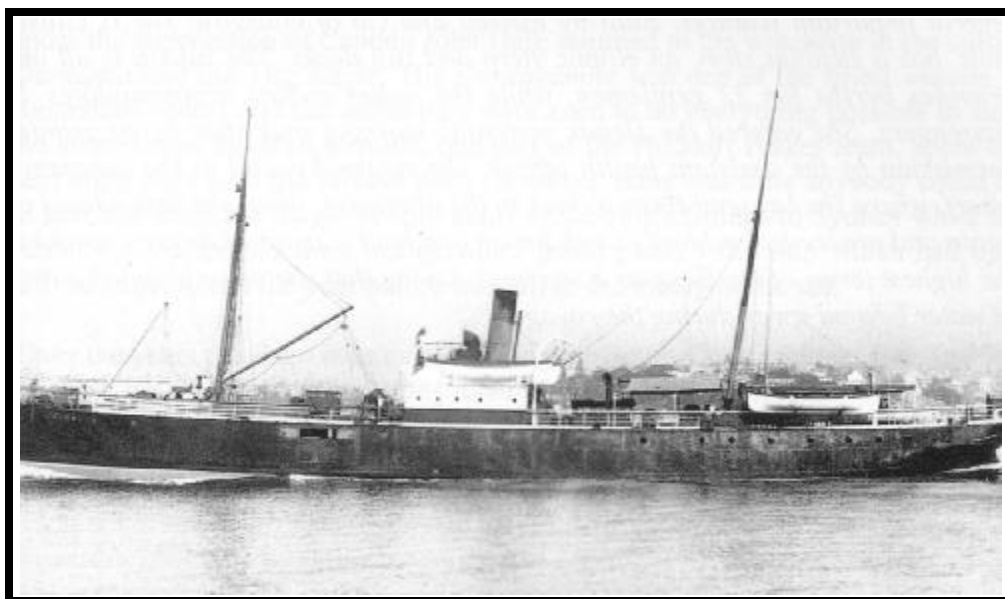


# Steamer *Bega*

(1883 - 1908)

## CONSERVATION PLAN



### NSW Heritage Office

Maritime Heritage Program

PARRAMATTA 2005



Report produced with the assistance of the  
Commonwealth Department of Environment and  
Heritage, Canberra.



Australian Government

Department of the Environment and Heritage

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Cover: *Bega in Port Jackson. Courtesy: Mitchell Library, State Library of New South Wales (no. 5004).*

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# 1 INTRODUCTION

This report forms an initial conservation management assessment of a shipwreck located offshore between Bermagui and Tathra, on the NSW far south coast in 2004. The Heritage Office was officially notified of the wreck in October 2004 by Mr Fred Billington and Mr David Prior, of Bermagui. They identified the site as the Illawarra and South Coast Steam Navigation Co. Ltd steamship, *Bega*, which foundered in 1908 with the loss of one life. This followed their independent query of fishing foul grounds in the region, based on results provided by the local fishing operators of Bermagui. The site was imaged by the men through the deployment of a “drop” video camera at this time.

*The Sydney Project* recreational dive team initiated the diving inspection of the *Bega* wreck site in October, 25, 2004, having been planning a diving expedition to the area to also examine various potential wreck locations, including *Bega* and *William Dawes*. All survey operations were coordinated and funded by the team members. The NSW Heritage Office assisted the notifiers and *The Sydney Project* team’s interpretation of the observed Historic Shipwreck site, through the provision of historical research reference materials. However due to the depth of the site, beyond established recreational and commercial diving limits, the Heritage Office was not involved in any aspect of the diving activities or tasking of personnel.

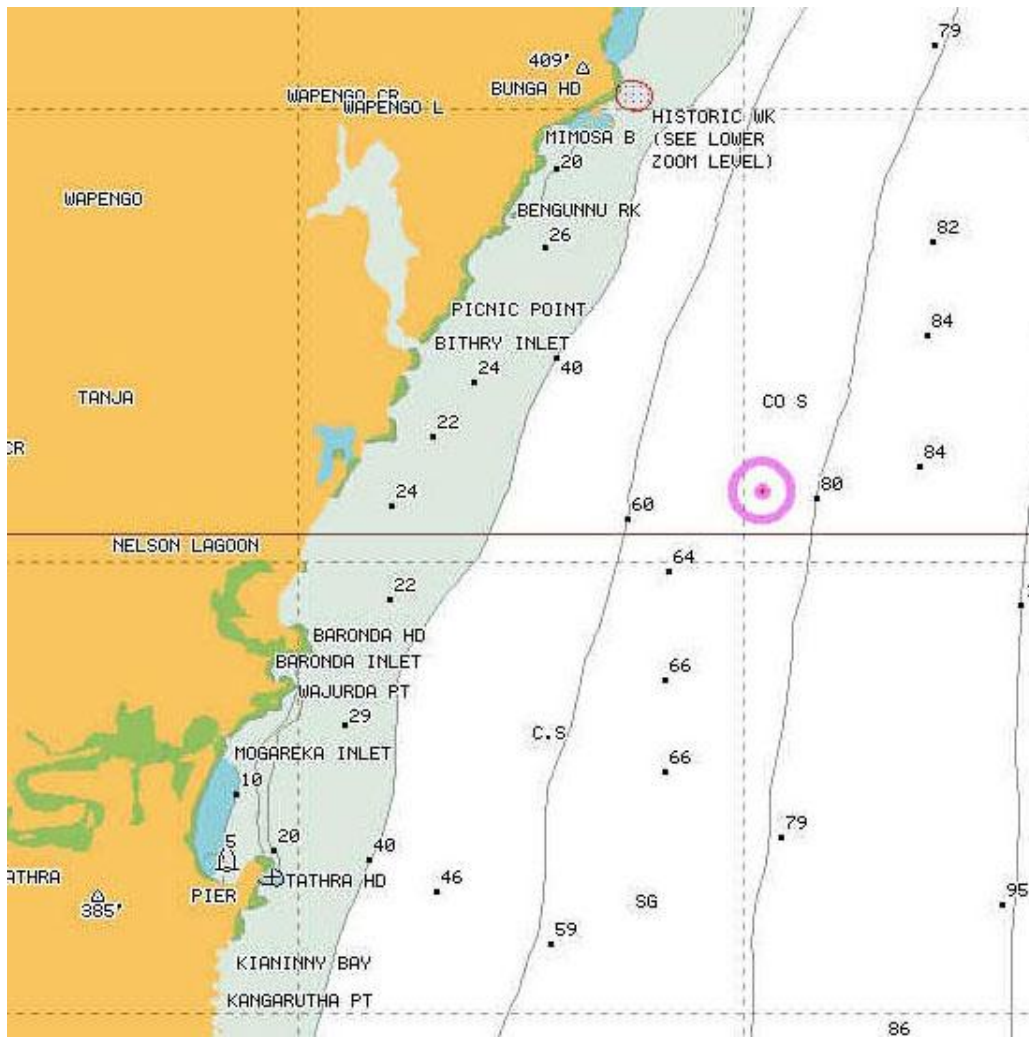
The *Sydney Project* diving operations confirmed the wreck as that of the *Bega* and validated Mr Billington’s and Prior’s assessment.

This Conservation Plan can be considered to be work in progress with historic research and continued archaeological inspection of this complex and deep wreck. The evaluation of site significance is partly dependent on research of related sites throughout Australia. As such, the findings presented here are preliminary in nature.

The independent *Sydney Project* survey work had a number of general objectives:

- Confirmation of the identification of the site as *Bega* as notified.
- initial inspection of the wreck site
- initial photographic recording of the principle features of the wreck
- continuation of historic research
- provided a unique recreational diving focus for the independent *Sydney Project*

This report utilises information kindly provided by *The Sydney Project* through ongoing diving inspection, together with the experiences of other divers visiting the site through the Dive Permits issued under the Commonwealth *Historic Shipwreck Act, 1976*



**Figure 1:** Location map -The *Bega* wreck site (shown as purple circle) and environs. Courtesy: Department of Commerce.

## 2 OBJECTIVES

The objective of this Conservation Plan is to;

- document the site discovery and inspection process
- assess the significance of the wreck
- assess the visual extent of the site
- assess threats to the site, and
- present measures for the effective management and advancement of the archaeological remains

These objectives have been achieved through;

1. The Sydney Project's investigation of the newly reported shipwreck near Tathra (notified on 13 October, 2004);
2. The recording of an accurate position for the wreck site;

3. The confirmation of the vessel's identity;
4. The completion of preliminary independent dives at the site;
5. The initiation of a graphic representation of the remains
6. The commencement of a NSW Heritage Office archaeological assessment of the wreck site;
7. An assessment of the threats to the integrity of the site;
8. The utilisation of the results of these site surveys in the development of management options for the archaeological site;
9. The implementation of site protection measures under the *Historic Shipwrecks Act, 1976*;
10. Liaison with Bega Valley Shire Council and media.
11. The implementation of agreed management options
12. Public promotion of the site's heritage and other values through media and appropriate opportunities.

### **3 METHODOLOGY**

Background histories of the range of potential shipwrecks in the NSW South Coast were compiled by the NSW Heritage Office prior to the initial site inspection. This documentation provided information on the general history of each vessel lost in the area, including aspects of construction and details of wreck event. Research into the history of the *Bega* has continued through British and Australian archives and this work is ongoing.

An accurate position was obtained for the wreck site using hand held GPS unit by the site notification and succeeding dive teams. The major features of the site have been identified through on-site underwater digital photography. A video record of the site also exists, commencing from the time of the discovery of the site and continues to be augmented.

### **4 LOCATION**

The site is located 6.2 nautical miles north east of Tathra Head. Tathra is approximately 6 hours drive south of Sydney. Diving operations at the site have been conducted from the Harbour of Bermagui, slightly to the north of the wreck.

## 5 CONSTRAINTS

### 5.1 Weather and sea conditions

The *Bega* lies in open water some six nautical miles off the southeast coast of Tathra Head, New South Wales. The area is frequently exposed to heavy seas and strong, often severe, currents with a long fetch. Strong southerly current up to several knots can also impact on the site.

### 5.2 Diving Operations

The *Bega* lies in a maximum depth of 76 metres of water. At this depth the site is beyond established recreational and commercial diving limits. Consequently the Heritage Office was not involved in any aspect of the diving activities or tasking of personnel. *The Sydney Project* team however liaised fully with Mr Tim Smith of the Heritage Office during the coordination of the survey operation. This followed initial briefings and team meetings held with the Heritage Office and detailed pre-dive planning sessions.

### 5.3 Non-disturbance archaeological survey

Survey operations of the newly reported wreck site were undertaken by *The Sydney Project*, as a standard 'non-disturbance' archaeological exercise. Only exposed and therefore visible portions of the wreck site were recorded. At no stage was the overburden of protective sand removed from any portion of the site. The depth and complexity of buried portions of the wreck was not explored.

This approach avoided direct disturbance of archaeological materials which could lead to accelerated deterioration of items. The site retains significance related to the fit out and use of the vessel from their original context. A survey that involved recovery of artefacts would require approval of an archaeological permit under the Commonwealth *Historic Shipwreck Act, 1976*. It would also require a tight network of control points to measure and track shipwreck and artefact associations, substantial conservation and laboratory support, archaeological supervision, and provision of ongoing storage, identification, research and display. This would involve a highly sophisticated and costly archaeological project which cannot currently be supported.

The 'non-disturbance' approach used by *The Sydney Project* in consultation with the Heritage Office, has advanced the protection of the site while allowing quite complex evaluations to be made. In the event that site conditions do change and new parts of the site are exposed, an extension of survey operations can be undertaken.

The non-disturbance archaeological survey confirmed the wreck to be the *Bega*. Initially indicated by the size and structure of the wreck and location, the archaeological survey produced more conclusive confirmation of the ships identity.

With short bottom times (<30 min for open circuit divers) accurate recording of the wreck size, layout etc was not possible. Many dives will be required to cover the entire extent of the wreck. It is envisaged that *The Sydney Project* will coordinate the bulk of future diving operations on the *Bega* wreck. This will be undertaken in liaison with the Heritage Office who will continue to provide advice on a "best practice" approaches in the interaction with the site and guide future non-disturbance

archaeological surveying of the wreck. Recent inspections by divers using closed circuit “rebreathers” units has enabled longer bottom times of up to 50 minutes. This had enabled more extensive visual surveys of the structure and associated relics to be made.

## **6 HISTORICAL CONTEXT**

The following historical background was prepared by the NSW Heritage Office for an Information Sheet titled ‘Bega Shipwreck 1908’. That information is accessible via the internet through the Heritage Office’s *Maritime Heritage Online* web site <http://maritime.heritage.nsw.gov.au>. Historical sources used in the information sheet have been included in the Bibliography.

### **6.1 Introduction**

The nineteenth century was dominated by the shipping movements of coastal and interstate steamers. Local communities depended upon the regular passage of these vessels for transport, transshipment of supplies, goods and mail. Several shipping companies dominated the trade but along the south coast the Illawarra and South Coast Steam Navigation Company dominated the trading route.

### **6.2 History of the Illawarra and South Coast Steam Navigation Company.**

With the establishment of the Illawarra Steam Packet Company in c. June 1839 a regular steamship service from Sydney commenced along the south coast. Although the *Sophia Jane* had been running trips to Wollongong, the establishment of the Illawarra Company saw a more regular service. The company soon after merged with the Brisbane Water Steam Passenger Co. forming the new General Steam Navigation Company in c. August 1839. The company’s initial fleet consisted of two wooden paddle steamers, the *Maitland* and *William IV*. They serviced the south coast from Sydney to Wollongong and the inland Hunter Valley trading route to Morpeth (Parson 1991).

One of the share holders of the founding company was the enigmatic Edey Manning. Manning was to become a major player in the south coast trading route, all but monopolising the industry until its eventual demise by World War 2 (Evans 2004:98).

The developing coastal industry faced many problems, the lack of harbour facilities providing one major limitation. Wollongong for example did not have a wharf until 1844. Until then large steamers anchored in the bay with rowing boats transporting cargo to and from the ship. Other harbours had mooring lines, such as Kiama by 1847, but these were only of use to vessels less than 300tons and often hazardous.

By the late 1840s the General Steam Navigation Company continued to expand its southern trade route with varying degrees of success. Services to Jervis Bay and Kiama were attempted but soon abandoned. Poor infrastructure, both on land and within the harbours, hampered the reliable transportation of goods. Nonetheless in the 1850s the *Illawarra* was added to the company fleet, purposely built for the Wollongong route (Parson 1991).

In 1854 dissatisfied with the service to the area further south of Wollongong, residents of Kiama and Shoalhaven formed the Kiama Steam Navigation Company and the Shoalhaven Steam Navigation Company, respectively. The former ran the *Kiama* and the latter the *Nora Creina*. Interestingly Edye Manning was also a trustee on the Shoalhaven Steam Navigation Company which ran in competition to his other business interest, the General Steam Navigation Company (Evans 2004:96).

With three liners now servicing the coast, competition intensified, ultimately to their own demise. In 1855 it was arranged to leave the Wollongong, Kiama and Shoalhaven trade to the *Illawarra*, *Kiama* and *Nora Creina*, respectively.

However, soon after the three companies combined forming the Illawarra Steam Navigation Company, again under the management of Edye Manning. This was sanctioned by an Act of Parliament in 1858 (Evans 2004:96). The initial fleet comprised the *Nora Creina*, *Illawarra* (1<sup>st</sup>), *Kiama*, *William IV* and the river steamer *Nowra*. The *Mimosa* was purchased soon after with many other ships to follow. The company expanded and soon serviced every port from Sydney to the Victorian border. It earned the title the “Pig and Whistle Run”, from its main cargo and the signal the ship made on their departure from port.

The Illawarra Steam Navigation Company again restructured in 1904 becoming the Illawarra and South Coast Steam Navigation Company. It continued to act as a life-line for the Illawarra region and south coast for many years. The vessels were familiar names to many households and the steamer *Bega* was one such vessel.

### **6.3 *Bega* - A Brief History.**

The *Bega* plied the regular south coast shipping lanes linking communities like Eden, Merimbula, Tathra and Bermagui to Sydney. It was operated by the Illawarra and South Coast Steam Navigation Company. A reliable vessel, the loss of *Bega* in 1908 came at a time when maritime travel was considered relatively safe with improved technologies and better navigational aids.

*Bega* was an iron twin screw steamer powered by a compound 98hp engine. The 567 ton, 57.7metre long vessel was built in Greenock, Scotland in 1883 by Russell and Co. With official number 83765, the vessel was reputedly the largest steamer on the south coast run at that time of its loss (Richards 1997:42).

The *Bega* arrived in Australia after a voyage around Cape Town, South Africa. The new *Bega* was fitted with a unique engine arrangement, as were the company's steamers *Allowrie* and *Kameruka*. This technique was known as “Rankin's Wonders”. A two-cylinder disconnecting compound engine drove the twin propeller shafts by using a high pressure cylinder to work the starboard propeller and a low pressure cylinder, the port. The technique increased operating efficiency, although required a flywheel to assist starting the engine. Each engine (cylinder) had its own reversing gear and either could be run independently of the other.

### **6.4 Wreck Event**

*Bega* departed the town wharf at Tathra on 5 April 1908 for Sydney after a voyage up the coast from Eden and Merimbula. Cargo had been loaded, including over 2000 cheeses, butter, racehorses, prized livestock for the Royal Easter Show, 176

pigs, furniture, wool and a special consignment of £2000 in gold coinage (561 ounces in weight) for the Sydney Branch of the Commonwealth Bank.

The 25 year-old *Bega* was under command of Captain Bishop, when it departed Tathra about 7.00 p.m. A list to port was noted. Before long the captain became alarmed at the increasing list and checked the ballast tanks. Concern grew when it was suspected that the cargo may have shifted. *Bega* was slowed and turned so that the wind and swell were against the lower side. Many of the 176 pigs were transferred to the high side in an attempt to stabilise the lean.

With the transfer of pigs, however, the vessel suddenly heeled over to that side and the bow settled noticeably lower. It appeared that water had now entered the hull. *Bega* was turned around in the direction of Tathra in an attempt to reach port and safety. Water was now steadily entering below deck spaces. Bishop ordered all of the pigs overboard – a significant sacrifice - but to no avail.

The passengers were ordered onto the deck, which was now cantered over at 45 degrees. Everyone fought to keep on his or her feet by clinging to anything within reach. *Bega* had now been turned around again in a northerly direction. Captain Bishop ordered the engine shut down and everyone to “*Abandon ship!*”. All got into the lifeboats, while blue distress flares were burnt on deck – the distress rockets could not be located! After some delay, lifebelts were found for all.

At this time, an elderly passenger named David Clarke suffered a heart attack and died at the rail, amidst the confusion. It was now 10.30 p.m. and two of *Bega*'s boats and two small rafts were launched. The survivors struggled in the dark with the body of Clarke. *Bega* was seen afloat for only another twenty minutes after abandoning ship. The bow had settled low in the water and the stern rose high in the air. As the *Bega* slid beneath the waves, the final lights went out. The survivors tried to keep the boats and rafts together and make the shore. This became impossible and they separated in the night.

The main lifeboats reached Cuttagee Beach the next morning, twelve hours after the *Bega* sank. The two rafts with the captain made shore at Wallacoot, south of Tathra later in the morning. Chief Engineer, Mr McCubbin, recalled the strangeness of the scene when a passenger, Mr Levy, handed around salvaged cigars. Squatting closely together on and around the body of Mr Clarke and up to their waists in water, “*we looked to be quite a comfortable party as we sat there on the rafts smoking cigars!*”. Exhausted and wet, all 61 were eventually safely landed.

A Court of Marine Enquiry was later held and could not determine a cause for the loss. Arguments were raised about the packing of cargo, sabotage with a theory of opened sea-cocks, the placement of a new refrigerator system on deck, the opening up of hull plating, or overloading of cargo.

*Bega* had earlier itself participated in the transport of survivors from the wrecked steamer *Corangamite* at Wreck Bay in 1886.

## **7 DISCOVERY**

The site of the *Bega* wreck was the subject of years of searching by two Bermagui men, retired sub-sea engineer Fred Billington and charter boat operator, David

Prior<sup>1</sup>. The men thought they had found the site in May 2004, when they passed over it with a magnetometer<sup>2</sup>. They verified their find in September 2004 when using a homemade drop video camera recorded the remains of an iron steamship. The NSW Heritage Office received notification of the discovery of the wreck by Fred Billington and David Prior in September, 2004.

The NSW Heritage Office subsequently convened a special meeting with the ship wreck notifier's (Fred Billington and David Prior). Held in Sydney on October 13, 2004 the meeting was also attended by the Commonwealth Historic Shipwreck Officer from the Department of Environment and Heritage (DEH), the NSW Water Police and the recreational diver group, *The Sydney Project*. All parties were briefed on the wreck discovery and management issues.

The general consensus of the meeting was that *The Sydney Project* was best placed to undertake their independent diving operations to confirm the identity and condition of the site. It was envisaged that this would assist the NSW Heritage Office and DEH in determining a considered management approach for the *Bega*. Due to the risk implications of inspecting such deep wrecks, the Heritage Office could not become involved in any dive planning or tasking, for liability reasons.

In addition it was decided that DEH should advise the Federal Minister on the proposed development of a Protection Zone around the site. This was subsequently declared and gazetted in November 2004 (See Section 6 for further details).

## 8 CURRENT FIELDWORK RESULTS

The following interpretation on the integrity and description of the site is derived from photographs posted on the *Sydney Projects* website<sup>3</sup> and made available to the Heritage Office.

The *Sydney Project* team dived the wreck on two occasions, October 26, 2004 and April 26 2005. Report on the two site inspections is available on the *Sydney Project* website. Since these initial explanatory dives, the *Sydney Project*, have visited the wreck on 10 occasions. Other valuable photographic documentation work has been undertaken by Max Glesson, while the site has been through 5 approved visitation permits.

### 8.1 Location

The site is located at:

Latitude: 36° 39' 222" S; Longitude: 150° 05' 207" N<sup>4</sup> (WGS 84).

### 8.2 Wreck Site Integrity

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<sup>1</sup> Senator the Hon Ian Campbell, media release, *Shipwrecks discovered off NSW Coast*, 6<sup>th</sup> November 2004, C108/04, in NSW Heritage Office file H0400317 Part 1.

<sup>2</sup> Underwater Cultural Heritage reporting form A478112 and HRL 31373 in NSW Heritage Office file H0400317 Part 1.

<sup>3</sup> <http://www.sydneyproject.com/>

<sup>4</sup> *Opp. Cit.* Underwater Cultural Heritage reporting form

The *Bega* is remarkably intact, resting upright on the seabed with a slight list to port. The hull is preserved up to main deck level, the deck itself along with the vessel superstructure having mostly collapsed into the interior of the hull.

The wreck has been impacted by fishing nets most noticeably at the bow and stern, however the presence of small portable artefacts such as portholes suggests that the site had not been impacted by divers.



**Figure 2:** *Bega* resting on seabed. Mid-fore ship, swimming towards bow. Deck winch visible. (Mark Spencer 2004).

Following the official notification of the site in 2004, the Heritage Office has been aware of unsubstantiated claims that the site had been previously discovered and dived. No supporting information has been identified, and any earlier discovery, if not reported, would constitute a breach of the requirements of the *Historic Shipwrecks Act, 1976*.



**Figure 3:** Bow of the *Bega*; between bulkhead and stempost. Snagged fishing net can be seen on the starboard side. (Mark Spencer 2004)

### 8.3 Wreck Site Description

The wreck of the *Bega* rests on a hard shale bottom in an approximately east-west direction with the maximum height of the wreck projecting 3m above the seabed<sup>5</sup>. The average water depth is 74 m with a maximum depth recorded at 77 m<sup>6</sup>.



**Figure 4:** Backlit porthole amidship, behind the boiler (Mark Spencer 2005)

The highest point of the wreck appears to be the stern, which is largely intact and has witnessed contact by fishing nets.



**Figure 5:** Stern post of the *Bega* showing snagged fishing net (Mark Spencer 2004)

<sup>5</sup> *Opp. Cit.* Underwater Cultural Heritage reporting form

<sup>6</sup> <http://www.sydneyproject.com/wrecks/wrecks.asp?did=13>



One of the twin screw propeller blades and shaft, on the starboard side, is exposed. The blade shows signs of damage however it cannot be determined at present whether this has occurred during the wrecking process or the subsequent period on the seafloor.

**Figure 6:** A blade of the Starboard propeller and shaft of the *Bega*. (Dave Apperley 2004)

Evidence that the deck and superstructure has collapsed is indicated by the clear visibility of the engine and boiler. The engine, a compound type, appears to be in its original position. However, the boiler appears to have rolled up against the hull. The vessel's funnel lay outside and alongside the hull on the ??? side, an usually ??? feature. THIS DESCRIPTION TO BE DOUBLE CHECKED



**Figure 7:** View towards the stern of the *Bega* enshrouded in fish. A toilet bowl or possible wash basin is visible on the port side. (Mark Spencer 2004)



**Figure 8:** View of the imposing engine of the *Bega* from astern. Remains of the decking, superstructure as well as piping associated with the engine and boiler visible (Mark Spencer 2005)



**Figure 9:** View of the *Bega*'s Scotch boiler. (Mark Spencer 2004)



**Figure 10:** Port side of the boiler, copper? piping appears to be resting on the gunnels. Remains of the funnel visible under the school of fish (Mark Spencer 2004)



**Figure 11:** The *Bega's* funnel rests on the seabed immediately alongside the port hull. (Samir Alhafith 2004)



**Figure 12:** Funnel of the *Bega* resting on the seabed. (Mark Spencer 2004)

Forward of the engine the main deck appears relatively well intact and has only collapsed a short distance. Perhaps it is resting on the second deck. The forward deck winch appears to be *in situ* though it may be that it has broken off its mounts and has slid down to the port side (see Figure 2). The bow section appears to have fallen away from the forward bulkhead.



**Figure 13:** Mid bow region of the *Bega*, forward of winch, looking forward (Mark Spencer 2004)



**Figure 14:** View of bow, of the *Bega*. (Mark Spencer 2004)

In addition to the structural components of the main wreck, there are a large variety of small artefacts strewn across the site. These artefacts can be separated into three distinct groups;

- ships fittings and machinery components,
- the vessel's crockery and other items;
- and cargo.

The majority of artefacts are located within the confines of the hull. Other relics have been observed scattered outside of the main hull, but await further recording. The following figures represent an initial inventory of the artefacts photographed during the initial inspections.



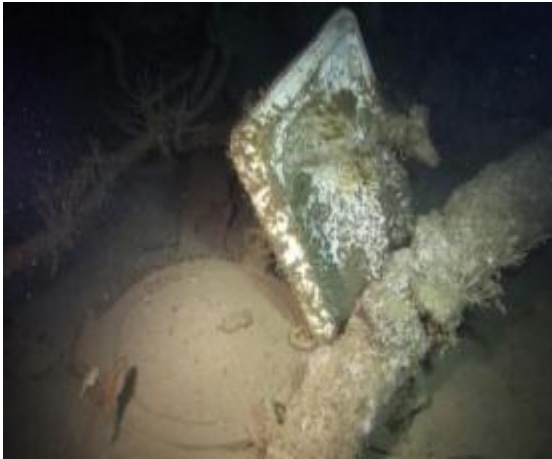
**Figure 15:** Tea cup on the Bega. (Samir Alhafith 2004)



**Figure 16:** Animal bones found in the forward hold on the *Bega* probably from livestock lost with wreck. (Samir Alhafith 2005)



**Figure 17:** Unknown porcelain object on the *Bega*. Identified as a 'toilet bowl' or the feature might also represent a wash basin perhaps from the saloon accommodation ( David Appleby 2004)



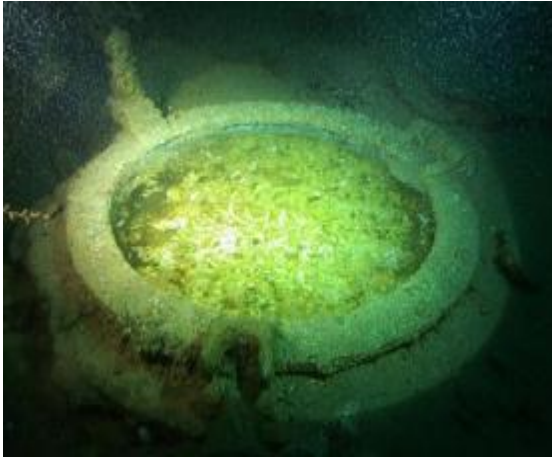
**Figure 18:** A porthole below and sink above, with taps still attached (Samir Alhafith 2004)



**Figure 19:** Glass bottle on the *Bega* (Sydney Project 2004)



**Figure 20:** Protective light cover on the *Bega* (Samir Alhafith 2004).



**Figure 21:** Representative porthole on the *Bega* (Samir Alhafith 2004)



**Figure 22:** A gauge on the engine with glass still intact. (Samir Alhafith 2004)



**Figure 23:** An 'oiler' on the *Bega* engine. (Samir Alhafith 2004)



**Figure 24:** White enamel tea pot found on the starboard side (Samir Alhafith 2005)



**Figure 25:** “Large amount of bottles found under the hull, near the stern. Bottles of every shape and size” (Samir Alhafith 2005)

## 9 SITE IDENTIFICATION

### 9.1 Further Research

It can be stated with some certainty that the site is that of the *Bega*. The wreck has two sets of propellers<sup>7</sup>, was powered by a compound steam engine and crockery from the wreck was found bearing the name “Illawarra and South Coast S. N. Co. L[t]d”.



Interestingly another ceramic photographed had the inscription “Illawarra Steam Navigation Co L[t]d Sydney”, the former name of the owning company, prior to its 1904 restructure.

**Figure 26:** A plate on the *Bega* bearing the Illawarra and South Coast S.N. Co. L[t]d logo (ISCSNC) (Samir Alhafith 2004)

**Figure 27:** A plate on the *Bega* bearing the Illawarra Steam Navigation Co. L[t]d logo (ISNC) (Samir Alhafith 2004)



<sup>7</sup> <http://www.sydneyproject.com/projects/view-project.asp?pid=5&pp=1>

To further confirm whether the site located by Fred Billington and David Prior is that of the *Bega*, a search of the NSW Shipwrecks database was conducted. The search focused on vessels of similar construction and propulsion lost in the vicinity. As all unlocated wrecks listed in the database do not have indicative positions presented (latitude and longitude), the search had to be carried out in the following way:

A research of the iron screw steamships wrecked on the NSW South coast identified the following vessels:

**Table 1: List of iron hulled steamships known to have been lost between Green Cape and Montague Island.**

Name	Engine	Number of screws	Date lost	Location	Found
<i>Iron Knight</i>	Quadruple expansion 553 nhp	1 or 2?	8/02/1943	Montague Island, 30 kms from	No
<i>Kedumba</i>	Triple expansion	1 or 2?	1932/12/21	Montague Island, 25 miles NW	No
<i>Robert J. Walker</i>	Triple expansion	1	1944/12/26	Bermagui, east of	No
<i>Wear</i>	Unknown	?	8/09/1944	Montague Island, 15 kms off	No
<i>Charlie Cam</i>	Triple expansion	1?	22/06/1932	Bunga Hd, Mimosa Bay, 10 mls nth of Tathra	Yes
<i>John Penn</i>	Compound 'Horizontal' direct acting cylinders, 2 pairs	2	1879/11/08	Broulee Bay, Southern side	Yes
<i>Lady Darling</i>	Simple inverted	1	1880/11	Montague Island, ~ 4 mls SW of, in 15 fathoms	Yes
<i>William Dawes</i>	Triple expansion, 339 nhp	1	1942/07/22	Tathra Head off	Yes

Of the known wrecks shown in Table 1 only one is known to have had twin screws, the *John Penn*. This site however has been identified and therefore is removed from the list of possibilities.

Of the other sites which have not been identified all but the *Wear* had triple or quadruple expansions engines. The site inspected by the *Sydney Project* appears to have had a smaller compound engine. These vessels were lost off Montague Island or east of Bermagui, the closest by 15 nautical miles north of the subject wreck site.

A search of vessels owned by the ISCN or its later ISCSNC reveals the following losses in NSW:

**Table 2: Illawarra and South Coast Steam Navigation Company wrecks in NSW**

<b>Name</b>	<b>Date lost</b>	<b>Location</b>	<b>Found</b>
<i>Benandra</i> <sup>8</sup>	1924/03/25	Moruya Heads, sandspit near the bar	No
<i>Duroby</i>	1923 (after)	Port Stephens, Duckhole (abandoned)	No
<i>Merimbula</i>	27/03/1928	Jervis Bay, Beecroft Head	Yes
<i>Mynora</i>	1864/04/06	Wreck Bay, Steamers Beach, ashore	No
<i>Vision</i>	1911/01/13	Bermagui, near, at Montreal Beach	No

The only vessel other than *Bega* owned by the Illawarra and South Coast Steam Navigation Company wrecked in the proximity of the subject site is the *Vision*. However, that event occurred some 15 nautical miles to the north of the site inspected by the *Sydney Project*. Furthermore although the *Vision* had a compound engine it's hull was made of timber and is therefore discounted.

Based on this review of both historic sources and site inspections, it would appear that the wreck notified by Fred Billington and David Prior is that of the *Bega*. The site's location corresponds to historical accounts of the loss and its propulsion and fit out reflects marine design of the latter 19<sup>th</sup> century (*Bega* was built in 1883). An overall measurement of the length of the hull has not yet been undertaken, but is expected to be within the 60 meters overall length of the *Bega*.

## **9.2 Comparative Sites**

The following discussion focuses on comparative wreck sites to *Bega* in Australia. It is limited to information obtained from the public versions of the NSW and National Shipwreck databases as they appear on the internet.

The analysis of comparative sites to the *Bega* focuses on:

1. *Twin screw steamers lost in NSW and nationally*
2. *Illawarra and South Coast Steam Navigation Company wrecks lost nationally.*

### **9.2.1 Twin screw steamers lost in NSW**

In the *Advanced Shipwreck Search* page of the NSW Shipwreck Database there is no field specific to propulsion. The field for 'engine' only relates to engine types, such as 'trunk', 'compound' etc and does not consistently specify the number of propellers a vessel had. The only search options were:

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<sup>8</sup> This vessel was noticed during the search for "twin screw" vessels (see Comparative Sites). The phrase "Illawarra & Sth Coast Steam Navigation Co. Pty Ltd" was in the comments field for this particular wreck. A search on the *Simple Site* and *Advanced Shipwreck Search* using this phrase did not bring up the *Benandra* or any other wreck.

Simple Site Search for “Twin screw”  
 Advanced Shipwreck Search in Comments field for “Twin screw”

**Table 3: Twin screw steamers lost in NSW**

<b>Name</b>	<b>Date lost</b>	<b>Location</b>	<b>Found</b>	<b>Inspected</b>
<i>Allenwood</i>	1951/09/14	Birdie Bch, 8km north from Norah Head	Yes	No
<i>Barcoo</i>	1991/04/09	Sydney, off	No	No
<i>Belbowrie</i>	1939/01/16	Sydney, Maroubra, Mistral Point	Yes	No
<i>Benandra</i>	1924/03/25	Moruya Heads, sandspit near the bar	No	No
<i>Bodalla</i>	1924/01/19	Narooma, entrance to Wagonga Inlet	Yes	Unknown
<i>Coraki</i>	1900/11/29	Trial Bay, Macleay R, new entrance, nth wall, 40 yds inside	Yes	Unknown
<i>Cumberland</i>	1917/08/11	Green Cape, 5 mls SE	Yes	No
<i>Ellerslie</i>	1913/05/22	Bellinger River, across end of south wall	No	No
<i>Florence Irving</i>	1877/12/04	Port Stephens, outer light	Yes	No
<i>John Penn</i>	1879/11/08	Broulee Bay, Southern side	Yes	Yes
<i>Maggie Johnson</i>	1902/06/26	Lake Macquarie, Young Wallsend, Cockle Ck	No	No
<i>Maianbar</i>	1940/05/05	Newcastle, Nobby's Beach	Yes	No
<i>Meggol</i>	1976/12/09	Sydney, Fish Reef, Dee Why	Yes	No
<i>Nerong</i>	1917/09/19	Norah Head, 2km offshore	Yes	No
<i>Our Jack</i>	1921/06/26	Cape Hawke off	No	No
<i>Psyche</i>	1940	Port Stephens, Salamander Bay	Yes	No
<i>Queen Bee</i>	1922/09/02	Broken Bay, 2 mls NE	No	No
<i>Rosedale</i>	1911/09	Smoky Cape, in vicinity of	No	No
<i>Sylvan</i>	1924/12	Newcastle, near Stockton Hospital	Yes	Yes
<i>Tyalgum</i>	1939/08/25	Tweed Heads, Flagstaff Beach	Yes	Yes

<i>Urana</i>	1937/08/31	Manning River	Yes	Yes
<i>Wollongbar</i>	1921/05/14	Byron Bay, ashore	Yes	Yes

Of these 23 known wrecks, none displayed the same combination of characteristics to *Bega*, that is,

- a vessel of intermediate size – 400 to 700 gross tonnage,
- a similar date of construction and use – 1875 to 1900, and/or
- performed a similar function - cargo and passenger transport.

Those twin screwed steamers which were ‘closest’ to the *Bega* in date of construction were the *Coraki*, the *Rosedale*, and the *Sylvan*. These vessels however were all less than 300 tons (gross) and may not have been exclusively engaged in cargo and passenger transport.

With this basic examination of known twin screw steamers wrecked in NSW, the *Bega* is unique as being the only twin screwed vessel built between 1875 and 1900, being of an intermediate tonnage (400 to 700), and engaged in cargo and passenger transport. This analysis is of course weighted towards the characteristic of the number of propellers the vessel carried. If this ‘trait’ was removed then the *Bega* could be considered – without the need of further interrogation of the NSW Shipwrecks Database – to be a wreck which is representative of those vessels which operated – and were lost – on the NSW coast in the first quarter of the 20<sup>th</sup> century.

### 9.2.2 Twin screw steamers lost in Australia

The following searches were undertaken on the National Shipwrecks Database:

*Simple Site Search* for “Twin screw”

*Advanced Shipwreck Search* in *Comments* field for “Twin screw”

*Advanced Shipwreck Search* in *Engine* field for “Twin screw”

Only five non-NSW wrecks were identified in this search:

*Coquette*,  
*HMVS Cerberus*,  
*Song Saigon*,  
*Pericles*, and  
*Glenelg*

The first four vessels, apart from having twin screws, have little in common with the *Bega*. The *Coquette* was a converted wooden hulled barque of 214 tons. The *HMVS Cerberus* was a naval vessel while *Song Saigon* was a Vietnamese motor vessel scuttled off Darwin the last 20 years. The *Pericles* was approximately 10,000 tons gross and almost 3 times the length of *Bega*. A triple expansion engine propelled its twin screws.

The *Glenelg*, a twin screw steamer, constructed in Glasgow in 1875, was a general cargo carrier which operated in south eastern Australia. It was wrecked in Bass Strait in 1900. Its tonnage is not recorded on The National Shipwreck database but one source has it listed as being 210 tons<sup>9</sup>. It was 41 metres in length, about 17

<sup>9</sup> <http://oceans1.customer.netspace.net.au/vic-wrecks.html>

meters shorter than the *Bega*. This wreck has some similarities with *Bega* with respect to date of construction and function. Its exact location and condition is not known at present.

## 10 LEGISLATIVE PROTECTION

### 10.1 Historic Shipwreck

NSW's shipwrecks and submerged cultural heritage are protected by legislation which aims to limit interference, damage or destruction to individual sites, while encouraging responsible public access to our maritime heritage sites.

Shipwrecks located inland (within rivers, harbours, lakes and enclosed bays) which are more than 50 years of age from the date of build, are protected as relics under the Relics Provisions of the NSW *Heritage Act*, 1977 (State).

Those wrecks situated in open waters, below the low water mark, adjacent to the coast and lost 75 years ago or more, like the *Bega*, are protected from interference or damage by the *Historic Shipwrecks Act*, 1976 (Commonwealth).

### 10.2 Protected Zone

The *Bega*, together with the *Lady Darling* (1880) near Montague Island, have the additional control of a Protected Zone exclusion zone placed around the wreck, under section 7 of the Act<sup>10</sup>. A permit is required from the Heritage Office to visit these exclusion zones.

The Protection Zone around the *Bega* was declared on November 5, 2004 by the Federal Minister of the Environment and Heritage. It appears in the Commonwealth of Australia Special Gazette, No. S 451, November 8, 2004. The declaration of a Protected Zone was undertaken for a number of reasons including the fragility of the site, observed damage by unintentional snagging of fishing nets, the valuable cargo consigned to the Bank of NSW (believed to be retained within the archaeological debris field) and possible threats to its retention on site, and to allow more detailed study of the site and its significance to NSW and the nation.

As with all Protected Zone declarations, they are intended to provide greater safeguards to key sites, particularly in the early period following discovery, where diver interest is more marked. The zone excludes visitation by vessels within a radius of 797 metres, unless authorised by a prior approved permit issued by the State Delegate for administration of the *Historic Shipwreck Act*, 1976 in NSW., The Director, NSW Heritage Office (See Section 12.3 below).

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<sup>10</sup> No. S 451 Monday 8 November 2004. Commonwealth of Australia Gazette Special

## 11 ASSESSMENT OF SIGNIFICANCE

Significance has been assessed in accordance with the nature and degree of significance of the sites' primary attributes. These include attributes related to historical, social, archaeological, scientific and interpretative significance.

### Attributes of Significance

**Criterion (a): An item is important in the course, or pattern, of NSW's cultural or natural history.**

	<i>Include</i>	
	<ul style="list-style-type: none"> <li>shows evidence of a significant human activity</li> </ul>	<ul style="list-style-type: none"> <li>has incidental or unsubstantiated connections with historically important activities or processes</li> </ul>
X	<ul style="list-style-type: none"> <li>is associated with a significant activity or historical phase</li> </ul>	<ul style="list-style-type: none"> <li>provides evidence of activities or processes that are of dubious historical importance</li> </ul>
	<ul style="list-style-type: none"> <li>maintains or shows the continuity of a historical process or activity</li> </ul>	<ul style="list-style-type: none"> <li>has been so altered that it can no longer provide evidence of a particular association</li> </ul>

### Comment

- The Bega wreck demonstrates the history of coastal trading between Sydney and the south coast from the early 19<sup>th</sup> century to the First World War. The industry played a crucial role in driving the early economic development of the Colony as settlement spread beyond the main epicentre of Sydney. In particular, the history of the managing company which owned the vessel, the Illawarra and South Coast Steam Navigation Company, exemplifies an early entrepreneurial enterprise.*
- The Bega, as an interstate steam ship, demonstrates the development of the relatively reliable maritime transport and communication links of the State. The trading route saw the transportation of people, cargo and news in the absence of a reliable or efficient road or rail system.*
- The site also demonstrates the history of coastal trading steam ships that serviced the south coast until the Federation. The Bega was the largest such steamer vessel serving the NSW coast at the time of its loss in 1908.*
- Finally in the sinking of the vessel, the wreck reflects the dangers and perils associated with transportation within NSW at the turn of the 20<sup>th</sup> century.*

**Criterion (b): An item has strong or special association with the life or works of a person, or group of persons, of importance in NSW's cultural or natural history.**

	<i>Include</i>	

	<ul style="list-style-type: none"> <li>• shows evidence of a significant human occupation</li> </ul>	<ul style="list-style-type: none"> <li>• has incidental or unsubstantiated connections with historically important people or events</li> </ul>
X	<ul style="list-style-type: none"> <li>• is associated with a significant event, person, or group of persons</li> </ul>	<ul style="list-style-type: none"> <li>• provides evidence of people or events that are of dubious historical importance</li> </ul>
		<ul style="list-style-type: none"> <li>• has been so altered that it can no longer provide evidence of a particular association</li> </ul>

Comment

- *The Bega is associated with the Illawarra and South Coast Steam Navigation Company, particularly the company's entrepreneurial manager Edye Manning who was a major figure in the establishment of reliable commercial shipping operations in NSW.*

**Criterion (c): An item is important in demonstrating aesthetic characteristics and/or a high degree of creative or technical achievement in NSW.**

	<i>Include</i>	
X	<ul style="list-style-type: none"> <li>• shows or is associated with, creative or technical innovation or achievement</li> </ul>	<ul style="list-style-type: none"> <li>• is not a major work by an important designer or artist</li> </ul>
	<ul style="list-style-type: none"> <li>• is the inspiration for a creative or technical innovation or achievement</li> </ul>	<ul style="list-style-type: none"> <li>• has lost its design or technical integrity</li> </ul>
	<ul style="list-style-type: none"> <li>• is aesthetically distinctive</li> </ul>	<ul style="list-style-type: none"> <li>• its positive visual or sensory appeal or landmark and scenic qualities have been more than temporarily degraded</li> </ul>
	<ul style="list-style-type: none"> <li>• has landmark qualities</li> </ul>	<ul style="list-style-type: none"> <li>• has only a loose association with a creative or technical achievement</li> </ul>
	<ul style="list-style-type: none"> <li>• exemplifies a particular taste, style or technology</li> </ul>	

Comment

- *The wreck of the Bega shows evidence of a particular design evolution in engine arrangement which developed in the late 19<sup>th</sup>, early 20<sup>th</sup> century. It reflects the use of the Rankin & Blackmore's patent twin-cylinder twin screw engines or "Rankin's Wonders" which greatly improved efficiencies.*
- *The site also exhibits the broader evolution of interstate trading vessels from wooden steam paddlers to more advanced, engine powered steam ships.*
- *The Bega is now a well preserved example of a late nineteenth and early 20<sup>th</sup> century coastal passenger twin screw steamer. It is considered one of the premier shipwreck sites available to deep wreck divers in NSW for its visual appeal and interest values.*

**Criterion (d): An item has strong or special association with a particular community or cultural group in NSW for social, cultural or spiritual reasons.**

	<b>Include</b>		<b>Exclude</b>
	<ul style="list-style-type: none"> <li>Is important for its associations with an identifiable group</li> </ul>		<ul style="list-style-type: none"> <li>is only important to the community for amenity reasons</li> </ul>
X	<ul style="list-style-type: none"> <li>is important to a community's sense of place</li> </ul>		<ul style="list-style-type: none"> <li>is retained only in preference to a proposed alternative</li> </ul>

Comment

- The Bega has a strong historic association to the coastal communities of the south coast of NSW. As one of the trading vessels that travelled the coast it played an important role in the economic development of these communities. At the turn of the 20<sup>th</sup> century transportation by sea was still relatively more reliable than road or rail.*
- In exhibiting the dangers of life on the sea, coastal communities often retain a strong sense of identity with wreck sites. Such sites reflect the hardships experienced by communities who rely on the sea for both a livelihood and a home.*
- The vessel bears the name of the administrative centre that governs the Bega Shire Local Government Area, off which, the wreck now lays.*

**Criterion (e): An item has potential to yield information that will contribute to an understanding of NSW's cultural or natural history.**

	<b>Include</b>		<b>Exclude</b>
X	<ul style="list-style-type: none"> <li>has the potential to yield new or further substantial scientific and/or archaeological information</li> </ul>		<ul style="list-style-type: none"> <li>the knowledge gained would be irrelevant to research on science, human history or culture</li> </ul>
X	<ul style="list-style-type: none"> <li>is an important benchmark or reference site or type</li> </ul>		<ul style="list-style-type: none"> <li>has little archaeological or research potential</li> </ul>
	<ul style="list-style-type: none"> <li>provides evidence of past human cultures that is unavailable elsewhere</li> </ul>		<ul style="list-style-type: none"> <li>only contains information that is readily available from another resource or archaeological sites</li> </ul>

Comment

- The Bega wreck, as the site of a late 19<sup>th</sup> century twin screw steamer vessel, has the potential to yield considerable archaeological information. Its state of preservation and integrity provides an opportunity to gain more information on the vessel's machinery, cargo and crew possessions – particularly its unique marine engine arrangement.*
- In addition the site is one of a few wrecks of twin screw steamers in NSW that has been located and is therefore an important benchmark or reference site type in the history of interstate south coast trading in NSW.*

**Criterion (f): An item possesses uncommon, rare or endangered aspects of NSW cultural or natural history.**

	<b>Include</b>		<b>Exclude</b>
	<ul style="list-style-type: none"> <li>provides evidence of a defunct custom, way of life or process</li> </ul>		<ul style="list-style-type: none"> <li>is not rare</li> </ul>
	<ul style="list-style-type: none"> <li>demonstrates a process, custom or other human activity that is in danger of being lost</li> </ul>		<ul style="list-style-type: none"> <li>is numerous but under threat</li> </ul>
	<ul style="list-style-type: none"> <li>shows unusually accurate evidence of a significant human activity</li> </ul>		
X	<ul style="list-style-type: none"> <li>is the only example of its type</li> </ul>		
	<ul style="list-style-type: none"> <li>demonstrates designs or techniques of exceptional interest</li> </ul>		
	<ul style="list-style-type: none"> <li>shows rare evidence of a significant human activity important to a community</li> </ul>		

**Comment**

- The Bega wreck is a rare relatively intact example of an innovative late 19<sup>th</sup> century twin screw interstate trading steamer with a unique engine arrangement trialled in the late 19<sup>th</sup> century (Rankin's Wonders). Its level of preservation and integrity also adds to the site's rarity.*
- On both a State and National level, few wreck sites of similar vessel type, size and/or use have been located or undergone a non-disturbance archaeological survey.*

**Criterion (g): An item is important in demonstrating the principal characteristics of a class of NSW cultural or natural places; or cultural or natural environments.**

	<b>Include</b>		<b>Exclude</b>
	<ul style="list-style-type: none"> <li>Is a fine example of its type</li> </ul>		<ul style="list-style-type: none"> <li>is a poor example of its type</li> </ul>
X	<ul style="list-style-type: none"> <li>has the principal characteristics of an important class or group of items</li> </ul>		<ul style="list-style-type: none"> <li>does not include or has lost the range of characteristics of a type</li> </ul>
	<ul style="list-style-type: none"> <li>has attributes typical of a particular way of life, philosophy, custom, significant process, design, technique or activity</li> </ul>		<ul style="list-style-type: none"> <li>does not represent well the characteristics that make up a significant variation of a type</li> </ul>
	<ul style="list-style-type: none"> <li>is a significant variation to a class of items</li> </ul>		
	<ul style="list-style-type: none"> <li>is part of a group which collectively illustrates a representative type</li> </ul>		
	<ul style="list-style-type: none"> <li>is outstanding because of its setting, condition or size</li> </ul>		
	<ul style="list-style-type: none"> <li>is outstanding because of its</li> </ul>		

integrity or the esteem in which it is held
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### Comment

- *The Bega retains critical structural elements of a late 19<sup>th</sup> century twin screw steamship which serviced the NSW south coast. It is representative of this class of vessel.*

## 11.1 STATEMENT OF SIGNIFICANCE

The *Bega* site demonstrates the history of interstate coastal trading between Sydney and the south coast of NSW. The industry was fundamental to the early economic development of the Colony and in particular many settlements of the south coast. The history of the vessel's managing company, the Illawarra and South Coast Steam Navigation Company and its manager Edye Manning, is significant in NSW maritime history.

Through its sinking it exhibits the dangers of travel in NSW at the turn of the 20<sup>th</sup> century. The loss of "life-line" vessels, such as the *Bega*, significantly impacted coastal communities reflecting a strong association between these communities and wreck sites today.

The *Bega* demonstrates the evolution of trading vessel design and technologies, particularly its use of the advanced engine arrangement known as "Rankin's Wonders". The wreck retains evidence of this technology and now provides a representative example of Rankin and Blackmore's engine design. The *Bega's* level of preservation provides the potential to yield information on steamship technology, cargoes and personal possessions of crew and passengers at the turn of the 20<sup>th</sup> century. On a State and National level it is a rare site type.

As a recreational dive site, the *Bega*, has attracted significant visitation by the growing numbers of deep wreck technical divers, providing an opportunity for developing new community partnerships in the management of complex, technically remote, wreck sites.

## 12 MANAGEMENT OPPORTUNITIES – DISCUSSION

### 12.1 Further On-site Research

The current survey is preliminary in nature and suggests a range of potential future site recording and research options.

The identification of the site can be considered to have been confirmed with a reasonable degree of confidence. The initial inspection of the site can be built upon by further inspection with the dual objectives of;

- mapping and describing the site for the purpose of making an 'inventory' and completing a comprehensive site plan, and

- monitoring the effects of diver visitation on the integrity of the site.

It is envisaged that the productive partnership between *The Sydney Project*, the Heritage Office and other stakeholders will continue. This will promote the importance of the *Bega* as an archaeological site, and foster a higher level of interest in maintaining the site intact.

This partnership between the technical diving groups and the NSW Heritage Office, has been the highlight of investigations to date. The interaction between all parties demonstrates the “new age” approach to wreck divers to fragile underwater cultural heritage sites and an awareness that shipwreck sites are an irreplaceable resource for both scientific study and inspired recreational pursuits.



The work was recognised by the Heritage Council of NSW at its meeting of September 8, 2005 at the historic Tathra Wharf. Here, Samir Alhafith, representing the *Sydney Project*, received an award from the Chair, Mr Michael Collins, in recognition of the groups key works in documenting deep wrecks in NSW, including the *Bega*.

**Figure 28** Award received by the *Sydney Project*

In recognition of Mr Fred Billington and Mr David Prior’s official reporting of the wreck site, under Section XX of the *Historic Shipwreck Act*, 1976, and in recognition of their efforts to “truth” a series of “hookup” spots identified by local commercial fishermen, they were awarded “Historic Shipwreck Awards” by Mr Collins. The event attracted significant media interest and an opportunity for the Heritage Office to further publicly celebrate the positive identification work conducted by the community members.



**Figure 29** Award received by Mr Fred Billington and Mr David Prior

## 12.2 Artefact removal

The *Bega* has become a significant facet of dive tourism in the Bega district. The retention of the site's tourism potential is closely associated with the retention of its archaeological potential. The appeal of the site is enhanced by the knowledge that it has not been 'picked over' either by souvenir hunters or archaeologists. Divers can experience this enhancement either by actually seeing a porthole, dead-eye or ceramic plates on site, or by being aware that these items are somewhere hidden under the sand.

Where these items become visible, good quality photographic records can be compiled to enable non-divers to experience the visual context of these elements and the diving experience. Removal would deplete the significance of the site and would be accompanied by a very high level of cost. This cost, depending on the quantity and nature of the items removed, the level of conservation required and the preparation or construction of suitable storage and display facilities could be considerable. Mounting an archaeological excavation project at such a deep site would require substantial diver and surface support, and be governed by the workplace safety requirements of Workcover Authority, NSW

The removal of artefacts from the site would not only reduce its appeal as a dive destination but would make the site indistinguishable from dozens of other iron shipwreck sites on the NSW coast that have witnessed degradation of their associated relics through opportunistic recovery, prior to the heritage legislative controls from the 1970's.

## 12.3 Access

### 12.3.1 Permits:

The current first *Bega* permit system has proven to be a highly effective way to management this site. The Heritage Office will continue to seek and consider advice on options for improving the conditions associated with these permits.

Requests for access to the site have predominately come from the sole Bermagui dive operator, Deep Sea Fishing and Dive Charters. Due to the vulnerability of this site to inadvertent damage from anchors and intentional damage by souvenir hunters, access has been controlled through permits to dive charter boats operating out of Tathra or Merimbula.

Any alteration to this arrangement needs to consider potential impacts on the site. A permit system open to all applicants would place the site under severe risk. It would not be possible to differentiate the relative merit of the many dive clubs and individual divers with dive boats or charter boat operators from other areas. Effectively, anyone who requested a permit would be granted access.. Most importantly, it would remove the management role of the current charter operators from Tathra or Merimbula. Without this support the *Bega* would rapidly deteriorate to a level similar to most other known iron wreck sites along the coast.

### 12.3.2 Number of vessels within the permit area:

A current condition of the permits is that, **except where specifically approved, in writing, by the Director of the Heritage Office**, no more than one vessel is to be in

the Protected Zone at any one time. Adequate briefing of divers prior to a dive and supervision of their exit is considered to be reasonable and effective.

### **13 MANAGEMENT RECOMMENDATIONS**

As a result of the historical research, wreck site inspections and subsequent assessment of significance, it is recommended that:

1. The conditions of the Protected Zone and permit system remain in force for the 2005-6 year and be reviewed annually.
2. Management options for the site be regularly reviewed based on input from the current permit applicants and in consultation with the wider diving community, dive shops, clubs and relevant Local and Government agencies.
3. The Heritage Office continues to monitor site usage and its effects on the integrity and long term survival of the wreck site and associated relics.
4. The Heritage Office to encourage dive groups such as the Sydney Project to undertake periodic non-disturbance archaeological recording of the site to enable a continued picture of the remains to emerge. All results should be distributed to the wider community.
5. When practicable, the site be investigated by a marine materials conservator, to assess the structural condition of the site and to identify any procedures which may prolong the retention of the structure.
6. Local historical societies, organisations and individuals be encouraged, where possible, to further research the background of the *Bega* wreck site, and others thought to exist in the general region.
7. The Bega Valley Shire Council, the National Parks and Wildlife Service, the NSW Water Police, the Bermagui and Bermagui Fisherman's Cooperative Coastal Patrol to be provided with a copy of this report. The Heritage Office should continue to liaise with these groups and seek to promote ongoing interpretative projects suitable for the areas maritime heritage.
8. NSW State Fisheries be provided with a copy of the report and be requested to advise all members of the location of the wreck site to ensure no accidental fouling of the site by fishing operations and details of the Protected Zone conditions.
9. The remains of the *Bega* and its associated artefacts be retained *in-situ* to preserve its attraction as one of the most intact, iron shipwreck archaeological sites on the NSW coast.

10. Archaeological excavation of the site only be approved where the Heritage Office receives a proposal backed by an adequate research design and funding for recovery, conservation and display to standards that ensure the long term retention of the artefacts and archaeological documentation.

## 14 Bibliography

### 14.1 Publications

Commonwealth of Australia Gazette Special No. S 451 Monday 8 November 2004.

Evans R 2004 "Ships and Settlement on the Shoalhaven", Unpublished report housed at the Vaughan Evans Library, National Maritime Museum, Sydney.

Gleeson, M. 1996 *Shipwrecks, Storms & Seamen of the New South Wales Coast*. Published by Max Gleeson

Richards, M. 1987 *Workhorses in Australian Waters*. Turton & Armstrong Pty Ltd. Sydney.

Richards, Mike, 1997, *Pig and Whistle Run: Men and Ships of the NSW South Coast*. Grafton.

### 14.2 NSW Heritage Office Bega Wreck File - H0400317 Parts 1 and 2

Senator the Hon Ian Campbell, media release, *Shipwrecks discovered off NSW Coast*, 6<sup>th</sup> November 2004, C108/04,

Underwater Cultural Heritage reporting form A478112 and HRL 31373

### 14.3 Websites

National Shipwreck Database	<a href="http://eied.deh.gov.au/nsd/public/">http://eied.deh.gov.au/nsd/public/</a>
NSW Heritage Office shipwreck database	<a href="http://maritime.heritage.nsw.gov.au">http://maritime.heritage.nsw.gov.au</a>
The Sydney Project	<a href="http://www.sydneyproject.com/">http://www.sydneyproject.com/</a>
Museum of Tropical Queensland	<a href="http://www.mtq.qld.gov.au/04research/yongala/history/tex.htm">http://www.mtq.qld.gov.au/04research/yongala/history/tex.htm</a>
Encyclopedia of Australian Shipwrecks	<a href="http://oceans1.customer.netSPACE.net.au/vic-wrecks.html">http://oceans1.customer.netSPACE.net.au/vic-wrecks.html</a>

## 15 APPENDIX A:

# BEGA SHIPWRECK 1908

Information Sheet  
NSW Heritage Office



*Bega after construction in 1883. Mitchell Library/State Library of NSW.*

### Introduction

The nineteenth century was dominated by the shipping movements of coastal and interstate steamers. Local communities depended upon the regular passage of these vessels for transport, transshipment of supplies, goods and mail. Several shipping companies dominated the trade and the vessels were familiar names to many households.

The iron twin screw steamer *Bega* was one such vessel. It plied the regular south coast shipping lanes linking communities like Eden, Merimbula, Tathra and Bermagui to Sydney. It was operated by the Illawarra and South Coast Steam Navigation Company. A reliable vessel, the loss of *Bega* in 1908 came at a time when maritime travel was considered relatively safe with improved technologies and better navigational aids.

However the dangers of ocean travel could always make their mark. *Bega* succumbed to a problem with stability on 5 April 1908 and foundered in the vicinity of Bunga Head, north of Tathra. Today the wreck site has been identified and provides a snap-shot of our past maritime history. A unique archaeological site, the remains are protected from disturbance by the Commonwealth *Historic Shipwrecks Act 1976*.

### The vessel

*Bega* was built in 1883 as an iron twin screw steamer. Powered by a compound 98hp engine, the 567-ton, 57.7metre vessel was built in Greenock, Scotland. With official number 83765, the vessel was built by Russell and Co. and was reputedly the largest steamer on the south coast run at that time.

The new *Bega* was fitted with a unique engine arrangement, as were the company's steamers *Allowrie* and *Kameruka*. This technique was known as "Rankine's Wonders". A two-cylinder disconnecting compound engine drove the twin propeller shafts by using a high pressure cylinder to work the starboard propeller and a low pressure cylinder, the port. The technique increased operating efficiency, although required a flywheel to assist starting the engine. Each engine (cylinder), had its own reversing gear and either could be run independently of the other (Richards, 42).

The *Bega* arrived in Australia after a voyage around Cape Town, South Africa.

### Wreck event

*Bega* departed the town wharf at Tathra on 5 April 1908 for Sydney after a voyage up the coast from Eden and Merimbula. Cargo had been loaded, including over 2000 cheeses, butter, racehorses, prized livestock for the Royal Easter Show, 176 pigs, furniture, wool and

a special consignment of £2000 in gold coinage (561 ounces in weight) for the Sydney Branch of the Commonwealth Bank.



*Bega departing in 1903 on a regular voyage. Mitchell Library/State Library of NSW.*

The 25 year-old *Bega* was under command of Captain Bishop, when it departed Tathra about 7.00 p.m. A list to port was noted. Before long the captain became alarmed at the increasing list and checked the ballast tanks. Concern grew when it was suspected that the cargo may have shifted. *Bega* was slowed and turned so that the wind and swell were against the lower side. Many of the 176 pigs were transferred to the high side in an attempt to stabilise the lean.

#### **Pigs sacrificed**

With the transfer of pigs, however, the vessel suddenly healed over to that side and the bow settled noticeably lower. It appeared that water had now entered the hull. *Bega* was turned around in the direction of Tathra in an attempt to reach port and safety. Water was now steadily entering below deck spaces. Bishop ordered all of the pigs overboard – a significant sacrifice - but to no avail.

#### **Death of a passenger**

The passengers were ordered onto the deck, which was now cantered over at 45 degrees. Everyone fought to keep on their feet by clinging to anything within reach. *Bega* had now been turned around again in a northerly direction. Captain Bishop ordered the engine shut down and everyone to “*Abandon ship!*”. All got into the lifeboats, while blue distress flares were burnt on deck – the distress rockets could not be located! After some delay, lifebelts were found for all.

At this time, an elderly passenger named David Clarke suffered a heart attack and died at the rail, amidst the confusion. It was now 10.30 p.m. and two of *Bega*’s boats and two small rafts were launched. The survivors struggled in the dark with the body of Clarke. *Bega* was seen afloat for only another twenty minutes after abandoning ship. The bow had settled low in the water and the stern rose high in the air. As the *Bega* slid beneath the waves, the final lights went out. The survivors tried to keep the boats and rafts together and make the shore. This became impossible and they separated in the night.

The main lifeboats reached Cuttagee Beach the next morning, twelve hours after the *Bega* sank. The two rafts with the captain made shore at Wallacoot, south of Tathra later in the morning. Chief Engineer, Mr McCubbin, recalled the strangeness of the scene when a passenger, Mr Levy, handed around salvaged cigars. Squatting closely together on and around the body of Mr Clarke and up to their waists in water, “*we looked to be quite a comfortable party as we sat there on the rafts smoking cigars!*”. Exhausted and wet, all 61 were eventually safely landed.

A Court of Marine Enquiry was later held and could not determine a cause for the loss. Arguments were raised about the packing of cargo, sabotage with a theory of opened sea-cocks, the placement of a new refrigerator system on deck, the opening up of hull plating, or overloading of cargo.



*Bega historic shipwreck: looking forward towards the bow. Copyright: Mark Spencer.*

*Bega* had earlier itself participated in the transport of survivors from the wrecked steamer *Corangamite* at Wreck Bay in 1886.



*View of port side of hull, showing boiler (to left) and ship's funnel lying on sand in centre. Copyright Mark Spencer.*

Local Bermagui divers Fred Billington and David Prior re-located the wreck site in 2004 following dedicated sounding and video camera surveys, drawing on information provided by historic records, and commercial fishing operators. October 2004 witnessed the first 76-metre dives to the site by *The Sydney Project* dive team, who confirmed the site's identification.

*Bega* is a protected historic shipwreck under the provisions of the Commonwealth *Historic Shipwrecks Act 1976*. Severe penalties apply for disturbing the shipwreck structure or for removing items. A special Protected Zone has been gazetted around the site which requires an approved entry permit issued by the NSW Heritage Office, Sydney.

Source: NSW Heritage Office Wreck File + research notes

Gleeson, Max., 1996, *Shipwrecks, Storms and Seamen*. Toppan Printing. Sydney.

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