

COMMERCIAL VISITOR

GUIDELINES



# Port Davey

## MARINE RESERVE



Tasmania  
Explore the possibilities

Department of Primary Industries, Parks, Water and Environment

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## **1.0 COMMERCIAL OPERATOR GUIDELINES**

### **1.1 Intent of the Guidelines**

These guidelines aim to protect the values of this relatively undisturbed wilderness area of the Port Davey Marine Reserve / Melaleuca Visitor Services Site whilst allowing for controlled tourism and recreation access.

The guidelines apply to commercial operators in the Port Davey Marine Reserve, licensed under the *National Parks and Reserves Management Act 2002*. They include motorised and non-motorised vessel-based recreation and tourism operations and land tourism operations. (A vessel includes yachts, motorboats, kayaks, dinghies, inflatables and float planes.)

The guidelines do not apply to commercial fishing vessels unless involved in providing services as detailed under S38 of the *National Parks and Reserves Management Act 2002*.

Onshore activities, often associated with commercial vessel operations, are also addressed in the guidelines.

These guidelines should be read in conjunction with the *Port Davey Marine Reserve map and visitors' guide*, available for purchase on-line through the Parks and Wildlife Service (PWS) website, Service Tasmania, or selected outdoor stores.

### **1.2 The Guidelines**

#### **1.2.1 Vessel Anchoring**

- To protect the sensitive and fragile marine life, a no-anchoring area (*Sensitive Area*) through Bathurst Channel has been marked on the Port Davey Marine Reserve map. To determine safe anchorages, consult the Tasmanian Anchorage Guide and nautical chart AUS 176.
- Tying off of large vessels to vegetation (live or dead) is discouraged, however if necessary for your safety, please use tree-guard webbing (or similar) to prevent damaging the vegetation.

#### **1.2.2 Vessel Access Restrictions**

- *Vessel access zones* are outlined in Appendix 5. The purpose of the zones is to minimise disturbance of the halocline and marine life.
- For vessels over 35 m in length, there are access limits which have been determined using a *Propeller Flow Turbulence Prediction Model*. Commercial operators in this category are required to provide information to enable the calculation (refer Appendix 6)

- The pilot of the vessel is responsible for assessing the vessel characteristics and weather at the time of the visit to determine the suitability of safe access. Vessels under pilotage, navigating within Port Davey, are to comply with all relevant State and Commonwealth Acts and Policies (refer Appendix 7).
- Shallow water navigation is prohibited. The depth at which water within the Port Davey Marine Reserve is regarded as navigationally shallow shall be the greater of twice the operational draft of the vessel, or that depth applicable to the vessel waterline length and speed of operation as determined in the graph in Appendix 4.
- *No Motorised Boating Areas* have been designated to protect vessels from dangerous obstructions, prevent bank erosion, avoid disturbance of seafloor sediments and water layer mixing, and to protect sensitive bird breeding areas. The tranquillity and purity of these waters will be protected by limiting use to small craft propelled manually or by sail (WHAMP, 1999, p138). These areas are noted on the marine reserve map and include Davey River, Spring River, North River and Old River.
- Aside from the designated *No Motorised Boating areas*, many other bays and inlets are too shallow for vessels other than dinghies, and require careful navigation. These areas are also important habitats for shorebirds – and in outer Port Davey, important fish nurseries. They include James Kelly Basin, NW Payne Bay/Davey River entrance, Hannant Inlet, Manwoneer Inlet, Horseshoe Inlet, Old River entrance, Moulters Inlet, the waters around Celery Top Islands, Melaleuca Inlet and Melaleuca Lagoon.
- *Restricted Access*: Access to Melaleuca Lagoon is restricted to authorised PWS staff and residential lessees.

### 1.2.3 Vessel Speed Limits

- A speed limit of 5 knots applies in Melaleuca Inlet, south of 43°24.496'S, to avoid further erosion of the soft sediment banks.
- To minimise bank erosion from wake impact on shorelines, vessels with planing hulls are encouraged to keep their keel parallel to the surface of the water. When travelling in very sheltered waters and navigable rivers planing is discouraged close to shore since all wake waves travel outwards from the sailing line (i.e. towards the shore rather than following the vessel).
- Vessels must be operated in accordance with the *Marine and Safety Tasmania (MAST) Motor Boats and Licences Bylaws 1998*. It is an offence under these bylaws, Section 28 (3) (b), to travel at a speed faster than 5 knots within 60 m of:
  - any shoreline, river bank, diving platform or marine facility; or
  - any boat underway, at anchor, moored, or engaged in fishing or in rowing; or
  - any buoy laid by or with the approval of MAST.

- Under Section 28 (c) it is an offence to travel at a speed faster than 5 knots within 120 m of:
  - any person bathing, or
  - any vessel or buoy displaying the signal letter "A" of the International Code of Signals which signifies "I have a diver down; keep well clear at slow speed."

#### 1.2.4 Certification of Vessels & Qualifications of Crew

- All vessels must abide by MAST and Tasports Corporation regulations, and provide current Survey certificates.
- Vessels must be under the command of a duly qualified person.
- Visitor numbers and crew qualifications should be submitted to PWS Southern Region.

#### 1.2.5 Safety

- All commercial operators are expected to comply with statutory requirements detailed in the *Workplace Health and Safety Act 1995* and *Workplace Health and Safety Regulations 1998*.
- A Risk Assessment and Control Plan must be submitted. The Plan should, as a minimum, list all risks associated with the activities planned, and steps to be taken to minimise risks identified. All activities undertaken within the Port Davey-Bathurst Harbour-Melaleuca region are considered to occur in a remote and isolated area. Guides must have reliable communications and equipment, qualifications and skills to cope with emergency situations. The Risk Assessment and Control Plan must identify how these requirements will be met.
- GPS Units must be fitted and switched on while vessel is moving and/or attended.
- Marine VHF radio must be fitted and switched on while vessel is attended.
- A copy of any Accident/Incident or Hazard Report must be forwarded as soon as practicable to the PWS Parks and Reserves Manager South.

#### 1.2.6 Insurances

- All licensed operators must have Public Liability Insurance of a minimum of \$10 million. Vessel operators must have Public Liability Insurance included in the Hull Insurance and for shore-based activities.

#### 1.2.7 Sewage & Grey Water

- Commercial vessels are required to have holding tanks of sufficient size to last their visit (refer Appendix I – Vessel Design & Equipment).
- Private vessels are encouraged to have sufficient-sized holding tanks fitted to their vessel where possible. PWS recognise that many smaller and/or older vessels have limited holding capacity for sewage, which may not last the time

spent in the marine reserve. For these vessels, please assist by observing the following:

- Empty holding tanks or portaloos before entering the marine reserve.
- While in the marine reserve, empty smaller holding tanks as close to the Breaksea Islands as practical. This will allow tidal flushing to dilute nutrients in the sewage and grey water, which will protect the sensitive marine life.
- When possible, use the on-shore toilets at Claytons Corner and Melaleuca airstrip.

#### 1.2.8 Marine Pests

- To avoid the introduction of marine pests and nutrients, it is illegal to discharge bilge and ballast within a marine reserve.
- It is illegal to discharge ballast within 12 nautical miles of the marine reserve/Southwest National Park boundary.
- All operators must thoroughly check anchors, and dive and fishing gear for introduced marine pests, and regularly (annually) clean and anti-foul their vessel – especially before departing for Port Davey.

#### 1.2.9 Root Rot

- To avoid further spreading this disease within the Port Davey area, ensure all visitors' gear is free of dirt and mud on arrival.
- When travelling between locations within the reserve, scrub muddy boots and equipment in the salty shallows before stepping ashore. Provide a scrubbing brush on-board your vessel for this purpose.
- Keep to formed tracks where possible, to avoid spreading the disease.
- Adherence to root rot hygiene also avoids the spread of other diseases, such as chytrid frog fungus.
- Quarantine (Interstate & Overseas Vessels) Under section 20AA of the *Tasmanian Quarantine Act 1977*, overseas vessels must apply for permission to call at all ports not recognised as First Entry Ports. This includes Port Davey and all other ports other than Hobart, Devonport, Launceston and Burnie (at First Entry Ports a different part of the *Tasmanian Quarantine Act 1977* applies).
- Permission must be obtained even if the vessel is only anchoring in a port and no passengers are going ashore.
- Quarantine considerations will be taken into account during an inter-agency meeting if appropriate.

#### 1.2.10 Water Pollution

- All vessels must abide by the *Tasmanian Pollution of Waters by Oil and Noxious Substances Act 1987*, giving effect to the MARPOL Convention, including no discharge of waste within 12 nautical miles of the coast, and the Tasmanian

### *Environmental Management and Pollution Control Act 1994.*

- Annexes I (oil), II (noxious liquid substances), III (packaged harmful substances) and V (garbage) are in force in Tasmania's coastal waters. Although parts of the Convention may only apply to vessels certified to carry more than 10 people, all commercial tour vessels, regardless of their size, must comply with the Convention whilst within the boundary of the Southwest National Park and the Port Davey Marine Reserve.
- Internal motored vessels must have a filter fitted for bilge, or an oil mat. Two stroke motors are not permitted.

#### 1.2.11 Noise Pollution

- Noise pollution standards for motor vessels and outboard motors are set by an Environment Protection Policy (EPP) on Noise.
- The number of vessels permitted in each zone (refer Appendix 5) take into account the need to preserve the tranquillity of the area and avoid disturbing wildlife.
- Onshore generators are not permitted.
- Vessel motors should be as quiet as current technology allows for.

#### 1.2.12 Leave No Trace

- The principles of Leave No Trace are used by Park Services and tour operators throughout the world to preserve our treasured wild places. The principles are listed in the notes on the Port Davey Marine Reserve map and must be adhered to.

#### 1.2.13 Shore-based Activities

- All shore-based activities must be identified (refer Appendix 2 for walking tracks and visitor sites). Approved activities will be documented in the commercial licence.
- Where boat or land toilets are not provided, visitors must be instructed on the Leave No Trace “dispose of waste properly” principle.
- Groups with only one guide must have a reliable communications system.
- All guides must hold an appropriate first aid qualification (minimum requirement being a current *Work Place Safety Level II First Aid Certificate* or equivalent).
- All guides must have access to emergency equipment to shelter and maintain body warmth of any person who has suffered an injury and is unable to walk.
- All guides must be at least 18 years of age and must have walked the tracks at least once in the last two years.
- Groups must not deviate from formed tracks, unless otherwise approved.

- All rubbish generated by the group must be taken out of the marine reserve/national park.

#### 1.2.14 Interpretation

- All regular commercial vessel licence holders are encouraged to provide appropriate quality interpretation to visitors and become accredited under the *National Ecotourism Accreditation Program (NEAP)*.
- Licence holders should make themselves fully aware of the content of the *Port Davey Marine Reserve Visitors' Guide*, which provides thorough interpretation on the natural and cultural heritage of the marine reserve and surrounds, including Melaleuca.
- For commercial cruise vessels longer than 35 m, PWS may require operators to have a suitably qualified PWS Officer onboard or that a PWS Officer may be required to attend all shore visits. Operators will be required to comply with any reasonable directions given by the PWS Officer. The PWS Officer's role is to ensure compliance with licence conditions, vessel access zones, and provide an interpretive service. The operator must cover any travel costs incurred by the PWS Officer to/from the vessel.
- A PWS Officer will, where possible, attend special events and commercial trips where there are a reasonable number of smaller vessels cruising in company (e.g. the Harris World Heritage Classic Boat Cruise and the Van Diemen's Land Circumnavigation Yacht Cruise). Please note a fee may be charged on a case-by-case basis.

#### 1.2.15 Aboriginal Heritage

- All commercial operators and guides must be aware of the provisions of the *Aboriginal Relics Act 1975*, and ensure that visitors do not disturb Aboriginal sites and relics, for example by picking up artefacts or walking over sites. Commercial operators and guides should contact the Department's Aboriginal Heritage Unit for advice on who to contact in the Aboriginal community if they are uncertain or unsure if a site has Aboriginal relics or artefacts.
- Areas suitable for onshore activities (refer Appendix 2) have been selected to minimise impact on important Aboriginal sites.

#### 1.2.16 Scuba Diving

- A *Divers' Code of Conduct* is outlined on the Port Davey Marine Reserve map. Intending divers are strongly encouraged to join a licensed PWS dive company who are familiar with the area, its fragility and its risks.
- *Diver Reference Area*: Three locations in Bathurst Channel have been set aside as no dive/no anchor areas to protect a representative sample of Bathurst Channel's marine communities. These *Reference Areas* are located alongside popular diving areas to enable impacts of diving in adjacent areas to be easily assessed.

## **2.0 COMMERCIAL VISITOR SERVICES (CVS) LICENCE SYSTEM**

The Commercial Visitor Services (CVS) section of the PWS provides information to operators interested in conducting commercial activities on reserved land. The CVS licensing system was introduced in 2000 at the request of, and after extensive consultation with, Tasmania's tourism industry. The CVS system is managed by the PWS and is designed to provide a 'one-stop-shop' approach for persons wishing to conduct tourism-based commercial operations in areas managed by one or more of the following authorities: PWS, Crown Land Services, Forestry Tasmania and Wellington Park Management Trust.

### **2.1 Why are Licences required?**

The CVS licensing system provides:

- a mechanism for measuring and directing the use of crown land with the prime aim of ensuring these activities do not compromise conservation values;
- a set of minimum standards of public safety and public liability cover;
- security of access for CVS contract holders; and
- operators with the opportunity to inform their customers of conservation values and the importance of conservation.

The guidelines outlined in Section 1.0 apply to all commercial operators in the Port Davey Marine Reserve. Adherence to these forms the basis of the condition of any licence.

All commercial operators are required under the *National Parks and Reserves Management Act 2002* to obtain from the PWS a licence to operate within the Southwest National Park (including Port Davey Marine Reserve) and the Southwest Conservation Area (including Melaleuca).

### **2.2 What do you need to do?**

You may apply for a licence by completing an application form, providing supporting documentation such as relevant maps and an operations manual, and paying the application fee of \$150.00

**Before completing your application, please contact CVS staff to discuss your proposal – phone: (03) 6333 3636.**

### **2.3 Applying for a Licence**

If you are applying for a business licence, you may (subject to approval) be issued with a 5 year contract. An annual licence fee will also apply.

You will also need to apply for a business licence if you plan to conduct a one-off commercial trip or special event in the area. Special events are often competitive in nature, occur usually over one or two days and can potentially involve large numbers of people. NB: In some cases an assessment may be required if the activity you propose is new or has the potential for significant environmental impact.

## **2.4 Prior to Issuing a Licence**

You will be required to produce an Operations Manual prior to being granted a licence. Please contact CVS staff to find out about any other additional requirements apart from those required by MAST (e.g. if your business will provide commercial bushwalking tours on specific tracks).

Please note that prior to the issue of a contract, you will also need to provide evidence that you hold:

- public liability insurance cover to the value of \$10 million; and
- any other relevant certificates and licenses required (e.g. MAST/Transport) which will be dependant on your operation.

## **2.5 Business Trading Name**

When conducting business in Tasmania you must register your trading name in Tasmania. The office of Consumer Affairs and Fair Trading, which is the organisation in Tasmania responsible for the registration of trading names, advise that:

- trading name registration is compulsory in every state and territory in which the business operates; and
- when conducting a tour in Tasmania an operator is considered to be offering a service to Tasmania and/or Tasmanians and is therefore required to register the trading name in Tasmania.

It is up to individual operators which entity they choose to nominate for the purpose of obtaining a CVS licence. However, the PWS have a responsibility to ensure that the Crown is entering into a contract with a legal entity that complies with Tasmanian legislation. The PWS will only enter into a contract with a company, an individual or a business with a trading name that is registered in Tasmania.

A trading name registration form is available from the Consumer Affairs and Fair Trading website.

## **2.6 Tourism Accreditation**

While your licence will have a number of conditions that relate to your specific business or activity, you must have, or within a maximum of eighteen (18) months of the Commencement Date of the licence, provide evidence of, achievement of accreditation appropriate to your Business under the National Tourism Accreditation Program.

The Tourism Industry Council of Tasmania can provide you with further information in relation to this process.

## **3.0 THE PORT DAVEY MARINE RESERVE**

### **3.1 An Introduction**

The Port Davey Marine Reserve in the southwest of Tasmania is located within the boundaries of the Southwest National Park and the Tasmanian Wilderness World Heritage Area. Originally proclaimed in 1951, the Southwest National Park is classified as IUCN Category II – National Park, and is fully protected under the *National Parks and Reserves Management Act 2002*. The Port Davey Marine Reserve was proclaimed in 2005.

The region can be enjoyed from the land, sea and air for its spectacular coastal scenery and largely pristine landscape. Its special values include the unusual marine environment, Aboriginal heritage, historic heritage, and its value as a wilderness and wilderness recreation destination.

The marine reserve is well-known for its significant and pristine marine ecosystems, reliant upon unusual water conditions. The stratified waters and soft sediments are prone to disturbance by the passage of vessels, especially in sheltered, shallow and/or narrow passages. There is also a very real risk of introduced pests and pathogens becoming a major ecological concern. The full range of environmental impacts likely to result from vessel movements in the Port Davey Marine Reserve is difficult to predict.

Due to the significance of the ecosystems and the uncertainty regarding the potential impact of vessel navigation and human activities, the **precautionary principle** has been adopted until such time as there is clear evidence that various activities do not cause environmental harm.

### **3.2 Current Management of Area**

The *Tasmanian Wilderness World Heritage Area Management Plan, 2016 (WHAMP, 2016)* forms the basis for management of the area.

A local plan (the *Melaleuca – Port Davey Area Plan (Area Plan)*) was approved in 2003 and provides management objectives, policy and actions for the Port Davey – Bathurst Harbour – Melaleuca area. The *Area Plan* stipulates that licenses issued for commercial vessel operations in the Port Davey – Bathurst Harbour area are to be prepared in accordance with these guidelines.

In 2007, the Department of Primary Industries and Water commissioned a report by *Aquenal Pty Ltd* to investigate the Port Davey-Bathurst Harbour marine and estuarine ecosystems and report on their biodiversity, threats and management options. In response to several recommendations in this report, in 2009 the *Port Davey Marine Reserve map and visitors' guide* were produced to interpret the area's values to users and clearly define management zones. The marine reserve map includes Codes of Conduct for boaties and divers, a "sensitive area" through Bathurst Channel where anchoring is not permitted, three "diver reference areas" where anchoring and diving are not permitted, and biosecurity guidelines.

## 3.3 The Marine Environment

### 3.3.1 Unusual Water Features

The unusual water conditions in the Port Davey Marine Reserve underpin the unique marine ecology of this area. Four major rivers feed into Bathurst Harbour and Bathurst Channel, bringing with them dark, tannin-stained water – the tannins leached from the peat soils of the buttongrass moorland and heathlands. The tannin-stained freshwater is lighter in weight than the underlying dense saltwater. This causes the dark band of tannin freshwater to sit on top of the clear saltwater – a phenomenon known as **stratification**. In Bathurst Harbour and Bathurst Channel, the freshwater layer is at its deepest (around 4 m) in winter, when rainfall is highest.

The narrow zone where freshwater meets saltwater is called the **halocline**, or salt gradient. Some species have adapted to live in either fresh or saltwater. The movement of fast and/or large vessels disturbs the halocline, and therefore the marine life.

### 3.3.2 Unusual Marine Life

In Bathurst Harbour and Bathurst Channel, the dark tannin freshwater restricts sunlight penetration to the top few metres, which limits the growth of marine plants. In their place live marine invertebrates, many of which are usually found in very deep, ocean waters.

The marine environment in Bathurst Channel in particular is ecologically unique and of international significance. The dark waters, combined with a strong current supplying food particles, provide an environment which sustains a great diversity of marine invertebrates. The animals colonise the channel floor and walls, and include sea pens, sea fans, sea whips, sponges, bryozoans, ascidians and soft corals. They are extremely fragile and sensitive to damage from vessels (anchors, anchor chains, large motors mixing the halocline, vessels running aground etc) and scuba diving (accidental fin kicks, sediment disturbance etc).

### 3.3.3 Soft Sediment Banks

The sheltered waters of rivers and some inlets have allowed the natural development of soft sediment shoals and banks that are very susceptible to erosion by boat wake and wash.

Any moving vessel produces currents and waves in the surrounding water which can have significant impacts on soft bank edges, especially in shallow, restricted channels or in bays and inlets. Vessel wake may be of sufficient magnitude to disturb sediments and/or aquatic organisms otherwise adapted to live in calm conditions.

Guidelines to minimise the impact of moving vessels have been established and must be adhered to.

### 3.3.4 Low Nutrient Waters

The marine life in Bathurst Channel and Bathurst Harbour exist in – and rely on – an extremely low nutrient environment. Estuaries are usually rich in nutrients, however in the south-west, the waters have drained through the nutrient-poor, shallow soils of eroded quartzites. Any increase in nutrients can poison the animals and encourage invasive species.

Discharging sewage and sullage increases nutrient levels. It is illegal to discharge sewage and grey water into any Australian marine reserve.

### 3.3.5 Pristine Waters

The Port Davey Marine Reserve is virtually free of introduced marine pests. It is however, an area of high risk because of its proximity to the port of Hobart and southeast Tasmania. Due to the unique nature of the marine and estuarine habitats of the area, extreme care must be taken to keep introduced marine pests out of the area. Marine pests are spread in bilge and ballast waters, on fouled boat hulls, anchors and anchor chains, and in dive and fishing gear.

## 3.4 The Terrestrial Environment

### 3.4.1 Landform and Geology

The Port Davey landscape is often mistaken for a glacial fjord. It is in fact a drowned valley or ria. Bathurst Harbour was once a large plain that flooded as the sea level rose about 7000 years ago with late melting of the last ice age. The geology of the area is largely billion year old quartzite's, originating as sand and mud laid down in shallow seas, which over time were metamorphosed by heat and pressure into quartzites and schists, then uplifted, folded and partially eroded away. Other younger rocks, conglomerates, are also present.

The soils that blanket much of south-west Tasmania are organosols – loosely referred to as peat. Organosols form from undecomposed plant material that slowly accumulates under extremely wet, humid and cool conditions.

### 3.4.2 Flora and Fauna

The vegetation community surrounding the marine reserve is typical of the south-west – buttongrass moorlands and heathlands. The moorlands have developed over thousands of years, assisted by regular burning by Aborigines.

Wildlife includes wombats, wallabies, a variety of small nocturnal marsupials, burrowing crayfish, and a great variety of birds, invertebrates and frogs.

### 3.4.3 Root Rot

The greatest threat to Tasmania's land plants is an introduced plant disease called root rot. The disease is caused by a microscopic soil-borne pathogen (*Phytophthora cinnamomi*), which lives inside a plant's roots and gradually kills its host. Root rot is spread on the muddy boots and camping gear of visitors. Once root rot infects an area it cannot be removed.

In the Port Davey-Bathurst Harbour region there are some large infestations of root rot, mainly alongside waking tracks and where visitors are going ashore.

The Celery Top Islands are presently root rot free. DPIPWE have declared them a *Phytophthora cinnamomi* management area for the protection of the uncommon vegetation species, *Persoonia muelleri* var. *densiflora*. The islands have been protected from fire for a considerable time, providing protection for rainforests. The islands and

adjacent area are also considered by the Aboriginal community as highly sensitive and significant in terms of their Aboriginal cultural and landscape values. They desire that there be an absolute minimum of disturbance and visitation to the islands.

### **3.5 Aboriginal Heritage**

At the time of European arrival, the Port Davey area was the homeland of the NINUNEE Aboriginal people. Nearby at Cox Bight lived another group – the NEEDWUNNEE. Both lived in ‘villages’ alongside freshwater and built dome-shaped huts from bark and teatree.

The Cox Bight-Melaleuca area is highly significant to the Aboriginal community for its spiritual associations and traditional resources which are used by the present-day Aboriginal community (report from Tasmanian Aboriginal Land and Sea Council to the Parks and Wildlife Service, 1997). The *Aboriginal Relics Act 1975* provides for the protection of Aboriginal sites and relics. The *Tasmanian State Coastal Policy 1996* provides for protection and conservation, where appropriate, of areas within which Aboriginal sites and relics in the coastal zone are identified.

### **3.6 European Heritage**

Whalers, sealers and piners (timber-cutters) first arrived in the early 1800s. Bay whaling stations were located at Bramble Cove and Turnbull Island. Pining villages were located near the mouth of the Davey River at Piners Point and Settlement Point, and another at Spring River. By 1890, with both whales and Huon pine scarce, Port Davey was largely abandoned.

Since the 1900s the areas has only seen three long-term resident families: the Claytons, Kings and Willsons.

## **4.0 WALKING TRACKS & VISITOR SITES**

The *WHAMP, 2016* places Port Davey and Bathurst Harbour waters, together with the land around Mt Milner, Mt Rugby, Claytons Corner and Mt Beattie in the *Recreation Zone*. This zone includes areas that are popular with bushwalkers, boat users, anglers and sea kayakers. They are suitable for day and overnight recreational use.

Most of the land above the high water mark is zoned *Wilderness*. An objective of the *Wilderness Zone* is to retain a challenging unmodified natural setting that suitably experienced people can visit for wilderness recreation and scientific purposes.

Melaleuca, located outside the WHA, is recognised as a *Visitor Services Site*. *Visitor Services Zones and Sites* aim to provide a range of appropriate facilities strategically located to facilitate visits to the WHA and to enable most visitors to gain a first hand experience of a range of the values of the WHA.

Maximum group sizes and client/guide ratios stated (refer Appendix 2) have been derived from track classifications as per the *Walking Track Management Strategy* for the WHA (*PWS 1994*), and the Review of client to guide ratios and group size limits for commercial/bushwalking experiences up to one day in duration (*PWS Dec 2002*).

## 5.0 INTERPRETATION

Interpretation should aim to enhance visitor awareness, understanding and appreciation of the unique but fragile and sensitive marine and estuarine communities in the area, and the real risks and ecological impacts posed by inappropriate boating and bushwalking practices. Good interpretation helps to enrich the experience of the visitor, and can influence visitor behaviour by highlighting the significance of and need to protect the natural and cultural values of the area.

The *Port Davey Marine Reserve Visitors' Guide* provides excellent natural and cultural history to assist operators and guides interpret the environment.

The *WHAMP, 2016* emphasises developing interpretation with local communities, including the Tasmanian Aboriginal community. The Plan also encourages Aboriginal people to manage Aboriginal interpretation of the WHA. Commercial operators and guides should contact the Department's Aboriginal Heritage Unit for advice on who to contact in the Aboriginal community with respect to Aboriginal interpretation of the area. The *Port Davey Marine Reserve Visitors' Guide* also contains interpretation on the Aboriginal heritage of the area.

## **APPENDIX 1 - Vessel Design and Equipment**

It is a requirement of the Parks and Wildlife Service that all commercial vessel operators are fitted as follows:

- GPS units must be fitted and switched on while vessel is moving and/or attended.
- Marine VHF radio must be fitted and switched on while vessel is attended.
- Motors should be as quiet as current technology allows for, and fuel efficient. Two stroke motors are not permitted.
- Boat size/hull design to minimise boat wake (refer 1.2.2 & 1.2.3)
- Holding tank fitted (refer 1.2.7)
- Internal motored vessels must have a filter fitted for bilge, or an oil mat.
- Visitor numbers and crew qualifications/movements should be logged and submitted to PWS Southern Region.

## **APPENDIX 2 - Walking Tracks and Visitor Ratios**

### **Spain Bay-Stephens Bay Track**

The coastal area, including Spain Bay and Stephens Bay, contains important Aboriginal heritage; all sites are protected. The 2 hr return walk to Stephens Bay starts just east of the rocky outcrop halfway along the western beach.

Beach – Maximum group size: 25 (including guides). Maximum to guide ratio: 24:1.

Spain Bay to Stephens Bay track – Maximum group size: 6 (including a minimum of one guide in the party).

### **Bramble Cove Beach**

The immediate area behind Bramble Cove is zoned Recreation, however inland access beyond the campsite is discouraged due to the existence of fragile and vulnerable historic heritage sites from the whaling industry.

Maximum group size: 25 (including guides). Maximum client to guide ratio: 24:1.

### **Mt Milner, Bramble Cove**

Mt Milner is a steep climb (1 hr return), providing good views of outer Port Davey. The walk starts at the western end of the small beach in north-west Bramble Cove.

Maximum group size: 6 (including minimum of one guide in the party).

### **Critchley Parker's Grave**

A 20 min return walk to Critchley Parker's grave starts at the western end of Parker Bay. Access to the bay is difficult for most vessels except kayaks and small dinghies.

Maximum group size: 6 (including minimum of one guide in the party).

### **Balmoral Beach (unnamed beach east of Balmoral Beach)**

The beach immediately east of Balmoral Beach has less sensitive hinterland than Balmoral Beach. It is zoned Recreation and is suitable as a landing site for commercial vessel passengers for the purposes of swimming and picnicking. However, any inland access from the beach immediately east of Balmoral Beach, or from Balmoral Beach, is discouraged as the route is steep and at risk of eroding. Maximum group size: 25 (including guides). Maximum client to guide ratio: 24:1.

### **Balmoral Hill Track**

The track to the top of Balmoral Hill (1 hr return) leads up the hill on the eastern shore of Casilda Cove. It is relatively well-graded and does not impact on the visual amenity of the area.

Maximum group size: 6 (including a minimum of one guide in the party).

### **Mt Rugby Track**

Use of the Mt Rugby track is presently being discouraged due to its rapidly deteriorating condition and PVWS inability to resolve this in the near future. Track re-routing is one of the options being investigated to avoid the visual scar that is presently developing.

### **Celery Top Islands**

The Celery Top Islands are recommended for zoning as a Scientific Area to protect their natural and scientific values (WHAMP, 2016). Public access is currently restricted to the second island from the west and is subject to biosecurity measures to prevent the introduction of root rot and other weeds and diseases. All operators are to provide a scrubbing brush for visitors to wash soil-contacted equipment before going ashore.

Maximum group size: 13 (including minimum of one guide)

### **Claytons House / 'Clydes Hill' Track / Mt Beattie Track**

Vessels may tie up at the jetty or anchor in Claytons Corner. Activities include:

- Visit Clyde and Win Clayton's former house and garden.

Maximum group size: 25 (including guides) Maximum client to guide ratio: 24:1

- 'Clydes Hill' walking track (20 minute return) to a knoll to the east of Claytons house for good views of the Celery Top Islands, Bathurst Harbour, Mt Rugby and the Arthur Ranges.

Maximum group size: 13 (including minimum of one guide)

- Mt Beattie walking track (3 hr return) for excellent views over Bathurst Harbour, Bathurst Channel and Melaleuca Inlet.

Maximum group size: 13 (including minimum of one guide)

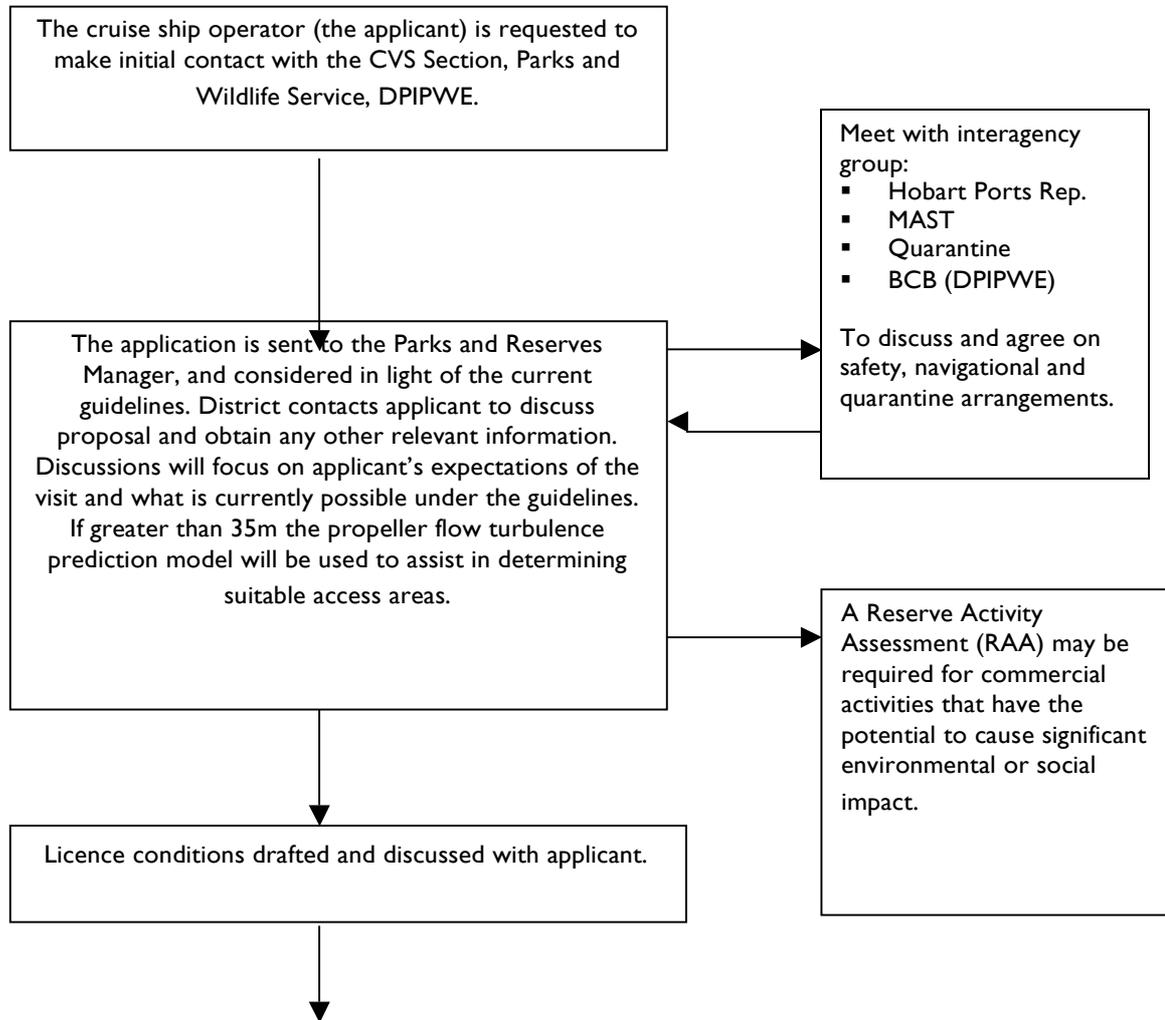
### **Melaleuca**

Bird Hide, Deny King's House, Historic Hut, airstrip and start/end of South Coast track. View critically endangered Orange-bellied Parrots from the Deny King Bird Observation Hide and the historic Charles King Memorial Hut. See the site of the Bathurst Harbour Landing Area (PWS private airfield) and start/end of the South Coast Track. In certain circumstances, it may be possible to view the exterior of Deny King's House and surrounding buildings. Visitation to the King's leasehold must be approved under the conditions of the licence.

Maximum group size: 25 (including guide). Maximum client to guide ratio: 24:1.

### APPENDIX 3 - Processing Cruise Ship Applications

(This chart generally applies to vessels over 35 m long)



Draft licence conditions sent to Commercial Visitor Services to finalise Licence.

#### APPENDIX 4 - Determining Safe Speed and Vessel Length

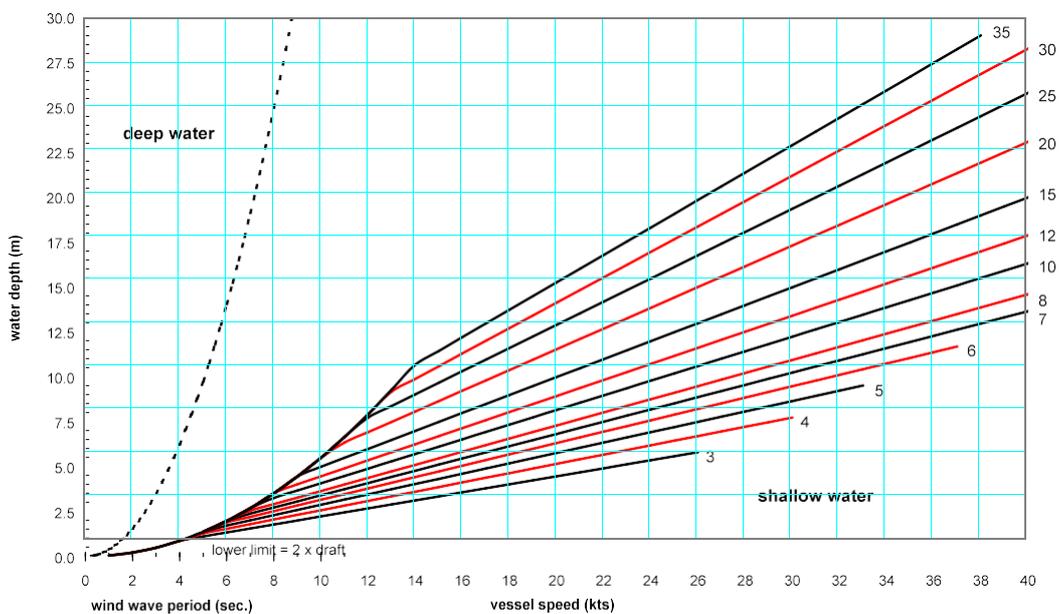
Any moving vessel produces currents and waves in the surrounding water which can have significant impacts on soft bank edges, especially in shallow, restricted channels or in bays and inlets. Vessel wake may be of sufficient magnitude to disturb sediments and/or aquatic organisms otherwise adapted to live in calm conditions. The energy of vessel-induced waves and currents is generally proportional to a vessel's displacement and the square of its speed.

Figure 1 provides standard scientific wave theory for the purposes of these guidelines. For further scientific information contact Jason Bradbury, Geo Scientific Officer, Biodiversity Conservation Branch, DPIPWE, or email: [Jason.Bradbury@dipwe.tas.gov.au](mailto:Jason.Bradbury@dipwe.tas.gov.au).

The main part of the graph may be used to determine the maximum speed that a vessel of known length may operate in water of particular depth without having an effect on the seabed. Navigationally shallow water occurs in that region to the right of the solid curved line and below the appropriate numbered line representing vessel length. For example, a 5m dinghy may operate at up to 5 knots in 1.5 m of water, 10 knots in 3 m, 20 knots in 5.75 m or 30 knots in 8.75 m of water without causing significant water motion at the seabed.

The dashed curved line to the left indicates the depth of wave activity according to the period (time in seconds between successive crests) of the natural, wind-driven waves. If the depth of disturbance due to wake waves extends below that of the prevailing sea state, disturbance to either the marine life or the halocline may occur. If the depth of wave wake activity extends below that of the maximum expected storm waves, repeated vessel activity may have a geomorphological effect (i.e. bank erosion).

#### Limits of navigationally shallow water according to vessel length & speed



## APPENDIX 5 - Vessel Access

The following table outlines the various zones within the Port Davey Marine Reserve. These areas are also indicated on the Port Davey Marine Reserve map. These zones do not imply that all parts within them are safe for vessels of the stated size. Marine chart (AUS176) and caution should be used.

Location	Vessel Draft	Vessel Length	Class	Speed Limits	Number of Vessels Permitted	Pilotage <sup>2</sup>
Port Davey  (eastward to Bramble Cove and Turnbull Island) <sup>3</sup>	Max 8m	121m to 280m	Large ship	Specify subject to Pilot requirements	Only one vessel in at any one time. Maximum number of 25 vessel visits per year..	MAST/TASPORTS requirements. PWS suitably qualified officer desired. South Passage is the recommended route for vessels navigating east of Breaksea Islands.
Bathurst Channel <sup>4</sup> (Turnbull Island eastward to an imaginary line between Parker Bay to Farrell Point and then to Joan Point.)  <i>NB: Operational zones subject to "propeller flow turbulence prediction modelling" (Appendix 6).</i>	Max 7m	35m to 120m <sup>5</sup>	Small ship			Vessels must manoeuvre in the deepest part of the channel.  Wind over 30 knots may cause difficulties in manoeuvring a large vessel.  <i>Refer marine reserve map for designated anchoring point in Bathurst Channel for large licensed commercial tourism vessels.</i>
Bathurst Narrows	Max 3m	Up to 35m	Large boat or small ship	Refer to Section 1.2.2 shallow water navigation	Max 3 vessels at any one time.	Not required
Bathurst Harbour, Payne Bay, Spain Bay	Max 2.5m					
All other areas zoned for motorised boating in the WHAMP, except areas listed below.		Up to 18m	Medium boat	5 knots <sup>1</sup>		
Melaleuca Lagoon (PWS & Melaleuca residents only), Melaleuca Creek upstream as far as public pontoon	Max 2m	Up to 6m	Dinghy Kayak Canoe Small Boat	5 knots <sup>1</sup>	No limit specified, however maximum group sizes will dictate the number of small craft used.	Not required

<sup>1</sup> Marine and Safety (Motor Boats and Licences) Bylaws 1998.

<sup>2</sup> Port Davey is a gazetted port under the Tasmanian Marine and Safety (Pilotage and Navigation) Regulations 1997. All vessels must comply with the requirements by MAST/TASPORTS.

<sup>3</sup> Bramble Cove is the usual anchoring and disembarking point for passengers of vessels greater than 35m. In Bathurst Channel, inside the sensitive area, a designated anchoring point is provided for commercial vessels just south of Little Louisa Islet (refer *Port Davey Marine Reserve map*)

<sup>4</sup> Vessels should exercise extreme care in Bathurst Channel to protect the concentration of very sensitive marine invertebrate communities on the channel walls and floor, the very low nutrient system, and the possibility of boat wake and propellers causing disturbance of the layered waters.

<sup>5</sup> Acceptability of cruise vessel access in this zone will be considered by an interagency committee.

## **APPENDIX 6 – Propeller Flow Turbulence Prediction Model**

For vessels over 35 m in length, a propeller flow turbulence prediction model will be used to determine operational limits within the General Access Zone.

To enable this calculation, the following inputs (for main propeller and for thrusters) should be forwarded with your application:

- propeller diameter from tip to tip (in metres)
- is the propeller ducted?
- propeller thrust coefficient (typically from 0.1 to 0.8)
- rotations per minute of propeller at desired ship speed (1/minute)
- nominated limit velocity (m/sec)
- distance from waterline to propeller hub (m) (immersion)

## **APPENDIX 7 - Relevant State and Commonwealth Acts & Policies**

*Aboriginal Relics Act 1975*

*Environmental Management and Pollution Control Act 1994*

*Historic Cultural Heritage Act 1995*

*Living Marine Resources Management Act 1995*

*Marine and Safety Authority Act 1995*

*National Parks and Reserves Management Act 2002*

*Nature Conservation Act 2002*

*Pollution of Waters by Oil and Noxious Substances Act 1987*

*Quarantine Act 1997*

*Threatened Species Protection Act 1995*

Emergency Marine Pest Plan 1999 (Australian)

Tasmanian Marine Oil Pollution Contingency Plan (TasPlan) 2001

Tasmanian State Coastal Policy 1996

State Policy on Water Quality Management 1997

International Conventions, Commonwealth Acts and Policies

International Convention for the Prevention of Pollution from Ships (MARPOL)

International Convention for the Prevention of the Pollution of the Sea by Oil, 1954, as amended 1962 and 1969

*Environment Protection and Biodiversity Conservation Act 1999*

*Environment Protection (Sea Dumping) Act 1987*

Commonwealth Coastal Policy 1995