

# Shire of Eltham Historical Society

INCORPORATED

P.O. BOX 137 ELTHAM VICTORIA 3095

## NEWSLETTER

NO 76 JANUARY, 1991

NEXT MEETING

8 PM WEDNESDAY 13 FEBRUARY 1991

ELTHAM SENIOR CITIZEN'S CENTRE

MAIN ROAD ELTHAM

(ENTER FROM SHIRE OFFICE DRIVEWAY)

GUEST SPEAKER: PAT VAUGHAN

ENVIRONMENTAL OFFICER

SHIRE OF ELTHAM

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MAROONDAH WATERWORKS CENTENARY

MAROONDAH RESERVOIR

SUNDAY 17 FEBRUARY 1991

MORE DETAILS BELOW

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### FEBRUARY MEETING:

Pat Vaughan was appointed as Environmental Officer for the Shire of Eltham in 1990. His main task in his first twelve months in the position is to produce a Conservation Strategy for the Shire. The strategy will include sections on a variety of conservation topics including the natural environment, pollution and waste control, resource conservation, cultural heritage etc. A number of working groups have been set up each containing people who are expert or at least interested in their particular topic. These groups will be seeking further input from a wide range of groups and individuals in the local community. The overall strategy is of interest but the section of greatest relevance to this Society is Cultural Heritage and Landscape.

The Society is represented on this working group by Sue Law and Russell Yeoman.

Pat's experience has been largely in the area of the natural environment. It has included preparation of a management plan for the Eltham Copper Butterfly. As a local resident he has a personal as well as professional interest in local conservation issues.

Pat will talk about the proposed conservation strategy in general terms but with particular reference to cultural heritage aspects. As well as providing first hand information on the strategy it is hoped that this talk will generate further interest and input by members.

## MAROONDAH AQUEDUCT CENTENARY:

The Board of Works has organized celebrations at Healesville on Sunday, 17th February, to mark the centenary of the Maroondah water supply system. The elements of this system include the Maroondah Reservoir and the older aqueduct which winds its way through the Shire of Eltham on its route from Healesville to Preston. The now partly disused aqueduct is a major if somewhat unobtrusive feature of the areas through which it passes.

The celebrations mark the centenary of the official opening of the aqueduct and the original weir on the Watts River, now submerged under the waters of the reservoir.

The programme for the day is as follows:

- 1.00 pm Healesville High School Band welcomes the official party at Healesville Railway Station.
- 1.15 pm Procession of horse drawn carriages through Healesville Township to the Maroondah Reservoir Park.
- 3.00 pm Commemorative ceremony and laying of time capsules.

A group of Society members will be attending. You can attend individually or contact Russell Yeoman if you would like to join the group. Some transportation can be arranged.

The Maroondah Aqueduct was once a major link in Melbourne's water supply system. Its eastern section is still used but from Research westerly it has been abandoned and some sections have been filled in.

The aqueduct was built during the period 1886 to 1891 to transfer water from the Watts River near Healesville to Preston Reservoir where it joined the metropolitan distribution system. It was originally known as the Watts River Aqueduct. The length of the aqueduct was 66 km, made up of 41 km of open channel, 10 km of tunnel through the hills and 15 km of inverted siphon which is the term used for the fourteen piped sections across stream valleys.

The areas of visual interest are the open channel sections although another interesting feature is the pipe bridge across the Plenty River near Leischa Court, Greensborough. With areas nearer to Eltham open channel sections run from Allendale Road, Eltham North to south of Main Road, Research near Eltham College; off Wyuna Road, Kangaroo Ground; between Nicholas Lane and Calwell Road, Kangaroo Ground and generally south of Sugarloaf Reservoir at Christmas Hills. To the west the aqueduct previously continued through Greensborough and Bundoora to Reservoir. To the east the aqueduct passes along the Yarra escarpment at Yering Gorge then north to Yarra Glen, Tarrawarra and Healesville to its commencement at Maroondah Reservoir.

The aqueduct is interesting historically for its function within Melbourne's water supply system. At the time it was built the construction of the aqueduct was considered an important local event in the various areas through which it passed. Contemporary records indicate that it was considered a significant engineering achievement.

From 1857 Melbourne's water was supplied from Yan Yean Reservoir but in the late 1870s it became apparent that additional catchments were necessary. Railways engineer and surveyor, John Davies, was commissioned to examine the possibilities of Watts River catchment. The report was favourable and in 1886 work was started on a weir to divert water to the proposed aqueduct. A considerable work force was employed on the weir and aqueduct and we have reports of large groups of workmen housed in tents or bark huts at various locations along the route. They significantly increased the population of small local communities and special measures were required to keep them in provisions, for instance an abattoir was established at Christmas Hills to provide meat for the workmen. The aqueduct was built of bricks made on the site and brick kilns were set up at strategic locations along the route. The work involved significant excavations on steep hillsides for the channel sections and miners were employed to construct the tunnels.

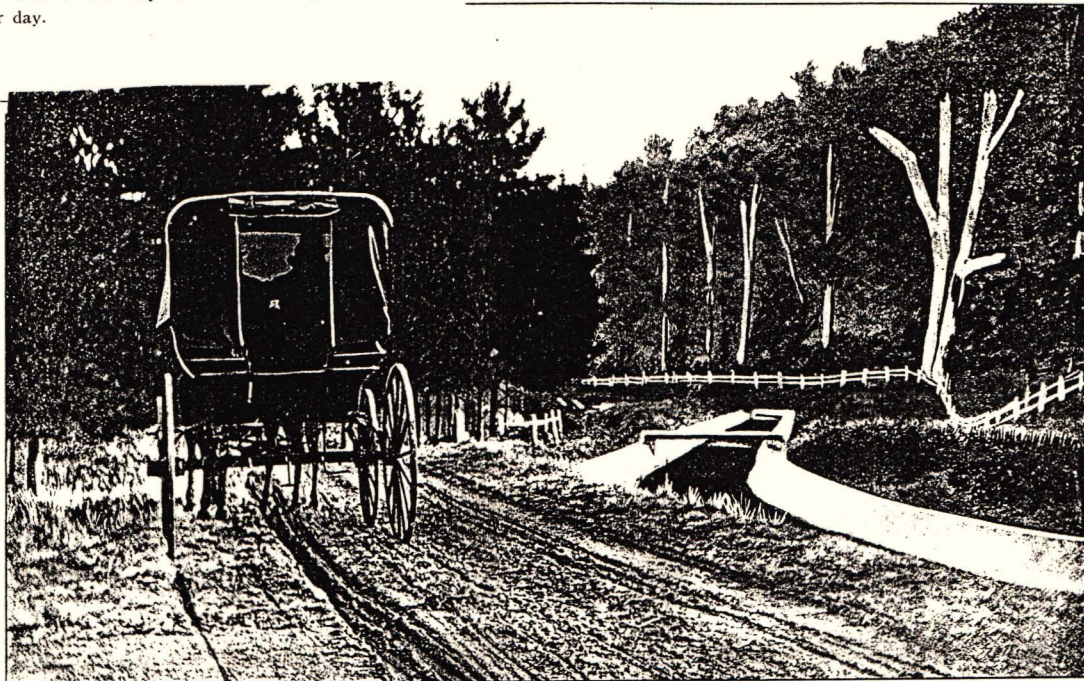
## Enlargement of Maroondah Aqueduct.



THE Board decided, in February, 1908, to increase the capacity of the Maroondah Aqueduct by raising the sides. This work is now in progress by means of a concrete berm and slopes, 18 inches high, constructed on top of the old concrete. About 607 chains have been completed, and 150 chains yet remain to be done.

The view shown is a portion of the Aqueduct near Yarra Glen.

The entire work is estimated to cost £18,000. The capacity of the Aqueduct has been increased from 25,000,000 gallons to 50,000,000 gallons, but, until the siphons have been altered, the enlarged size of the channel can only be taken advantage of to the extent of about 6,000,000 gallons per day.



Enlargement of Maroondah Aqueduct

Some of the tunnels were of considerable length. For instance the one under the ridge between Research and Kangaroo Ground is 1.7 km long.

The waterworks were opened in 1891 by the Governor of Victoria, the Earl of Hopetoun. A large party travelled to Healesville for the occasion. The O'Shannassy catchment east of Warburton was added to Melbourne's water supply system in 1914, but the city's water needs continued to grow. In 1920 work commenced on the present concrete Maroondah Dam two kilometres downstream from the weir on the Watts River. The aqueduct was enlarged at the time and its capacity was doubled to 230 megalitres a day. This involved raising the sides of the open channel and duplicating pipes in the siphon sections.

As time marches on, technology develops in the the water supply field as elsewhere. Large pipes are now easier to manufacture and more intense land development creates potential pollution problems with open water supply channels. Sections of the aqueduct have now been replaced with large pipes. In the late 1960s a large water main was constructed from the tunnel outlet at Research and extending westerly through St Helena and Greensborough. This section of the aqueduct was taken out of use. Long lengths in the Greensborough and Bundoora areas have been destroyed but at Research and Eltham North the old channel remains largely intact.

About ten years ago a further section of the aqueduct was replaced by pipes. This was the section from Sugarloaf Reservoir to the tunnel entrance at Kangaroo Ground. The main carries the water from both Sugarloaf and Maroondah Reservoirs. The aqueduct remains in operation between the two reservoirs while between Sugarloaf and Kangaroo Ground it operates at greatly reduced capacity for supply to local properties. The Research-Kangaroo Ground tunnel still forms part of the system.

Today the aqueduct channel still winds its way around the hillsides of Kangaroo Ground and Research. Its route can be identified in many instances by the mature pine trees which seem to be the identifying feature of most old Board of Works projects. In areas where there are not pines, and in some areas despite the pines, native vegetation has regenerated along the aqueduct reserve and there are impressive wildflower displays in the spring. Alongside the aqueduct there is a well made track which is or was used for daily maintenance patrols by the Board of Works.

Because of the way the aqueduct follows the contours of the land, the track beside it provides excellent walking and in many cases affords excellent views over the surrounding countryside. Unfortunately for would-be-walkers, Board of Works by-laws don't allow public access to the sections still in use. However, from Research to Allendale Road the Board has relinquished control and the aqueduct reserve is now Crown Land under the control of the Shire of Eltham.

It is being developed as a linear park and a bike path has been constructed over about half this length. The maintenance track remains for the rest of this part and this provides a pleasant walk with views over the developing residential areas of Eltham North and Research. There are structures associated with the aqueduct including covered sections and bridges at road crossings. The Melbourne Open Space Plan shows that it is intended that a future recreational trail will follow the aqueduct all the way to Maroondah.

The Maroondah Aqueduct is now the oldest of the Board of Works aqueducts close to Melbourne, (although there are older ones in the mountain catchments north of Yan Yean). The Yan Yean Aqueduct, the oldest in the system, was destroyed more than twenty-five years ago when a water main was laid in the channel. Significant sections of aqueducts in the later O'Shannassy/Silvan system have also been filled in. The remaining sections of the Maroondah Aqueduct are important in local history terms and as part of Melbourne's early public utility system. These sections are not in any immediate danger of destruction and no urgent action is required to ensure preservation. However, it is a situation where vigilance is required to ensure that neglect does not lead to the loss of this historical asset.

The theme for Heritage Week in April this year is "Water and Wetlands". We intend to arrange our own "Aqueduct Events" during that week.

#### ANNUAL GENERAL MEETING:

To satisfy the requirements of the Society's rules, notice is hereby given that the Annual General Meeting of the Shire of Eltham Historical Society Incorporated will be held at 8:00 pm on Wednesday, 13th March 1991 in the Eltham Senior Citizens' Centre. Whilst further details will be given in the March Newsletter, the Agenda of the Annual General Meeting is set out below in accordance with the rules.

1. Apologies
2. Minutes of 1990 Annual General Meeting
3. Annual Reports
  - a) President's Report
  - b) Secretary's Report
  - c) Treasurer's Report
  - d) Other Reports
4. Statement by the Society in accordance with Section 30 (3) of the Associations, Incorporations Act 1981.
5. Election of office bearers and ordinary members of the committee. Positions to be filled are as follows:

President  
Senior Vice President  
Junior Vice President  
Treasurer/Membership Secretary  
Secretary  
Ordinary Committee Members (not less than three  
and not more than six)

6. Fixing of entrance fee (if any) and annual subscription
7. Any other business of which at least two weeks notice has been given to members.

It should be noted that under the Society's rules, nominations of office bearers should be made in writing to the secretary not less than seven (7) days before the meeting. Nominations should be signed by two members of the Society and accompanied by the written consent of the candidate. If insufficient nominations are received further nominations shall be received at the meeting. However, it should be noted that where a valid prior nomination is received it will have priority and no nominations for that position can be accepted at the meeting.

#### ELTHAM, ENGLAND:

In recent years we have developed a strong relationship with The Eltham Society which represents historical and other interests at the original Eltham south east of London. That Society celebrated its 25th anniversary in 1990. As part of its celebrations it has produced Volume 1 of "Eltham in the Making" a history of the area edited by Roger Simmons. This is the first of a two volume set and covers the period from Roman times up till 1939.

We are grateful to Clifford Crate, Chairman of the Society for sending us a copy of this most interesting 128 page book. It will be available for loan to members as are all of the books in our collection.

#### "WATERSHED" JACKSON:

Ernest "Watershed" Jackson who died at Albury in October 1990 was a former resident of Kangaroo Ground and member of this Society. His late wife Vera was a descendant of the Bell family, pioneers of Kangaroo Ground and Yarra Glen.

Ernest Jackson was respected in conservation and rural circles as a conservationist before his time. As early as the 1940s he began a dedicated fight for the improvement of "watershed management" in Australia - now under the umbrella term land care. Over many years and in a variety of positions he wrote prolifically on water resources and related subjects including soil conservation and tree preservation.

In 1977 he was awarded the British Empire Medal and shortly before his death he was honoured by the conservation organization Greening Australia. This included a commemorative plaque and a letter from Mrs Hazel Hawke the organization's patron.

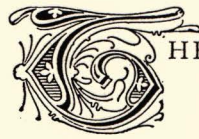
A more detailed report on Ernest Jackson's achievements is contained in the magazine Trees and Natural Resources Vol. 32 No. 4 p. 26.

#### KANGAROO GROUND FIRE BRIGADE:

On 6th February the Kangaroo Ground Fire Brigade celebrates its 99th birthday and it is understood to be the oldest "bushfire brigade" in Victoria, possibly in Australia. Plans are underway for celebration of its centenary in 1992 and it is proposed that a professional standard video documentary be produced for the occasion. The intention is to tell the story of the people behind the brigade, that is the families of Kangaroo Ground, rather than have a chronicle of fire disasters and fire fighting achievements. The brigade would be grateful for any information or documents which may be of assistance even if only in some marginal way. If you can help please contact Nicholas Pelling, P O Box 1 Kangaroo Ground 3097 or phone him on 719-7513 (day or evening).

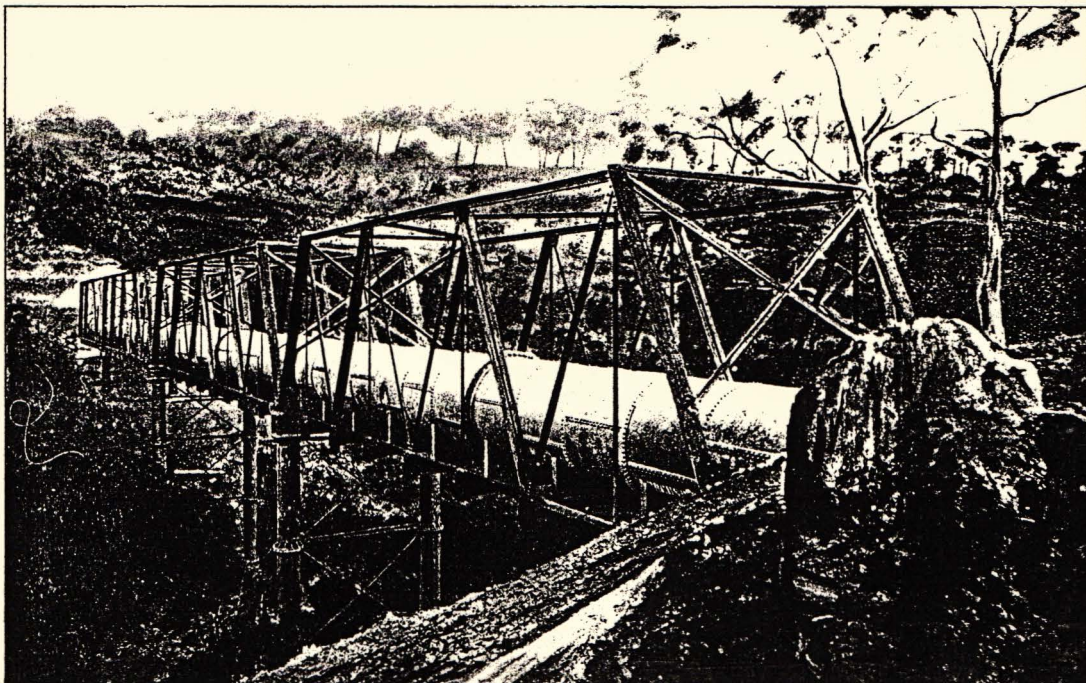


### Maroondah Aqueduct across the Plenty River.



HE MAROONDAH AQUEDUCT crosses the Plenty River in a wrought iron pipe, 53 inches in diameter by 210 feet long.

This pipe is carried by an iron lattice girder of four spans, which is constructed of sufficient width and strength to carry another pipe similar to the existing one, when the aqueduct is completed to its full size, or double its present capacity.



Maroondah Aqueduct Crossing Plenty River near Greensborough

#### OTHER NEWS:

In November we joined with the Diamond Valley Arts Society to enter a float in the Eltham Community Festival Parade. The main theme of the float was a Walter Withers painting with a "Walter" on each side busy at work. This float won the prize for the best display.

Thanks are due to Joh Ebeli who arranged the joint float through his membership of both organizations and for carrying out the bulk of the preparation work.

Our programme for 1991 is currently being finalized. If you have anything you think we should be doing in the way of meeting items or excursions, please contact a Committee Member quickly. The programme will be sent out with the March Newsletter.

Russell Yeoman  
Secretary  
439-9717

Sue Law  
President  
439-9520

Opal Smith  
Treasurer/Membership Secretary  
439-8209