



Gippsland Lakes Sustainable Boating Plan

2016-2018



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Gippsland Lakes Sustainable Boating Action Plan 2016-2018

Acknowledgments:

We acknowledge the Gunaikurnai people, traditional owners and custodians of the land and waters of the Gippsland Lakes region, and pay our respects to their Elders past and present. In particular, we pay tribute to the Brayakaulung, Brabralung and Tatungalung clans, whose custodianship is a vital part of the heritage, knowledge and future management of the Gippsland Lakes.

We also acknowledge the valuable input provided into this plan by many stakeholders and community members who value the environmental, social and economic qualities of the Gippsland Lakes.

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Gippsland Lakes Sustainable Boating Plan

2016-2018



Executive Summary

The Gippsland Lakes is Australia's largest estuarine waterway, valued for its internationally-significant environmental qualities, as a boating, fishing and tourism destination, and for the lifestyle, cultural attachment and recreational activities enjoyed by the community.

This magnificent waterway system provides a range diverse ecological values, flora, fauna and natural landscapes, underpinning substantial regional economic and social benefits through boating, fishing, tourism and lifestyle opportunities.

As boating activity increases on the Lakes, so does the need to ensure that growth is managed sustainably to protect the environment, maintain public safety, and enhance community well-being and regional economic growth.

The Gippsland Lakes Sustainable Boating Plan (GLSBP) provides a plan for action to preserve and enhance the environmental, social and economic values of the Gippsland Lakes, while supporting growth in boating and waterway activity.



The plan identifies and evaluates risks and benefits associated with boating activity on the Lakes and recommends measures to manage sustainable growth through policy, regulation, infrastructure, coordinated management and education.



The development of the Gippsland Lakes Sustainable Boating Plan was informed by input from key stakeholders in boating, tourism, fishing and environmental management. Stakeholders and community members also contributed through waterway forums held at Lakes Entrance, Paynesville and Sale, and a community survey attracting over 700 responses.

The Plan has thus incorporated statutory, policy, and community considerations in its preparation to provide for future action that meets strategic needs.

The plan has been developed with reference to:

- the values associated with the Gippsland Lakes;
- the risks that potentially diminish (or enhance) those values; and
- the actions that would assist in preventing or minimising negative effects on the identified values.

The Gippsland Lakes Sustainable Boating Plan aims to provide for strategic management of boating activity on the Gippsland Lakes, to minimise adverse environmental impacts, while seeking to optimise the economic and social benefits of boating.

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1. Introduction

1.1 Background

The Gippsland Lakes is Australia's largest estuarine waterway, valued for its internationally-significant environmental qualities, as a boating, fishing and tourism destination, and for the lifestyle, cultural attachment and recreational activities enjoyed by the community.

This magnificent waterway system provides a range diverse ecological values, flora, fauna and natural landscapes, underpinning substantial regional economic and social benefits through boating, fishing, tourism and lifestyle opportunities.

As boating activity increases on the Lakes, so does the need to ensure that growth is managed sustainably to protect the environment, maintain public safety, and enhance community well-being and regional economic growth.

The Sustainable Boating Plan aims to assist in the planning and management of sustainable boating and boating-related activity for the future.

1.2 Purpose and Scope of the Plan

The Gippsland Lakes Sustainable Boating Plan (GLSBP) provides a plan for action to preserve and enhance the environmental, social and economic values of the Gippsland Lakes, while supporting growth in boating and waterway activity.

The plan identifies and evaluates risks and benefits associated with boating activity on the Lakes and recommends measures to manage sustainable growth through policy, regulation, infrastructure, coordinated management and education.

The project aims for boating sustainability in its true meaning; achieving mutually beneficial economic, social and environmental outcomes for the Gippsland Lakes.

The Plan addresses aspects of boating activity to the extent that they affect the natural environment, public safety, safe and efficient maritime operations, provision and maintenance of boating infrastructure (including foreshore related infrastructure), and the well-being of the community.

It is intended to guide action over a 3 year period by Gippsland Ports to carry out its functions as Local Port Manager and by other agencies where their responsibilities relate to waterway management.

1.4 Objectives of the Plan

The objectives of the GLSBP are to:

- Identify the environmental, social and economic impacts associated with boating activity on the Gippsland Lakes;
- Establish an action plan for minimising risks and improving sustainability through potential policy, regulatory, infrastructure or community education programs;
- Demonstrate sustainable management of boating activity on the Gippsland Lakes;
- Support sustainable growth of recreational boating activities while protecting other values.

1.3 The Need for a Sustainable Boating Plan

The Gippsland Lakes hosts a wide variety of boating activity, including many types of recreational boating, sailing and motor boat clubs, a large commercial fishing fleet and several boat charter operations.

The Lakes have a long history of maritime activity and thousands of boating enthusiasts use the Lakes every year for cruising, sailing, paddling, watersports and fishing.

In addition to boat usage by local residents, the Lakes are a popular destination for recreational boaters from the wider Gippsland region and beyond, with demand for boating facilities reaching its peak in the summer months.

Tourism and boating activity on and around the Gippsland Lakes makes a substantial contribution to the regional economy. Boating activity is estimated to contribute a total of approximately \$160 million per annum to the region.

The Gippsland Lakes are recognised internationally for their unique ecological values. The landforms, wetlands, habitats, fish, mammals and birds of the Gippsland Lakes together represent significant environmental attributes that are sensitive to disturbance and damage due to the potential impacts of human activity.

The social and cultural values associated with the Lakes are also very important to the community. A strong attachment to the lifestyle, social and cultural values of the Lakes is evident in local communities, where recreational and social activities, and to a large extent, cultural identity, is strongly related to the natural environment, landscape and historical association that many people have with the Lakes.

In the future, it is assumed that:

- Boating activity will increase as a consequence of net migration inwards to the region;
- Boating activity will increase through the success of tourism promotion activities of other agencies and as demand outstrips available opportunities nearer to the Melbourne metropolitan area;
- More infrastructure will be required to meet the demands of greater and more diverse boating activity;
- The potential pressures on environmental and social values will increase, as will the opportunities for the regional economy.

The Gippsland Lakes Sustainable Boating Plan aims to provide for strategic management of boating activity on the Gippsland Lakes, to minimise adverse environmental impacts, while seeking to optimise the economic and social benefits of boating.

1.4 Preparation of the Plan

The Plan has been prepared as an initiative of the Gippsland Lakes Environmental Strategy (2013), which seeks to protect and enhance the environmental, economic and social values of the Gippsland Lakes.

It incorporates the directions and recommendations of the Gippsland Boating Coastal Action Plan 2013 in relation to the future priorities for development and management of boating infrastructure on the Gippsland coast. This plan provides substantially greater scope and detail in relation to the management of boating activity, including recommendations for minimising various direct environmental impacts, reducing waterway conflict, and maintaining and supporting local amenity, tourism and eco-tourism opportunities, and recreational values.

It also assists in furthering the Gippsland Tourism Strategic Direction 2013-18 and the Gippsland Regional Growth Plan 2014, which highlights the need for protection of the region's natural resources and investment in facilities to support the sustainable economic use of those resources.

The Plan has also incorporated the findings and relevant recommendations of the Ramsar Site Management Plan for the Gippsland Lakes, prepared by the East Gippsland Catchment Management Authority in 2015, to provide for future management and protection of the ecological values of the Lakes and catchment.

Notably, the Ramsar Plan identified only four potential high risk threats to the ecological values of the lakes related to boating activity:

- Residential and commercial development (presumably including development of on-water or near-water infrastructure) potentially affecting visual amenity
- Recreational activities (increased boat traffic) and the potential impacts to dolphins.
- Introduced marine pests (e.g. European shore crab), resulting in increased competition and predation and decline in native species extent, diversity and abundance.
- Recreational activities (boat launching) resulting in physical damage to riverbanks.

Responses to each of these threats is included in this Plan, along with a range of other potential environmental risks which, whilst not featuring as high risk in the Ramsar Plan, are nonetheless potentially damaging to the environment at a localised scale.

In addition, the plan forms part of the review of Gippsland Ports' Safety and Environmental Management Plan, dealing with the management of safety and environmental risks associated with all the Gippsland Ports managed waterways in Gippsland, and incorporating the current legislative framework, technical knowledge and systems for managing risk.

The development of the Gippsland Lakes Sustainable Boating Plan was informed by input from key stakeholders in boating, tourism, fishing and environmental management. Stakeholders and community members also contributed through waterway forums held at Lakes Entrance, Paynesville and Sale, and a community survey attracting over 700 responses.

The Plan has thus incorporated statutory, policy, and community considerations in its preparation to provide for future action that meets strategic needs.

The plan has been developed with reference to:

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- the risks that potentially diminish (or enhance) those values; and
- the actions that would assist in preventing or minimising negative effects on the identified values.



Case Study – Burrunan Dolphins

A unique species of dolphin, the Burrunan dolphin (*Tursiops Australis*), was first described in 2011.

The Gippsland Lakes is home to one of only two known resident populations of this species, with an estimated resident population of just 50 individuals. During winter, the numbers increase, up to about 150, with the entry of visiting male dolphins from Tasmania.

The very small population size makes these dolphins vulnerable to human impacts as the loss of only a few dolphins could affect the viability of a population. In February 2014, the species was listed as threatened under the Flora and Fauna Guarantee Act 1988.



The Gippsland lakes Ramsar Site Management Plan describes the Burrunan dolphins as having high priority ecological values in the Gippsland Lakes. A high priority threat to the dolphins is described as “Vessels affecting the behaviour and condition of dolphins”.



The species is potentially affected by boat strike and altered behaviour from pursuit. In particular avoidance of boats can detract from important activities for dolphins such as feeding and resting and can lead to a decline in their health.

The primary response to the identified risk is boater education. Dolphins often approach boats of their own volition and have been known to spend considerable time interacting with some vessels. Many boat operators may not be aware of the regulations restricting the approach distances by boats, or of the risk of dolphin strike if boat operators are unaware of the presence of nearby dolphins.

Education strategies, including information about responsible behaviour in the vicinity of dolphins and the required approach distances (as required by State legislation) can assist in increased boater knowledge of the risk, as well as a greater appreciation of the importance of the species and the opportunities for responsible interaction with these unique animals.



1.5 Roles and Responsibilities

The management of waterway and boating activity, including land-based facilities serving boating activity, is complex and multi-faceted. Many different agencies have responsibilities for land management, facilities planning and delivery, service delivery, policy, regulatory and enforcement roles.

These roles overlap considerably at the land-water interface.

1.5.1 Gippsland Ports

Responsibility for the management of maritime activities sits primarily with Gippsland Ports under the Port Management Act 1995 and the Marine Safety Act 2010.

In relation to the Gippsland Lakes, Gippsland Ports' responsibilities include:

- Port operations, regulation and compliance
- Boating safety and information
- Port safety and environmental management
- Incident management and emergency response
- Marine pollution response (Wilson's Promontory to NSW border)
- Assessment, installation and maintenance of navigation aids
- Hydrographic surveying
- Dredging, sand management and channel maintenance;
- Provision, allocation and management of wharves, piers, jetties, berths, pens and swing moorings and marinas
- Vessel lifting and slipway services
- Vessel maintenance and repair
- Port and related infrastructure planning and development
- Port / waterway related economic development
- Governance and business management

1.5.2 Other Agencies

In addition to the broad waterway management responsibilities of Gippsland Ports, many other agencies have roles that overlap with or complement these responsibilities.

These agencies' responsibilities are also derived from statutory roles and functions established by legislation.

Agency	Role
Maritime Safety Victoria	State-wide regulator of maritime activity which coordinates waterway management, marine pollution responses and Implements vessel standards and operator competencies and promote boating safety.
Department of Economic Development, Jobs, Transport and Resources	Provide services to local ports that serve the commercial fishing industry, charter boats, and recreational fishing and boating interests along Victoria's coast. Management of Victoria's Fisheries resources. Regional economic development.

Department of Environment, Land, Water and Planning (DELWP)	Public land management Foreshore management plans Oversight of Committees of Management Environment and wildlife issues Private jetty licenses Hunting management
Local Government (East Gippsland Shire Council and Wellington Shire Council)	Maritime infrastructure in the Gippsland Lakes, including marinas, boat ramps and associated land-based facilities. Strategic and statutory planning, including the administration of local Planning Schemes. Tourism and visitor services.
Parks Victoria	National Parks and Reserves management adjacent to the local port, management of Marine National Parks and Marine Sanctuaries, Gippsland Lakes Coastal Park and other State reserves. Licensing of park-based tourism, management of public camping grounds.
EPA	Environmental protection legislation, marine pollution, water quality monitoring.
Gippsland Coastal Board	Implementation of the Victorian Coastal Strategy, provision of advice to the Minister and the Victorian Coastal Council, and preparation and implementation of coastal action plans.
Destination Gippsland	Regional Tourism Board and peak tourism body for the Gippsland region.
Gippsland Lakes Coordinating Committee	Coordination of priority actions to maintain the environmental health of the Gippsland Lakes and catchment.
Police	Primary law enforcement agency also responsible for Search and Rescue. Water – Coordination of all marine incidents involving recreational vessels, yachts and commercial vessels within Victorian Coastal and Inland waters. Local - Public disturbances, alcohol/drug related incidents and crime.
Australian Volunteer Coast Guard	Promotion safety in the operation of small craft. Assistance with the recovery of vessels broken down or in danger. Search and rescue at the direction of Victoria Police.
Country Fire Authority and State Emergency Services	Emergency response.
Aboriginal Affairs Victoria, Gunai Kurnai Land and Waters Aboriginal Corporation	Management and protection of Aboriginal cultural heritage.
Crown Land Committees of Management	Management of specified Crown Land Reserve foreshore areas.

Case Study – Coordinated management of boating facilities

Given the various roles and responsibilities in relation to waterway management, boating facilities, emergency management, safety, and environmental risks, a clear delineation of statutory roles and responsibilities is critical to the effective management of waterways.

In the case of the Gippsland Lakes, there is some lack of clarity as to which agency is responsible for managing waterway activity and facilities and, in some cases, the overlap of management responsibilities can lead to poor outcomes.

The co-ordination of management responses is sometimes ad hoc, particularly where boating infrastructure and associated facilities are managed and regulated by multiple agencies.

Berths and moorings and associated land-based facilities are managed by four separate entities: Gippsland Ports, Local Government, the Department of Environment, Land, Water and Planning (DELWP) and private licensees.

For example, a new private jetty requires a planning permit from the local planning authority and approval for works on waterways from the relevant Catchment Management Authority. The jetty is licensed under the statutory responsibilities of DELWP as the Crown Land manager. The safety and environmental risks associated with vessels berthed on the jetty are partly the responsibility of Gippsland Ports (under the Marine Safety Act) and the EPA (under the Environment Protection Act). The inspection and maintenance of the jetty is undertaken under license conditions imposed by DELWP.

At public boating facilities, it is not uncommon for the management of a boat ramp, nearby jetty, foreshore Crown Land, car park and the actual waterway falls within the responsibilities of 4 or 5 different agencies.

It is arguable that the processes and responsibilities for managing boating infrastructure are inefficient and overly complex.

Recently, discussions have been held with a view to rationalising these responsibilities. There is an opportunity to resolve inefficiencies and overlaps in management responsibilities by way of agreement between the relevant authorities and a rationalisation of approvals, land and asset management and licensing processes.

At the very least, processes could be established for coordinated decision-making regarding the management of particular foreshore areas, to avoid outcomes such as the signage that proliferates at sites such as the Johnsonville boat ramp and landing, as pictured.



2 Boating on the Gippsland Lakes

2.1 The Gippsland Lakes

The Gippsland Lakes is an extensive system of estuarine lakes and wetlands (approximately 420 square kilometres) forming a coastal complex separated from Bass Strait by the Ninety Mile Beach barrier. Several rivers discharge into the system, which has a permanent artificial opening at Lakes Entrance.

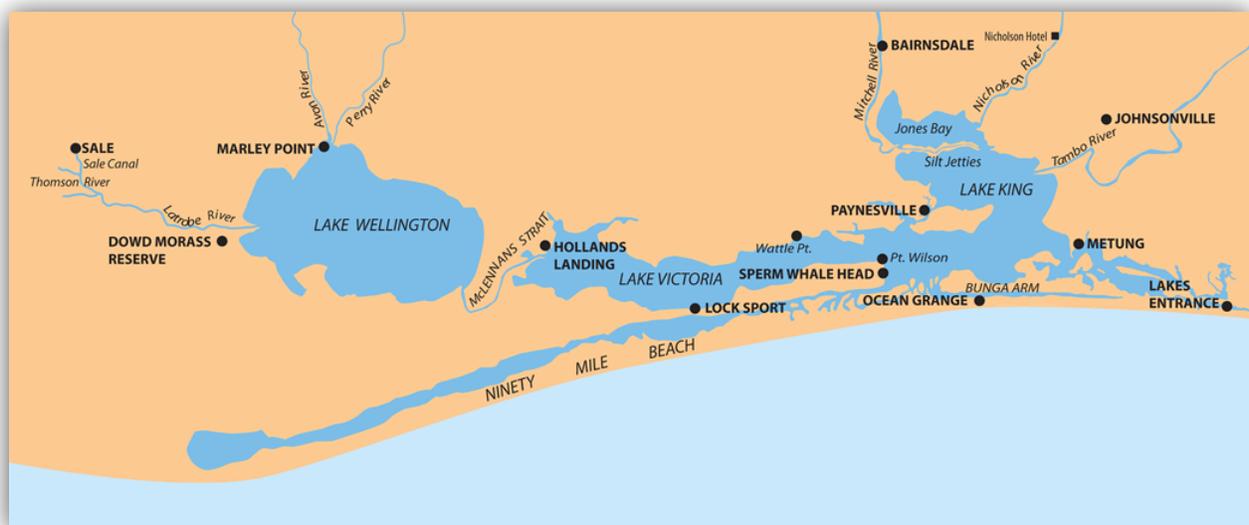
The Gippsland Lakes includes significant areas such as the Gippsland Lakes Coastal Park, Lakes National Park, Wildlife Reserves, Reserved Crown land and Gippsland Lakes Ramsar Site as listed under the International Convention on Wetlands (Iran 1971).

A detailed map of the declared Port of Gippsland Lakes is included in the Appendix.

The waterway features an extensive open-water estuarine ecosystem which includes: seagrass meadows, fringing reed beds, salt marshes, swamp paperback wetlands, intertidal sandy beaches and spits, large and diverse populations of marine and estuarine fish species, approximately 80 species of water birds and waders including breeding colonies of several rare and endangered species and an important habitat for migratory bird species.

In addition to these ecological values, the Gippsland Lakes is a popular tourism and boating destination, with a long history of maritime activity, commercial and recreational fishing and a growing popularity among recreational boaters of all kinds.

Communities in adjoining towns and villages (including Lakes Entrance, Paynesville, Metung and Loch Sport) are attracted to the lifestyle, recreational and landscape values, while residents of the Gippsland region also gain benefits from the social, recreational and economic opportunities provide by the Lakes.



2.2 Boating Activity

Boating and waterway-related activity on the Gippsland Lakes is diverse. In addition to on-water activity, the foreshores of the Gippsland Lakes are used for a range of commercial, social and recreational activities that have an interface with boating facilities.

They include:

- Recreational boating –including power boating, yachting, sailboarding and paddling;
- Other recreational activities including swimming, diving, shore-based angling, and walking along piers and boardwalks;
- Commercial boating –including commercial fishing and Bass Strait commercial shipping;
- Charter boats, self-drive charter and tour operators and the Raymond Island ferry;
- Provision of public access to waterways, including boat ramps, jetties and boardwalks;
- Development and maintenance of infrastructure, including dredging and aids to navigation;
- Berthing and mooring at marinas, jetties, and swing moorings;
- Boat slipping, servicing and maintenance.



In addition, there are a range of activities undertaken by the community, private sector and public authorities either on or adjacent to the waterway that have the potential to affect safety, access and environmental conditions, but are not directly managed by Gippsland Ports. These include leases and licenses for yacht clubs, fishing clubs, restaurants, cafes, charter companies and private marinas.

Boating activity itself consists of a variety of vessel types, regattas, on-water events, festivals, competitions and community activities.

The management of the waterway requires a balance between the regulation of activity to ensure safety, convenience and mitigation of environmental risks and the need to support growth in tourism, recreational activity, community and economic development for the region.



2.3 Boating Growth and Diversity

Demand for recreational boating has been increasing in Gippsland and Victoria more broadly in response to population growth and higher levels of boat ownership.

Of the boat registrations recorded in Victoria, around 6.8% (12,658) are registered within the Gippsland region. Boat registrations in Gippsland have been increasing over recent years by approximately 1.6% which is slightly lower than state average (1.7%), but higher than regional population growth. In 2012, the boat ownership per capita for the Gippsland Study area was approximately 1:7, significantly higher than the Victorian ratio of 1:34.

A 2012 study of tourism in the region found that:

- 1.2 million people visited the East Gippsland Region in 2011;
- This represented a 16.5% growth in tourism from the previous year;
- A significant number of tourists took part in fishing and boating activities as part of their trip (13% of day trip visitors and 23% of overnight visitors).

There is a range of boating and marine infrastructure that serves the region, including piers, jetties, boat ramps, marinas and other assets. Increasing visitor numbers as well as population growth are likely to place continued pressure on existing infrastructure and create a demand for new facilities.

In addition, the types of craft are changing and becoming more diverse as evidenced by:

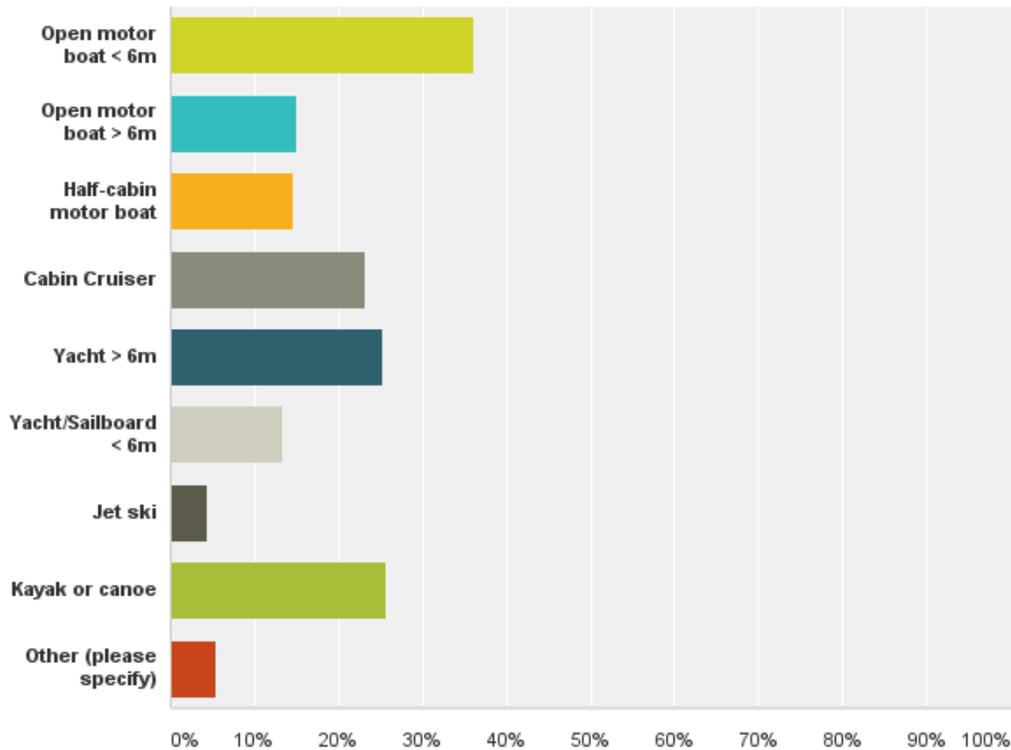
- A trend towards larger recreational vessels associated with the growth in boating activity by self-funded retirees moving to the Gippsland Lakes from Melbourne and increasing numbers of larger vessels visiting the Lakes from other coastal areas; and
- Increased popularity of unpowered vessels – kayaks, canoes, sailboards, and stand-up paddleboards.



A Gippsland Lakes Boating Survey was conducted by Gippsland Ports in 2015.

Approximately 50% of respondents reside outside of the immediate Gippsland Lakes area and 35% live outside Gippsland. The high number of respondents from outside the region confirms that Gippsland Lakes boating stakeholders come from a much bigger geographic area than the immediate environs of the Lakes.

The survey confirmed the diversity of vessel types in use on the Gippsland Lakes, as shown in the figure below:



Respondents participated in a broad spread of boating activities. Approximately 50% of respondents went fishing. Over 25% went kayaking or canoeing. Approximately 11% went cruising offshore. “Other” responses include hunting and duck shooting, staying on a boat overnight or longer, commercial fishing, power boat racing and commuting from home to work.

2.4 Economic Value of Gippsland Lakes Boating Activity

Boating, recreational and commercial fishing and tourism associated with the Gippsland Lakes is a significant contributor to the regional economy.

Overall, the total net impact of the recreational boating industry in Gippsland is estimated at \$163.0 million per annum. This includes first round or direct economic impact of \$51.4 million and a flow on or indirect economic impact of \$111.6 million.

Employment impacts both direct and indirect were also estimated using Input-Output multipliers. These were estimated for all visitation types. The results show that estimated direct and flow-on employment gain resulting from recreational boating totalled 2,814 full time equivalent (FTE) jobs.

The commercial fishery at Lakes Entrance, which is dependent on ocean access to the Gippsland Lakes, has an estimated value of around \$35.0 million; \$27.5 million from fishing, \$6.7 million from seafood processing and \$0.8 million from retail and food services. This is approximately 80% of the total value of Victoria’s commercial fishery.

The direct plus flow-on employment attributable to commercial fishing (primarily the offshore fishery) represents approximately 12 per cent of the estimated employment in the town of Lakes Entrance.

This economic contribution to the region is reliant on the following key factors:

- A healthy natural environment that supports continued population growth and visitors attracted to the natural values of the Lakes;
- Facilities and services that support continued tourism activity and growth in visitor numbers;
- Reliable ocean access that supports the offshore commercial fishery and safe access for visiting recreational vessels.

The sustainable growth of boating and water-based recreational activities is an important facet of future economic development for the region.

2.5 Boating Facilities and Services

2.5.1 On-water vessel storage, launching and retrieval

Recreational boating infrastructure includes a range of on-water storage and launch and retrieval facilities, including berths, moorings (including swing moorings), jetties and boat ramps.

An important consideration in providing infrastructure in the Gippsland Lakes area is adequately meeting infrastructure demand in peak periods. Many of the facilities provide sufficient capacity for average demand, however, during periods of high boating activity (i.e. over summer), a number of facilities are put under strain and can exceed capacity.

Capacity pressures can lead to ‘unmet’ demand or a reduced number of boaters seeking to use Gippsland Lakes during peak periods as they may seek alternative options with fewer infrastructure/facility capacity constraints.

Overstretched facilities can cause a number of concerns. Congestion or conflict on the water can cause safety concerns for boaters. Car park congestion can further exacerbate this frustration in the boating community, and reduce the number of boaters able to access popular facilities.

Analysis of predicted berth and swing mooring demand has found that in all years over the period 2012 to 2040, boat storage demand exceeds supply. The region currently has few vacant wet berths and an applicant waiting list approximately 500. Proposals for additional berthing in the future are unfunded.

The gap between supply and demand is expected to worsen in coming years. This will largely be driven by the growth of local boating demand as well as tourism.

In order to preserve and grow boating tourism and provide sufficient boating facilities throughout the year for local residents, infrastructure planning and design of facilities should respond to the increased demand in peak periods. There are some options for how this can be done and these are outlined in the recommended actions.

Gippsland Ports has prepared a set of infrastructure priorities for the next three years to facilitate increased capacity for permanent and itinerant berthing of vessels (See Appendix 3). These facilities are primarily centred on existing boating nodes as identified in the Gippsland Boating Coastal Action Plan 2013. The provision of these additional facilities is dependent on State Government funding allocations under the Boating Safety Facilities Program.

A critical issue for access to the Lakes is the functionality of boat ramps. In all cases, these are provided by local government and, in many locations, boat ramps are affected by limited access due to shallow water, constant build-up of sand or poor design. At Loch Sport, Marlay Point, Eagle Point, Bullock Island and other locations, users report poor functionality, access and unsafe conditions.

Improvements to the Charles Street boat ramp at Loch Sport have recently been announced and Gippsland Ports is working in conjunction with Wellington Shire to seek funding for sand removal at Marlay Point, but there is likely to be an on-going problem with the functionality and capacity of boat ramps at various locations around the Lakes. A concerted effort to improve these facilities will be required in the future to enable appropriate vessel launching and retrieval.

2.5.2 Facilities for commercial vessels

Commercial boating activity on the Gippsland Lakes is primarily based in Lakes Entrance. The commercial fishing fleet relies on berthing in Cunninghame Arm, unloading facilities at Bullock Island and Eastern Wharf and reliable ocean access through the entrance to Bass Strait.



Lakes Entrance experiences a mixing of commercial and recreational boating activity which presents challenges for safety and environmental management. Unloading of fish, cargo and equipment, potential waterway conflict between commercial and recreational vessels, and public access to wharves, jetties and land-based facilities present on-going challenges for Gippsland Ports. The risks associated with these activities are managed through waterway zoning and restrictions, where practicable, on public access to commercial wharves and foreshore-based facilities. Capacity and funding constraints are an on-going concern in managing these potential conflicts.

A number of commercial tour and charter operators are also based at Lakes Entrance, Metung and Paynesville. Continued growth in boat-based tourism relies on suitable berthing facilities, navigable waters and infrastructure capacity for growth in this sector.

At present, there are limitations on capacity to support these commercial activities and a range of safety and environmental risks that result.

2.5.3 Land-based facilities

On-shore facilities, including slipways and boat servicing and maintenance activities are owned and operated by Gippsland Ports and the private sector.

These facilities and services are critical to sustainable boating activity in the future in order to:

- Provide capacity for vessel owners to access maintenance services;
- Reduce the need to undertake maintenance of vessels on the waterway, which presents environmental and safety risks;
- Facilitate a reasonable level of vessel maintenance to reduce the hazards associated with poorly maintained or serviced vessels operating on the waterway.



At present, Gippsland Ports provides vessel slipping and maintenance services at Bullock Island and Paynesville. Gippsland Ports operates under a Safety and Environmental Management Plan that guides the management of various hazards and risks associated with these activities.

Private vessel lifting and servicing facilities operate over private and Crown Land adjacent to the Lakes with little oversight of environmental or safety requirements. While the availability of private boat servicing facilities is an important element of Gippsland Lakes boating activity, there is evidence that these activities present environmental risks due to:

- Operation of vehicles and equipment on public land without necessary approvals;
- Cleaning of boat hulls on Crown foreshores, potentially leading to waterway pollution;
- Storage and use of hazardous materials.



In addition, there is anecdotal evidence of private vessel owners undertaking maintenance on-water, creating potential environmental and safety risks.

Gippsland Ports is able to oversight and manage the hazards associated with vessel servicing operations on its own facilities, but has no control over the management of private facilities.

2.5.4 Aids to Navigation and Boating Guides

Aids to navigation perform an important role in boating safety and sustainability. The Gippsland Lakes are characterised by an ocean entrance, shallow waters, sandbars, river mouths and channels that require careful navigation.

These natural features present hazards that not only create safety risks, but also the potential for vessel groundings or operation of vessels in shallow waters, popular swimming areas or environmentally sensitive areas of the Lakes that can be harmful to people, natural features, seagrass, and wildlife.

Aids to navigation, marker buoys delineating channels and no boating zones, 5 knot zones and other hazards perform an important role in boating safety and protection of environmentally sensitive areas.

The management and placement of aids to navigation performs an important function in managing boating activity and, as this activity increases in the future, it is important that resources are available to maintain these facilities, along with regular review of Vessel Operating and Zoning Rules to minimise the incidence of on-water conflict in high use areas and vessel strandings.



Boating guides prepared by Gippsland Ports also provide an important resource for recreational boaters who may be unfamiliar with the Gippsland Lakes. The recent development of on-line boating guides is an important innovation in providing boating information to vessel operators.

2.5.5 Dredging and Channel Maintenance

Dredging of sand on the bar at Lakes Entrance and in other key locations is a critically important activity in maintaining navigability of the Gippsland Lakes.



Prior to 2008, the safety of ocean access at Lakes Entrance was variable due to constantly changing bar conditions. The sand management program instigated in 2007/8 has significantly improved the reliability of safe ocean access.

Gippsland Ports owns a Cutter Suction Dredge, the Kalimna, which dredges inside the entrance on an ongoing basis. A Trailing Suction Hopper Dredge (TSHD) is periodically contracted to maintain ocean access.

The Environmental Management Plan sets out strict requirements for environmental protection. The Plan consolidates obligations established under Victorian and Commonwealth approvals.

Channel dredging also occurs as required within the Lakes, in high use areas such as Steamer Channel and Aurora Channel and, occasionally at river mouths that experience a build-up of sand and silt. The risks associated with channel maintenance are also managed under strict environmental conditions to prevent damage to environmental values.



Sustainable boating activity relies on safe navigation and a dredging regime that minimises environmental disturbance. Gippsland Ports has limited capacity to undertake dredging activities and only does so, when safety considerations demand. Recreational boaters have an expectation that the waterway will be navigable and that expectation needs to be balanced against the cost of dredging and the potential environmental impacts.



In some cases, such as the recent re-nourishment of Crescent island (in Bunga Arm), channel dredging has been able to facilitate a positive environmental outcome by enhancing habitat for migratory birds. The re-nourishment of sand islands in the Lakes has provided an opportunity for dredging activity to provide environmental benefits.

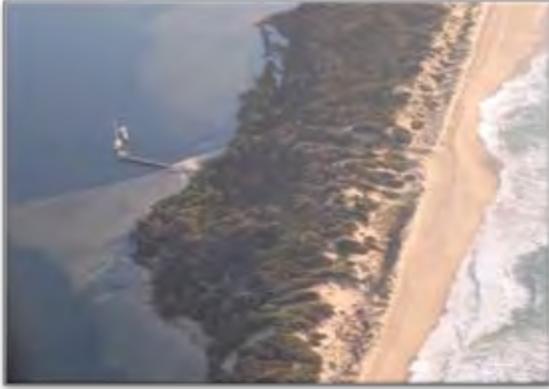
2.5.6 Destination Jetties

In addition to facilities for permanent and itinerant berthing in the designated boating nodes, destination jetties provide boating access to more remote areas of the Gippsland Lakes, popular for visitors who wish to experience the pristine natural features of the Lakes and Ninety Mile Beach.

Destination jetties serve the sole purpose of facilitating access to day trippers or overnight visitors. In essence they perform a community service function.



As boat-based and eco-tourism continues to grow on the Gippsland Lakes, there is an increasing demand on these facilities. In the absence of mooring facilities in these more remote areas, recreational vessel operators are more likely to beach their vessels, creating the potential for environmental damage



due to damage to seagrass beds, uncontrolled access to sensitive foreshores and dune systems and disruption of sensitive areas important for foreshore vegetation and wildlife habitat.

Destination jetties therefore perform an important function in supporting recreational boating and public access and appreciation of natural areas, but bring challenges for asset maintenance and the provision of related services, such as public toilets, picnic facilities, walking paths, etc.

The maintenance of existing destination jetties and the provision of new jetties in popular locations is regarded as an important contribution to the Gippsland Lakes environment and the growth of nature-based tourism, but places significant financial burden on Gippsland Ports, as well as increasing expectations on Parks Victoria, as the manager of abutting coastal parks to provide land-based facilities.

2.5.7 On-water refueling and sewage pump-out

On-water refueling of vessels and the pumping of sewage direct into the waterway are regarded by the community as serious environmental concerns, posing perceived hazards in relation to water quality and the amenity of the Gippsland Lakes.

The extent of illegal on-water refueling and sewage (or contaminated bilge water) discharge is unknown. Anecdotal evidence suggests that there are many vessels operating on the Lakes that are refueled on jetties or foreshores without adequate safety precautions and that discharge untreated sewage or contaminated bilge water directly into the waterway.



Whilst the extent of the environmental impact of such activity is likely to be limited to specific areas where boating activity is intense, it is nevertheless a public concern.

On-water refueling facilities are provided at Lakes Entrance, Metung and Paynesville.

Sewage pump-out or hopper facilities are provided at Lakes Entrance, Metung, Paynesville, Bunga Arm and Duck Arm, Loch Sport, Hollands Landing and Sale with bilge pump out infrastructure at Bullock Island and Paynesville Boat Yards.

Proposed facilities at Loch Sport (and Sale) are not within the port or linked to assets managed by Gippsland Ports. Facilitating development in these locations, as proposed, will likely be through Wellington Shire Council or alternative management arrangements.

3 Values and Threats

3.1 Overview

This Plan is based on a methodology of identifying key values for which the Gippsland Lakes are regarded as important, the threats (or risks) that may negatively impact on those values, and the actions that may be taken to minimise the threat or risk and thus make a positive impact on the identified values.

Based on the notion of sustaining environmental, social and economic values, this “risk management” approach aims to identify actions that can not only assist in preventing negative impact on the identified values, but also contribute to improved environmental, social and economic outcomes related to boating activity.

The notion of “positive risk” involves an understanding that action taken to minimise one particular risk (e.g. increasing awareness of the need to maintain the engines of vessels to avoid fuel or oil leaks into waterways) can also improve the outcome in another area of risk (well-maintained vessels are less likely to suffer breakdowns causing potentially unsafe conditions for vessel operators and passengers).

3.2 Values of the Gippsland Lakes

Community members value the Gippsland Lakes for a wide variety of reasons.

Research and community consultation has shown that there is a strong agreement in the community on the importance of the Lakes’ environmental values – water quality, ecosystems, wildlife and habitat. These values are reflected in the listing of the Gippsland Lakes under the Ramsar convention.

Social and economic values are largely dependent on these environmental qualities and much of the recreation, tourism boating and fishing activity would suffer if environmental values were degraded.



Recreation on and around the Lakes relies on healthy ecosystems that support natural vegetation, aquatic life, fish stocks, birds and mammals.

Loss of water quality due to algal blooms has been shown to cause a significant downturn in tourism, particularly in the case of toxic blue-green algae, which inhibits human contact with the water and the consumption of seafood.

Recreational values attributable to activity on and

around the Lakes include, boating and boat-based watersports, sailing, foreshore recreation and swimming, recreational fishing, and passive pursuits including bird-watching, photography and sight-seeing.

Economically, the lakes provide an important source of income for tourism operators and related businesses in hospitality, accommodation and local services, as the Lakes provide a major attraction for visitors.

Boating activity (including boat-based recreational fishing) and the related marine services industries have been estimated to contribute approximately \$160 million per annum (directly and indirectly) to the regional economy. This economic contribution is attributable to expenditure on boat sales and servicing, chandlery and related marine industries, as well as the expenditure incurred by the boating public and visitors on provisions, fuel, accommodation, tours and related expenses.

The Gippsland Lakes Boating Survey (2015) identified the community’s values in relation to the Gippsland Lakes.

The five most important values/attributes were:

Value/attribute	Critically important (%)
Water quality	80
Wildlife and habitat protection	70
Navigation aids and channels	67
Maintenance of a navigable entrance to the ocean	61
Public facilities (parking, toilets, seating, etc.)	55

The natural values attributable to water quality, wildlife and habitat are most important to respondents. This indicates that most boaters on the Gippsland Lakes are both aware and respectful of these environmental values.

The lower rated values include: Areas for water skiing, jetties and wharves for fishing, on-water boat refueling, permanent berths and moorings. However, even for the lower rated values there were only a small proportion of respondents thinking they are “not important”, in each case outweighed by the “quite important” or “critically important” responses.



3.3 Risk Identification and Assessment

The identification of threats or risks to the values of the Gippsland Lakes has been derived from the following sources:

- Comprehensive community consultation conducted in the latter half of 2015 through community surveys and forums undertaken by Gippsland Ports for its Safety and Environmental Management Plan;
- Gippsland Ports Risk Register;
- Gippsland Lakes Ramsar Management Plan 2015.

Key theme	Major source of risk
Waterway Management	<ul style="list-style-type: none"> • Congestion due to increasing and more diverse boating and waterway activity, particularly seasonally. • Constrained waterways, leading to potential competing uses and interaction of vessels and people. • Vessel grounding or collision resulting in potential channel obstruction, damage to property, environment and threats to safety. • Increase in use of non-motorised craft (paddlers) and lack of awareness of safety requirements by inexperienced paddlers. • Boat ramps and jetties with high use during peak times. • Refueling and sewerage discharge. • Potential competing uses and interaction of vessels and people, including impact of excessive boat wake. • Potential on-water conflict between commercial and recreational vessels.
Boating Infrastructure	<ul style="list-style-type: none"> • Increased demand for berths and moorings. • Increasing size of recreational vessels. • Capacity for larger commercial and recreational vessels. • Increased expectation for services and security at berths. • Ability to continue to obtain suitable construction materials. • Compliance of existing facilities. • Conflict between jetty anglers and vessels. • Boat ramp accessibility and functionality. • Use of facilities by recreational anglers.

Key theme	Major source of risk
	<ul style="list-style-type: none"> • Control of public access to commercial wharves and jetties. • Increased demand for use of commercial vessel berths and moorings.
Access and Navigability	<ul style="list-style-type: none"> • Loss of traditional levels of navigability. • Bar conditions, tides and channels limit access/egress in and around the Lakes. • Increased planning timelines/costs of dredging. • Greater focus on environmental issues and permits and consents for dredging. • Demand for dredging at locations other than Lakes Entrance. • Risk of groundings.
Waste and Pollution	<ul style="list-style-type: none"> • Vessel operations in ports and waterways have the potential to pollute water bodies through fuel and oil leaks, sewage and bilge-water discharge. • More serious hazards are presented by poorly maintained or derelict vessels and the risk of vessel collision and/or fire. • Maintenance operations at boat yards involve the potential discharge of pollutants to waterways and the atmosphere. • Litter thrown from boats and left on foreshores presents a hazard to wildlife and reduces the overall amenity of the Lakes.
Marine pests	<ul style="list-style-type: none"> • Boating movements into the Lakes provide the opportunity for vessel-borne pests and diseases to enter the Lakes.
Climate change	<ul style="list-style-type: none"> • Predicted sea level rise and more frequent and severe storm events pose a hazard for maritime infrastructure and activities. • Impacts on port operations include shoreline erosion, infrastructure damage or loss, and greater risk of damage to vessels or boating mishaps in adverse weather,
Inter-agency coordination and management	<ul style="list-style-type: none"> • Overlaps and uncertainty regarding management responsibilities. • Variable agency resources to undertake management responsibilities. • Lack of coordination in the planning and management of infrastructure assets, particularly at the land/water interface. • Limited resources for integrated planning of boating and land-based infrastructure. • Inconsistent policy or management arrangements (e.g. licensing of berths and moorings)

Case Study: Boat Wake

Real or perceived safety and environmental impacts associated with vessel wake in confined waters have been reported in many locations around the Gippsland Lakes.

In particular, large displacement vessels are often singled out as causing excessive wake in some operating conditions and locations, leading to discomfort, vessel damage and, in some cases, significant risks to public safety.

Effective management of vessel wake is a multi-faceted problem that defies a simple “one size fits all” solution.

While it is an offence to operate a vessel in a manner which causes a hazard or inconvenience to others, such offences are extremely difficult to consistently enforce and enforcement on its own is not seen as the most effective solution.



It is apparent that a means of managing vessel wake is required that addresses legitimate concerns related to waterway safety and protection of the environment, while also not unduly restricting vessel operation.

Safety impacts associated with wake generally involve people on or near the shoreline and vessels underway or moored. Small craft are particularly at risk of being swamped, broached, or capsized by the steep, near breaking waves produced by some vessels. At the very least, excessive wake in enclosed waterways caused inconvenience and discomfort, if not a safety hazard for the occupants of moored vessels.



In the Gippsland Lakes the hazard is most pronounced in popular and relatively enclosed areas – McMillan Strait, Bancroft Bay, the Barrier Landing, Cunninghame Arm and North Arm.

These impacts are likely to be of more concern during certain times of the year, e.g. summer months when waterways are busier and beaches are being used by bathers, or more pronounced in certain conditions, e.g. during calm weather, when large waves may be unexpected.

The severity of any environmental impact caused by wake will depend on how the wash regime differs from the natural wave climate. It is also

dependent on the susceptibility of the recipient shores to wave attack. In some naturally sheltered environments with “soft” shores, or low lying sand islands, it is more likely that environmental damage may be caused by boat wake.

In water ski areas, where wakeboarding is popular, it is expected that boat wake may be of concern to some people; however restrictions on boat wake in these areas would unduly limit their function as designated areas for these watersports.

Some possible measures include:

- Posting signs on shore or including notices on navigation charts in areas where high vessel wake is likely to affect safety of other waterway users.
- Engaging in outreach activities to ensure the boating public is aware of the potential impacts associated with wake.
- Communication with the boating public to promote greater awareness of boat wake and to encourage wake minimization in critical locations.

Boat operators should be made more aware of the impact of wake vessels when moving through confined waterways to reduce the risk of endangering others safety and enjoyment the waterway.

Rather than simply observing a posted speed limit, vessel operators should take into account the environment in which they are operating including proximity of other vessels, jetties, shorelines and the width and depth of the waterway.

The introduction of “low wake” zones, as opposed to “no wake” zones (which would be problematic to enforce), in conjunction with local education programs, could assist in reducing the incidence of this hazard.

Initially, it is proposed to introduce advisory “low wake” zones in McMillan Strait, Bancroft Bay (from Shaving Point to Bell’s Point), Cunninghame Arm and Hopetoun Channel in the vicinity of the Barrier Landing.

Broader education programs for boaters and the public can be undertaken to increase awareness of the risks associated with boat wake the potential to reduce those risks.

These education/information and advisory actions can also be promoted to the owners and operators of larger vessels, including charter and tour boats that regularly ply the Lakes.



4. Responses

The following tables outline a series of proposed responses to the threats identified in the previous sections, categorised under Environmental, Economic and Social issues.

These responses are derived from community consultation, existing Gippsland Ports risk management plans and the recommendations of boating and waterway management plans from other jurisdictions in Australia.

4.1 Environmental

Values	Threats	Responses
Water quality	Sewage disposal from boats Boat maintenance Pollution (oil, fuel, bilge-water) Waste disposal (water/land) Derelict vessels	<ul style="list-style-type: none"> • Conduct an investigation into the extent of illegal sewage discharge. • Investigate and advocate for regulatory changes to prohibit the operation of vessels without sewage holding tanks. • Undertake boater education on proper engine maintenance and management of bilge water. • Initiate and deliver a “Don’t Litter the Lakes” education campaign. • Encourage land managers to provide improved waste disposal facilities at boat ramps and jetties. • Finalise draft environmental management plans for Gippsland Ports sites. • Encourage higher standards of environmental compliance for private operators of boat maintenance activities. • Advocate for greater investment in Gippsland Ports’ pollution response capability. • Develop and implement revised procedures for assessment and enforcement to remove derelict or unseaworthy vessels. • Undertake stakeholder engagement and information on responsibilities for derelict and unseaworthy vessels.
Seagrass and lake sediments	Damage due to boating activity and swing moorings Damage due to dredging	<ul style="list-style-type: none"> • Undertake education on avoidance of seagrass beds • Maintain standards for provision of environmentally-friendly swing mooring tackle. • Ensure compliance with regulatory requirements for dredging and avoidance of dredging activity in environmentally sensitive areas. • Establish an agreed position with stakeholders on appropriate levels of access and navigability.
Wildlife	Boat noise Damage to threatened	<ul style="list-style-type: none"> • Review Vessel Operating and Zoning Rules in sensitive areas (Cunninghame Arm, Hopetoun Channel, Bancroft

	<p>species habitat through boating activity or development of boating facilities</p> <p>Boating interference to Burrunan dolphins</p> <p>Litter</p> <p>Marine Pests</p>	<p>Bay, McMillan Strait, Bunga Arm and Newlands Arm)</p> <ul style="list-style-type: none"> • Undertake boater education on avoidance of areas of wildlife habitat (avoidance of dolphins, breeding and roosting grounds for water birds) • Include ballast water management protocol in Harbour Master's Directions. • Provide information to boaters on avoidance of transfer of potentially contaminated water/vessels • Provide operational support to agencies responsible for monitoring and managing invasive pest species. • Develop and distribute educational material regarding avoidance of damage to wildlife and habitat.
<p>Foreshores and fringing vegetation</p>	<p>Uncontrolled access to sensitive foreshores and riverbanks</p> <p>Riverbed/sea grass damage caused by boat wash or dredging activity</p>	<ul style="list-style-type: none"> • Plan for the provision of new and upgraded destination jetties and mooring poles in suitable locations. • Investigate and implement restrictions on vessel beaching in sensitive locations. • Trial the introduction of "low wake" zones in areas of constrained waterways (parts of Cunninghame Arm, Hopetoun Channel, Bancroft Bay and McMillan Strait and all rivers)
<p>Climate change</p>	<p>Impact of sea level rise and extreme weather events on boating infrastructure and navigability</p>	<ul style="list-style-type: none"> • Participate in regional climate change adaptation planning to establish new design standards for boating infrastructure. • Develop criteria for assessment of climate change risks in the design of new or upgraded infrastructure. • Provide for predicted inundation levels, including sea level rise considerations, in the design of infrastructure (location of electrical cabling, etc.)

4.2 Economic

Values	Threats	Responses
Business and Employment	<p>Insufficient boating infrastructure capacity to cater for demand</p> <p>Restrictions on maritime servicing and maintenance activities due to poor environmental performance</p> <p>Insufficient capacity to cater for commercial boating activity</p>	<ul style="list-style-type: none"> • Work with regional bodies and relevant agencies to further develop Gippsland Lakes boating infrastructure priorities. • Develop business cases for new infrastructure investment and maintain advocacy for appropriate levels of funding. • Pursue boating facility projects as identified in Gippsland Ports forward budget proposals. • Monitor current and predicted demand for commercial vessel berths. • Investigate the adoption of “access fees” to generate funds for boating infrastructure. • Implement revised berthing fees and charges for berths and moorings to establish cost recovery on a user-pays basis.
Tourism activity	<p>Lack of boating access to destinations</p> <p>Lost opportunity for eco-tourism development and access to diverse locations</p>	<ul style="list-style-type: none"> • Communicate to manage user expectations on levels of navigability and access for particular boating activities, • Develop plans for accommodation of charter and tour boat operators in Paynesville. • Increase berthing capacity in popular areas, i.e. Lakes Entrance, Metung, Paynesville and Loch Sport. • Work with Parks Victoria to plan for development of destination jetties and associated on-land day visitor infrastructure at key locations. • Investigate options for delivery of on-water fueling facilities, potentially at Loch Sport and the Port of Sale. • Provide directional signage (fingerboards) for on-water directions at key on-water locations, indicating direction and distance to boating destinations and facilities.
Infrastructure and Services	<p>Poorly-designed infrastructure</p> <p>Loss of infrastructure functionality</p>	<ul style="list-style-type: none"> • Work with other infrastructure providers to establish priorities for upgrading or removal of poorly performing facilities. • Undertake asset audits and inspections to identify maintenance needs. • Ensure that access to sub-standard assets is restricted to minimise safety risk and notify users of access limitations and safety risks. • Develop agreements with other infrastructure managers for the rationalisation of management responsibilities at boating nodes.

4.3 Social

Values	Threats	Responses
Safety	<p>Over-use of facilities Lack of facilities supply to meet demand Conflict between recreational activities Waterway congestion Inadequate navigation aids Conflict between vessels/facilities and foreshore access/passive recreation Vessel/swimmer conflict Unsafe vessel operation</p>	<ul style="list-style-type: none"> • Maintain regular monitoring of waterway user conflict and identify actions for reducing conflicts through waterway zoning, compliance education and enforcement. • Implement the Gippsland Ports Education and Compliance Manual to address high priority safety risks. • Maintain and improve communication and feedback processes for engagement with waterway users, including boater surveys, forums and information programs. • Continue to undertake port and waterway hydrographic surveys. • Enhance the provision of a range of boating information (e.g. boating guides, educational materials, webcams) including the methods for information delivery and promote greater uptake of information by waterway users. • Work with MSV, GWP and other agencies to promote greater awareness of waterway rules and responsible boating in support of the Victorian Waterways Boating Safety Action Plan 2015-2018. • Participate in educational programs for users of non-motorised vessels, including paddling safety programs. • Develop and implement an education campaign for “watch your wake”. • Implement “minimum wake” zones in priority areas and the appropriate public education and management mechanisms. • Work towards a commercial fishing berth precinct at Lakes Entrance. • Maintain controls on public access to commercial wharves and jetties to reduce public safety risk. • Review access to wharves and jetties as risk profile changes. • Undertake education of waterway users to increase awareness in relation to the risk of conflict with commercial vessels.
Recreation	<p>Conflict between waterway users Loss of recreational opportunities due to boating restrictions or conflict between vessels Unmet recreational</p>	<ul style="list-style-type: none"> • Advocate for new recreational fishing facilities to reduce conflicts arising from recreational fishing (failure to give way to vessels, fish cleaning tables attracting birds and wildlife). • Undertake regular port and waterway risk assessments and AtoN risk assessments. • Identify waterway and facility “hot-spots” where

	<p>opportunities Lack of boat launching and berthing facilities Poorly coordinated management of key boating facilities Water contamination risk for swimmers</p>	<p>safety, functionality or capacity is compromised by multiple management regimes.</p> <ul style="list-style-type: none"> • Identify opportunities to rationalise management roles in key locations where management conflicts or gaps arise. • Review and rationalise facility signage to reduce visual clutter and provide more effective and coordinated information. • Update boating guides updated and electronic charts and expand to include environmentally sensitive areas, identification of touring routes etc.
Lifestyle and community cohesion	<p>Noise from vessels Mixing of inappropriate activities Loss of passive foreshore recreation opportunities Lack of seasonal capacity of facilities</p>	<ul style="list-style-type: none"> • Apply waterway risk assessments for hot spots – i.e. McMillan Strait, Cunningham Arm, Newlands Arm, Hopetoun Channel. • Consider seasonal changes in Vessel Operating and Zoning Rules and set asides in areas of heightened seasonal demand to reduce negative impacts.
Cultural heritage values	<p>Damage to culturally significant sites Access to significant cultural areas</p>	<ul style="list-style-type: none"> • Investigate the potential for designation of "wilderness" zones where powered vessels are excluded (i.e. only human powered water craft or yachts without auxiliary power permitted) .
Landscape values	<p>Inappropriately located or designed infrastructure and facilities Visual clutter due to signage and over-development of permanent berthing Visual blighting by infrastructure</p>	<ul style="list-style-type: none"> • Review and rationalise information signage on jetties and wharves and at boat launching facilities to provide clear, consistent messaging. • Advocate for the provision of dry boat storage to relieve berthing demand.

5 Action Plan and Priorities

The following action plan allocates an indicative priority and timing for implementation of the responses identified in the previous section.

Actions are categorised according to themes of:

1. Waterway Management
2. Infrastructure Planning and Management
3. Regulation
4. Information, Education and Advocacy

While Gippsland Ports may not have the lead responsibility for some of the actions described, it will advocate for the allocation and coordination of resources by other agencies and stakeholders to assist in implementation of these actions.

Action	Priority	Timing
1. Waterway Management		
1. Conduct an investigation into the extent of illegal sewage discharge.	Medium	2017-18
2. Finalise draft environmental management plans for Gippsland Ports sites.	High	2017
3. Maintain standards for provision of environmentally-friendly swing mooring tackle.	High	On-going
4. Include ballast water management protocol in Harbour Master's Directions.	Medium	2017
5. Provide operational support to agencies responsible for monitoring and managing invasive pest species.	High	On-going
6. Establish an agreed position with stakeholders on appropriate levels of access and navigability.	High	On-going
7. Investigate and implement restrictions on vessel beaching in sensitive locations.	Medium	2017
8. Maintain regular monitoring of waterway user conflict and identify actions for reducing conflicts through waterway zoning, compliance education and enforcement.	High	On-going
9. Continue to undertake port and waterway hydrographic surveys.	High	On-going
10. Trial the introduction of "low wake" zones in areas of constrained waterways (parts of Cunninghame Arm, Hopetoun Channel, Bancroft Bay and McMillan Strait and all rivers)	High	2016-17
11. Improve on-water signage in channels and narrow waterways by identifying speed limits and "keep right" on markers and on bridges etc.	Medium	2017-18

2. Infrastructure Planning and Management		
1. Plan for the provision of new and upgraded destination jetties and mooring poles in suitable locations.	High	On-going
2. Participate in regional climate change adaptation planning to establish new design standards for boating infrastructure.	High	On-going
3. Develop criteria for assessment of climate change risks in the design of new or upgraded infrastructure.	High	2017
4. Provide for predicted inundation levels, including sea level rise considerations, in the design of infrastructure (location of electrical cabling, etc.)	High	On-going
5. Work towards a commercial fishing berth precinct at Lakes Entrance.	Medium	2018+
6. Maintain controls on public access to commercial wharves and jetties to reduce public safety risk.	High	On-going
7. Review access to wharves and jetties as risk profile changes.	High	On-going
8. Undertake regular port and waterway risk assessments and AtoN risk assessments.	High	On-going
9. Identify waterway and facility "hot-spots" where safety, functionality or capacity is compromised by multiple management regimes.	High	2017-18
10. Update boating guides updated and electronic charts and expand to include environmentally sensitive areas, identification of touring routes etc.	Medium	2017
11. Apply waterway risk assessments for hot spots – i.e. McMillan Strait, Cunningham Arm, Newlands Arm, Hopetoun Channel.	High	2016-17
12. Consider seasonal changes in Vessel Operating and Zoning Rules and set asides in areas of heightened seasonal demand to reduce negative impacts.	Medium	2017
13. Investigate the potential for designation of "wilderness" zones where powered vessels are excluded (i.e. only human powered water craft or yachts without auxiliary power permitted).	Low	2018
14. Review and rationalise information signage on jetties and wharves and at boat launching facilities to provide clear, consistent messaging.	Low	2018
15. Identify opportunities to rationalise management roles in key locations where management conflicts or gaps arise.	Medium	2018
16. Work with regional bodies and relevant agencies to further develop Gippsland Lakes boating infrastructure priorities.	High	2017-18
17. Develop business cases for new infrastructure investment and maintain advocacy for appropriate levels of funding.	High	On-going
18. Pursue boating facility projects as identified in Gippsland Ports forward budget proposals.	High	On-going
19. Monitor current and predicted demand for commercial vessel berths.	Medium	On-going
20. Develop plans for accommodation of charter and tour boat operators in Paynesville.	Medium	2017-18
21. Increase berthing capacity in popular areas, i.e. Lakes Entrance, Metung, Paynesville and Loch Sport.	High	On-going

22. Work with Parks Victoria to plan for development of destination jetties and associated on-land day visitor infrastructure at key locations.	Medium	2017-18
23. Review options for delivery of on-water fueling facilities, potentially at Loch Sport and the Port of Sale.	Medium	2018+
24. Work with other infrastructure providers to establish priorities for upgrading or removal of poorly performing facilities.	Medium	2017-18
25. Undertake asset audits and inspections to identify maintenance needs.	High	On-going
26. Ensure that access to sub-standard assets is restricted to minimise safety risk and notify users of access limitations and safety risks.	High	On-going
27. Develop agreements with other infrastructure managers for the rationalisation of management responsibilities at boating nodes.	High	2016-18
3. Regulation		
1. Investigate and advocate for regulatory changes to prohibit the operation of vessels without sewage holding tanks.	Medium	2017
2. Investigate the adoption of “access fees” to generate funds for boating infrastructure.	Low	2018+
3. Implement revised berthing fees and charges for berths and moorings to establish cost recovery on a user-pays basis.	High	2016-17
4. Develop and implement revised procedures for assessment and enforcement to remove derelict or unseaworthy vessels.	High	2016-17
5. Ensure compliance with regulatory requirements for dredging and avoidance of dredging activity in environmentally sensitive areas.	High	On-going
6. Review Vessel Operating and Zoning Rules in sensitive areas (Cunninghame Arm, Hopetoun Channel, Bancroft Bay, McMillan Strait, Bunga Arm and Newlands Arm).	High	2016-17
7. Implement the Gippsland Ports Education and Compliance Manual to address high priority safety risks.	High	On-going
4. Information, education and advocacy		
1. Provide directional signage (fingerboards) for on-water directions at key on-water locations, indicating direction and distance to boating destinations and facilities.	Low	2018
2. Communicate to manage user expectations on levels of navigability and access for particular boating activities.	High	On-going
3. Encourage land managers to provide improved waste disposal facilities at boat ramps and jetties.	High	2016
4. Undertake boater education on proper engine maintenance and management of bilge water.	Medium	2017
5. Initiate and deliver a “Don’t Litter the Lakes” education campaign	Medium	2017+
6. Encourage higher standards of environmental compliance for private operators of boat maintenance activities.	Medium	On-going
7. Advocate for greater investment in Gippsland Ports’ pollution response capability.	High	On-going

8. Undertake stakeholder engagement and information on responsibilities for derelict and unseaworthy vessels.	High	2017
9. Undertake education on avoidance of seagrass beds.	Medium	On-going
10. Undertake boater education on avoidance of areas of wildlife habitat (avoidance of dolphins, breeding and roosting grounds for water birds).	High	2016+
11. Provide information to boaters on avoidance of transfer of potentially contaminated water/vessels	Medium	2017
12. Maintain and improve communication and feedback processes for engagement with waterway users, including boater surveys, forums and information programs.	High	On-going
13. Develop and implement an education campaign for “watch your wake”.	High	2016+
14. Enhance the provision of a range of boating information (e.g. boating guides, educational materials, webcams) including the methods for information delivery and promote greater uptake of information by waterway users.	High	2016+
15. Work with MSV, GWP and other agencies to promote greater awareness of waterway rules and responsible boating in support of the Victorian Waterways Boating Safety Action Plan 2015-2018.	High	2016+
16. Participate in educational programs for users of non-motorised vessels, including paddling safety programs.	High	2016+
17. Undertake education of waterway users to increase awareness in relation to the risk of conflict with commercial vessels.	High	2016+
18. Advocate for new recreational fishing facilities to reduce conflicts arising from recreational fishing (failure to give way to vessels, fish cleaning tables attracting birds and wildlife).	Medium	2017-18
19. Advocate for the provision of dry boat storage to relieve berthing demand.	Low	On-going

7 References

Gippsland Lakes Ramsar Management Plan, 2016, East Gippsland Catchment Management Authority

Gippsland Ports Safety and Environmental Management Plan (Draft) 2016, Gippsland Ports

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Gippsland Regional Growth Plan 2014, GLGN & DEDJTR, 2014

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Boating Behaviour 2014, Transport Safety Victoria

The Economic Value of Boating and Marine Industries Associated with the use of the Gippsland Lakes, 2014, AECOM

Economic Value of Commercial Fishing Operating Out of Lakes Entrance, 2014, Econosearch

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Boating Safety Plan - Sydney Harbour and its Tributaries, 2014, Maritime Management Centre, Transport for NSW

Education & Compliance Handbook, 2015, Gippsland Ports

International Navigation Association, 20013, Guidelines for Managing Wake Wash from High Speed Vessels

Gippsland Market Profile: Year ending December 2012, Tourism Victoria

Guide to Low Wave and Wake Boating, Department of Primary Industries, Water and Environment, Tasmania, undated.

Boating Industry Snapshot – Drivers of Growth in Victoria, Boating Industry Association of Victoria, 2015

A guide to boating and swimming around whales, dolphins and seals, DSE, 2011

Boating Management Strategy for the Swan Canning River Park, Swan River Trust, 2012

8 Appendices

- 1. Maps – Port of Gippsland Lakes**
- 2. Recommendations of the Gippsland Boating Action Plan 2013**
- 3. Gippsland Ports Boating Facilities Priorities for the Gippsland Lakes 2016-2018**
- 4. Gippsland Lakes Boating Survey: Summary Report**

Gippsland Lakes Sustainable Boating Plan

2016-2018

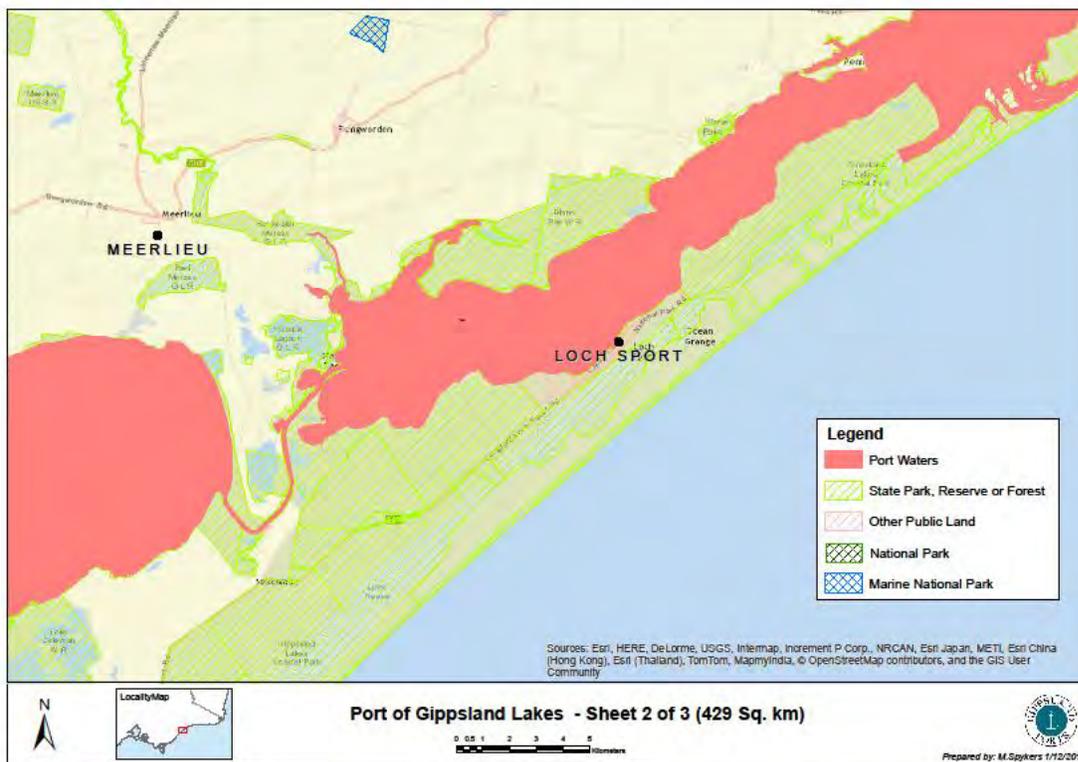
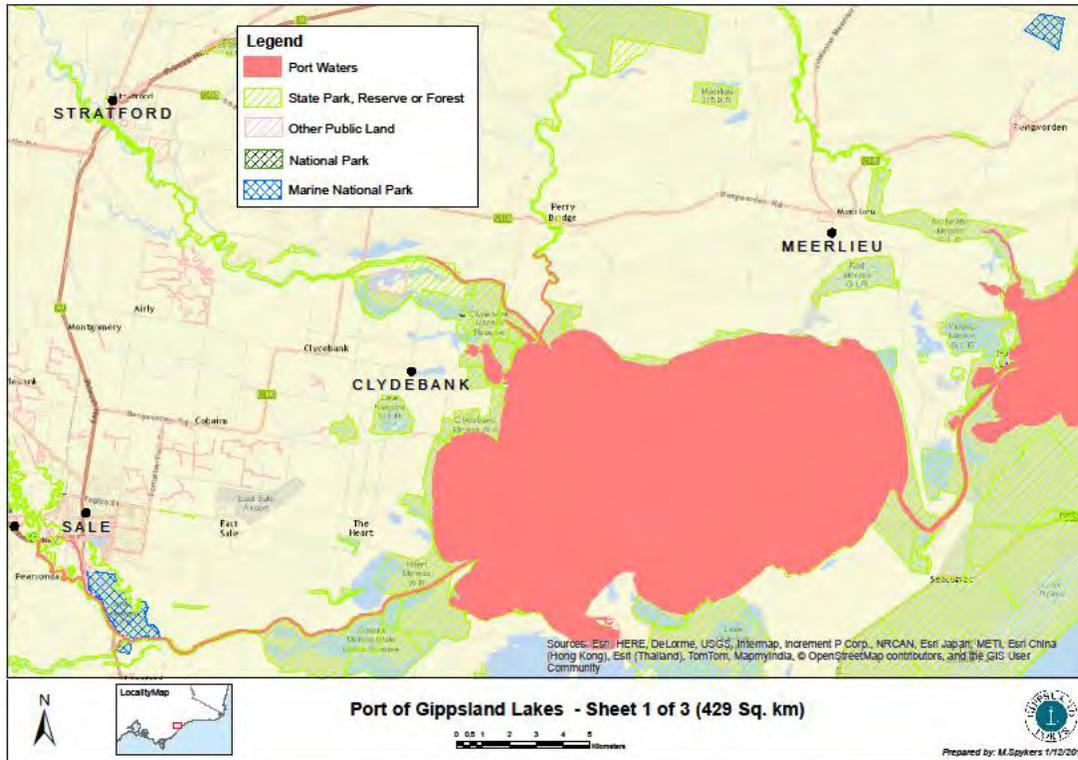


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1. Maps - Port of Gippsland Lakes





2. Recommendations of the Gippsland Boating Action Plan 2013

Action	Responsibility	Priority	Included in GL SBP
1 Develop a coordinated network of recreational boating facilities			
1.1 Develop criteria for licensing ancillary boating structures such as boat lifts and floating docks that will address the risks of such structures as well as their appropriate location.	DEPI, Local Government, Gippsland Ports Facility managers	High	Yes
1.2 Develop coastal management plans or site master plans for locations identified as having a future role as a state or regional boating precinct or district boating facility, where the plans do not already exist (Port Welshpool, Port Albert, Loch Sport, McLoughlins Beach, Paynesville-Eagle Point-Raymond Island, Lake Tyers, Marlo, Bemm River) and review those that are more than 10 years old.	Local Government, DEPI Land and facility managers	High	Yes
1.3 Formalise the approach to the approval, governance and management of private jetty licences (as described in the <i>Draft Boating Facilities Plan 2000</i> (DSE 2000))	DEPI Facility managers	High	Yes
2 Reduce the harmful effects on the environment			
2.1 Put in place management protocols, arrangements and standards for sewage pump-out facilities (in line with Gippsland Ports feasibility studies)	Gippsland Ports, Local Government Facility managers	High	Yes
2.2 Progressively establish and upgrade fuelling and pump-out facilities in the region (in line with Gippsland Ports feasibility studies)	Gippsland Ports, Local Government Facility managers	High	Yes
2.3 Encourage and instigate further research into the impacts of boat wakes and speeds on the environment.	DEPI, Catchment Management Authorities Research institutions	Medium	Yes
2.4 In periodically reviewing boating zones and speed limits for the safety of waterway users, consider the impacts of boat wakes	TSV (Maritime), Gippsland Ports, Waterway managers,	Medium	Yes

on natural environments in sensitive areas.	DEPI TSV (Maritime), Gippsland Ports, Waterway managers		
2.5 Make compulsory the use of holding tanks and pump-out facilities for boats capable of overnight use.	EPA	Medium	Yes
3 Make boating safer, enjoyable and available to users of all abilities			
3.1 Seek to achieve compliance with relevant Australian Standards (e.g. AS-3962, AS4997) in the provision of new recreational boating facilities or any upgrade or maintenance work undertaken to existing facilities, except where local environmental or other circumstances make this unviable or undesirable.	Gippsland Ports, DEPI Facility managers	High	Yes
3.2 Develop priorities for an audit of each boating facility, unless previously audited, to test compliance with appropriate Australian standards.	Implementation committee Facility managers	High	Yes
3.3 Use the boating facility audit to assist with determining priorities for upgrading and maintenance works	DEPI, Gippsland Ports, facility managers, Local Government, Department of Transport Facility managers	High	Yes
3.4 Develop strategies to promote recreational boating in Gippsland emphasising the idea of appropriate locations for each type of activity.	Destination Gippsland, Tourism Victoria Local government, regional tourism Associations	High	Yes
3.5 Comply with disabled access requirements in any new works at all state and regional precincts and provide that information to the <i>Gippsland Boating Coastal Action Plan</i> implementation committee upon request.	Facility managers	Medium	Yes
3.6 Include in the <i>Gippsland Boating Coastal Action Plan</i> implementation plan opportunities for disabled access upgrades, if necessary, at state and regional facilities.	Implementation committee, Facility managers	Medium	No

4 Ensure long-term sustainability of facilities			
4.1 Develop criteria, in line with Commonwealth dredging protocols and other regulations, to assist local government and other committees of management to determine where and when dredging to maintain or enhance recreational boating is appropriate in Gippsland.	DEPI, TSV (Maritime) EPA, Parks Victoria, Gippsland Ports, Catchment Management Authorities, Local Government	High	Yes
4.2 Prepare and review annually a list of regional priorities for development, maintenance and upgrade works and determine the ongoing budget requirements.	Implementation committee, Facility managers	Medium	Yes
4.3 Upon the completion of local coastal hazard assessments in the Gippsland Lakes and Ninety Mile Beach coastal area, a detailed consideration of those projected impacts and any mitigation measures to address them should be included in any future coastal/foreshore/master plans and associated works plans.	DEPI, Facility managers	Medium	Yes
5 Reduce conflict between recreational boaters at places where usage is intense			
5.1 Include in all new or updated coastal management plans and infrastructure project plans a description of how to make more efficient use of facilities, particularly ramps and public jetties, to reduce user waiting times.	Local government, committees of management, Facility managers	High	Yes
5.2 Encourage recreational boaters to use alternative facilities in close proximity, where they exist, by marketing these opportunities.	Local government Facility managers	Medium	Yes
6 Reduce conflict between recreational boaters and other users of the waterways			
6.1 In accordance with existing programs, accredit providers of boating safety training in Victoria.	TSV (Maritime)	Medium	No
7 Coordinate and rationalise management			

7.1 Establish a <i>Gippsland Boating Coastal Action Plan</i> implementation committee to meet twice yearly or as required during the life of this plan.	GCB Member agencies	High	No
7.2 Develop a detailed <i>Gippsland Boating Coastal Action Plan</i> implementation plan to be endorsed by all members of the implementation committee in the first six months after this plan's endorsement by government.	GCB Implementation committee	High	No
7.3 Conduct a review of management arrangements of all state, regional, district and local boating facilities. Receive written confirmation from facility managers and waterway managers of their agreed roles and determine if there are more appropriate alternative management arrangements.	DEPI, Implementation committee DEPI	High	Yes
7.4 Use the management review to prioritise and formalise, if necessary, alternative management arrangements for various Gippsland boating sites.	DEPI, Implementation committee Facility managers	Medium	Yes

3. Gippsland Ports Boating Facilities Priorities for the Gippsland Lakes 2016-2018

Boating Safety and Facilities Program	
2015/16 Grants Offered and Accepted	
Project	Estimated Cost
FACILITIES	
Lake King Jetty (Metung) Rebuild and Extension	\$255,000
Johnsonville Landing Jetty Redevelopment. Rebuild and increase capacity	\$308,000
McMillan Straits (Paynesville) Transient berthing (capacity increase)	\$385,000
Nicholson River (Nicholson) Boat Ramp Jetty Redevelopment (floating)	\$185,000
NAVIGATION AIDS	
VOZR Upgrades Upgrade No Boating Zone Buoys to be compliant with IALA standards identified in 2014 TSV Audit	\$52,000
Reeve Channel Replace North Groyne Special Mark and Green Light Inner	\$18,000
Gippsland Lakes Electronic Boating Charts (Stage 1)	\$102,874
TOTAL 2015/16	\$1,305,874

2016/17 Proposed Applications	
FACILITIES	
Marlay Point Maintenance Dredging	\$60,000
Public Mooring buoys at "safe havens" (10 No)	\$60,000
Nyerimilang Jetty - Construct a new destination Jetty	\$620,000
Sperm Whale Head Jetty - Rebuild and extend including widening approach for DDA compliance	\$450,000
Green Light Jetty - Rebuild	\$200,000
Steamer landing (Bunga Arm) - Rebuild	\$250,000
NAVIGATION AIDS	
VOZR No Boating Buoyage to Piles - Upgrade balance VOZR non-compliant buoys to piles. Subject to TSV review in context of 15/16 BSFP Grant to change and make compliant all buoys.	\$60,000
Gippsland Lakes AtoN Various upgrades as per Draft V1 16/17 Budget	\$68,000
Electronic Boating Charts Stage 2	\$145,000
Develop new, upgrade existing and implement boating educational awareness and associated signage	\$150,000
Total 16/17	\$2,063,000

2017/18 Proposed Applications	
FACILITIES	
Paynesville Landing North – Re-deck existing, ramping and low level extension approximately 20m towards ferry	\$150,000
NAVIGATION AIDS	
Gippsland Lakes AtoN Various upgrades as per Draft V1 17/18 Budget	\$65,000
Total 17/18	\$215,000
2018/19 Proposed Applications	
FACILITIES	
Eagle Point Jetty - Rebuild, widen, increase capacity (modify head to improve functionality for boating use)	\$300,000
Lakes Entrance Boat Harbour (West) - Develop as shorter itinerant jetty say 75 metres with 11 pens on inner (east) layby on west	\$650,000
BI Destination Jetty - Construction new destination jetty adjacent to BI Fuelling facility	\$250,000
NAVIGATION AIDS	
Gippsland Lakes AtoN Upgrades as per Draft V1 18/19 Budget	\$64,000
Total 2018/19	\$1,264,000

Other/Potential Future Facility Considerations	
Progress Jetty - Staged rebuild and redevelopment to provide additional sheltered berths Stg 1	\$950,000
Progress Jetty - Staged rebuild and redevelopment to provide additional sheltered berths Stg 2	\$450,000
Cunninghame Arm - Transient berthing pontoon west off PO jetty towards Ferryman	\$200,000
Barrier Landing - Additional Transient berthing jetty	\$250,000
Raymond Island Public Jetty - Rebuild	\$400,000
Swan Reach Jetty - Extend	\$100,000
Kalimna Jetty - Extension and removal of steps	\$140,000
Emu Bight - Destination Jetty	\$200,000
Cunninghame Arm - Destination Jetty South side Footbridge	\$400,000
Steamer Landing Raymond Island - Rebuild	\$200,000

4. Gippsland Lakes Boating Survey: Summary Report



Gippsland Lakes Boating Survey

Summary Report



September 2015

1. Summary

The Gippsland Lakes Boating Survey was undertaken to gather views on boating activity on the Lakes and to obtain user input on matters relating to boating infrastructure, safety, convenience and environmental impacts.

Open to everyone, the survey attracted 737 respondents, 95% of whom own a boat and have been out on the Lakes in the past 12 months.

The sample size, though not necessarily representative, gives a strong indication of the views of many boaters (and some others) about safety on the Lakes and the issues associated with environmental protection and boating infrastructure. The survey also indicates useful aspects of boat ownership, boating habits, destinations and preferences.

Just over 50% of respondents reside outside of the immediate Gippsland Lakes area. 35% live outside Gippsland. The high number of respondents from outside Gippsland confirms that Gippsland Lakes' boating stakeholders come from a much bigger geographic area than the immediate environs of the Lakes.

Respondents participated in a broad spread of boating activities over the past year. Approximately 50% have been fishing and over 25% have been kayaking or canoeing. Approximately 11% have entered Bass Strait for cruising.

Paynesville is by far the most popular starting point for boating, probably due to the moorings and launching facilities available there. Metung is the most popular destination. As well as popular destinations including Ocean Grange, Steamer Landing Sperm Whale Head, many boaters visited a wide variety of locations, including Bairnsdale, Loch Sport, Johnsonville, Marlay Point and Hollands Landing.

From a safety perspective, the most important issues raised by respondents included hoon boating behavior, boats approaching swimming areas, alcohol, poor driver skill and boats speeding in 5 knot zones. Enforcement of boating rules and education were seen as key responses to safety concerns.

Environmentally, boaters place a high value on water quality and habitat. They perceive that the biggest risks to the natural environment are illegal sewage pump-out, fuel spills, bilge water pump-out, litter thrown from boats and marine pests.

Overwhelmingly, respondents support increased boating activity on the Lakes, more funding for boating infrastructure and continued effort to educate boat users to respect the environment and the safety and comfort of other waterway users.

The survey feedback provides a valuable source of information to guide the preparation of the Gippsland Lakes Sustainable Boating Plan.

2. Introduction

2.1 Background

Gippsland Ports is undertaking the preparation of a Sustainable Boating Plan for the Gippsland Lakes. The project was commissioned by the former Gippsland Lakes Ministerial Advisory Committee and complements the role of Gippsland Ports as the waterway manager under the Marine Safety Act.

Funded by the Gippsland Lakes Environment Fund, the scope of the project is limited to the Gippsland Lakes. Gippsland Ports is undertaking assessment of boating activities in all other waterways under its jurisdiction as part of its Safety and Environmental Management Plan, currently being prepared.

The Gippsland Lakes Sustainable Boating Plan aims to identify the actions necessary to support continued growth in boating activity on the Gippsland Lakes, while ensuring that the environmental, social and economic values of the Lakes are maintained and enhanced.

In order to canvass community and stakeholder views regarding boating on the Lakes, a survey was prepared and conducted during August 2015.

The survey was widely promoted via e-mail lists, public notices in local newspapers, social media and word of mouth. Boating related organisations also assisted in promoting the survey.

2.2 Purpose of the Survey

The survey serves three main aims:

1. To gather information on boating usage, boat types, visitation, destinations and overall boater activity on the Gippsland Lakes;
2. To gather stakeholder views and perceptions about boating on the Gippsland Lakes, including safety hazards, environmental hazards, boating facilities and aids, and the overall experience of boating on the Lakes;
3. To solicit opinions on the priorities for improving the boating experience, including important areas for improvements to the perceived safety and environmental impacts of boating.

The survey provides valuable information about stakeholders' priorities for the Gippsland Lakes and gives a clear indication of survey respondents' views on potential action to improve boating on the Lakes.

2.3 Survey Format and Administration

The survey was administered using the on-line Survey Monkey software. It consisted of 30 questions covering the following issues:

- Boating activities, frequency, destinations and purpose
- Boat ownership – type of boat, location and use of facilities
- Rating of boating facilities and services
- Broader values and perceptions of the Gippsland Lakes
- Safety risks and remedies

- Environmental risks and remedies
- Importance of boating facilities and management actions (enforcement, education, etc.)
- Respondent information (age, gender, place of residence).

Several “open field” questions were also included to allow respondents to include comments.

The survey was made available as a link via e-mail, the ‘Gippsland Ports’ and ‘Boating on the Gippsland Lakes’ Facebook pages, and the Gippsland Ports’ web site. The survey was promoted via the Facebook pages and web site, public notices in the Bairnsdale Advertiser, Lakes Post and Gippsland Times, media release (published in the local newspapers), the Boating Industry Association of Victoria e-newsletter, the ‘Around the Jetties’ newsletter and via various boating and related organisations and clubs.

Hard copies of the survey were made available to people without access to a computer.

The survey ran from 30 July to 28 August 2015.



Do the Gippsland Lakes float your boat?



The Gippsland Lakes are a boating paradise. More and more people are enjoying cruising, sailing and paddling on our beautiful and relatively safe waterways.

The Lakes also have environmental importance and host a range of activities that are potentially hazardous to the environment and public safety.

Gippsland Ports is undertaking a 'Sustainable Boating Plan', to support growth in boating activity, while ensuring that the environment of the Lakes is protected and the community can continue to enjoy safe, responsible boating into the future.

Input from the boating and non-boating community is an important part of the project. It will help us understand the patterns of boat use on the Lakes and your views on boating facilities, hazards, and improvements to boating.

What do you think about boating on the Gippsland Lakes?

Complete our survey about boating on the Gippsland Lakes.

You can enter the draw to win a Personal Flotation Device!*

To complete the survey, go to:



www.gippslandports.vic.gov.au



'Boating on the Gippsland Lakes'



or contact Gippsland Ports on 51 50 0500 to request a hard copy.

* Prize may not be exact model shown, but will keep you afloat!

MORE INFORMATION...

Contact: Martin Richardson Phone: 0417 099 911
E-mail: martine@gippslandports.vic.gov.au

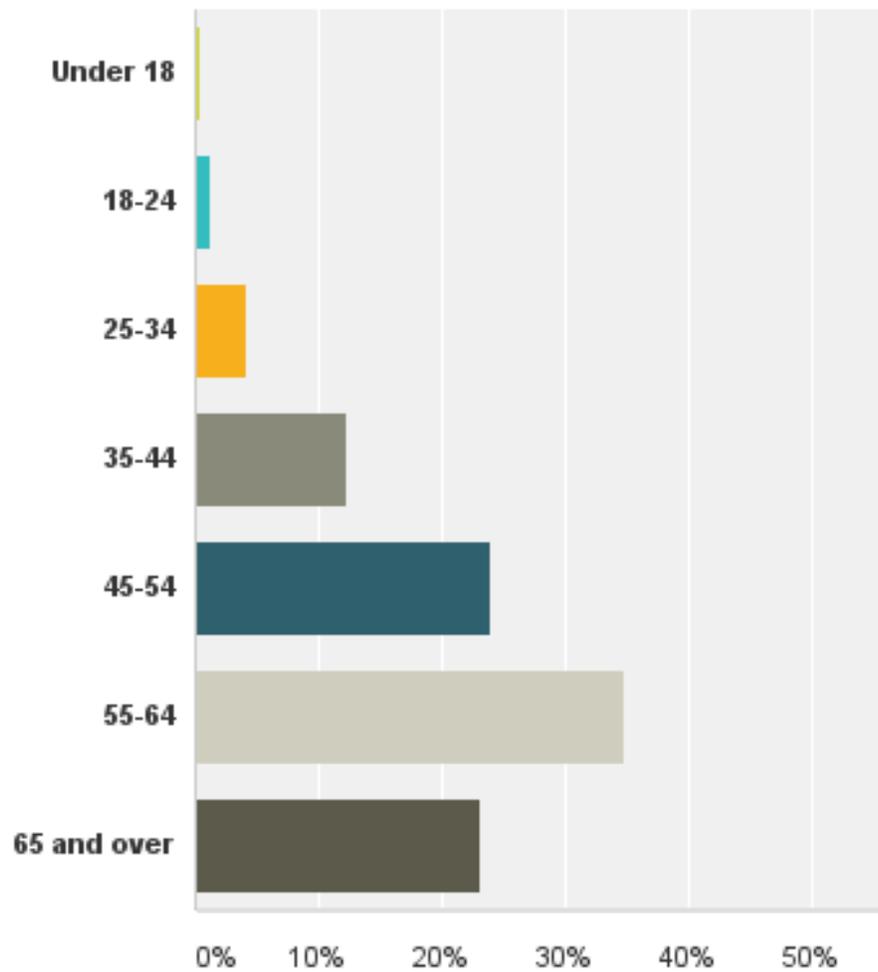


3. Survey Results

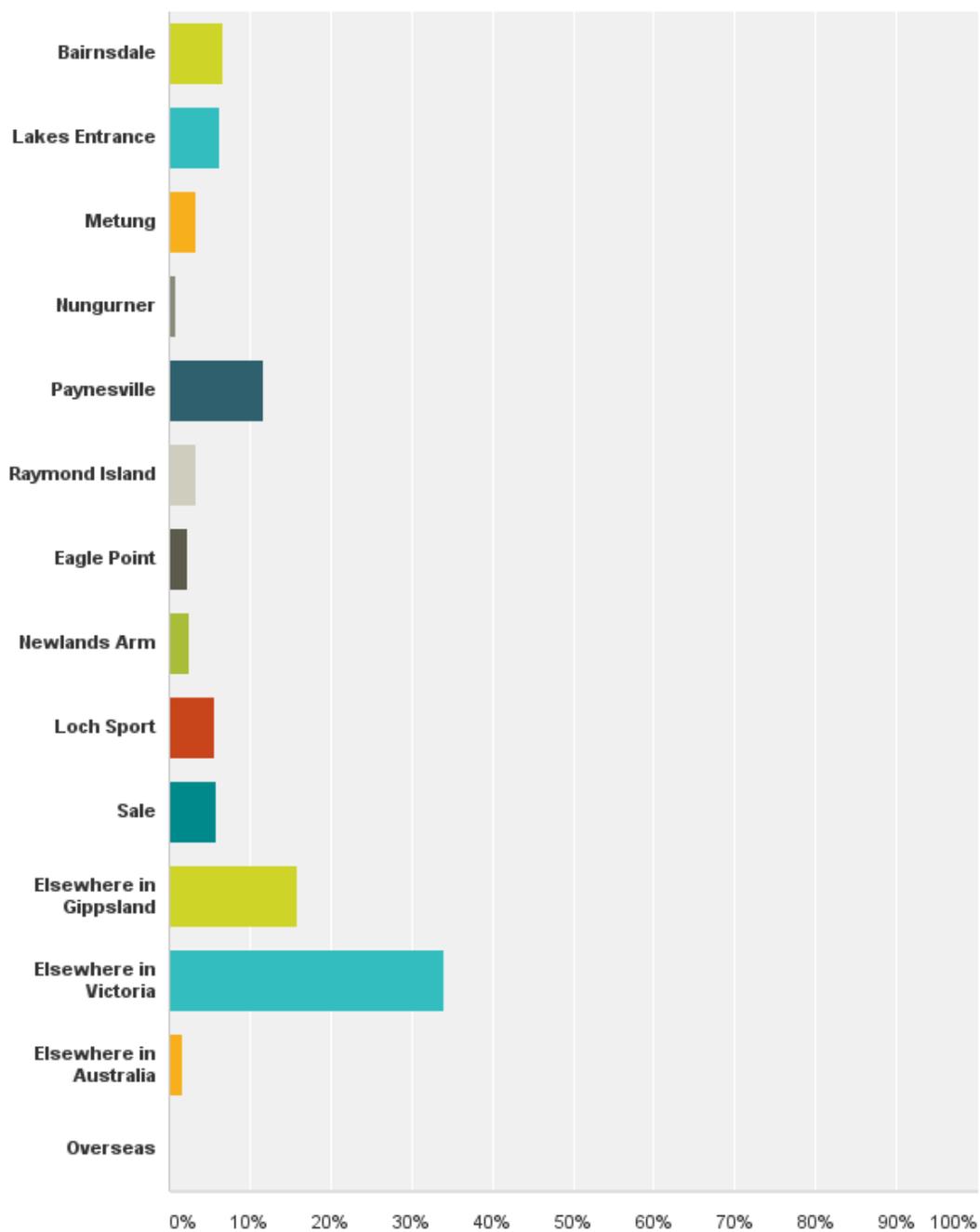
3.1 Respondents

A total of 737 people completed the survey. 87% completed all questions.

Approximately 81% of respondents were male. The majority of respondents were over 55 years old.



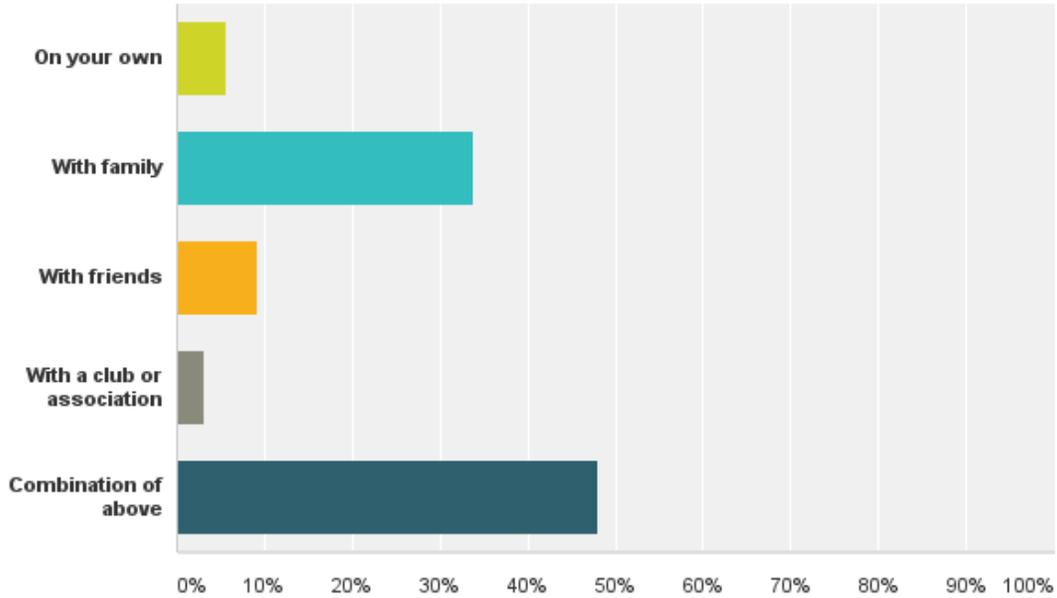
Approximately 50% of respondents reside outside of the immediate Gippsland Lakes area. 35% live outside Gippsland. The high number of respondents from outside the region confirms that Gippsland Lakes boating stakeholders come from a much bigger geographic area than the immediate environs of the Lakes.



3.2 Boating Activity

95% of respondents own a boat and 94% have been boating on the Lakes in the past 12 months. Over half of respondents go boating more than 10 times per year. Boating is primarily a family activity.

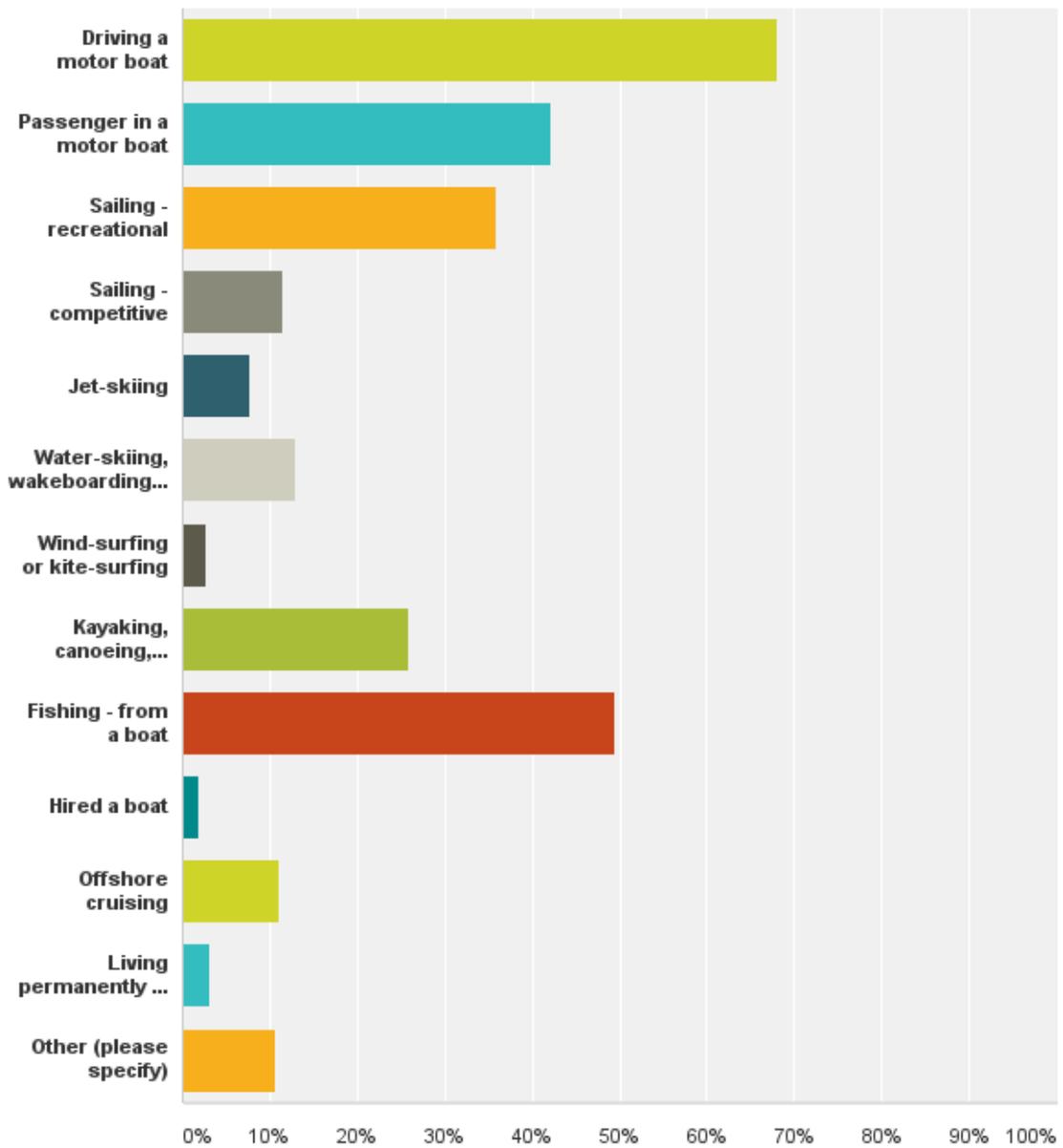
Do you normally go boating...



Only a very small proportion of respondents go boating alone. It is a very social activity.

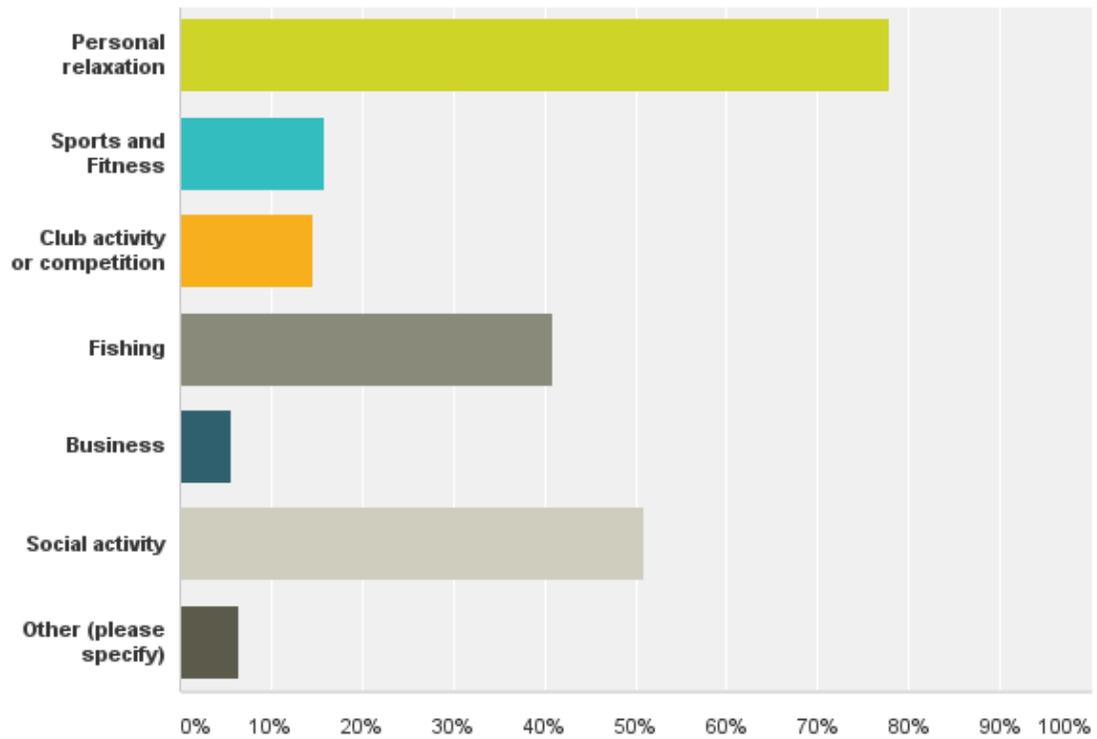


In the last 12 months, respondents undertook the following boating activities on the Gippsland Lakes:



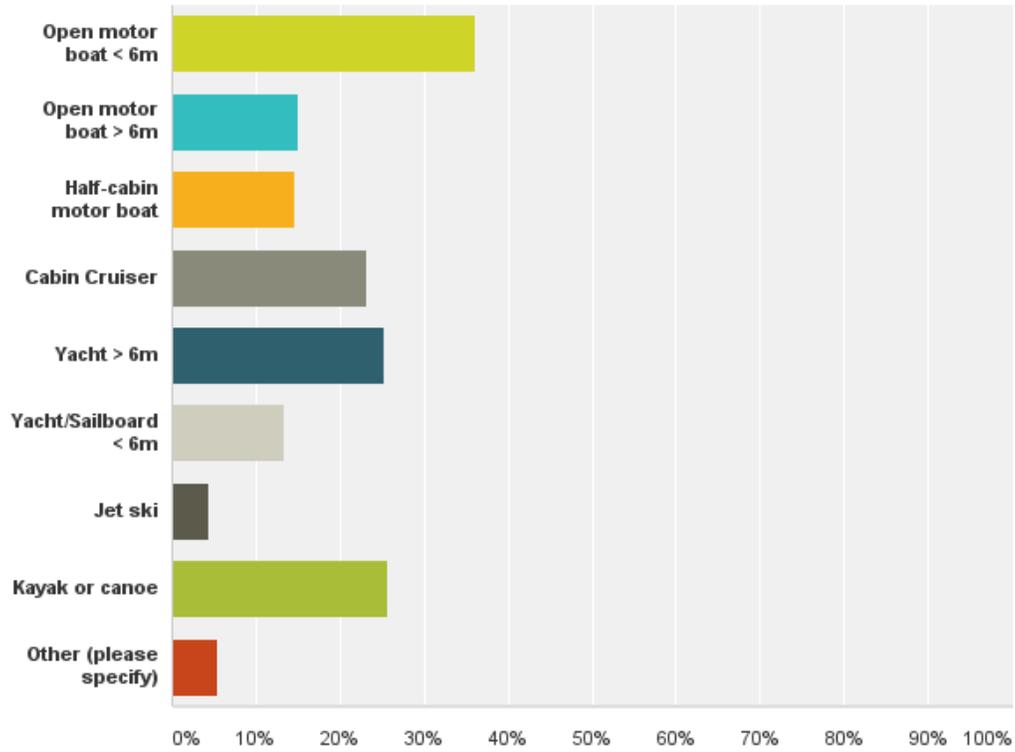
Respondents participated in a broad spread of boating activities in the previous year. Approximately 50% of respondents went fishing. Over 25% went kayaking or canoeing. Approximately 11% went cruising offshore. "Other" responses include hunting and duck shooting, staying on a boat overnight or longer, commercial fishing, power boat racing and commuting from home to work.

The main purposes of boating activity are: personal relaxation, social activity and fishing.



3.3 Boat Ownership

Most common boat is “Open motor boat – less than 6 metres”. Boat ownership is spread across all boat types. Many respondents own more than one water craft. 25% own a kayak or canoe.

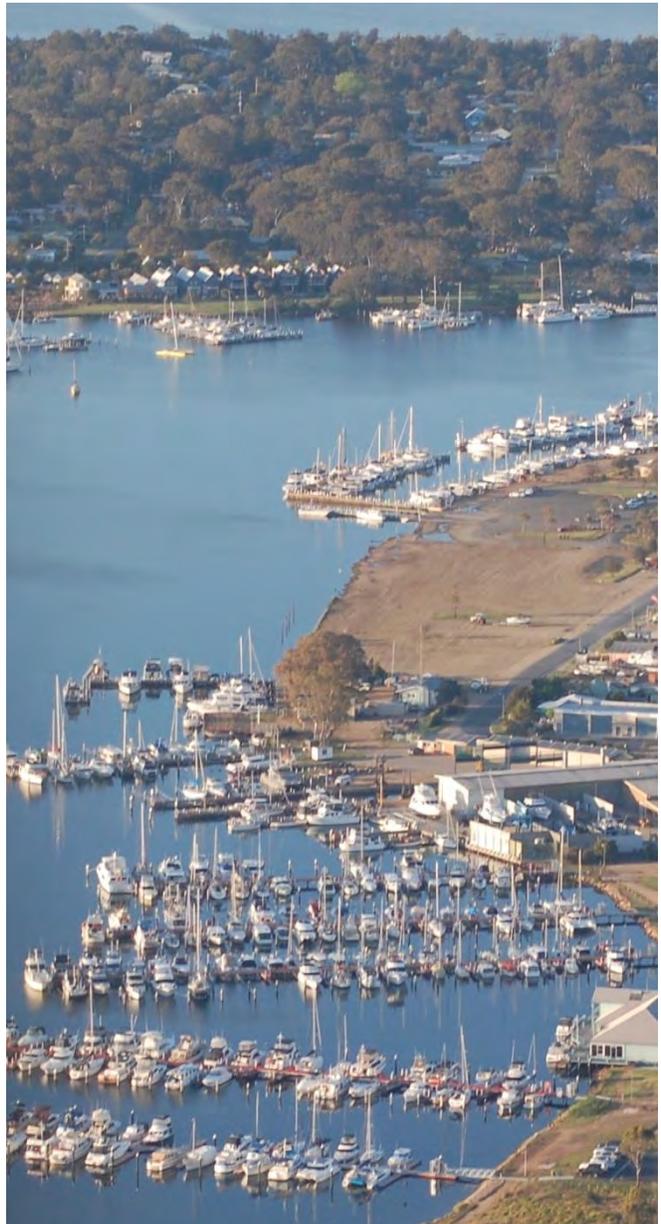
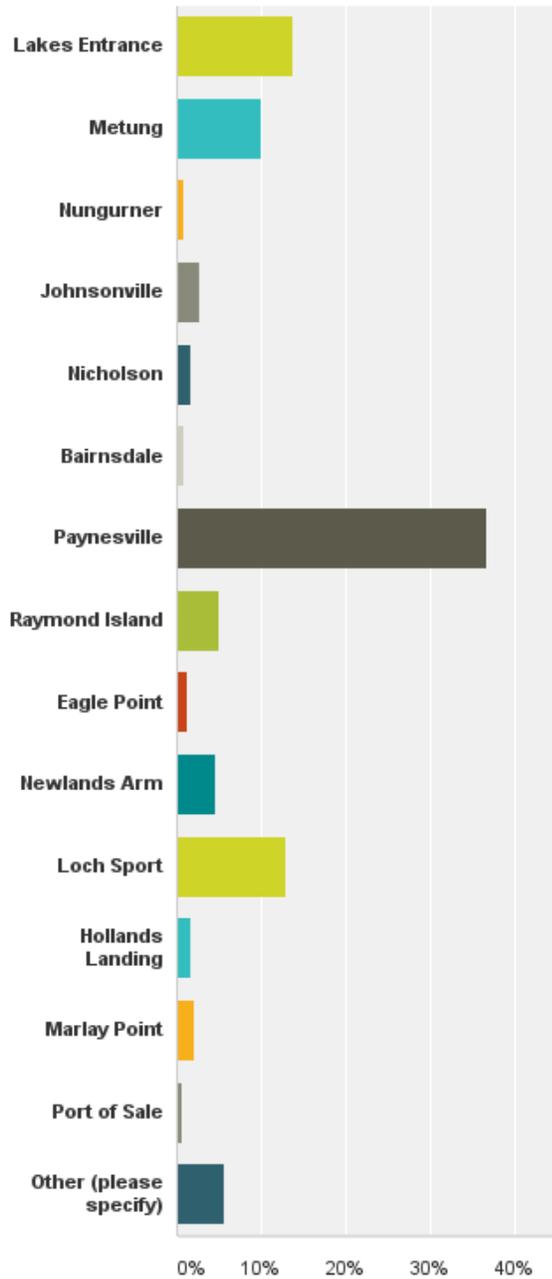


3.4 Locations and Destinations

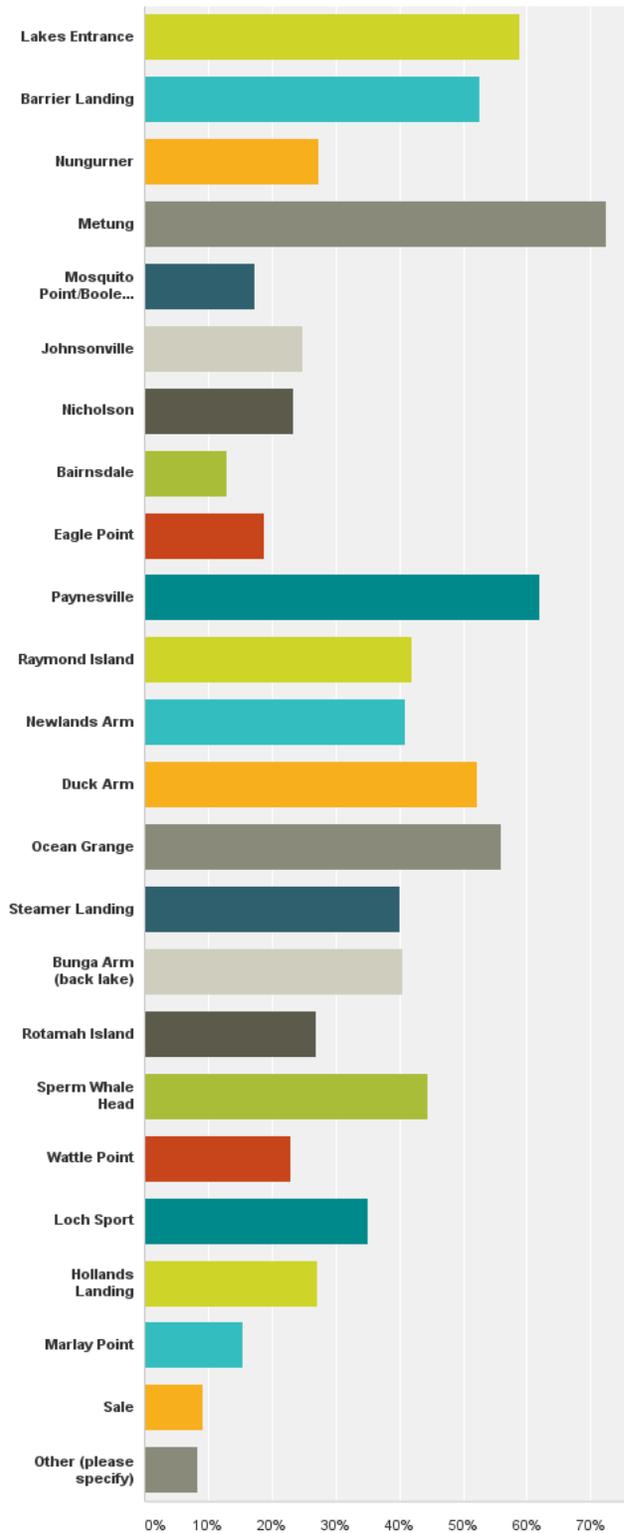
Paynesville is by far the most popular starting point for boating.

Many boaters visited a wide variety of destinations, including places such as Bairnsdale, Loch Sport, Johnsonville, Marlay Point and Hollands Landing.

Where do you commence your boating?

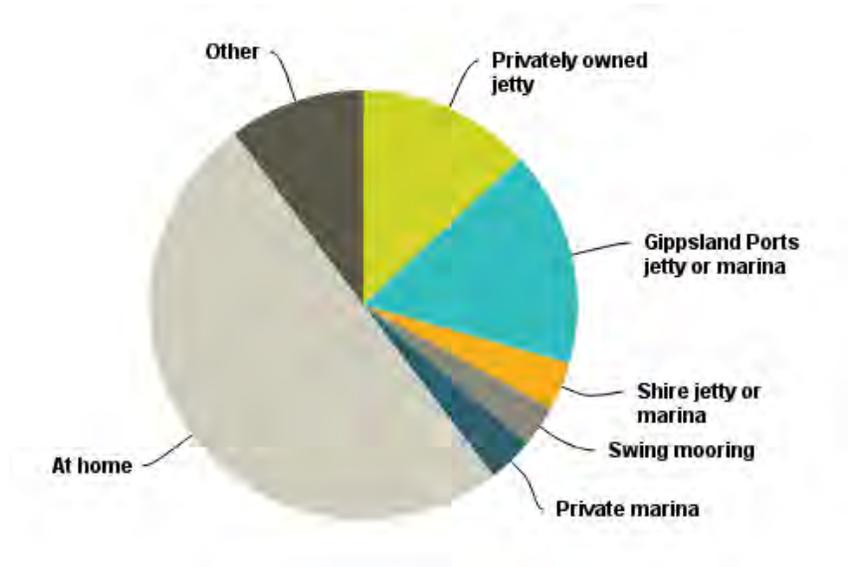


Metung is the most popular destination. Most popular destinations outside the main towns are: Ocean Grange, Barrier Landing, Duck Arm, Sperm Whale Head, Bunga Arm and Steamer Landing.

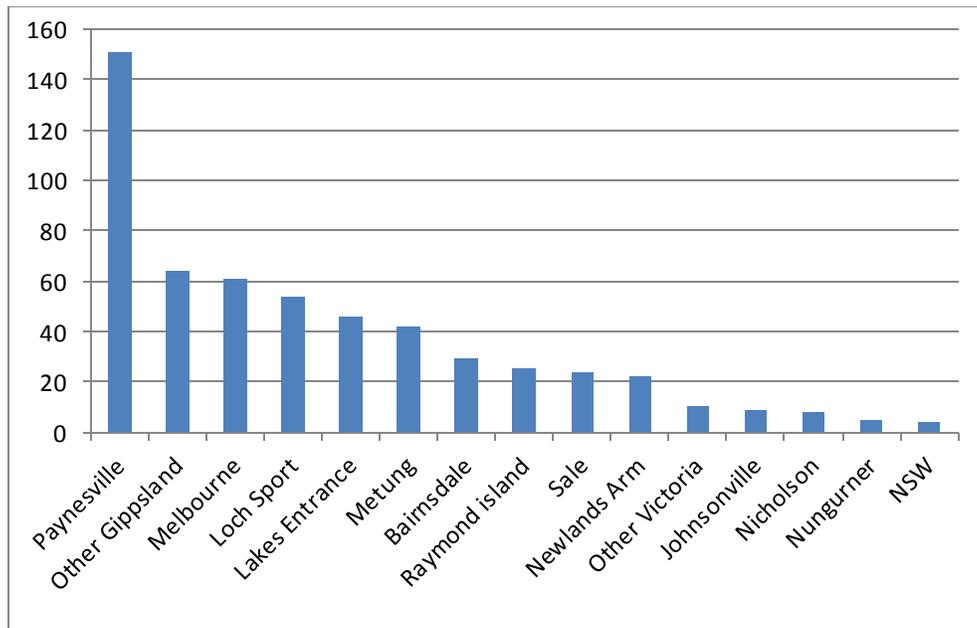


About 50% of respondents launch boats stored at home. Over 40% are permanently moored on a jetty or marina. These results indicate significant travel for boating and a high demand for boat launching facilities.

Where is your boat usually stored?



At what location is your boat usually stored?



3.5 Boating Habits

Respondents were asked a series of questions about boating habits. The table below compares the responses of all boat owners against owners of boats over 6 metres.

Do you...?	Never (%)		Sometimes (%)		Often (%)	
	All boats	Boats > 6m.	All boats	Boats > 6m.	All boats	Boats > 6m.
Have trouble finding a short-term berth	33.00	21.61	56.38	64.55	10.61	13.83
Beach your boat at locations around the Lakes	18.26	23.17	46.22	48.09	35.53	28.74
Use an anchor	13.61	13.47	61.10	68.19	25.28	18.34
Keep a trailerable boat in the water	61.25	58.80	28.04	28.90	10.70	12.29
Take a boat into Bass Strait	59.86	59.76	31.14	31.10	9.00	9.15
Use a chemical toilet	63.17	48.28%	21.89	28.53	14.95	23.20
Use sewage pump-out facilities	65.38	48.94	18.18	25.98	16.43	25.08
Use bilge pump-out facilities	81.30	73.84	13.70	19.87	5.00	6.29
Witness dangerous or inconsiderate behaviour	10.08	6.27	61.95	62.96	27.97	30.77

Most boaters:

- ***Have some trouble finding a short-term berth***
- ***Beach their boats***
- ***Use an anchor***
- ***Witness dangerous or inconsiderate behaviour by others.***

Trips into Bass Strait do not vary according to boat size (40% “sometimes” or “often” regardless of size), but people whose main purpose is fishing use the entrance more (60% “sometimes” or “often”).

Use of sewage and bilge pump-out is higher among larger boat owners, but relatively low overall.

3.6 Perceptions of Boating Facilities and Services

The survey included several questions (some asked in previous Gippsland Ports surveys), seeking users' views on the adequacy of infrastructure and services.

The detailed results are included in Appendix 2. Comparisons over time are unreliable due to different survey methods, but are also included in Appendix 2 for information.

Highest satisfaction (average score above 5 out of 10):

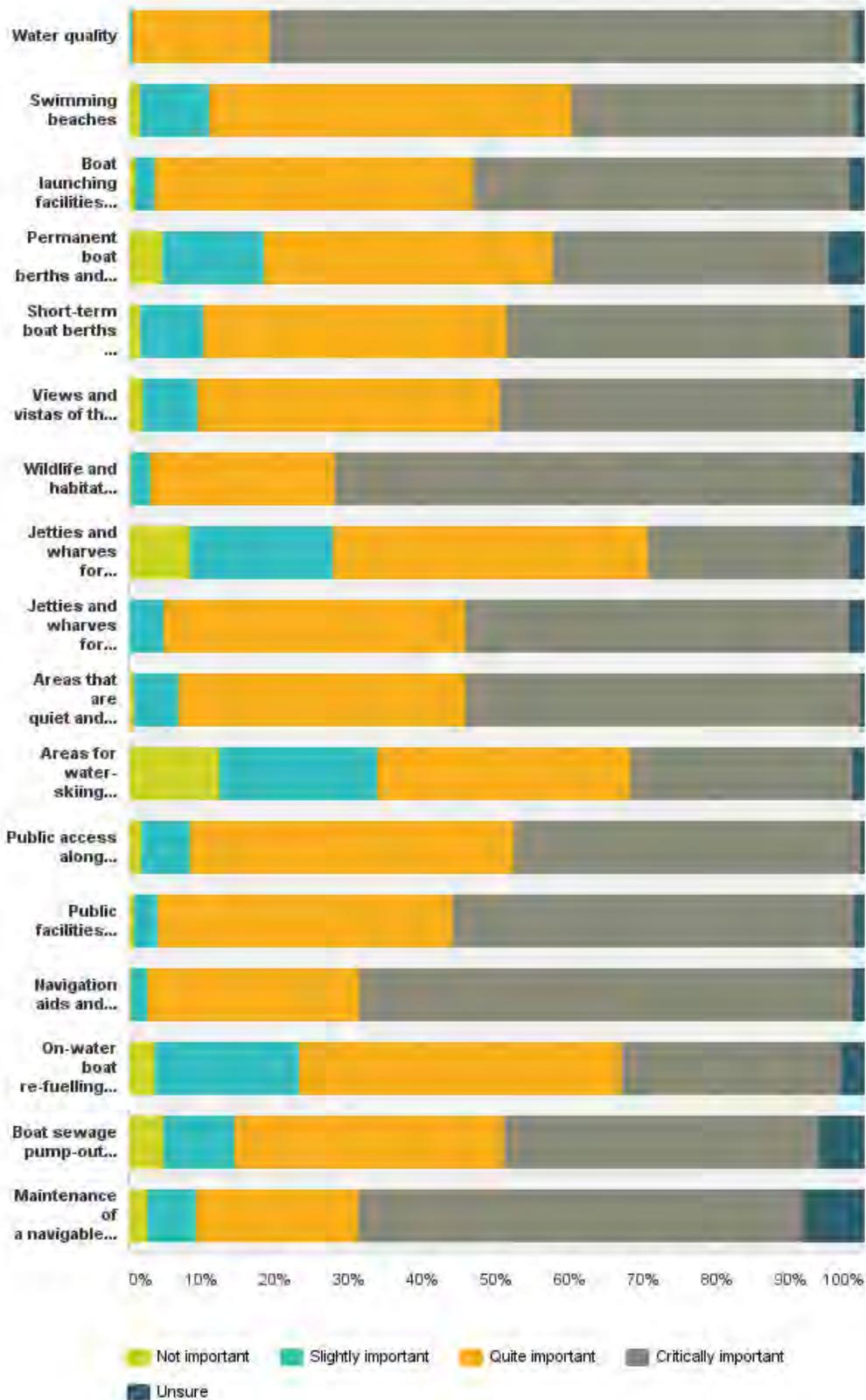
- ***Extent to which navigation aids help with safe boating***
 - ***General condition of wharves and jetties***
 - ***Reliability, visibility, size and location of navigation aids***
 - ***Availability and accuracy of information about waterways and navigation aids***
-

Lowest satisfaction (average score below 5 out of 10):

- ***Availability of permanent berths and moorings***
 - ***Enforcement of berthing time restrictions***
 - ***Access to sewage pump-out***
 - ***Availability of short-term berths and moorings***
 - ***Access to on-water fueling***
 - ***Enforcement of waterway rules***
-



3.7 Importance of the Gippsland Lakes' values and facilities



Top 5 highest rated values:

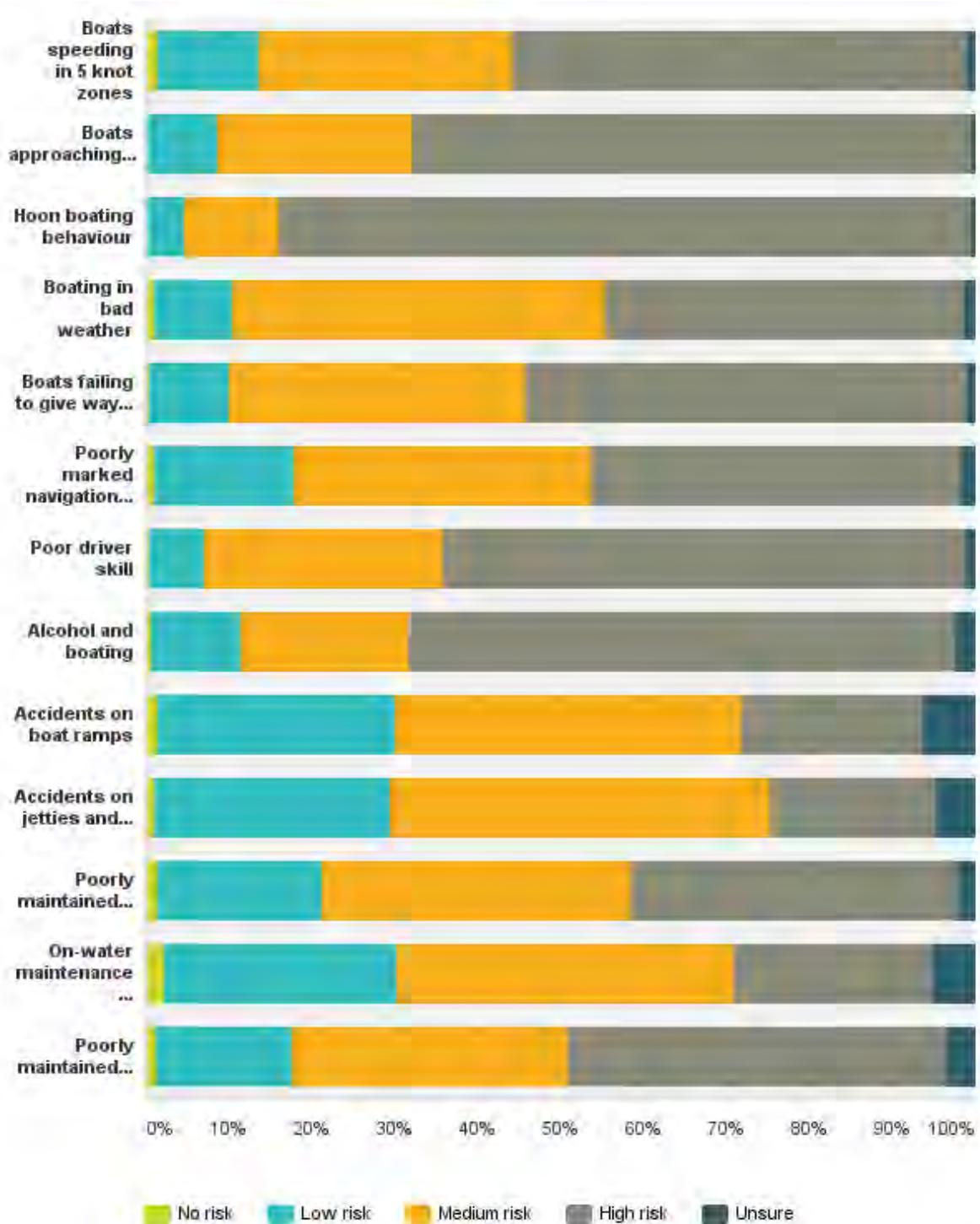
Value/attribute	Critically important (%)
Water quality	80
Wildlife and habitat protection	70
Navigation aids and channels	67
Maintenance of a navigable entrance to the ocean	61
Public facilities (parking, toilets, seating, etc.)	55

The natural values attributable to water quality, wildlife and habitat are most important to respondents. It follows that most boaters on the Gippsland lakes are both aware and respectful of these environmental values.

The lower rated values include: Areas for water skiing, jetties and wharves for fishing, on-water boat refueling, permanent berths and moorings. However, even for the lower rated values there were only a small proportion of respondents thinking they are “not important”, in each case outweighed by the “quite important” or “critically important” responses.



3.8 Safety Risks



Highest rated safety risks:

- 1. Hoon boating behaviour***
 - 2. Boats approaching swimming areas***
 - 3. Alcohol and boating***
 - 4. Poor driver skill***
 - 5. Boats speeding in 5 knot zones***
 - 6. Boats failing to give way correctly***
-

83% of respondents regard hoon boating behaviour as high risk.

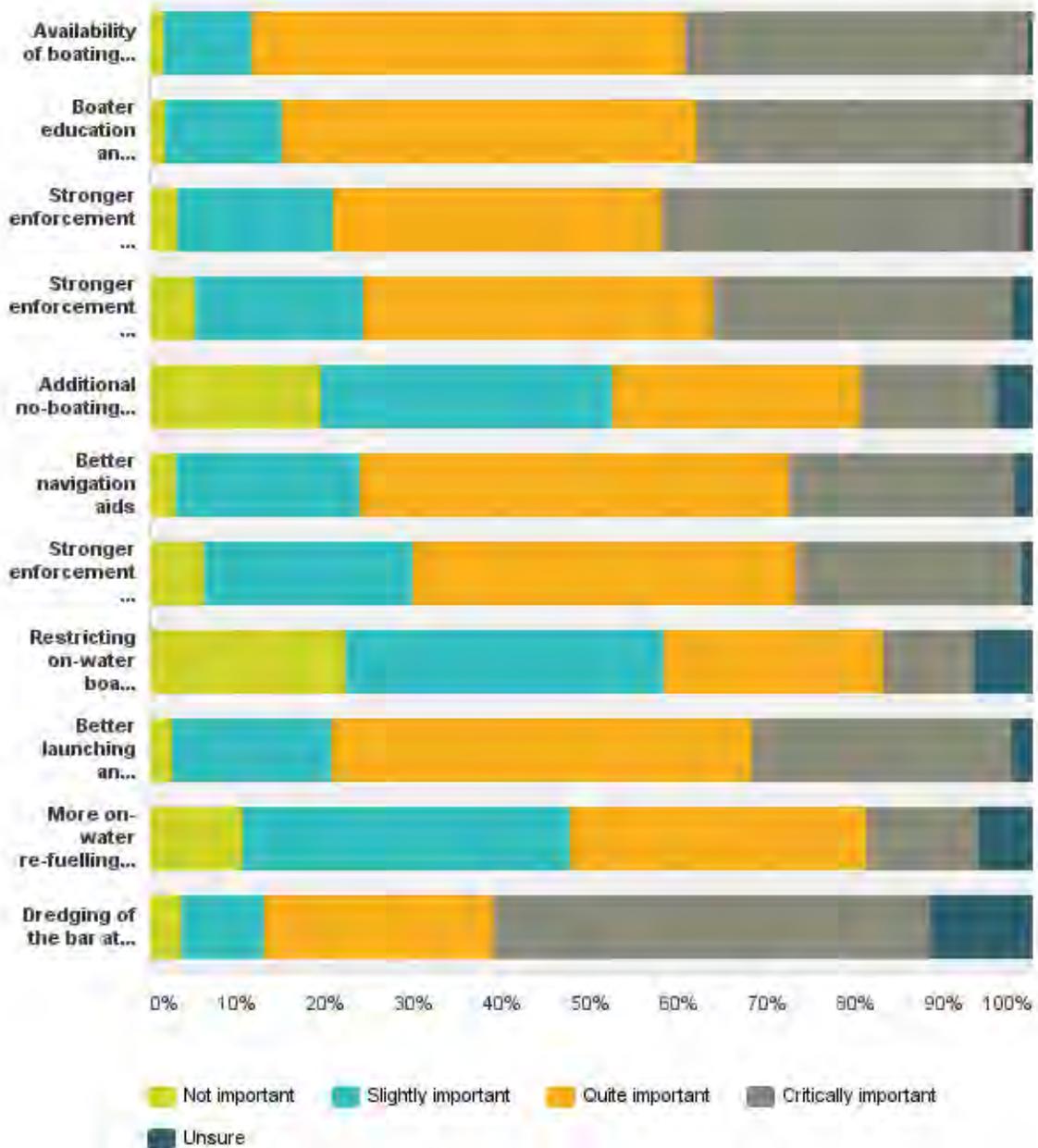
Lowest rated safety risks:

- 1. Accidents on boat ramps***
 - 2. Accidents on jetties and wharves***
 - 3. On-water maintenance and re-fueling***
-



Q17 How important are the following in REDUCING safety risks?

Answered: 662 Skipped: 19



Most important safety remedies are:

- ***Dredging of the bar at the entrance***
 - ***Stronger enforcement of speed limits***
 - ***Boating information, maps, etc.***
 - ***Boater education***
-

Approximately 50% of respondents regard dredging of the bar at the Lakes Entrance as “critically important” for safety. Another 25% regard dredging as “quite important”.

Selected comments:

“Policing should be done in the high tourist season, not after everyone is gone home as is done now. Water police in particular are never seen during peak periods. Fishing inspectors are never around and need to be around Lakes Entrance almost all the time. Ports need to inspect residence moorings for effluent discharge more often, pretty poor at Post Office jetty at the moment with repairs being done, toilet and washing water discharges.”

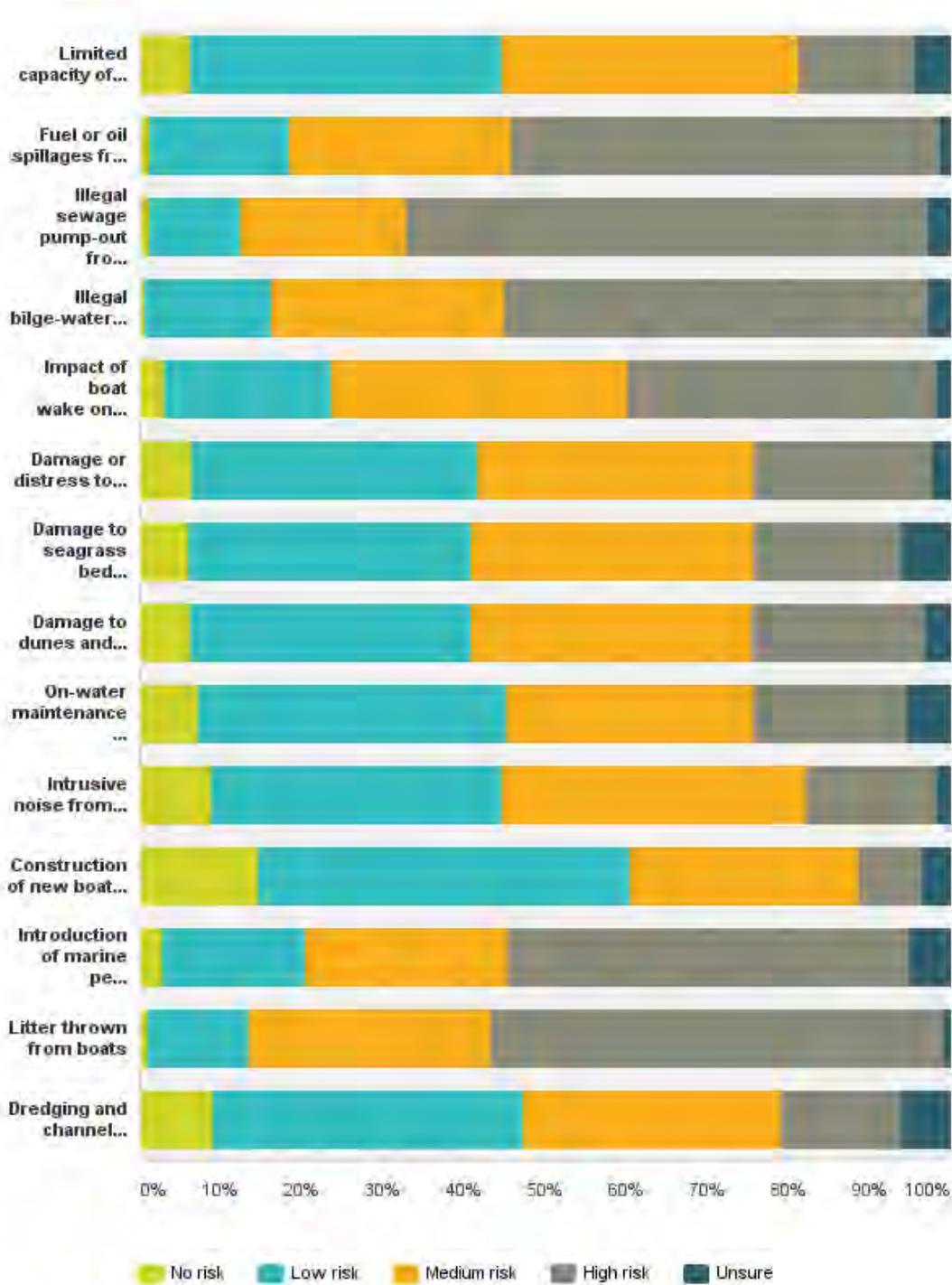
“Changing references from 5 knot speed limit to “No wake zone”. This is one of the most important safety (and comfort) improvements one could make anywhere boats and boaters congregate.”

“Better management or education to hire boat users, particularly highlighting higher risk areas such as tidal influence at mooring sites or wind impact on Gippsland Lakes water ways.”

“Better education for locals and visitors about speeds and rules on the lakes and rivers. Better enforcement of speeding on the rivers.”

“Education not enforcement is a better approach to managing risk.”

3.9 Environmental Risks



Highest rated environmental risks:

- ***Illegal sewage pump-out***
 - ***Litter thrown from boats***
 - ***Fuel or oil spillages***
 - ***Illegal bilge water discharge***
 - ***Introduction of marine pests***
-

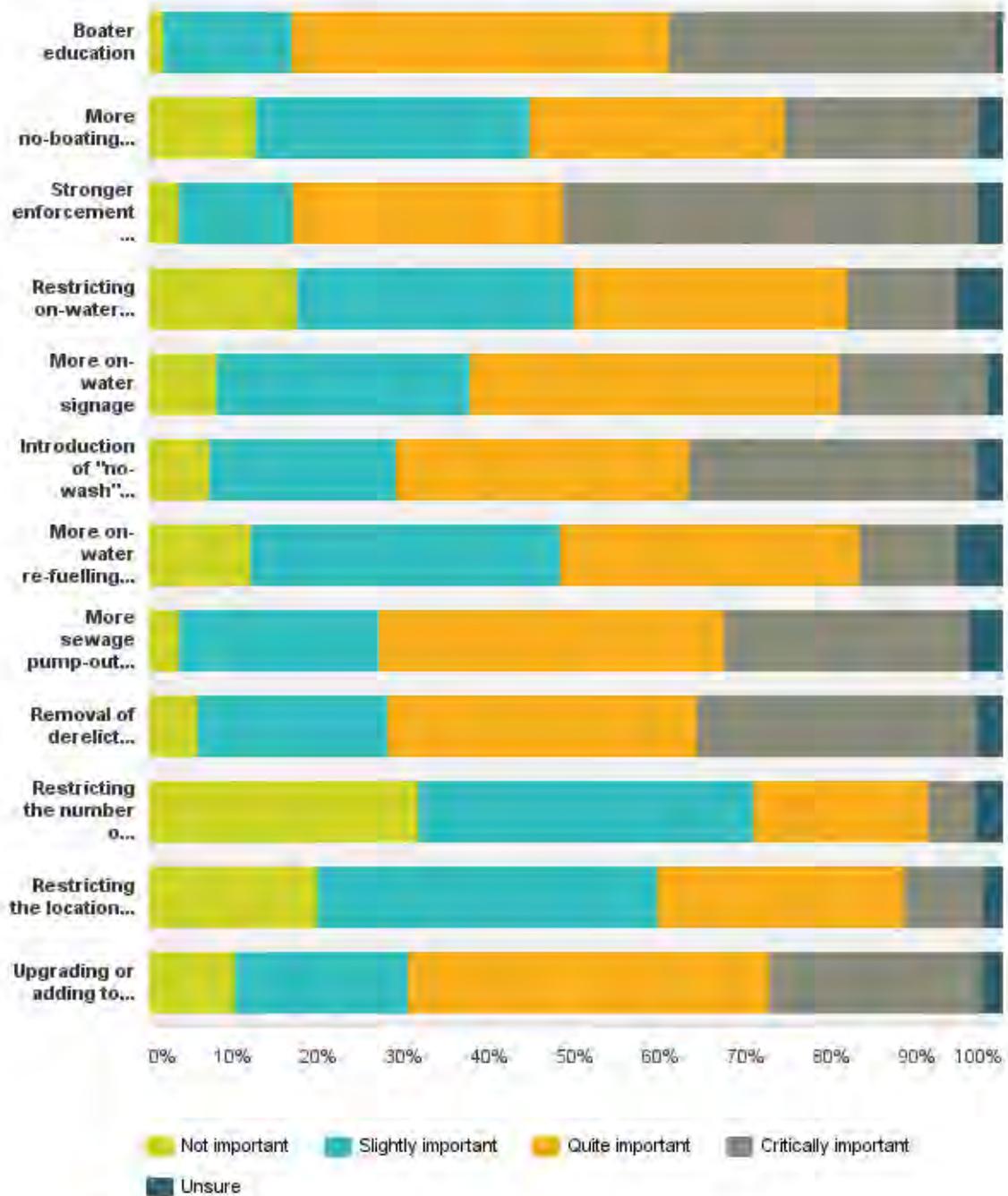
Lowest rated environmental risks:

- ***Construction of new boat launching and berthing facilities***
 - ***Dredging and channel maintenance***
 - ***On-water maintenance of boats***
 - ***Intrusive noise***
 - ***Damage or distress to wildlife***
-



Q20 How important are the following in REDUCING risks to the environment?

Answered: 630 Skipped: 111



Most important environmental remedies:

- Stronger enforcement of illegal sewage discharge
 - Boater education
 - Introduction of “no-wash” zones
 - Removal of derelict vessels
 - More sewage pump-out facilities
-

Selected comments:

“I think most of us would change our behaviour if we understood that it was doing harm, and how it was doing harm. Intrusive rules could very easily spoil the experience; please be very careful changing rules.”

“Make it illegal to put sewage into the Lakes. At present even boats with holding tanks pump straight into the Lakes because they are too lazy to go to a pump out station.”

“Inspections in marinas of vessels consistently pumping contaminated bilge water into the lake, usually with oil or fuel slick showing. Mostly old timber boats that aren't maintained!”

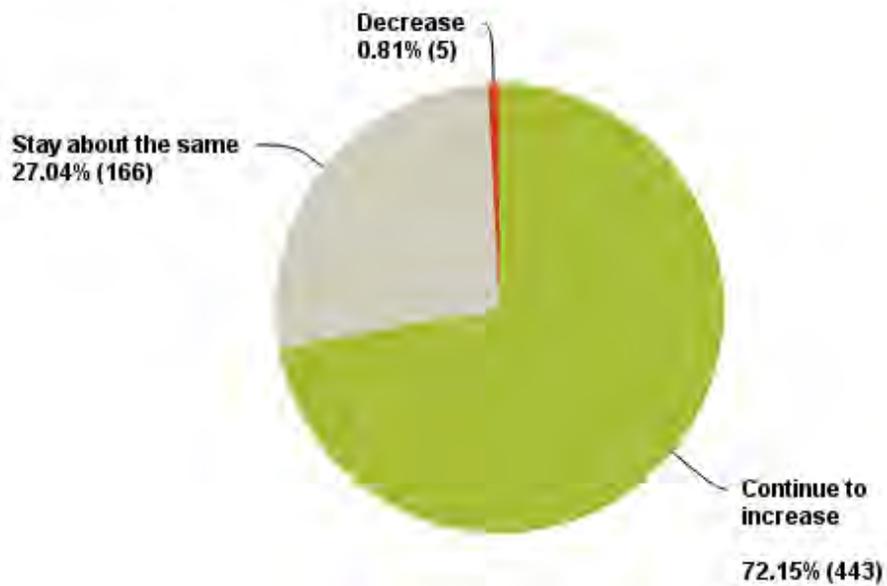
“Organise a “boating” clean up Australia Day. Such an activity could raise awareness of environmental impact and encourage boat users to be proactive and more responsible in their practices.”

“More boating facilities will make it easier for boating and should ensure less damage to environment.”

“It is important to focus on risk-plus-frequency not just on risk. For example, no-boating zones probably don't matter much because the overwhelming majority of boaters only go to the popular places. It is also important not to create endless restrictions on low-impact boating by people who are not just casual visitors but may well have been coming to, and caring for, the Lakes for decades. In the end, friendly on-the-ground presence to help create a culture of care for the Lakes is the most productive thing, not rules.”

3.10 Overall views about boating on the Gippsland Lakes

In the future, would you like to see boating and boating facilities on the Gippsland Lakes...



Selected comments:

“I have enjoyed boating on the Gippsland Lakes for fifty years and have seen many changes. Both environmentally and facilities. We need to ensure our Lakes are preserved environmentally and at the same time provide high quality facilities for the enjoyment of this beautiful waterway.”

“There is nowhere else in Australia quite like the Gippsland Lakes. The level of appropriate infrastructure, particularly jetties, toilets and hot showers, and accessible towns (primarily Paynesville, Metung and Lakes Entrance) is quite unique and makes the Lakes accessible in even quite small yachts and boats. I have often heard first time interstate boating visitors expressing their amazement at what we have here.”

“Increased high quality boating infrastructure is needed to maintain the destination as one of Australia's best coastal / inland waterways for tourism and recreation.”

Other important actions to improve boating on the Gippsland Lakes:

89%

More government funding for boating facilities

85%

Overall improvements to boating infrastructure

84%

More capacity for seasonal increases in boat numbers

83%

More toilets, seating and public amenities on foreshores

80%

More information and education about boating and availability of facilities

Appendix 1: Boating Survey Cover Page



Boating on the Gippsland Lakes

Introduction

This survey is being conducted on behalf of Gippsland Ports to gather community views about boating on the Gippsland Lakes.

Gippsland Ports has been commissioned to prepare a 'Sustainable Boating Plan' to help guide the future growth and management of boating on the Lakes and to ensure that boating activity can continue to provide economic, recreational and social benefits, while protecting the natural environment of the Lakes.

The survey seeks information about your participation in boating activity and your views on matters including boating safety and facilities.

We are also seeking your views on how we can help to ensure that boating is safe, enjoyable and environmentally-friendly into the future.

Even if you do not own a boat, we are interested in your views.

The survey will take about 15 minutes. Personal details and individual responses will be kept confidential.

If you provide your e-mail address at the end of the survey, you will be informed of the results and have the chance to win a prize of a personal flotation device.

The survey closes on 28th August 2015.

**Hard copies may be returned to:
Gippsland Ports
97 Main St. Bairnsdale
or
P.O. Box 388, Bairnsdale 3875**

Thank you for your time.

Appendix 2:

Perceptions of boating facilities and services

Attribute	Poor (1-4)	Satisfactory (5-8)	Excellent (9-10)	Unsure (%)	Weighted average
Extent to which navigation aids help with safe boating	10	58	30	2	6.92
Reliability of navigation aids	13	63	23	2	6.50
Visibility/size of navigation aids	14	69	16	1	6.26
General condition of wharves, jetties and berths	18	60	21	1	6.25
Location of navigation aids	16	65	17	2	6.21
Number of navigation aids	16	66	16	2	6.19
Availability and accuracy of information about waterways and navigation aids	17	69	20	4	6.05
Access to boat launching facilities	18	54	22	6	5.89
Managing the amount of silt and sand in channels	29	58	11	8	5.10
Effectively managing the impact of boating activities on the environment	21	59	10	11	5.04
Monitoring the safe operation of vessels	24	53	10	13	4.79
Safety of access to the ocean	14	49	12	25	4.49
Access to on-water fueling	34	41	12	13	4.47
Enforcement of waterway rules (speed limits, no-boating zones, etc.)	45	41	9	5	4.42
Availability of short-term (visitor) berths and moorings	41	42	8	9	4.40
Access to sewage pump-out	16	46	11	26	4.21
Enforcement of berthing time restrictions	35	41	7	17	3.89
Availability of permanent berths and moorings	32	39	3	26	3.34



Photo courtesy of Araluen Park Cottages