



# Sydney Water and Alexandra Canal

Stage 4 Geography – Water in the World  
Self-guide excursion resource for teachers

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Alexandra Canal is an artificial waterway that follows the course of Sheas Creek. It starts in Surry Hills from underground springs and flows in a southerly direction to Botany Bay via the Cooks River.

The value people have had for Alexandra Canal has changed over time. It has been a ...

- source of food and resources for Aboriginal people
- source of water for colonial food production and manufacturing
- transport route for trade
- dumping place for industrial waste
- a stormwater drain
- heritage listed asset
- recreational space





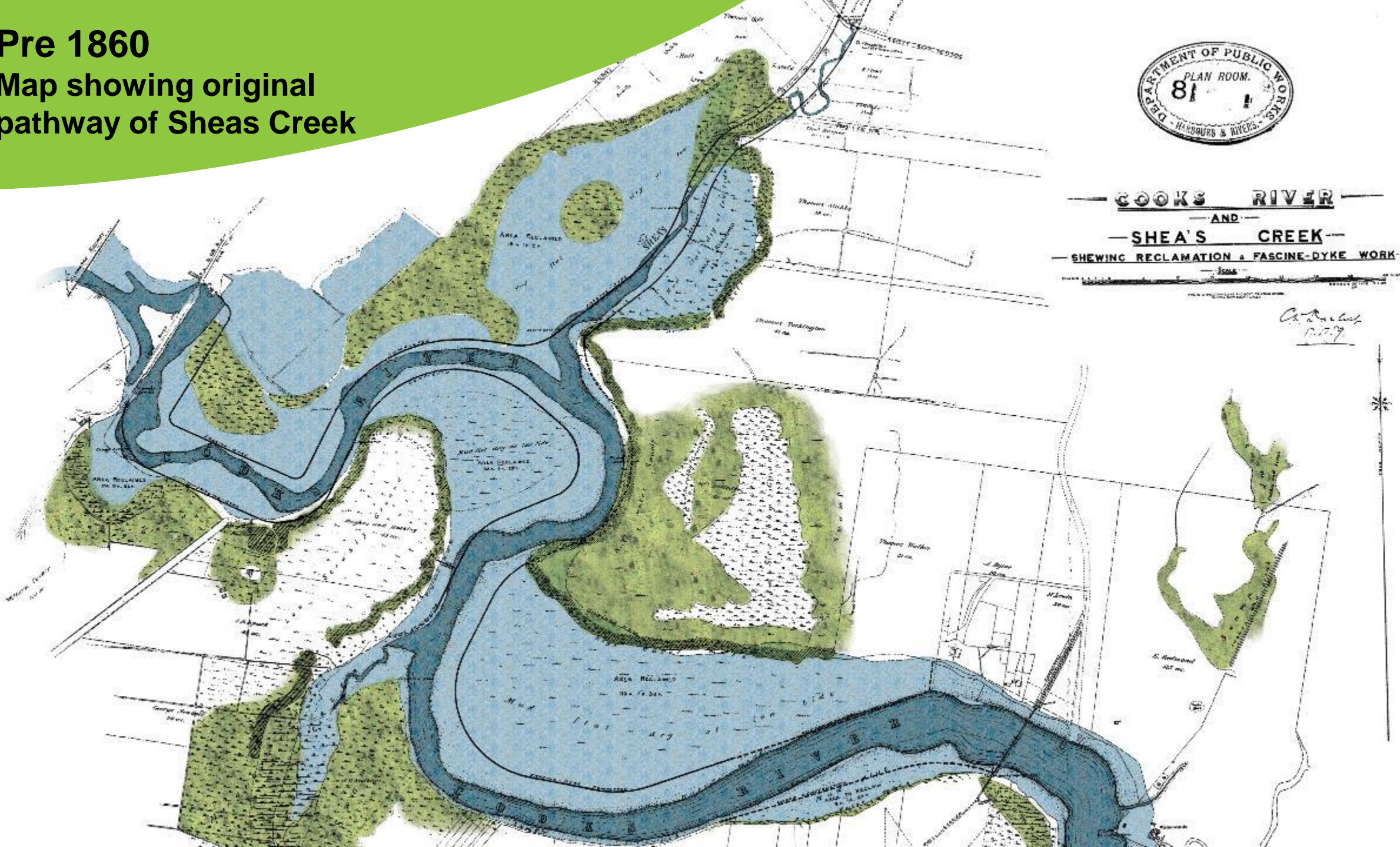
Pre 1860

Map showing original  
pathway of Sheas Creek



COOKS RIVER  
AND  
SHEA'S CREEK  
SHOWING RECLAMATION & FASCINE-DYKE WORK

*Chas. J. ...*  
1859





# Natural creek

source of food and resources for Aboriginal people

Sydney  
**WATER**



During the canal construction 7,000 year old Dugong bones with cut marks were discovered. This discovery told us a lot about the local climate, the plants and animals in the area and the lifestyle of the original inhabitants.

Before the arrival of Europeans this waterway was a natural tidal creek. It was surrounded by Swamp Mahogany and Casuarinas in the upper creek and Mangroves and Saltmarsh closer to the Cooks River.



# Sheas Creek

source of water for colonial food production  
and manufacturing

Sydney  
**WATER**



- Sheas Creek was named after Captain John Shea. He arrived with the First Fleet as captain of the ship Scarborough.
- The first use of the creek was as a water supply for Chinese market gardens.
- In 1848 the Slaughterhouse Act forced all polluting industry to move out of the city.



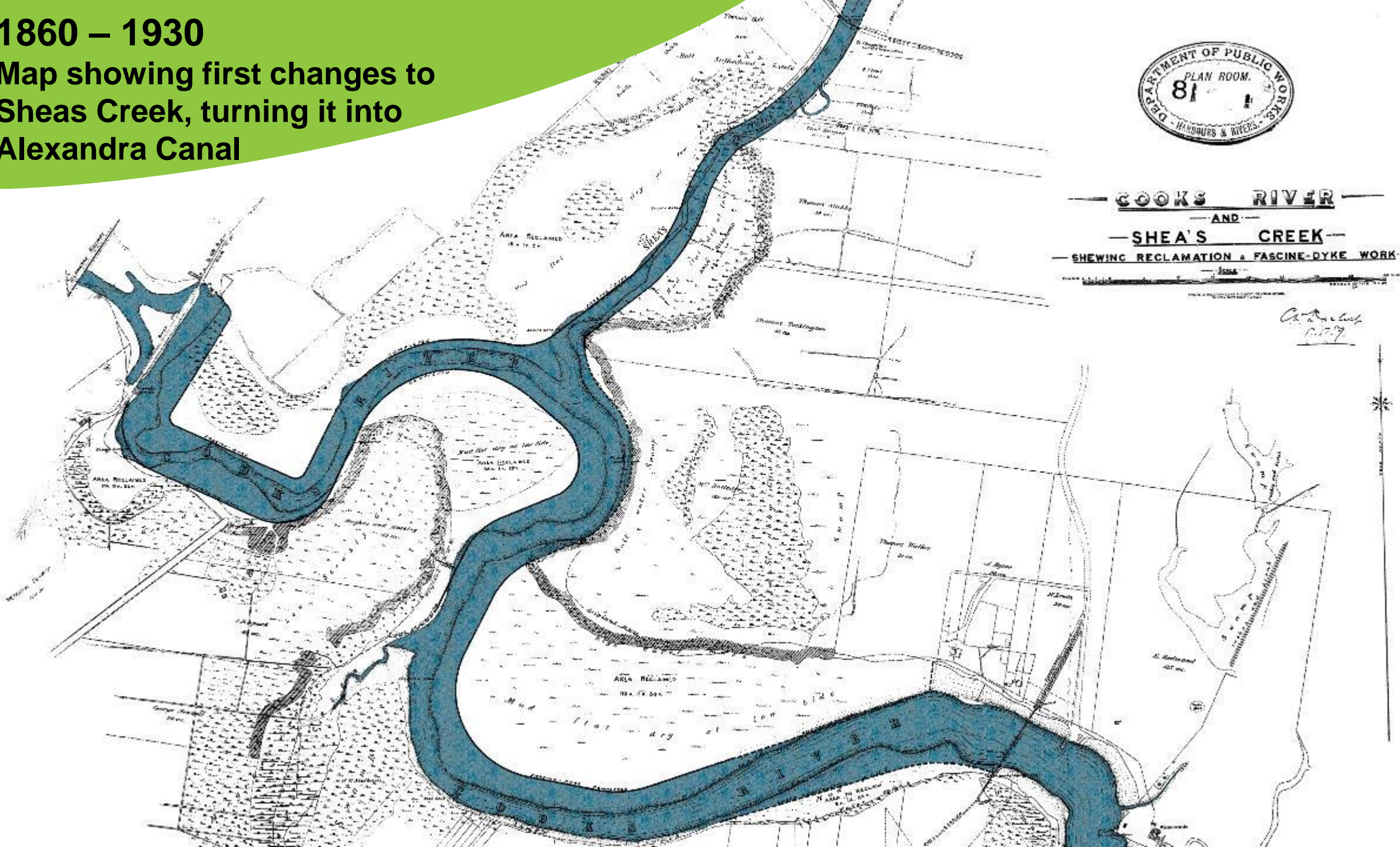
1860 – 1930

Map showing first changes to  
Sheas Creek, turning it into  
Alexandra Canal



— COOKS RIVER —  
— AND —  
— SHEA'S CREEK —  
— SHOWING RECLAMATION & FASCINE-DYKE WORK —  
— Scale —

*C. D. ...*  
1879



# Alexandra Canal

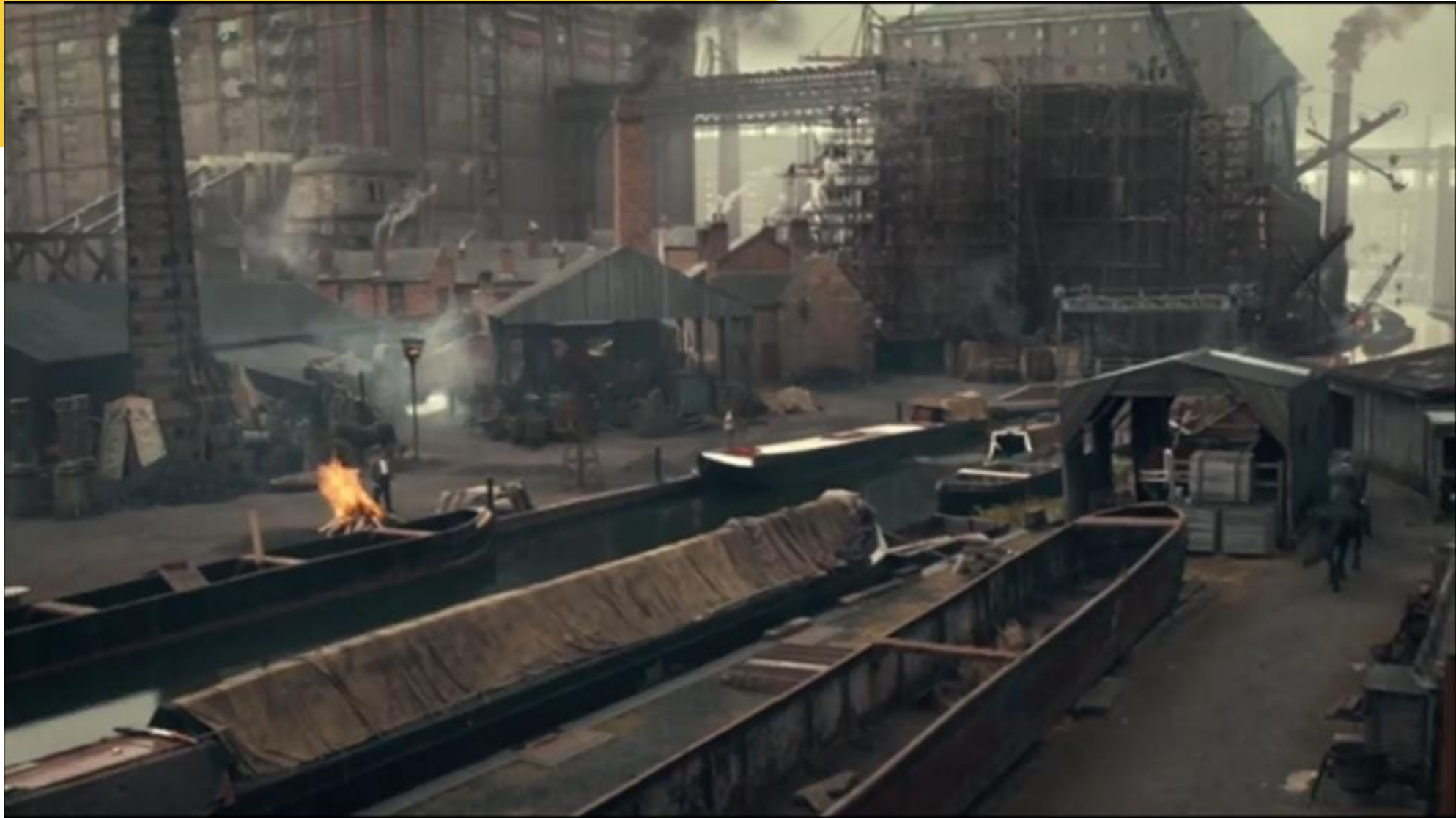
transport route for trade and dumping place  
for industrial waste

Sydney  
**WATER**



Industrial activities included brickworks, tanneries, abattoirs, lime kilns, chemical manufacturing and wool stores





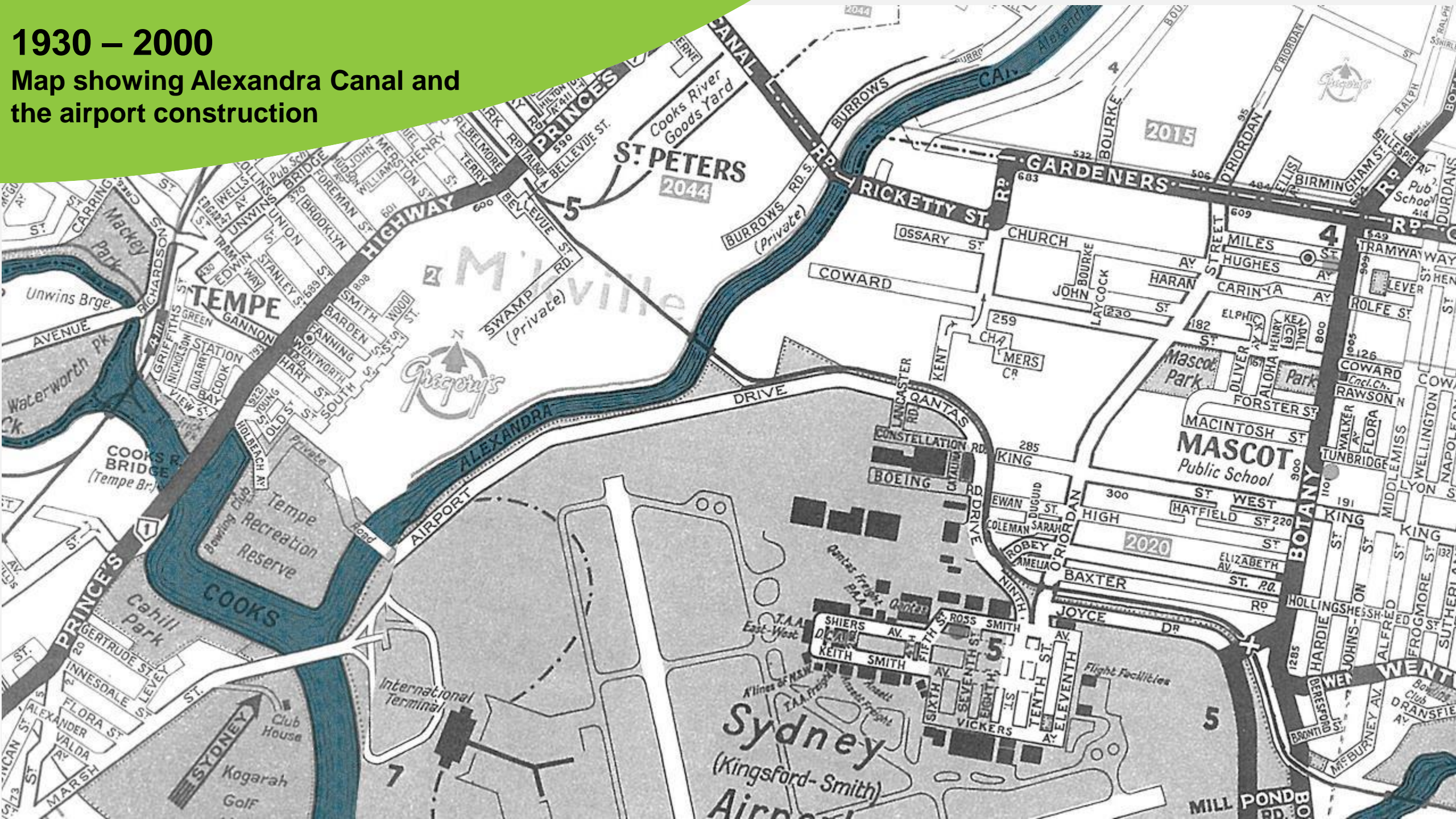
The development of Alexandra Canal was inspired by the industrial canals of Birmingham UK. The TV show Peaky Blinders has recreated the industrial canal use in Birmingham

<https://www.youtube.com/watch?v=JwXfVGjSz-4>



1930 – 2000

Map showing Alexandra Canal and the airport construction





# Alexandra Canal

A stormwater drain and urban decay

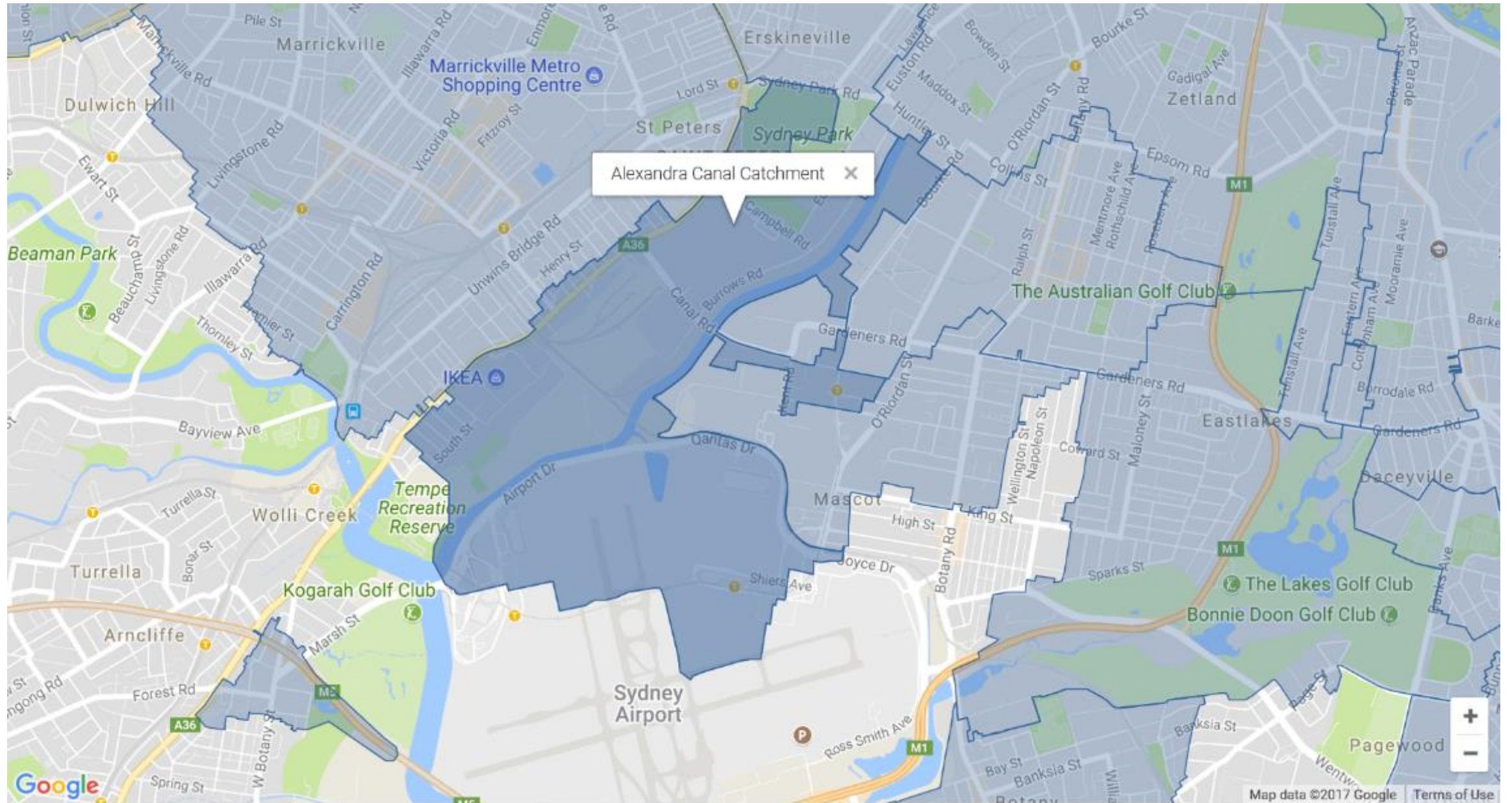
Sydney  
**WATER**



This is still an industrial area but the canal is no longer in use for transport, so it has begun to decay. Today, it is an outlet for the stormwater from the surrounding area.



# Stormwater catchment area





# Investigating the site

## Heritage

A Conservation Management Plan was created to report on the value of this place as evidence of our industrial past



## Environment

Major erosion along the side of the canal had reduced public enjoyment of the site



We have used 3D modelling to inspect areas we cannot reach in person. The orange section in the aerial image below can be seen in 3D. Click on image.





**2000 – today**  
**Satellite image showing**  
**Alexandra Canal today**





# Naturalisation



To fix the canal we have build a new wall. It is made of sandstone with gaps in it. These gaps are spaces for plant and animal habitat. We also worked with local council and community groups to create a space for recreation. We also tried to keep some of the previous features of the landscape such as the old Moreton Bay fig.



# Alexandra Canal Bank Restoration



## Bank ecology

The Alexandra Canal bank restoration project restores riparian banks to create diverse habitats. The design creates a variety of unique environments, including:

- 1. **High tide** - This area is designed to provide a habitat for birds and insects. It features a mix of native and introduced plants, including trees, shrubs, and grasses. The design also includes a series of concrete blocks that create a series of small pools and wetlands.
- 2. **Mid tide** - This area is designed to provide a habitat for birds and insects. It features a mix of native and introduced plants, including trees, shrubs, and grasses. The design also includes a series of concrete blocks that create a series of small pools and wetlands.
- 3. **Low tide** - This area is designed to provide a habitat for birds and insects. It features a mix of native and introduced plants, including trees, shrubs, and grasses. The design also includes a series of concrete blocks that create a series of small pools and wetlands.
- 4. **Remnants of the original bank** - These are the original concrete blocks that were left in place when the bank was restored. They provide a habitat for birds and insects.
- 5. **Hard hat ecology** - This area is designed to provide a habitat for birds and insects. It features a mix of native and introduced plants, including trees, shrubs, and grasses. The design also includes a series of concrete blocks that create a series of small pools and wetlands.
- 6. **Sandstone bank ecology** - This area is designed to provide a habitat for birds and insects. It features a mix of native and introduced plants, including trees, shrubs, and grasses. The design also includes a series of concrete blocks that create a series of small pools and wetlands.

## Heritage Values

The Alexandra Canal bank restoration project restores riparian banks to create diverse habitats. The design creates a variety of unique environments, including:

- 1. **Original riverbank** - This area is designed to provide a habitat for birds and insects. It features a mix of native and introduced plants, including trees, shrubs, and grasses. The design also includes a series of concrete blocks that create a series of small pools and wetlands.
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# Alexandra Canal Bank Restoration



To see the finished project and hear what our community thought about it, watch this video

<https://www.youtube.com/watch?v=gvsuQLdtu5Y>



# Your safety is important

All waterways in Sydney are stormwater drains. Moving run off from high points to low points in the catchment.

Stormwater drains can be open channels or underground tunnels.

Some naturalised stormwater drains are designed to look like a natural creek.

It's important that you don't go into drains - even during fine weather.

Stormwater drains can be very dangerous places.

- stormwater can contain pollution like broken glass, chemicals, disease causing bacteria and litter
- water in drains can rise quickly and unexpectedly, even when it's not raining in the local area
- You can be swept away by water in a stormwater drain. Even shallow water can be very powerful and could knock you over





# Sydney **WATER**

