



# **CLYDE ESTUARY**

SAFE BOATING PLAN 2009 - 2013



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# CLYDE ESTUARY SAFE BOATING PLAN January 2009

# **1 OVERVIEW**

# 1.1 Aims

This Safe Boating Plan is a guide for boating activities on the Clyde Estuary. It aims to:

- Promote maritime safety;
- Maximise enjoyment of the waterway and minimise user conflicts via education and information campaigns; and
- Promote the provision of appropriate infrastructure.

# 1.2 NSW Maritime's Role

NSW Maritime is responsible for the regulation of commercial and recreational boating on navigable waterways of NSW. NSW Maritime manages commercial and recreational boating through:

- administration of NSW marine legislation;
- encouraging a culture of on-water safety via education programs, Safe Boating Plans and policies and enforcement of boating laws;
- issuing of recreational boat driver licences and boat registrations;
- management of mooring areas;
- surveying and registering commercial vessels and the certification of crews;
- placement and management of navigation aids and signs;
- funding for regional boating infrastructure; and
- issuing aquatic licences for major aquatic events, and assisting with associated on water control activities.

# 1.3 Safe Boating Plans

Safe Boating Plans are a guide to shared use and access to a particular waterway to the benefit of recreational and commercial users alike. Safe Boating Plans are designed to be responsive to changing conditions and boating patterns, and are reviewed when necessary but generally every five years from the date of adoption by NSW Maritime.



# 2 THE CLYDE ESTUARY

The Clyde Estuary is a major community resource for the people of the South Coast of NSW. As well as being an important focus of commercial and recreational activities within the Eurobodalla Shire, the river plays host to a number of major aquatic events including the Batemans Bay Marine Show, fishing competitions and sailing regattas.

# **2.1 Recreational Activities**

The following table outlines the dominant recreational activities along different parts of the Estuary:

Section	Degree of Usage	Type of Usage	Facilities
Batemans Bay	Moderate	A broad expanse of water popular for fishing, cruising, sailing and charter operations.	Corrigans and Caseys Beaches located on the southern side of the bay and Long Beach on the northern side are popular for boaters and swimmers, especially near camping and picnic areas.
East of Princes Highway Bridge	Low to moderate	An area that includes the Clyde River bar, a narrow navigation channel, moorings, the marina and Batemans Bay township. Little or no towing activity. Marine Park Authority sanctuary zone at Cullendulla Creek.	Boat ramps at Hanging Rock and the Boat Harbour. Swing moorings and the Batemans Bay Marina are also located in this section. Public wharves located at Hanging Rock and adjacent to Batemans Bay town centre.
Lower Clyde	Low	Intensive aquaculture (oyster) activity in this area. Some fishing and small sailing craft. Little or no towing activity.	Boat ramps immediately west of the Princes Highway traffic bridge, on northern and southern banks of the river. A number of boatshed are located on the northern shore.
Chinamans Point	Low to moderate	Very popular fishing area. Oyster farming in this area. Marine Park Authority sanctuary zones at Waterfall Creek and Pelican Island. Little or no towing activity.	Area bordered by State Forest on the south and National Park to the north.
Big Island	Low to moderate	Popular for fishing and cruising. Little or no towing activity. Marine Park Authority sanctuary zone at Buckenbowra River.	Area bordered by National Park along the eastern side of the river.
Little Island	Low	Some fishing, cruising and paddling activity in this area.	Area bordered by National Park along the eastern side of the Estuary.



Section	Degree of Usage	Type of Usage	Facilities
Nelligen	Moderate	Popular for fishing, cruising and towing activities. A stop-off point for houseboats motoring up the Estuary. Also a destination for ferry and charter activity.	Boat ramps downstream of the traffic bridge – one on the eastern side and the other the western of the Estuary. A public wharf is located on the town side of the Estuary.
Nelligen Bridge to Currowan Creek	Moderate to high	A long (14km) section of Estuary where towing cruising and fishing activities are popular. Some canoeing and kayaking at each end of this area.	A boat ramp is located at the Nelligen Caravan Park on the western side of the Estuary immediately upstream of the Nelligen traffic bridge.
Currowan Creek to Cockwhy Creek	Low	Shallow areas of this section restrict navigation for most vessels.	

# **Commercial Uses**

The Clyde hosts a variety of commercial activities including fishing, aqua farming, charters, and hire and drive operations. There are currently 39 fishing businesses that can potentially access the Clyde Estuary for commercial purposes, including the use of fish, eel and crab traps. The Estuary is also home to 162 oyster leases covering an area of 179 hectares of waterway.

#### **Commercial Vessel Activity**

Commercial Activity	Number of Operators
HIRE & DRIVE	5
PASSENGER	2
WORK/UTILITY	4

Inshore commercial vessels are predominantly of the hire and drive type such as houseboats and small tinnies, and make use of both the lower and upper Clyde.



# **3 THE CLYDE ESTUARY SAFE BOATING PLAN**

The Clyde Estuary Safe Boating Plan is divided into four major sections, (Areas 1, 2, 3 and 4), reflecting the different regions and uses oft eh waterway. These sections are further divided into subsections as outlined below.

AREA 1:		east to	the main river from the Princes Highway traffic bridge Batemans Bay, and includes Cullendulla Creek and the River bar.
	Sub-Sections:	1A: 1B:	Batemans Bay
		ID.	East of Princes Highway Bridge
AREA 2:		to the t Waterfa	the main river from the Princes Highway Traffic Bridge, traffic bridge at Nelligen and includes McLeods Creek, all Creek, Buckenbowra River, Big Island, Little Island eep Station Creek.
	Sub Sections:	2A:	Lower Clyde
		2B:	Chinamans Point
		2C:	Big Island
		2D:	Little Island
		2E:	Nelligen
AREA 3:		extent from Co	the main river from the Nelligen Traffic Bridge, to the of the navigable limit at the old wharf ruins upstream ockwhy Creek and includes Nelligen Creek, Cyne es Creek and Currowan Creek.
	Sub Sections:	3A:	Nelligen to Currowan Creek
		3B:	Currowan Creek to old wharf ruins
AREA 4:		Include	es the area from Cockwhy Creek to Shallow Crossing.
	Sub Sections:	4A:	Cockwhy Creek to Shallow Crossing

The Plan includes a number of concepts and actions applicable on an estuary-wide basis, followed by specific initiatives relevant to an individual section or subsections. The implementation of the Plan is in accordance with the following timeframes:

- **Short Term**: within one year of the adoption of this plan.
- *Medium Term:* within three years of the adoption of this plan.
- Long Term: within the first five-year cycle of this plan.
- **Ongoing:** on a recurring or "as required" basis.



# **4 ESTUARY-WIDE CONCEPTS AND STRATEGIES**

# 4.1 Marine safety

#### Issues:

#### • Traffic Bridges

Traffic bridges crossing navigable waters may impede vision and lines of navigation, or pose boating safety concerns with people fishing, swimming or diving from the bridge.

The strategies adopted in this boating plan are aimed at mitigating the risk of vessel incidents, accidents, including the potential installation of navigation lights, an upgrade for warning signage and designation, where necessary, of spans for each-way vessel traffic.

NSW Maritime will also continue to enforce the relevant provisions of the *Water Traffic Regulations* prohibiting travelling at speed, skiing or aquaplaning under bridges.

#### Commercial Fishing Grounds

NSW Maritime is aware of concerns raised by professional fishermen with regard to vessels mooring in popular commercial fishing grounds. Locations of known fishing grounds and appropriate management strategies have been included in the location specific management sections of this plan. NSW Maritime will seek support from the Department of Primary industries Fisheries for an education program to encourage non-fishing vessels to avoid impeding professional fishermen by undertaking recreational activity or mooring while commercial fishing is in progress in these areas.

#### Recreational vessels

River traffic is not spread evenly over all reaches of the river. More heavily trafficked areas include Nelligen (both sides of the traffic bridge), the upper reaches between Nelligen Bridge and Currowan Creek, and the Bay itself. NSW Maritime will undertake an ongoing education program, including signage to encourage users of these areas to share the waterway and be aware of the impacts of their activities on other users.

#### Navigation channels

#### Issue:

Stakeholder concerns focused on the importance of safe navigation channels due to the everchanging conditions of the river. Silting of navigation channels can be addressed either by the identification and marking of a navigation hazards, the identification of alternative channels or by dredging. In some instances the erection of warning signs and/or installation of navigation aids to show a safe passage through a silted area are sufficient to ensure safe navigation. Dredging of navigation channels on the Clyde Estuary is a shared responsibility between the NSW Department of Lands and local councils.



NSW Maritime will continue to provide expert navigation advice to government agencies and Eurobodalla Council on channel access, and will maintain its current program of navigation marker installation and maintenance to ensure that navigation channels and hazards are appropriately marked.

#### Actions:

Action	Time Frame
• Liaise with the Department of Primary Industries concerning potential conflict between commercial fishers and the boating community during hauling operations.	Ongoing
<ul> <li>Enforce existing "distance-off" regulations for boaters traversing under traffic bridges.</li> </ul>	Ongoing
<ul> <li>Liaise with Roads and Traffic Authority regarding navigation lighting on bridges</li> </ul>	Medium Term
<ul> <li>Install "Slow down under bridge" signage.</li> </ul>	Medium Term
<ul> <li>Where necessary, mark only one span as the navigation channel under particular bridges.</li> </ul>	Medium Term
<ul> <li>Conduct an education program for high traffic areas, including signage where appropriate.</li> </ul>	Ongoing
<ul> <li>Provide navigation advice to government agencies and Eurobodalla Council as required, regarding safe navigation and access to navigation channels on the Estuary.</li> </ul>	Ongoing

# 4.2 Navigation Aids and Moorings

#### Navigation Aids

#### Issues:

The Clyde Estuary has a total of 42 navigational aids of various types. There are 25 navigational lights and approximately 43 signs indicating restrictions such as 4 knot zones, No Wash areas, and cautions for shallow water.

The existing configuration of navigation aids and signs on the Estuary has evolved over the past decade based on changing levels of boating activity, river conditions and feedback from the boating community. While the existing provision of navigation aids is considered adequate, some stakeholders have indicated that additional signage may assist in improving boating safety outcomes.



#### Actions:

By 2012 NSW Maritime will:

- Install kilometre signs at regular intervals along the main river indicating distance from the river mouth;
- Number all navigation aids and update maps accordingly; and
- Review the existing configuration of navigation aids and where necessary replace and/or install new marks.

#### Moorings

#### Issues:

NSW Maritime moorings are valued as a convenient and cost-effective means of vessel storage on the Clyde. Moorings are currently located as follows:

LOCATION	PRIVATE	COMMERCIAL
Square Head	12	2
Esplanade	29	7
Nth/East of Bay Bridge	27	1
Wray Bay	26	1
Clyde Batemans Bay Sth/East	1	11
Clyde Batemans Bay Sth/West	2	18
Nelligen	22	1
Upper Clyde	4	2

Stakeholders expressed support for additional recreational boating infrastructure including moorings, provided matters such as sewage discharge and appropriate siting were addressed. Some stakeholders noted the proposed marina developments in Bateman's Bay and the potential impact on demand for swing moorings on the Estuary.

#### Actions:

By 2012 NSW Maritime will:

- Consider the need for additional courtesy and emergency moorings on the Clyde.
- Ensure mooring placement complies with relevant Department of Primary Industries Fisheries Habitat Management Plans and the *Fisheries Management Act 1994* and has regard for commercial fishing grounds.
- Monitor the impact of increased marina berth access on swing mooring demand.
- Ensure appropriate waste management procedures for moored vessels are developed; and
- Undertake an education campaign targeting mooring apparatus maintenance.



# 4.3 Wharves, Jetties and Boat Ramps

#### Issues:

The table below lists the Estuary's boat ramps and facilities:

LOCATION	LANES	PARKING (Cars & Trailers)	JETTY / PONTOON
Hanging Rock Regional	3	400	Yes
Batemans Bay Boat Harbour	1	nil	Yes
North Bridge	2	15	No
South Bridge	2	25	No
East Bridge - Nelligen	1	10	No
West Bridge - Nelligen	1	10	Yes
Caravan Park - Nelligen	2	Limited	Yes

Stakeholders expressed support for additional boating infrastructure, subject to appropriate siting to avoid conflicts with other uses and qualities of the waterway.

#### Actions:

NSW Maritime provides grant funding for infrastructure projects throughout NSW that benefit the boating community. Under its Maritime Infrastructure Program (MIP) projects are initiated by a proponent such as the local Council or community groups, who normally provide 50% of the overall funding of each project.

During the life of this Plan, NSW Maritime will liaise with the Eurobodalla Council over the issue of additional infrastructure and where possible assist in sourcing grant funding from its Maritime Infrastructure Program to assist in construction of new or improved boating facilities on the Estuary.

# 4.4 Vessel wastes

#### Issue:

The greatest contributors to poor water quality in the Estuary are land-based stormwater, septic and sewerage systems, and runoff following storms. However, discharge of sewage and other pollutants from vessels may contribute to localised water quality problems, especially in heavily trafficked areas. In particular, some stakeholders highlighted the importance of appropriate management of vessel wastes including sewage, bilge water and general litter, both in the water and around service facilities.



#### Actions:

#### Actions:

#### "Sewage Pollution from Vessels" Strategy

Water quality degradation due to the impacts of boating is being addressed through Maritime's "Sewage Pollution from Vessels" strategy. Key initiatives include:

- adoption in 2003 of amendments to the Marine Pollution Regulation 2001:
  - o prohibiting discharge of untreated sewage in certain areas;
  - requiring that passenger-carrying commercial vessels and houseboats install toilets and holding tanks to prevent sewage discharge into NSW waterways; and
  - imposing a 500 metre buffer from environmentally sensitive areas for the discharge of treated sewage. (This effectively makes the whole of the Clyde Estuary a no-discharge zone for both treated and untreated sewage);
- an education campaign to inform the boating community of its responsibilities in managing sewage discharge from vessels.

#### Moorings

Mooring applications are subject to an assessment process to ensure they do not unduly impact on marine flora and fauna, particularly seagrass.

#### Pump-outs and fuelling facilities

NSW Maritime generally recommends that Development Approvals for new berthing facilities, such as marinas, incorporate appropriate pump-out facilities for vessels. A pump-out facility is currently located at the Batemans Bay Marina. NSW Maritime supports an additional facility on the estuary and will work with Eurobodalla Council to investigate the location of such facilities on the lower Clyde west of the Princes Highway traffic bridge and at Nelligen.

NSW Maritime also recommends that developments containing fuelling facilities have satisfactory safeguards to prevent contamination of the waterway due to oil and fuel spillage.

# 4.5 Seagrasses and wetlands

#### Issue:

The Clyde Estuary contains significant habitat areas including the Marine Park Authority's sanctuary zones at Cullendulla Creek, Pelican Island, Waterfall Creek and the Buckenbowra River.

In addition, seagrass beds along the Estuary are sensitive to the impacts of mooring and anchor chains or boat propellers, and can also be damaged by poorly monitored dredging and marine construction activities.

#### Actions:

NSW Maritime will continue to educate boaters regarding compliance with Department of Primary Industries '*Fish Habitat Protection Plan No.2: Seagrasses'* including avoiding driving their boat across shallow, weedy areas or anchoring in or near seagrass beds.



A permit from the Department of Primary Industries Fisheries is already required to place moorings near seagrass beds. During the life of this plan Maritime will also work with the Department on developing seagrass-friendly mooring designs.

The Clyde Estuary Lower Catchment supports 54 SEPP 14 wetlands with Cullendulla Creek, Pelican Island, Waterfall Creek and the Buckenbowra River listed as sanctuary zones in the Batemans Bay Marine Park by the Marine Park Authority. Maritime monitors the use of power boats in highly sensitive navigable wetland areas and will continue to encourage boating practices that minimise the impact on habitat areas vital to aquatic, avian and terrestrial species.

# 4.6 Bank erosion

#### Issue:

Many stakeholders expressed concern over the impact of vessel wash on river bank erosion

#### • Batemans Bay & Clyde River Estuary Management Plan

The Batemans Bay and Clyde River Estuary Management Plan outlines a range of measures to protect the waterway and minimise the impact of land and water-based activities on sensitive habitat. The Batemans Bay and Clyde River Estuary Processes Study indicated there were areas upstream of Nelligen that are susceptible to erosion, but concluded that *"for these areas of the estuary the impact of boat wash on bank erosion is minimal. Other factors such as floods and natural meander processes are far more significant as the primary cause of erosion. Secondary disturbances such as groundwater seepage, wind waves and boat wash may exacerbate the continuation of this erosion. However, the limitation of boating activity alone would have very little impact in the long term on erosion. There are no recommendations for boating controls due to bank erosion on the estuary upstream of Nelligen."* 

#### • Southern Rivers Catchment Management Authority – Foreshore Definition Survey

Undertaken in July 2006, this foreshore definition study surveyed the extent of bank erosion on public and private lands with Clyde Estuary frontage between the entrance and approximately 1.3km downstream of Shallow Crossing. It provided a rapid assessment of foreshore condition to enable the identification of high priority sites for the treatment of erosion, and expands on sites identified in the Batemans Bay and Clyde River Estuary Management Plan as potential sources of erosion and sedimentation.

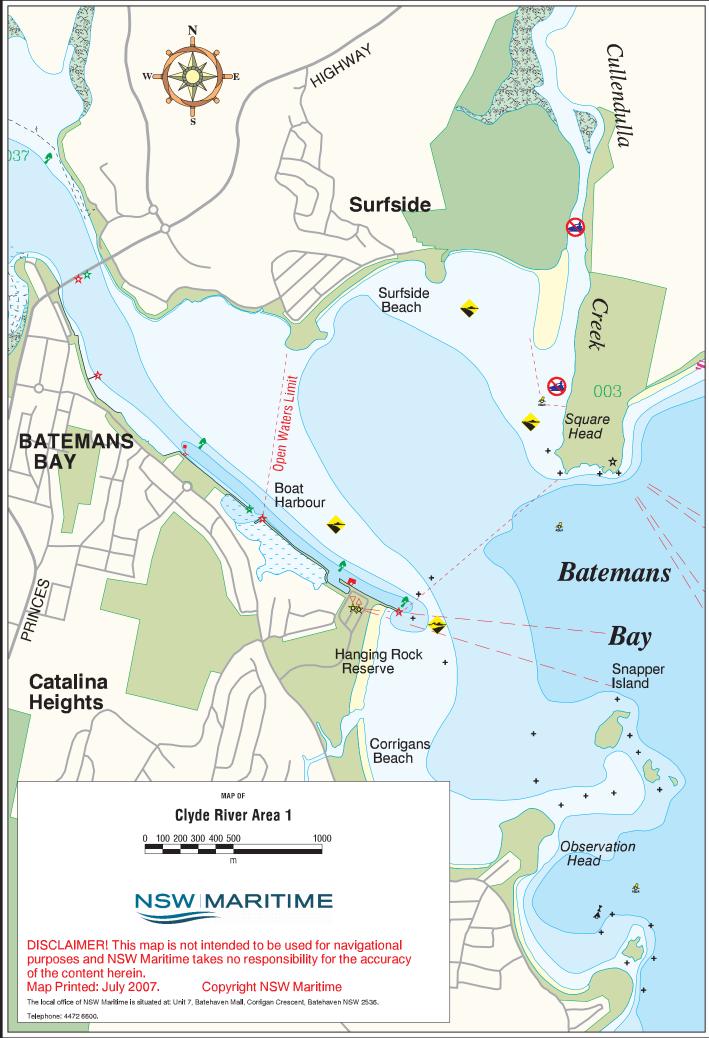
The survey suggested a range of possible rehabilitation works for local councils and landowners including control of riparian weeds, regeneration of riparian vegetation, bank stabilisation, upgrading and sealing of watercourse crossings, installation of stock-exclusion fencing and the provision of off-stream watering points.



#### Actions:

By 2010, NSW Maritime will:

- Identify areas of the estuary with high erosion potential from boat wake, and where wake could result in unsafe boating;
- Assess the need for wake management zones in those areas;
- Consider the need for recommended areas for wake creating boating activities;
- Review existing navaid configurations to guide vessels away from sensitive areas;
- Enforce existing distance-off regulations to ensure safe boating and mitigate potential erosion from vessel traffic;
- Formally consider the need for a voluntary code of conduct for wakeboarding vessels, developed in consultation with wakeboard groups and recreational users of the waterway, to reduce the impact of wake on other vessels such as hand-and wind-powered craft in popular sections of the Estuary; and
- Undertake an education program aimed at reducing the incidence of erosion-producing vessel waves caused by actions such as power turning.



Map generated by MapWizard on 01 Aug 07 by mhollan1



# AREA 1 - BATEMANS BAY TO PRINCES HIGHWAY BRIDGE

# **General Description**

This area covers the eastern extremity of the Clyde River recognised as a line extending from the south-western point of Square Head (149° 12' 50° E, 34° 42' 40° S) to the port pile on the eastern most extremity of the rock wall at Hanging Rock (149° 11' 50° E, 34° 43' 15° S) and encompassing the Clyde River Coastal Bar.

### **Area Features**

The area has within its boundaries the township of Batemans Bay, the boat harbour including a marina, the environmentally sensitive Cullendulla Creek and a large expanse of shallow water from the Clyde River bar extending northwest to an area between the Princes Highway Bridge and Surfside. Cullendulla Creek has been designated as a sanctuary zone in the Batemans Bay Maine Park.

There are 95 private moorings (PMLs) and 22 commercial moorings (CMLs) in this area.

### **Boat Ramps**

Hanging Rock Ramp Boat Harbour Ramp (private)

#### Navigation Aids 9Lit Aids 5 Unlit Aids Plus a variety of signage

### **Special Events**

Sailing Regattas; Fishing Competitions



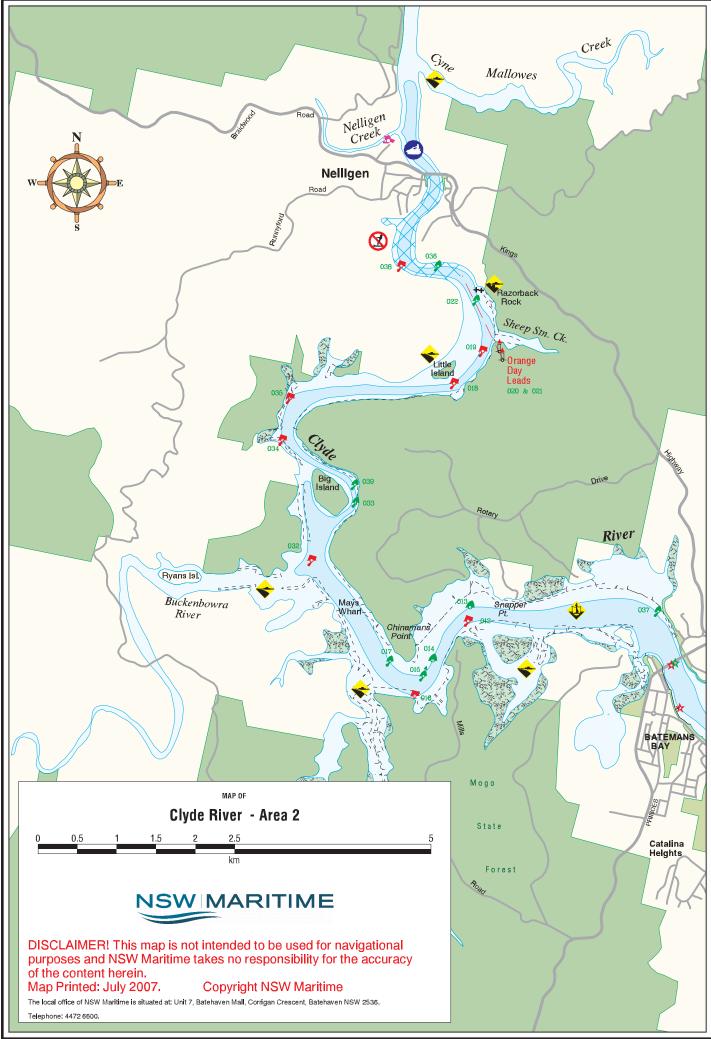
ACTIVITIES	INFRASTRUCTURE	ISSUES	OUTCOMES	ACTIONS	TIME- FRAME
1A: BATEMANS BAY					
This area includes Cullendulla Creek and the main conduit for vessel access to the ocean via the Clyde River Bar. It also includes an extensive area of shallow water. Activities include sailing, cruising, fishing, canoeing/kayaking, and transiting vessels. Cullendulla Creek has been declared a sanctuary zone in the Batemans Bay Marine Park.	Hanging Rock Boat Ramp Private Boat Ramp at the boat harbour. Boat Harbour and Marina	<ul> <li>Clyde River Bar:</li> <li>Safety issue for vessels crossing or operating adjacent to the bar at the entrance to the Clyde River.</li> </ul>	Mitigate the risk of incidents occurring on the bar.	<ul> <li>Continue existing education strategy, particularly:</li> <li>Deliver a range of bar crossing seminars to boaters.</li> <li>Continue highlighting information on crossing bars at licence seminars.</li> <li>Continue to promote NSW Maritime's bar crossing brochure through the Bomaderry operations centre.</li> <li>Include lead marks and how to use them in educational strategies.</li> </ul>	Ongoing
		<ul> <li>Stakeholders raised the need to dredge the bar at the river mouth as there is some suggestion the depth at times precludes/limits larger vessel activity.</li> </ul>		NSW Maritime will refer dredging issues to the NSW Department of Lands.	Short Term
		<ul> <li>Stakeholders suggested that due to the dynamic nature of the Clyde River Bar there is an ongoing issue concerning accuracy of the navigation leads marking the crossing.</li> </ul>		NSW Maritime arranges regular hydrographic surveys of the bar and leads are placed in the most suitable locations for safe boating access. Monitor and review.	Ongoing
		<ul> <li>The installation of a camera to film the bar with a live feed to the internet was suggested.</li> </ul>		NSW Maritime will liaise with Coast Watch to investigate the installation of a bar camera.	Short Term
					Short



ACTIVITIES	INFRASTRUCTURE	ISSUES	OUTCOMES	ACTIONS	TIME- FRAME
		<ul> <li>Stakeholders suggested:</li> <li>The need for vessel restrictions in the Cullendulla Creek sanctuary zone.</li> <li>Important habitat for many species but particularly black swans and pied oyster catchers. Seagrass beds and important nursery and fish breeding ground.</li> <li>Protection of seagrass in Cullendulla Creek and surrounding area.</li> <li>Installation of a South Cardinal mark limiting vessel use adjacent to Cullendulla Beach due to shallow water .</li> </ul>	Habitat protection.	Apply a 4 knot speed restriction in Cullendulla Creek to reduce wash and protect seagrass beds. Speed restriction subject to review over the life of the Plan Consider the effectiveness of a cardinal mark, having regard for silting and sand movement in the area.	Ongoing
		Reference was made concerning the location of the existing open water limit that extends from Pinnacle Point to the entrance to the boatharbour. It was suggested the limit be moved further east and run from Snapper Head to Hanging Rock as this could still be classed as enclosed water.	Changed open water limit.	NSW Maritime will investigate and consider relocation of the existing open water limit.	
		A number of stakeholders supported the enlarging and renewing of the boatharbour marina given the urgent need to meet demand for new berths.		NSW Maritime supports the proposed marina redevelopment.	



This area is close to Batemans Bay CBD and is a popular access point for onshore and water- based visitors using ferry and public wharves.	3 x Public Wharves	Issues relating to moorings include varying views on the appropriate number of swing moorings.	Optimal number of swing moorings.	See Section 4.2 relating to moorings.
Activities include ferries, cruising, pwc, fishing, canoeing/kayaking, and transiting vessels.		A number of stakeholders have expressed concern over safety and noise issues relating to pwc and other vessels around the Batemans Bay foreshore and traffic bridge.	Fewer incidents and reduced noise impact	NSW Maritime will continue to enforce existing speed and distance-off regulations for boaters traversing under traffic bridges. Install " <i>Slow Down Under Bridge</i> " signage. For further strategies relating to navigation under traffic bridges see section 4.1. Monitor and enforce compliance to existing pwc irregular driving regulations.



Map generated by MapWizard on 01 Aug 07 by mhollan1



# AREA 2 -PRINCES HIGHWAY BRIDGE TO NELLIGEN

### **General Description**

Area 2,also known as the Lower Clyde, extends from the Princes Highway traffic bridge to the traffic bridge at Nelligen. It includes McLeods and Sheep Station Creeks and the Batemans Bay Marine Park sanctuary zones at Pelican Island, Waterfall Creek and the Buckenbowra River.

### **Area Features**

The area has within its boundaries significant aquaculture in the form of oyster leases, the Clyde River National Park, Big and Little Islands and the township of Nelligen.

There are 24 private moorings (PMLs) and 3 commercial moorings (CMLs) in this area.

#### **Boat Ramps**

North Bridge Ramp South Bridge Ramp East Bridge Ramp at Nelligen West Bridge Ramp at Nelligen

### **Navigation Aids**

4 Lit Aids 11 Unlit Aids Plus a variety of signage

### **Special Events**

**Fishing Competitions** 



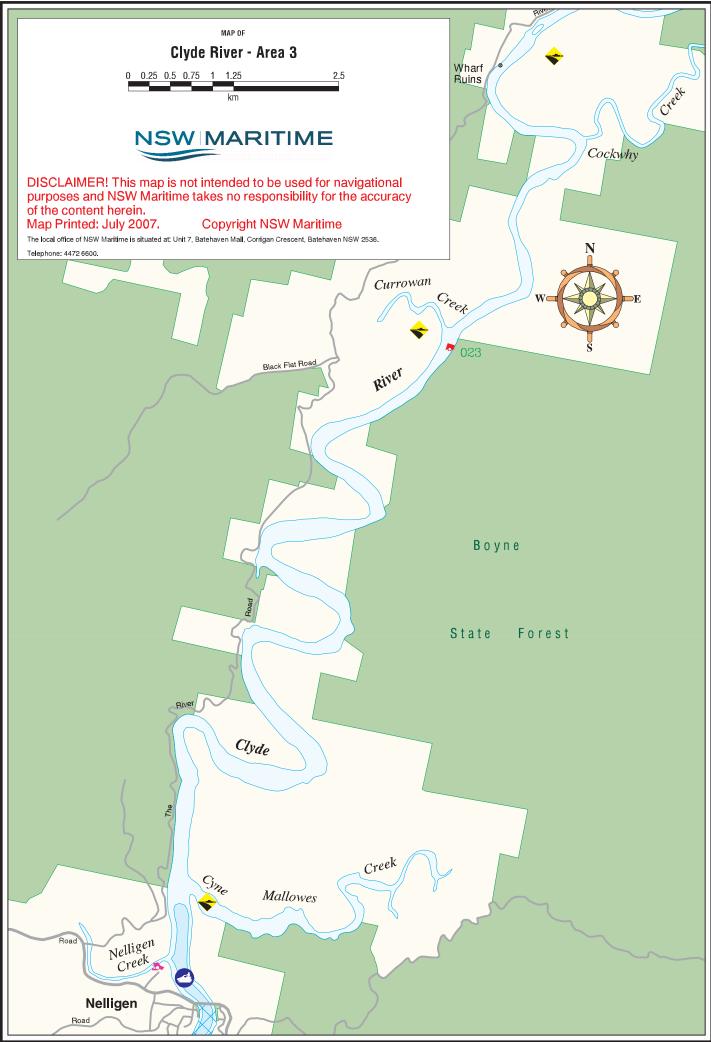
ACTIVITIES	INFRASTRUCTURE	ISSUES	OUTCOMES	ACTIONS	TIME- FRAME
2A: PRINCE HIGHWAY	TRAFFIC BRIDGE TO CH	INAMANS POINT			
This section includes intensive aquaculture in the form of oyster leases lining the main channel as well as McLeods Creek, Lattas Channel and Waterfall Creek. Sailability run sailing experiences for the disabled from the North Bridge boat ramp.	North Bridge South Bridge East Bridge Nelligen	<ul> <li>Navigation issues include:</li> <li>Vessel wash creating issues with oyster operations. Particularly in the area south of Budd Island, Lattas Channel and upstream of the entrance of McLeods Creek.</li> </ul>	Reduction in risk of wash affecting oyster operations.	NSW Maritime will conduct education campaigns targeting vessel wash.	Short Term
Other activities include commercial fishing, ferry services, hire boats, house boats and some pwc operations.	West Bridge Nelligen	<ul> <li>Stakeholders suggest some oyster rafts/buoys are encroaching into the main channel.</li> </ul>	Co-operation between agencies and oyster growers to improve delineation between oyster lease boundaries and main navigation channels.	NSW Maritime will convert three unlit navigational aids located between Snapper Point and Chinamans Point to lit navaids to improve navigation and the delineation between the channel and oyster beds.	Ongoing
		<ul> <li>Channel marking in the main channel from Snapper Point to Chinamans Point.</li> </ul>	Reduction in risk of vessel accidents and incidents.	NSW Maritime will liaise with the Batemans Bay Marine Park Authority regarding channel markings.	Short Term
				Waterfall Creek will become a 4 knot zone. Install an aquamark at the centre of its entrance denoting the 4 knot zone. Speed restriction to be reviewed during life of the Plan.	Ongoing
		<ul> <li>Protection of passive use area around Pelican Island Sanctuary Zone.</li> </ul>		Apply a 4 knot speed restriction in the channel around Pelican Island	Ongoing
		<ul> <li>Stakeholders expressed a need for an additional pump- out facility west of the Princes Highway traffic Bridge.</li> </ul>		Liaise with Eurobodalla Shire Council to investigate the installation of an additional pump-out facility. Offer assistance in preparing a submission for Maritime Infrastructure Project grant funding.	Short Term



ACTIVITIES	INFRASTRUCTURE	ISSUES	OUTCOMES	ACTIONS	TIME- FRAME	
2B: CHINAMANS POINT TO SHEEP STATION CREEK						
This section of river is popular for fishing (both recreational and commercial), oyster farming, and as a main conduit between the upper and lower Clyde. Ferries, houseboats and recreational vessels motor through this area to Nelligen. Some waterskiing also takes place in this section of river.	Mays Wharf (private)	<ul> <li>Protection of habitat, particularly, Buckenbowra River sanctuary zone.</li> </ul>		Buckenbowra River to become a 4 knot zone due to its sanctuary status and expanse of shallow water. Installation of an aquamark at the centre of its entrance denoting the 4 knot zone and for vessels to "Navigate with Caution".	Ongoing	
The Buckenbowra River sanctuary zone is also located here.				NSW Maritime will conduct education campaigns targeting vessel wash.	Short Term	
		Navigation issues include:				
		<ul> <li>Vessel wash creating issues with oyster operations.</li> </ul>	Reduction in risk of wash affecting oyster operations.	Installation of an additional port buoy designed to keep vessel traffic in the centre of the river and away from the shallow water / shoaling on the western side of Little Island.	Ongoing	
		<ul> <li>The shallow or western side of Little Island can be hazardous and there have been incidents of houseboats running aground at low tide.</li> <li>Sheep Station Creek is a small body of shallow water with some oyster farming.</li> </ul>	Reduction in risk of vessel accidents and incidents.	Sheep Station Creek to become a 4 knot zone due to its expanse of shallow water and location within the Clyde River National Park. Installation of an aquamark at the centre of its entrance denoting the 4 knot zone and for vessels to "Navigate with Caution".	Ongoing	
		Navigation can be hazardous.				



ACTIVITIES	INFRASTRUCTURE	ISSUES	OUTCOMES	ACTIONS	TIME- FRAME		
2C: SHEEP STATION CREEK TO NELLIGEN TRAFFIC BRIDGE							
This is a small section of river that includes the township of Nelligen which is accessible by ferry. Activities include houseboating, fishing and canoeing/kayaking.	<ul> <li>East Bridge Ramp</li> <li>West Bridge Ramp</li> <li>Public Wharf</li> <li>No Waterskiing or aquaplaning from Nelligen Bridge downstream towards Razorback Rock.</li> </ul>	<ul> <li>A number of stakeholders have expressed concern over safety issues relating to pwc and other vessels around the Nelligen traffic bridge.</li> </ul>	Reduced risk of accidents / incidents in and around the Nelligen traffic bridge.	NSW Maritime will continue to enforce existing speed and distance-off regulations for boaters traversing under traffic bridges. Install " <i>Slow Down Under Bridge</i> " signage. Monitor and enforce compliance to existing pwc irregular driving regulations and increase education.	Ongoing Short Term Ongoing		
		<ul> <li>Stakeholders suggested the installation of a pontoon along the existing brick wall adjacent to the public wharf at Nelligen as it would be particularly beneficial for disabled access.</li> </ul>	Improved river access.	Liaise with Eurobodalla Shire Council to investigate the installation of a pontoon along the existing brick wall adjacent to the Nelligen Wharf. Offer assistance in preparing a submission for Maritime Infrastructure Project grant funding.	Short Term		
		<ul> <li>Environmental issues include:</li> <li>Noise emanating from houseboats at night, especially loud music.</li> </ul>	Noise reduction	NSW Maritime will liaise with houseboat owners to encourage users to be aware of urban areas when anchoring for the night.	Short Term		
		<ul> <li>Erosion issues relating to wakeboarding activities.</li> </ul>	Reduction in the risk of bank erosion.	NSW maritime will initiate a series of education campaigns aimed at creating an awareness of the potential effect of vessel wakes on susceptible river banks.	Ongoing		



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# AREA 3 - NELLIGEN BRIDGE TO OLD WHARF RUINS

### **General Description**

This area covers the section of river from the Nelligen Traffic Bridge to the extent of the navigation limit at the old wharf ruins downstream approximately 1km upstream of Cockwhy Creek. Included in this area are Nelligen, Cyne Mallowes and Currowan Creeks.

### **Area Features**

This is a beautiful section of the river and is very popular for visitors engaged in a variety of activities.

There are 4 private moorings (PMLs) and 2 commercial moorings (CMLs) in this area.

### **Boat Ramps**

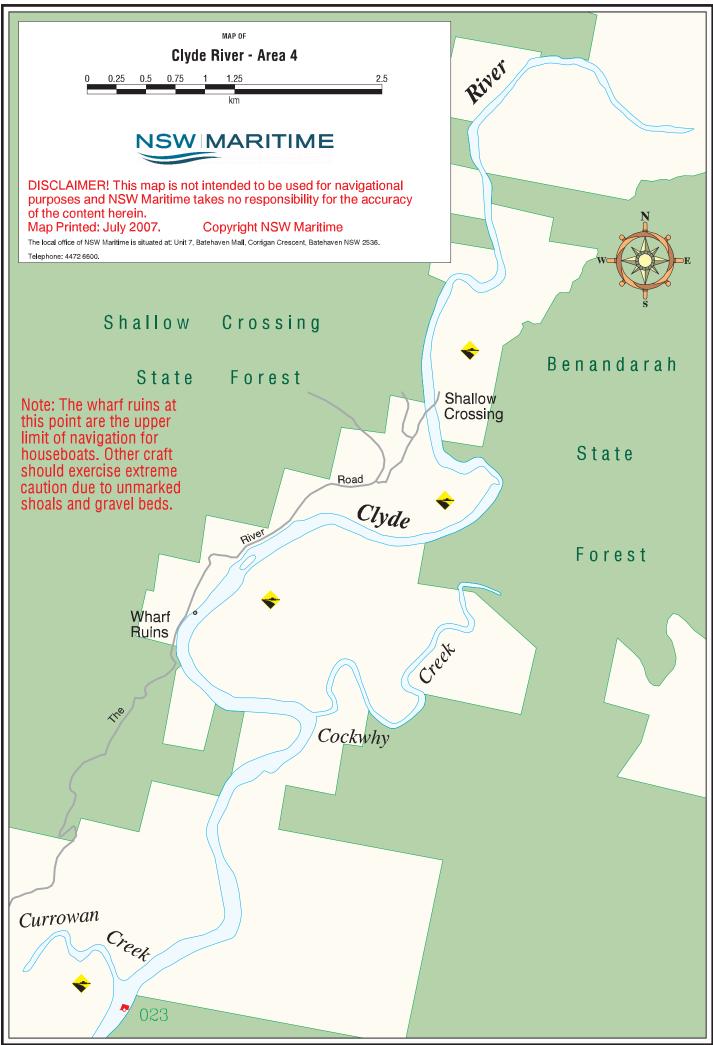
Nelligen Caravan Park Ramp (Private)

# **Special Events**

Fishing Competitions



ACTIVITIES	INFRASTRUCTURE	ISSUES	OUTCOMES	ACTIONS	TIME- FRAME	
3A: NELLIGEN BRIDGE TO OLD WHARF RUINS						
The lower end of this section is popular for water-based activities, particularly around the Nelligen Caravan Park. Upper Clyde activities include waterskiing, wakeboarding, cruising, fishing and passive activities such as swimming, canoeing and	Nelligen Caravan Park (Private Ramp)	<ul> <li>Navigational issues include:</li> <li>Safety concerns relating to pwc and other vessels around the Nelligen traffic bridge.</li> </ul>	Reduced risk of accidents / incidents in and around the Nelligen traffic bridge.	For strategies relating to safe navigation under the traffic bridges see previous section 4.1 above.		
kayaking.		<ul> <li>Potential user conflict between power boats, skiing, wakeboarding, pwc, canoeing, fishing and swimming activities, especially in the area adjacent to Nelligen Caravan Park.</li> </ul>	Maintain high level of safe boating.	<ul> <li>The small numbers of complaints and accidents/incidents recorded in this area indicate satisfactory user behaviour. However, in an effort to provide for passive activities, NSW Maritime will:</li> <li>Make Nelligen Creek a maximum 4 knot speed zone.</li> <li>Deploy appropriate signage and</li> </ul>	Ongoing	
		<ul> <li>Need for signage at the "Old Wharf Ruins" approx 1km upstream of Cockwhy Creek warning of shallow water.</li> </ul>	Safe boating	Installation of an aquamark place in the middle of the channel announcing the end of navigable limit, shallow water, and to proceed with caution.	Ongoing	
		<ul> <li>Environmental issues include:</li> <li>Protection of habitat areas: <ul> <li>Cyne Mallowes Creek,</li> <li>Currowan Creek, and</li> <li>Cockwhy Creek.</li> </ul> </li> </ul>	Habitat protection	Create 4 knot speed restrictions in each of these creeks. Place an aquamark at the entrances denoting "4 Knot Speed Restriction / Hazard to Navigation".	Ongoing	



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# AREA 4 -OLD WHARF RUINS TO SHALLOW CROSSING

#### **General Description**

This area covers the section of river from the extent of the navigation limit at the old wharf ruins approximately 1km upstream of Cockwhy Creek TO Shallow Crossing.

### **Area Features**

This is a beautiful section yet shallow section of the river and is very popular for visitors engaged in camping and passive activities such as canoeing, kayaking, fishing and swimming.

There are no moorings in this area.

#### **Boat Ramps**

Nil

## **Special Events**

**Fishing Competitions** 



ACTIVITIES	INFRASTRUCTURE	ISSUES	OUTCOMES	ACTIONS TIME FRAM
4A: OLD WHARF RUINS	TO SHALLOW CROSSING	6		
This is a shallow stretch of river with limited navigable water. The river is bisected at Shallow Crossing by a concrete floodway which is generally passable only at times of flood. Vessels have to picked up and carried across the floodway if they wish to be used further upstream. It is a popular area for visitors undertaking activities such as swimming, canoeing, kayaking and bass fishing.				Due to its shallow nature and the presence of the concrete floodway, this area is generally accessible only by smaller craft. Stakeholder requests for formal boating restrictions are noted but not considered necessary at this time.