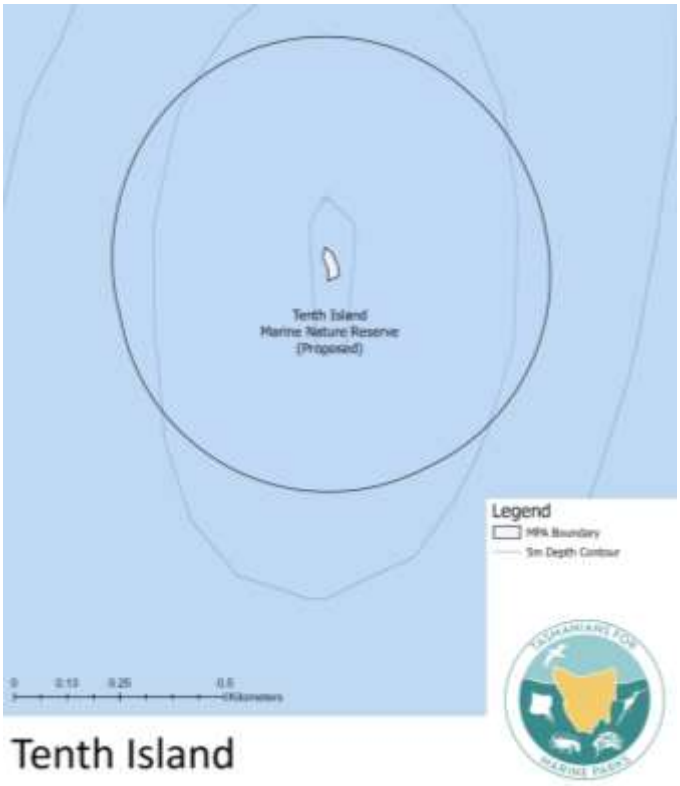
Three Sisters–Goat Island



Adjacent to land-based conservation area.

Dr Barratt - one kilometre west to Tea Tree Point to include the more extensive reef habitat found between here and Penguin Pt, and also extended at least one kilometre east to buffer the reef at Goat Island. "would make a valuable contribution to conservation in this region by protecting habitats under-represented in regional reserve proposals, and further protecting the penguin population that come ashore to nest in the associated coastal reserves".

Tenth Island



Adjacent to land-based conservation area

500 metre around Island currently no netting recommended in this zone already.

A large seal colony recommended by PWS Seal biologists, supported by Prof. Graham Edgar recommendation, Marine Reserves 1996 Bronte Workshop, Tasmanian Fisheries Industry Council and Tasmanian Amateur Sea Fishermens' Association (1997)

Boullanger Bay/ Robbins Passage

Primarily to protect bird habitat High Value Site – Dr Parsons Nowhere else on earth report

Dr Woehler comments - BirdLife Tasmania is presently in discussions with State and Fed Govts about a nomination of the Robbins Passage – Boullanger Bay wetlands for Ramsar listing. Extends from Woolnorth/Cape Grim to East Inlet SE of Stanley. c100km2 of area, includes all intertidal sandbars, saltpans, saltmarsh etc Covers Walker Channel, Robbins Passage, Boullanger Bay , East and West Inlet, Duck Bay, Mosquito Inlet etc

Areas Considered by not accepted for marine parks

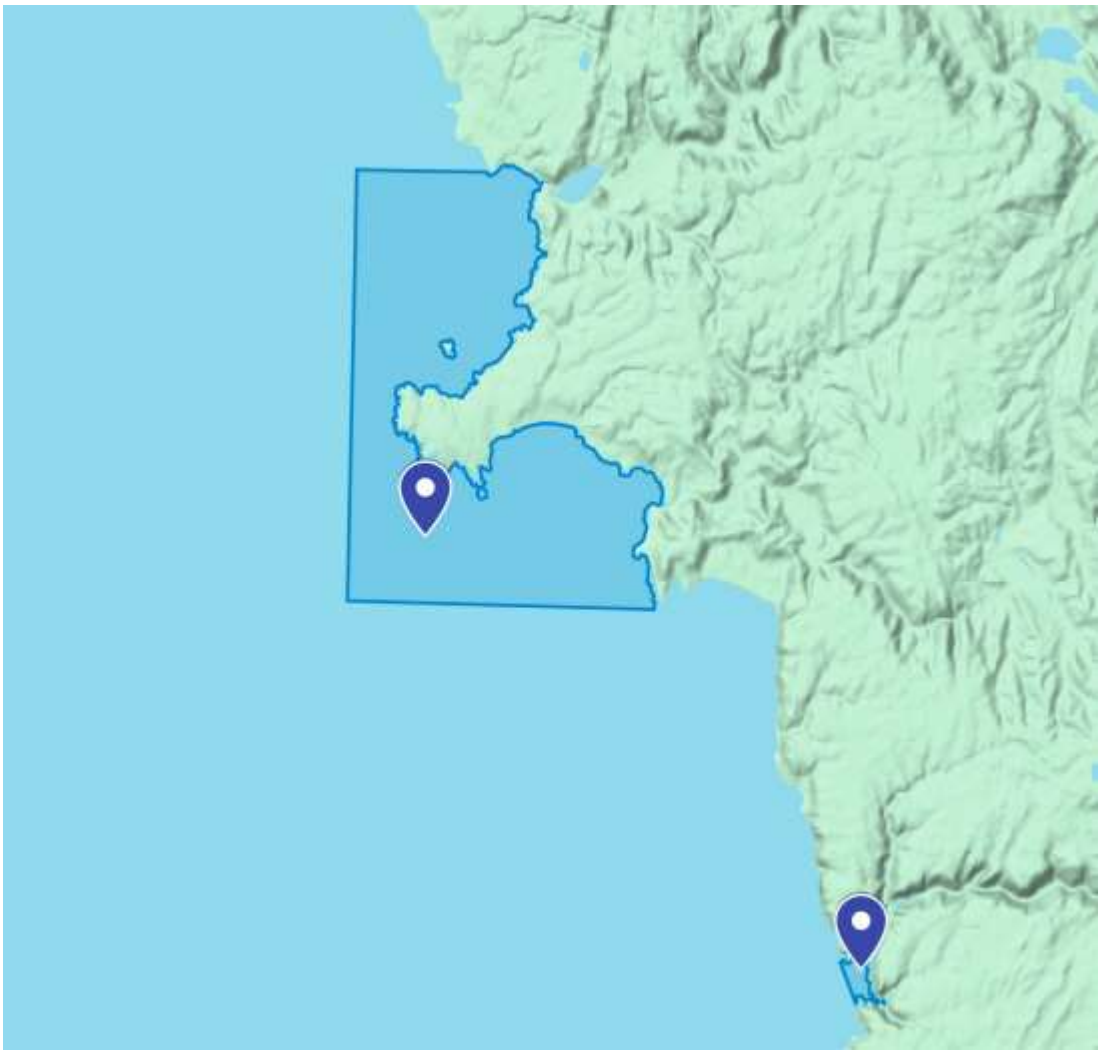
Kangaroo Island (Walker Channel)	Site specific supporting data on the area's natural values of the marine environment is missing Proposed at Marine Reserves 1996 Bronte Workshop See Robbins Passage
Ringarooma Coastal Reserve	Supporting data on the natural values of the marine environment is missing. Little data, origin of proposal is unclear.
Badger Head	Supporting data on the natural values of the marine environment is missing. Little data
Stanley	Little detailed supporting data on the area's marine natural values.
Lillico Beach	penguin colony, Dr Barrett – no netting restrictions may be an adequate protection measure.
Tamar Estuary	The area south of Batman Bridge is part of an existing conservation area, See Low Head recommendation for lower estuary.

Franklin (West Coast)

Current Status– no marine protected areas

Sloop Rocks and Pt Hibbs (south of Macquarie Harbour entrance)

High Value Site – Dr Parsons Nowhere else on earth report. The Sloop Rocks area south of the entrance to Macquarie Harbour is considered to contain the best known representation of the reef in this region. The area from Dunes Creek to Gorge Point (including offshore Sloop Rocks) contains deep as well as shallow reefs and some shelter to the prevailing westerly swells. The environment around Point Hibbs has not been surveyed but includes an even wider range of wave exposure, and may also provide a wider range of tidal currents and other conditions given the presence of a protruding headland and associated small island (Hibbs Pyramid).



Wanderer river estuary

High Value Site – Dr Parsons Nowhere else on earth report.

The remote Wanderer River Estuary located 60 km south of Macquarie Harbour is one of ten estuaries statewide that has been classified as having critical conservation significance as a rare type of estuary. It contains very few species as well as low animal abundances. The value of this estuary is that its highly pristine and the only estuary of its type in Tasmania

Prof Edgar Comment - A total of 24 out of the 90 Tasmanian mainland estuary catchments were considered to be pristine. These catchments were nearly all in the south and west of the state and on Cape Barren Island.

Will not require fishing protections.

Areas Considered by not accepted for marine parks

Arthur River–Temma	Prof. Graham Edgar recommendation, Marine Reserves 1996 Bronte Workshop. This area is of particular significance for the Tasmanian Aboriginal community. Kings Run area and Sundown Point Indigenous areas could have a sea country zone if preferred by the Aboriginal community.

Areas for Reconsideration

Macquarie Harbour

Special Features of the Site

Dr Karen Parsons High Value Site - Macquarie Harbour is unique within the Franklin Bioregion and Australia at large. This massive inlet, which is one of the largest estuarine systems in the country, covers 295 km2 7 and is therefore six times the size of Sydney Harbour! It has highly unusual physical and hydrological characteristics, with the only similar water body in Tasmania being Bathurst Harbour further to the south. These two estuaries are unique in Australia, having highly stratified waters, a darkly stained brackish surface layer, and relatively deep (>30 m) basins separated from the sea by shallower areas. Macquarie Harbour is however distinctive from the Bathurst system due to higher nutrient levels, more restricted marine flows at its narrow entrance, and its 'three-layer' system comprising a surface layer of mixed marine and freshwater origin, a marine bottom layer, and also an intermediate slowly changing mid-layer. Biological studies within Macquarie Harbour have also revealed a remarkable discovery. The Endangered Maugean Skate is an endemic western Tasmanian species that was only discovered in 1988 and is limited to brackish upper estuary waters (see Section 5.3). This species was initially believed to be confined entirely to Port Davey in Tasmania's south-west, however it was subsequently recorded in Macquarie Harbour, where it is in fact more abundant and widespread46. The highly limited distribution of this 'microendemic' fish means that protection of its habitat is a very high conservation priority.

Of the nine major indirect threats to Tasmanian estuaries the most relevant are:

(iv) foreshore development and dredging,

(v) marine farms,

(vi) modification to water flow through dams and weirs,

(vii) acidification of rivers and heavy metal pollution from mines,

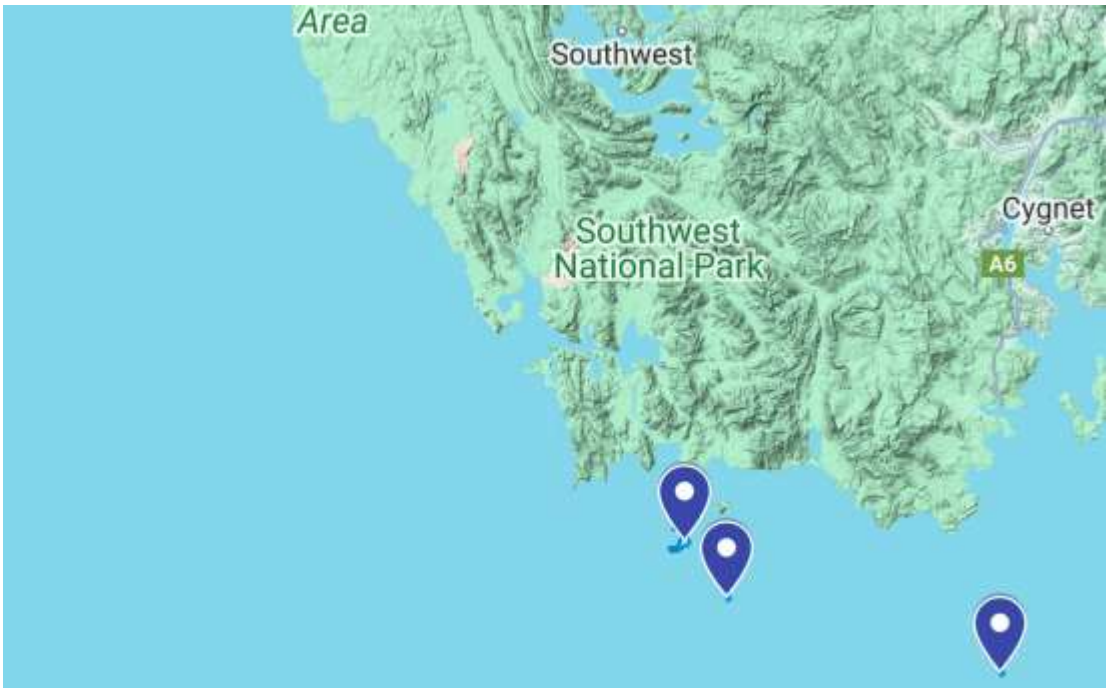
(viii) the spread of introduced pest species, and

(ix) long-term climate change.

The most topical of these is marine farming, because of its nutrient inputs and impact on oxygen levels in the harbour. Parts of the harbour are contaminated by mine waste. There is also an issue with boat wash undermining the harbour banks, especially in the Gordon River. The area near Strahan also suffers the same risks that come with any urbanization and development.

The area is already under reserve, public discussion will continue on appropriate activities in those reserves and specific measures for threatened species protection.

Davey (SW Tasmania)



Current Status- One existing marine park

Port Davey–Bathurst Harbour

Current MPA, adjacent to SW National Park. Status could be reviewed.

Review required of current fishing zone, Prof G. Edgar. An area of exposed coast habitat is missing from the current marine park.

Maatsuyker Is

Adjacent to SW National Park

High Value Site – Dr Parsons Nowhere else on earth report, Maatsuyker Island is a marine wildlife 'jewel' that supports large populations of seals and seabirds, including Threatened species not recorded elsewhere in Tasmania. It forms the primary Tasmanian breeding site for the Rare New Zealand Fur Seal, a haul-out site for Australian Fur Seals, and produces small numbers of Endangered Southern Elephant Seal pups. Subtidal reefs include forests of the ecologically important Giant Kelp.

Recommend whole main island cluster out 500m from the high water mark.

Mewstone and Pedra Branca

Adjacent to conservation area, very exposed.

High Value Site – Dr Parsons Nowhere else on earth report.

Mewstone and Pedra Branca are unique in providing two of only three breeding colonies for our endemic and Vulnerable Shy Albatross and hence are listed nationally as Critical Habitat. Both are very remote and free of predators, making them safe refuges for many thousands of seabirds.

Recommend whole main island out 500m from the high water mark.

Mewstone and Pedra Branca

Areas Considered for marine parks but not accepted	
Telopea Point–Cox Bight	Adjacent to SW National Park. Marine Reserves 1996 Bronte Workshop, Prof. Graham Edgar recommendation, Tasmanian Fisheries Industry Council and Tasmanian Amateur Sea Fishermens' Association (1997). Values are intertidal and are contained within the existing land-based National Park which extends to low water mark.

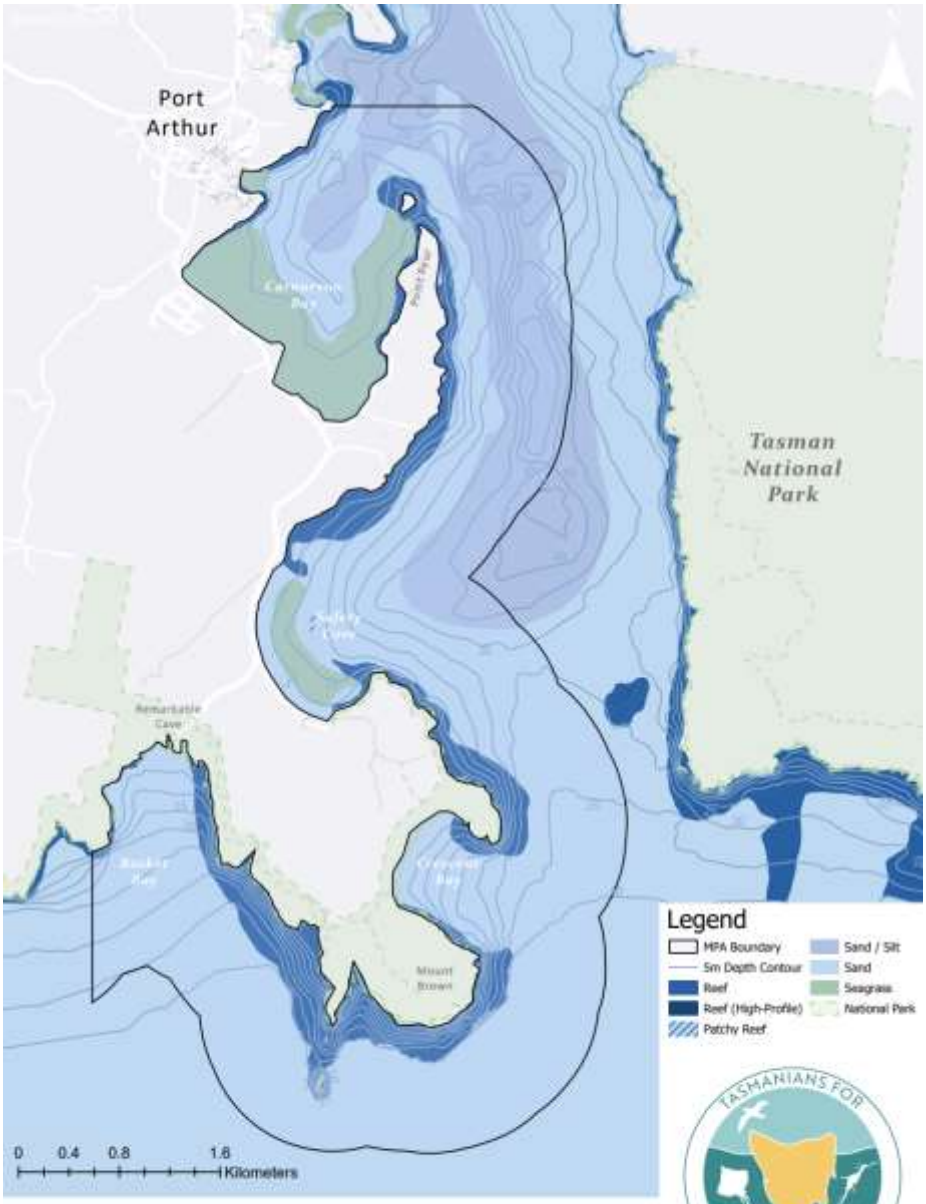
Bruny (SE Tas - Incomplete, often low protection conservation zones)

NEW MARINE PARK

Port Arthur (Carnarvon Bay–Remarkable Cave)

High Value Site – Nowhere else on earth report

The failure to meaningfully protect other places in the Tasman Peninsula requires us to reconsider a new park, if that area will be more acceptable than the previous proposals.



Port Arthur

Marine Protected Areas suggested for reassessment

The Bruny Bioregion park assessment programme undertaken 15 years ago substantially failed to adequately protect many areas, and their status should be reassessed. Marine Conservation Reserve status often provides too little protection.

Derwent River	marine conservation reserves	Bruny Bioregion RPDC enquiry
Opossum Bay,	"marine conservation reserves" marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	Bruny Bioregion RPDC enquiry
South Arm peninsula,	marine conservation reserves. marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	Bruny Bioregion RPDC enquiry
Monk Bay,	"marine conservation reserves" marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values.	Bruny Bioregion RPDC enquiry

Waterfall Bay-Fortescue,	marine conservation reserves, adjacent to national park Most marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values. High Value Site – Nowhere else on earth report, Eaglehawk Dive Centre The coastline from Fortescue Bay to Waterfall Bay and including Hippolyte Rocks contains near pristine habitats and is renowned as a world class diving and ecotourism destination, spectacular sea cliffs, unique cave systems, steep drop offs, rich sponge gardens and diverse marine life. The continental shelf break occurs unusually close to shore, providing habitat for deepwater species. This region also contains populations of Threatened endemic handfishes. The spectacular sea caves in Waterfall Bay support complex invertebrate assemblages dominated by colourful sponges, soft corals, bryozoans, ascidians, zoanthids and anemones. Offshore, the Hippolyte Rocks are surrounded by clear waters and deep reefs dominated by soft red algae below 35 m and diverse sponge gardens below 50 m. They provide an important haul-out site for the Australian Fur Seal, as well as breeding habitat for numerous seabirds. The area is poorly protected and completely open to fishing pressure.	
Tinderbox	Recent extension of existing Marine Reserve) -	Completed
Ninepin Point	Recent extension of existing Marine Reserve) -	Completed
Port Cygnet,	marine conservation reserves	Bruny Bioregion RPDC enquiry
Cape Bruny–Cloudy Bay (including Cloudy Lagoon)	marine conservation reserve	Prof. Graham Edgar recommendation, Bruny Bioregion RPDC enquiry, Eaglehawk Dive

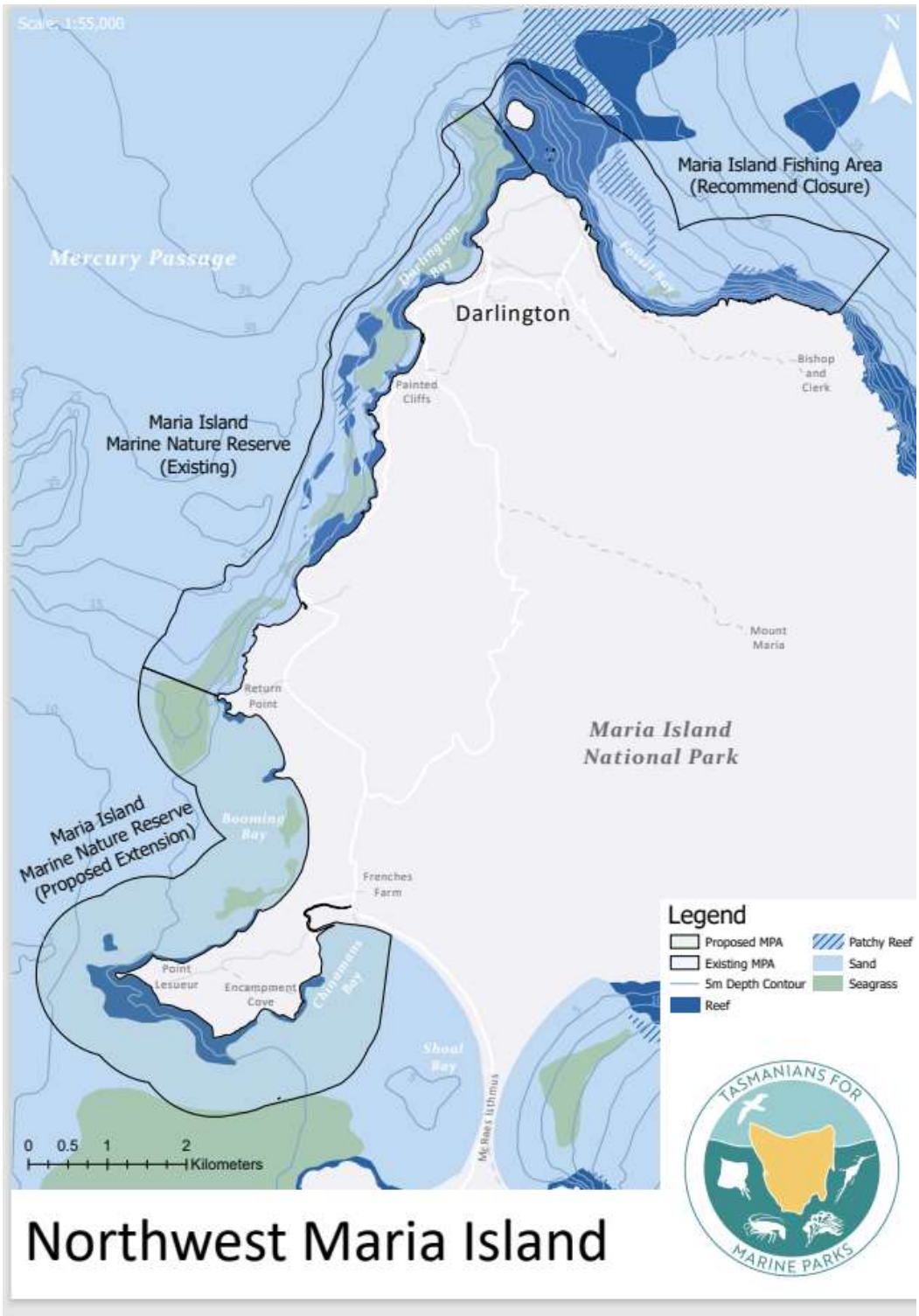
		Centre
Central Channel,	"marine conservation reserves" marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	Bruny Bioregion RPDC enquiry
Simpsons Pt,	"marine conservation reserves" marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	High Value Site – Nowhere else on earth report, Bruny Bioregion RPDC enquiry
Roberts Point	Roberts Pt marine conservation reserve only marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	High Value Site – Nowhere else on earth report, Bruny Bioregion RPDC enquiry
Huon estuary, and Offshore Reefs (Ninepin Point, Butts Reef, Zuidipool Rock, Arch Rock	marine conservation reserve only marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	High Value Site – Nowhere else on earth report, Bruny Bioregion RPDC enquiry
Slopin Island,	marine conservation reserve only marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	Bruny Bioregion RPDC enquiry
Hippolytes,	marine conservation reserve only marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	High Value Site – Nowhere else on earth report, Bruny Bioregion RPDC enquiry

Pitt Water/Orielton Lagoon	Ramsar site marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values may not need to exclude fishing. The mudflats in Barilla Bay and Orielton Lagoon are primary feeding areas for resident and migratory shorebirds, while additional mudflats to the south at Five Mile Beach have recorded the highest densities of benthic invertebrates in south-east Tasmania, averaging at more than 11,000 animals per m2. Pitt Water is also noted as being one of the most significant areas of saltmarsh in Tasmania and contains a range of threatened plant species… rocky shores support the largest population of the endemic and Threatened Live-bearing Seastar	High Value Site – Nowhere else on earth report,.
Southport Lagoon	marine conservation reserves need more discussion on zoning/restrictions needed to protect the area's values	Rated Class A estuary, pristine with high environmental values.

Freycinet (East Coast)

Current Status- 2 existing MPAs)

Maria Island Extension

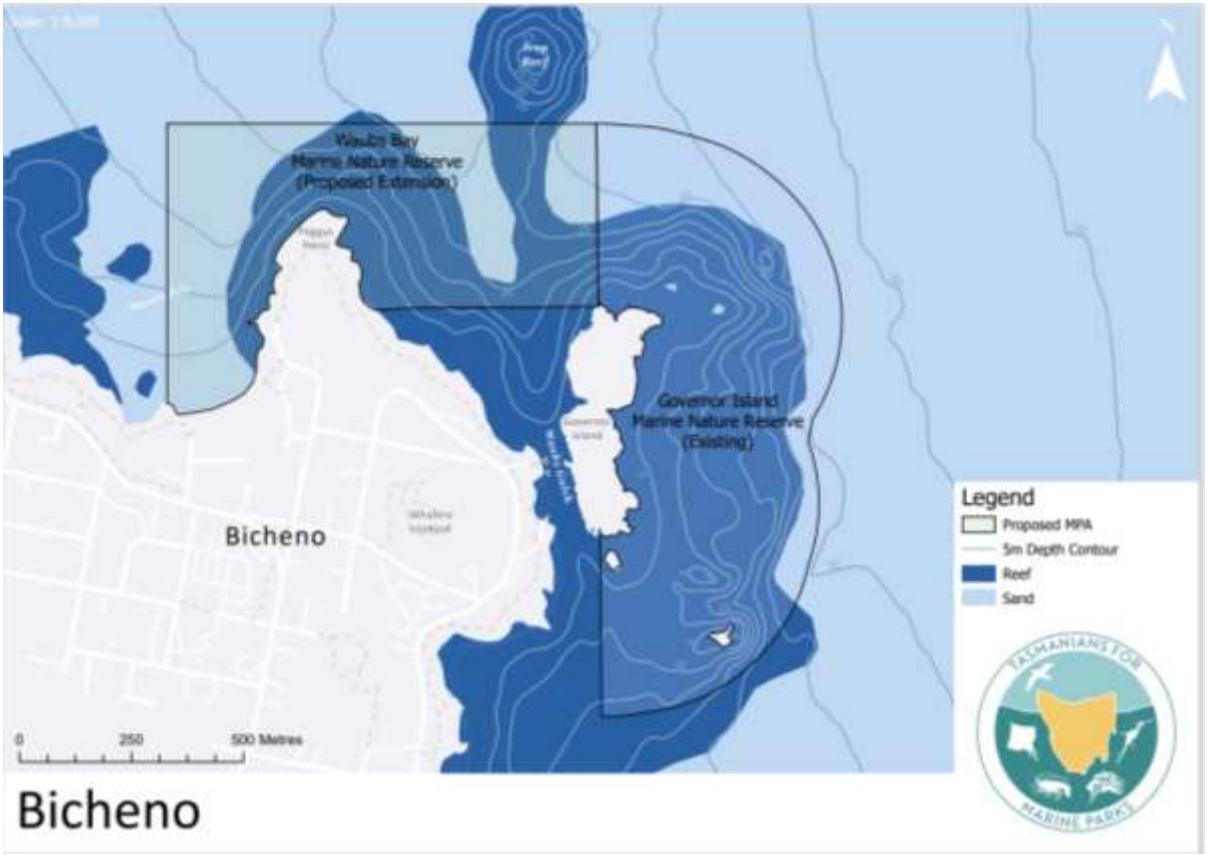


Existing MPA - suggested extension of existing Marine Reserve to Booming Bay, Shoal Bay/Chinamans Bay, plus closure of "fishing" area, suggested by marine naturalists.

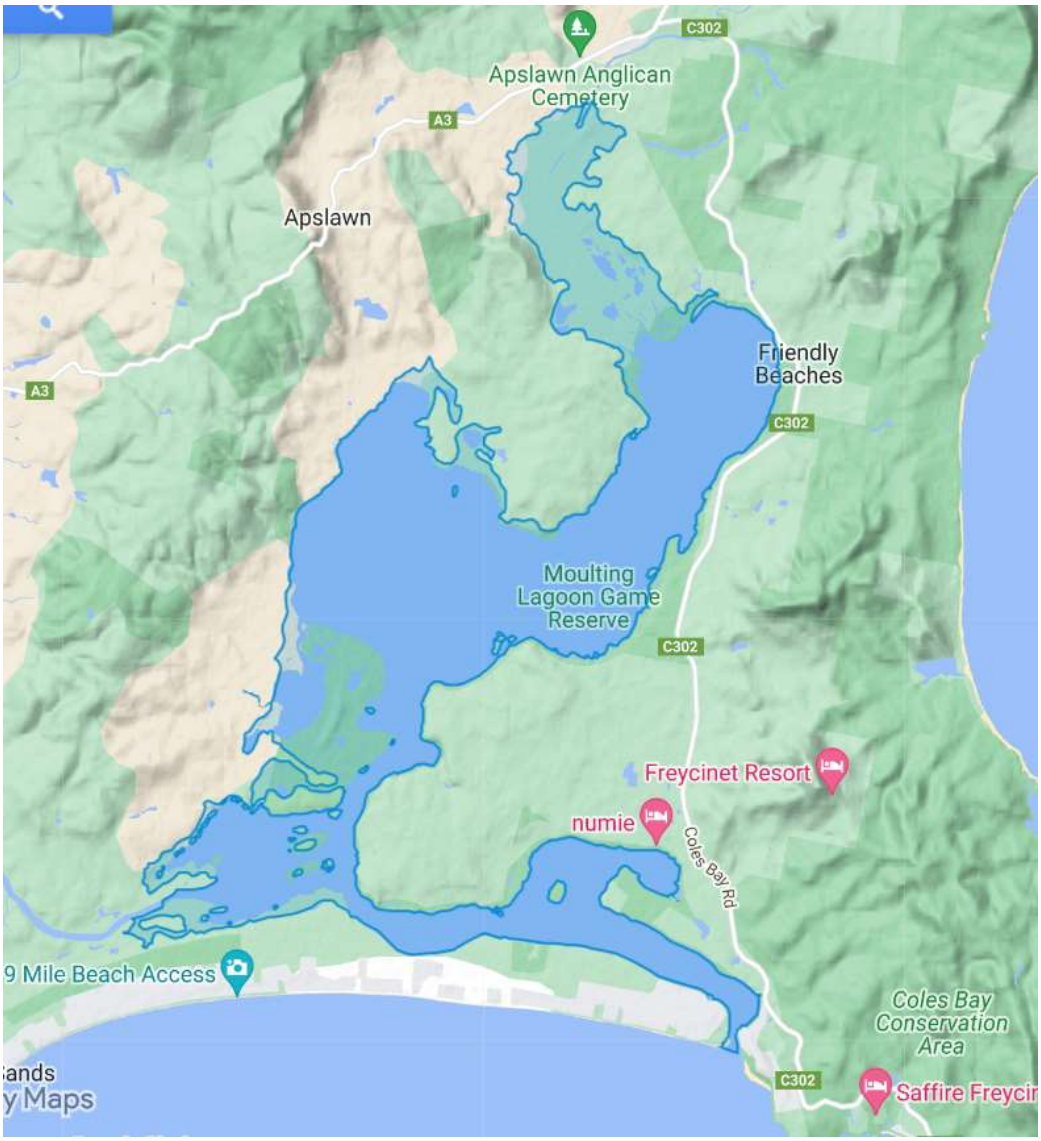
Governor Island MPA

Existing MPA. Suggested as too small. Requires consideration of an extension in Waubs Bay.

The extension of Governor Island MPA e.g. to eastern Waubs Bay, has been suggested by local residents. It's a popular dive and snorkelling site with a large adjacent population of little penguins. Noted for its resident seadragon population. Some angling occurs from the breakwater.



Moulting Lagoon



Very important bird site.

Tasmanian Fisheries Industry Council and Tasmanian Amateur Sea Fishermens' Association (1997), 1996 Bronte Workshop, Prof. Graham Edgar recommendation

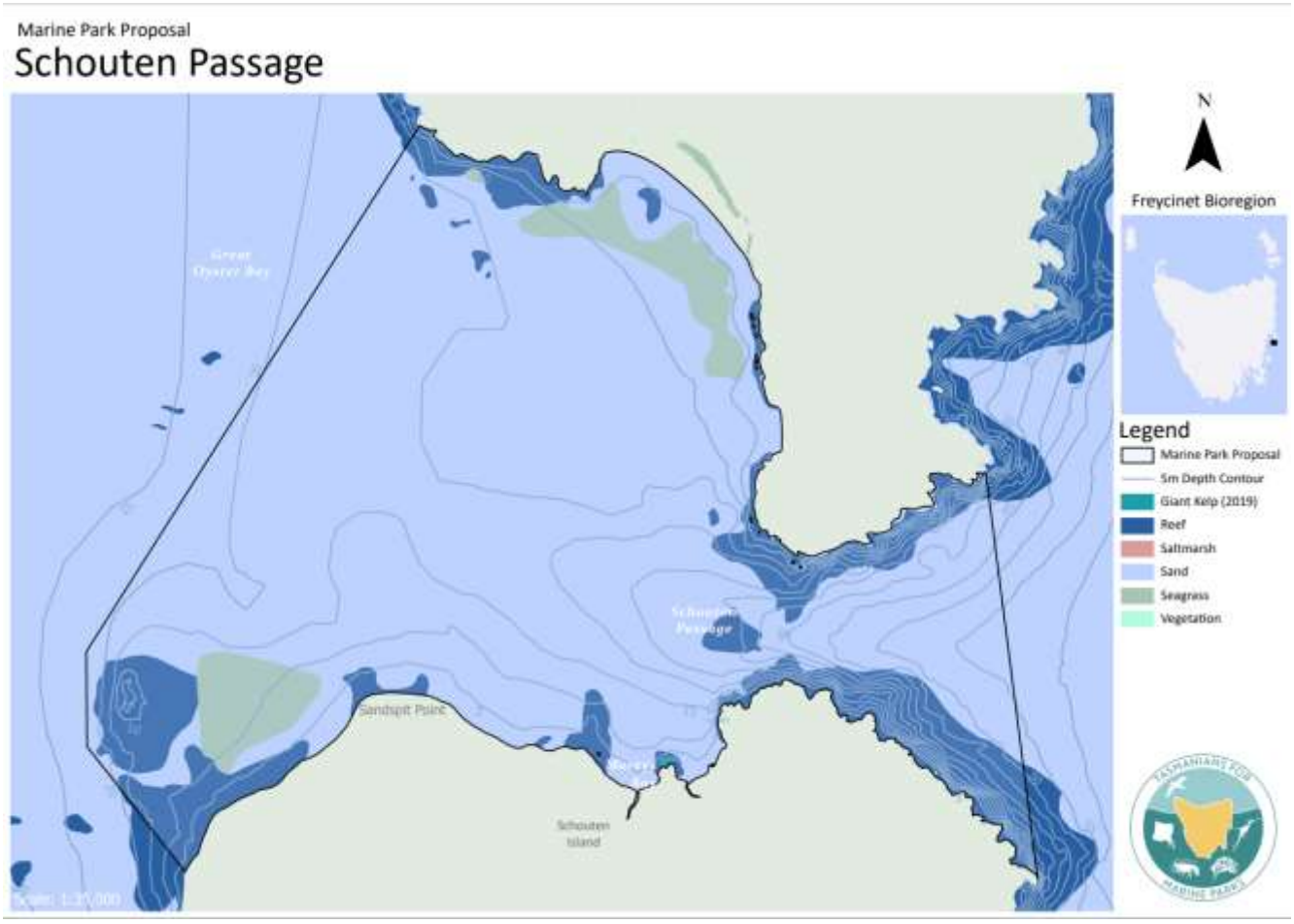
Existing Game Reserve. Overlap with hunting activity. Status could be upgraded.

Schouten Island and Schouten Passage

Adjacent to land-based national park

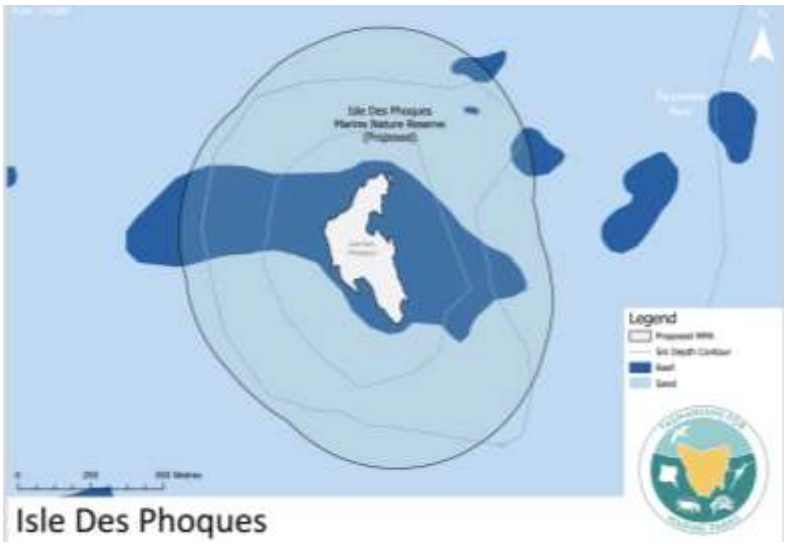
High Value Site – Nowhere else on earth report

Dr Parsons - A high diversity of pristine marine habitats is supplemented by highly variable geology, with a north-south fault line dividing an eastern granite component, which is similar to the north-east coast, from a western dolerite section, which is more similar to the south-east of the state. Structurally complex reefs include underwater extensions of sea cliffs and have highly variable wave exposures and depths, some extending to 70 m. The additional presence of seagrass beds comprised of the Black-stemmed Eelgrass in depths of 5-15 m, patchy reef intermixed with cobbles, and extensive areas of unvegetated sand add to the habitat diversity of the island.



Ile Des Phoques

Adjacent to land-based Conservation area



High Value Site – Nowhere else on earth report

Dr Parsons - Ile des Phoques is a small rocky island between Maria and Schouten islands. It is unique in possessing numerous sea caves distinct from sea caves found elsewhere on the Tasmanian coastline. Several caves have light entering through the roof creating stunning light effects that, combined with the brightly coloured jewel anemones and zoanthids (anemone-like animals) covering the cave, and frequent schools of fish, provide spectacular underwater scenery. The caves are considered to be of outstanding geological significance.

Ile des Phoques is also a regular haul-out site for Australian Fur Seals, and geological evidence suggests that it once supported a large seal breeding colony. The island remains a breeding site for seabirds. Ecotourism activities are centred around seal watching and spectacular cave diving.

Recommend 500m area around island.

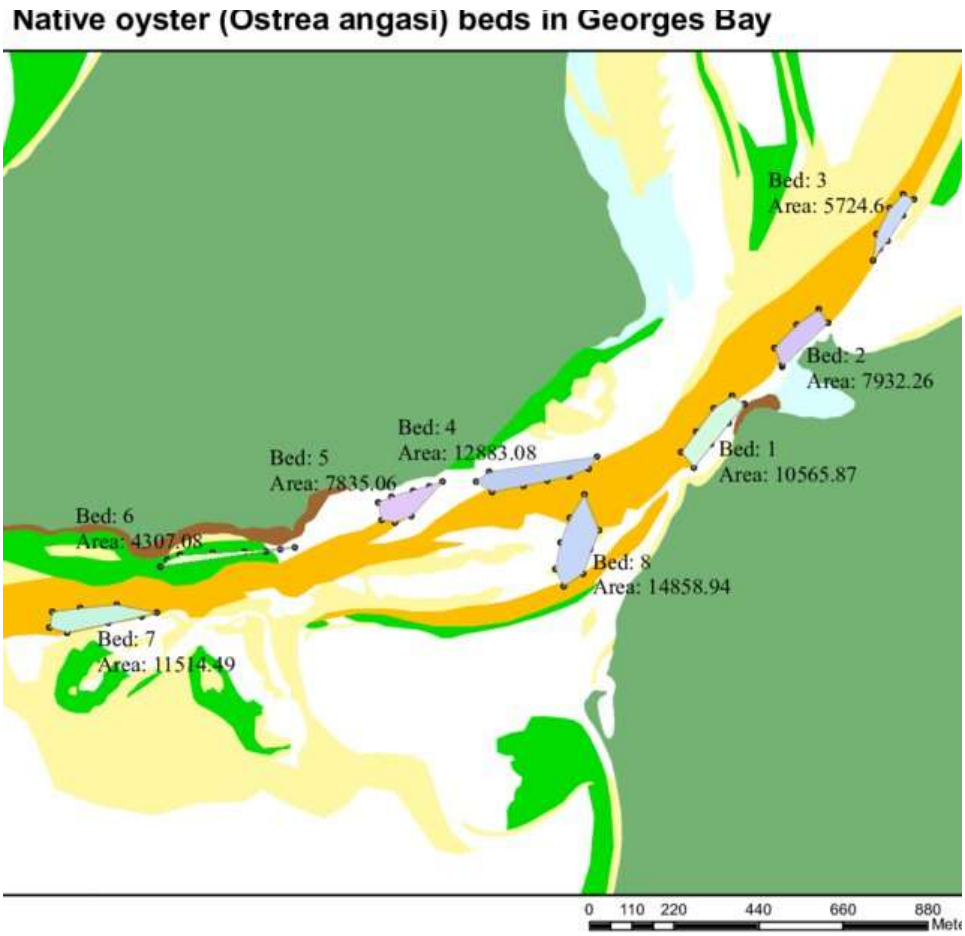
Georges Bay native oyster reef

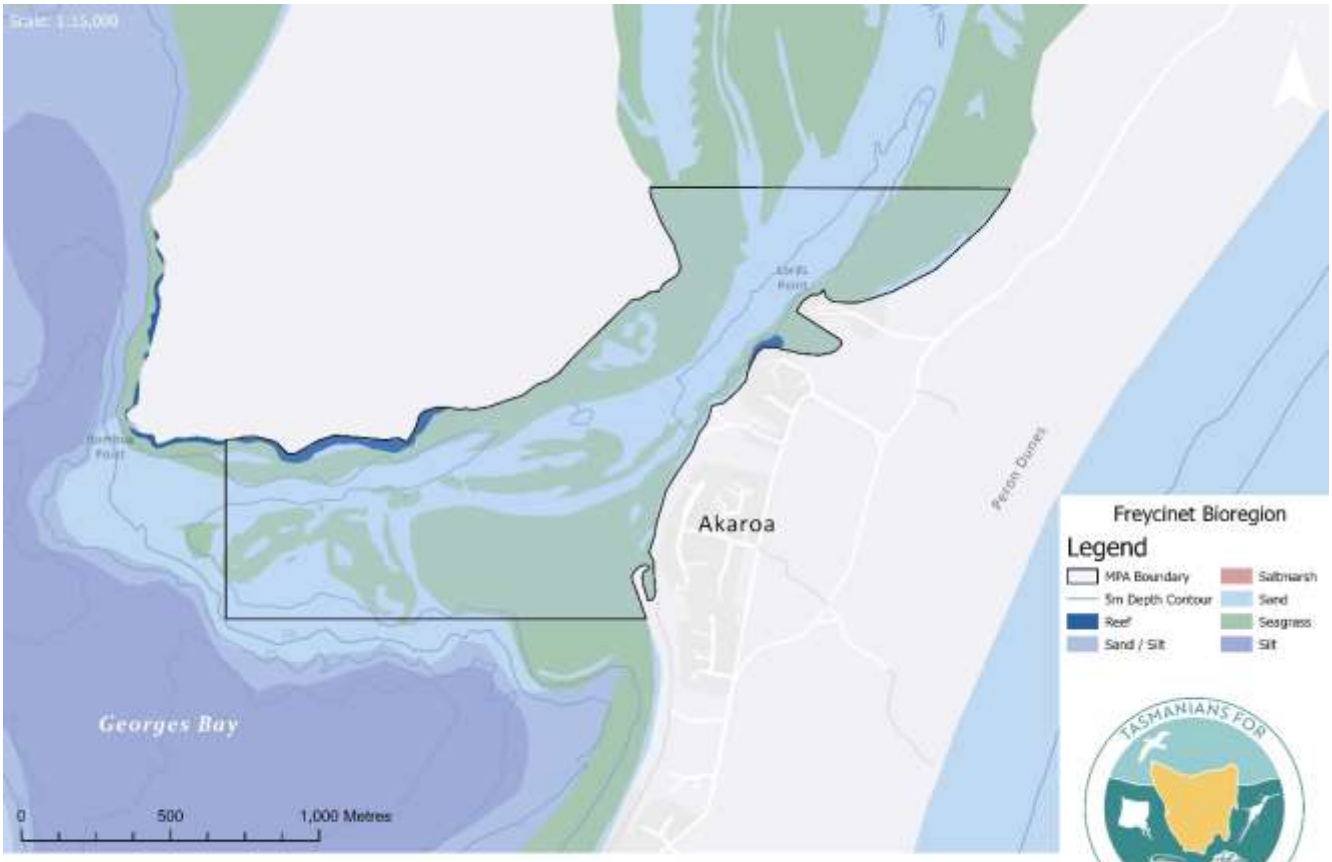
Adjacent to Georges Bay Important Bird Area

May not require fisheries restrictions except for shellfish.

High Value Site – Nowhere else on earth report.

Last surviving natural angasi flat oyster reef in Australia, when the habitat was once widespread.





Georges Bay - Native Oyster Reefs

Areas Proposed and Considered but not accepted

Mayfield Point	Little information
Ansons Bay larapuna /Eddystone	Eddystone is now inside a fisheries research area, soon to be repealed, Ansons Bay dunes/beach are in a conservation area. Significant indigenous community interest in this area.
St Helen–Binalong Bay	Partly inside research area soon to be removed. Declaration of an MPA would require sustained urchin removal activity. Many areas now heavily urchin damaged. Dr Barrett had previously suggested MPAs from Binalong township south to Grants Point [excluding boat ramp].

Background Information

There are internationally agreed principles about how marine parks are made and structured. An MPA can have levels of protection that fit into one of the six IUCN Protected Area Management Categories, from scientific reserves with very high levels of protection to hunting reserves with very low levels of protection. The ANZECC Guidelines note that "the MPA may incorporate areas ranging from highly protected areas to sustainable multiple-use areas accommodating a wide spectrum of human activities".

"Tasmanians for Marine Parks" are after high levels of protection, but is not trying to exclude visitors, so the marine parks can provide economic and educational benefits as well as conservation benefits.

There are a few things everyone agrees a good marine park must have:

"Security"—the MPA must have secure status, which can only be revoked by a Parliamentary process;

They should cover all the special areas of different regional habitats called bioregions. Tasmania does not have any marine parks in the northern bioregions of the State, other than the Kent Group.

Comprehensiveness—the reserve system will include the full range of ecosystems within and across each bioregion. Lots of habitats should be included in the park and it should be big enough to protect them all.

Adequacy—it should be well protected from all its main threats. Adequacy also means that the size and boundaries ensure the viability and integrity of populations, species and communities.

It also includes the idea of replication. Replication means that more than one example (e.g. having two parks in one bioregion) for 'insurance' against losses to events like oil spills and storms.

Representativeness - means that the system should reasonably reflect the flora and fauna of each marine ecosystem.

IUCN Protected Area Management Categories

The international community sets up different classes of protection. Most Tasmanian marine parks fall into Category II National Park—protected area managed mainly for ecosystem protection and tourism.

This is a natural area of land and/or sea, designated to:

(a) protect the ecological integrity of one or more ecosystems for present and future generations;

(b) exclude exploitation or occupation inimical to the purposes of designation of the area, and

(c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

IUCN III Natural Monument—Lower levels of protection could be used for marine sea caves and other features. A national monument is a protected area managed mainly for conservation of specific natural/cultural features which are of outstanding or unique value because of their inherent rarity, representative or aesthetic qualities, or cultural significance.

IUCN IV Habitat/Species Management Area—This is a protected area managed mainly for conservation through management intervention. This is to ensure the maintenance of habitats and/or to meet the requirements of specific species. We have a few protections for animals like handfish, but not much for their habitat other than perhaps the Opossum Bay Marine Conservation Area which has very low levels of protection.

THE TASMANIAN APPROACH

Nationally and internationally there have been two basic approaches to the development of systems of marine protected areas. One approach is to declare large multiple use Marine Protected Areas such as the Great Barrier Reef Marine Park and manage a large region which includes exploitation of resources and some smaller areas of higher protection and no exploitation

The other approach is to declare much smaller highly protected Marine Protected Areas with no extractive activities. This is the approach Tasmania has taken so far in the development of its Marine Protected Areas system.

Marine Protected Areas in Tasmania have largely been quite small areas declared to protect biodiversity and provide areas for public recreation, education and research. Often, Marine Protected Areas in Tasmania are extensions of land-based National Parks. Linking marine parks with onshore reserves does have management benefits.

Both approaches, if implemented properly, can achieve the desired outcomes in terms of the conservation of biodiversity.

Monitoring of the marine reserves in Tasmania has however, highlighted the inadequacy of the size of some of the existing reserves, leading to later increases in the size of Tinderbox and Nine Pin Point MPAs.

Many of Tasmania's current "marine conservation" areas are likely too poorly protected to be of much benefit.

Other Marine Management Areas

Some other arrangements give limited protection to marine life, such as fishing restrictions like, No Netting/Restricted Fishing Areas, Shark Nursery Areas, the exclusion of trawling within 1 nautical mile of the shore. Two areas exclude

fishing for science: Crayfish Point Marine Reserve and George III Rock Research Area as well as some other more recent urchin research areas on the NE coast.

Under the Fisheries Rules of the Living Marine Resources Management Act (LMRMA), closed areas or restrictions can be changed or rescinded. "Fisheries management areas, consequently, provide no security of tenure—and are not formally recognised as MPAs under the current definitions. (Tasmanian Marine Protected Areas Strategy: Background Report).

Things marine parks can do

Marine Parks protect depleted, threatened, rare, endangered or endemic species and ecological communities and in particular to preserve habitats considered critical for the survival of such species. Some species are sensitive, with complex habitat requirements, or are vulnerable to disturbance.

They can slow down the decline of degraded ecosystems and be a focus for efforts to restore habitats. A healthier more resilient habitat is more likely to survive new threats like invasive species and climate change.

They can protect economically significant habitats like fish nursery sites, as well as habitats, species and seascapes of importance to recreation and tourism.

They can protect geological, archaeological, historical sites, seascapes, cultural sites and cultural practices and manage these significant sites for future generations.

They can aid in the interpretation of marine and estuarine systems for the purposes of conservation, recreation and public education.

They provide places for research and provide reference sites for scientific studies, including sites for baseline fisheries monitoring and long-term environmental monitoring.

STEPS IN THE DEVELOPMENT OF A MARINE PARK

Step 1 Gather data including ecosystem mapping. Collection of baseline biodiversity data is the first step to developing a good marine park. A program of marine habitat and biodiversity surveys have created incomplete records but not at very fine scales. Better mapping has long been identified as a priority for future marine park planning.

Step 2 identify a list of possible MPAs within bioregions to represent major ecosystems. Is the spot unique and in good condition? Does the area contain unique species, populations, communities or ecosystems?, contain unique or unusual geographic features? will the site provide replication of ecosystems within the bioregion?

Step 3 Identification of threats - such as human activities and natural recurrences that can cause habitat destruction, species removal and disturbance, pollution (heavy metals, oil spills and toxic chemicals) and run-off.

Step 4 Consultation—the process of identification and selection of MPAs will include effective and high-quality public consultation with appropriate community and interest groups, to address current and future social, economic and cultural issues, existing or potential contribution to economic value by virtue of its protection (e.g. for recreation or tourism, as refuge or nursery area, or source of supply for economically important species? extraction of or exploration for resources? shipping and/or trade? fishers? local or regional employment? Does the site have existing or potential value for research and monitoring?

Step 5 Assess the comprehensiveness, adequacy and representativeness of ecosystems and habitats in existing MPAs within each IMCRA bioregion.

Step 6 Assess feasibility of potential MPAs external destructive influences? social and political acceptability?, community support?

This glosses over the huge amount of advocacy, education and activism that is needed to get the number of votes in Parliament to make it happen. There are also debates and disputes about boundaries that tend not to always be based on environmental grounds. A common reaction to a marine park proposal is an effort to shift the proposals to areas where there is little fishing, and thus often little marine life.

Late last year, the Tasmanian Government committed to international marine protected are targets, although at the same time they also appear to maintain a moratorium on declaring new marine parks.

Who are We?

Marine Life Network (MLN) are ordinary people who volunteer their time to help protect and promote the wonders of Tasmania's ocean environment. The aims of Marine Life Network are to educate and advocate.

We do anything useful for the marine environment, but our main campaign at present is a campaign called "Tasmanians for Marine Parks".

An effort has been made to recruit a broad a cross-section of the community from along the political spectrum. MLN is non-partisan, welcoming to everyone, and is not an affiliate of existing political parties.

Facebook: At the "Tasmanians for Marine Parks" site.

Instagram: tasmanians_for_marine_parks

Website info: http://marinelife.org.au

Email: moremarineparks@gmail.com

Select Sources for site Identification

Prof Graham J. Edgar et al, "Global conservation outcomes depend on marine protected areas with five key features" Nature, Vol 506 13 February 2014.

Dr Parsons, K. E. (2011) "Nowhere Else on Earth: Tasmania's Marine Natural Values". Report for Environment Tasmania. Aquenal, Tasmania.

Dr Karen Edyvane, "Tasmanian Marine Protected Areas Strategy: Background Report", Department of Primary Industries, Water and Environment, Tasmania 2000.

Prof Edgar G, "Marine Parks and Potential Marine Reserves in Tasmania", National Parks and Wildlife Service Occasional Paper No.7, Part 2 June 1984.

G.J. Edgar, N.S. Barrett and D.J. Graddon, "A Classification of Tasmanian Estuaries and Assessment of their Conservation Significance using Ecological and Physical Attributes, Population and Land Use", Ocean Rescue 2000 - Marine Protected Area Program.

A Survey of Potential Marine Reserve Locations in Bass Strait Final Report Ocean Rescue 2000 Project D701 For Australian National Parks and Wildlife Service

Dr Barrett, N. Biological surveys and Habitat Mapping of Proposed Marine Protected Areas on the Tasmanian North and North-Eastern Coasts, TAFI 2001.

Sources and extracts relating to MPA design and protection level

Graham J. Edgar1 et al, Global conservation outcomes depend on marine protected areas with five key features

"… the conservation benefits of 87 MPAs investigated worldwide increase exponentially with the accumulation of five key features: no take, well enforced, old (.10 years), large (.100 km2), and isolated by deep water or sand.

Most (59%) of the MPAs studied had only one or two key features and were not ecologically distinguishable from fished sites. Our results show that global conservation targets based on area alone will not optimize protection of marine biodiversity. More emphasis is needed on better MPA design, durable management and compliance to ensure that MPAs achieve their desired conservation value.

how conservation value, characterized by ecological response of fish communities within MPAs, is affected by the cumulative effects of five key planning and management features: (1) degree of fishing permitted within MPAs; (2) level of enforcement; (3) MPA age; (4) MPA size; and (5) presence of continuous habitat allowing unconstrained movement offish across MPA boundaries6

"Evaluating the social and ecological effectiveness of partially protected marine areas", John W. Turnbull, Emma L. Johnston, and Graeme F. Clark 1

Abstract: Marine protected areas (MPAs) are a primary tool for the stewardship, conservation, and restoration of marine ecosystems, yet 69% of global MPAs are only partially protected (i.e., are open to some form of fishing). Although fully protected areas have well-documented outcomes, including increased fish diversity and biomass, the effectiveness of partially protected areas is contested.

Partially protected areas may provide benefits in some contexts and may be warranted for social reasons, yet social outcomes often depend on MPAs achieving their ecological goals to distinguish them from open areas and justify the cost of protection. We assessed the social perceptions and ecological effectiveness of 18 partially protected areas and 19 fully protected areas compared with 19 open areas along 7000 km of coast of southern Australia.

We found no social or ecological benefits for partially protected areas relative to open areas in our study. Partially protected areas had no more fish, invertebrates, or algae than open areas; were poorly understood by coastal users; were not more attractive than open areas; and were not perceived to have better marine life than open areas. These findings provide an important counterpoint to some large-scale meta-analyses that conclude partially protected areas can be ecologically effective but that draw this conclusion based on narrower measures.

We argue that partially protected areas act as red herrings in marine conservation because they create an illusion of protection and consume scarce conservation resources yet provide little or no social or ecological gain over open areas. Fully protected areas, by contrast, have more fish species and biomass and are well understood, supported, and valued by the public. They are perceived to have better marine life and be improving over time in keeping with actual ecological results. Conservation outcomes can be improved by upgrading partially protected areas to higher levels of protection including conversion to fully protected areas.

Barrett,N., A Survey of Potential Marine Reserve Locations in Bass Strait Final Report Ocean Rescue 2000 Project D701 For Australian National Parks and Wildlife Service

"The process of choosing a marine reserve site is a balance between biological suitability, public access and public acceptance. "

"Climate resilience in marine protected areas and the 'Protection Paradox', Bates, AE and Cooke, RSC and Duncan, MI and Edgar, GJ and Bruno, JF and Benedetti-Cecchi, L and Cote, IM and Lefcheck, JS and Costello, MJ and Barrett, N and Bird, TJ and Fenberg, PB and Stuart-Smith, RD, Biological Conservation, 236 pp. 305-314. (2019)

Abstract: Restricting human activities through Marine Protected Areas (MPAs) is assumed to create more resilient biological communities with a greater capacity to resist and recover following climate events. Here we review the evidence linking protection from local pressures (e.g., fishing and habitat destruction) with increased resilience. Despite strong theoretical underpinnings, studies have only rarely attributed resilience responses to the recovery of food webs and habitats, and increases in the diversity of communities and populations. When detected, resistance to ocean warming and recovery after extreme events in MPAs have

small effect sizes against a backdrop of natural variability. By contrast, large die-offs are well described from MPAs following climate stress events. This may be in part because protection from one set of pressures or drivers (such as fishing) can select for species that are highly sensitive to others (such as warming), creating a 'Protection Paradox'. Given that climate change is overwhelming the resilience capacity of marine ecosystems, the only primary solution is to reduce carbon emissions. High-quality monitoring data in both space and time can also identify emergent resilience signals that do exist, in combination with adequate reference data to quantify the initial system state. This knowledge will allow networks of diverse protected areas to incorporate spatial refugia against climate change, and identify resilient biological components of natural systems. Sufficient spatial replication further offers insurance against losses in any given MPA, and the possibility for many weak signals of resilience to accumulate.

Krueck, N and Hedley, C, Marine Protected Area (MPA) size optimization tool, Capturing Coral Reef and Related Ecosystem Service, World Bank (2018) https://iwlearn.net/iw-projects/4690

Abstract: A simple, individual-based model together with the latest field data on home ranges, densities and schooling behaviour in 66 coral reef fishes was created to specify the relationship between reserve size and conservation effectiveness. Conservation effectiveness was measured using a simple spatial model to determine numbers of individual fish a given reserve can be expected to protect. These numbers were then analysed relative to locally expected population sizes, the fishery value, and functional role of these representative species. The results gave reason for concern over the protection status of most fishery species in standard no-take MPAs around the world, allowing to specify that larger MPAs (> 2km wide) are likely to achieve much better conservation outcomes.