

Chapter 1.

History of the Coal Loader – An Overview



Syllabus Links

- Geography Stages 1 through to Stage 5
- History Stages 1, 2, 3 and 5
- Curriculum Priority Sustainability – Geography – Stages 1, through to Stage 5
- Curriculum Priority Sustainability – History – Stage 1, 2 and 5.

Terms and concepts

First contacts, colonisation, conflict, dispossession, energy sources, colliers, empathy, sustainability, protest, coal-fired, remnant bushland, industrial, redundant, sustainable technologies.

Background Information:

The Coal Loader site demonstrates the layering of human history in Sydney and helps us understand broader changes in attitudes to the environment and place in Australia. An ancient Aboriginal rock carving of a marine creature, illustrating the relationship of the Cammeraygal people with their waterway, sits next to a coal bunkering facility which reflects the culture of Europeans who displaced them.

In the late 1800's and early 1900's, much of the vegetation in North Sydney was cleared however, the bushland at the Coal Loader site and at Balls Head remained. This remnant bushland was enjoyed by residents for walks and recreational activities. The famous poet Henry Lawson wrote a poem about the changes to this bushland once the new industrial coal loading facilities started to be built.

From the 1920s to the 1970s the Coal Loader was part of Sydney harbour's working waterfront. After it was closed in 1992, the Coal Loader became the focus for community opposition to residential development – like many other redundant waterfront sites. Today it is a showcase for sustainable technologies that provide an alternative to heavy dependence on coal and exemplify our attempts to tread more lightly upon the earth, like those that came before, in the face of climate change and pollution.



a. Aboriginal Heritage and First Contacts

Aboriginal people occupied the Balls Head peninsula at least 6,000 years ago when sea levels stopped rising at the end of the last Ice Age and Sydney Harbour, as we know it, was created. The local Cammeraygal people fished the waters around the headland. Natural rock overhangs provided shelter and a place to make tools and create art. At least one Aboriginal person was buried on the peninsula.

This world changed with the coming of Europeans in 1788. Some Aboriginal people fought the newcomers, others attempted to mediate with them. Primary sources suggest that the Cammeraygal man Carradah befriended the naval officer Lieutenant Ball who had helped to survey the Harbour and explore the country on its northern shores. Whether Carradah showed Ball the area around this headland is not known but, interestingly, it was the Lieutenant who was immortalised by the European naming of the place – Balls Head.

The First Fleet was followed by another and then more ships. Thirty years later, without treaty or compensation, much of the land of the Cammeraygal had been divided up and given away to colonists.

Read more in Chapter 2. Aboriginal Heritage.



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b. Henry Lawson and historic North Sydney

In the early 1900s, the remnant bushland on Balls Head was celebrated by the poet Henry Lawson. He criticised the construction of the coal loader in what was one of our first environmental protests. Lawson lived locally off and on for many years and he thought Balls Head was a bushy haven for the working class he mixed with around North Sydney. His poem 'The Sacrifice of Balls Head' was written in 1916 and reveals his resentment at the changes overtaking the place in the early 20th century.



c. Industrial Sydney and Coal Loading operations

From the 1920's to the 1970's, the site functioned primarily as a transfer depot from ships called colliers to smaller coal-fired vessels. The Balls Head Coal Loader was extremely advanced for its time, breaking records by delivering nearly 2500 tons of coal in under 20 hours.

In 1934, the lease was taken up by the Wallarah Coal Company which had a mine near Newcastle and a wharf on the coast at Catherine Hill Bay. They would operate the loader for nearly 40 years.

Work at the Coal Loader fell away until the 1970s when the place was completely refitted to supply export coal to Japan. Later the jetty was lengthened to accommodate larger colliers.

By the 1990s technology and social change spelled the end of operations at the Balls Head Coal Loader. The world had not lost its appetite for coal – in fact it had never been greater. But that meant exports directly from Newcastle in ships too large to dock at Balls Head. The ships took on their final load of coal in 1992.



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d. Caretakers Cottage and remediation

The state government leased the site in 1994 to a caretaker, who used the old powerhouse building as a base for their pioneering environmental remediation business, Environmental Earth Sciences. Founder Phil Mulvey also set up residence in the old caretaker's cottage, and lived there with his family for 14 years. The site itself was in need of remediation to remove toxic chemicals, so the new tenants set about this job. They turned an old oil tank site into a wetland.



e. Community action and sustainability

The community battled to save the site from redevelopment and retain the land for public use. The protests and negotiations with the State Government announced that the Coal Loader, along with the nearby BP site and several other obsolete industrial waterfronts, would be dedicated to public recreation. It was a landmark announcement that was celebrated locally, and throughout Sydney.

There were public meetings and concepts were put up for comment. After nearly two years of negotiation a master plan for the whole Waverton Peninsula was adopted. The details still had to be decided and the money found to realise the great ideas. But work started at the BP site and the park was completed there in 2005.



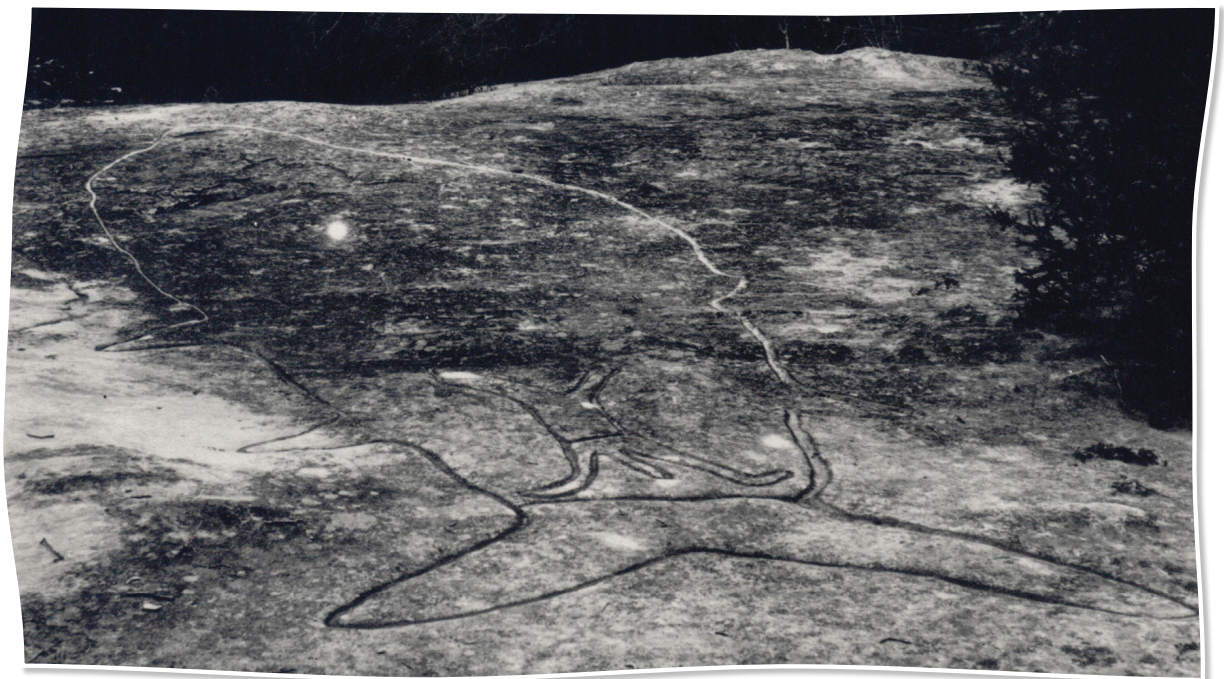
Attention was turned to the Coal Loader and there were more workshops and exhibitions so that local opinion could be heard. Plans were approved in 2007. New life was going to be breathed into the Coal Loader by following the principles of sustainability – of living in harmony with our environment. The new ideas were reflected in a new name. The Coal Loader Centre for Sustainability was going to be a 'grass-roots' place to visit, a place where you could meet others interested in new technologies and old eco-systems.




f. The Present – Sustainability and Aboriginal Culture

At the Coal Loader Centre for Sustainability the old infrastructure of coal that powered our economy for 150 years has been overlaid with new 'clean' technologies that reduce pollution and energy use. But just outside there is another overlay that has been removed. The road that covered the ancient carvings has been dug up to reveal what is left of a remarkable collection of images. When that happened in 2008 the Aboriginal community spoke about the discovery of 'an old friend'.

The Coal Loader Centre for Sustainability was officially opened in July 2011 with the motto "Learn from the past, embrace the future". The Centre now enables hands-on learning about sustainability in everyday life, and serves as a community meeting point and hub for Council's extensive range of environmental and sustainability programs.



FURTHER INFORMATION

- Before your visit – watch the History of the Coal Loader three minute video 
- Read the 'Aboriginal Heritage' section of the Coal Loader Sustainability Learning Guide
- Visit the North Sydney Heritage Centre at the Stanton Library. View resources related to Balls Head and the Coal Loader
- Visit the Aboriginal Heritage Office or see their website www.aboriginalheritage.org
- Download the Coal Loader Walking Map from www.northsydney.nsw.gov.au/coalloader
- Follow the self-guided information signs throughout the Coal Loader site.



Chapter 1

Activity 1 – Timeline of the Coal Loader

Activity Summary:

This activity requires students to use key dates and historical photos to construct an historical timeline and describe the changes which happened at the Coal Loader site. Students should read the background information in the chapter to assist understanding.



Inquiry questions:

1. How has the Coal Loader site changed over time?
2. What has been the impact on people and the environment?
3. Where are the historical buildings, sites and evidence at the Coal Loader?

Syllabus Outcomes:

- Identifies and describes significant people, events, places and sites in the local community over time. HT1-2
- Describes and explains how significant individuals, groups and events contributed to changes in the local community over time. HT2-2
- Describes and explains different experiences of people living in Australia over time. HT3-2
- Describe processes and influences that form and transform places and environments. GE4-2

Materials and Preparation:

- Teachers use the reference poster 'Return to Community, A History of Balls Head & its Coal Loader ' for class discussion. See online North Sydney Coal Loader Learning Guide Appendix 2 and collected as a laminated class set at the Coal Loader office.
- Teachers to provide a copy of the worksheets to each student.
- Students to bring a clipboard and writing equipment.
- A4 laminated Coal Loader Map.
- Students to read and discuss the background information in chapter 1.
- Watch the 3 minute Coal Loader History video.
- Optional – Visit the website of the North Sydney Heritage centre /Stanton Library.
- Optional – Visit the website of the Aboriginal Heritage Office.



Chapter 1 – History of the Coal Loader

Activity 1 – Student Worksheet

Name

Location – Class to sit near one of the old buildings eg, Caretakers cottage or Mess hall.

1. Start with a brief discussion with students based around Inquiry questions, that is,
 - What used to be here at the Coal Loader?
 - How did people use the land/resources at the Coal Loader?
 - How did land use at the Coal Loader change the environment?
2. Hand out the laminated poster 'Return to Community, A History of Balls Head & its Coal Loader'. Students read this either as a class or groups of 2 or 3 and write down briefly what happened on the dates or time period in the spaces below. (Some have been done for you).
Draw a line to connect the arrows – which represents time.

- a. Pre 1788 – _____ ↓
- b. 1788 – _____
- c. 1789 – Captain Ball befriends Carradah, and explores the area.
- d. 1818 (1788 + 30 years) _____ ↓
- e. Through the 1800's _____
- f. Early 1900's _____ ↓
- g. 1916 – poem about Balls Head written by Henry Lawson.
- h. 1921 – _____
- i. 1934-60 's – Wallarah Coal company operates CL – it ships coal from Catherine Hill Bay to the Coal Loader. From the CL coal is moved across Sydney.
- j. 1960's-1992 – Coal and Allied ships coal to _____ ↓
- k. Mid 1990's – _____
- l. 1997 – _____ ↓
- m. 2007 – North Sydney Council develops and approves the site for sustainability.
- n. 2011 – The Coal Loader Centre for Sustainability officially opened _____ ↓
- o. 2024 – Students, teachers and the public visit the CL to learn about _____



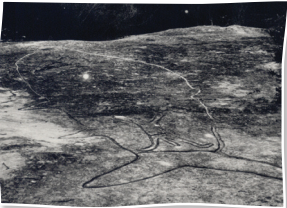



Chapter 1 – History of the Coal Loader

Activity 1 – Student Worksheet *continued*

3. Let's develop a timeline with historical photos.

Name _____

- Students are to use the photos to help work out and write down what the year or time period the picture shows.
- Students refer to the poster and work in pairs to describe and write briefly what land uses existed and how this affected the environment during this time.
- Students share their answers to class.

Photo / picture	Time period	Land uses ? Effects on the environment?
	a. Before 1788 (up to 6000 years ago)	
	b.	
	c. 1800's	
	d.	



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Activity 1 – Student Worksheet *continued*

	e. 1921 – 1960's	
	f. 1960's – 1992	
	g.	

4. Where are the historical sites at the Coal Loader?

- a. Let's take a walk around the Coal Loader site, find the historical sites and tick them off ✓ when you see them.

It's best to start at the Cammeraygal engraving (B) and then walk past (C), (D), (I).

Walk into the (i) display room in the Caretakers cottage to view artefacts, then walk out to the Coal Loader platform at (M) then walk down the stairs to tunnels at (L).

- b. Hand out the A4 Coal Loader laminated maps so that students can view a larger map, and find out where they are.
- c. On the Coal Loader map below, circle or underline:
- Cammeraygal engraving (at B)
 - Mess Hall (at D)
 - Powerhouse (at C)
 - Genia McCaffery Building also called Caretaker's Cottage (at I)
 - Display room at Genia McCaffery Building showing artefacts (i)
 - Coal Loader Platform at (M)
 - Coal Loader Tunnels at (L)
 - Wharf (N).



Chapter 1 – History of the Coal Loader

Activity 1 – Student Worksheet *continued*

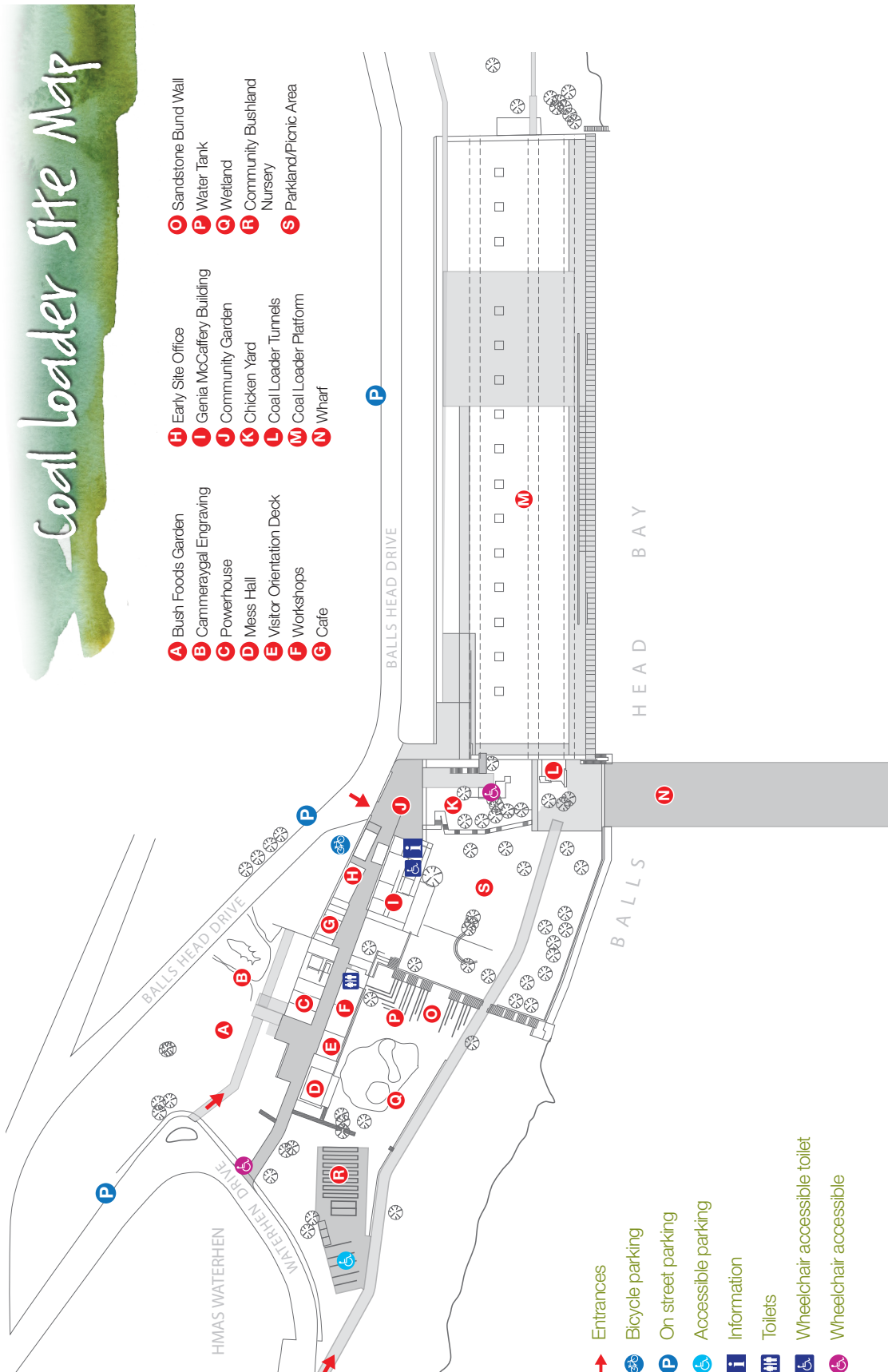


Diagram X shows the Coal Loader site



Chapter 1 – History of the Coal Loader

Activity 2 – Using poetry as an environmental message

Activity Summary:

This activity examines a poem that Lawson wrote about the area when coal loading operations were being introduced back in 1916. Lawson's poem was an early form of environmental activism. During this activity students will consider the issues important to Lawson, and use them as inspiration to create their own poem or drawing. Students should read the background information in the chapter to assist understanding.



Inquiry questions:

1. What is the poem written by Lawson communicating about how the Coal Loader site has changed?
2. How does a poem communicate the impact on people and the environment?
3. How does a poem written over one hundred years ago help inspire students to create their own piece of writing or a drawing?



Syllabus Outcomes:

- Describe processes and influences that form and transform places and environments. GE4-2
- GE5-2 explains processes and influences that form and transform places and environments. GE5-2
- Identifies and describes significant people, events, places and sites in the local community over time. HT1-2
- Describes and explains how significant individuals, groups and events contributed to changes in the local community over time. HT2-2
- Describes and explains different experiences of people living in Australia over time. HT3-2

Materials and Preparation:

- Students to bring a clipboard, writing equipment and a student worksheet which contains a copy of the poem by Henry Lawson.
- A4 laminated Coal Loader Map.
- Students to read and discuss the background information in chapter 1 and read the background information below.
- Watch the 3 minute Coal Loader History video.
- Optional – Visit the website of the North Sydney Heritage centre /Stanton Library and/or borrow Henry Lawson's 'North Sydney: a selection of Henry Lawson's North Sydney writings', edited by Olive Lawson.



Chapter 1 – History of the Coal Loader

Activity 2 – Using poetry as an environmental message *continued*

Background Information:

Henry Lawson (1867-1922) is possibly Australia's best known poet. Along with Banjo Paterson, he presented 'the bush' to Australians at a time, in the late 19th century, when cities were growing but the national identity was linked to rural types such as drovers, shearers, farmers and graziers.

Lawson's portraits of life near the North Sydney waterfront are rare portrayals of working 'harbour people'. The span of Lawson's association with North Sydney coincided with great change. The local population grew from just over 12,000 in 1886 to 48,000 in 1920. During this time, North Sydney was at the forefront of that development as people crowded around the foreshores to take advantage of regular ferry services to and from the city.

Around 1910 Lawson expressed his annoyance at the changes taking place around him. His poem 'The Sacrifice of Balls Head' was written in 1916 and reveals his ongoing concern at the changes overtaking the area in the early 20th century.



Chapter 1 – History of the Coal Loader

Activity 2 – Using poetry as an environmental message *continued*

Name

Location – Class to sit near one of the old buildings eg, Caretakers cottage or mess hall.

1. Start with a brief discussion with students based around two Inquiry questions, that is,
 - How does a poem communicate the impact of the changes on people and the environment?
 - How does a poem written over one hundred years ago help inspire students to create their own piece of writing or a drawing?

Introduction

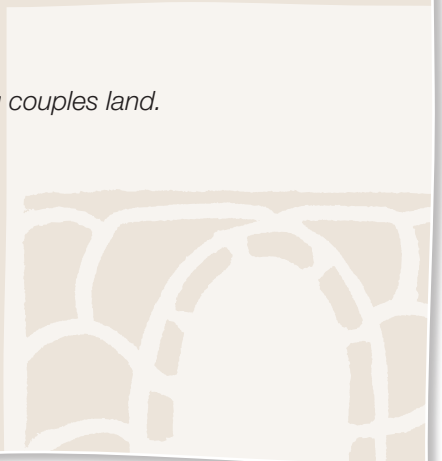
The bush poet Henry Lawson lived around North Sydney off and on for many years. During this time he enjoyed visiting Balls Head which he described as a bushy haven for the working class. His 1916 poem 'the Sacrifice of Balls Head', reveals his concern at the changes overtaking the area in the early 20th century.

Read and reflect on Lawson's poem below. You will use it as inspiration to write your own piece of creative writing.

The Sacrifice of Ball's Head **Henry Lawson, 1916**

*'They're taking it, the shipping push,
As all the rest must go –
The only spot of cliff and bush
That harbour people know.
The spirit of the past is dead,
North Sydney has no soul –
The State is cutting down Ball's Head
To make a wharf for coal...
And strings of grimy trucks shall run
In everlasting trains
And on the cliff where wild trees are
Shall stand the soulless cranes
To dump their grimy loads below,
Where the great brown rocks are grand;
And the deep grass and wild flowers grow – and boating couples land.*

*No more shall poorer families
Give "Grandma" and "Grandad"
A glimpse of nature's mysteries
To make their old hearts glad.
No more our eyes shall be relieved
In the city's garish day –
A sordid crime has been achieved!
And none has aught to say.*





Chapter 1 – History of the Coal Loader

Activity 2 – Using poetry as an environmental message *continued*

2. a. What is the poem written by Lawson, communicating about how the Coal Loader site is changing?

- b. Historians use stories and poetry to understand how people felt and what they experienced at different times. Empathy means to understand and share the feelings of others. Write down how you might have felt if you were:

- Henry Lawson
- The local Cammeraygal people
- The coal workers

3. Imagine Henry Lawson was still alive. What might he feel looking at the site today? Is there a connection between Lawson's preferred use of the site and the community action that took place when the Coal Loader was decommissioned?

4. Use the Henry Lawson poem as inspiration for your own piece of creative writing. Try and capture your own feelings towards the site and write about that or think about some of the issues that Balls Head may face today and include in the poem, writing or drawing. Don't forget to give your poem, writing or drawing a title.

Draft your poem here



Chapter 1 – History of the Coal Loader

Activity 3 – Student worksheet

The Coal Loading System Materials Flow

Name

Activity Summary:

This activity will encourage students to use the information about the coal loading system provided to construct a materials flow diagram that will show how coal would have been moved on, around and off the site.



Inquiry questions:

1. How was coal moved from the harbour across the space?
2. What machinery and materials were used at the Coal Loader?
3. What was the importance of coal 100 years ago?

Syllabus Outcomes:

- Describe processes and influences that form and transform places and environments. GE4-2
- Identifies and describes significant people, events, places and sites in the local community over time. HT1-2
- Describes and explains how significant individuals, groups and events contributed to changes in the local community over time. HT2-2
- Identifies that materials can be changed or combined. ST1-6MW-S



Materials and Preparation:

- Students to bring a clipboard, writing equipment and a copy of the worksheet which has background information.
- A4 laminated Coal Loader Map.
- Students to read and discuss the background information in chapter 1.

Background Information

The Coal Loader on the western side of Waverton peninsula is a very special site where many paths of history intersect.

The Coal Loader operated from the 1920's to 1990's primarily as a transfer depot for coal from colliers to smaller coal-fired vessels.

Some coal was also distributed to the local market by road transport. It was a record-breaking facility, demonstrating state-of-the-art technology for its time.

In the 1920s coal was unloaded from large ships (colliers) and dumped on the platform above by cranes that moved along the seawall. Chutes in the tunnel roof released the coal into elevated travelling 'feeders' which directed coal into skips below. When full, the skips travelled onto the adjacent wharf to discharge their coal onto waiting ships.



Chapter 1 – History of the Coal Loader

Activity 3 – Student worksheet

The Coal Loading System Materials Flow *continued*

The facility consisted of 177m long wharf, which was 18m wide. In 1921, after only a year of operation, the Coal Loader was breaking records, delivering nearly 2500 tons of coal in less than 20 hours.

A high-speed conveyor was installed in the middle tunnels in the 1970s. It was one of the most advanced methods of coaling in Sydney Harbour and dispensed with the need for ‘coal lumpers’ to shovel fuel from colliers to receiving steamers while out in the Harbour. A ‘coal lumper’ was a person who was employed to load and unload coal from the ships.



The site operated for over 70 years before being decommissioned. It was dedicated as public open space in 1997, formally transferred to North Sydney Council in 2003, and opened as the Coal Loader Centre for Sustainability in 2011.

Location – Sit on the Coal Loader Platform in front of the glass information panels.

Introduction:

The Coal Loader is a former industrial site that operated from the early 1920s to the early 1990s. It functioned primarily as a transfer depot for coal from bulk carriers to smaller coal-fired vessels. During this activity you will use the information provided to draw a flow diagram that shows how the coal would have been moved around the site in the 1920's.

In the 1920s coal was unloaded from large ships (colliers) and dumped on the platform above by cranes that moved along the seawall. Chutes in the tunnel roof released the coal into elevated travelling ‘feeders’ which directed coal into skips below. When full, the skips travelled onto the adjacent wharf to discharge their coal onto waiting ships.



Chapter 1 – History of the Coal Loader

Activity 3 – Student worksheet

The Coal Loading System Materials Flow *continued*

Name

The facility consisted of 177m long wharf, which was 18m wide. In 1921, after only a year of operation, the coal loader was breaking records, delivering nearly 2500 tons of coal in less than 20 hours.

1. Start with a brief discussion with students based around Inquiry questions, that is,
 - How was coal moved from the harbour across the space?
 - What machinery and materials were used at the Coal Loader?
 - What was the importance of coal 100 years ago?
2. Read the introduction together as a class.

Students are to circle the labels on the diagram below as the teacher points out the various areas where the:

- coal was unloaded,
- coal was craned onto the platform,
- chutes were,
- tunnels are,
- small coal ships waited for the coal.

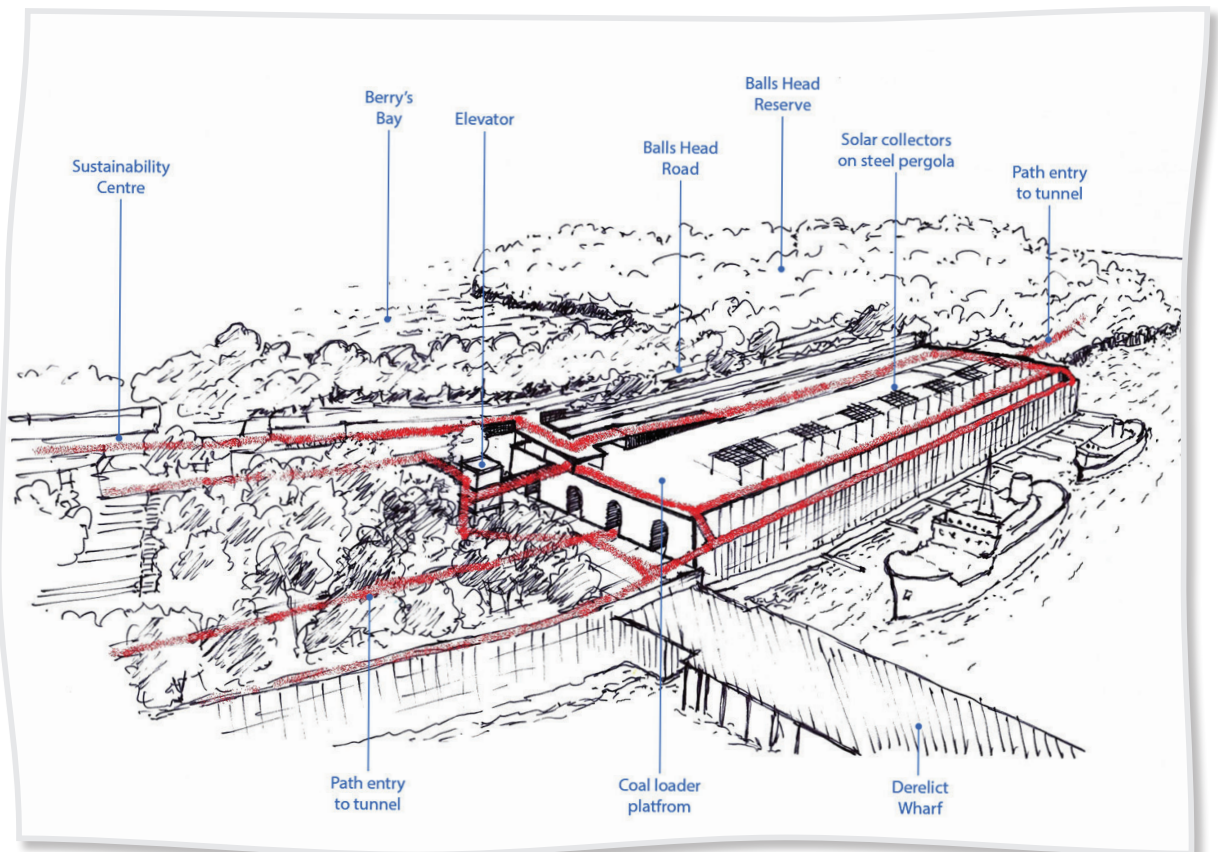


Diagram X shows simplified coal loading process (source: CorkerConsulting)

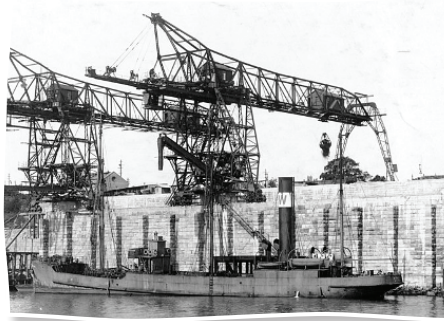


Chapter 1 – History of the Coal Loader

Activity 3 – Student worksheet

The Coal Loading System Materials Flow *continued*

3. Try putting these historic Coal Loader photos in the correct order by labelling the photos:
1. Unloading. 2. Piling up coal. 3. Loading coal.



4. Can you observe any remnants (remains) of these machines?

What are they?

What materials are they made from?

- Use the information provided in the Introduction to draw a flow diagram that shows how the coal was moved to, from and around the site
- Use arrows to show the direction of the coal needed to travel
- Include any other outputs eg fuel, water and noise etc

Draw flow diagram here



Chapter 1 – History of the Coal Loader

Activity 3 – Student worksheet

The Coal Loading System Materials Flow *continued*

- d. What have people used coal for over the last 100 years ?
Name at least two uses:

HISTORY HUNT

Walk around the Coal Loader site and find these features:

