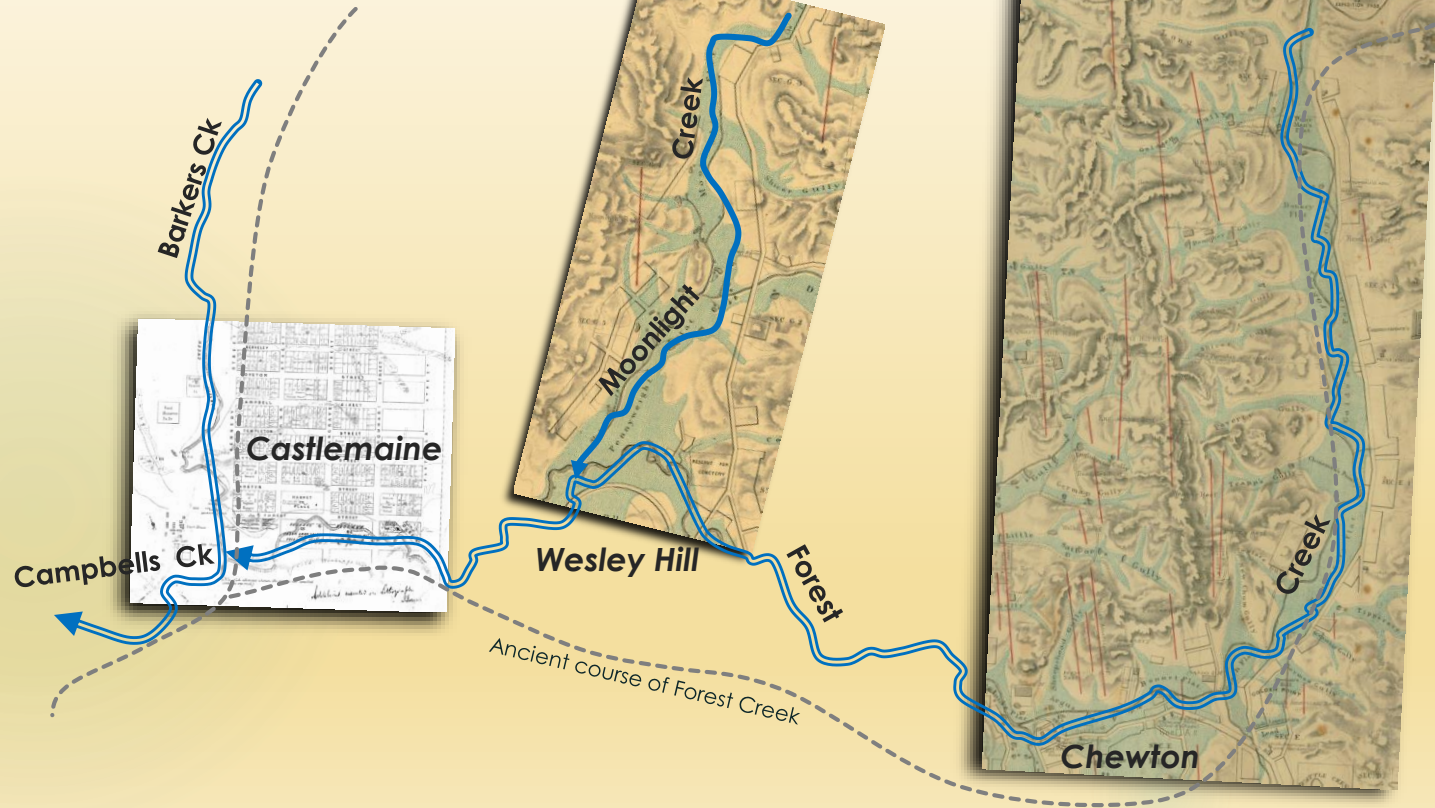
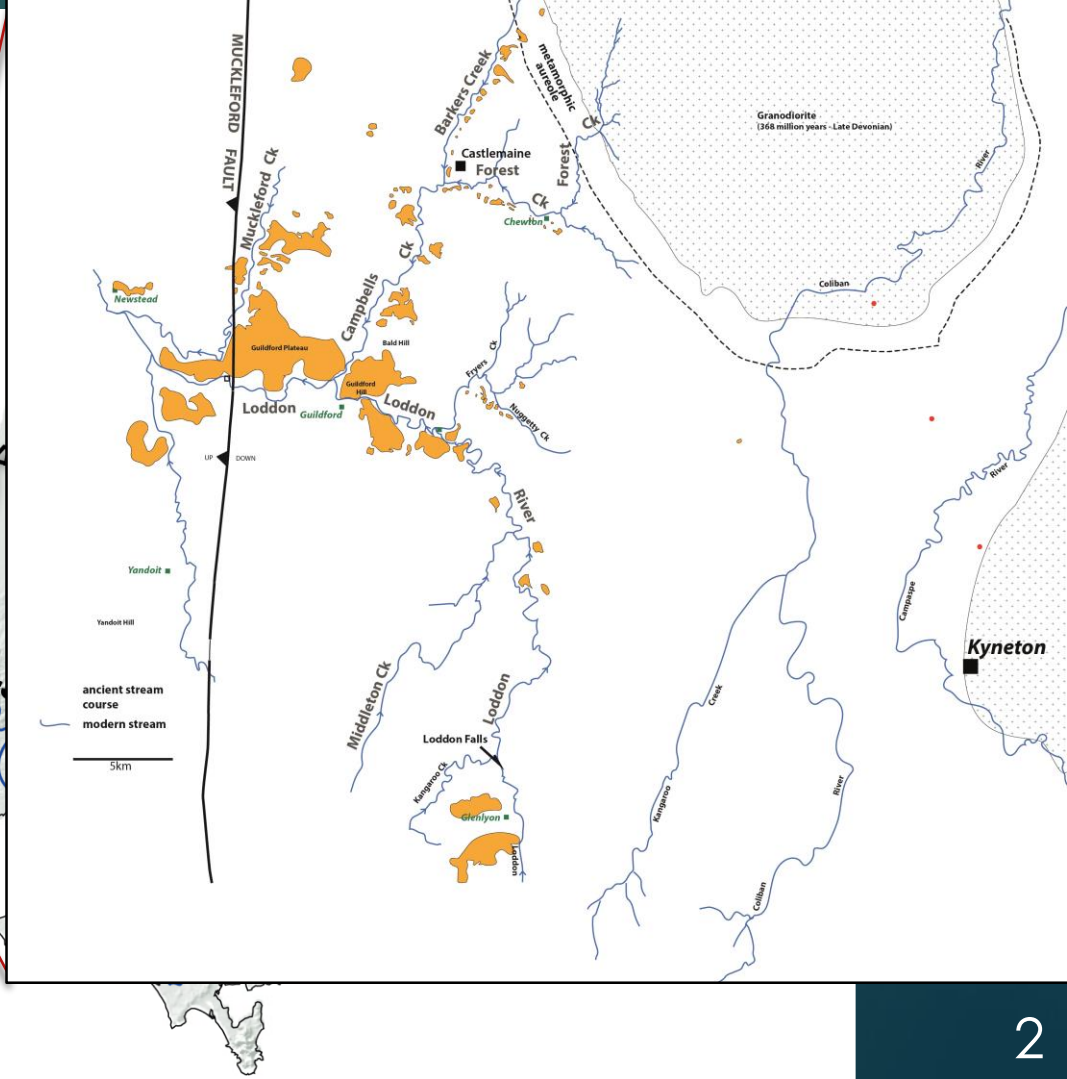
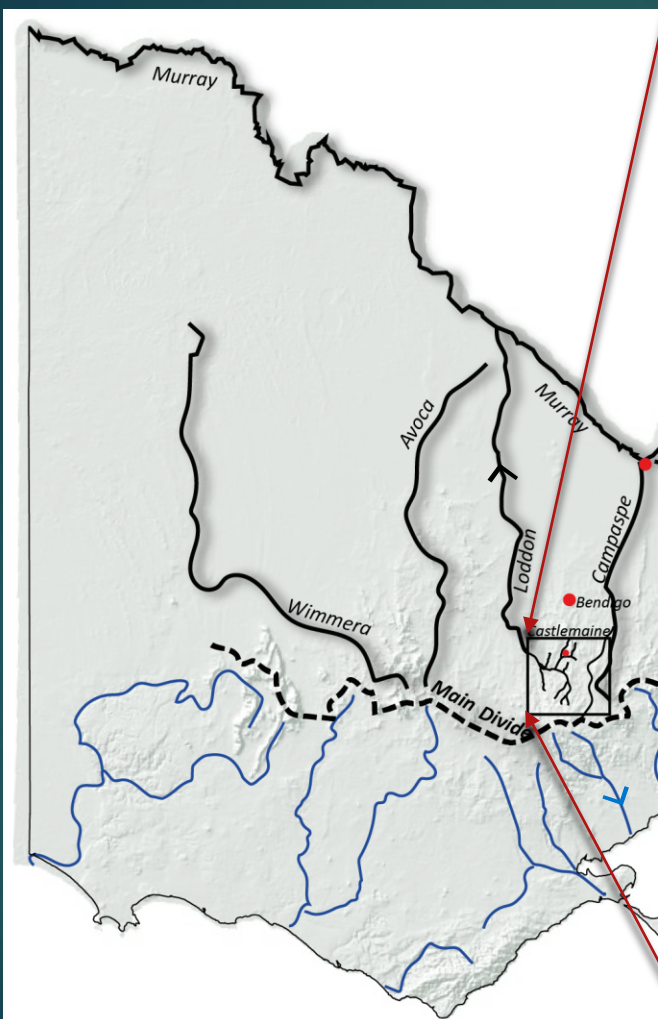


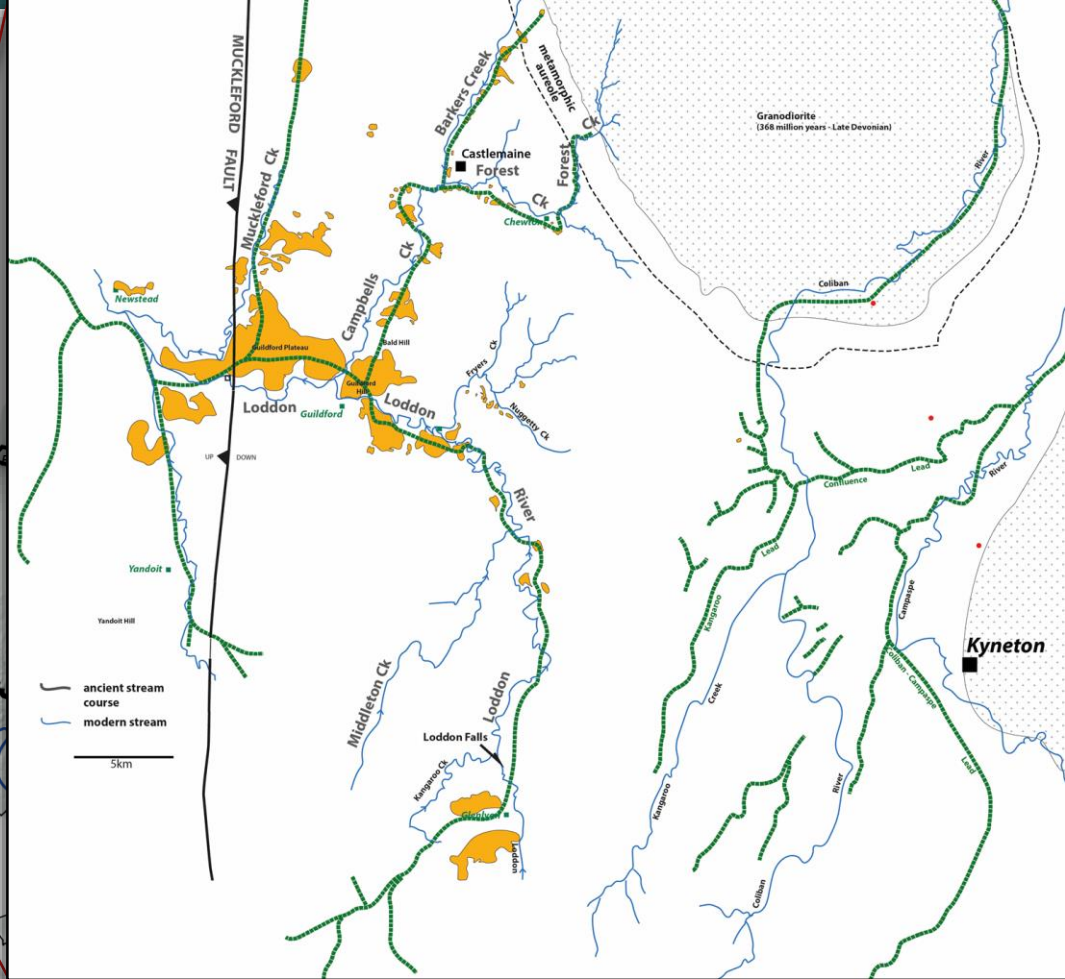
FOREST AND MOONLIGHT CREEKS

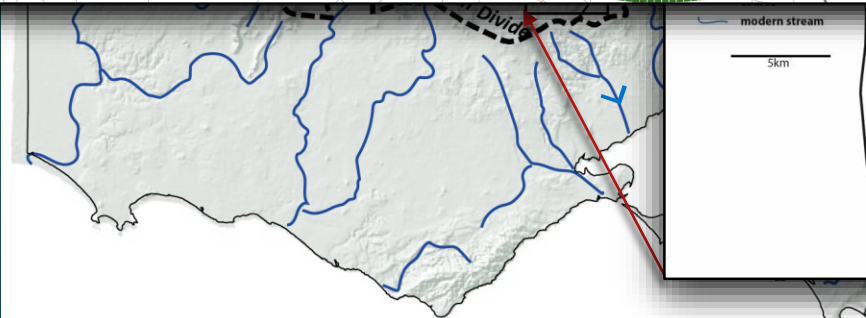
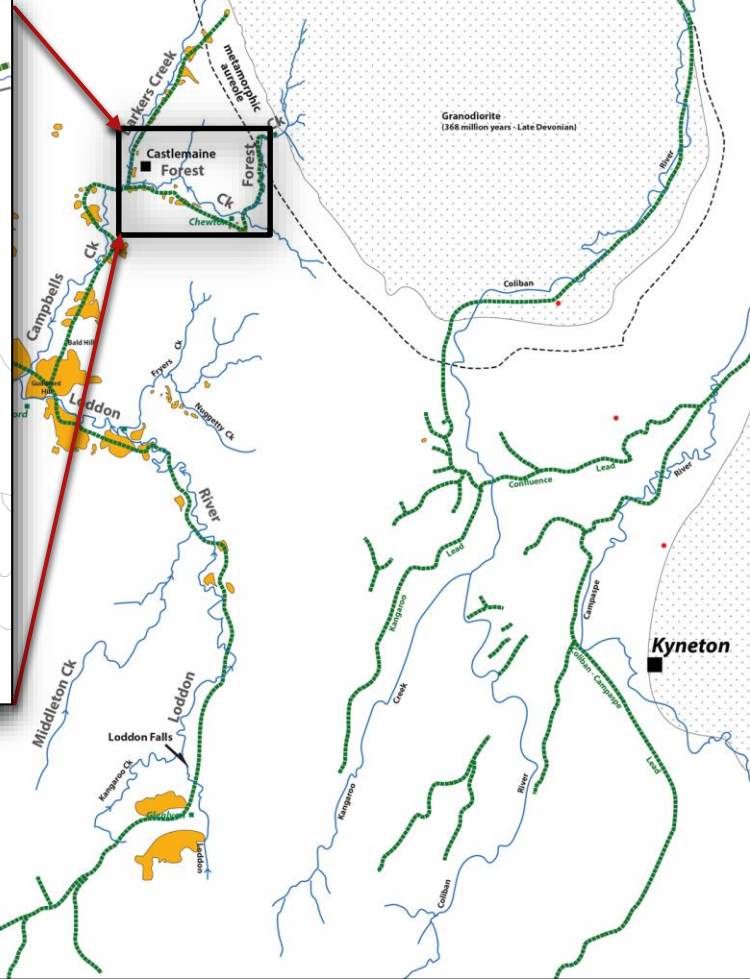
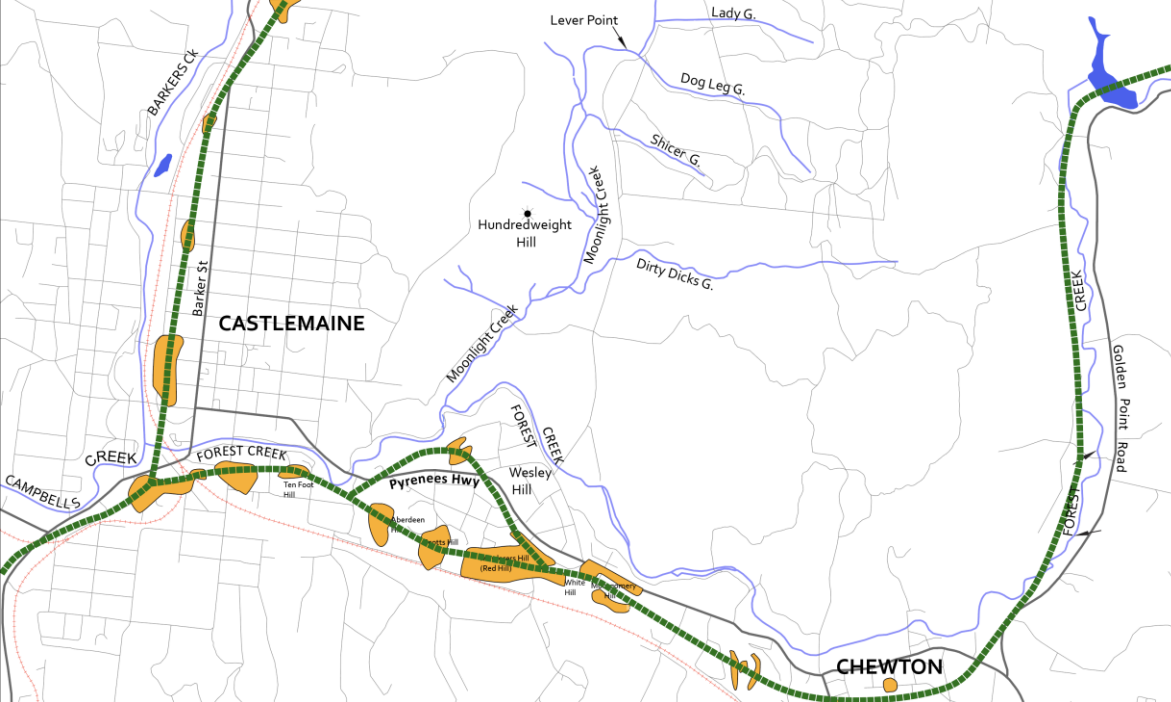
ANCIENT ORIGINS

EFFECTS OF MINING AND FARMING











The older gravels in the ancestral Loddon R. contain very large cobbles (64-256 mm) and boulders (> 256 mm)

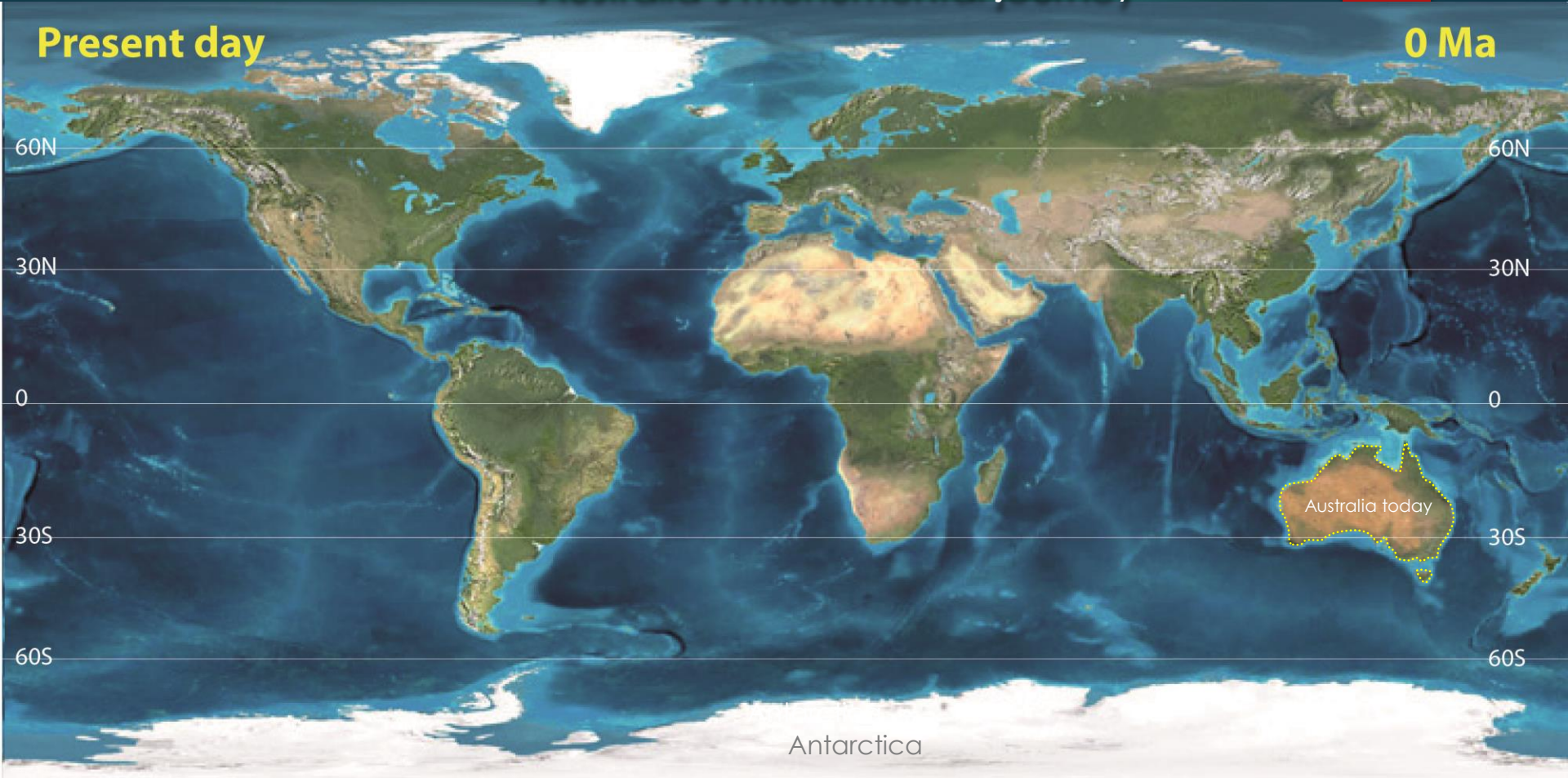
This indicates the ancient streams were very energetic with high water flows in a high rainfall environment

This is evidence of dramatic shifts in climate over the past ~60 million years

Australia's monumental journey

Present day

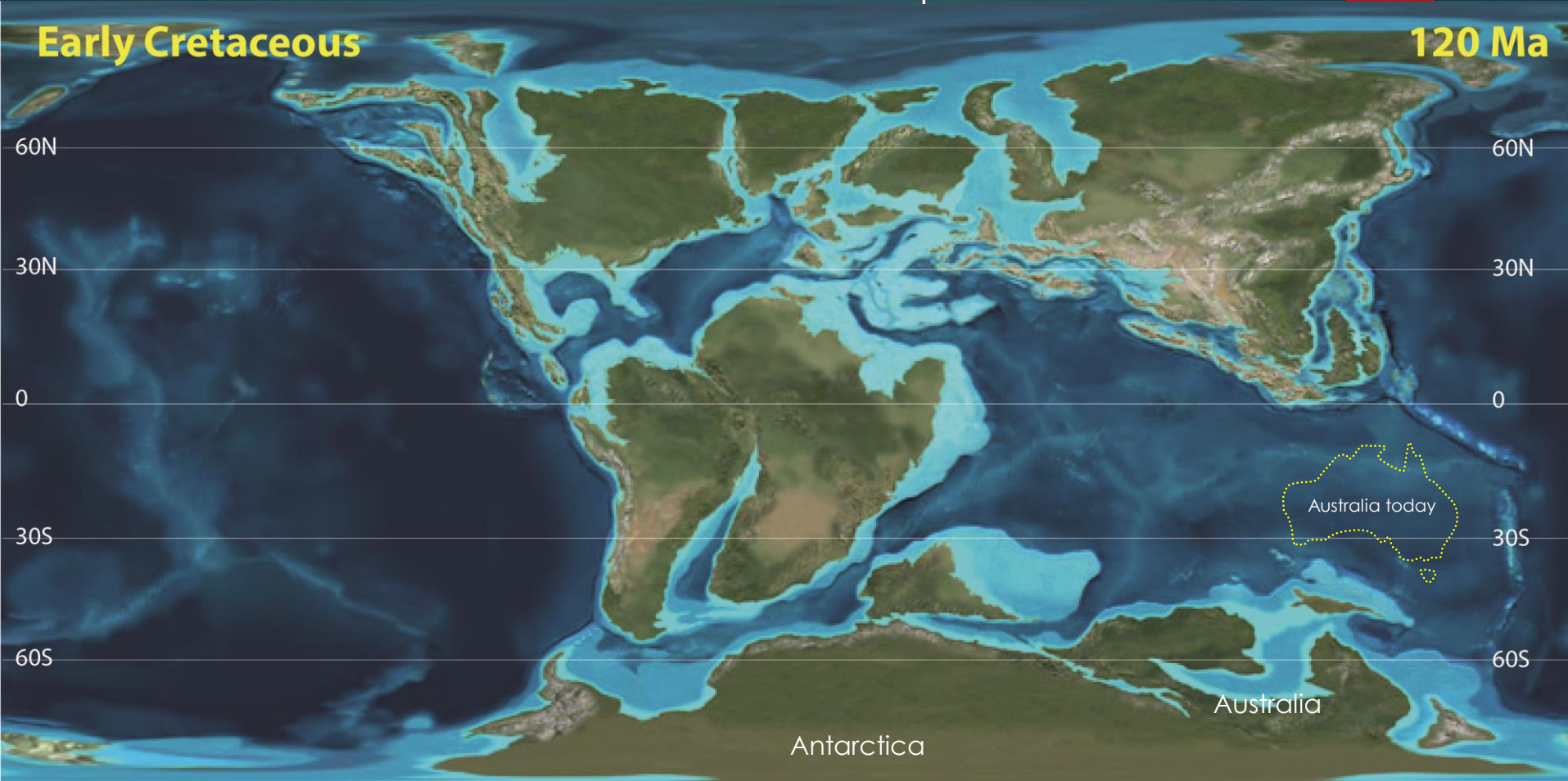
0 Ma



Gondwana breaks apart

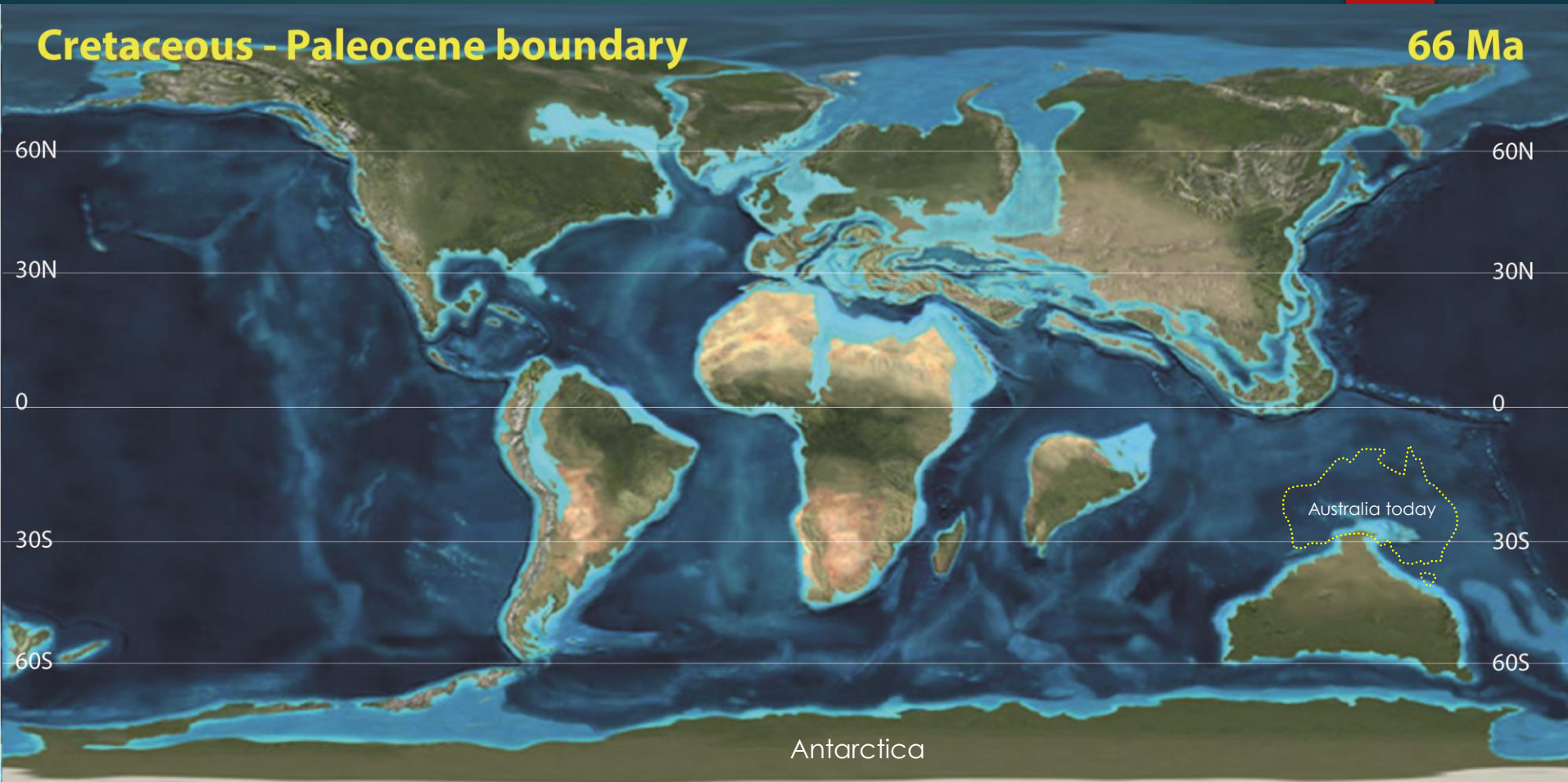
Early Cretaceous

120 Ma



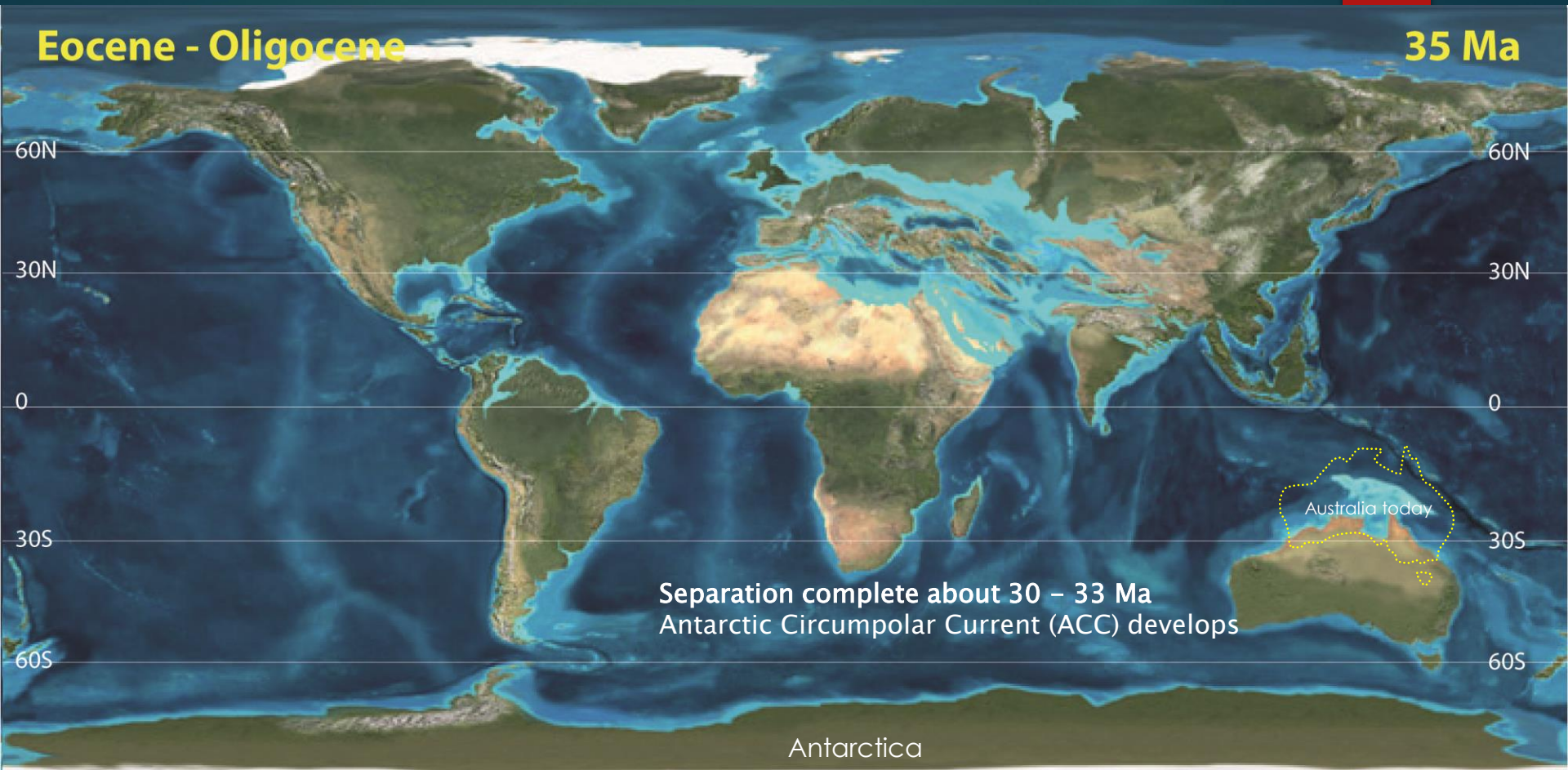
Cretaceous - Paleocene boundary

66 Ma



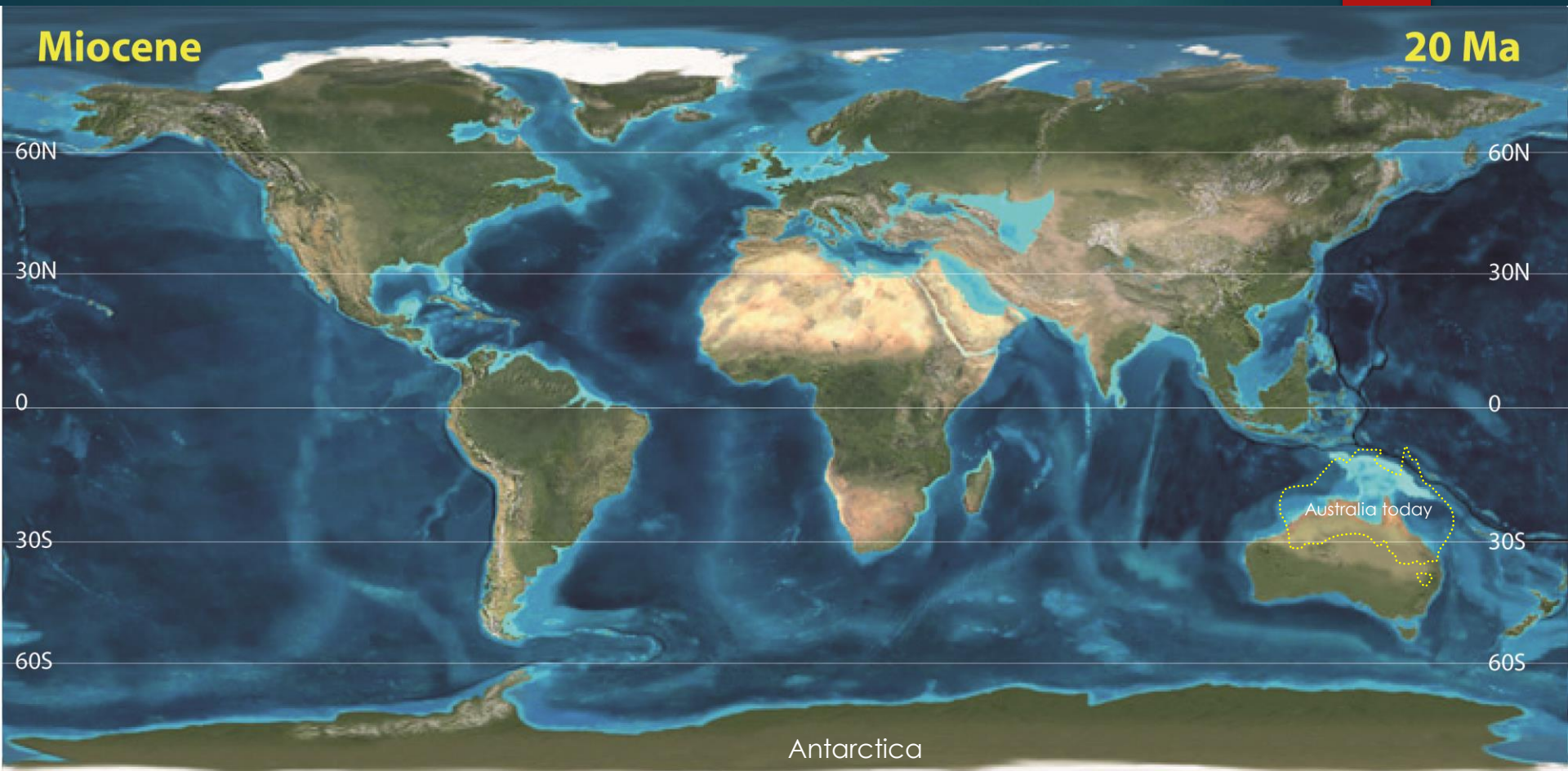
Eocene - Oligocene

35 Ma



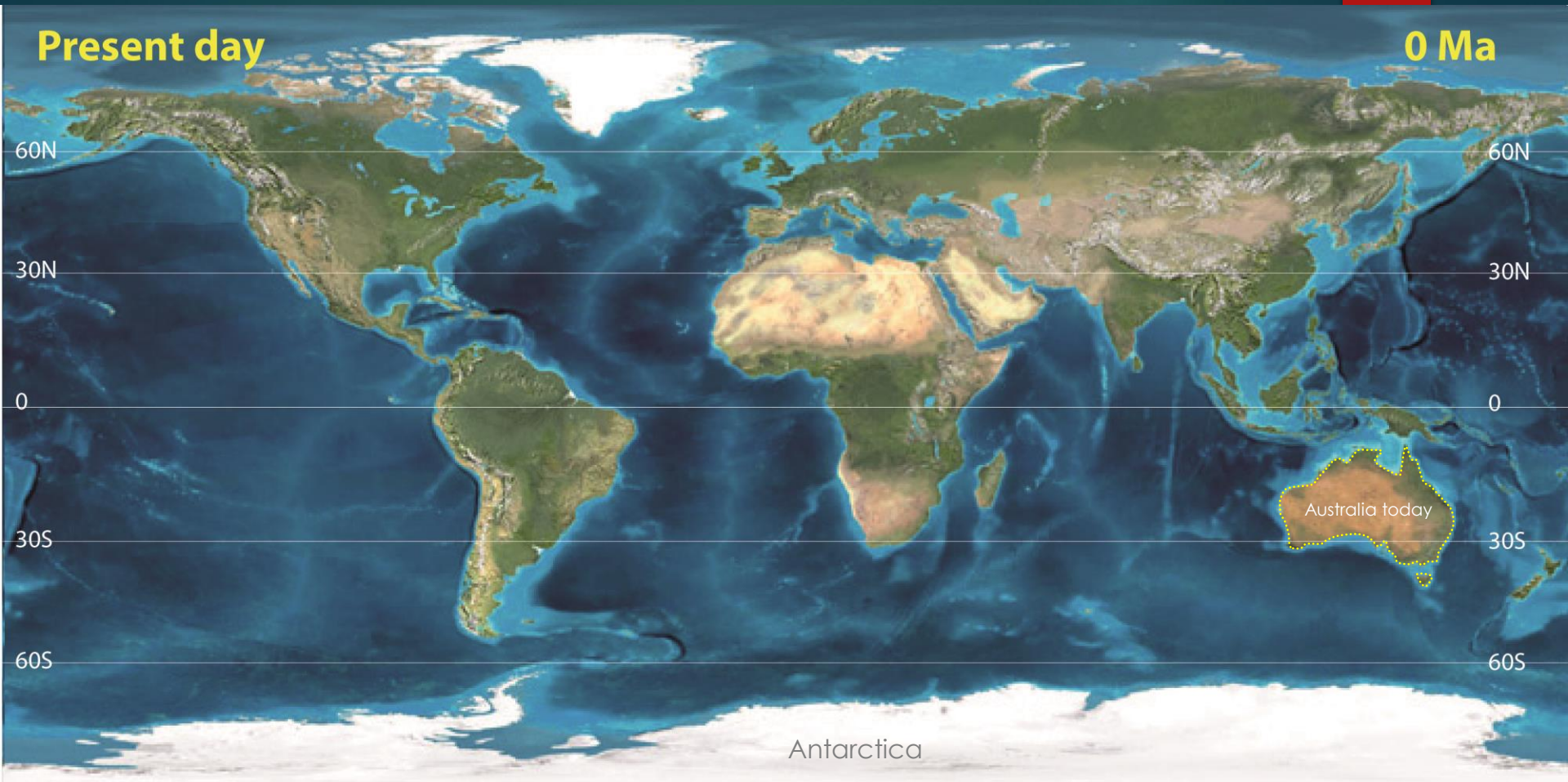
Miocene

20 Ma



Present day

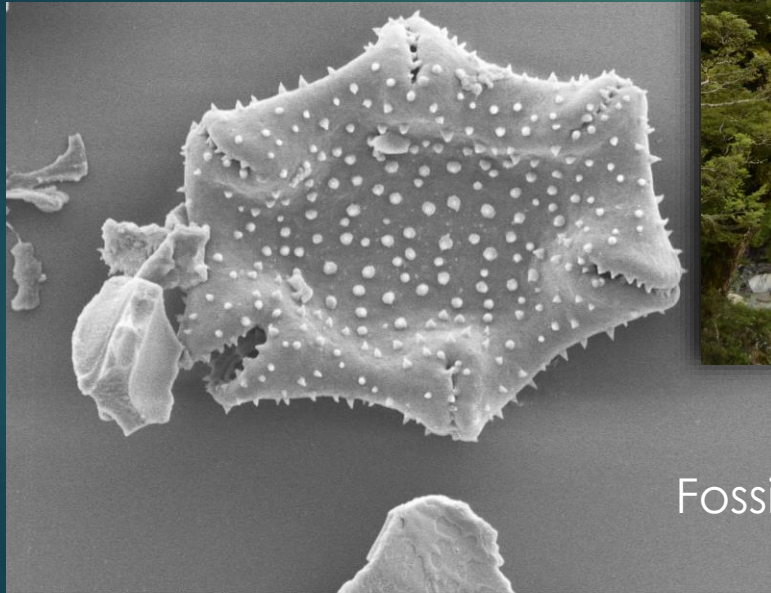
0 Ma



Nothofagaceae tree (NZ)

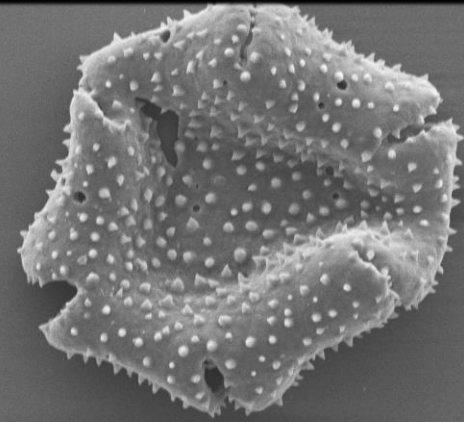


Nothofagaceae leaves



Fossil pollens – 25 Ma

Mag	HV	Spot	Det	WD	Pressure	
5968x	5.0 kV	2.0	ETD	9.8 mm	---	20.0µm
Advanced Microscopy Facility Bio21						

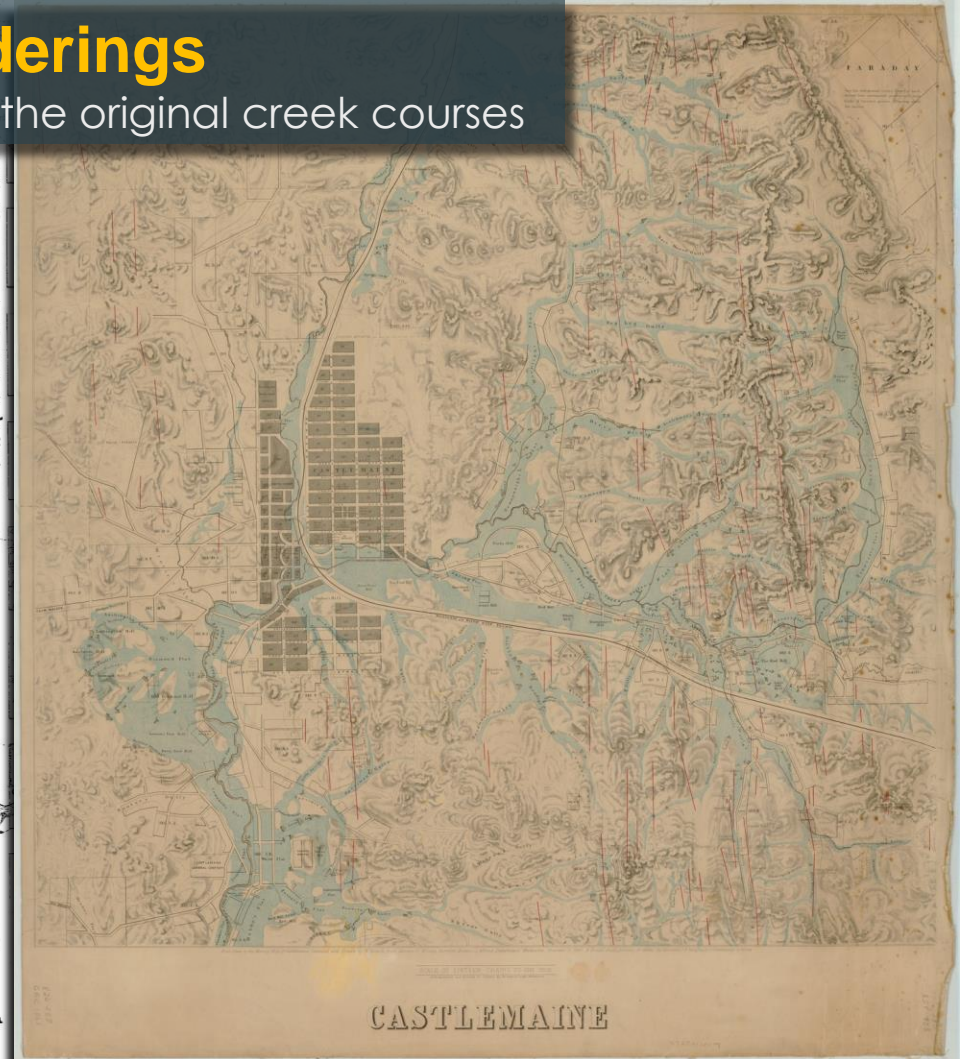
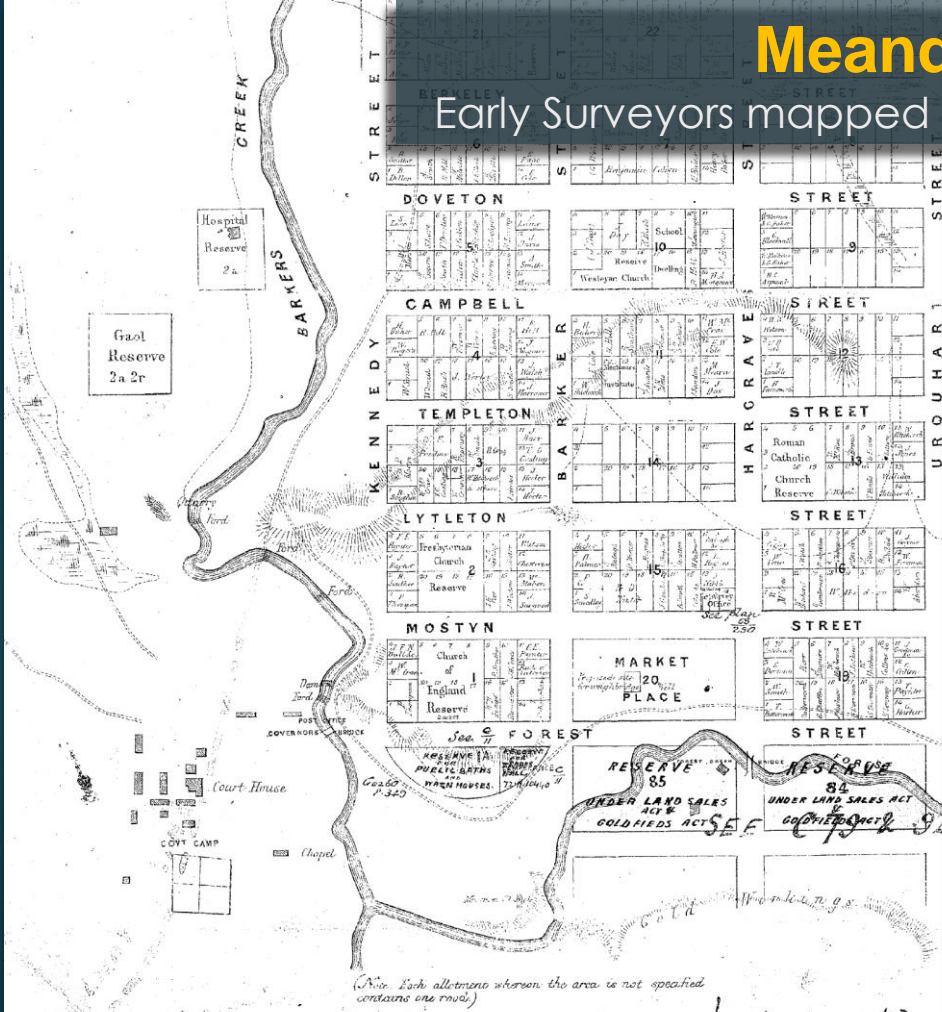


Nothofagus

Mag	HV	Spot	Det	WD	Pressure	
5968x	5.0 kV	2.0	ETD	9.8 mm	---	20.0µm
Advanced Microscopy Facility Bio21						

Meanderings

Early Surveyors mapped the original creek courses



Meanderings

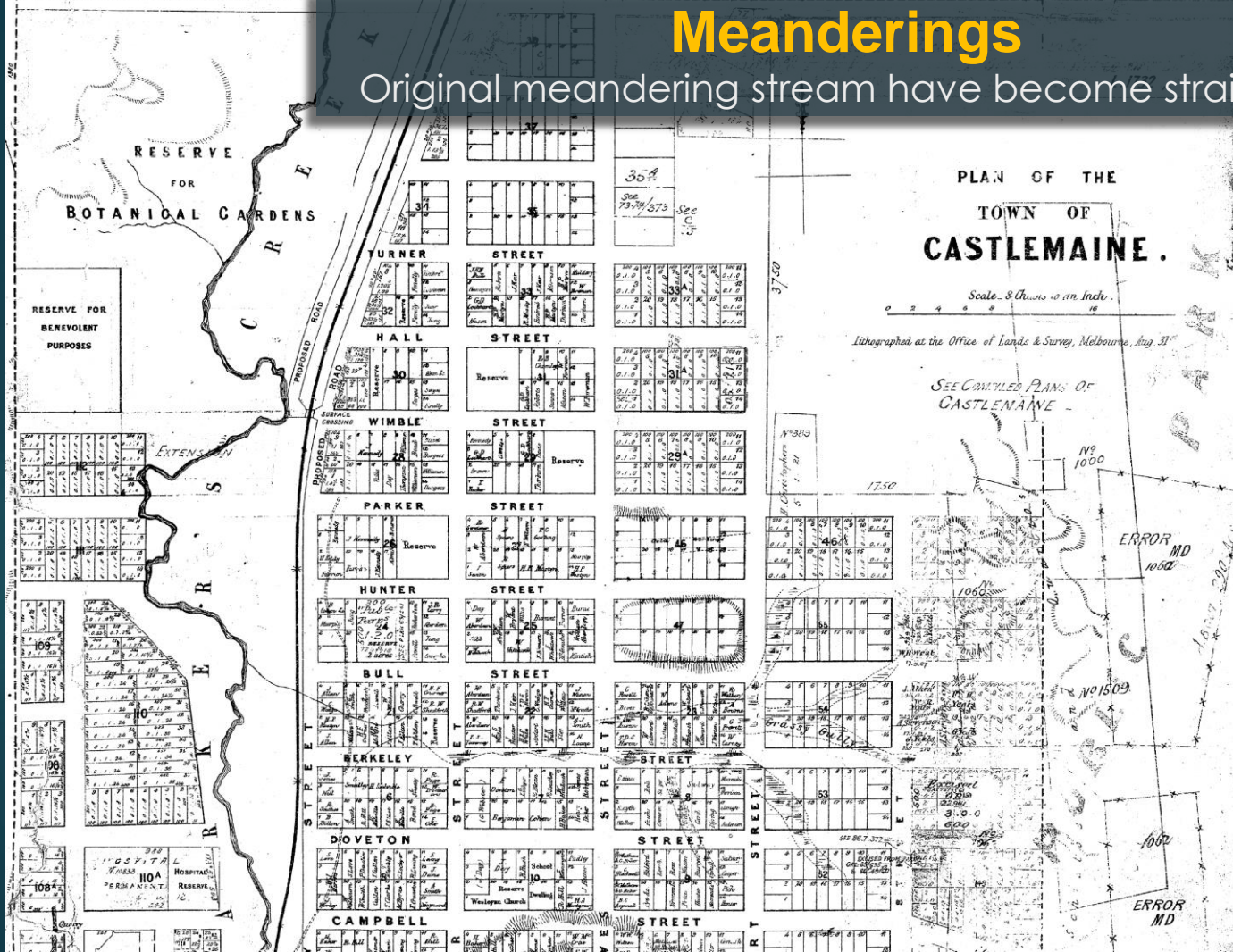
Original meandering stream have become straighter

Present day
Barkers Ck

Present day Forest Ck

Meanderings

Original meandering stream have become straighter

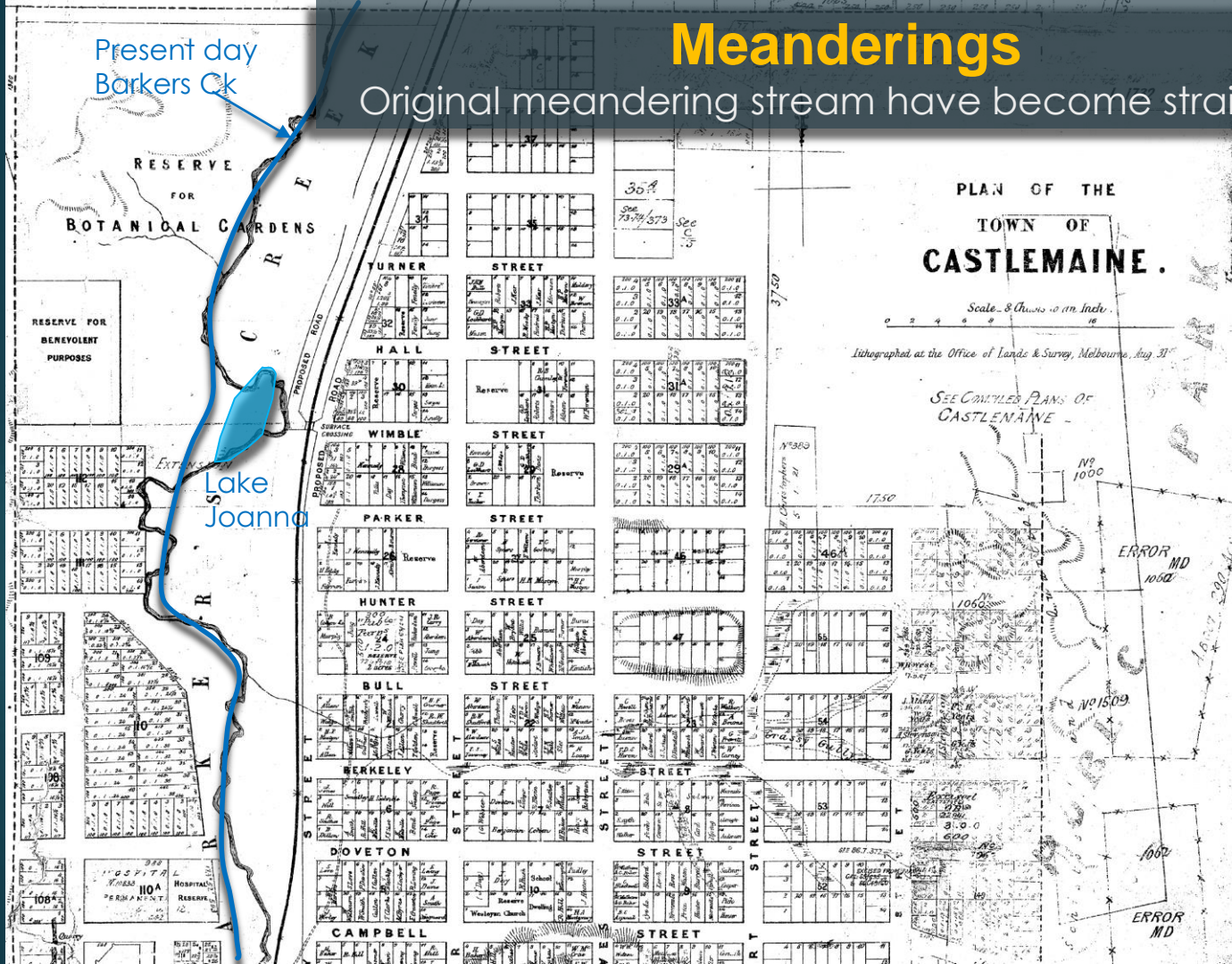


Putaway plan C100 August 1861

Present day
Barkers Ck

Meanderings

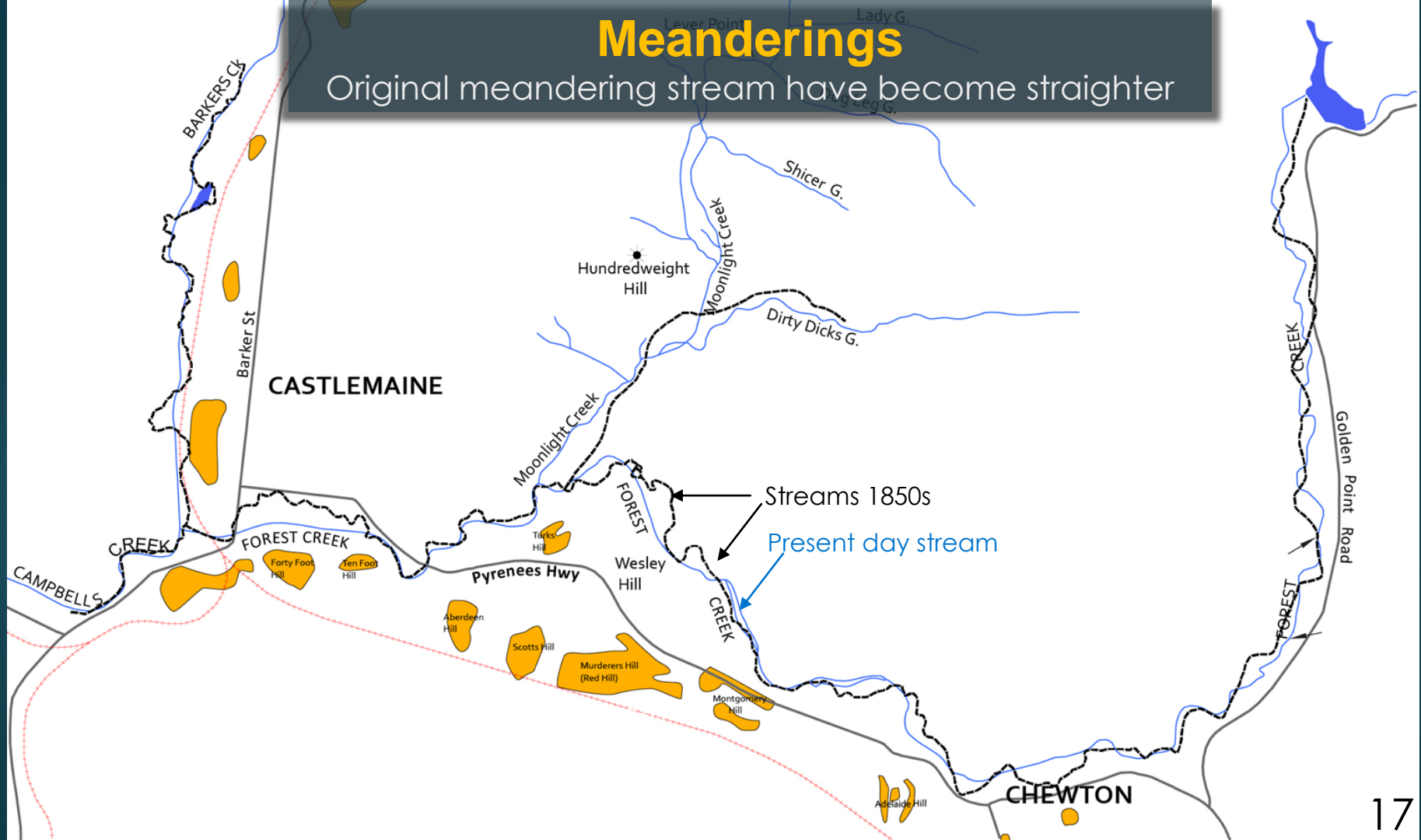
Original meandering stream have become straighter



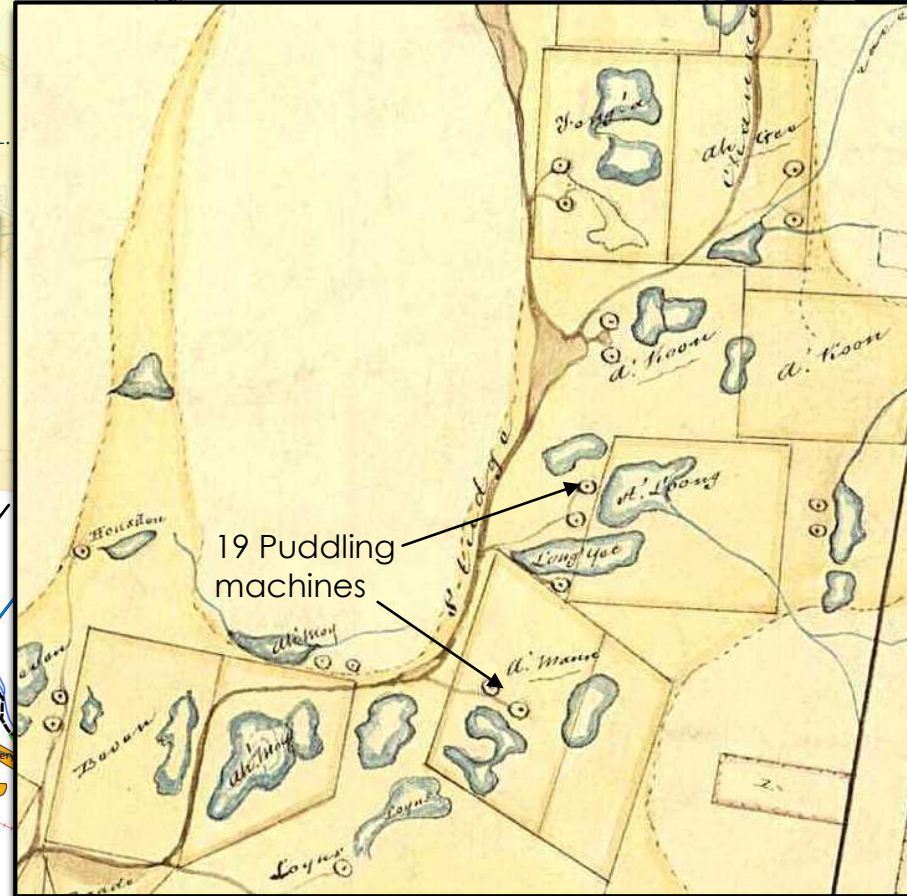
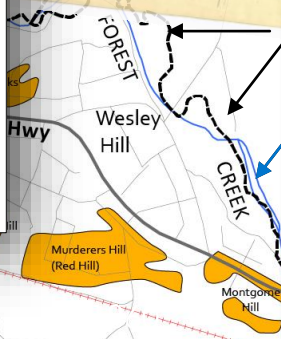
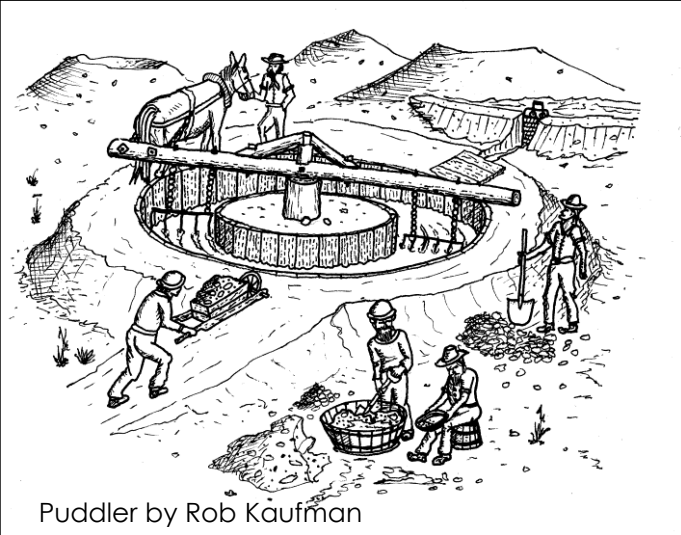
Putaway plan C100 August 1861

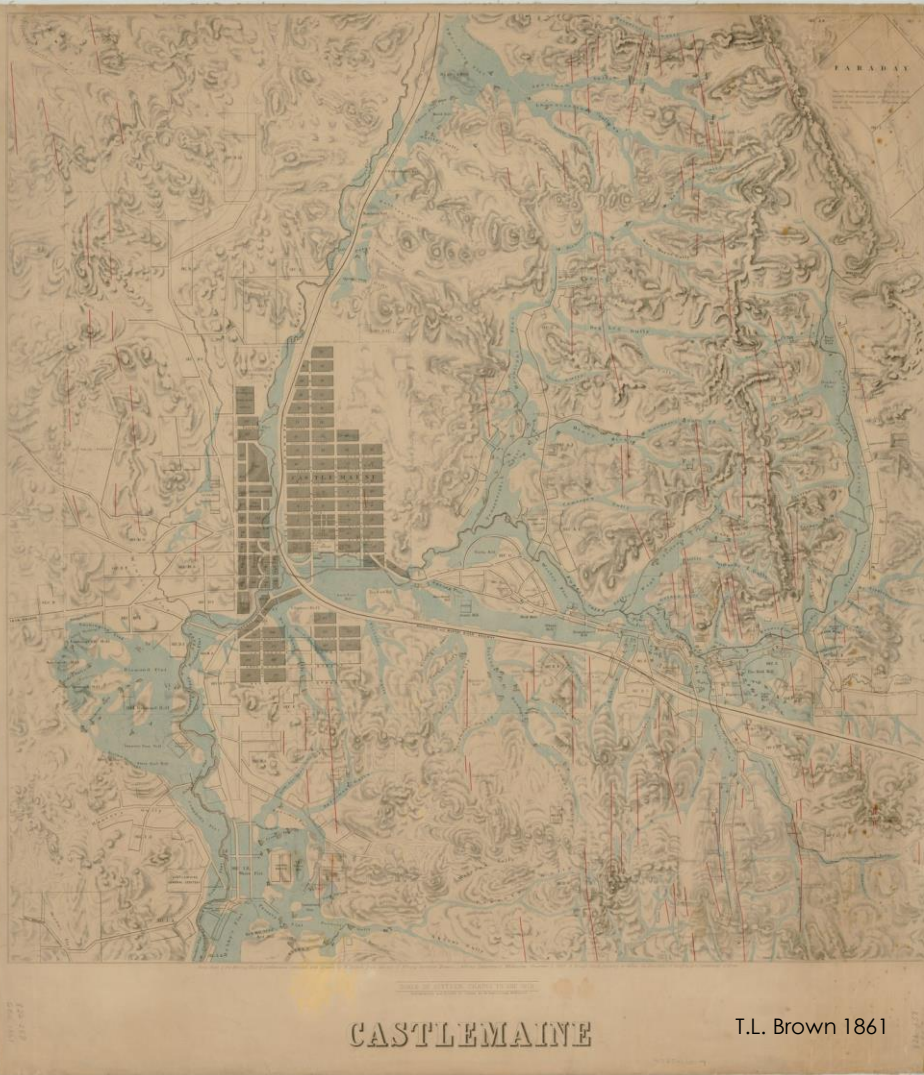
Meanderings

Original meandering stream have become straighter



Effects of early alluvial mining





SLUDGE

"..the injury caused by this monster nuisance of the gold-fields is too patent to be doubted"

"There are 360 puddlers whose sludge flows into the main channel of Forest Creek"

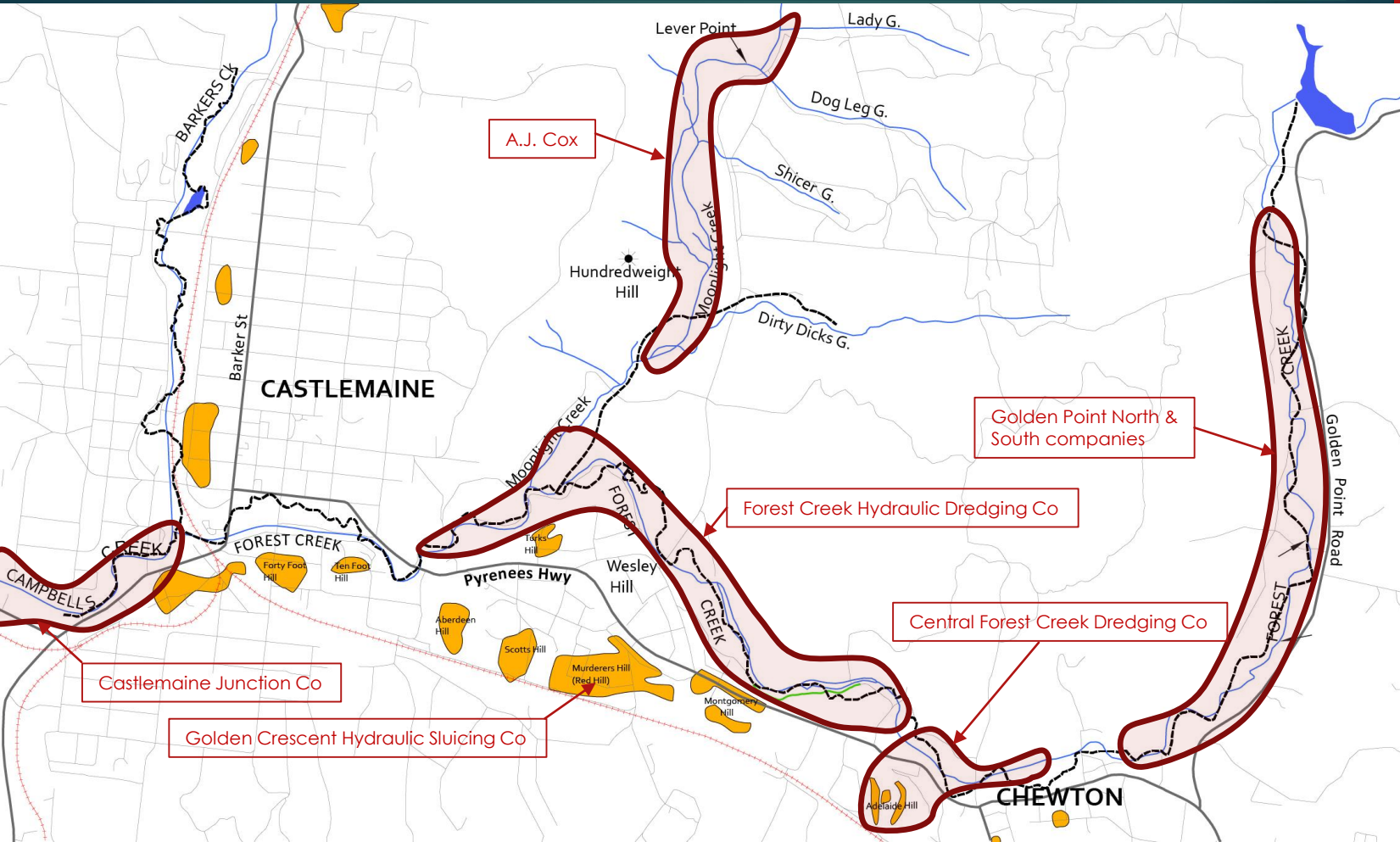
Mt Alexander Mail 16-4-1860

THE MINING BOARD AND THE SLUDGE.

We hope we shall not be considered impertinently intrusive by the gentlemen of the Mining Board, if we venture to direct their attention to the resolutions recently arrived at by the puddlers of Forest Creek. That important section of our mining community profess their readiness to contribute towards the maintenance of a sludge channel, but it is impossible to give effect to their good intentions without the sanction of the local mining parliament. There should be no difficulty in obtaining the desired by-law, to impose fees on all puddlers whose sludge flows into the main creek—for the injury caused by this monster nuisance of the gold-fields is too patent to be doubted; but if we are correctly informed there is a disposition on the part of some of the members of the Mining Board, who represent other divisions of the district, to disregard the wishes of the members for Castlemaine. We can easily understand that Mr Gatty Jones may be sceptical on sludge, St. Andrew's being yet untroubled by it. Alluvial mining being altogether suspended on Tarrangower, Messrs. Ramsay and Braddon are perhaps disposed to pool pool the complaints that come from other quarters, and we do not expect active sympathy for the Forest Creek puddlers, from the representatives of Daylesford. But we remind those gentlemen that they are not sent into the Board to legislate merely for the divisions for which they have been returned. The mining interests of the whole district are committed to them, and where they find an evil capable of amelioration, it is their duty to legislate for it, notwithstanding that such legislation may not be a matter of special interest to the divisions they respectively represent. There are three hundred and sixty puddlers whose sludge flows into the main channel of Forest Creek. They are anxious to make some arrangement by which their sludge may be carried off and

Mt Alexander Mail 16-4-1860

Sluice and Dredge mining 1898 -1940s



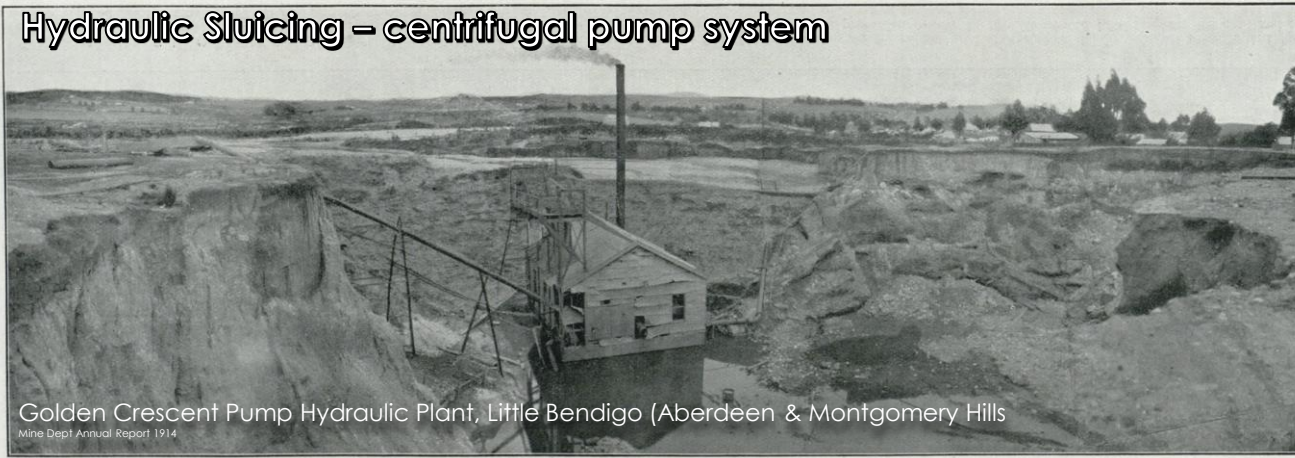
Hydraulic Sluicing – gravitational system

PLATE XIX.



Cox's Jet Elevator plant and workings at Moonlight Flat: typical of many jet plants working in the gullies around Castlemaine district. The nozzle pressure of this plant is obtained from the Coliban Water Supply, the head pressure being about 100 feet, and from three to four millions of gallons of water are used weekly when in full work. Ground treated ranges from 9 to 20 feet deep, and about 7,000 cubic yards of material are treated weekly.

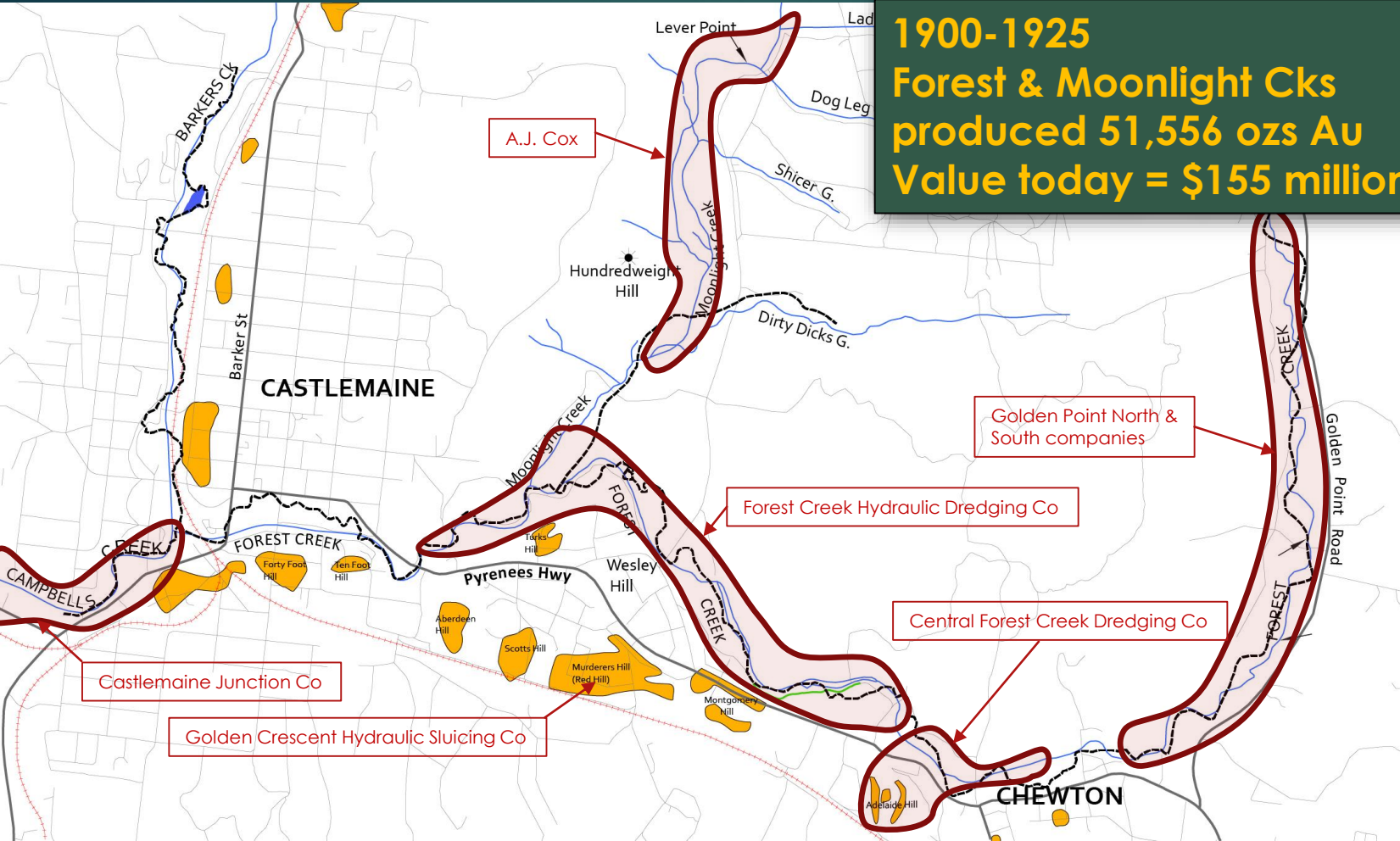
Hydraulic Sluicing – centrifugal pump system



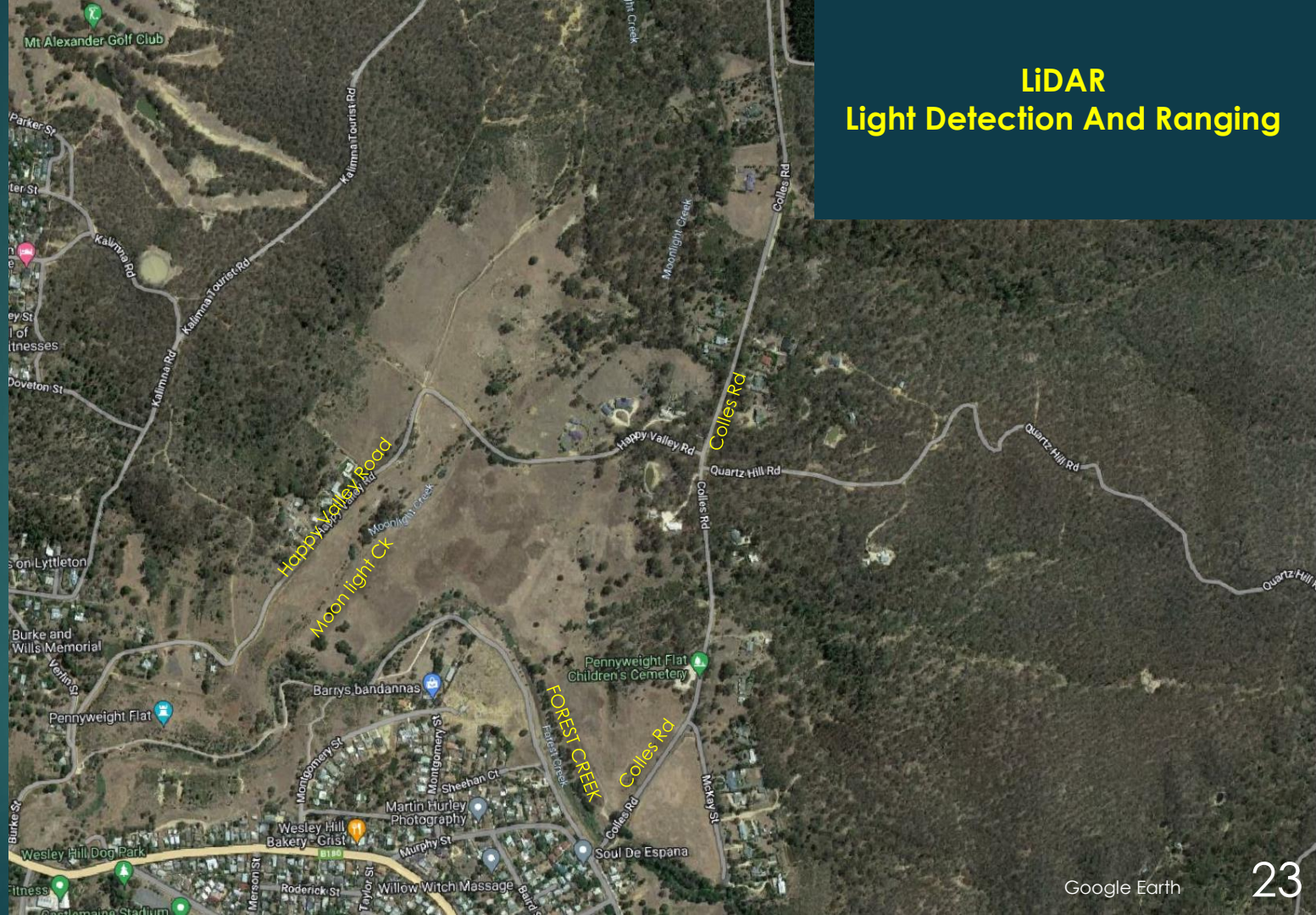
Sluice and Dredge mining 1898 -1940s

1900-1925

Forest & Moonlight Cks
produced 51,556 ozs Au
Value today = \$155 million

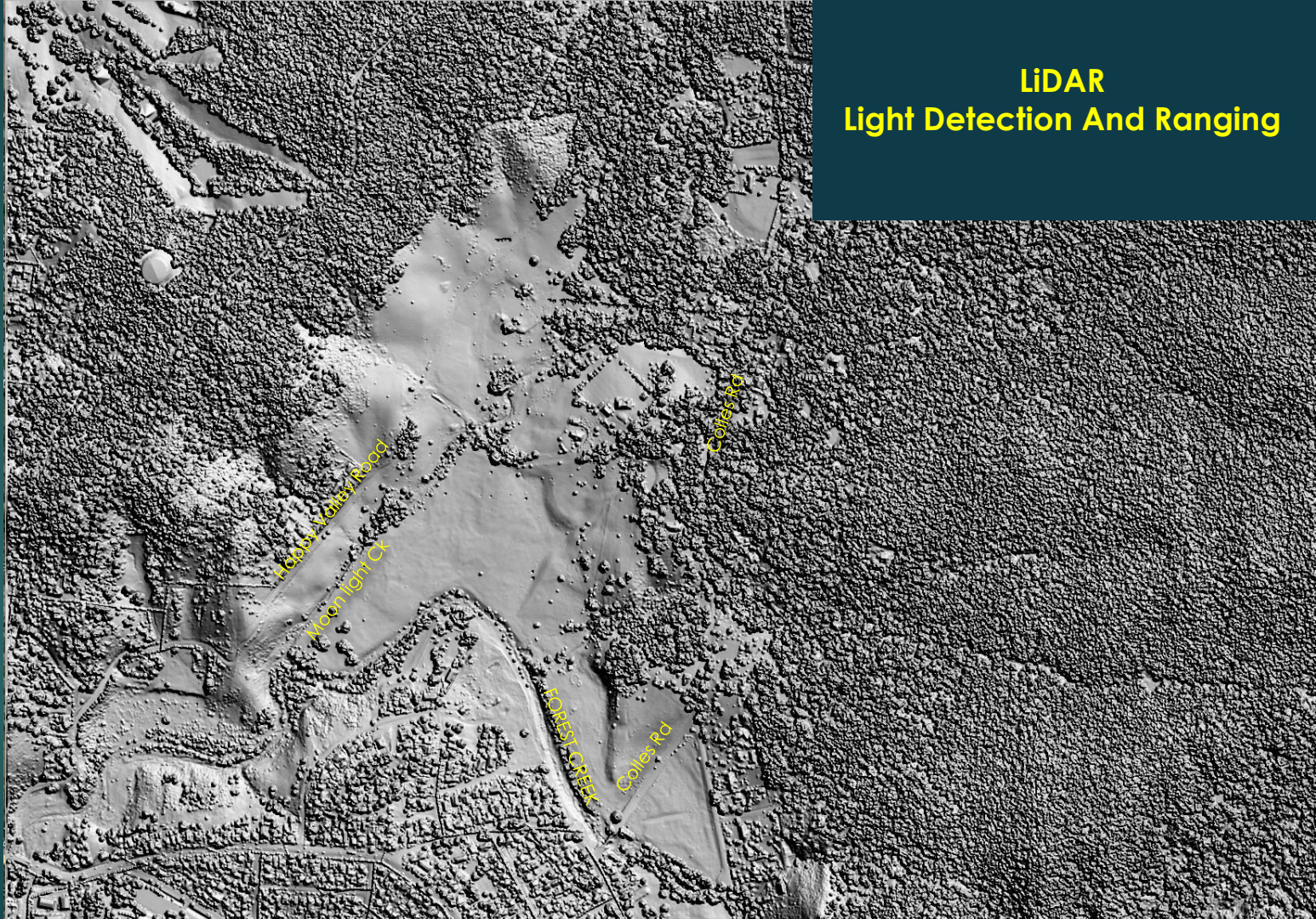


LiDAR Light Detection And Ranging



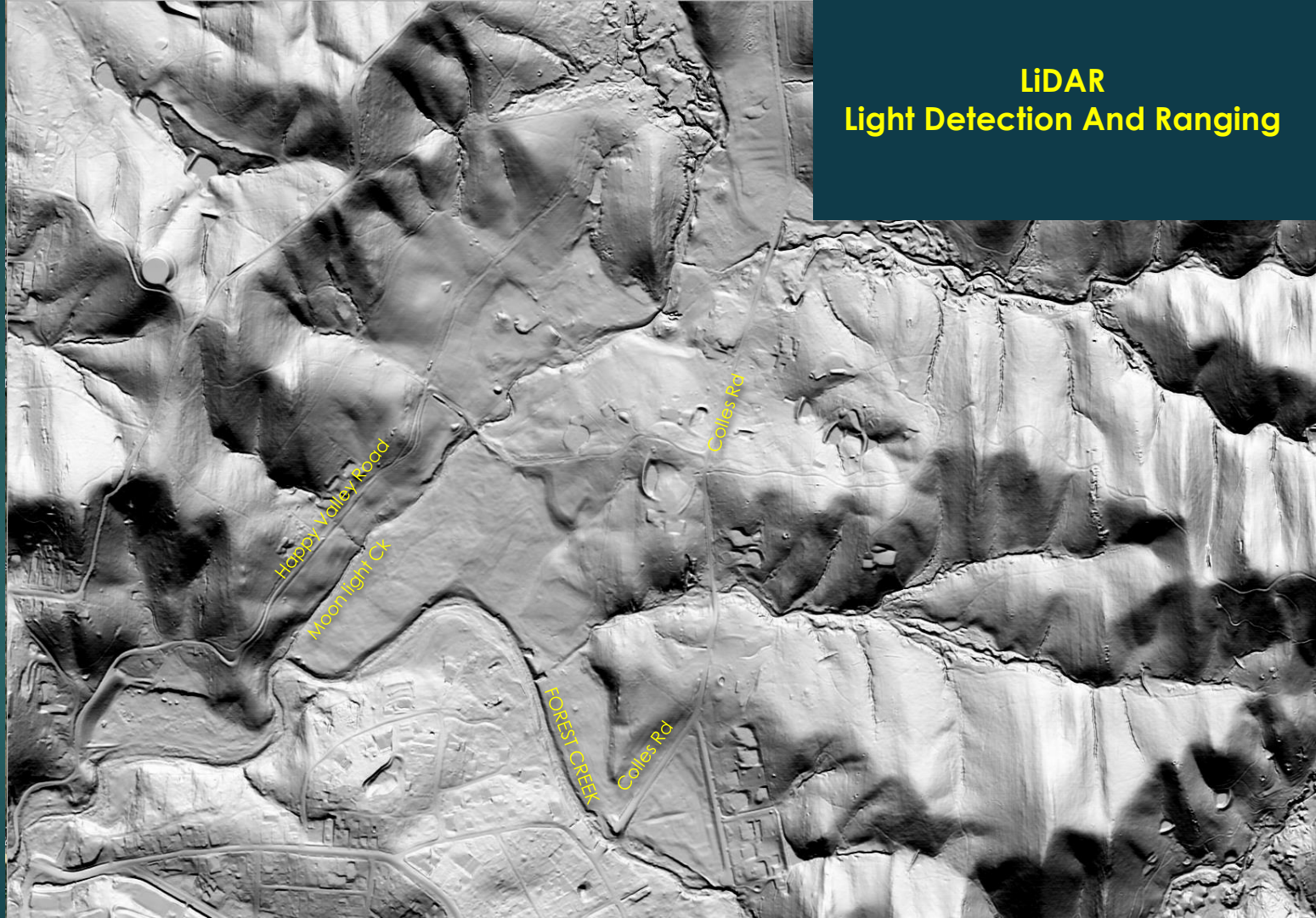
LiDAR Light Detection And Ranging

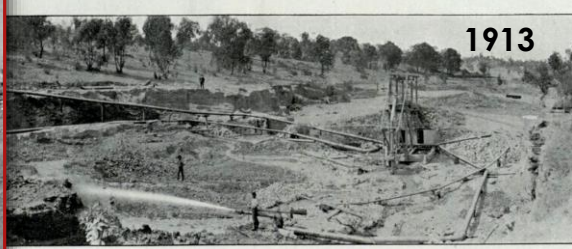
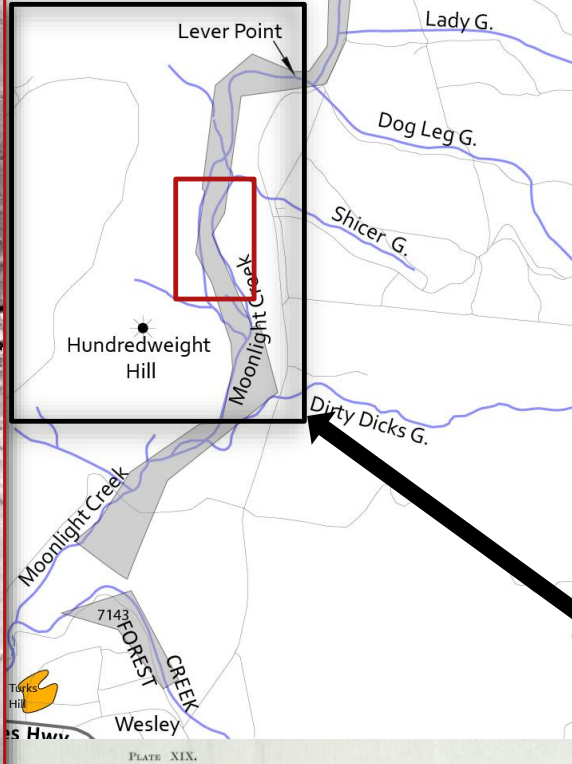
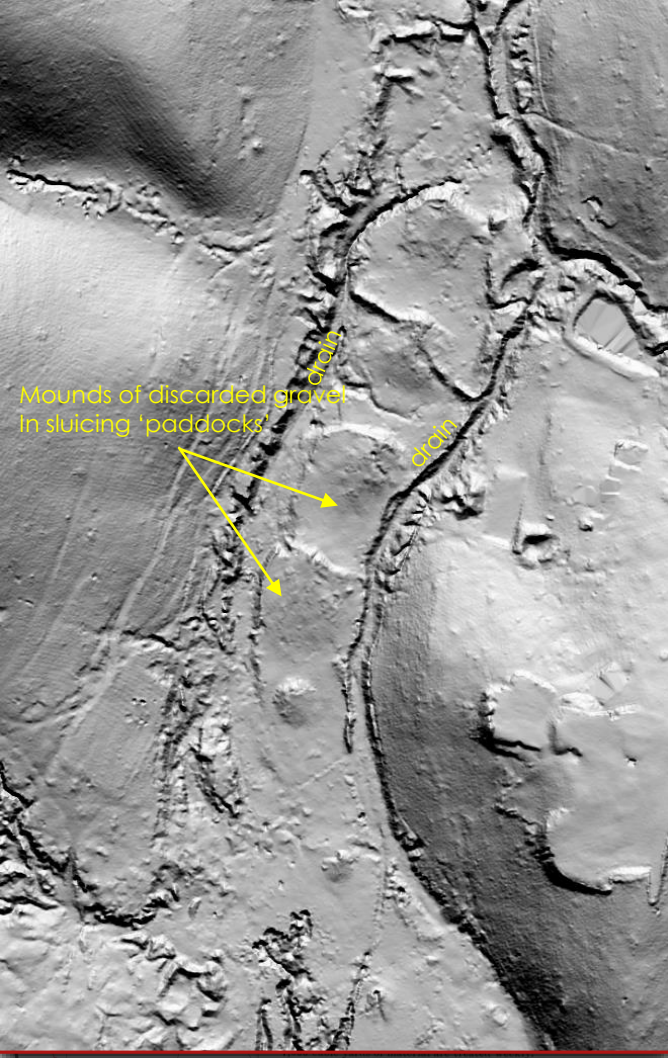
Lidar
Geoscience Australia
'Elvis website'



Lidar
Geoscience Australia
'Elvis website'

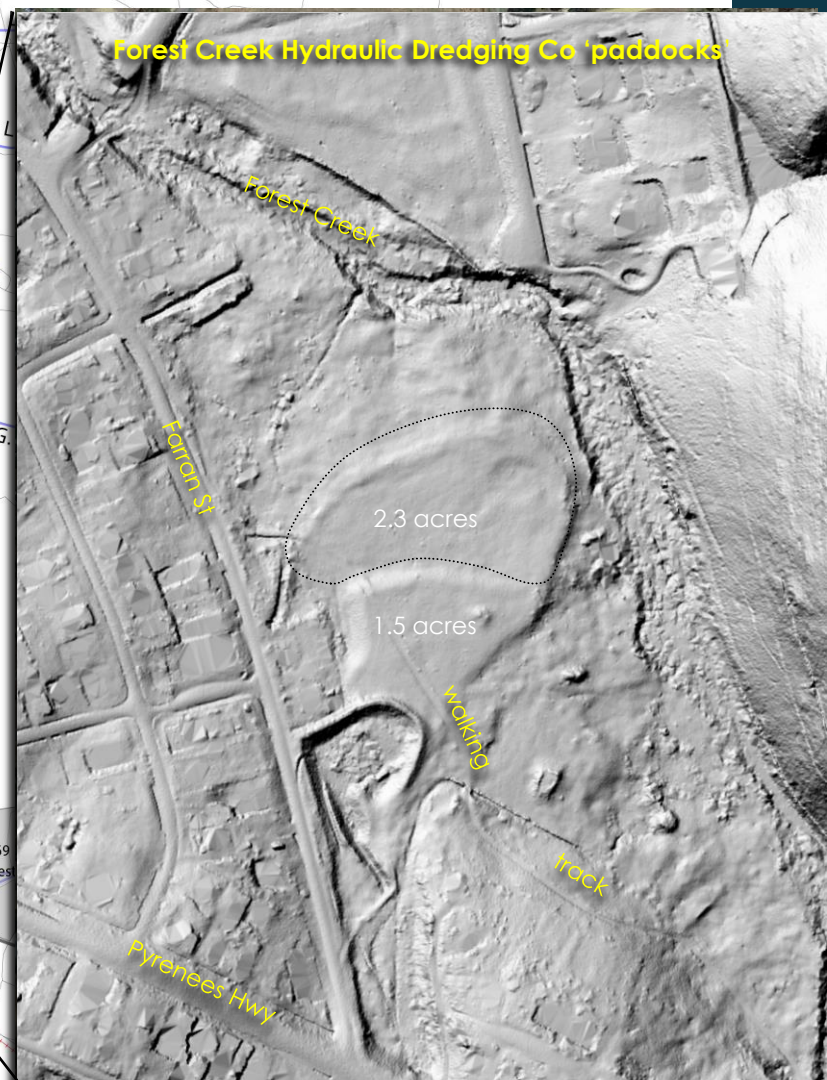
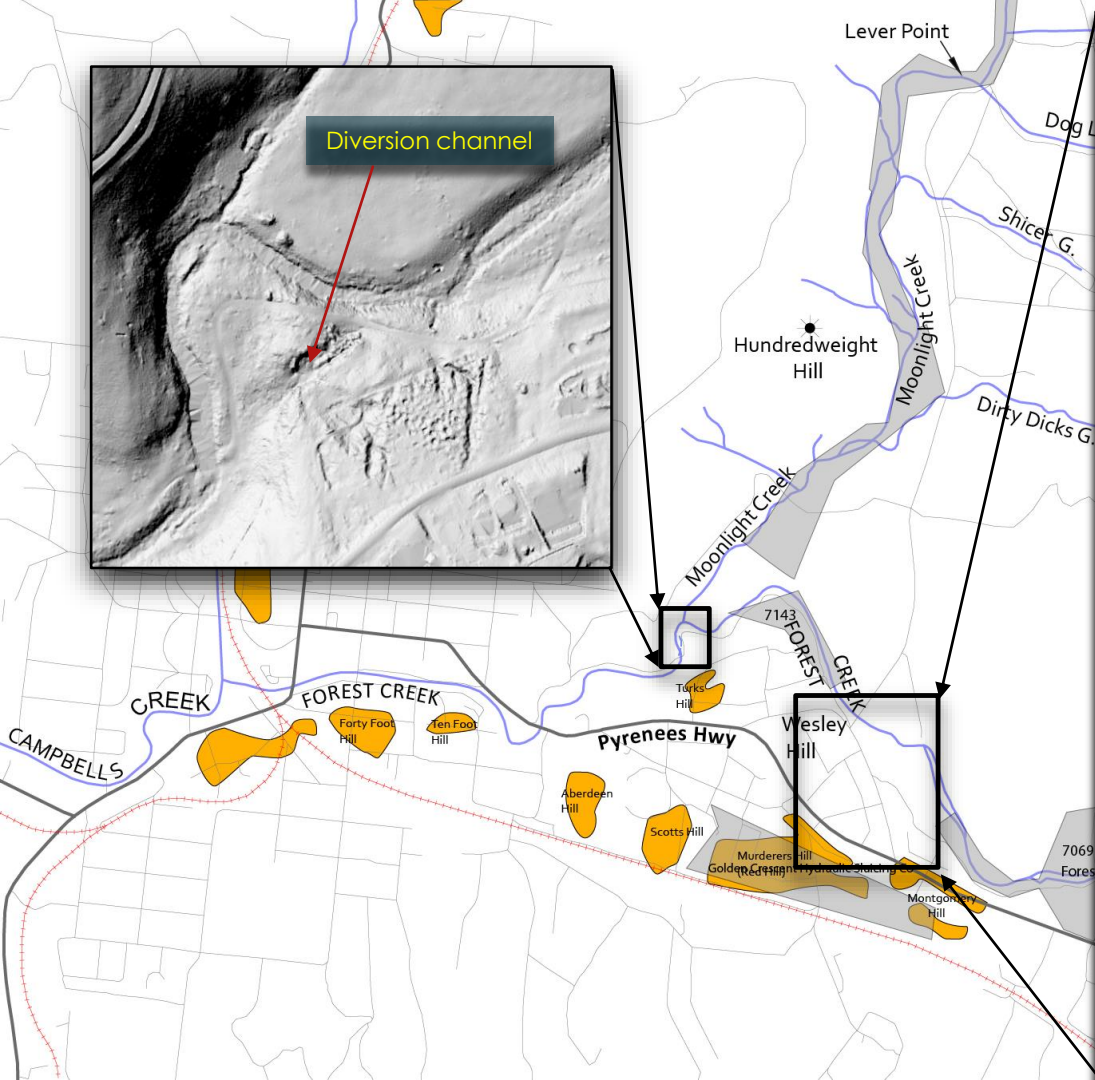
LiDAR Light Detection And Ranging

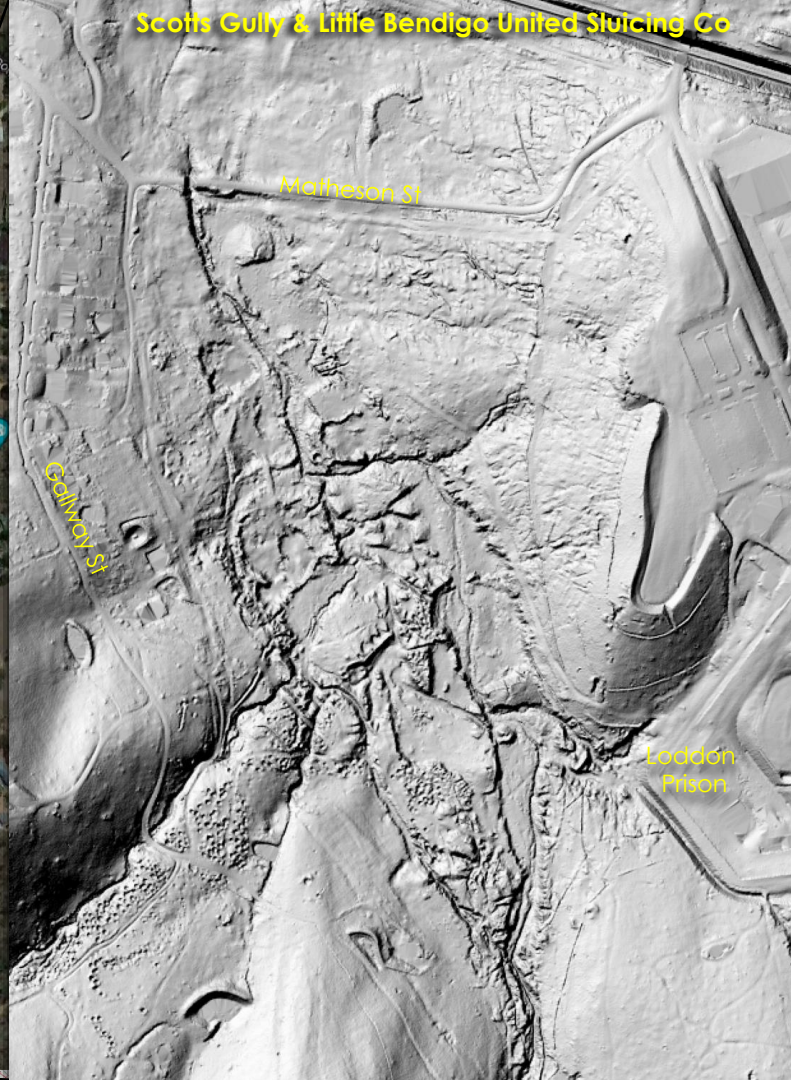
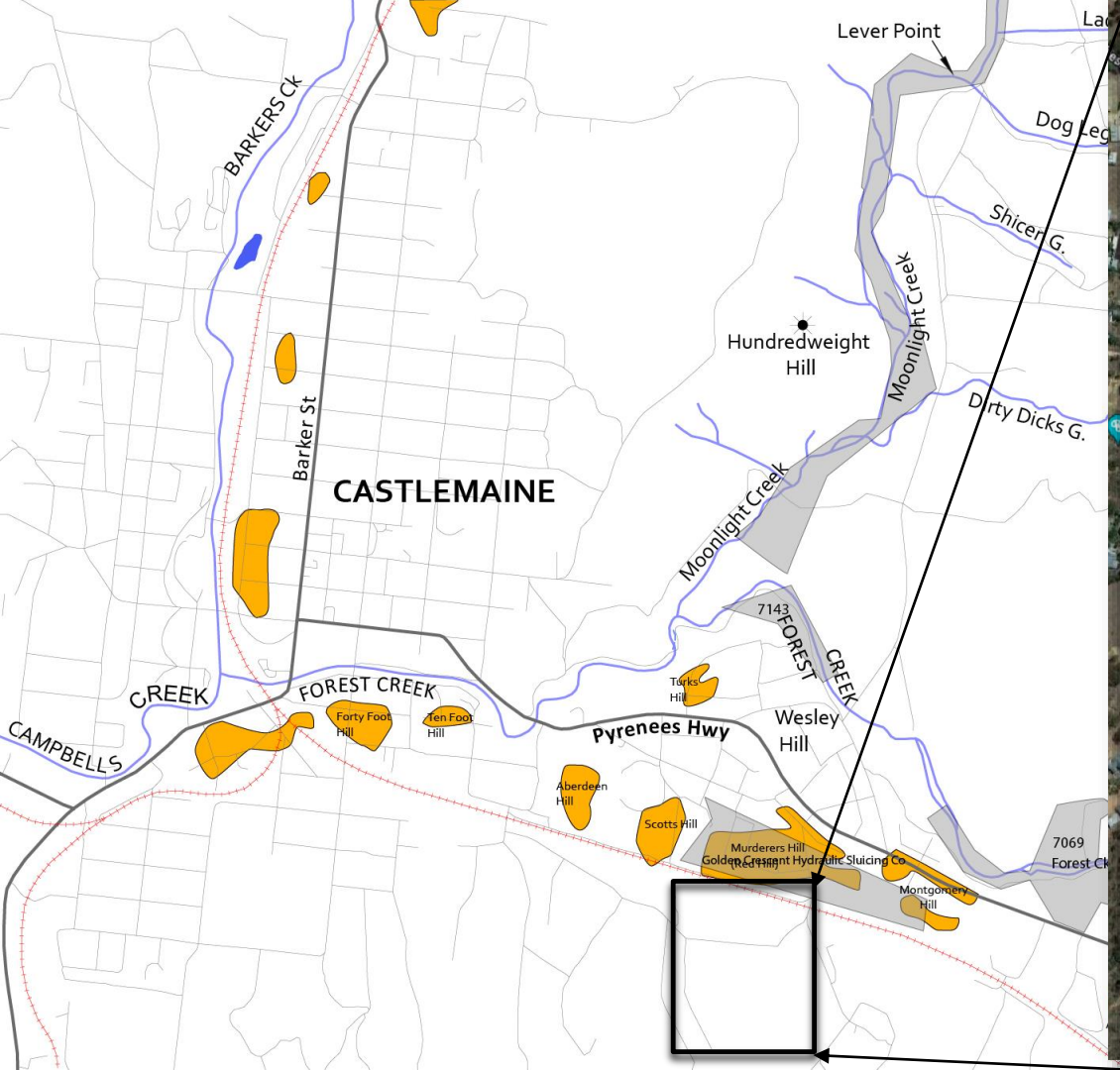




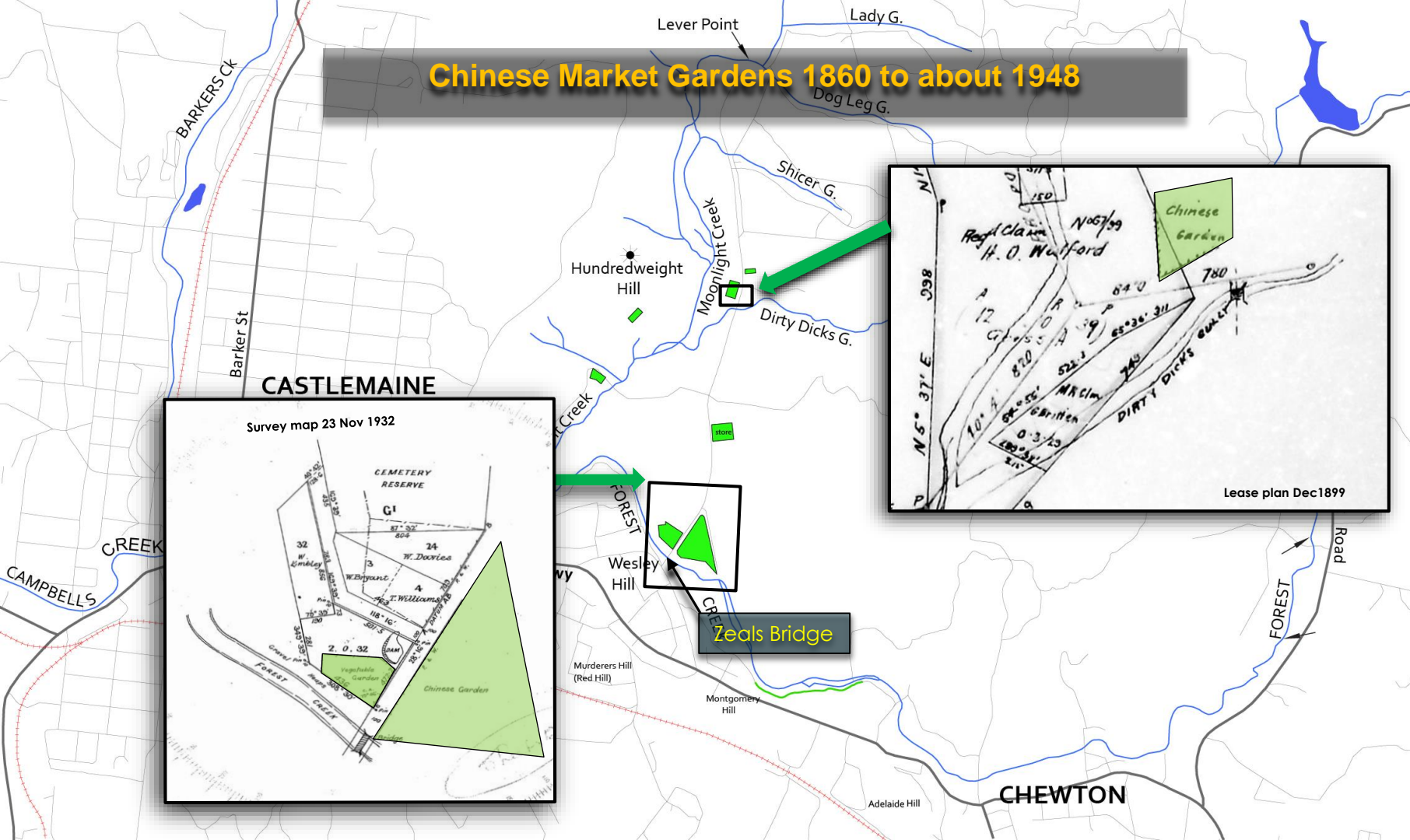
Typical of many jet plants working in the gullies around Castlemaine district. The nozzle pressure of this plant is 100 lbs. per sq. in. and 100 to four millions of gallons of water are used weekly when in full work. Ground treated ranges from 9 ft. to 15 ft. deep.







Chinese Market Gardens 1860 to about 1948



Castlemaine Market prices:

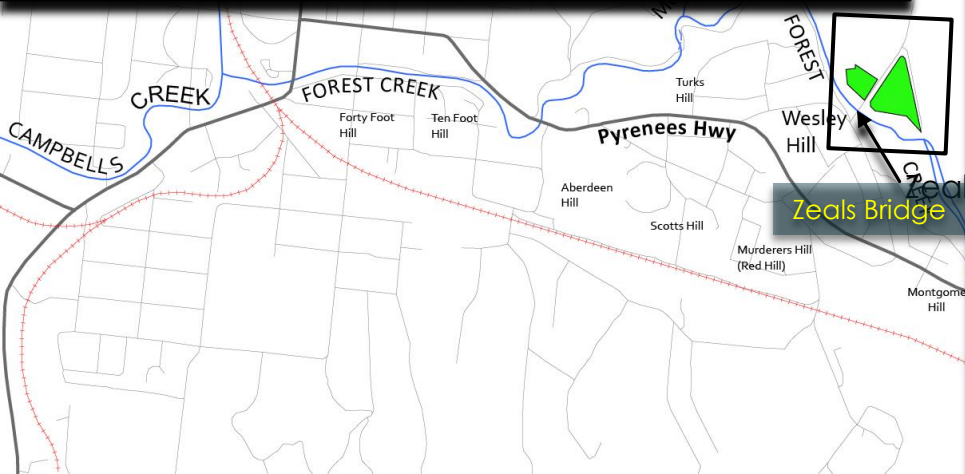
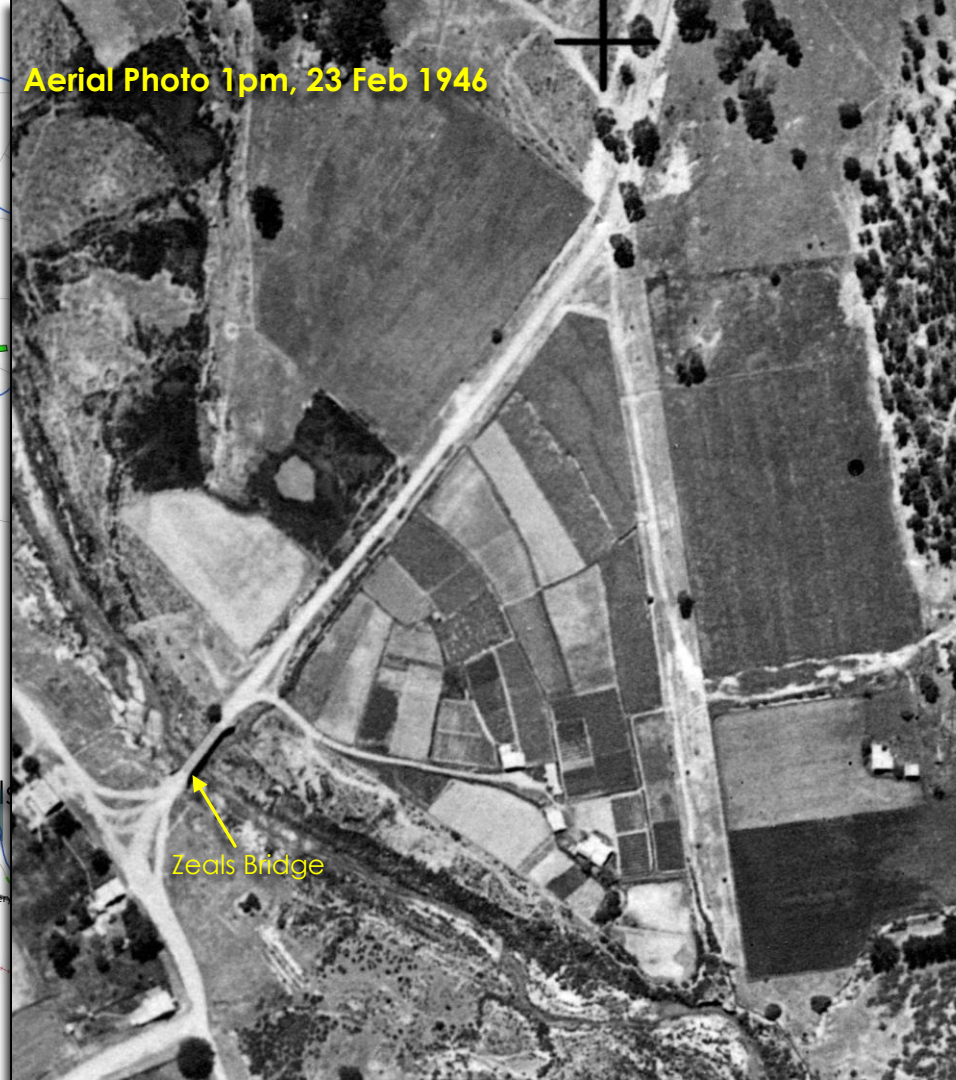
Carrots & turnips 2 pence per bunch

Cabbages 3d to 6d each

Marrows 1.5d to 4d each



Aerial Photo 1pm, 23 Feb 1946

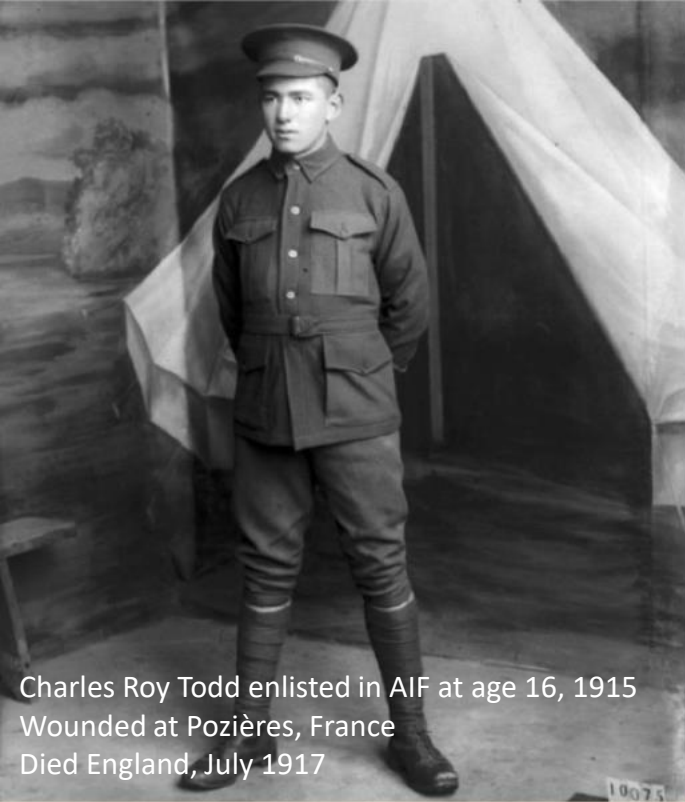


Charles and Florence Lee Suey
and family c1907

Charles died Dec 1911

Children are:
Charles (b. 1899), Beatrice, Doris (b. 1901),
Violet (b 1903), Iris b. 1904),
Reginald (b. 7 May 1905) and Gladys (b. 1906)





Charles Roy Todd enlisted in AIF at age 16, 1915
Wounded at Pozières, France
Died England, July 1917

▲ Charles Roy Lee Suey in Darge's studio at the
Broadmeadows training camp. (Collection Australian War
Memorial - Photograph by Darge)

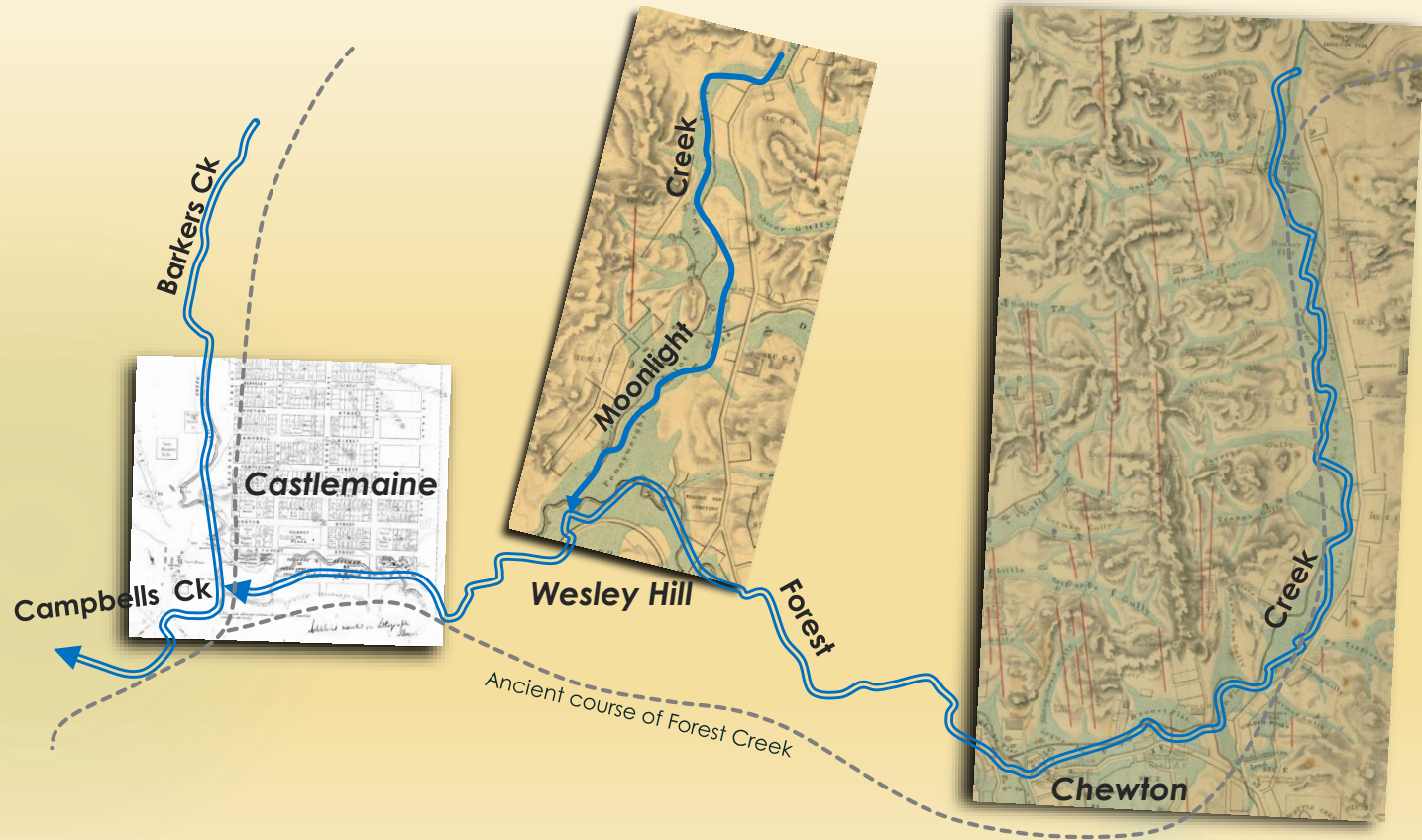
Chinese Anzacs of the Loddon Mallee region,
Golden Dragon Museum Copyright 2018

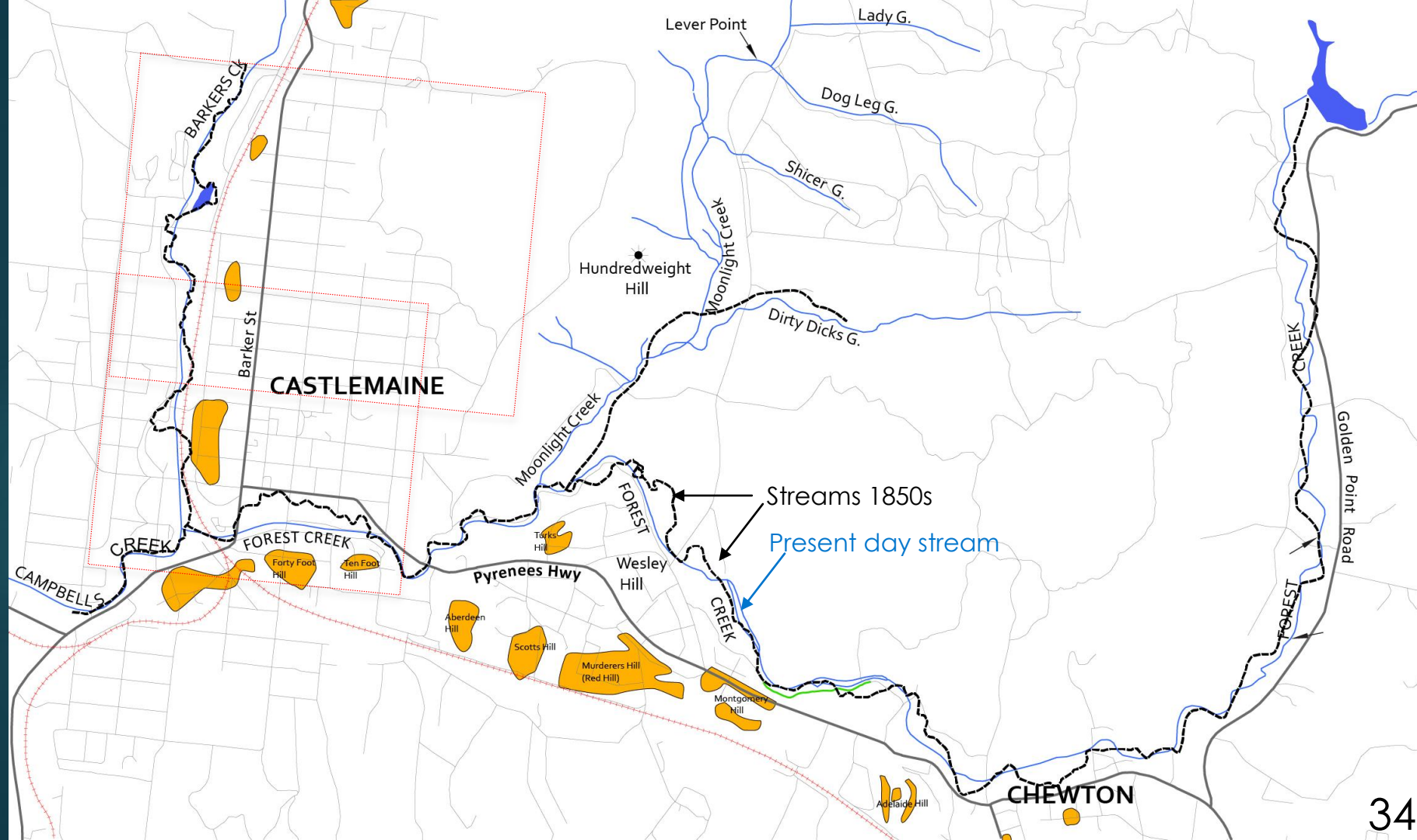


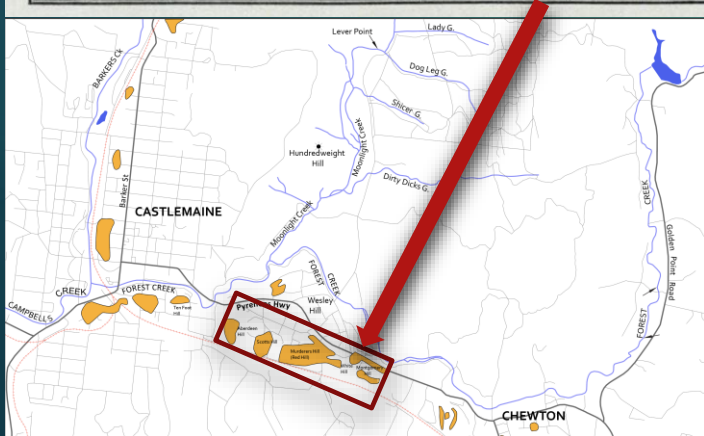
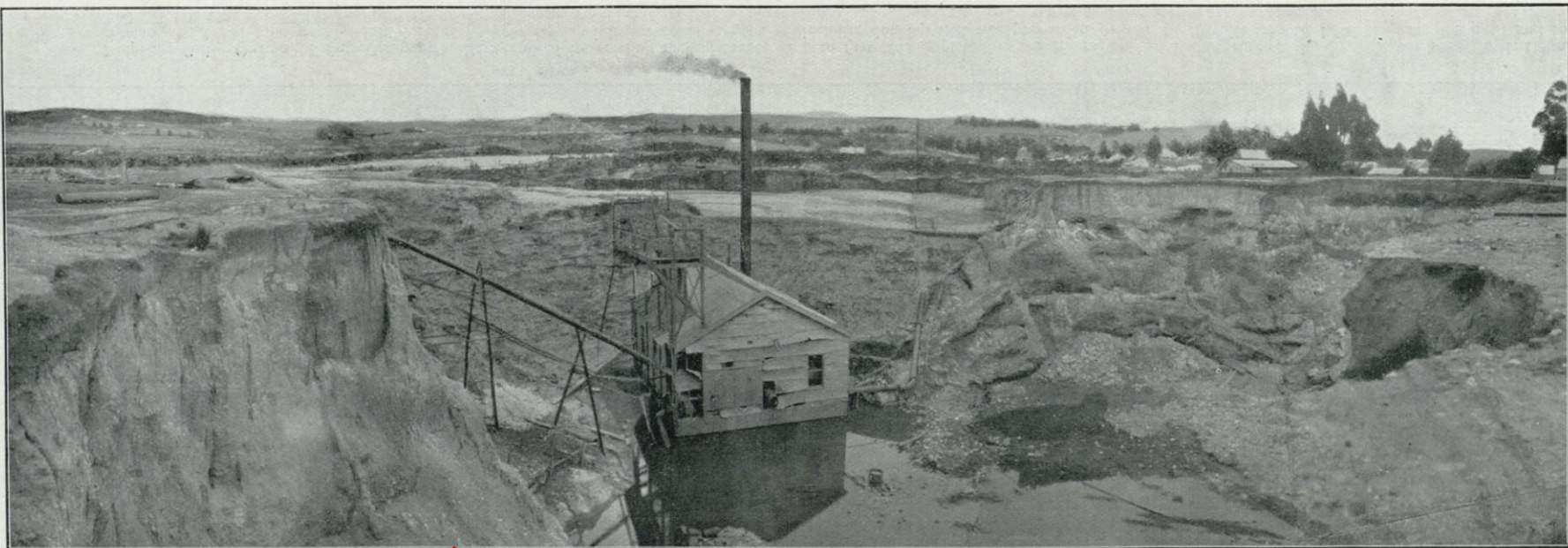
Verey Collection, Castlemaine Historical Society Inc

Adolphus Verrey & Co., Castlemaine

Our once meandering streams have had a hard time
but are slowly recovering







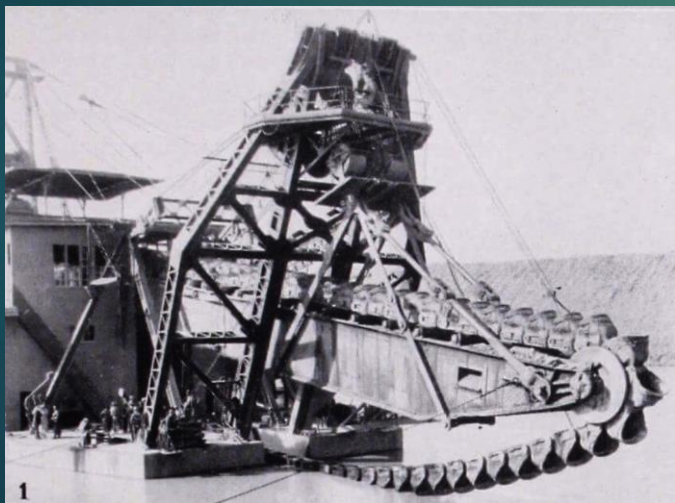
Golden Crescent Pump Hydraulic Plant, Little Bendigo (Aberdeen & Montgomery Hills
Mine Dept Annual Report 1914

Sluice and Dredge mining 1898 -1940s



Bucket Dredge, Campbells Ck

Mines Dept Annual Report 1911

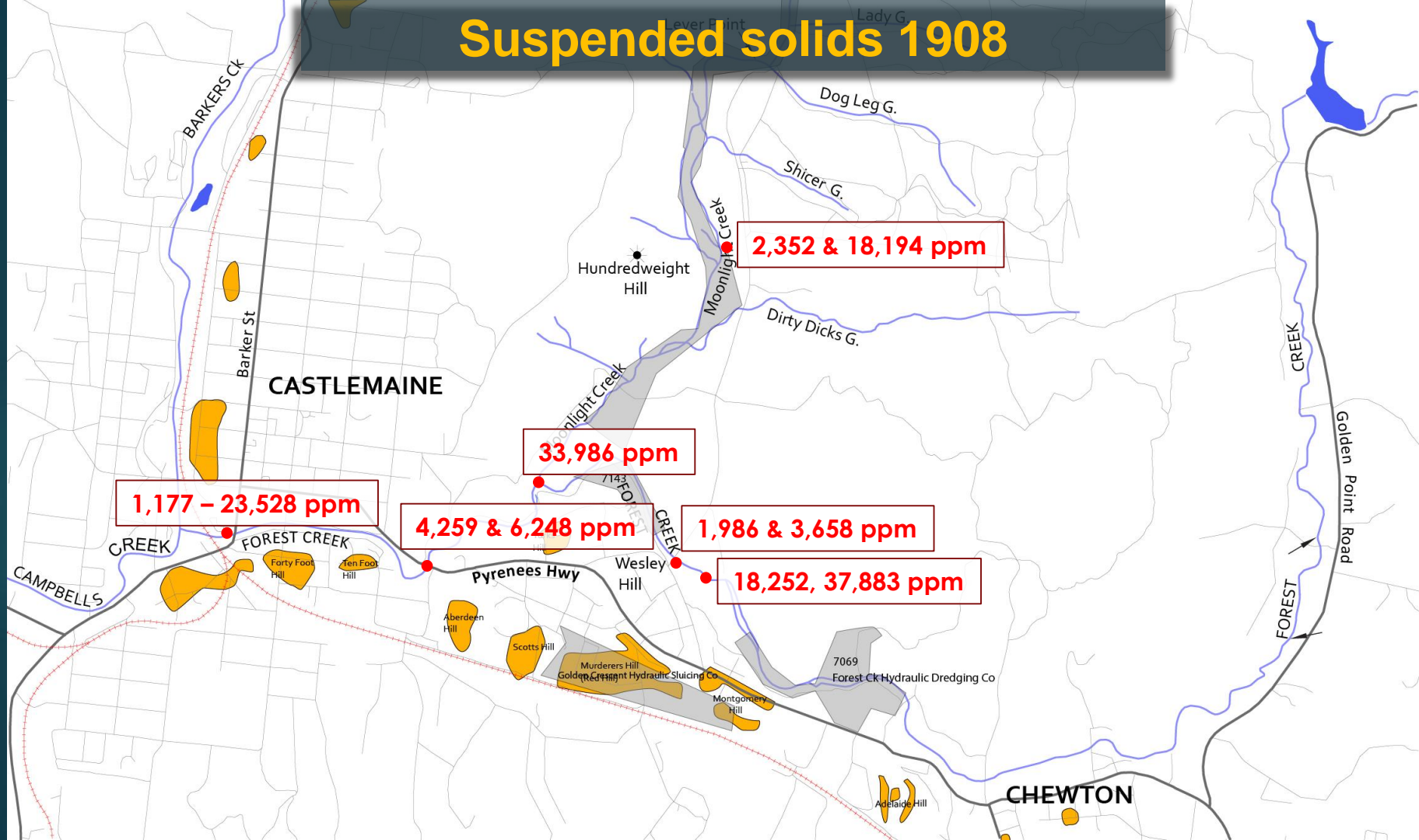


<https://www.911metallurgist.com>

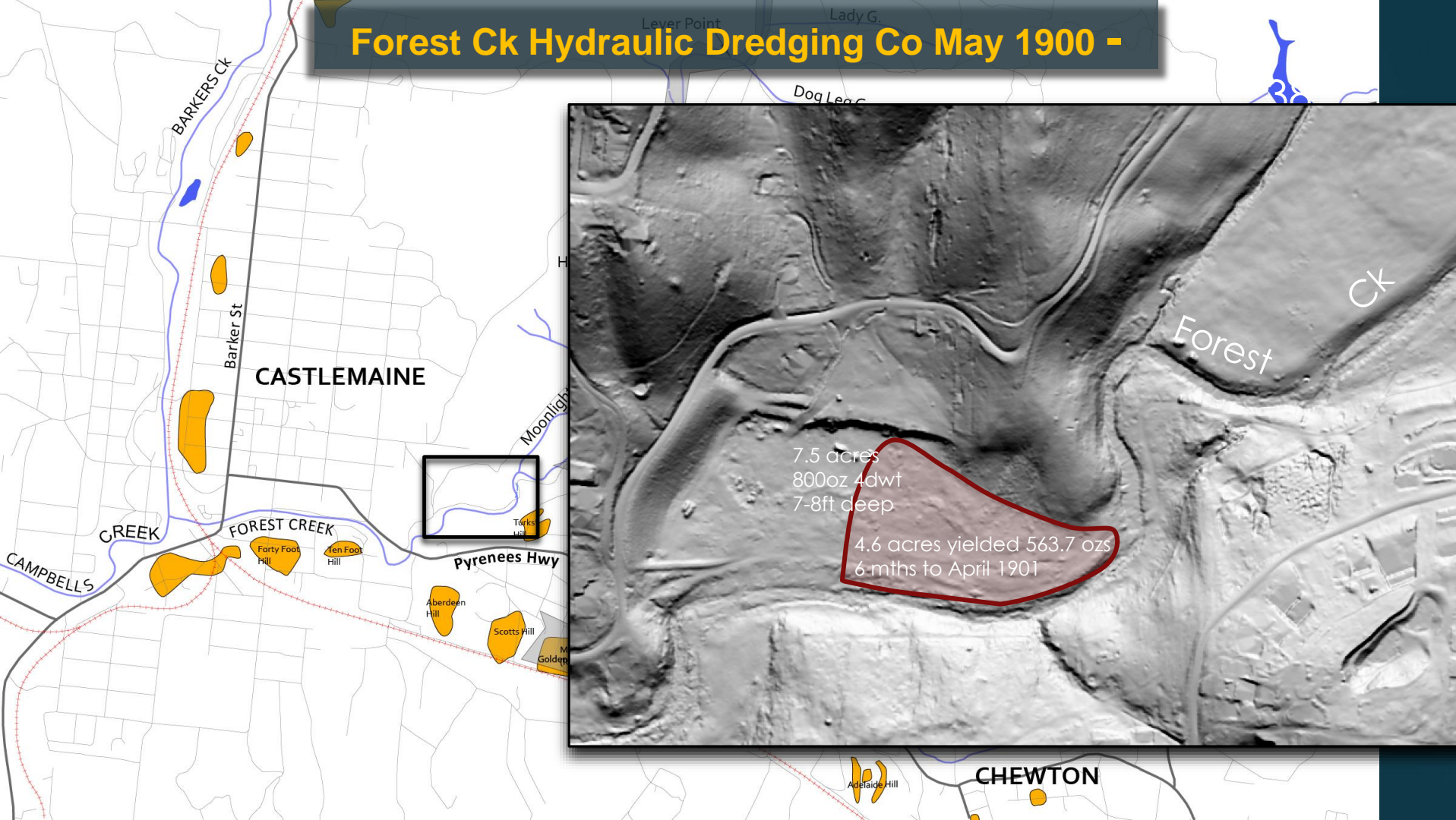


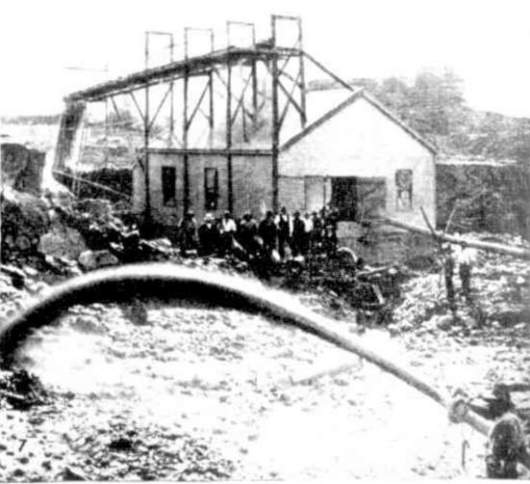
Dredge buckets

Suspended solids 1908



Forest Ck Hydraulic Dredging Co May 1900 -





Weekly Times Sat 20 May 1905 page 9

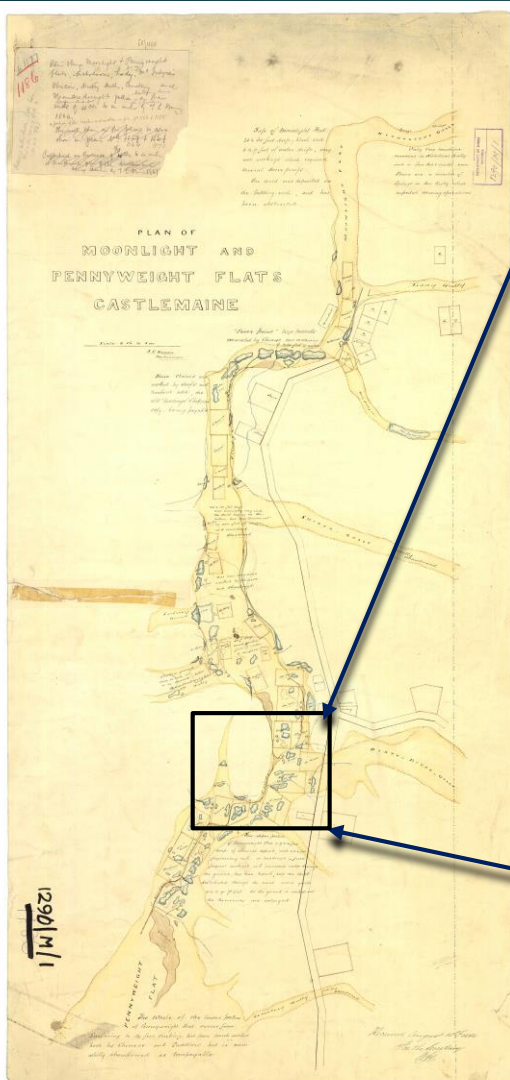


Timber lacework retaining wall

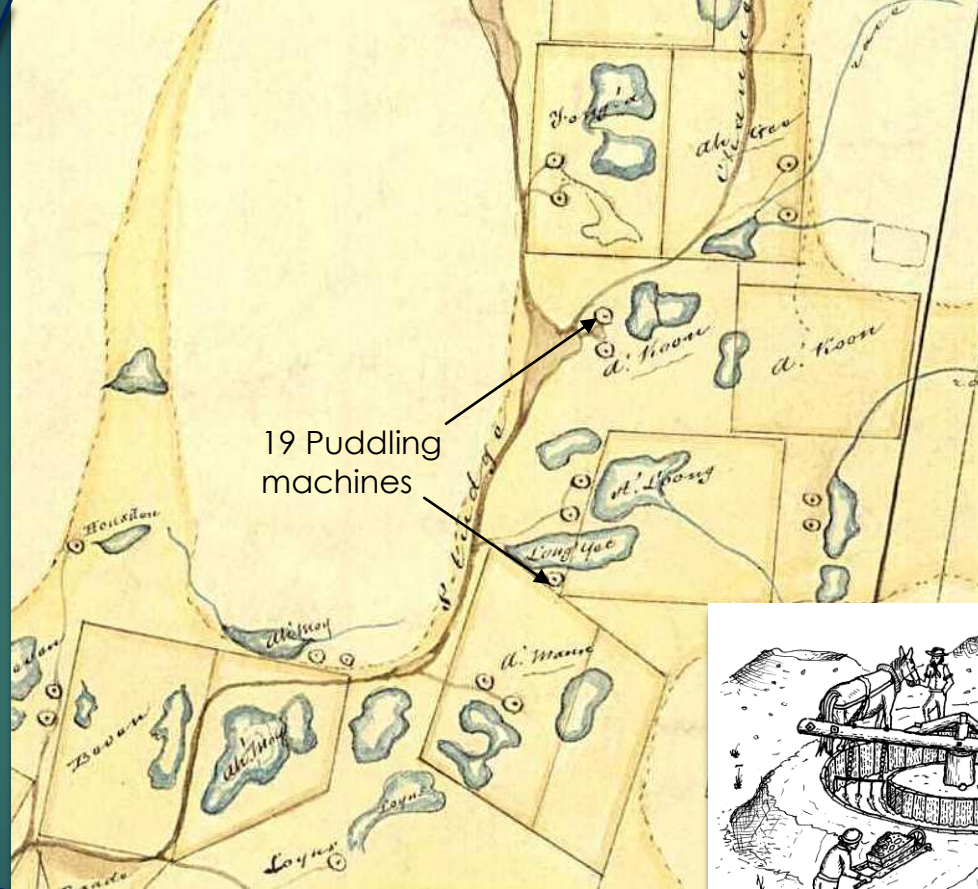
Castlemaine Historical Society Inc

CENTRAL FOREST CREEK DREDGE

CLAMB'S
CASTLEMAINE



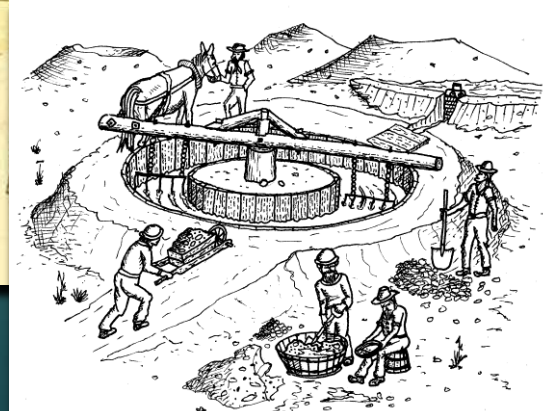
40



19 Puddling
machines

T.L. Brown 1860

T.L. Brown 1860



Puddler by Rob Kaufman

