

## Local History Research: Weirs, Locks and Dams

LCRK paddlers would be well familiar with the weir just upstream from Fullers Bridge – it pretty much sets the upstream limit of our paddling (unless you want to drag your boat over the top), and overflows with enthusiasm after periods of heavy rain. The weir was completed in 1938 – coinciding with the opening of the Lane Cove National Park in the area upstream of Fullers Bridge (which was completed 1918).

But as we'll see below, we could well have found ourselves with a Lock (ie a proper Murray River Lock!) at Fishermans Point just upstream of our current 12km turn. Now that would have made for some interesting Time Trial course records! And/or a permanent portage as part of the course!

Perhaps predictably, both the current weir and the Lane Cove National Park, were the result of much discussion, lobbying and prevarication from the mid-1920's. More interesting though, was that weirs, locks and dams at a variety of locations on the Lane Cove River were all on the agenda from the late 1800's.

For context:

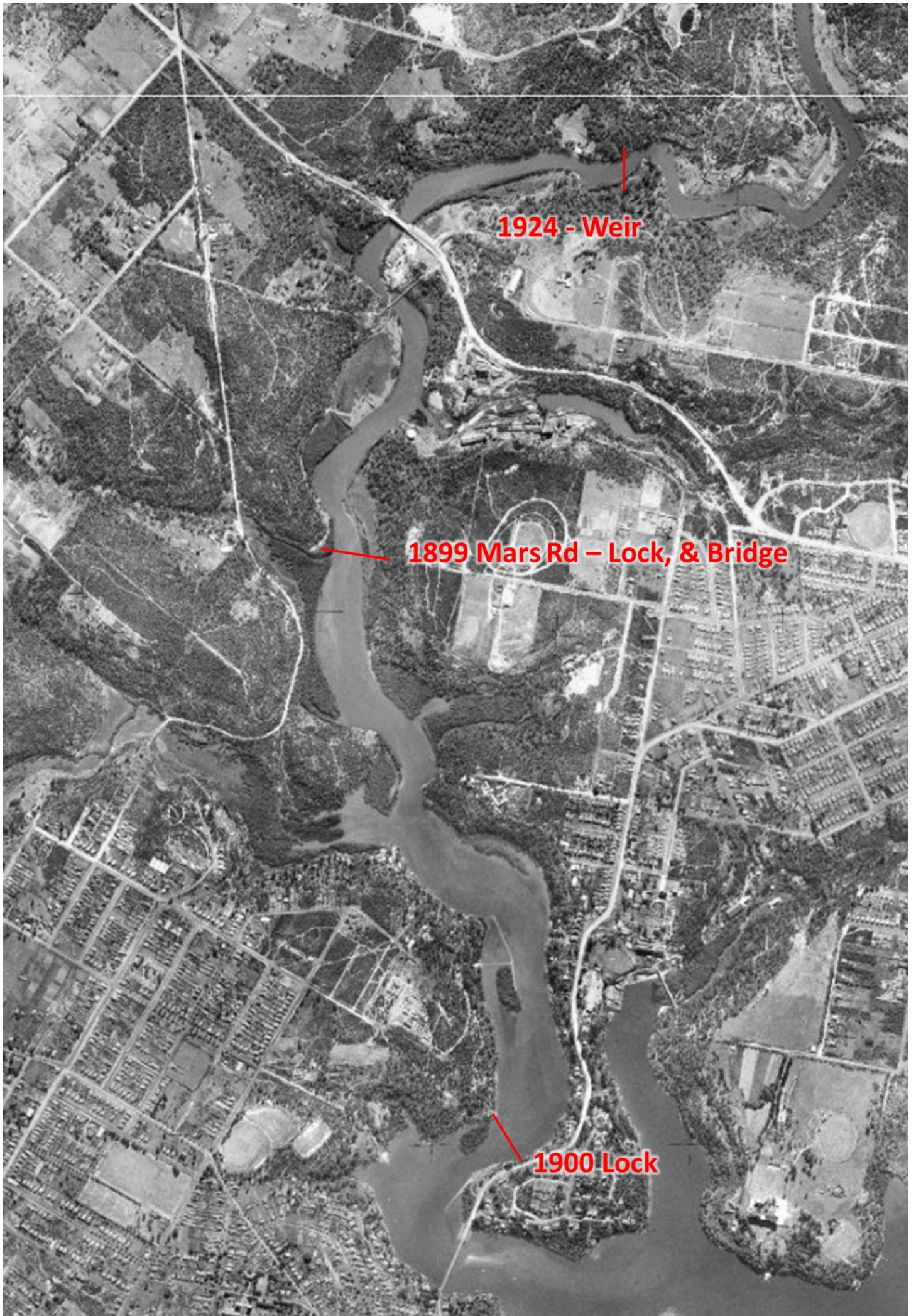
- the 'Factory' at Duck Corner had been in operation as a Flour Mill since ~1890 (and prior to that a Boiling Down Works from ~1870).
- Fairyland Pleasure Grounds was a hive of activity from ~1900
- Cumberland Paper Mills (up Stringybark Creek adjacent to the 6km turn) opened in 1913
- And with catchment area logging and development from the 1880's - the river had been rapidly silting up and sections of it had become only navigable at high tide around these times.
- Dredging of the river came much later – most notably in the 1960's

There seem to be three primary motivations to damming the Lane Cove River: water supply, navigation and recreation. A summary of dates and descriptions of various proposals are shown below, and some of these are explored in more depth in the following pages.

1. Purpose: Damming/retaining fresh water flows from upriver for irrigation and water supply purposes.
  - 1870. A dam, *above the tidal influence* (ie above current location of De Burghs Bridge) as Sydney's water supply – or 'lower down' *creating seven miles of dammed channel*.
  - 1902. A weir at head of the navigable portion of the river (ie current location of De Burghs Bridge) – 25ft high for irrigation.
  - 1903. A weir at end of Balaclava Rd North Ryde (opposite Gloucester Ave West Pymble) for irrigation. 30ft high with argument for 80ft (more dam than weir!)
2. Purpose: Trafficable Locks as an aid to shipping navigation (both commercial and recreational)
  - 1899. A lock at end of Mars Road (ie just downstream of our 6km turn). In conjunction with a bridge/causeway for a promised tramway to the new Field of Mars subdivision.
  - 1900. A lock between Cunninghams Reach ('Fishermans Point') and Boronia Park. Lock to be 20ft wide, 20ft deep and 70ft long.
3. Purpose: Beautification and recreation, oh and keeping the sharks out...
  - 1924. A dam/weir at 'Fairyland Rocks' for creation of a *wonderful recreation reserve* upstream.
  - 1936. A weir upstream of Fullers Bridge (ie current location) as part of the newly formed Lane Cove National Park. Both of which subsequently opened in 1938.

The map overleaf (1943 aerial from Six Maps – copyright) shows the section of the river from the LCRK Pontoon – down to the 12km TT turn. Overlaid are three of the proposed lock/weir sites which would have impacted on our current day Time Trials. Whilst the aerial photo is some decades later than the original discussions – it gives some representation of the geography at the time.

The discussion then proceeds with a chronological report on the various propositions....



1924 - Weir

1899 Mars Rd - Lock, & Bridge

1900 Lock

## 1870 – Sydney Water Supply...

SMH 15 Sep 1870

Source: <https://trove.nla.gov.au/13218733>

Whilst only a letter to the editor, this lengthy letter (extract only) proposes a solution to Sydney's Water supply. Either for a smaller a dam above the head waters of Lane Cove River (ie around De Burghs bridge) – or a much larger dam (logically at either Fullers or around Fairyland). As an alternative to Sydney water supply from Upper Nepean or Georges River. It demonstrates early thinking on the subject.

## 1900 – a Lock at Cunninghams Reach (Fishermans)

This idea is perhaps the most interesting, and was certainly the most developed – with plans drawn, politicians serenaded, promises made and key stakeholders apparently on board.

The proposal was for a substantial Lock – just a little upstream of our 12km turn point. Indications are the lock height would have retained up river section at a 'permanent high tide' level – ie not a massive lake.

This would be consistent with preserving the upstream operations of both the Flour Mill at Duck Corner, and Fairyland Pleasure Grounds – both of which active (and influential) at the time.

Alternate sources suggest a resultant 6ft rise at the Flour Mill however it is surmised this was probably a reference to '6ft above low tide' vs '6ft above high tide'.

The lock was described as being 20ft wide, 20ft deep and 70ft long – capable of dealing with good sized steamers and ships (and even a couple of K4's!)

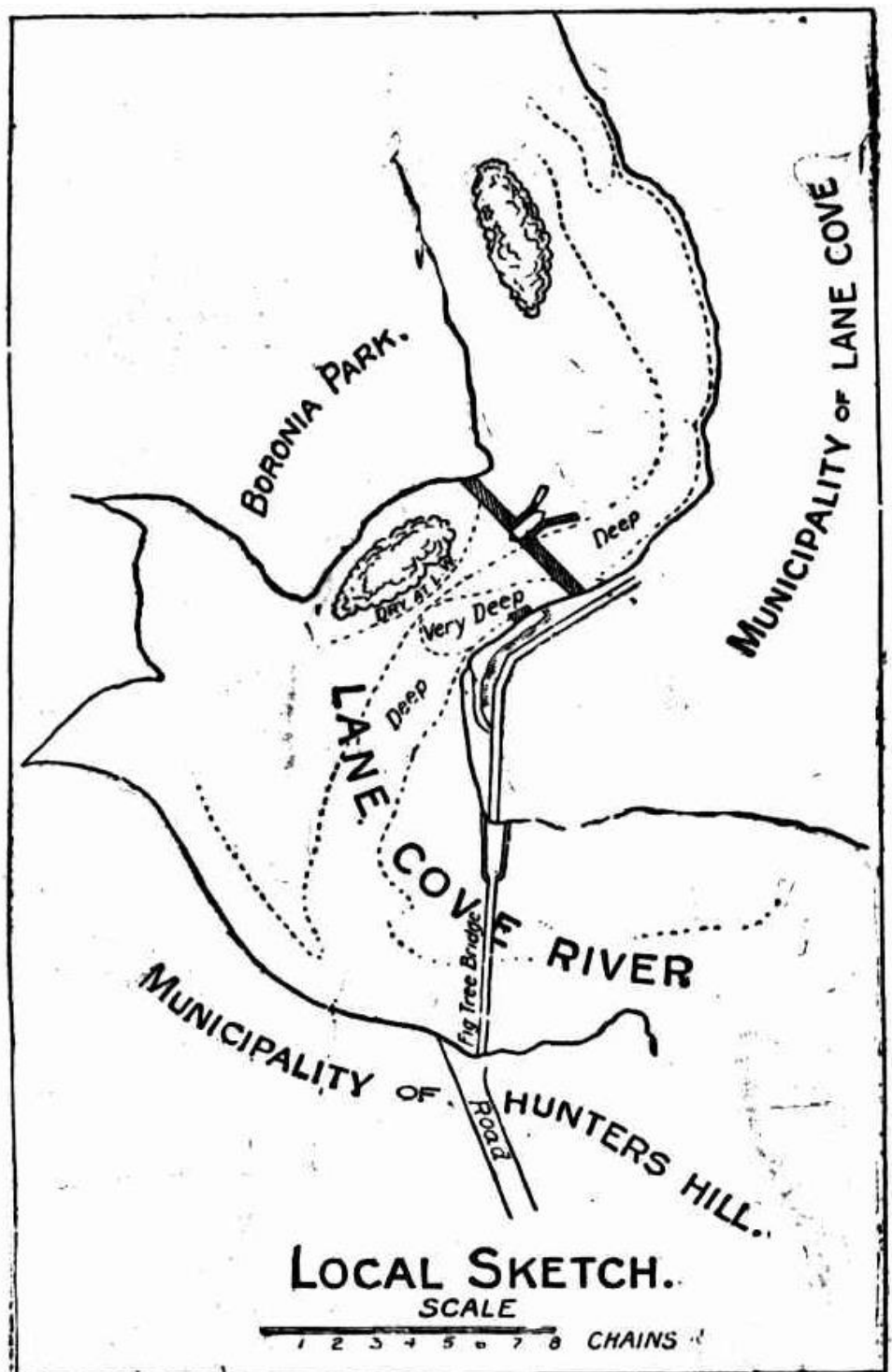
The original article from The Australian Star is reproduced overleaf.

### WATER SUPPLY.

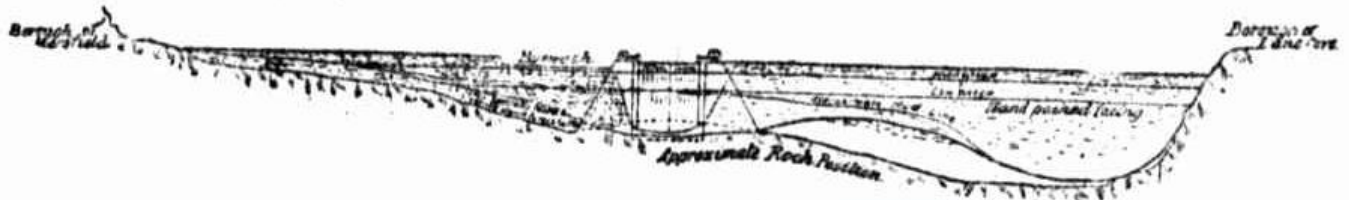
TO THE EDITOR OF THE MERALD.

SIR,—Will you kindly permit me to submit to the public a scheme for the supply of water to Sydney, which, on account of the comparatively small expense at which it may be carried out, deserves consideration.

Within three miles of Sydney is the mouth of the Lane Cove River, a tidal inlet upwards of seven miles long, and having a large extent of catch-water basin, in country similar to that of the Lachlan and Botany swamps, so that the water is equal in purity to that which is obtained from those places. By damming this watercourse above the tidal influence a supply much greater than that from Botany might be secured, and that supply be many times multiplied by damming lower down, as not only would the river itself receive and hold more water as in an artificial lake, but several affluents be enclosed which would catch and retain great quantities of water.



## SUGGESTED WEIR ON THE LANE COVE RIVER.



GENERAL SIDE VIEW OF WEIR.

Of the many beautiful scenes surrounding Sydney a trip up the Lane Cove River is one of the best known. The steam ferry service extends as far as Fig Tree Bridge, but above this the river is a series of shoals cut by a more or less intricate channel.

The river extends upwards some nine miles beyond the Fig Tree Bridge, and to those who are sufficiently energetic to row to the head many charming scenes are revealed. The banks are here and there occupied by orchards, and there is ample room for plenty more were the facilities of access more possible. A row boat trip is usually taken at high tide when the waters cover the shoals and the verdure lies right on the water's edge; at low tide the river is almost unnavigable. Therefore a proposal to construct a weir on the Lane Cove River, and so render it navigable the whole distance at all times, must be admitted by all to be a highly desirable one. The only question is, will the benefits derived by the State compensate for the expenditure? This, it is contended, can be answered in the affirmative, and without much difficulty it can be proved that the results will compensate highly indeed for the money proposed to be expended thereon.

At the present time the river is only navigable by regular passenger steamers as far as the Lane Cove River Bridge, a distance from the mouth of about three miles. The remainder of the river, a distance of nine miles, is only navigable by small row-boats at high tide. The strength of current during flood and ebb is so great as almost to prevent rowing boats from attempting to proceed against the tide. The result is that only those who can spare the time when the tides

room; the lock also obviously provides a guard against sharks being admitted into the locked part of the river.

The estimated cost is £7600. A depth of water at high tide level would be thus maintained at all times, and would ensure a passage of the river for boats with safety day and night.

With a little further expenditure the whole length could be made navigable by passenger steamers, and tens of thousands would have



SECTIONAL VIEW OF WORK.

an opportunity of visiting the most beautiful part of Sydney Harbour at a very reasonable cost, say 1s return from Sydney.

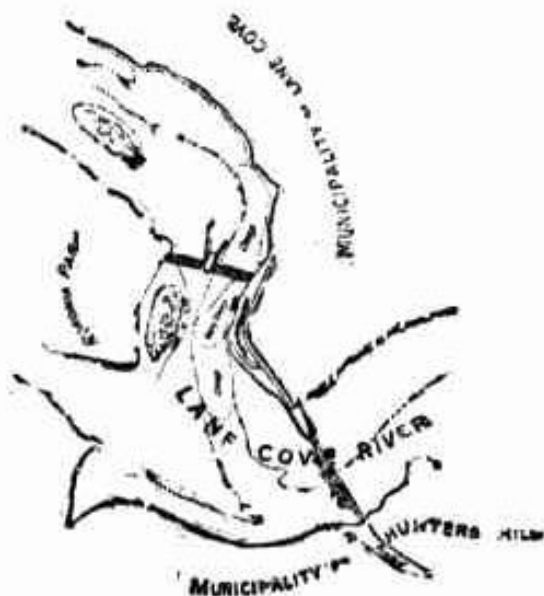
This sheltered part of the harbour is by Nature designed for boating and bathing parties. With perfect confidence the boating public could embark in boats containing numbers of people, and the shocking loss of life that occurs every year would be entirely avoided as far as this river is concerned.

The shark horror would be a thing of the past, and one of the finest bathing places in New South Wales would be available to the public free.

Besides providing just the thing that is urgently wanted for the public large areas

are favourable are able to avail themselves of the trip, thus limiting the pleasures of thousands of boating parties who would gladly take advantage of the charming scenery and safe enjoyments that a jaunt on the Lane Cove provides.

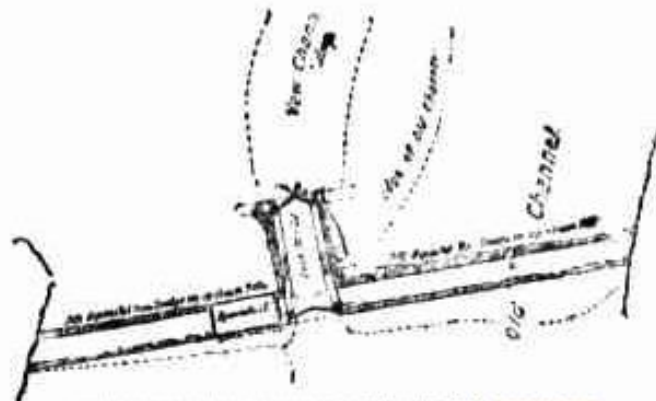
By locking the river at the point just above the well-known iron bridge at Fig Tree, the passage of steamers and ships will be extended further than hitherto, and a large area opened up for public use and enjoyment. At the point indicated in our illustration nature



LOCAL SKETCH.

has provided the narrowest part most suitable for approaches, and well endowed with building materials. Consequently the selection of this place was made for the lock and weir.

The plans drawn by Mr. Herbert E. Ross, C.E., give the total length of weir at 330ft., and of breadth sufficient to withstand all the elements that are likely to be brought against it, and constructed on standard principles. Provision is made for a lock 20ft. wide, 70ft. long, and 20ft. deep of concrete of the most recent design, thus any steamer that is likely to pass through for years will have ample



LOOKING DOWN ON THE WEIR.

of Government land would be provided with nine miles of water frontage; indeed, the increase in value of the Field of Mars alone would pay for the cost of the work many times over.

The value of property in the surrounding districts of Hunter's Hill, Ryde, Marsfield, Hornsby, Pynible, Willoughby and Lane Cove would be greatly enhanced.

The time of journey from Sydney wharf to Lock would be under 30 minutes, and doubtless holiday excursion boats would land passengers in 20 minutes. The fare now is 6d return, and it is only reasonable to suppose that in a few months after completion of the work the fares would be reduced to 4d return.

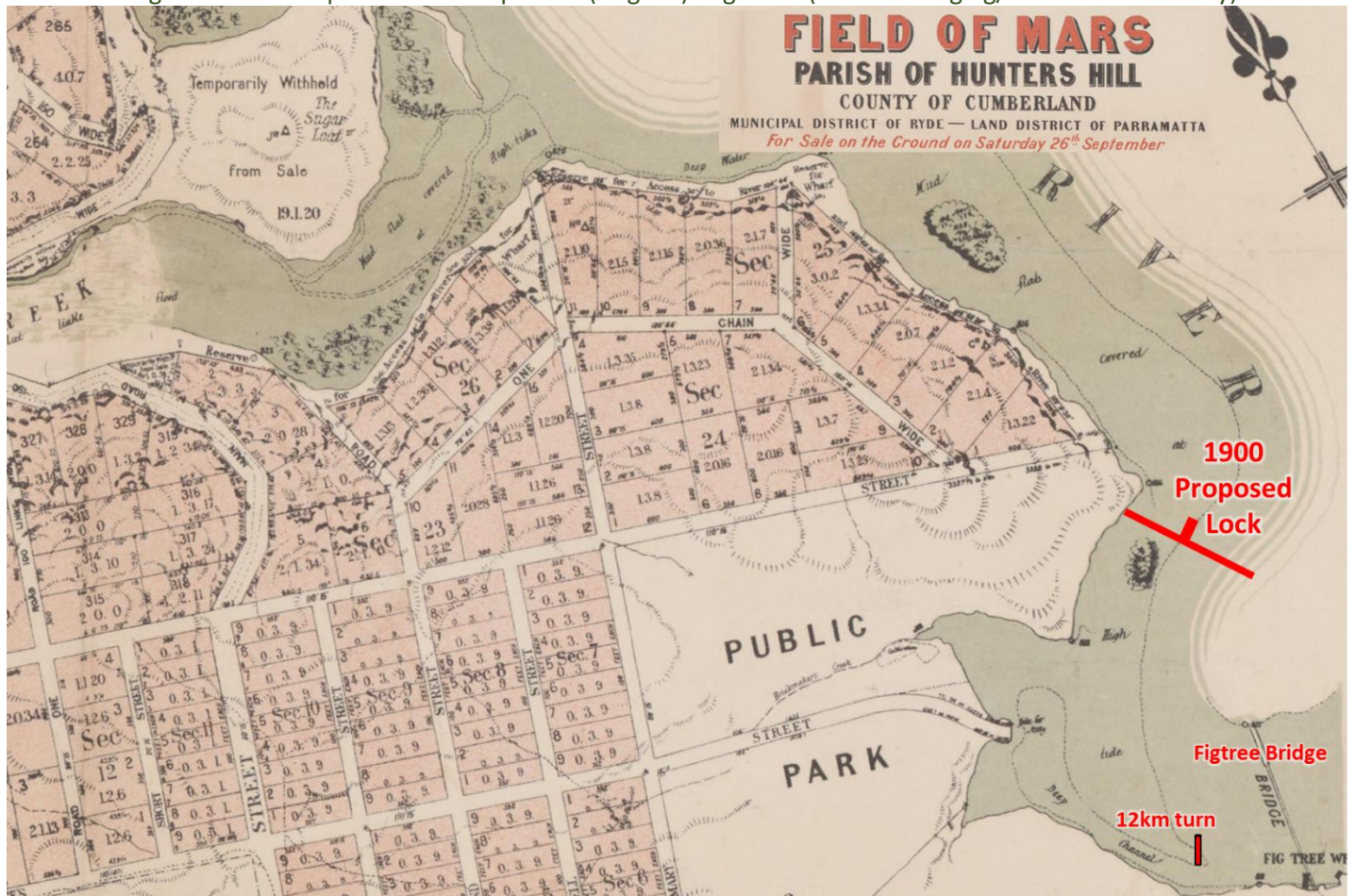
The proposal would embody an admirable fishing reserve for fish culture under the most favourable conditions, and water and fish would be placed entirely under the control of the Department of Fisheries.

the Department of Fisheries.

On public grounds alone it should commend itself to Parliament, and if our legislators are not prepared to risk the public moneys in the venture they should at least allow private enterprise to come in and do some good for the people.

Failing the Government undertaking this work, we understand that in order to show that it is payable private money is available to carry out the proposal. The only concession asked in return is the sole right to ply for hire on the upper river, and Government to have power to resume at any time at cost price.

For added context – here is an extract of the 1885 Field of Mars subdivision – overlaid with position of the lock and LCRK’s exiting 12km turn. Top left of the map is the (original) Sugarloaf (before dredging/reclamation activity).



Source: <https://nla.gov.au/nla.obj-230182707>

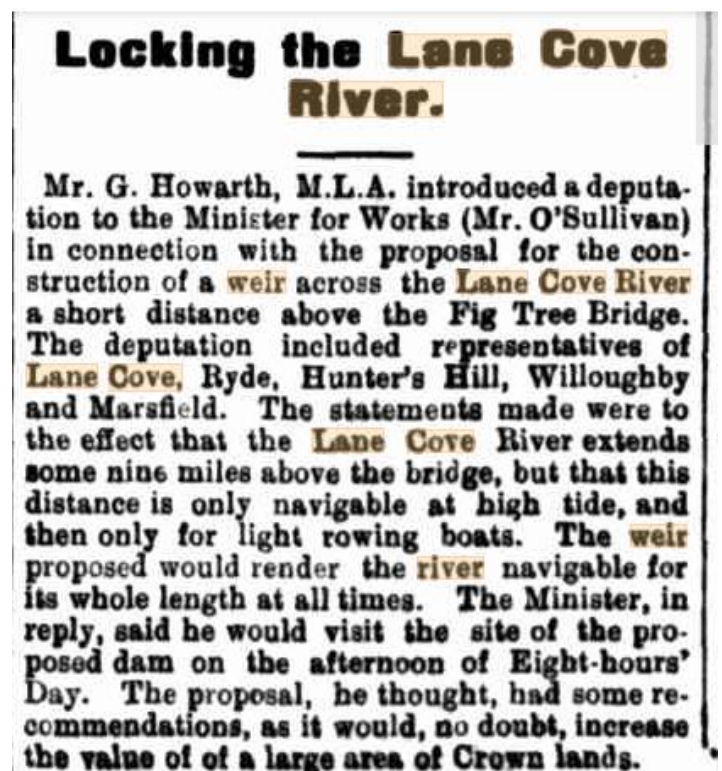
...and the obligatory “Site Visit”

[The Cumberland Argus and Fruitgrowers Advocate \(Parramatta, NSW : 1888 - 1950\) / Sat 15 Sep 1900](#) ,

Source: <https://trove.nla.gov.au/newspaper/article/85818386>

The article at right provides further elaboration on the motives for the Lock, with the river only navigable the full nine miles (ie to De Burghs Bridge) at high tide – and only for light rowing boats!

In 1901 there is record of Mr O’Sullivan having issued an instruction for preparatory works to commence on this Lock – although not much information on what happened from there..



## 1902 - Reservoir at head of the river (~De Burghs bridge)

The Daily Telegraph (Sydney, NSW : 1883 - 1930) / Thu 23 Oct 1902

Source: <https://trove.nla.gov.au/newspaper/article/236814411>

Not looking very encouraging – but again the prospect of a reservoir at the head of the river (ie near De Burghs Bridge). Purpose would appear to be for freshwater supply.

O'Sullivan was the Minister for Works (ie State Gov't)

**WEIR AT LANE COVE RIVER.**

In answer to Mr. Farnell, Mr. O'SULLIVAN said that a report and survey had been made for a weir 25ft. high at the head of Lane Cove River. The water would be backed up about 4500ft., and the contents of the reservoir would be about 40,000,000 gallons. No estimate had been prepared, but £3000 was the approximate cost for this weir. No definite conclusion had been arrived at as the scheme could not be recommended, because the amount of water stored would be comparatively insignificant.

## 1903 – Weir at end of Balaclava Road North Ryde / Turramurra

The Daily Telegraph (Sydney, NSW : 1883 - 1930) / Sat 14 Mar 1903

Source: <https://trove.nla.gov.au/newspaper/article/237397203>

A Marsfield Council proposal for a weir at end of Balaclava Rd North Ryde – crossing towards Gloucester Ave West Pymble). The height suggests this is more of a dam than a weir...

**THE LANE COVE WEIR.**

At the last meeting of the Marsfield Council it was decided to again approach the Minister for Works and urge the construction of a weir on the Lane Cove River at the end of Balaclava-road, for the purpose of conserving water for irrigation and other uses. Exception was taken to the official report, which dealt with a weir only 30ft. high, as it was considered that there was ample room for one of 80ft.

# 1924 – Weir just above Fairyland

The Sun (Sydney, NSW : 1910 - 1954) / Thu 4 Dec 1924

Source: <https://trove.nla.gov.au/newspaper/article/223577352>

This proposal seems to be a combination of local councils – Ryde, Willoughby, Lane Cove, North Sydney with plans (or at least thoughts) of a 'huge freshwater lake' and what would become a National Park - upstream of Fairyland...

Weir height is not discussed – but presume similar to the current Fullers weir (ie set above high water level to maintain separation of salt/fresh water)

## WEIR AND RESERVE

### Damming Lane Cove River

#### COUNCILS TO CONFER

"If they had water frontages like this in America or Melbourne, they'd never stop skiting about it."

This remark was made by Ald. J. W. Tomlin, of Lane Cove Council, yesterday afternoon, when a party of enthusiasts visited the upper reaches of the Lane Cove River.

The party was organised by Ald. Dyer, Mayor of Ryde, in which municipality the main portion of a proposed reserve on the Lane Cove River is situated.

A conference of aldermen from different municipalities will discuss the scheme later on. To give delegates an idea of the area, Ald. Dyer issued a number of invitations to take the trip by motor launch from Fairyland towards de Burgh's bridge, a distance of 4½ miles.

Those who comprised the party included Aldermen Dyer, Greenwood, Douglas, and Miller (Ryde), A. E. Rudder (North Sydney), J. W. Tomlin (Lane Cove), Parkes and Norquay (Willoughby), Mr. R. P. Napier (North Ryde Progress Association), Messrs. D. N. Morrison (town clerk), and D. Cameron (engineer), (Ryde), and Mr. Robert C. Swan, the proprietor of Fairyland pleasure grounds, who placed his launch at the disposal of the party.

Alderman Rudder some time ago put forward a proposal for building a weir across the River, thus creating a huge fresh water lake, the country surrounding it to form a national reserve.

The Mayor of Ryde explained during the trip that there were a number of reserves along the river, and an effort was to be made to have these vested in the councils concerned—Ryde, Lane Cove, Willoughby municipalities, and Kuring-gai Shire.

At present the land is reserved from sale only; and the councils want to secure the land first and improve it afterwards.

According to experts, the proposed weir is not expected to present any engineering difficulties. There is a natural bar of rock across the river above Fairyland, and this could be utilised as a foundation for the dam. The catchment area will consist of from 15,000 to 20,000 acres.

Although the area is only a few miles from the Sydney G.P.O., the rugged scenery, with its giant bush trees and wild flowers of all kinds, will form a wonderful recreation reserve.



Source: <https://trove.nla.gov.au/newspaper/article/246983610>

This article is three years on from previous— and is more emphatic (and descriptive) of a 'National Park' from Fairyland all the way to De Burghs bridge – with a weir at Fairyland as a key component.

## What Has Become of Plans for Lane Cove River?

What has become of the scheme, which received much publicity some time ago, for the creation of a second "National Park" on the upper reaches of the Lane Cove River? Each year that passes is going to make this plan more difficult and costly to carry out, and, at the same time, more necessary for the general health of the neighborhood.

WITH the completion of the North Shore Bridge and the St. Leonards to Eastwood railway an enormous growth must take place in the districts bordering the river. Already, in anticipation of these works, buildings are going up on every hand, and settlement is spreading closer and closer to the banks of the stream.

Factories also are gradually claiming a place alongside the river, and unless something is done to stop this tendency the beautiful valley will be altogether ruined for future generations.

### WHAT IS WANTED.

Briefly, the scheme is to construct a weir across the stream a little above Fairyland, and to resume all the land from there to the head of the river. This would provide an area of 1100 acres to be a unique playground, close to the heart of the city, with four and a half miles of waterway through the centre of it from Fairyland to De Burgh's bridge.

Nowhere in the world does an opportunity like this exist, and we are letting it slip through our fingers. The cost of the scheme would be something like £30,000. What is that sum com-



THE BEAUTY OF THE RIVER.—

A bend in Lane Cove River, where a wonderful opportunity for the creation of a park is being let slip.

pared with the surpluses which Governments are daily shouting about? Yesterday I spent some hours exploring what portions of the district I could cover in the time.

I came away convinced that there is a charge upon the people of Sydney to do this thing for their children, and that everlasting shame will rest upon us if it is not done.

It is not hard to imagine what this place will be like in a few years' time if this work is undertaken before it is

too late. Wooded hills sweep back from the banks of the river, full of wild life and those native flowers whose very existence our materialism is threatening at the present day.

If these areas are preserved now they will be places of wonder and de-



FIG-TREE BRIDGE, LANE COVE.—Above this point the river still retains much of its natural charm. Are we going to allow it to be destroyed?

light in that not far distant day when the city shall have spread all around them.

If nothing is done the river must inevitably become a mere drain running through masses of houses and factories.

### A PROMISE ONCE MADE.

I have been told that Sir George Fuller, when he was Premier, promised a deputation that he would make this work a national matter, and would move his Cabinet in the direction of having it done at the expense of the State.

That was just before the elections which saw the defeat of his Government. Nothing was done then, because it was thought to be too near polling day for the Government to undertake such a work.

Nothing was done afterwards because Sir George's Government was then no more, and the powers which have since occupied the Treasury benches have had other things to think of in their battle to have their own political skins.

But something must be done soon. If it is not done by the Lang Government before the coming elections, then those who will have the matter in their hands on that day should see that a Government is returned that has a sense of its responsibilities to the city, and to those who must inhabit it after us.

WATCHMAN.

## 1936 – Weir just above Fullers Bridge

The Sun (Sydney, NSW : 1910 - 1954) / Thu 31 Dec 1936

source: <https://trove.nla.gov.au/newspaper/article/230908146>

Whilst the National Park had been discussed previously (eg the 1927 article above), this is a firmer example of the proposal for the current weir.

Construction of this started in 1937 and was completed in 1938 – as was the National Park including Riverside Drive and associated picnic areas.

### NEW NATIONAL PARK

---

## Planning Lane Cove River Reserve

The Lane Cove River National Park, when completed, will accommodate scores of thousands of picnickers, according to Mr. C. B. Thistlewaite, chairman of the committee which has just completed its recommendations to the Government concerning the acquisition of lands.

"We are now waiting on the Minister for Lands to appoint a trust to complete the scheme," Mr. Thistlewaite stated to-day. "The park may be ready for the 150th anniversary celebrations."

Mr. Thistlewaite said that 500 acres of the foreshores of the river, between Fuller's and De Burgh's bridges had been secured, but several areas still remained to be acquired.

"It is proposed that a weir should be constructed about a quarter of a mile from Fuller's Bridge to dam between 40 and 50 acres of water," he said.

"This would be suitable for aquatic sports and boating. The 200 acres of flat area around the lake would make a splendid picnic resort."

## 1937 – Disappearing Pollution

The Daily Telegraph (Sydney, NSW : 1931 - 1954) / Sat 10 Jul 1937

A portent of things to come....

### WEIR WILL END RIVER POLLUTION

Any pollution now existing on the upper Lane Cove River will disappear with the construction of the weir near Fuller's Bridge.

That statement was made yesterday by Mr. C. Bowes Thistlethwayte, president of the Lane Cove National Park Trust, replying to an allegation by Alderman Maguire, of Rockdale, that the site was not suitable for the Boy Scouts' international jamboree in 1938.

Construction of the weir at a cost of £7500 would provide a lake suitable for bathing and boating, similar to Audley Lake at National Park, Mr. Thistlethwayte added.

[trove.nla.gov.au//247221730](https://trove.nla.gov.au//247221730)

## 1939 – Freshwater Sharks!

The Daily Telegraph (Sydney, NSW : 1931 - 1954) / Tue 26 Sep 1939

And not even in the (fresh) water were you safe!

### Sharks Seen In Fresh Water

Sharks have been reported in the Lane Cove River above a weir that was completed more than 12 months ago.

There is now fresh water above the weir.

It is believed that the sharks, trapped when the weir was built, have become accustomed to the fresh water.

The president of the Lane Cove National Park Trust (Mr. Spooner, M.L.A.), said yesterday that the prohibition on swimming above the weir would continue.

He said the trustees were examining the reports of sharks.

Mr. D. G. Stead, ichthyologist, said last night: "It is quite probable that there are sharks above the weir."

"The whaler shark—the only one which penetrates the upper reaches of the harbor, could live for years, but not breed, in fresh water."

[trove.nla.gov.au/newspaper/article/247813312](https://trove.nla.gov.au/newspaper/article/247813312)