

# User Expectations and Improvements for Public Boat Ramps in Westernport and Port Phillip Bays



**The Victorian Recreational Fishing Peak Body Inc.**

**Stage One: Final Report 2010**




## A Message from the VRFish Chair

It is a well known fact recreational boating and fishing go hand in glove. Over 80% of all trailerable boat registrations in Victoria occur primarily for the purpose of recreational fishing, and without serviceable recreational boating facilities, Victoria would miss out on what is a highly beneficial and safe recreation.

The following report has been written by VRFish with a view to informing our decision makers about the needs and wants of Victoria's recreational boaters and fishers, in a report that was generated by collecting data in the field and by asking recreational boaters about the sort of service levels they expect at our major boating facilities. Many thanks are due from VRFish for the funding and support needed to complete this vital study, but I must particularly thank the Minister for Roads and Ports, The Hon. Tim Pallas MP, Ms Lisa Faldon and Marine Safety Victoria, Mr Wayne Hill and Parks Victoria, Mr Clyde Batty and the Boating Industry Association (Vic) and our VRFish project team.

Entitled "User Expectations and Improvements for Public Boat Ramps in Westernport and Port Phillip Bays", this study gives decision makers and boating facility managers an unparalleled insight into the actual quality of the service delivered to recreational boaters and is remarkable in its depth. This study and report has been developed as one outcome of the successful VRFish Boat Ramp Forum and is presented to all for the benefit of a healthy past time, vital recreational activity and some might even say religion.

Kind Regards and Good Launching!



**Geoff Cramer**

**VRFish Chairman**



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**Pic1:** The best view in the world – Backing the boat down the boat ramp! (*Altona*)

## Executive Summary

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You only have to visit either of the bays on a spring or summer's day to see how important public boat ramps are to the community. Boats of all shapes and sizes are out on the water providing beneficial recreation for thousands of people. Recreational boating is about relaxing and having fun. Public boat ramp facilities must be user friendly, quick and easy to use, and must provide the appropriate infrastructure to address user needs. At present many boaters experience long and frustrating waiting times while using these facilities. They experience shallow water at lower tides which may result in significant delays in retrieving their boat. At some ramps users have to reverse their car into salt water to launch or retrieve their boat. Simple things such as the lack of line marking or no wheel stops at the end of the ramp can slow down the launching of boats.

This report has been prepared by people who own and operate recreational trailer boats. It deals with the issues boaters experience when they use public boat ramps around Port Phillip and Westernport bays. The report's focus is on lower cost and shorter term improvements that can be implemented and that will make public boating facilities easier to use and less frustrating for owners and operators of recreational trailer boats.

This report is not a strategic planning report recommending high cost replacement and expansion of facilities and longer term improvements to solve the planning problems of this infrastructure. VRFish commenced this process late in 2008 when it conducted a public boat ramp forum with a broad range of representatives who have an interest in boat ramps. VRFish then conducted boat ramp surveys at the Melbourne Boat Show and the Melbourne Fishing and Four Wheel Drive Show during 2009 and 2010.

### **These user survey results included:**

- a)** Establishing a user's perspective on acceptable queuing time for boaters when launching and retrieving boats, and
- b)** That waiting times to launch and retrieve at boat ramps are the key 'user choice' criteria for recreational boaters.

VRFish then conducted a study of the 36 facilities to identify the short term and low cost improvements that will improve the effectiveness of the facilities to better meet the expectations of facility users.

This study involved multiple visits to each of the 36 facilities by the report team to establish and collect data '*in situ*'. This data included:

- The actual number and grade/slope of facility ramp lanes
- The actual number of formal car/trailer and car only parking spaces
- An estimated number of overflow car/trailer parking spaces
- The actual water depth at ramp lane toe during the lowest tides
- An inventory of physical infrastructure attributes at each facility

The data collected during the facility surveys has been included within the appendices of this report as a supplement to existing desk top based facilities studies.



This report offers a range of recommendations for the future design of boating facilities that will make such facilities more user friendly to boaters. It also deals with other issues experienced at these facilities that also cause user frustration. This includes fines being issued when ticket machines do not function and government regulations which slow down the launching/retrieval process as unintended consequences of road safety initiatives (i.e. infringements for boat drivers who remain in the boat while it is towed out of the water to the head of the ramp). This report recommends that to ease boater frustration boat drivers should be able to remain in the boat as it is being towed up to the top of the ramp after the boat is driven or winched onto the trailer.

This report recommends an urgent review of the Australian Standard AS 3962-2001 - Guidelines for the Design of Marinas. This code sets design standards for boating facilities which in effect create the excessive queuing experienced at many facilities. The code states urban facilities with jetties/ mooring infrastructure need 40 to 50 parking spaces per ramp lane.

When boaters surge to a facility for any one of a range of reasons to launch/retrieve boats, extensive queuing occurs. A ramp lane functioning at optimum levels can only launch/retrieve approx 15 boats per hour. Facilities such as Corinella in Westernport Bay regularly experience queuing times of two hours. High use boating facilities need substantially more ramp lanes than stipulated in the code to reduce the extensive queuing times. Also, a new set of design criteria is needed for the public boating facilities in the tourist areas located along the southern section of both bays, as boat ramp traffic is not based on available parking.

This report concludes Stage 1 of the scope of works. The current scope of work further envisaged that:

- The 2010 Fishing and Boating show user survey data is to be collated, analysed and presented to complete survey data input into this study
- That the study team completes the facility survey works (Stage 2) by visiting, counting and compiling peak ramp usage data during the spring and summer of 2010

However, subject to the Ministers approval for VRFish to seek a formal project variation to the funding contract, it is now proposed that the project funding allocated to the collection of facility peak usage data should instead be reallocated to a study to further investigate VRFish Priority package 1: Methods to optimise the implementation of a proposed Webcam installation program at boating facilities. This reallocation of funding has arisen because it is expected that this new pathway will produce an outcome that delivers a greater cost benefit and also because the webcams package (when implemented) will provide higher quality data than 'in situ' observation by the project team.

In commissioning and acting on this report, the government has the opportunity to address the key issues being raised by the users of the boat ramps in Port Phillip and Westernport bays. Many of these issues are quite inexpensive to address and can result in quick and tangible improvements. As users of these facilities, VRFish urges the Government to act on these recommendations to ensure that the user satisfaction with public boat launching is improved in the short, medium and longer term.





**Pic 2:** A Frustrating boat launch! (*Indented Head*)

The **key findings** of this study were:

- The lowest cost way of obtaining improvements for ramp users is to ensure that existing facilities are fully utilised.
- The need to improve recreational boater awareness by the real time availability of parking, weather conditions and actual queuing levels at facilities through the use of live webcam data streamed onto a central public boating facilities website.
- The use of webcams will provide extensive data capture for the future design of facilities without expensive site surveys.
- There is a need to introduce a 'standard package' of operational items at all facilities to meet boater's needs. These include:
  - All boat ramps must have wheel stops to stop trailers being reversed off the ramp and becoming caught on the end of the ramp
  - All boat ramps must have clear reversing line marking to help inexperienced drivers
  - Asset managers need ways to maximise onsite parking and minimise inconvenience to surrounding residents.

## Summary of Report Recommendations

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### Short Term Low Cost Improvements

The focus of this report is to recommend short term and lower cost improvements for public boating faculties on Port Phillip and Westernport Bays. These recommendations have been prioritised in order of funding and implementation priority with VRFish Priority No.1 being the highest priority package.

### Other Important Recommendations

Other issues were observed when the sites were inspected and opinions gathered from facility users. Those other issues which are considered important to boaters have been included in this report. Some of these are higher cost strategic improvements which in principle lay outside the scope of this report. Nevertheless they have been prioritised into high, medium and lower priorities for the convenience of the Department of Transport.



**Pic 3:** A trailer sailor does it tough at a major metropolitan boat ramp (*Half Moon Bay*)

## Improving the Utilisation of Existing boating facilities

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Surveys by the VRFish project team at some of the busiest boat ramps during peak periods have revealed some unexpected usage patterns. This appears to be based on historical levels of unacceptable queuing times leading boaters to choose different launch/retrieve times to avoid peak periods. While in principle this is a desirable outcome to maximise the utilisation of existing facilities by spreading out demand, it has led to boaters avoiding “traditional” peak periods to the extent that “new peak” periods are being created on different days. To better utilise existing facilities, boaters need to be able to access real time information to make a good decision as to which facility to use and when to use it.

An active, real time public boating facility web site with live data streamed from webcams for public boating facilities is needed. Currently boaters drive to a facility, not knowing whether queuing is occurring, parking areas are full or if weather conditions will make launching difficult or impractical. This web site can also be used for communicating with boaters using information pages and research questionnaires.

This recommendation has been given the highest priority because it will substantially improve the utilisation of existing facilities. It provides a direct and clear pathway to assisting boaters to reduce queuing time which is their highest priority. Webcams will also provide a range of data for the management and future design of boating facilities. This data capture has traditionally required extensive, costly and time consuming onsite surveys. Many facilities have been designed and constructed in the past without these surveys.

As well as helping boat facility users decide which facility to use, management authorities will greatly benefit from the data provided by webcams. An installation program needs to be established for funding submissions.

It is the view of the study team that this opportunity is of such high potential in improving the experience of users of boat launching facilities that it is proposed to reallocate the remaining project funding away from the planned ‘in situ’ peak usage survey, with appropriate changes to the project scope of works via a funding contract variation, and into a feasibility study examining the implementation of VRFish Priority Package 1 in the most efficient and cost effective way.

The thrust of this proposed feasibility study would be to address how best to avoid the high ongoing costs of data transmission from multiple, high bandwidth, streaming webcams onto a single web page/portal. There are a number of potential project options including the transmission of still images at timed intervals to limit the costs of data transmission. This could be coupled with on site data storage for the high value data that is being recorded on an ongoing basis. This recorded data would have a multiplicity of values including the remote monitoring of facility usage for planning purposes, the recording of sea/water level data for engineering studies, law enforcement and public safety, etc.

This recorded data could be collected annually or as needed. It is acknowledged that there would be additional costs for data storage, data collation and the maintenance of the webcams and related infrastructure, but it is believed that these costs will be insignificant when compared to the user benefits delivered by such a system.

However, what remains problematic is that there is no single authority with the resources, budget or mandate to operate such a system for the benefit of recreational boaters. It is therefore proposed that the working hypothesis for the webcam package feasibility study be that VRFish would seek to obtain funding from governmental and other sources to implement and operate such a webcam network. VRFish is of the opinion that the current project budget will be adequate to conduct this feasibility study.



Should a formal project variation request receive consent, VRFish proposes to engage a number of webcam and IT specialists to provide advice on how to minimise costs and maximise the value of data and information provided by the proposed system. VRFish further proposes that the current project team will deliver this feasibility study. It is expected that this feasibility study will take 2-4 months to complete.

VRFish Recommendations Improving the Utilisation of Existing Boating Facilities	Short Term Improvements Funding to be Sought
<p>That VRFish seek project variation consent to conduct a feasibility study into an optimal webcam package.</p> <p>Subject to a positive feasibility study, that an active real time web site is created for public boat ramp facilities in Port Phillip and Westernport Bays.</p> <p>That a webcam package is implemented for all high use facilities to allow users to choose whether and which facility to use based on real time information.</p> <p>That the webcam package including live webcam data (of ramp weather conditions, queuing and available parking capacity) is telecast onto the web site.</p> <p>That the installation of electronic counters monitoring available parking capacity be investigated for inclusion into the web site.</p> <p>That the active boat ramp web site includes weather and low tide launching information and be an active site for information exchange with boaters.</p>	<p style="text-align: center; writing-mode: vertical-rl; transform: rotate(180deg);">VRFish Priority No. 1</p>

## Reducing Excessive public boat ramp queuing times

Each boat ramp lane has a capacity to launch/retrieve approximately 15 boats per hour when functioning at optimal levels. Where there is a surge in boaters greater than this capacity wanting to launch/retrieve, queuing occurs. The result of the VRFish survey was that boaters indicated that 10 to 15 minutes of waiting time is acceptable.

Excessive queuing times are the primary frustration for boaters. Queuing times over two hours occur regularly at a number of ramps. The reality is that excessive queuing times can be substantially reduced if there is an appropriate increase in the number of boat ramp lanes for the current facility usage rates. Other recommendations in this report will help to reduce queuing times but cannot be expected to reduce peak use queuing times to the acceptable range of 10 to 15 minutes.

It needs to be understood that user expectations for queuing times are quite low because boating is a recreation. While longer queuing during commuting for instance may be acceptable, boaters seeking a day of recreation will not willingly choose to schedule their outing at a time when excessive queuing is expected.

The construction of many more ramp lanes at existing facilities are outside the scope of this report as this requires expenditure that is significant and would need to be sustained over a period of time. A separate study needs to be undertaken to determine the number and locations of ramps that would be required. There is recent evidence about the queue reduction impact of adding more ramp lanes with the recently completed work at Patterson River demonstrating what can be achieved. It is important that a program is commenced to tackle excessive queuing times experienced at high use facilities by constructing additional ramps at existing facilities.

VRFish Recommendations Reducing Excessive Public Boat Ramp Queuing Times	Short Term Improvements Funding to be Sought
That funding is provided to establish a prioritised program of installing additional ramps at existing facilities to reduce queuing times during peak use periods.	VRFish Priority No. 2
That a program to construct additional compliant ramp lanes at high use facilities to reduce long queuing times during peak periods be implemented	HIGH PRIORITY HIGH COST



**Pic 4:** Another frustrating boat launch! (*Safety Beach*)



## Implementing Short Term & Lower Cost improvements at existing facilities

Many facilities lack the basic elements required to meet the expectations of boaters. All existing facilities need to be upgraded to include all of these basic elements. All public boating facilities need to be functional, safe, easy to use at all tides, and have a low risk of damage to boats and cars. The implementation of these basic elements will greatly assist boaters to gain best use from existing boating facilities.

VRFish Recommendations Implementing Short Term & Lower Cost Improvements at Existing Facilities	Short Term Improvements Funding to be Sought
That a replacement program for existing high use public boat facilities be implemented where ramps having a grade of less than 1:9 are replaced <i>(to reduce the need for cars being reversed into salt water)</i>	VRFish Priority No. 3
That a program for the installation of 45 degree angled grooves on existing slippery boat ramp surfaces be implemented <i>(to give ramp surfaces good traction)</i>	
That a program to install ramp side walls to reduce the build up of sand and mud on ramps be implemented <i>(to stop cars being stuck on the ramp)</i>	
That where no lane dividers exist on multi lane ramps, line dividers are to be added or a white line is be painted above the high tide level <i>(to assist reversing drivers)</i>	
That a program to ensure that wheel stops and advisory signage are in place at all facilities be implemented <i>(to stop trailer wheels dropping off the end of the ramp)</i>	
That a program for extending boat ramps to achieve at least the recommended Australian Standard AS 3962-2001 Guidelines for the Design of Marinas lowest tide of 600mm depth be implemented <i>(to help boaters better use the facilities at lower tides)</i>	
That a program to seal and line mark gravel manoeuvring areas at the top of multi lane ramps be implemented <i>(to help inexperienced drivers reverse to the ramp)</i>	
That a line marking template for manoeuvring areas of sweep and reversing lines be adopted as the standard template and recommended to all facility managers for implementation <i>(to ensure all facilities have a consistent acceptable standard)</i>	
That the line markings within facilities are repainted whenever it is not clearly visible in dark and wet conditions <i>(to improve safety and effectiveness)</i>	

VRFish Recommendations Implementing Short Term & Lower Cost Improvements at Existing Facilities	Short Term Improvements Funding to be Sought
That all facility managers are advised of the high priority boaters give to line marking. They are requested to inspect and repaint the line marking where necessary before October each year.	VRFish Priority No. 3
That the informal practice of diverting smaller boats to existing shallow ramps be formalised with signage to enable an appropriate mix of deep and shallow ramps in close proximity to match demand <i>(This program can also be assisted by the web based action VRFish Priority No. 1)</i>	
That the lower steps of fixed pier ladders are cleaned regularly to reduce slipperiness <i>(for safety of users)</i>	
That a program to ensure designers and facility managers maximise car/trailer parking and minimise car only parking at existing public boating facilities be implemented <i>(to reduce trailer parking in residential areas)</i>	VRFish Priority No. 4
That a program for the installation of traffic controls in gravel overflow car parking areas to maximise parking capacity be implemented <i>(to best utilise all available space).</i>	
That a program to bring existing fish cleaning facilities up to the standard of having a shade roof, sufficient cleaning and fish filleting arrangements and an acceptable waste disposal system be implemented <i>(to better utilise existing facilities).</i>	

## Reducing Boater Frustration at public boating facilities

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There are many reasons why boaters become frustrated while using public boating facilities. Measures can be introduced to better control the external stimulants that lead to this frustration. Under the current road regulations it is illegal for any person to remain in the boat while it is being towed by a car. Boaters climbing out of the boat positioned over a trailer, while it is in the water or on the ramp, increases ramp queuing times and the risk of personal injury through falls. These are unintended consequences of the road regulations which would actually see ramp queuing times increase dramatically if all boaters were to observe these rules.

The actions of some municipal Council's are not fair to boaters. One of the underlying factors is that many facility operators are not positively committed to their customers, and operate in ways that do not favour boaters. Active manning of facilities at peak periods is a proven mechanism to reducing user frustration. At the fishing and four wheel drive shows held in Melbourne in 2009, the results of the survey were that 168 supported manning of facilities and 56 felt it was not necessary.

Frustration comes from a range of sources. Many frustrations would be reduced if there was one body to control all public boating facilities and this body was committed to providing the best service levels for boaters.



**Pic 5:** The Frustrated Ramp Controller? (*Mr. Trevor Hogan*)



<b>VRFish Recommendations</b> <b>Reducing Boater Frustration at public boating facilities</b>	<b>Short Term Improvements</b> <b>Funding to be Sought</b>
<p>That the road regulations be changed to make it legal for the boat operator to remain in the boat as it is being towed up/down the ramp (<i>all boat operators who drive the boat onto the trailer must now exit the boat before the boat is towed clear from the water or risk fines</i>). There is clearly a safer and quicker way to launch &amp; retrieve boats.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>VRFish Priority No. 5</b></p>
<p>That active manning of non manned high use facilities is implemented during peak times to increase operational effectiveness and reduce queuing times.</p>	
<p>That municipal Council's are recommended to consider manning facilities during peak times instead of sending teams of officers to impose non compliance parking fines on boater's vehicles.</p>	
<p>That discussions take place with municipal Council's that actively fine facility users for non payment after the only ticket machine ceases to function or is vandalized (<i>to minimise this occurrence</i>)</p>	
<p>That suitable passive/landscaped areas at existing high use facilities be converted to car/trailer parking where practicable (<i>maximise all available on site space and minimise fines for parking of these passive areas</i>)</p>	
<p>That car only parking at existing high use public boating facilities be minimised (<i>particularly at peak periods</i>) and replaced with car/trailer parking (<i>to maximise trailer parking nearer the actual ramps</i>)</p>	
<p>That a program is implemented to make lower use facilities that are located near to high use facilities, more user friendly to boaters (<i>reduce time delays and spread work load at facilities</i>)</p>	
<p>That signage is installed at high use facilities advising where other nearby facilities are located (<i>spread usage across facilities at peak times</i>)</p>	
<p>VRFish to advise all facility managers that it has a grants officer that can assist in applying for grants funding for dredging of public boating facilities (<i>insufficient water depth creates problems such as damage to boats and motors</i>)</p>	

## Funding Controls

One way to ensure that important and beneficial changes to public boating facilities management occur, is to build them into the funding/grant process. The following issues are considered important and need inclusion into the public grants process. This is a no regrets way for Government to ensure that all investments that include grant funding will over time address those issues of most importance to users.

VRFish Recommendations Funding Controls	Short Term Improvements Funding to be Sought
That future Government grant funding for public boating facilities be conditional on works complying with the basic boater's design package described in VRFish Priority No.7.	VRFish Priority No. 6
That future Government grant funding conditions for public boating facilities gives preference to funding applications where active facility manning is proposed to be introduced during peak periods.	
That future Government grant funding conditions for public boating facilities prevent municipal Council's from the charging of higher launching /parking rates for non residents of the municipality.	
That future Government grant funding conditions for public boating facilities prevent the use of launching/parking fees being used for non boating facility expenditure.	

## Design of boating facilities

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A range of boating facility design issues need consideration from a user point of view. The first is a “basic boater’s design package” that needs to be implemented within the industry and establishes minimum acceptable standards from a facility users perspective. When facilities are being designed and grants are being sought for works, these are the basic elements that are to be included. There is a strong case to review sections of Australian Standard AS 3962-2001 Guidelines for the Design of Marinas. The recommendations of this standard have inadvertently created the long queuing times experienced at many ramps and do not provide for sufficient water depth for launching larger boats. This standard needs to be reviewed. Other recommendations considered important have also been included.



**Pic 6:** Is this good design? (*Blind Bight*)



## High Priority Recommendation – Implement Basic Boater’s Design Package

That a **basic boater’s design package** is implemented into the industry as the fundamental requirements for the future design and funding of boat facility works and that this package includes:

- a) Ramps with compliant slope angle (*to minimise damage to boats and cars*)
- b) Adequate ramp traction - recommended 45 degree surface grooves on the surface as per template in this report (*to achieve acceptable traction*)
- c) Lane dividers or white lines on multi lane ramps (*to assist less experienced facility users reversing trailers*)
- d) Wheel stops at the toe of the ramp with advisory signage (*to reduce trailer wheels dropping off and being trapped at the end of boat ramps*)
- e) Adequate depth of water for a safe launch and passage to deep water or low water warning signage (*to enable larger boats to launch and to minimise damage to larger boats*)
- f) Sealed and line marked manoeuvring area (*to improve launching times and traffic control*)
- g) Maximise existing area onsite parking for trailers (*to make best use of available onsite space*)
- h) Effective line marking, lighting and signage (*to assist inexperienced drivers reversing trailers and general safety*)
- i) Existing fish cleaning facilities to be upgraded with shade roof, sufficient cleaning and fish filleting arrangements and an acceptable waste disposal system.
- j) Floating pontoons, where practicable.

VRFish Recommendations Design of Boating Facilities	Short Term Improvements Funding to be Sought
<p>Future development of Public Boating Facilities, are to also include:</p> <ol style="list-style-type: none"> <li>1) Ramp lanes with compliant width.</li> <li>2) Adequate depth of water for a safe launch and passage to deep water.</li> <li>3) Fish cleaning facilities where practical.</li> </ol> <p>That the number of parking bays per ramp lane for trailerable boating facilities is to be based on peak boat per hour demand rate for that facility. Not “Numbers of parking spaces for public ramps” in the Australian Standard AS 3962-2001 Guidelines for the Design of Marinas (<i>this code is creating the long queuing times that are being experienced in many facilities in Victoria</i>)</p> <p>That research is conducted to ensure that the future design of the number of boat ramp lanes needed in tourist areas is based on actual demand and not based on available site car parking capacities as recommended in Australian Standard AS 3962-2001 Guidelines for the Design of Marinas (<i>tourist areas function differently to the assumptions behind the code</i>). Implementation of VRFish Priority No.1 Webcams and traffic counters would provide the data needed to understand actual launch ramp traffic rather than parking constraints.</p> <p>That a standard cross section be implemented in Victoria for the spacing and depth of grooves on a boat ramp surface (<i>not specified in the code</i>)</p> <p>That the lowest tide 600mm minimum depth to the boat ramp toe as recommended in the Australian Standard AS 3962-2001 be reviewed given the large size of many boats now using public ramps (<i>larger boats need deeper water to use the facilities</i>)</p> <p>That future boat ramp lanes are constructed with a clear lane width of at least the width specified in the Australian Standard AS 3962-2001 Guidelines for the Design of Marinas</p> <p>That the Australian Standards Association be requested to review the Australian Standard AS 3962-2001 Guidelines for the Design of Marinas in light of the recommendations in this report. VRFish would be pleased to provide a representative to attend AS development meetings</p> <p>That floating pontoons are made the prime design option when designing new mooring structures for facilities (<i>more user friendly than fixed height piers</i>)</p> <p>That pontoons are designed with a wider shore based end to allow moored boat not to obstruct launching/retrieving boats</p> <p>That a study on the launching needs of personal water craft is implemented and design criteria are established for future launching and retrieval facilities.</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);">VRFish Priority No. 7</p>

VRFish Recommendations Design of Boating Facilities	Short Term Improvements Funding to be Sought
That research is conducted to establish the usage rates and size of yachts wishing to launch at public boating facilities in Port Phillip and Westernport bays to determine the need for which ramps require sufficient launching depths for yachts.	VRFish Priority No. 7
That a maximum 2 meter spacing between boat tie down points on pontoons considered for future implementation ( <i>currently too far apart for busy facilities</i> )	
That the deck of any fixed piers keeps stepping down as they extend out to sea to ensure their height above water level is minimised for user friendliness.	
That the facility manager of Patterson River facility be requested to monitor the usage of the new disabled facility, record the results and report annually so that the demand for additional similar facilities elsewhere can be assessed ( <i>currently public boating facilities around Melbourne provide no disabled facilities</i> )	
That fish cleaning facilities are constructed at public facilities where sufficient parking is available for fish cleaning facility users ( <i>recreational fishers need to be able to park vehicles when cleaning fish in a way that does not create traffic problems</i> )	VRFish Priority No. 3
That fish cleaning tables be designed for the ease of cleaning the table and the filleting of fish ( <i>facilities must be user friendly</i> )	VRFish Priority No. 3



Pic 7: PWC launches are frustrating! (Safety Beach)



## Maintenance standards/audits and annual supply contracts

At present the standard of maintenance varies substantially between facilities. The maintenance standards for each facility need to be consistent and at a level that provides an acceptable level of safety and effective operation. Examples are that line markings need to be repainted before the start of each summer period, lights need to be operational and boat buffers need to be in place to prevent damage to boats when moored to pontoons and jetties. These standards need to be audited by a third party on a regular basis. Annual supply contracts for all facilities can reduce costs and give consistent maintenance standards outcomes.

VRFish Recommendations Maintenance Standards/Audits	Short Term Improvements Funding to be Sought
That a package of operational and maintenance standards for public boating facilities be established and implemented with the facility managers.	VRFish Priority No. 8
That a program of third party auditing of the implemented operational and maintenance standards at all public boating facilities in Port Phillip and Westernport Bays be implemented and carried out each May. The facility managers being advised of the audit results by the end of June.	
That the concept of using annual supply contracts for cyclic maintenance at public boating facilities to reduce costs, ensure common standards and ensure works are completed within set time frames be investigated.	

## Launching fees

There is no uniformity in the fees charged by the various boating facility managers. One reasonably priced annual launching ticket which would apply to all Melbourne ramps would be an excellent start to reducing frustrations of boaters. Many boaters launch at a range of facilities across the season and such a system would take a lot of the frustration out of deciding where to spend a day on the water.

VRFish Recommendations Launching Fees	Short Term Improvements Funding to be Sought
That there be one annual launching/parking ticket which applies to all public boating facilities in Port Phillip and Westernport Bays where fees are now charged.	VRFish Priority No. 9
That municipal Council's cease charging higher launching /parking rates for non residents of the municipality when they use a public boating facility controlled by the Council.	
That facility manager's cease using launching/parking fees for non boating facility expenditure.	
That all public boating facilities have at least two on site ticket machines for the issue of daily tickets.	
That future 'on site' ticket machines include the option of payment by credit card.	

## Controls /Safety

<b>VRFish Recommendations Controls/Safety</b>	<b>Short Term Improvements Funding to be Sought</b>	<b>Other Important Improvements</b>
That where public boating facility jetty decks are greater than 1.5 meters higher than the abutting exposed concrete ramps at low tide, the responsible authority is to ensure the jetty structure is safe for users.	–	<b>High Safety Priority</b>
That lighting surveys are conducted at all public boating facilities and nearby channels before the next summer fishing season to identify inoperative and sub standard lighting and advise all relevant managers	<b>VRFish Priority No. 3</b>	–
That bike and pedestrian paths/traffic are kept clear of car/trailer manoeuvring areas in public boat facilities.	–	<b>High Safety Priority</b>
That all municipal Councils are requested to install parking restrictions where standing or parked cars reduce the effectiveness and safety of public boating facilities.	–	<b>High Safety Priority</b>



## Introduction

This report has been prepared by experienced boaters who regularly use a range of public boat ramps around these bays. The intent of this report is to identify short term/lower cost improvements that will improve the operation of the 36 largest public boat ramps around Port Phillip and Western Port bays. It also provides surveyed outcomes of the expectations of boat ramp users. This report is not a detailed technical examination of each facility. It is an examination from a boater's point of view of which improvements have the potential to improve user satisfaction. The 36 chosen public boating facilities are listed in Appendix Part A.

The **outcomes** of this report are to:

- A.** Identify what the users of our public boating infrastructure consider an acceptable queuing time when they launch and retrieve boats.
- B.** Identify and recommend short term and lower cost improvements at the study's 36 public boat ramp facilities that will improve these facilities for the users and makes recreational boating a more pleasurable experience.
- C.** Identify other issues observed/raised that improve user satisfaction for boat ramps in both bays

## **Acceptable queuing times at public boating facilities**

### **Public surveys conducted by VRFish**

VRFish conducted a public boat ramp survey at the “Melbourne Boat Show” and the “Melbourne Fishing and Four Wheel Drive Show” held during 2009. Comments were sought about the boat ramps used and in the ramp users opinion, what is an acceptable queuing time when launching and retrieval their boat. The queuing time question was defined as the time boaters waited in line after preparing their boat/trailer for launch or retrieval and having direct access to the boat ramp to complete these actions. Visitors to the VRFish stand completed a written voluntary boat ramp questionnaire. A prize was drawn at the end of the show for one lucky participant.

#### ***Survey at the Melbourne Boat Show 2009***

450 questionnaires were returned with 413 completing the acceptable queuing time section. The overall weighted average acceptable queuing time was 11.08 minutes. The breakdown of responses is shown in table 1

#### ***Survey at the Melbourne Fishing and Four Wheel Drive Show 2009***

80 questionnaires were received with 70 completing the boat launching and retrieval time section. The overall average acceptable time was 15.8 minutes. The breakdown of responses is shown in table 2.

### **Detailed results of the surveys**

The detailed results of the surveys are shown in Appendix Part D

#### ***Combined survey result***

The weighted average for both shows is 11.76 minutes.

From these surveys, the acceptable queuing time for boat ramps is considered to be in the range of 10 to 15 minutes.

### **Survey results**

“That a user acceptable queuing time for public boat ramps is in the range of 10 to 15 minutes”.

### ***VRFish Comments on the surveys***

At the first show, the Boat Show, the acceptable queuing time question was worded: “When launching and retrieving your boat, what is an acceptable queuing time while waiting to use the boat ramp? (Number of minutes – 5, 10, 15 or other)”

At the second show, the Fishing and Four Wheel Drive Show, the acceptable queuing time question was worded: “When launching and retrieving your boat, what is an acceptable queuing time while waiting to use the boat ramp?”

It was felt that the question at the Boat Show which included a prompted choice of answers “5/10/15 minutes or other” may have been leading the person by offering an answer. The question used for the second show will be used when VRFish conducts a follow up survey at these two shows in 2010.



**Pic 7:** Just one more constraint to getting the boat wet! (*North Road*)



**Table 1:** Melbourne Boat Show 2009 survey results

Region of Victoria	Number of Surveys Received	Average User Acceptable Queuing Time in Minutes
South West	26	8.56
North East	14	10.18
North West	8	9.38
Port Phillip Bay	238	11.56
Westernport Bay	78	11.94
Gippsland	49	9.36
<b>Total</b>	<b>413</b>	<b>11.08</b>

**Table 2:** Melbourne Fishing and Four Wheel Drive Show 2009 survey results

Region of Victoria	Number of Surveys Received	Average User Acceptable Queuing Time in Minutes
South West	5	8
North East	3	10
North West	0	0
Port Phillip Bay	48	17.31
Westernport Bay	5	16.40
Gippsland	9	13.44
<b>Total</b>	<b>70</b>	<b>15.77</b>

## **Identification and recommendations for short term and lower cost improvements at public boating facilities**

This report seeks to identify low cost and short term improvements for public boating facilities, so these facilities better meet the expectations of boaters. Every boater has service expectations and wants a boat ramp facility that is user friendly, quick to use and close to where they want to carry out their aquatic activity.

### ***What user influenced improvements are required to make recreational boating, a more pleasurable experience?***

From a boating facility user's perspective, all public boat ramp facilities need:

- A functional layout and operation that is easy to use, safe and minimises inconvenience and personal stress
- Effective boat ramp slope angle for easy launching of boats with no need to reverse cars into the salt water or have boats hitting concrete ramps when launching and retrieving
- Boat ramps free of sand, mud and slippery plant life and that provides sufficient traction for towing vehicles and persons walking on the ramp
- Boat ramp lanes which are defined by lane dividers or white lines
- Facility line marking which is clearly visible in wet and low light conditions
- Manoeuvring area at the top of the ramp which assists inexperienced drivers and reduces the frustrations of others users waiting in any queue
- Effective traffic flows that minimise conflicts and queue jumping
- Parking bays which are easy to access, and safe to use
- Sufficient water depth to launch/retrieve boats in all tidal conditions and reach open water without being grounded or damaging the boat or motor
- Wheel stops that prevent the trailer wheels dropping off the end of the ramp and the trailer becoming stuck
- Protection from wind, excessive wave action and cross currents that inhibit the launching and retrieving boats
- Short queuing times during peak use times to launch and retrieve boats
- Piers, jetties and pontoons which are user friendly, will not damage moored boats and have adequate grab/tie down points
- Adequate boat mooring/holding area while parking the car/trailer
- Car/trailer parking bays which are close to the ramp that have short walk/quick return time
- Minimal cost, fair charges and effective payment process where launching fees are charged
- Adequate lighting, signage and line marking to make the use of the facility user friendly
- Effective channel markers where required
- Fish cleaning facilities for recreational fishers which are functional, protected from the sun and easily cleaned
- Public toilets and other infrastructure such as bait, fuel and ice supplies close by

## **1 Improving the Utilisation of Existing boating facilities**

### **1.1 Public boating facility website**

There is limited accurate and real time information currently on the web for public boating facilities in Port Phillip and Westernport Bay. A single web site is recommended for all public facilities on both bays.

This site should provide:

- Live webcam footage showing available parking capacity, queuing and current weather conditions at high use sites
- A parking counter such as that used in commercial car parks in the city advising users of the available parking spaces at any given time
- Low tide information with low tide photographs for launch and retrieval at each facility

### **1.2 Webcams**

The use of webcams would enable boaters to view the level of availability of parking at a facility and assess weather conditions before they head off to the ramp. The weather conditions are often not consistent across the bays. One area may have high winds and another area several kilometres away may be calm.

VRFish can assist facility managers to install webcams. It is recommended that webcams be installed at all busy facilities and facilities that are subject to queuing, lack of parking and poor weather induced launching conditions.

Webcams are currently used at a number of facilities in both bays. Some of these can be viewed on the VRFish website [www.vrfish.com.au](http://www.vrfish.com.au). It would be a low cost option to extend this existing information site to include video from all proposed webcams and other boater information. Webcams provide a real time service to users.

The webcam video would also make the future assessment of usage rates, queuing and parking at these facilities much easier than at present.

### **1.3 Electronic parking counters**

Where the recommended webcams cannot show most of the onsite trailer parking bays to give boaters a good indication of available parking spaces, an investigation for the viability of installing parking counters is recommended at high use facilities. The available number of parking spaces would be shown on the web site page for that facility

### **1.4 Low tide information**

The height of low tide does vary with the phases of the moon across each month. Many inexperienced boaters are not aware of this. It is recommended that this web site give boaters low tide pictures and accurate information for each facility to enable them to decide whether the ramp is suitable for their boat at a lower tide.

### **Other information**

The location and type of facilities available at each boating facility need to be included.

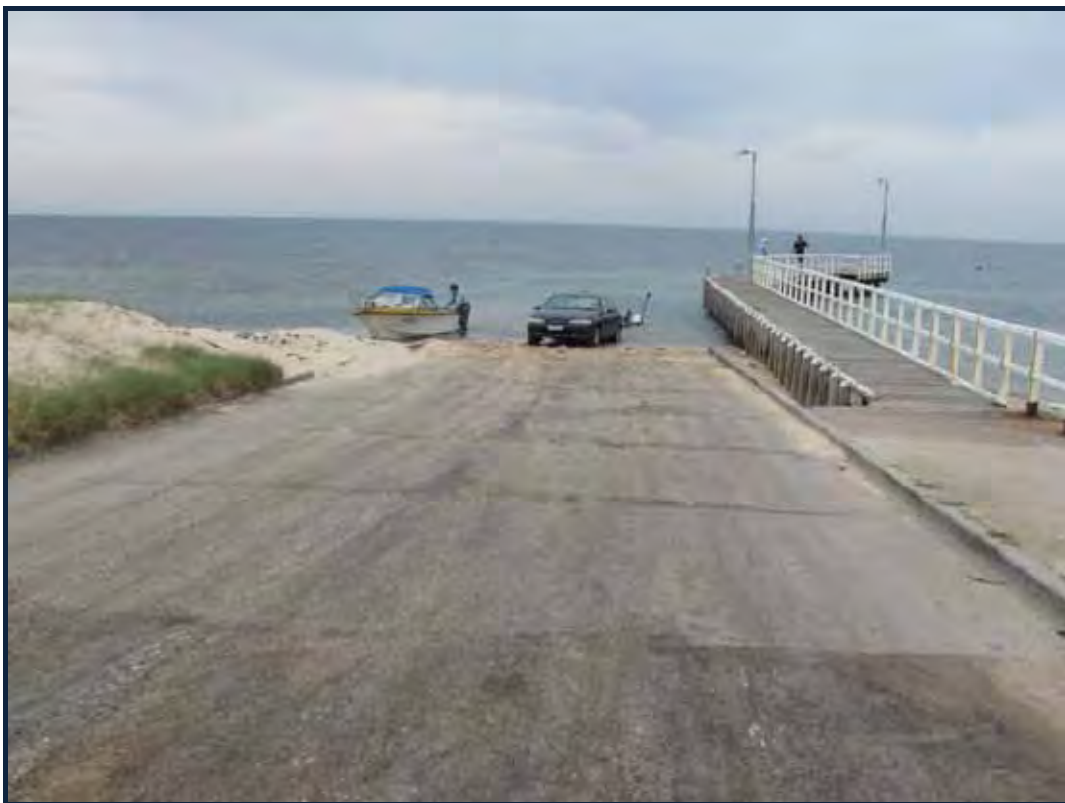
### **Feedback Site**

The site needs to be an active site where questionnaires could be used to gain specific information from users and users could offer comments on the facilities. Government bodies could use this site to advise and inform.



**VRFish Priority Recommendation One:**

- That a single real time active web site is created for all public boat ramp facilities in Port Phillip and Westernport Bays
- That a webcam package be implemented for all high use facilities that are subject to queuing, lack of parking and poor weather induced launching conditions
- That the webcam package including live webcam video of ramp weather conditions, queuing and available parking capacity telecast on the web site
- That the installation of electronic counters monitoring available parking capacity be investigated for inclusion into the web site
- That the active boat ramp web site includes low tide launching information, current tide level and be an active site for information exchange



**Pic 8:** Do we know what boaters need? (*Indented Head*)

## 2 Reducing public boat ramp excessive queuing times

### 2.1 Long queues to launch and retrieve boats

One of the biggest issues for boaters is the time lost when queuing at a facility to launch or retrieve their boat. Queuing of up to two hours occurs and regularly occurs at many facilities. Queuing does not occur throughout the day. It occurs when too many boaters arrive at the ramp in a short time period. Boaters 'surge' to a ramp for a range of reasons. Snapper fishers arrive at the ramp to all be fishing just before dawn (peak snapper time) and when the weather changes during the day, boats surge back to the ramp. Another cause for a boat launch surge is a low tide in Westernport Bay (most ramps are inoperable at low tide). Some queues are caused just by too many boaters trying to use the ramp. The problem is compounded when inexperienced boaters take significantly more time to launch or retrieve on the ramp. Boaters get frustrated and ramp rage can occur. **Why does queuing occur?**

The Australian Standard AS 3962-2001 Guidelines for the Design of Marinas states "Numbers of parking spaces for public ramps should be in accordance with table 7.1" and specifies that for urban boating facilities, with ramp only "allow 30-40 spaces per ramp", with boat holding structures "allow 40 -50 spaces per ramp", with separate rigging and de-rigging areas "allow 50-60 spaces per ramp".

If we use the Altona facility on Port Phillip Bay as an example, the Altona facility has approx 154 onsite car/trailer parking spaces with others parking along the surrounding streets. Altona has 6 ramps which equates to 25 parking spaces per ramp within the facility. Assuming another 60 car/trailers park in the surrounding streets, this gives an averaged total of 35 parking spaces per ramp. The facility has boat holding structures (with the Australian Standard specifying 40 to 50 parking bays per ramp lane in this case). But Altona, one of the State's busiest boat launch facilities, has only 35 spaces per ramp lane which is less than the 40 to 50 spaces per ramp lane specified in the Australian Standard. Altona is regularly so congested that queuing exceeds one hour and substantial ramp rage occurs.

The issue is that it takes experienced boaters approx. 4 minutes per boat to launch or retrieve per lane. Add a few inexperienced boaters into the mix and the average time taken will be longer. If boaters have to park their car a long way from the ramp and walk back to the boat then the mooring time for their boat increases. This makes it more difficult for others to moor their boats increasing their delay time. If 100 boats surge to the ramp in a relatively short time frame, queuing occurs. 100 boats to be launched on 6 lanes equates to 16 boats per lane. 16 boats with each having an ideal ramp time of 4 minutes equates to a waiting time of 1 hour and 5 minutes for the last boater in line. If the other 100 boats arrive over the next hour, they will all experience queuing times in excess of 1 hour and 5 minutes. Inexperienced users will produce further delays with the waiting times escalating.

The Australian Standard does not allow for this surging of users during peak times. To reduce queuing times when surging occurs, you need more ramp lanes. If there were 10 lanes for the existing parking capacity at Altona then the minimum waiting time for the last boat in a surge of 100 boats is 40 minutes. This is still a long way from the results of the acceptable queuing time survey where boaters said that 10 to 17 minutes are acceptable. The 4 minute launching/retrieval time is based on the authors' personal observations at various ramps. The actual launch/retrieval times for Altona have not been scientifically researched.

The design criteria for urban boating facilities needs to be reviewed as the Australian Standard AS 3962-2001 Guidelines for the Design of Marinas does not provide launching and retrieval times which meet the expectations of boaters. The design of boating facilities need to be based on peak demand rates for a facility, not based on a set parking storage basis for per ramp lane. Each ramp lane can only launch and retrieve so many boats per hour. Short queuing times for facilities that experience surges of boats need considerably more ramp lanes than specified in the Australian code.

The manoeuvring area at Altona can also be reconfigured and the “boats on ramp” times improved. This will not remove the queues, but will increase user satisfaction.

Short term and low cost solutions can improve the effectiveness of existing facilities but cannot solve this problem. Experience shows that active manning of facilities will definitely reduce launching times.

It is also interesting to note that users who have experienced significant delays such as those described for Altona are quick to modify their behaviour by doing what they can to avoid peak periods. For instance, until recent ramp upgrades were carried out at Patterson River, there were regular and significant delays during good weather weekends in the peak of the snapper season. This has led many such users to avoid weekends altogether. This “history” of learned behaviour by users has led to the somewhat perverse outcome that often midweek peaks are now greater than those experienced on weekends. The works at Patterson River increased the effective number of ramp lanes from 4 to 10. This greatly reduced the queuing times.

In this report additional double ramps have only been recommended at a few sites. At sites such as Queenscliff and the Newport Warmies, additional double ramps can be built which require no other infrastructure. These ramps can be built directly off existing sealed access lanes. However, this report cannot recommend a detailed program for constructing additional ramps to reduce queuing times. This is a longer term strategic issue.

## **2.2 Monitoring peak periods and peak usage**

The timing of when surges of boats occur at a facility is difficult to predict. They regularly occur, but have a range of drivers. A yachting regatta, a good fishing report, various weather patterns, and personal choice can all combine to create a surge of boats. Some facilities have very heavy use every week which results in regular queuing. Manned facilities only keep records of the number of daily tickets sold, not the total number of launches/retrievals. To get good peak load data for each facility, monitoring over the whole day is needed.

During the snapper season the peak usage often occurs before dawn. One Tuesday morning at 3am there were 70 car/trailers parked at the Warneet facility. Many snapper fisherman have indicated that they avoid fishing on weekends and fish after/before work during the week to avoid the very busy times. This causes queuing at various times across the week.

### **VRFish Priority Recommendation Two:**

- That a program to construct additional compliant ramp lanes at high use facilities with the explicit purpose to reduce long queuing times during peak use be implemented where this can be achieved in a cost effective way.

### 3 Implementing short term/lower cost improvements at existing facilities

#### 3.1 Ramp slope

Boat ramps need sufficient slope angle to effectively launch boats. On low slope ramps, such as Safety Beach (1 in 12.8), cars are regularly reversed into the salt water to obtain sufficient depth of water to launch and retrieve their boats including PWC's. This is detrimental for both the cars and the safety of the people driving them due to the unseen effects of oxidization of important structural components within the vehicle. Boats and propellers have a higher probability of hitting flatter ramps when launching and retrieving.

The replacement program for high use boat ramps with a slope angle of less than 1:9 needs to be given high priority. Refer Appendix B3 for existing ramp grades.

The following criteria have been used to allocate the priority rating for the replacement of high use ramps with a grade of 1:9 or less.

<b>High Priority Ramps</b>	Replace ramps which have a short viable life span ( <i>poor quality concrete slabs with substantial cracking/pot holes/exposed steel reinforcement</i> ).
<b>Medium Priority Ramps</b>	Replace ramps which have a medium viable life span ( <i>average quality concrete slabs with cracking/surface deterioration</i> ).
<b>Lower Priority Ramps</b>	Replace good quality ramps which have an expected long life span
<b>Other criteria</b>	Site specific

The Australian Standard AS 3962-2001 states: "The ramp gradient should be within the range of 1:9 to 1:7 with the preferred gradient of 1:8".

It is recommended that a program, to replace all ramps with a slope of less than 1:9, be implemented.

#### 3.2 Surface grip and drainage

Boat ramps need a surface which provides sufficient traction for both towing vehicles and persons walking on the ramp. On Page 42, section 7.2.3.4. of the Australian Standard AS 3962-2001 it states "The ramp surface is required to provide traction for the towing vehicle at all tide levels, and a sound footing for boat users. Poured concrete ramps should have non slip grooves moulded into the surface at an angle of 45 degrees. Raked, rough broomed and other coarse grained surfaces are unsatisfactory."

The angled grooves drain the water from the surface and give a regular sharp edge. This reduces marine growths and provides good traction. The grooves need vertical walls which are at least 30mm deep and have a sharp edge at the top.



When inspecting the lower sections of the ramps at the lowest tide for the month, the smooth surfaced ramps were found slippery to very slippery. On smooth surfaced ramps with established marine growths it was difficult to stay upright unless there was a pier to hold. The ramps with vertical sided grooves provided much better traction. Many ramps have a raised “plank” style surface. Flat raised “planks” approx 150mm wide (often with rounded edges) and are about 1 cm above the ramp surface. The traction on these surfaces is considerably less than vertically walled grooves. All existing smooth surfaced concrete ramps need grip and drainage improvements. These ramps either need angled grooves cut into their surface or a new topping slab laid over the top of the ramp, which includes angled grooves. A shorter term option for older smooth ramps with a short life span is to possibly cut shallow grooves into the existing surface as a short term measure. The grooves could be in the order of 10 mm deep. The grooves need to be at least cut below the high tide level.

Another observation was that marine growth occurs in the clearer waters that allow sunlight to penetrate. The ramps in the top half of Westernport bays have mud but no obvious marine growths on them. The “slipperiness” of these ramps is directly related to the mud deposits on them. Unless the ramp has a substantial build up of mud, it is felt that minor wave action on the 45 degree grooves will help to keep the surface clean by draining the mud to the sides of the ramp. Angled grooves will not stop slippery marine growths from growing on them. The lower section of the ramp at Mornington has these grooves and has marine growths on it. But these grooves do have a sharp edge on them which improves personal traction. The grooves need to be close enough together to give a reasonable amount of traction for persons walking on the ramp. A person needs to be able to step on a groove with each footstep to benefit from the groove edge.

For drive on trailers, the trailer needs to be in sufficient water depth before the boat can be driven on. The lower ramp needs good traction as the boat operators must then climb out of the boat before it is towed up the ramp. The current law requires boat operators to climb out of the boat and walk up the ramp. The lower ramp must have good traction. Refer Appendix B3 for existing ramp surface grip and drainage.

The following criteria have been used to allocate the priority rating for the installation of 45 degree grooves in the surface of existing slippery ramps.

<b>High Priority Program</b>	Install grooves on smooth and worn concrete ramp surfaces which are slippery.
<b>Medium Priority Program</b>	Install grooves on worn transverse plank style surfaces which have more traction but still can be slippery.
<b>Lower Priority Program</b>	Install grooves on transverse plank style surfaces when they become worn and slippery
<b>Other criteria</b>	Site specific

It is recommended that a program to install a 45 degree angled grooved surface on all slippery ramp surfaces be implemented.

### **3.3 Boat ramp side walls for sand/mud build up**

Boat ramps need to be kept free of sand and mud build up. Towing vehicles can become bogged in the sand and mud deposits on a concrete ramp and persons can slip over. Where such a build up continually occurs, the use of side walls next to the ramp needs to be considered to reduce the amount of material being washed onto the ramp. These have been successfully applied at the Patterson River facility. This can reduce the frequency of the management authority having to send personnel and machinery to remove the deposits off the ramps. The peak use times for many boat ramps are during the holiday season. This is a difficult time for the facility management authorities to provide resources to regularly clean these ramps. Side walls on ramps need to be constructed in a manner that they do not become tripping hazards when constructed across public beaches. Side walls will not work in every situation. It is recommended that a program to install side walls to reduce sand and mud deposits on ramps be implemented.

### **3.4 Lane dividers**

Where physical lane dividers are not constructed on existing ramps, it is recommended that either they are added or a white line is painted on the high end of the boat ramp to the high water line, to distinguish the lane. This is a guide for less experienced facility users to ensure they minimise reversing time and do not block other ramp lanes by reversing across ramp lanes.

### **3.5 Wheel stop barriers at the toe of the ramp**

Boat ramps need wheel barriers at the end of each ramp when trailer wheels can either drop off the end of the ramp into deeper water or become bogged on a soft sea floor. This is a common occurrence at ramps without wheel stops at lower tides. It can be difficult or impossible to tow the trailer (especially including the boat) back onto the ramp surface. Some boats have to be re-launched to enable the retrieving trailer to be towed back onto the ramp surface.

When all the facilities were inspected at the lowest tide of the month, it was observed at several facilities that trailers were stuck after backing off the end of the ramp. A physical wheel barrier at the end of the ramp is the recommended solution. Some facilities have signs warning of no wheel stops or signs/coloured posts placed at the toe of the ramp to denote the end of the ramp. These are not considered as effective as a wheel stop.

#### ***The recommended wheel stop package contains:***

- 1) Full width wheel stop at the end of each lane of the ramp.
- 2) Sign at the ramp advising that raised wheel stops are in place. The reason for having this sign is to make boaters aware of the wheel stop as propellers of boats being driven on/driven off trailers can hit the wheel stop damaging both the stop and the motor.
- 3) Sight marker attached to the jetty or the floating pontoon in line with the wheel stop.

***The installation of wheel stops is a high priority for all boating facilities that can trap trailer wheels and is a high priority recommendation.***

### **3.6 Sufficient launching depth/ramp extensions**

Boat ramps need sufficient depth of water at low tide to launch boats or need to be adequately signed that the ramp has no water depth or limited water depth at low tide.

The Australian Standard AS 3962-2001 states that “a depth of 600mm minimum below the lowest predicted water level is required for normal trailed craft and that a depth of 1200mm minimum below the lowest predicted water level is required for fixed keel trailed sailing yachts”.

This study found the 600mm depth is not adequate to launch many of the larger recreational boats that are regularly launched into the bays. Many 6 meter boats require at least one meter depth of water to launch. 600mm has been used as the standard in this report for the minimum depth required at the lowest water level, but this is insufficient for many boats that now use public ramps. A study needs to be carried out to determine what launching depth is required for larger boats and a more realistic minimum depth adopted for the design of boat ramps in Victoria until the code is updated. Boat manufacturers regularly state that the biggest problem affecting boat sales in Victoria is the problem of launching boats in Victoria. We need ramps that are designed to cater for the latest trends of recreational boating sales in the state.

There are no recommendations for the extension of ramps to 1200mm depth for yachts. Insufficient data was obtained on the number of yachts using the public ramps.

The ramps were inspected at the lowest tide for the month. Achieving at least 600mm depth of water at all low tides is a high priority as it will greatly improve the functionality of boat ramps for many boats. When a ramp is extended to achieve this launching depth, deeper dredging is likely to be required (Refer Appendices B5 and B9).

The criteria used to decide which non compliant ramps need to be extended are based on a range of issues specific to each site. The criteria used, includes the condition of the concrete ramp, location of other compliant ramps, possible increase in dredging, and the amount of available car/trailer parking.

It is recommended that a study be implemented to assess what depth of water is needed for the larger boats which are now regularly launched at the public ramps.

### **3.7 Sealing of gravel manoeuvring areas**

The sealing of gravel manoeuvring areas at facilities creates a more controlled traffic environment. The manoeuvring area at the top of multi lane ramps is recommended to be sealed so that the approach, turning and reversing line marking can be laid to assist drivers.

### **3.8 Cars without trailers parking within public boating facilities**

Boating facilities are constructed on the shore line and some facilities have large parking allowance for cars only. Boat facilities need some car only spaces for boat passengers that have driven to the site. Some facilities have car only spaces for other purposes within the facility. With car/trailer parking at a premium in high volume facilities, additional car only spaces for persons accessing passive land or beaches needs to be reviewed to minimise car/trailers being parked outside the facility.

Where cars regularly park in locations that cause problems for boat ramp facility users, the local council needs to be approached to install parking and standing restrictions for non boaters such as day trippers who park in boating facilities for the view. Actively manned facilities have fewer problems with cars as they can be more easily controlled and stopped at the entrance area. The number of car only parking bays within the facility and whether the local Council has installed parking restrictions within the car/trailer parking areas is shown in Appendix C1. Trailer only parking is now at a premium at most facilities and needs to be maximised.

The Clifton Springs facility which has regular ramp rage and insufficient car/trailer bays has 43 car only spaces near the ramps. Most of these car only bays are for access to the abutting passive coastal land. Most of these spaces need to be relocated to the passive land to create extra trailer spaces near the ramps.

### **3.9 Parking controls in overflow car parking areas**

Gravelled or grassed over flow parking areas need to have a graded surface with fences/barriers/posts to direct cars to most effective parking layout. The barriers/fencing/poles are needed to designate the line and angle of parking. Poorly parked car/trailers will reduce the capacity of these areas. Designating individual parking bays using raised marking such as half buried timber posts is not recommended (it is a tripping hazard). Parking controls are recommended for unconstructed over flow parking areas.

The Stony Point facility over flow parking area is not user friendly. The surface of this overflow area needs to be graded and shaped, some trees removed and the steep access road sealed to prevent the regular pot holing. It needs parking controls to define the lines and angle of trailer/car parking areas. This is a very high priority.

### **3.10 Line marking template for the manoeuvring area**

The manoeuvring area is the area at the top of the ramp where cars with trailers turn and reverse to the ramp. A standard manoeuvring area line marking template is needed for multi lane ramps. Some facilities have these lines while other does not. Sweep lines are needed where the turning area is limited and reversing lines are needed for all ramps. This line marking is needed to help drivers, especially inexperienced drivers and those who are unfamiliar with the facility, to turn and reverse to the ramp lane. The line marking reduces on ramp time and poorly placed boats blocking more than one ramp lane. Often the approach access lane is at a lesser slope than the actual boat ramp and the driver cannot see the boat ramp surface when commencing to reverse. The driver cannot see raised lane dividers that do not extend to the top of the ramp. Inexperienced reversing drivers need a wide highly visible white line on the right hand side of the car to follow to each ramp lane. In some instances only the reversing line is needed when there a wide turning area. Tighter turning areas need the turning lines. This will reduce launching and retrieval times and the frustration of waiting drivers. The template will not fit all locations and is recommended as a standard to facility managers follow.

### **3.11 Repainting facility line marking**

Visible white lines are a high priority, especially for guiding inexperienced facility users. White lines need to be repainted when they are not clearly visible in wet and low light conditions experienced at boat ramps. Line marking using normal paint needs be inspected each winter time and repainted where necessary before the start of the spring/summer high use period. Many of the facilities inspected had faded and worn line marking which needed repainting. Maintaining line marking to be clearly visible at all times is recommended.

#### **3.11.1 Use of thermoplastic paint**

Thermoplastic paint with reflective glass beads needs be used for traffic controls in trafficable areas of larger heavy use facilities. Such facilities are regularly used before dawn and after dark. Thermoplastic paint is more expensive but has a longer life and is easily seen when the pavement is wet. If the lighting of the area is not good, raised cat's eye type markers need to be used on the reversing lane lines to give direction if the pavement is wet. The use of this long life paint will reduce the inspection and painting frequencies. The use of this paint is recommended.



### **3.12 Fish cleaning facilities**

Recreational fishers have made a large investment to catch a relatively small amount of fish and these fish are a valuable community resource. Fishers need fish cleaning tables which are functional, easy to clean and protected from the sun. They need to be able to park their vehicle clear of traffic while cleaning fish. Fish cleaning facilities need to be located clear of public areas such as beaches and have sufficient room for garbage trucks to access the waste bins. Some boating facility managers are opposed to the installation of a fish cleaning facility and opposed to providing waste disposal bin clearance services.

#### **3.12.1 Shade roofs**

All cleaning tables need a sun roof to protect the people cleaning fish and to protect the fish from the effects of the sun. A hot stainless steel table top will partly cook the fish while it is being cleaned. Fishers spend considerable amounts of money to catch fish. They are a valuable community resource. Why ruin the fish by providing tables which are heated to a high temperature by the sun on hot days prior to use. Shade roofs are recommended over all fish cleaning tables. Fish cleaning tables in the Geelong area have a range of roofing styles over them.

#### **3.12.2 Cleaning the fish**

The fish cleaning table needs to be suitable for cleaning and filleting fish. A smooth stainless steel surface provides no resistance to hold the underside of the fish while it is being cleaned and filleted. A cutting board holds the fish better. The table surface must not have a raised pressed edge lip which is higher than the cutting surface. This makes filleting more difficult. When a fish cleaning table is being designed, the designer needs to fillet fish on the proposed surface. Hygienic cutting boards need to be a design consideration instead of a later inclusion by others. It is recommended that fish cleaning tables be designed and tested to ensure they are suitable for cleaning and filleting fish.

#### **3.12.3 Ease of cleaning the table**

The ease of cleaning the table needs to be addressed. With current water restrictions, many facility managers have installed low flow/timed taps which have to be manually held down to achieve a water flow. Tables need to have taps with timed water flows, sufficient water flow volumes/pressure and short indestructible flexible metal hose for washing down the cleaning table. Often, taps do not have a threaded end for the attachment of short indestructible hoses. To clean a table, a running tap with a good flow rate and a hose or a brush and two free hands are needed. One hand holds the hose and the other cleans the surface. Cleaning tables that cannot be easily cleaned are a health hazard and can make the cleaning tables unusable. It is recommended that all existing facilities comply with these cleaning requirements.

#### **3.12.4 Waste bins**

Not all cleaning tables have waste bins next to or under them. Unless it is environmentally sound to dispose of fish waste into the water, bins need to be provided for the disposal of fish waste and regularly cleared. It is recommended that fish cleaning facilities have a land based disposal process unless it is environmentally sound to dispose of the fish waste into the water.

It is recommended that current fish cleaning facilities are brought up to the recommended standard below and that new facilities are installed at other boating facilities which have a suitable area including vehicle parking.

The following criteria have been used to allocate the priority ratings for the updating of existing facilities and the Installation of new fish cleaning facilities.

<b>Program High Priority</b>	Install sun roof over existing fish cleaning facility (safety), ensure that existing facilities are made functional, be easily cleaned (good water flows, tap hoses etc.) and have a sound waste disposal system.
<b>Program Medium Priority</b>	Install new fishing cleaning facility at other high use boating facilities.

### **3.13 Signage diverting small boats to shallow auxiliary ramps**

Signage that directs small boats away from the main ramp to use an available shallow auxiliary ramp would help reduce the load on the main ramp. This report is not recommending that shallow auxiliary ramps are built in the future, all future ramps need to have a compliant slope and depth. It is recommending that facilities with existing auxiliary ramps would benefit from the installation of this signage.

### **3.14 Fixed jetty ladders**

Lower ladder steps exposed at low tide are often covered with slippery marine growth. A regular cleaning process needs to be in place. It is most important that boaters can safely access their boat.

### **VRFish Priority Recommendation Three:**

- That a replacement program for existing high use public boat facilities be implemented where ramps have a grade of less than 1:9.
- That a program for the installation of 45 degree angled grooves on existing slippery boat ramp surfaces be implemented.
- That a program to install ramp side walls to reduce the build up of sand and mud on ramps be implemented.
- That where no lane dividers exist on multi lane ramps, line dividers are be added or a white line is be painted above the high tide level.
- That a program to ensure that wheel stops and advisory signage are in place at all facilities be implemented.
- That a program for the extending boat ramps to achieve at least the recommended Australian Standard AS 3962-2001 Guidelines for the Design of Marinas lowest tide of 600mm depth be implemented
- That a program to seal and line mark gravel manoeuvring areas at the top of multi lane ramps be implemented.
- That a program to ensure designers and facility managers maximise car/trailer parking and minimise car only at existing public boating facilities be implemented.
- That the program for the installation of traffic controls in gravel overflow car parking areas to maximise parking capacity be implemented.
- That the line marking template for manoeuvring areas of sweep and reversing lines be adopted as the standard template and recommended to all facility managers.
- That the line marking of facilities is repainted whenever it is not clearly visible in dark and wet conditions.
- That all facility managers are advised of the high priority boaters give to line marking. They are requested to inspect and repaint the line marking where necessary before October each year.
- That a program for the bring existing fish cleaning facilities up to the standard of having a shade roof, sufficient cleaning and fish filleting arrangements and an acceptable waste disposal system be implemented.
- That the informal practice of diverting smaller boats to existing shallow ramps be formalised with signage to enable an appropriate mix of deep and shallow ramps in close proximity to match demand.
- That the lower steps of fixed pier ladders are cleaned regularly to reduce slipperiness (for safety of users)

## **4 Reducing boater frustration at public boating facilities**

### **4.1 Remaining in the boat when it is being towed up and down the ramp**

Driving boats directly off or on to the trailer is widely encouraged as it reduces the time on the boat ramp. The problem is that it is illegal for the boat operator to remain in the boat when it is being towed to or from the water. For launching drive off boats, this law requires the boat driver to climb into the boat when it is parked on the trailer in the water. Larger boats need approx 1 meter of water to launch. For retrieving boats, the boat driver must jump out of a boat into the water and onto an often slippery immersed ramp before the boat is towed up the ramp to the tie down area in the car park. To minimise the time the boat is on the ramp and for personal safety, it is recommended that the boat operator be allowed to remain in the boat while it is towed between the tie down area and the boat ramp. It is not recommended that more than one person be in the boat when it is being towed.

### **4.2 Active manning of Boating Facilities**

Manned facilities need to be actively manned. Site personnel need to assist boaters to reduce launching and retrieval times by overcoming any facility bottleneck and ensuring boaters have carried out all preparation before reversing down the ramp. Active manning reduces ramp rage by reducing on ramp time, maintaining control and keep order on the site. A person manning a ticket box to collect fees has a much lesser effect on improving the operational efficiency of the ramp. An active person can still take the fees while assisting with the operation of the facility. Each busy facility has different bottlenecks and operational issues.

Facility managers of high volume facilities need to be proactive and seek volunteers or use some of the income for manning at peak times. Active manning of heavily used facilities at peak times will reduce anxiety and will improve operational efficiency. It needs to be investigated for all busy facilities to help reduce launching and retrieval times, and maximise onsite parking. Strategies such as the manning of heavy use facilities are now needed to be put in place to better cope with the ever increasing patronage of these facilities.

#### **Active manning** of boating facilities can improve:

1. Traffic flows
2. Maximising onsite parking in unmarked over flow areas
3. Minimising cars/trailers parking in surrounding street
4. Maintaining order of queuing
5. Assisting inexperienced drivers when they want to be assisted.
6. Reminding persons to prepare the boat for launching while waiting in the queue and not on the boat ramp which delays the others in the queue.
7. Effectively collect daily fees and issue of annual tickets. This is an easier option for boaters than using on site ticket machines which can only issue day passes and may malfunction. This also removes the need for teams of council bylaw officers to regularly visit the facility and issue parking fines.
8. Increased revenue as all boats launched at the facility will have fees collected and not just those who park in the facility.



See Appendix Part D for the results of the public boat ramp surveys conducted at the 2009 fishing and four wheel drive shows in Melbourne in which a total of 168 people supported active manning of facilities and 56 felt it was not necessary.

It is recommended that active manning be investigated for all high volume facilities.

#### **4.2.1 Active Manning of gravel surfaced facilities**

Active manning creates a more structured operation when the site lacks infrastructure such as line marking and marked parking bays. Manning controls queuing and reduces issues such as drivers jumping queues. Some drivers need to be reminded to park in a set manner otherwise they park where ever and reduce the parking capacity of the site.

Examples are the Warneet and Patterson River facilities. They are gravel facilities with regular very high peak usage. Active manning has reduced the launching/retrieval times and the subsequent ramp rage and maximised the number of trailer parking on the site. This also reduces resident anxiety by minimising parking in the surrounding residential streets. An example of launching time improvement is ramp staff checking queuing boats and reminding boaters to removed tie down straps and portable lights before they reverse their boat onto the ramp.

It is recommended that active manning be investigated for all high volume gravel facilities.

#### **4.2.2 Low cost manning/council local laws staff**

Manning of facilities can be a low cost improvement with the use of volunteers such as the Coast Guard. Manned facilities do not need teams of parking officers to visit the site to enforce illegal parking. The staff time saved for parking officer visitations would help to fund the costs of manning the facility. A council local laws officer could man the facility at peak times instead of the Council regularly sending a team of local laws officers to issue parking fines. This would be more user friendly for boaters and reduce boater frustration. It is recommended that this concept be recommended to Councils who enforce parking restrictions at their boating facilities.

#### **4.2.3 Ticket machine malfunctions**

Ramp rage at some ramps can be reduced by municipal councils less aggressively issuing parking fines when ticket machines malfunction.

At the Hastings boat ramp facility, the only ticket machine in the facility was vandalised. One person placed a note on his car dash stating that the ticket machine was not functioning. He received a parking fine. Before he left the site he observed seven local laws officers revisiting the facility and booking all without tickets. He was told that they visited the facility a few times each day as someone had damaged the ticket machine. Tickets are available during business hours for other sellers but there is no sign to advise users where to buy tickets. The person went to the Council to complain and was told the solution was simple. Send in a letter and a cheque for the launching fee and the fine will not proceed. Unless a person went to the Council to complain they would not be aware of this. This approach does not create a pleasurable boating experience.

The Council that controls the Warmies boat ramp facility has reacted in a similar way. The only ticket machine was damaged and a team of bylaws officers then regularly visited the facility each day and booked all without tickets while the machine was away being fixed.

It is recommended that discussions take place with councils who react in this way to minimise ramp rage in the future.

#### **4.3 Maximising trailer parking at existing facilities**

With Car/Trailer parking with in facilities at a premium, it is important that existing facilities be examined to ensure that any available space is converted into parking. At the New Haven boat ramp facility, the trailer parking area at the facility has 29 bay and limited kerbside parking. On a busy day, another 25 plus car/trailers are illegally parked within this car park as well as other parking in the surrounding streets. This car park has no other use other than parking cars/trailers. The local bylaws officers regularly visit during the holidays and issue

many fines. With some minor redesign and the use of posts, some more trailer bays can be created and posts installed to prevent parking on footpaths and lawn areas. Some of the no standing areas should be able to be converted to parking bays. The council will lose some income, but the boaters will receive fewer fines and have less anger. It is recommended that car park at existing facilities be reviewed where there is a possibility that additional parking spaces may be created.

#### **4.3.1 Converting car only bays to trailers bays**

Some busy facilities have a substantial number of car parking bays for persons not using the boating facility. These are for access to the shore line/day trippers etc. Where trailer parking is at a premium and boat trailers are parked outside the facility, it is recommended that the car only bays for others within the facility are reviewed and where practicable, converted to boat trailer parking bays. Some car only bays are needed within each facility for persons who go out on the boats that are launched.

The Clifton Springs facility has many car only bays for those who access the abutting passive land. This needs to be reviewed. Most bays should be moved to the passive land abutting the facility.

#### **4.4 Program to improve boating facilities adjacent to high use facilities**

The lowest hanging fruit in terms of achieving user satisfaction is to utilise existing assets more effectively. There need to be strategies in place to encourage boaters to use under-utilised facilities which are near heavily used facilities to reduce ramp rage and boater anxiety during peak periods. The work load at heavily used ramps needs to be spread where possible across nearby ramps. Often high volume facilities have no easy solution to create more car parking, quicker launch and retrieval times etc and are confined by their limited existing allocated space.

These **strategies** can be:

- Improvements to online - real time information service that allow users to access information on the optimum launch location for their purposes.
- Signs at heavily used ramps indicating where other nearby ramps are located.
- High priority improvements to the under-utilised facilities which will make them more user friendly.

The reconstruction of the St Helens facility should take some pressure of the nearby Limeburners Point Facility. The Coast Guard who manage the St Helens facility advises that the facility car park has not been full in their experience. The Limeburners Point facility has heavy use and regular long queuing at peak times. When complete, the changes at the St Helens site needs to be promoted to the broader boating community in that region.

The basic boat launching facilities near the St Aubins facility could be improved to reduce the pressure on the St Aubins Facility.

The Patterson River Facility has reduced its queuing time and improved its launching times from past years. The number of effective ramp lanes has been increased from 4 to 10. However, many past users have expressed the view that they don't use the facility at peak times because of past experiences. Boaters from the region need to be informed that the facility has substantially improved its operational efficiency over the past few years.

It is recommended that improvements at under-utilised facilities near high use facilities be given priority.

#### **4.4.1 Signage for nearby facilities**

It is recommended that location signage be installed stating where the next nearby boating facility is located. This would help to spread the load for boating facilities by making boaters aware of their options.

#### **4.5 Dredging Program**

Dredging of boating facilities need to meet the expectations of users. Sucking mud or sand into a marine motor can result in extremely high repair costs. It is most important for boaters that there is a sufficient depth of water for their boat to operate in. Many facilities around the bays need maintenance dredging to ensure sufficient depth of water for boats to reach naturally deeper water. Where dredging is required, there needs to be regular site inspections and a formal dredging program needs to be in place that caters specifically for high use facilities. Some facility managers struggle to find sufficient funds for a dredging program to keep the facility operational at all times and this often has a deleterious effect on facility users. VRFish has a grants officer who can assist facility managers when they are seeking funding.

It is recommended that facility managers be advised that VRFish can assist them to seek funds for dredging programs.

#### **VRFish Priority Recommendation Four:**

- That the law be changed to make it legal for the boat operator to remain in the boat as it is being towed up/down the ramp (Boat operators who drive the boat onto the trailer must now exit the boat before the boat is towed from the water or face fines)
- That the law be changed to made it legal for the boat operators not to be required to wear a life jacket when driving their boat on or off the boat trailer (Many fines are currently issued)
- That active manning of non manned high use facilities be implemented during peak times to increasing operational effectiveness and reduce queuing times.
- That municipal Council's are recommended to consider manning facilities during peak times instead of sending teams of officers to impose non compliance parking fines on boater's vehicles
- That discussions take place with municipal Council's that actively fine facility users for non payment after the only ticket machine ceases to function/is vandalized (to minimise this occurrence)
- That suitable passive/landscaped areas at existing high use facilities be converted to car/trailer parking where practicable (maximise all available on site space and minimise fines for parking of these passive areas)
- That other use car only parking at existing high use public boating facilities be minimised and replaced with car/trailer parking (some facilities have many other use car only spaces)
- That a program to make lower use facilities, that are near to high use facilities, more user friendly to boater, is implemented (spread usage across facilities)
- That signage is installed at high use facilities advising where other nearby facilities are located (spread usage across facilities at peak times)
- That VRFish advise all facility managers that it has a grants officer that can assist in applying for grants seeking funding for dredging of public boating facilities.



**Pic 9:** Not bad for an auxiliary boat ramp! (*Clifton Springs*)



## **5 Maintenance standards/audits and annual supply contracts**

### **5.1 Standard operational and maintenance package for public boating facilities**

Acceptable minimum operational and maintenance standards need be developed to ensure that all public facilities have consistent outcomes. The level of maintenance and the level of operational effectiveness varied at each facility. Some facility managers had good standards while others were poor. Line marking needs to be inspected annually and repainted where necessary before the summer season. The quality of line marking varied greatly. Line marking is very important to the effective operation of a facility. Some facility managers do not see boating facilities positively as a community asset and at times react negatively to boaters using their facility.

It is recommended that a package of operational and maintenance standards for public boating facilities be established and implemented with the facility managers.

#### **5.1.1 Auditing of facilities**

To ensure that all public boating facilities have acceptable minimum operational and maintenance standards for boaters it is recommended that they are be audited by a third party on a regular basis and the audit outcomes given to the facility manager for action. This needs to cover such issues as adequate pier buffers, cleaning tables that can be cleaned by the users, faded signage, wheel stops in place, quality of line marking, slippery ramps and ladders and whether lighting is functional. The observation of this study is that the standard of maintenance does vary substantially from facility to facility.

#### **5.1.2 Boat buffers**

All piers and floating pontoons need adequate buffers to prevent damage to boats which are moored to them. This is a high priority for boaters given the high cost to purchase and repair boats. Most facilities have adequate buffers. All buffers need a regular auditing program to ensure they are functional.

The Rye facility has buffers that are perished and none on the corner with the ramp. A large bolt protrudes out where the corner buffer was. This needs to be repaired.

#### **5.1.3 Grouping works for annual supply contracts**

One contract for installing angled grooves on all smooth boat ramps should give a cost effective outcome. The grooves would be created by either cutting into the surface, or by adding a new topping slab on the existing ramp. These works could be funded under a grant and constructed through one contract for both bays.

Annual supply contracts could be effectively used where a group of facility managers are not experienced in the specific works required or lack the time and resources to obtain best price and regularly renew maintenance works such as line marking at the appropriate time. A better price may be able to be obtained by combining all similar works at each facility into one contract package.

#### **VRFish Priority Recommendation Five:**

- That a package of operational and maintenance standards for public boating facilities be established and implemented by all facility managers.
- That a program of third party auditing of the implemented operational and maintenance standards at all public boating facilities in Port Phillip and Westernport Bays be implemented and carried out each May. The facility managers being advised of the audit results by the end of June.
- That the concept of using annual supply contracts for cyclic maintenance at public boating facilities to reduce costs, ensure common standards and ensure works are completed within set time frames be investigated.



**Pic 10:** Maintenance programs are essential

## **6 Launching fees review**

### **6.1 Facility launching/parking fees**

There are a wide range of parking/launching fees charged for the use of the public boat ramp facilities around the bays. Each facility manager sets their launching/parking fees. There is no conformity in the rates charges (Refer Appendix B1)

#### **6.1.1 One annual ticket for all public boating facilities on the two bays**

One annual launching ticket is needed which permits boaters to use all of the public facilities in Port Phillip and Westernport Bays that currently charge fees. Recreational boaters are very mobile and often use a range of facilities depending on what ramp best suits their needs for that specific day. One annual launching ticket for all public boat ramp facilities in Port Phillip and Westernport Bays is more equitable than the State Government raising boat registration and boat license fees for all boaters in the state. Many other boat ramps in the state are free and many boaters do not use the boating facilities in Port Phillip and Westernport bays.

It is recommended that one annual launching ticket be introduced for all paid ramps in Westernport and Port Phillip Bays.

#### **6.1.2 Removal of higher non resident launching fees**

State Government grant funding for future construction works, needs to have a condition that prevents municipal councils from charging higher rates for non residents of the municipality. Some municipal councils have split facility usage rates and charge much higher rates for non residents of their municipal district. The construction costs for these facilities are mostly funded by the State Government from its charges from boaters. These facilities are regional facilities. This is to the detriment of non residents.

It is recommended that future grant funding conditions for public boating facilities prevent the charging of higher rates for non residents of the municipality.

#### **6.1.3 Ensuring launching fees only fund boating facilities**

Controls are recommended for facility managers to ensure that the income from launching fees is only used to specifically fund the development and ongoing maintenance of the facility. Foreshore committees often use the income to fund the development and maintenance of other foreshore areas which not part of the boat ramp facility. It is not fair on boaters that the fees they pay are not always fully allocated for maintenance and improvements of the boat ramp facility.

#### **6.1.4 Second onsite ticket machine**

Boating facilities need to have at least two on site ticket machines and a list of addresses where tickets can be purchased. Preferably this needs to include options on weekends and after normal business hours. At present, most facilities have only one ticket machine. If it malfunctions, boaters may not be able to buy a daily ticket. On weekends and public holidays and especially before/after business hours when most boating trips commence this is a particular problem. Some malfunctions are caused by vandalism. Some municipal councils aggressively issue parking infringement fines when the ticket machine has been vandalised. Most municipal council facilities have signage which only indicates the address of the municipal offices (during business hours only) for the alternative purchase of tickets. Parking/launching tickets need to be made easier to purchase. It is recommended that boating facilities have at least two on site ticket machines.

#### **6.1.5 Onsite payment by credit card**

Public boat ramp facility ticket machines are recommended to have credit card facilities as well as payment by coins only. Daily fees range up to \$15 and this requires a good supply of coins. It is a regular occurrence at facilities with coin only ticket machines that boaters have insufficient coins outside business hours and have to try to get change from other boaters. This does not add the enjoyment of boating.

The Queenscliff facility has a ticket machine with payment by coins and by credit card. Ticket machines with payment by coins and by credit card are recommended for all facilities which use ticket machines.

**VRFish Priority Recommendation Six:**

- That there be one annual launching/parking ticket which applies to all public boating facilities in Port Phillip and Westernport Bays where fees are now charged.
- That municipal Council's cease charging higher launching /parking rates for non residents of the municipality when they use a public boating facility controlled by the Council.
- That facility manager's cease using launching/parking fees for non boating facility expenditure.
- That public boating facilities have, at least two on site ticket machines for the issue of daily tickets.
- That future on site ticket machines includes payment by credit card.



## **7 Controls/Safety**

### **7.1 Fixed piers with high decks**

If strong currents and/or higher wave actions dictate that fixed piers are required then they need to be designed to have changing deck levels that follow the water level down as the tide moves. The deck height above the water needs to be kept at a minimum. It is most difficult for many persons to have to climb ladders to enter and exit boats. The higher the ladder, the greater the safety risk and level of difficulty is for the users. It is most important that the platform from which persons enter and exit a boat is most safe and user friendly.

The Government and facility managers have a duty of care to provide safe boating facilities that protect the health of the users and the public. One observation of this study is that some fixed public jetties in Westernport Bay have limited safety fencing along the pier and yet the pier deck is 3.25 to 3.9 meters above concrete boat ramps which are exposed at low tide. These facilities are Newhaven, Corinella and Rhyll.

It is recommended that where public boating facility jetty decks are greater than 1.5 meters higher than the abutting exposed concrete ramps at low tide; the responsible authority is to ensure the jetty structure is safe for users.

### **7.2 Survey of lighting facilities**

Boat ramp facilities need an adequate level of lighting for all functional areas. Many facilities are actively used before dawn and after dark. Predawn usage of facilities during the Snapper season is often at peak usage levels with queuing. The entrance to the facility, access lanes, preparation areas, the manoeuvring area and the parking bays need to be effectively lit. The level of lighting needs to comply with Australian standards.

The facilities need solar lighting on the end of each pontoon/jetty for personal safety and for the docking of incoming boats.

All channel markers near facilities need to be illuminated with lights or good quality and functional reflective tape to assist boaters operating in the dark. Regular checks need to be made to ensure that the illumination is functioning correctly. On dark nights, especially with rain, channel marker posts are very difficult to pick up even with a spot light. GPS has reduced the risk but not all boats have GPS. Some boat operators, who have them, do not know how to use them for navigating safely on water to and from the facility.

The safety of boaters on the water and pedestrians at facilities is most important. Correctly lit facilities operate more effectively during hours of darkness. It is recommended that a study be conducted at each facility to ensure the lighting is functional and meets the relevant standards.

### **7.3 Bike and pedestrian paths**

Bike and pedestrian paths need to be kept well clear of cars/trailer manoeuvring areas such as turning and reversing to ramps. It is difficult for a driver to see someone behind or on the blind side when reversing a trailer with a boat. This is a safety issue that the facility manager needs to review.

At the North Road facility in Brighton, there are busy bike and a pedestrian paths constructed across the reversing/launching lanes. The users of these paths could easily be distracted and looking in the other direction at Port Phillip Bay while vehicles with trailers are manoeuvring in this area.

#### **7.4 Municipal parking restrictions**

Most boating facilities are on the foreshore offer very scenic views. Some boat ramp facilities have good parking controls to control non facility users from standing or parking in access lanes or trailer parking bays. Others do not. Drivers reversing boats to the ramp have limited visibility behind the boat. Cars parked in manoeuvring areas can be dangerous. Cars regularly park in the manoeuvring area of the Indented Heads facility because it offers a good view. Where cars stand or park in critical areas which creates problems for boaters, it is recommended that the local Council be asked to install parking restrictions to reduce the problem. Boaters need Council parking restrictions that make boating easier.

#### **VRFish Priority Recommendation Seven:**

- That where public boating facility jetty decks are greater than 1.5 meters higher than the abutting exposed concrete ramps at low tide, the responsible authority is to ensure the jetty structure is safe for users.
- That lighting surveys are conducted at all public boating facilities and nearby channels before the next summer fishing season to identify inoperative and sub standard lighting and advise all relevant managers.
- That bike and pedestrian paths/traffic are kept clear of car/trailer manoeuvring areas in public boat facilities.
- That municipal Council's are requested to install parking restrictions where standing or parked cars reduce the effectiveness and safety of public boating facilities.



**Pic 11:** Traffic Controls are more than controlling cars!



## **8 Design of boating facilities**

### **8.1 Basic boater's design package for public boating facilities**

Public boating facilities need to be functional, easy to use at all tides, and have a low risk of damage to people, boats and tow vehicles. Many facilities lack the basic lower cost elements to meet the expectations of boaters. All existing facilities need to be brought towards a similar level, where practicable, to meet these expectations. These lower cost package elements need to be included in all future boating facility developments. It is recommended that this asset package be recognized and introduced as the basic boater's package within the industry.

### **8.2 Minimisation of long queues at boat ramps**

Refer to Section 2 and the recommendations.

### **8.3 Allowances for off-site parking of car/trailers in tourist areas**

The standard design technique for having one ramp lane for each 30 to 40 car/trailer spaces does not currently apply to many facilities around the bays. There are facilities that operate along traditional lines where boaters go to the facility, launch their boat and park as close to the ramp as possible. These are generally facilities in the northern spheres of the bays. Many facilities in the southern spheres of the bays are tourist driven. Many car/trailers are parked away from the ramp facility at the caravan or holiday house or elsewhere. The beaches are relatively flat and calm and boats can pick up and drop off car drivers wherever the car/trailer has been parked. Some park elsewhere to avoid facility parking fees.

The boating facilities of Tootgarook, Anthony's Nose and Tyrone Road have approx 60 parking spaces between them but have constant queues during the summer holiday period and launch hundreds of boats daily. A future demand study is needed to ascertain the number of launches per day and the queuing times for facilities in these tourist areas. This data is needed to establish the current shortfall in ramp lanes and what strategies/facility sizes are required in the future. Similar issues arise at other facilities such as St. Kilda and Martha's Cove.

In the Patterson River water front residential area there are around 280 moorings plus a large dry stack facility. Most of these boats are launched at the Patterson River facility and then driven to the residential moorings. Some are moored for a short time and others more permanently. This is a work load for the Patterson River facility which is unrelated to number of car/trailer parking bays within the facility.

Boating facility designers need to understand this issue and research is needed to ensure that the future design of the number of boat ramp lanes is based on actual demand and not based on site car parking capacities as recommended in Australian Standard AS 3962-2001.

### **8.4 Standard cross section for 45 degree grooved ramp surface**

It is recommended that a standard cross section for the spacing and the depth/width of the 45 degree grooves is implemented. It needs to be based on pedestrian safety. A person's shoe needs to be in contact with at least one groove for each step taken. Each groove needs a sharp edge for pedestrian traction. It is the edge of the groove that stops a person slipping over when the surface is slippery.

### **8.5 Review of 600mmm depth**

The Australian Standard AS 3962-2001 specifies the required minimum depth to the toe of the ramp at the lowest tide of the month of 600mm for trailerable boats. This depth is not adequate to launch many of the larger trailerable boats now using public boating facilities. Operators of larger boats interviewed in the field indicated that approx 1 meter is required for their boats. Given the trend that size of boats is increasing, the code needs to be reviewed and brought up to date for the increasing number of large boats being sold. A study is needed to establish the launching requirements of larger boats for future boating facility works in Victoria and refer it to the Australian Standard Association for a review of the code. Boat



manufacturers in this state say that the largest impediment to sales of boats is the difficulty of launching them. This needs to be given a high priority.

It is recommended that the 600mm depth as required by the Australian Standard AS 3962-2001 be investigated as many large boats now in use require deeper water.

#### **8.6 Ramp lane widths**

Boat ramps need sufficient lane width. Of the lanes of the 36 ramps inspected many are substandard. The current trend is that boaters are buying larger and heavier boats which makes narrow ramp lanes more of a problem. The recommendation is to take no action on the width of existing ramp lanes but to ensure all future ramps are built with sufficient width as recommended in the Australian Standard AS 3962-2001. The ramp structures need to be constructed wide enough to keep the kerb, lane dividers and buffers outside this clear width. Refer Appendix B3 for inspection results.

#### **8.7 Review of the standards**

Given the issues raised in this report, the boat ramp section of the Australian Standard AS 3962-2001 is recommended for review. It is important that this code of practice provide good outcomes for the current and future boating traffic that use boating facilities.

#### **8.8 Preference for floating pontoons**

Floating pontoons are the boaters preferred platform at a boating facility. They are at the level of the boat and much safer to use and more user friendly. They are especially more user friendly for older persons who are less flexible and stable when accessing boats. It is recommended that they are used unless specific site conditions prevent this. With the larger tidal height differences in Westernport Bay, pontoons should be used wherever possible.

#### **8.9 Design and location of floating pontoons**

The layout of the pontoon and its location with the boat ramp is critical. The pontoon needs to be offset from the ramp to enable boats to be launched and retrieved while boats are moored to the pontoon. The moored boats should not block the boats being launched. The pontoon structure needs to widen as it approaches the ramp and meet with the edge of the ramp to enable boaters to walk their moored boats along the pontoon to the rear of the trailer without stepping off the pontoon. Constant width pontoons which are offset from the ramp are more difficult to use as the area between the ramp and the pontoon is often at a lower level and is wet with a sand or mud surface.

The pontoons at the Werribee facility are very functional and are a good model for future designs. This type of pontoon design is highly recommended.

#### **8.10 Launching requirements of personal water craft**

PWC's need steeper boat ramps as most PWC trailers have full size car wheels and a short length trailer. Many of these trailers have skids which require that the PWC needs to be floated off the trailer. It is difficult to push skid mounted PWC's off the trailer when they are out of the water. The current trend is to direct, encourage and expect PWC's to launch at auxiliary/secondary ramps which have lesser grades than conventional ramps. The observation is that they need steeper ramps otherwise the car often needs to be reversed into the salt water to float the PWC off the trailer. The outcome to be sought is to be able to easily launch a PWC without backing the car into the water. It is recommended that the future design of boat ramps needs to cater for this issue.

#### **8.11 Launching locations for yachts at public boating facilities**

Larger yachts require deeper water to launch at boat ramps than average trailerable boats. Most public boating facilities around both bays are not suitable for yachts at lower tides. It is recommended that research is needed to establish the demand for launching yachts and the depth of water needed for current day yachts. The requirements should be similar to larger trailerable boats.

#### **8.12 Grab points/tie down points on floating pontoons**

Floating pontoons need some form of grab points for boaters as they dock at the pontoon. Boaters need to be able to hang on to the pontoon when they first arrive, before they tie up to the pontoon. This is a practical issue for pontoon users. At times, the boat operator is the only person in the boat capable of grabbing the pontoon to secure the boat. This can be compounded by side winds and wash from other boats. The boat operator at the boat controls needs to be able to reach out and grab some point with their hand. Having tie down points 5 meters apart restricts the effectiveness of a busy pontoon. Some pontoons have vertical posts bolted along their sides. These are good grab rails but often broken off by boats hitting them or tying to them. Pontoons need a stronger system of vertical posts than the present process of bolting lighter posts to the outside of the pontoon sections. Possibly metal posts bolted to the surface of the pontoon inside the buffer area. It is recommended that tie down points be at 2 meter spacing's as this would give boat operators, a grab point when they first reach a pontoon with other boats moored to it. This is a high priority with boaters.

#### **8.13 All Abilities access**

The recent announcement of the grant to build a disabled facility at the Patterson River facility is a move in the right direction. The success of this facility needs to be monitored when complete. More disabled friendly facilities are needed.

#### **8.14 Functional fish cleaning facilities**

Recreational fishers have made a large investment to catch a relatively small amount of fish and these fish are a valuable community resource. Fishers need fish cleaning tables which are functional, easy to clean and protected from the sun. They need to be able to park their vehicle clear of traffic while cleaning fish. There needs to be a suitable area at the facility which is clear of public areas such as beaches and allows garbage trucks to access the waste bins. Some boating facility managers are opposed to the installation of a fish cleaning facility and opposed to providing waste disposal bin clearance services.

##### **8.14.1 Cleaning the fish**

The fish cleaning table needs to be suitable for cleaning and filleting fish. A smooth stainless steel surface provides no resistance to hold the underside of the fish while it is being cleaned and filleted. A cutting board holds the fish better. The table surface must not have a raised pressed edge lip which is higher than the cutting surface. This makes filleting more difficult. When a fish cleaning table is being designed, the designer needs to fillet fish on the proposed surface. Hygienic cutting boards need to be a design consideration instead of a later less hygienic inclusion by others.

#### **8.15 Water conditions at the Boat ramp**

Boat ramps need protection from swells, winds, tidal cross flows and wind chop. There is no low cost solution to this problem. Boat ramps which offer protection are more user friendly and will have a much higher usage rate than those that do not. It is a high priority with boaters that boating facilities have a calm harbor for safety of boats and persons. Many facilities around the two bays need sea walls. The ramp at Cowes is exposed to northerly winds sweeping down Westernport Bay. When these winds create waves it makes this ramp dangerous and at times unusable. A sea wall is needed here to create a safe harbor and give protection to boaters.

The strong tidal cross current at the Rhyll facility creates a range of difficulties including lining the boat up with the trailer when retrieving. The current sweeps boats sideways. This can block the abutting ramp and the boat can hit persons holding other boats. The water is often too deep to for a person to hold the rear of the boat while lining it up with a trailer. One solution is to use only double ramps with a pier on either side where strong tidal cross flows are experienced. Ropes can be used to hold boats on the upstream side. Rhyll is a triple lane ramp with a pier on only one side. It cannot be used as a three lane ramp when the tidal flows are strong. A pier on the eastern side abutting the eastern ramp would improve the operation of the facility and is considered a high priority.

There is no short term or lower cost solutions to these problems which puts these issues outside the scope of the recommendations of this report, but they are major issues for boaters.

#### **8.16 Toilets**

Toilets are needed at all major facilities. Timely construction needs to be given a high priority where they are not present.

#### **VRFish Priority Recommendation Eight:**

- That a basic boater's design package be implemented into the industry as the basic requirements for the future design and funding of boat facility works and that this package includes:
- Ramps with compliant slope angle (to minimise damage to boats and cars)
- Adequate ramp traction - recommended 45 degree surface grooves on the surface as per template in this report (to achieve acceptable traction)
- Lane dividers or white lines on multi lane ramps (to assist less experienced facility users reversing trailers)
- Wheel stops at the toe of the ramp with advisory signage (to reduce trailer wheels dropping off and being trapped at the end of boat ramps)
- Adequate depth of water for a safe launch and passage to deep water or low water warning signage (to enable larger boats to launch and to minimise damage to larger boats)
- Sealed and line marked manoeuvring area (to improve launching times and traffic control)
- Effective line marking, lighting and signage (to assist inexperienced drivers reversing trailers and general safety)
- Existing fish cleaning facilities with shade roof, sufficient cleaning and fish filleting arrangements and an acceptable waste disposal system.
- Floating pontoons, where practicable.
- Future development of Public Boating Facilities, are to also include:
- Ramp lanes with compliant width.
- Adequate depth of water for a safe launch and passage to deep water.
- Fish cleaning facilities where practical.
- That the number of parking bays per ramp lane for trailerable boating facilities is to be based on peak boat per hour demand rate for that facility, not table 7.1. "Numbers of parking spaces for public ramps" in the Australian Standard AS 3962-2001 Guidelines for the Design of Marinas (the code is creating the long queuing times).
- That research is conducted to ensure that the future design of the number of boat ramp lanes needed in tourist areas is based on actual demand and not based on available site car parking capacities as recommended in Australian Standard AS 3962-2001 Guidelines for the Design of Marinas (tourist areas function differently to the assumptions behind the code).

**VRFish Priority Recommendation Eight Cont'd:**

- That a standard cross section be implemented in Victoria for the spacing and depth of grooves on a boat ramp surface (not specified in the code).
- That the lowest tide 600mm minimum depth to the boat ramp toe as recommended in the Australian Standard AS 3962-2001 be reviewed given the large size of many boats now using public ramps (larger boats need deeper water).
- That future boat ramp lane are constructed with a clear lane width of at least the width specified in the Australian Standard AS 3962-2001 Guidelines for the Design of Marinas
- That the Australian Standards Association be requested to review the Australian Standard AS 3962-2001 Guidelines for the Design of Marinas in light of the recommendations in this report. VRFish would be pleased to provide a representative to attend AS development meetings.
- That floating pontoons are made the prime design option when designing new mooring structures for facilities.
- That pontoons are designed with a widen shore based end to allow moored boat not to obstruct launching/retrieving boats
- That a study on the launching needs of personal water craft is implemented and design criteria are established for future launching and retrieval facilities.
- That research is conducted to establish the usage rates and size of yachts wishing to launch at public boating facilities in Port Phillip and Westernport bays to determine the need for which ramps require sufficient launching depths for yachts.
- That 2 meter spacing between boat tie down points on pontoons is considered for future implementation (currently too far apart for busy facilities).
- That floating pontoons are made the primary design option when designing new mooring structures for facilities (they are more user friendly than fixed height piers).
- That the deck of fixed piers keeps stepping down as they extend out to sea to ensure their height above water level is minimised for user friendliness.
- That the facility manager of Patterson River facility be requested to monitor the usage of the new disabled facility, record the results and report annually so that the demand for additional similar facilities elsewhere can be assessed (currently public boating facilities around Melbourne provide no disabled access facilities).
- That fish cleaning facilities are constructed at public facilities where sufficient parking is available for fish cleaning facility users
- That fish cleaning tables be designed for the ease of cleaning the table and the filleting of fish (facilities must be user friendly)
- Maximised existing area onsite parking for trailers (to make best use of available onsite space)





**Pic 12:** Shade helps, but cleaning fish doesn't need to happen twice!

## 9 Funding Controls

One way to ensure that important changes beneficial to boat users occur is to build them into any funding/grant process. The following issues are considered important and need to be included as conditions or similar to ensure the identified goals are achieved.

### **VRFish Priority Recommendation Nine:**

- That future Government grant funding conditions for public boating facilities be conditional on works complying with the basic boater's design package.
- That future Government grant funding conditions for public boating facilities gives preference to funding applications where active facility manning is proposed to be introduced.
- That future Government grant funding conditions for public boating facilities prevent municipal Council's from charging of higher launching /parking rates for non residents of the municipality.
- That future Government grant funding conditions for public boating facilities prevent the use of launching/parking fees being used for non boating facility expenditure.

## 10 Recommended Improvements at Each Facility

### 10.1 Port Phillip Bay Boating Facilities

With nearly half a million acres of navigable water, Port Phillip bay is one of Victorias most popular boating destinations. Relatively shallow and free of tidal surge and currents, nearly 75% of all registered boats in Victoria deliver over half a million launches annually from the boating infrastructure lining Port Phillip Bay.



**Pic:** Port Phillip Bay at its welcoming finest!



#### 10.1.1 Queenscliff Boat Ramp

**CBCAP Designated Facility Role: Regional**

**No. of existing ramp lanes (excluding auxiliary ramp): 2**

**No. of Car/Trailer Parking Bays: 103**

***VRFish Observations:***

The facility is in a protected harbour and there is parking for trailers outside the facility in the residential area, but not within the nearby commercial area. The commercial area has angled car only parking and local laws officers have in the past booked trailers parking in this area. The over flow 'grassed' trailer parking area has no parking controls. Fences and posts would increase the density of car/trailer parking. The main boat ramps are smooth and need grooving. The coast guard is constructing a building with in the facility car park and there may be scope for them to supervise the ramps. There is a second roughly poured ramp of 9m width which is poorly constructed. If it was replaced with a new second double ramp, this would speed up launching and retrievals. The second ramp would fit in with the existing facility layout and not require other supporting works. The mooring capacity is two floating jetties of 21 meter length which is limited. There is nowhere else to beach boats. There are long queues to use the facility.





<b>VRFish Recommended Improvements Queenscliff Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No.1</b>	—
Install angled grooved surface on lower section of the existing double ramp lanes	<b>VRFish Priority No.3</b>	—
Paint manoeuvring line marking at ramp top to recommended template standards, Paint lane dividers	<b>VRFish Priority No.3</b>	—
Install wheel stops at end of ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	—
Replace existing poor quality second boat ramp with new double ramp to ease congestion. No other supporting infrastructure needed.	—	<b>High Priority</b>
Extend pontoons to increase mooring capacity	—	<b>High Priority</b>
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 4</b>	—
Install fish cleaning table with shade roof	<b>VRFish Priority No. 4</b>	—
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>	—

### 10.1.2 St Leonard's Boat Ramp

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 4**

**No. of Car/Trailer Parking Bays: 29 within the facility with 100 over road**

***VRFish Observations:***

The facility has two quality double ramps. It has a sealed access lane and manoeuvring area (seal is in poor condition) and gravel surfaced car parks. The parking areas need sealing and the facility needs line marking on the sealed areas. There is a grassed over flow parking area on the other side of the road which parks in excess of 100 car/trailers. This area has gravel access tracks which define the parking layout. The Foreshore Committee who controls this grassed area is reportedly intending to convert this area to a caravan parking area. This needs to be investigated. The ramp is very slippery at low tide. This facility is functional. Cars that park in/drive through this facility are a problem. Sand is washing up on the ramp.



<b>VRFish Recommended Improvements St Leonard's Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	—
Install angled grooved surface on the lower section of the existing ramp lanes	<b>VRFish Priority No. 3</b>	—
Re-seal manoeuvring area and line mark	<b>VRFish Priority No. 3</b>	—
Install wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	—
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 4</b>	—
Seale and lane mark gravel car parking bays	—	<b>High Priority</b>

### 10.1.3 Swan Bay Boat Ramp

This is a minor gravel ramp with very limited parking capability that accesses shallow water. It has not been included in the study.





#### 10.1.4 Indented Head Boat Ramp

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 83**

##### ***VRFish Observations:***

This facility has future potential. The car parking could be extended to make better use of the area. This is flatter ramp with a shallow grade and which is in poor condition. Cars regularly reverse into the salt water when launching boats. The ramp has insufficient low tide depth of water at its toe and no wheel stops. The higher priority is to replace the boat ramp with a compliant one than try to make the existing ramp more compliant. Boats can moor on one side of the pier only. Sand builds up on the ramp from the north and the ramp is very slippery. The over flow area holds approx 30 car/trailers. Some line marked car/trailer parking bays are too wide (4m). Cars parking in the boat launching area are a problem.



<b>VRFish Recommended Improvements Indented Head Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	–
Replace existing flat slope poor condition ramp with a new compliant ramp surface	–	<b>High Priority</b>
If ramp replacement will not occur in short term, install angled grooved surface on the lower section of the existing ramp lanes and investigate repairing ramp toe and installing wheel stops at end of ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	–
Repaint existing facility white lines (correct size parking bays), Paint lane dividers, Paint reversing lines	<b>VRFish Priority No. 3</b>	–
Modify the pier to allow boats to moor to the other side of the pier.	<b>VRFish Priority No.3</b>	–
Investigate side walls on ramp to restrict sand washing on the ramp	<b>VRFish Priority No. 3</b>	–
Request the Council to install no parking area for cars only to prevent them parking in the manoeuvring/launching area	–	<b>High Safety Priority</b>
Design overflow parking layout and install parking controls (fences/posts) in unmarked parking overflow area	<b>VRFish Priority No. 4</b>	–
Install fish cleaning table with shade roof	<b>VRFish Priority No. 4</b>	–

#### **10.1.5 Grassy Point Ramp**

This is a very limited single ramp for small boats only. No other facilities. Not included in this study.



#### 10.1.6 Steele Rock – (Fairfax Street)

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 1**

**No. of Car/Trailer Parking Bays: Large Foreshore area**

#### ***VRFish Observations:***

This facility has a new single ramp and a new short pier. It has excellent parking expansion potential. The facility as a whole though has limited potential given the ramp is unusable at lower tides (limited water at toe) and the water is shallow with rocks off the ramp (requires periodic dredging). This facility is exposed to northerly winds which causes mild siltation. The facility parking area is all gravel. No wheel stop is required (ramp meets firm sand on same level).

VRFish Recommended Improvements Steele Rock Boat Ramp	Recommended Short Term Improvements
Install fish cleaning table with shade roof	VRFish Priority No. 4





### 10.1.7 Point Richards Boat Ramp

**CBCAP Designated Facility Role: TBA**

**No. of existing ramp lanes: 2 unserviceable (4 planned)**

**No. of Car/Trailer Parking Bays: Approx 100**

#### ***VRFish Observations:***

The facility is currently being reconstructed. The rock wall form and dredging are complete, with four ramps and the jetty to be built in 2010. The facility has a large flat sealed car park (approx 100 spaces) and sealed access area which needs a functional design and traffic management controls using line marking and barriers. This facility has a very high potential. There are no recommendations as the facility is currently being rebuilt other than webcams. The facility will need all lines remarked as part of the reconstruction.



VRFish Recommended Improvements Point Richards Boat ramp	Recommended Short Term Improvements
Install webcams	VRFish Priority No. 1

#### 10.1.8 Clifton Springs Boat Harbour

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 3**

**No. of Car/Trailer Parking Bays: 98**

##### ***VRFish Observations:***

This is a good facility. Extra parking bays may be able to be built if some of the landscaped barrier and garden areas were reduced. The car park is confined in three directions but could extend into the extensive passive area to the south along the foreshore. There is substantial ramp rage and over use during summer periods and weekends. Weather changes create long retrieval queues. Car/trailers park a long way from the ramp. There are 43 car only spaces in the facility. Many of these are for the passive area to the south. These spaces need to be moved to the passive area and replaced with car/trailer parking bays

The auxiliary ramp is a single cobble stone type ramp with a slope of 1 in 13. This ramp has a floating jetty. It needs to be replaced with a compliant double ramp to speed up launching /retrievals and be more functional for PWC'S. The access lanes to the new ramp would need to be sealed. Little other works would be needed to support the new ramp. The water depth is the same as the main ramp.



<b>VRFish Recommended Improvements Clifton Springs Boat Harbour</b>	<b>Recommended Short Term Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>
Replace auxiliary flat ramp with a new compliant double lane ramp to ease congestion	<b>High Priority</b>
Install wheel stops at end of double ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>
Repaint existing facility white lines, Paint reversing lines on double ramp	<b>VRFish Priority No. 3</b>
Consider relocating most of the 43 car only bays to passive area and remarking as car/trailer bays	<b>VRFish Priority No. 4</b>
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 4</b>

#### **10.1.9 Limeburners Point Boat Ramp**

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 3**

**No. of Car/Trailer Parking Bays: 102**

##### ***VRFish Observations:***

On Australia day (public holiday) the ramp was very busy with many trailerable yachts also using the ramp. There was an acute shortage of mooring space by mid afternoon when boats were being removed from the water. The protected marina area behind the rock wall is only used at one end. The southern half is not used. Extra pontoons need to be installed in this vacant area to moor boats clear of the ramps. The central floating pontoon and its supporting structure create a bottle neck at the ramp and needs to be removed to the vacant southern section to open up the ramps. Boats could use the middle ramp as a “drive on” facility, which would not be supported by a pontoon. This would make the facility more functional by removing the bottle neck. There are 43 car only spaces in the facility which receive high usage. Cars not associated with boats using the facility need to be kept out of the facility as it has heavy boat traffic movements on a high use day.





<b>VRFish Recommended Improvements Limeburners Point Boat Ramp</b>	<b>Recommended Short Term Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>
Move central floating jetty to the vacant south area and remove support structure to ease congestion at the ramps	<b>High Priority</b>
Install wheel stops at end of single ramp and wheel stop advice signs/markers at double and single ramp	<b>VRFish Priority No. 3</b>
Repaint existing facility white lines, Paint manoeuvring line marking at ramp top to recommended template standards, Paint lane dividers	<b>VRFish Priority No. 3</b>
Install high flow taps and flexible metal cleaning hoses on the taps	<b>VRFish Priority No. 4</b>
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 4</b>
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>

#### 10.1.10 St Helens Park Boat Ramp

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 57**

##### ***VRFish Observations:***

This facility is fully developed with the ramps and the jetties to be rebuilt in 2010. The harbor is to be dredged. Interestingly, the coast guard who take the fees for the ramp stated that the car park has not been full during peak times.



VRFish Recommended Improvements St Helen's Park Boat Ramp	Recommended Short Term Improvements
Install webcams	VRFish Priority No. 1

#### **10.1.11 Werribee River Boat Ramp**

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 5**

**No. of Car/Trailer Parking Bays: 130**

***VRFish Observations:***

This is an excellent facility with a very good functional layout. The layout of the floating jetties is excellent and should be a model for future facilities. Boats moored on the pontoons, are clear of boats being launched and retrieved and can then be walked to the trailer along the pontoon structure. The pontoons are offset from the ramps but have a wider land based abutment which sits alongside the ramp. At the lowest tide for the month, the entrance to the river was very shallow and needs periodic dredging.



<b>VRFish Recommended Improvements Werribee Boat Ramp</b>	<b>Recommended Short Term Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>
Install wheel stops at end of ramps and wheel stop advice signs	<b>VRFish Priority No. 3</b>
Paint manoeuvring line marking at ramp top to recommended template standards, Paint lane dividers	<b>VRFish Priority No. 3</b>
Install shade roof over existing clean table	<b>VRFish Priority No. 4</b>
Install high flow taps and flexible metal cleaning hoses on the taps	<b>VRFish Priority No. 4</b>
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 4</b>



#### 10.1.12 Altona Boat Ramp

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 6**

**No. of Car/Trailer Parking Bays: 154**

##### ***VRFish Observations:***

There has been considerable past discussion and reports written about how to improve this facility. The observation from the VRFish site visits is that short term surge demand exceeds the capacity of this facility as it stands. The facility is well developed but the launching area queue end is a bottle neck. This launching area needs to be redesigned and reconstructed to reduce launching/retrieval times. The redesign of the launching area is expected to improve the ramp times of the facility but will not solve the long queuing problem. The outlet for the fishing club car park directs cars without trailers directly into the launching zone. This outlet needs to be closed and cars directed to exit the car park clear of boat ramp traffic. Dredging is needed at the entrance to the protected marina area. The existing ramps have no wheel stops.



<b>VRFish Recommended Improvements Altona Boat Ramp</b>	<b>Recommended Short Term Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>
Redesign and reconstruct the manoeuvring area at top of ramps	<b>High Priority</b>
Close current outlet of fishing club car park, redirect outlet clear of launching area.	<b>High Priority</b>
Install wheel stops at end of ramps and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>
Paint manoeuvring line marking at ramp top to recommended template standards, Paint lane dividers	<b>VRFish Priority No. 3</b>
Install high flow taps and flexible metal cleaning hoses on the taps	<b>VRFish Priority No. 4</b>
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 4</b>
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>

#### 10.1.13 Newport Warmies Boat Ramp

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 60**

##### ***VRFish Observations:***

This is a good facility which launches into protected water. It has very high usage and is a known ramp rage spot. It has potential to handle more a lot more boat launch and retrievals. A second double ramp needs to be built off the queuing area to the west of the existing ramp to increase launching and retrieval capacity. Little facility change is needed to service this additional ramp. There is vacant land around the facility that needs investigation as to whether the size of the car park can be increased.

The current facility has a functional layout and experiences high demand.



<b>VRFish Recommended Improvements Newport Warmies Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	–
Construct a second double ramp to ease congestion	–	<b>High Priority</b>
Install wheel stops at end of ramp and wheel stop advice signs	<b>VRFish Priority No. 3</b>	–
Repaint existing facility white lines, Paint manoeuvring line marking at ramp top to recommended template standards, Paint lane dividers	<b>VRFish Priority No. 3</b>	–
Install sun roof over existing fish cleaning table.	<b>VRFish Priority No. 4</b>	–
Install non-destructible hoses at existing fish cleaning table	<b>VRFish Priority No. 4</b>	–
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>	–
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>	–



**10.1.14 St Kilda Marina**

**CBCAP Designated Facility Role: Regional**

**No. of existing ramp lanes: 4**

**No. of Car/Trailer Parking Bays: 81**

This is a privately owned facility which is open to the public. It has a functional layout with good launching infrastructure. Boats launch into the protected marina. It has not been included for any VRFish recommendations.



#### **10.1.15 North Road Boat Ramp**

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 3**

**No. of Car/Trailer Parking Bays: 25**

***VRFish Observations:***

Historically one of the finest launch facilities in Port Phillip, this facility is now a disaster for boaters. It has excellent, recently constructed ramp/pier facilities but the car/trailer parking has been reduced in size dramatically to allow for more car only spaces servicing the abutting café. The gate to the launch facility is locked from 11pm to 6am. There are no recommended improvements other than webcams and wheel stops to this facility as these would be a waste of money for boaters because of the current very limited parking capacity. Two shared pedestrian paths cross the back down area to the ramp.



VRFish Recommended Improvements North Road Boat Ramp	Recommended Short Term Improvements
Install webcams	VRFish Priority No. 1
Install wheel stops at end of ramp and wheel stop advice signs	VRFish Priority No. 3





#### **10.1.16 Half Moon Bay Boat Ramp**

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 33**

##### ***VRFish Observations:***

The current facility at Black Rock is old with very poor functionality. A new master plan for this facility has been developed. No short term improvements will improve the function of the current facilities. The VRFish recommendation is to build a new compliant boating facility based on current design practices.





#### 10.1.17 Mordialloc Creek Boat Ramp

**CBCAP Designated Facility Role: Undesignated**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 41**

##### ***VRFish Observations:***

This facility has high usage and experiences ramp rage. It has good functionality that utilises the available space well. The pontoons on both sides of the two lane ramp only hold two boats each. The creek bank is not suitable for holding boats as it is mud with a continuous bed of reeds. Increased mooring capacity is needed to help with the high usage. It has no fish cleaning facilities with a sign stating fish cleaning is illegal. The installation of a fish cleaning table is likely to be opposed by the municipal council and needs to be investigated. The size of boats that can be launched is governed by the low clearance height of the downstream foot bridge. There are no car only parking controls in the car park but this is not considered an issue, given the surroundings have low appeal to others.



<b>VRFish Recommended Improvements Mordialloc Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	–
Extend floating pontoons for more mooring space	–	<b>High Priority</b>
Install wheel stops at end of ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	–
Paint lane dividers, Paint reversing lines	<b>VRFish Priority No. 3</b>	–
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>	–
Install fish cleaning table with shade roof	<b>VRFish Priority No. 4</b>	–
Review the need for the installation of an angled grooved surface on existing ramp lanes – given a low priority when inspected	–	<b>Low Priority</b>
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>	–

#### **10.1.18 Patterson River Boat Ramp**

##### **CBCAP Designated Facility Role: Regional**

**No. of existing ramp lanes: 10**

**No. of Car/Trailer Parking Bays: 276**

##### ***VRFish Observations:***

A jewel in the public boat launching crown, this is a well managed, manned facility with 10 ramp lanes, 276 trailer spaces and is on protected waters. It has a gravelled surface (soon to be sealed) for ramp access and parking areas.

This facility was experiencing long queues and long waiting times but has improved markedly. The following changes have substantially reduced the waiting time. The facility had four functioning ramp lanes and four poor ramp lanes that many boats could not use. It now has ten functional boat lanes. The queuing times have substantially reduced from an average of 45 minutes to 10 minutes (*T.Hogan pers.comms.*) at busy times.

There is a problem with the recently installed car park lights annoying neighbours. Some lights have been turned off to satisfy complainants leaving boat users in the dark. The types of globes need to be changed and possibly baffles used. Possibly some of the tall lighting poles need to be replaced with short residential type lighting poles. It is a high priority that all the car park is lit given the facilities are close to excellent snapper grounds and attract high usage mostly outside day light hours.

A grant has been announced for a disabled access winch facility to be installed on the site for entry and exit from boats. The onsite toilets however, do not have disabled access facilities. The toilets need to be modified to include disabled access facilities.

Fish cleaning facilities have been opposed by Parks Victoria in the past. It is recommended that fish cleaning facilities be installed well clear of the water and have council bins for removal of the fish wastes. There are no parking controls for cars only parking in the trailer areas but this is not a problem as the ramp is manned.







<b>VRFish Recommended Improvements Patterson River Boat Ramps</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	–
Install angled grooved surface on existing ramp 3 – smooth surface	<b>VRFish Priority No. 3</b>	–
Investigate different globes/baffles on rear lighting poles to reduce annoyance to abutting residential properties	<b>VRFish Priority No. 3</b>	–
Install sign at ramp 4 to advise that it has non compliant water depth at low tide, larger boats to use the other onsite ramps.	<b>VRFish Priority No. 5</b>	–
Install wheel stops at end of ramp and wheel stop advice signs/markers on ramps 3 and 4	<b>VRFish Priority No. 3</b>	–
Install wheel stop advice signs only on ramps 1 and 2	<b>VRFish Priority No. 3</b>	–
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 3</b>	–
Install fish cleaning table with sun roof and waste disposal	<b>VRFish Priority No. 4</b>	–
Install disabled facilities in the existing toilet.	–	<b>High priority</b>
Review the need for the installation of an angled grooved surface on ramp No 4 – given a low priority when inspected.	–	<b>Inspect Site</b>

#### **10.1.19 Kananook Creek Boat Ramp**

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: Approximately 10**

**No. of Car/Trailer Parking Bays: 41**

##### ***VRFish Observations:***

This facility is listed for closure under the CBCAP's longer term strategy. However, there are no indications at present that this will occur in the medium term. Short term improvements are recommended to ensure the facility is user friendly to boaters. Both ramps do not satisfy the 600mm standard depth at lowest tide and there are no ramp stops. Another issue is the regular lack of depth of water at low tide at the mouth of Kananook Creek between dredging periods. Given the closeness of Patterson River facility, it is recommended that only wheel stops be installed on the ends of the existing ramps and that signs be installed warning boaters of possible insufficient water at low tide and that deeper water exists at the Patterson River facility. Given the wide width of the two multi lane ramps, it is not recommended that the turning /reversing line marking template be installed. The 10 lane width of the boat ramps gives boaters more options and width than traditional boat ramps. Fish cleaning is illegal at the facility but does occur. Waste is thrown into the water. Fish cleaning facilities are needed with council bins for removal of waste. There are no mooring cleats for holding boats on the central rock groin and on the up stream rock wall. These will assist boaters, with smaller boats in busy times, who can directly access the ramp when entering and exiting the boat. There are parking controls in place to prevent cars only in the car/trailer bays.



<b>VRFish Recommended Improvements Kananook Creek Boat Ramp</b>	<b>Recommended Short Term Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>
Install wheel stops at end of both ramps and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>
Install signs for both ramps advising of non compliant depth at low tide	<b>VRFish Priority No. 3</b>
Install angled grooved surface on the lower section of the existing ramp lanes	<b>VRFish Priority No. 3</b>
Repaint existing facility white lines	<b>VRFish Priority No. 3</b>
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>
Install fish cleaning table with shade roof	<b>VRFish Priority No. 4</b>
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>

**10.1.20 Frankston Boat Ramp (Oliver's Hill)**

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 48**

***VRFish Observations:***

This facility is under-utilised. The ramp lanes at this facility are in a poor condition with sections breaking away at the toe of the ramps. The toe of the ramp needs to be repaired to make the ramp safer and more functional at lower tides. Wheel stops need to be installed. The ramp had no water depth just out from the ramp at the lowest tide of the month. A new facility with good water depth is planned but unlikely to be built in the foreseeable future. It is recommended to investigate repairing the toe of ramp to 600mm below lowest tide and to dredge the exit to encourage some boating traffic from Mornington which is suffering from a demand that cannot be satisfied. The police close the Mornington ramp on peak days and man the ramp to turn boaters away to prevent ramp rage.





<b>VRFish Recommended Improvements Oliver's Hill Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	—
If ramp is not to be replaced in short term, investigate repairing toe of ramp to give 600mm below lowest tide depth, install wheel stops and dredging channel from ramp to take boats away from the Mornington facility.	<b>VRFish Priority No. 3</b>	<b>Maintenance Dredging</b>
If ramp is not to be replaced in short term, install angled grooved surface on the lower section of the existing ramp lanes	<b>VRFish Priority No. 3</b>	—
Paint reversing lines	<b>VRFish Priority No. 3</b>	—
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>	—

#### 10.1.21 Mornington Boat Ramp

**CBCAP Designated Facility Role: Regional**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 37**

##### ***VRFish Observations:***

Recreational boating service needs grossly exceed the capacity of this facility. Police close this facility and man it to direct users away when it regularly “gets out of hand”. Ramp rage is a big problem as it only has 37 trailer parking bays and is located in a very popular tourist area. Tourists fill all other parking areas during peak visitation times (after 8.30 am) on weekends and holidays. There is no regular over flow capacity which is present at most other ramps. The Council has even considered directing boaters to a nearby local council park to park their car/trailers and operating a bus service to take them back to the ramp. Parking is the key limitation of this facility and there is no obvious solution other than reclaiming some of Port Phillip Bay.



This ramp accesses excellent fishing grounds and is very popular with boaters. The ramp is next to the Mornington yacht club and is suitable for launching yachts. There are some possible improvements such as manning the entrance to this facility to redirect the constant stream of day trippers looking for a parking bay (this area has a sign saying no car only entry). Looking at the traffic flow directions and parking angles may make improvements but this facility has severe parking limitations. Another facility needs to be built in this area which has ample parking. The disposal of fish waste during the snapper season is also a problem. The cleaning table on the pier see's considerable use with most waste is thrown into the water. The table has bins next to it. Maybe the cleaning table could be moved well clear of the water and enlarged. Possibly, the Frankston ramp at Oliver's Hill should be upgraded and signs installed at Mornington to deflect some traffic from Mornington.



VRFish Recommended Improvements Mornington Boat Ramp	Recommended Short Term Improvements
Install webcams	VRFish Priority No. 1
Clean marine growth off lower ramp lanes	VRFish Priority No. 3
Paint lane dividers, Paint reversing lines	VRFish Priority No. 3
Install flexible metal cleaning hoses on the taps	VRFish Priority No. 4
Install shade roof over existing clean table	VRFish Priority No. 4
Install signs advising where adjacent public boat ramp facilities are located.	VRFish Priority No. 5

#### **10.1.22 Linley Point Boat Ramp**

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 17**

***VRFish Observations:***

This is a very limited facility with only 17 trailer parking bays. Parking outside the facility is also very limited and is on a very busy road. The ramp cannot be used at the lowest tides (no water) with the toe of the ramp level with the sand. Substantial dredging would be needed if the ramp was extended to give more depth of water. The ramp is smooth and slippery at low tide. The facility is only available to persons with an annual ticket from the local council offices.







VRFish Recommended Improvements Linley Point Boat Ramp	Recommended Short Term Improvements
Install angled grooved surface on the lower section of the existing ramp lanes	VRFish Priority No. 3
Repaint existing facility white lines,	VRFish Priority No. 3

#### **10.1.23 Martha's Cove Boat Ramp**

**CBCAP Designated Facility Role: NA**

**No. of existing ramp lanes: 4**

**No. of Car/Trailer Parking Bays: 101**

##### ***VRFish Observations:***

This is an excellent privately operated facility that is open to the public from 6am to dusk. It is closed at dusk to protect the residents who live on the water within this development. It can handle larger boats and is part of an extensive private marina. This facility has been constructed to a high standard of quality. It is marginally more costly than surrounding public ramps to launch but is built to a much higher standard. It has not been included for VRFish recommendations.



#### **10.1.24 Safety Beach Boat Ramp**

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 3**

**No. of Car/Trailer Parking Bays: 116**

##### ***VRFish Observations:***

This facility has an unsatisfactory low slope angle (12.8%) on the ramps. Sand also builds up on the ramps. Cars are regularly immersed in salt water while launching boats and can become bogged in the loose sand on the concrete ramp. Many cars have been observed with the rear of the car immersed with their front wheels even in the salt water when launching vessels, especially PWC's. The ramps have no wheel stops and there is a drop off at the end of the ramp. The ramp is smooth and very slippery at low tide. It has plenty of parking, has very high usage and is also in a tourist area. It is a prime candidate for reconstruction. Unless it is to be rebuilt in the medium time frame, the following short term improvements are needed.



<b>VRFish Recommended Improvements Safety Beach Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	–
Replace existing flat boat ramp with a new compliant triple lane ramp	–	<b>High Priority</b>
If ramp is not to be replaced in short term, rebuild ramp toe (poor condition) and install wheel stops at end of ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	–
If ramp is not to be replaced in short term, install angled grooved surface on the lower section of the existing ramp lanes	<b>VRFish Priority No. 3</b>	–
Repaint existing facility white lines, Repaint manoeuvring line marking at ramp top to recommended template standards	<b>VRFish Priority No. 3</b>	–
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>	–
Install fish cleaning table with shade roof	<b>VRFish Priority No. 4</b>	–
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>	–



#### 10.1.25 Anthony's Nose Boat Ramp

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: 20**

##### ***VRFish Observations:***

This facility is manned during holiday periods; otherwise it is a free use ramp. It has a very high usage and queuing load during the tourist season, but has extremely limited parking. Trailers are taken elsewhere and parked. It is a well maintained timber ramp, with gravel car park. Dredging is not required and the observed toe depth at a lower tide was 620mm. The end of ramp is level with firm sand.



VRFish Recommended Improvements Anthony's Nose Boat Ramp	Recommended Short Term Improvements
Install wheel stops at end of ramp and wheel stop advice signs/markers	VRFish Priority No. 3
Paint reversing lines	VRFish Priority No. 3
Install signs advising where adjacent public boat ramp facilities are located.	VRFish Priority No. 5

#### **10.1.26 Tootgarook Boat Ramp**

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 2**

**No. of Car/Trailer Parking Bays: None**

##### ***VRFish Observations:***

This is another high use tourist season facility with absolutely no parking. Fees are paid at an onsite caravan when manned. It has a narrow access (3.2 meters wide on a 90 degree turn) lane to the top of the launch ramp. This restricts larger boats which may be reasonable to expect at this time. This ramp is basically a beach launch. It has temporary toilets during the holiday season.



VRFish Recommended Improvements Tootgarook Boat Ramp	Recommended Short Term Improvements
Install wheel stops at end of ramp and wheel stop advice signs/markers	VRFish Priority No. 3
Install angled grooved surface on the lower section of the existing ramp lanes	VRFish Priority No. 3
Paint reversing lines	VRFish Priority No. 3
Install signs advising where adjacent public boat ramp facilities are located.	VRFish Priority No. 5

#### 10.1.27 Rye Boat Ramp

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 3**

**No. of Car/Trailer Parking Bays: 126**

***VRFish Observations:***

This facility has very high potential for expansion. It has a very large area for trailer parking. If the car park was redesigned, the parking capacity would be substantially increased. There is far too much landscaping. This site is suitable for a facility handling considerably more boat traffic than as is at present. A sea wall is also needed as part of this redevelopment.

The channel to deeper water does not follow existing channel markers. When the channel turns to the north, it is on the wrong side of the red marker post. This is a serious issue. When boats first enter the channel from the bay, boats were touching the bottom at the lowest tide for the month. The channel at the jetty/ramp is too narrow for manoeuvring boats at busy and rough times. The channel needs to be dredged which is a substantial project, given the long length of the channel. The end of the ramp has been excavated with a substantial drop off from the ramp.





<b>VRFish Recommended Improvements Rye Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	–
Dredge channel to align with channel markers	–	<b>Urgent Action is Needed</b>
Install wheel stops at end of ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	–
Review the need for the installation of an angled grooved surface on existing ramp lanes – given a medium priority when inspected	<b>VRFish Priority No. 3</b>	–
Paint reversing lines	<b>VRFish Priority No. 3</b>	–
Install fish cleaning table with shade roof	<b>VRFish Priority No. 4</b>	–
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>	–

#### 10.1.28 Tyrone Road Ramp

**CBCAP Designated Facility Role: Local**

**No. of existing ramp lanes: 1**

**No. of Car/Trailer Parking Bays: None (40 on the other side of the road)**

***VRFish Observations:***

This is another high use facility during the tourist season. The ramp is a cobble stone type construction. It is a free, unmanned, single ramp across the beach with a gravel car park on the other side of the road. It has limited water depth at low tide and similar exit depth from the ramp. Dredging and exit water depths from the ramp need to be investigated to see if the ramp has potential for further development. The nearby St Aubins Way Boat Ramp has a very high workload and limited parking. Some of the smaller boating traffic may be able to be diverted to this ramp from the St Aubins Way Boat Ramp.



<b>VRFish Recommended Improvements Tyrone Road Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Investigate improvements at this facility to redirect smaller boats from St Aubins facility	–	<b>High Priority</b>
Install wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	–
Repaint reversing lines	<b>VRFish Priority No. 3</b>	–

**10.1.29 St Aubins Way Boat Ramp (Sorrento)**

**CBCAP Designated Facility Role: District**

**No. of existing ramp lanes: 3**

**No. of Car/Trailer Parking Bays: 76**

***VRFish Observations:***

This is a functional facility confined in a tight area. Local comment is that it needs more mooring capacity. It has wheel stops and a toe depth of approx 800mm at lower tides. It is a very high use ramp. It has a protective sea wall. This is the closest ramp to the entrance of Port Phillip Bay on the western side of the bay and is used by larger boats.

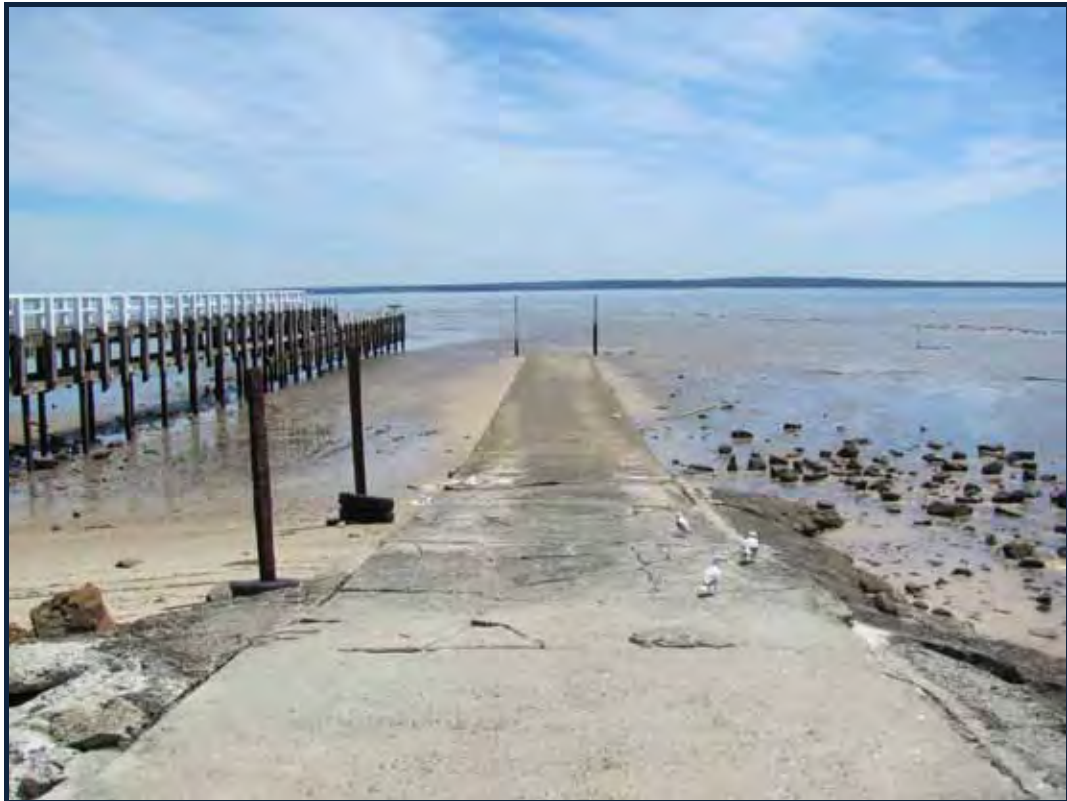




<b>VRFish Recommended Improvements St Aubins Way Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	–
Install wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	–
Extend the mooring facility	–	<b>High Priority</b>
Repaint reversing lines	<b>VRFish Priority No. 3</b>	–
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>	–

## 10.2 Westernport Bay

The facilities in Westernport bay have higher tidal movements than Port Phillip Bay. All the facilities on the main land are in an environment of a surface crust over soft mud or just soft mud. Dredging exposes the soft mud. Trying to walk on the soft mud is not recommended. The facilities on Phillip Island have a range of environments from sand at Cowes to mud at New Haven. Westernport Bay has been made a recreational fishing haven after the permanent removal of commercial netting and offers good recreational fishing close to Melbourne. The water in the northern half is normally discoloured.



**Pic:** Large Tides dominate launching and retrieving boats in Westernport

### 10.2.1 Stony Point Boat Ramp

**C.B.C.A.P. designated facility role – District**

**Number of existing ramp lanes – 3**

**Approximate number of car/trailer parking bays within the facility – 142**

#### ***VRFish Observations:***

This facility has a manned ticket box. The facility has a developed lower level with an under developed upper over flow parking area. The manoeuvring area is lacking in room to straighten the boat trailer before reversing down the ramp. There is a large tree blocking an extension. The upper over flow area is undeveloped with random trees, hilly and a pot holed surface. The gravel access road to the higher ground is steep and needs to be sealed. The track pot holes and erodes quickly as vehicles drive along it. The facility experiences long queues and ramp rage. Larger boats use this facility as it is the last mainland concrete ramp before the western entrance of Westernport Bay to Bass Strait. . The ramp had no water at the lowest tide. To effectively extend the ramp to a compliant depth extensive dredging may be required. The ramp has a much worn plank style surface.



<b>Recommended Improvements Stony Point Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	—
Investigate the cost of dredging the channel and extending toe of ramp to give 600mm below lowest tide depth.	<b>VRFish Priority No. 3</b>	<b>Dredging needs costing</b>
Install angled grooved surface on the lower section of the existing ramp lanes	<b>VRFish Priority No. 3</b>	—
Install wheel stops at end of ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	—
Repaint existing facility white lines, Paint manoeuvring line marking at ramp top to recommended template standards	<b>VRFish Priority No. 3</b>	—
Install shade roof over existing cleaning table	<b>VRFish Priority No. 4</b>	—
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 4</b>	—
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>	—



### 10.2.2 Hastings Boat Ramp

**C.B.C.A.P. designated facility role – Regional**

**Number of existing ramp lanes – 4**

**Approximate number of car/trailer parking bays within the facility – 120**

#### ***VRFish Observations:***

This is an unmanned facility which experiences long queues and ramp rage. It provides access to good fishing grounds. The layout is functional and there is little that can be done to improve effectiveness of the layout. The ramp had no water at the lowest tide. To effectively extend the ramp to a compliant depth extra dredging will be required. A double ramp could be built near the cleaning table to reduce queuing, this would require dredging.



<b>Recommended Improvements Hastings Boat Ramp</b>	<b>Recommended Short Term Improvements</b>	<b>Other Improvements</b>
Install webcams	<b>VRFish Priority No. 1</b>	–
Investigate the cost of dredging the channel and extending toe of ramp to give 600mm below lowest tide depth.	<b>VRFish Priority No. 3</b>	<b>Dredging needs costing</b>
Install wheel stops at end of ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	–
Paint reversing lines	<b>VRFish Priority No. 3</b>	–
Install shade roof over existing cleaning table	<b>VRFish Priority No. 4</b>	–
Design parking layout and install parking control fences/posts in unmarked parking overflow area	<b>VRFish Priority No. 4</b>	–
Review the need for the installation of an angled grooved surface on existing ramp lanes – given a medium priority when inspected	<b>Inspect Site</b>	–
Install signs advising where adjacent public boat ramp facilities are located.	<b>VRFish Priority No. 5</b>	–
Install second ticket machine with coin and credit card payments	<b>VRFish Priority No. 9</b>	–

### **10.2.3 Warneet Boat Ramp**

**C.B.C.A.P. designated facility role – District**

**Number of existing ramp lanes – 2**

**Approximate number of car/trailer parking bays within the facility – 100**

#### ***VRFish Observations:***

This facility is a high use facility on a gravel area. It is actively manned with a small tackle/bait shop on the facility. It has one good ramp and one old flat grade ramp. A new master plan has been drafted which proposes to replace the flat ramp with a new second single ramp. This ramp needs to be replaced with a double ramp to ease long queuing times. Active manning enables 100 car/trailers to be parked on site. The master plan layout with a landscaped designed parking layout will provide 80 bays. The ramp has no water at the lowest tides. A channel will need to be dredged from the ramp out to the main channel in the inlet. This area has not been dredged in the past. The committee of management has in the past excavated at the ramp to give a better launching depth. Boaters need a channel dredged out to the main channel. This dredging will need a feasibility report to ascertain its variability. In its current state, warning signs of insufficient water depth at lower tides is a high priority. The good western ramp has a worn plank style surface that is reasonable grip at present. Mud is deposited on the western ramp mainly from the car park drain. This drain is to be relocated under the master plan. Sand and mud is deposited under the floating pontoon at high tides during easterly winds. This caused the hinge to fracture. The committee is to replace the pontoon at the hinge with a hinged metal walkway. A wheel stop is required. There are two kitchen sinks currently attached to the side of the ramp for cleaning fish. DSE have a new fishing cleaning table stored at present but are reluctant to install it. This issue needs to be resolved. The pontoons need to be extended to improve mooring space. The master plan will need to address the above issues.



Recommended Improvements Warneet Boat Ramp	Recommended Short Term Improvements	Other Improvements
Install webcams	<b>VRFish Priority No. 1</b>	—
Replace flat low slope eastern ramp with compliant double ramp, dredging needed for achieving compliant depth	—	<b>High Priority</b>
Investigate the cost of dredging the channel and extending toe of western ramp to give 600mm below lowest tide depth.	<b>VRFish Priority No. 3</b>	<b>Dredging needs costing</b>
Install wheel stops at end of western ramp and wheel stop advice signs/markers	<b>VRFish Priority No. 3</b>	—
Seale the manoeuvring area	<b>VRFish Priority No. 3</b>	—



#### **10.2.4 Blind Bight Boat Ramp**

**C.B.C.A.P. designated facility role – Local**

**Number of existing ramp lanes (excluding auxiliary lanes) – 2**

**Approximate number of car/trailer parking bays within the facility – 20**

##### ***VRFish Observations:***

This is a local facility with keen community involvement. At low tide the water can be hundreds of meters from the ramp. Careful planning around low tide is required when using this ramp. A new floating pontoon has just been installed. Expanding parking is also difficult on this site. The ramp surface has an angled plank type surface. The toe of the ramp is level with mud. The two ramps are narrow (3.3 and 3.4 meters) and the southern ramp needs to be widened.



Recommended Improvements Blind Bight Boat Ramp	Recommended Short Term Improvements
Widen the southern ramp lane	VRFish Priority No. 3
Install signs warning of insufficient depth at lower tides	VRFish Priority No. 3
Install shade roof over existing fish cleaning table	VRFish Priority No. 4
Install signs advising where adjacent public boat ramp facilities are located.	VRFish Priority No. 5

### 10.2.5 Tooradin Boat Ramp

**C.B.C.A.P. designated facility role – District**

**Number of existing ramp lanes – 2**

**Approximate number of car/trailer parking bays within the facility – 62 on draft master plan (Estimated to be 95)**

#### ***VRFish Observations:***

A new master planning process is underway for this facility. The proposal is to build a new third ramp which will create three ramps of compliant width. The facility currently has a double ramp and a narrow single ramp. The existing ramp is in a poor state with substantial cracking. The toe of the existing ramp is raised, roughly poured concrete with reinforcement exposed. There are no wheel stops but it is not practical to install them on the roughly poured concrete. The existing ramps finish short of the natural channel. Regular dredging is needed to reach the natural channel. The ramps need to be rebuilt several meters to the south and this should give them deeper natural water that is self maintaining. The old jetty on the western side has a very slippery metal surface for rubber sole shoes when wet. It is planned to be replaced under the master plan but needs a warning sign or some form of short term resurfacing to protect the safety of users. The launching fees are paid at a caravan at the entrance. The facility surface is gravel. The facility is periodically dredged with a suction type dredge. There is a rock reef just off the ramp and one further out in the channel which need to be cut. These are the two shallowest points for boats using the channel from the facility that cannot be suction type dredged. It is recommended to await the finalisation of the master plan before recommending works. The draft master plan shows 62 parking bays. The site has a higher parking bay potential. The site suffers less queuing than the Stony Point, Hastings or nearby Warneet facilities. This is probably due to the long trip down the Rutherford channel when boats want to access deep water.



Recommended Improvements Tooradin Boat Ramp	Recommended Short Term Improvements	Other Improvements
Install webcams	VRFish Priority No. 1	–
Construct three new ramps. This is the main recommendation.	–	High Priority
If the existing ramps are not to be replaced in the short term, install angled grooved surface on the lower section of the existing ramp lanes	VRFish Priority No. 3	–
Seale the manoeuvring area	VRFish Priority No. 3	–
Install sun roof over the existing fish cleaning table when it is in its final location	VRFish Priority No. 4	–
Install signs warning of insufficient depth at lower tides until complaint ramps built and the channel rock is dredged.	VRFish Priority No. 5	–



#### **10.2.6 Corinella Boat Ramp**

**C.B.C.A.P. designated facility role – Local**

**Number of existing ramp lanes – 2**

**Approximate number of car/trailer parking bays within the facility – 133**

##### ***VRFish Observations:***

This is a developed and functional facility with an upper grassed parking area. It experiences very long queues. Reported waiting times at this facility regularly exceed two hours. The facility has only two ramp lanes for 133 parking spaces which are regularly full during the fishing seasons. With the number of parking bays, more ramp lanes are needed to service these existing parking bays. It provides access to a range of fishing including the Elephant Fish when they frequent Westernport Bay. The western ramp is smooth and the eastern one has a transverse plank style surface. There are ramp stops on the ramp toes. There are fish cleaning tables at the ends of the piers. A shade roof may not be practical but needs to be investigated. The piers are 3.25 metres above the exposed concrete ramp at the lowest tide for the month. There are vertical posts at short spacing along each pier. User safety needs to be investigated to ascertain whether intermittent horizontal rails are needed to be installed to improve safety and which would allow boats to access the pier at higher tides from boats.



Recommended Improvements Corinella Boat Ramp	Recommended Short Term Improvements	Other Improvements
Install webcams	VRFish Priority No. 1	–
Construct a second double ramp to ease queuing	–	High Priority
Investigate horizontal safety rails with gaps for boater access where the piers are more than 1.5 metres above exposed concrete ramps at low tides	–	High Safety Priority
Install wheel stop advice signs/markers for the existing ramps	VRFish Priority No. 3	–
Install angled grooved surface on the lower section of the existing western ramp lane	VRFish Priority No. 3	–
Repaint existing facility white lines, Paint reversing lines	VRFish Priority No. 3	–
Install shade roof over existing cleaning table, if feasible?	VRFish Priority No. 4	–
Design parking layout and install parking control fences/posts in unmarked parking overflow area	VRFish Priority No. 4	–
Install toilets near facility	–	Medium Priority

### 10.2.7 New Haven Boat Ramp

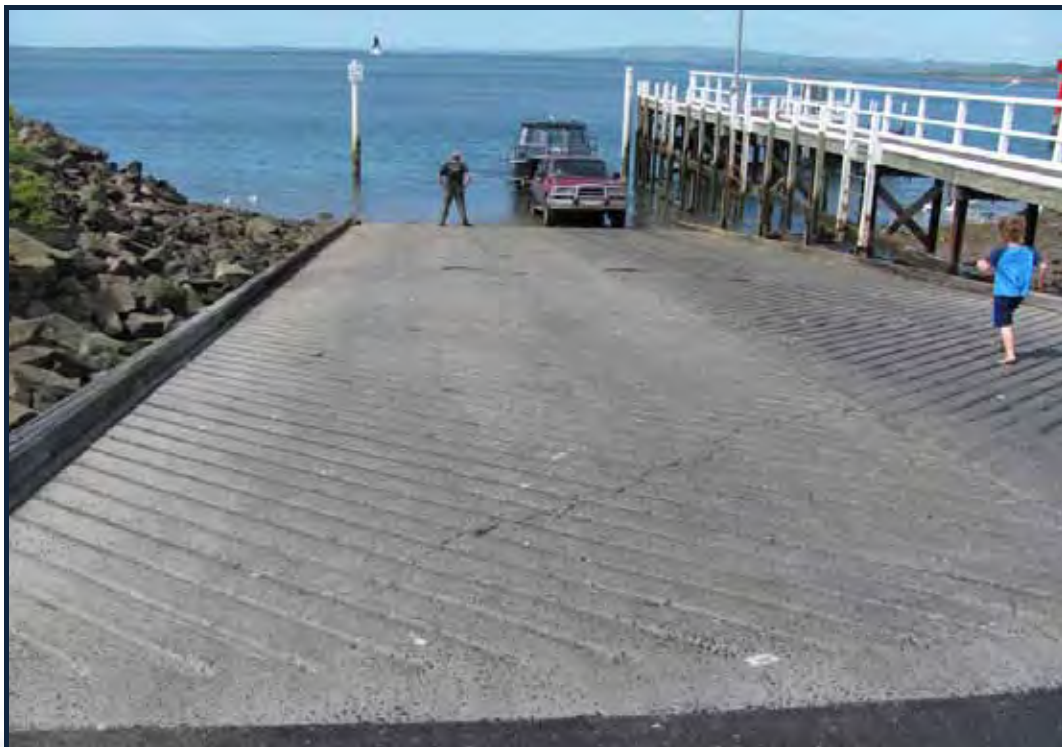
**C.B.C.A.P. designated facility role – Regional**

**Number of existing ramp lanes (excluding auxiliary lanes) – 2**

**Approximate number of car/trailer parking bays within the facility – 33**

#### ***VRFish Observations:***

This is a CBCAP designated regional facility with no overflow area. Car/trailers park in the surrounding residential streets when the car park is full. Cars park a few blocks away and boaters have a long walk back to their boats. This facility has limited mooring space with the walking time to return to the boat compounding the problem. Larger boats use this facility as it is the last ramp before the eastern entrance of Westernport Bay to Bass Strait. It is a very high use facility. Approx 20 extra car/trailers illegally park in the facility during peak times resulting in regular parking fines. Some of these illegal places can be converted to parking bays if the standard of landscaping is reduced. The car park is only used for Car/trailer parking. The pier is 3.90 meters above the exposed concrete ramp at the lowest tide for the month. There are short vertical posts at short intervals along the pier. User safety needs to be re-investigated to ascertain whether the posts are extended and intermittent horizontal rails are needed to be installed to improve safety (and which would also allow boats to access the pier at higher tides from boats). The ramps need to be extended towards a compliant depth and wheel stops rebuilt. The depth of maintenance dredging may need to be increased.



Recommended Improvements New Haven Boat Ramp	Recommended Short Term Improvements	Other Improvements
Install webcams	VRFish Priority No. 1	–
Investigate horizontal safety rails with gaps for boater access where piers are more than 1.5 meters above exposed concrete ramps at low tides		High Safety Priority
Extend toe of ramp to give 600mm below lowest tide depth and install wheel stops and wheel stop advice signs/markers	VRFish Priority No. 3	–
If the ramp is not to be extended, repair the existing wheel stop, section missing	VRFish Priority No. 3	–
Paint manoeuvring line marking at ramp top to recommended template standards, Paint lane dividers	VRFish Priority No. 3	–
Redesign car park to maximise trailer parking.	VRFish Priority No. 4	–
Investigate Council placing a waste bin at the fish cleaning table in the car park, fish waste being thrown onto the high tide line	VRFish Priority No. 4	–
Install hoses on taps and shade roof over existing clean table in car park	VRFish Priority No. 4	–
Install shade roof over existing cleaning table, if feasible (on pier)	VRFish Priority No. 4	–
Install signs advising where adjacent public boat ramp facilities are located.	VRFish Priority No. 5	–
Install second ticket machine with coin and credit card payments	VRFish Priority No. 9	–
Install toilets near facility	–	Medium Priority



### 10.2.8 Rhyll Boat Ramp

**C.B.C.A.P. designated facility role – District**

**Number of existing ramp lanes – 3**

**Number of car/trailer parking bays within the facility – 41**

#### ***VRFish Observations:***

This is a developed and functional facility on land with no over flow area. Trailers can be parked along the foreshore to the west but compete with tourist parking needs. Trailer parking ticket applies. This facility experiences strong side way tidal movements which can make launching and retrieval difficult. An existing pier/pontoon structure is located on the west side of the ramp. A new pier/pontoon on the east side of the ramp is needed to make the facility more functional by assisting boaters deal with the strong side currents. Buffers are needed on the timber posts to protect boats. The tidal current makes it difficult to fully utilise the three ramps at the same time as boats are swept sideways while launching and being retrieved. The pier is 3.50 metres above the exposed concrete ramp at the lowest tide for the month. There are vertical posts at short spacing along the pier. User safety needs to be investigated to ascertain whether the posts are extended and intermittent horizontal rails are needed to be installed to improve safety and which would allow boats to access the pier at higher tides from boats. The two western ramps are in poor condition and smooth. They need a grooved surface if they are not going to be replaced in the medium term. The eastern ramp is not as old and in better condition. It has angled grooves in its surface.



Recommended Improvements Rhyll Boat Ramp	Recommended Short Term Improvements	Other Improvements
Install webcams	VRFish Priority No. 1	–
Install new pontoon /pier on east side of ramp	–	High Priority
Investigate horizontal safety rails with gaps for boater access where the piers are more than 1.5 meters above exposed concrete ramps at low tides	–	High Safety Priority
Install angled grooved surface on two western ramp lanes	VRFish Priority No. 3	–
Paint lane divider between old western ramps, Paint reversing lines	VRFish Priority No. 3	–
Install wheel stop advice signs/markers	VRFish Priority No. 3	–
Install shade roof over existing cleaning table if feasible (on pier)	VRFish Priority No. 4	–
Install high flow taps and flexible metal cleaning hoses on the taps	VRFish Priority No. 4	–
Install signs advising where adjacent public boat ramp facilities are located.	VRFish Priority No. 5	–
Install second ticket machine with coin and credit card payments	VRFish Priority No. 9	–

### **10.2.9 Cowes Boat Ramp**

**C.B.C.A.P. designated facility role – Regional**

**Number of existing ramp lanes (excluding auxiliary lanes) – 2**

**Up to 23 metres wide at lower low tides**

**Approximate number of car/trailer parking bays within the facility – 48**

#### ***VRFish Observations:***

This facility has a developed car park and a limited over flow area which competes with beach users. When the car park is full, car/trailers are parked in the surrounding residential streets. It has very high use during the tourist season. The facility has no pier/pontoon structure and has a boat ramp which has variable longitudinal grades and cross sectional grades. The width varies from a double ramp at the top and 23 meters wide at low tide. Most of the ramp is often covered by layers of sand. It is assumed that the ramp has been widened at lower cross sectional levels to help deal with the sand issue. The sand is loose and is washed and blown across the ramp. The ramp has some tidal shear, subject to low ocean side swells on rough days and is fully exposed to northerly winds which can make the ramp unusable and dangerous. This facility is the last Phillip Island boat ramp before the western entrance of Westernport Bay to Bass Strait. The upper section has an acceptable slope. The lower section of the ramp is very flat. Cars need to reverse into the water at lower tides to have sufficient depth for many boats. This facility must be rebuilt to provide new ramps, pontoons/piers and a protective sea wall to create a safe marina. The ramp is smooth and slippery at low tide. Side walls to slow sand build up are likely to be a tripping hazard. This is a very popular beach with constant use by tourists. The ramp has no water at the lowest tides. Dredging would be needed as there is insufficient water depth past the end of the existing ramp. A report on the extent and possible success of dredging is needed before a ramp extension could be considered. The existing ramp toe is level with the sea bed.



Recommended Improvements Cowes Boat Ramp	Recommended Short Term Improvements	Other Improvements
Install webcams	VRFish Priority No. 1	–
The facility must be given a high priority for the full construction of a major facility with new ramps, sea wall, dredging and pontoons/piers	–	High Priority
Install angled grooved surface on lower section of the two centre ramp lanes	VRFish Priority No. 3	–
Paint lane dividers, Paint reversing lines	VRFish Priority No. 3	–
Install signs warning of insufficient depth at lower tides.	VRFish Priority No. 3	–
Install signs advising where adjacent public boat ramp facilities are located.	VRFish Priority No. 5	–
Install second ticket machine with coin and credit card payments	VRFish Priority No. 9	–







**The Victorian Recreational Fishing Peak Body Inc.**