

Penarie creeks system, on the western end of the lower Murrumbidgee floodplain (circled). The first water flowed into Paika Lake for over a century, in May 2011. A partnership established in 2008 between the owners of properties adjoining Paika Lake with assistance from the NSW Office of Environment and Heritage and CSIRO aims to restore life to Paika Lake. Paika Creek, and lower Penarie Creek, after being isolated from their Murrumbidgee lifeline since 1906. The restoration area includes rare and ecologically strategic off-floodplain wetlands, including Paika Lake, and an inter-bioregional wildlife corridor.

PAIKA LAKE REGENERATION

Action has begun to rehabilitate the stranded Paika-

1926 Moama-Balranald railway line officially opened

planned for the lower Murrumbidgee to be constructed Silver Needlewood Only two weirs of the nine weirs with locks originally 1934 Major amendment to River Murray agreement 1929 Beginning of the Great Depression fat animals were supplied to markets. was agisted on the lower Murrumbidgee floodplain, and agistment. During past droughts, stock from other areas and more than 100 000 were sent out of the district on Dam - as predicted by Monash. Around 90 000 sheep died 'Paika' Station to diversions to the MIA and the completion of Burrinjuck resilience of the district as a result of reduced flooding due the development of Drought highlighted the erosion of the social-ecological 1927 Ecological, economic and social crisis Key dates in

the tirst time in TU5 years

2011 Water Flows into Paika Lake for

2005 Yanga National Park established

1980 Beginning of transition to ecological

1951 Paika' purchased by Leo Connellan

1940 Maude and Redbank weirs completed

river management

'mood loow' to bn3 8291

2008 Paika Lake Regeneration Partnership established

2001 Paika' purchased by John and Dianne Williams

proclaimed - without a water allocation! 1945 Lowbidgee Flood Control & Irrigation District

1938 'Paika' purchased by Charles and Rebecca Oliver

on how to sustain their floodplain landscape advice to lower Murrumbidgee communities 1904 John Monash engaged to provide expert

to noitesilenigrem lesigolose to prinniged (AIM) 998bidmurrumbidgee (MIA) 1906 Large-scale government Irrigation

water flowed into Paika Lake until 2011. lower Murrumbidgee floodplain - last time

Lake Paika Accommodation

Take a step back in time, unwind, relax and

enjoy unique accommodation in the restored

Self Contained Workman's Quarters, Experience

this recently reinstated natural wetland, on one

of the districts most historic stations. Witness breathtaking sunsets and amazing bird life. Guests

are invited to fish, swim, canoe and bird watch.

Situated 17kms North of Balranald, between Yanga and Mungo National Parks, and 5

minutes from the Historic Homebush Hotel.

rrequent, tower and future with less Preparation for a

available water on the most productive land. shorter floods by using a levee bank to concentrate

1912 Murrumbidgee Irrigation Areas (AIM) launched

pəjəjduloo 911 Paika levee

Burrinjuck Dam Paika levee and

uo səsuəmmos

1907 Construction

part of River Murray Agreement constructed on the Murrumbidgee below Hay as 1914 Nine weirs with navigation locks to be

1923 Break-up of large pastoral properties near Balranald

stations were subdivided. order to make it viable. 'Paika', 'Yanga' and 'Canally' closer settlement within 25 kilometres of the line in connect Balranald to the Victorian rail system was for A requirement of the Border Railways Agreement to

1924 'Paika' homestead block purchased by Albert Poulton

'Lake Paika' Station **BALRANALD NSW**

EXPERIENCE

1846 George Hobler visits Paika Lake and squats on

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1061	Federation
6681	Australia's first environmental movement to protect a wetland
0681	Beginning of economic depression
7881	Peter Macpherson buys 'Paika' from partners
8781	Beginning of rabbit invasion of district
823	Paika' sold to Macpherson, Ronald & McLachlan Paika Creek Hotel established
0281	Macfarlane and Webster purchase four adjacent runs - Bidura, Willibah, Toylambool and East Toylambool - to add to 'Paika'
	The beginning of 'golden age' of river transport
7981	Rail link between Echuca and Melbourne
	'Paika' sold in two parcels: Tyson brothers bought Juanbang, Kooncombera and Juanbang Back runs. Matthew Hervey in partnership with Macfarlane and Co. purchased Paika, Yarrowal, and Yarrowal Back runs.
L981	Sheep overtake cattle as main livestock
	Augustus Morris and syndicate purchase Wentworth's lower Murrumbidgee properties
1823	Commencement of steam navigation on Murray-Darling river system
	Stations were initially left without labour and transport but soon good profits were made providing livestock to goldfields butchers.
1851	First Australian gold rush
1820	Hobler loses 'Lake Paika' Station to Wentworth
<u></u> ۲۶۱	Lower Darling Squatting District proclaimed

Mallee Emu - Wren

Murrumbidgee Irrigation development

1903 Proposal for a large-scale private

This landscape-altering undertaking required government funding for the relocation of power-lines; earthworks, including the cutting of existing levees; and the installation of water control structures to access environmental water from the Murrumbidgee River. Some dramatic wildlife biodiversity and vegetation regeneration has already occurred in

response to watering. Over 20 000 waterbirds of more than 35 species, including the threatened Freckled duck. Blue billed duck and Australian painted snipe, have been observed.

Freckled duck

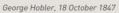
Sweet quandong (Santalum acuminatum)

Booking essential

Further information: Dianne Williams Ph: 0350 201653 Mob: 0427 206801

Email: dwpaika@bigpond.com

Charley and I took home as many quandongs as made 56 lbs. of jam ... it makes a very fine jam or preserve, and in the absence of garden fruit is very acceptable.



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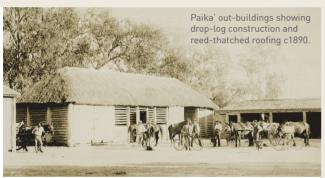
stables, etc., are thatched in capital style

Town and Country Journal, 21 September 1872

George Hobler squatted on land around Paika Lake in 1846. When it became part of the Lower Darling Squatting District in 1848, he tendered for the legal occupation of Paika, Yarrowal, Kooncoombera, and Juanbung runs that made up his 'Lake Paika' Station. William Charles Wentworth out-bid him and took them over in 1850. Hobler and most of his family migrated to California in 1851.

A syndicate consisting of Augustus Morris, Thomas Mort, Thomas Holt and Thomas Smart purchased Wentworth's lower Murrumbidge stations in 1853. Wentworth's former Annanomy Run was integrated with 'Lake Paika' Station, so that it extended to Balranald, which became an important service hub and river port for surrounding pastoral properties. The boundaries of three large stations – 'Canally', 'Paika' and 'Yanga' – met at the town.

In 1855, Augustus Morris split 'Lake Paika' into two parcels for sale. In 1861, the Tyson brothers bought Juanbang, Juanbang Back and Kooncombera runs. Matthew Hervey in partnership with Macfarlane and Co. purchased Paika, Yarrowal, and Yarrowal Back runs. In 1865, Walter Macfarlane and William Webster took over Hervey's share and in 1870 they purchased four adjacent runs -Bidura, Willibah, Toylambool, and East Toylambool – that were incorporated with 'Paika'. The property remained in that form until 'broken-up' for closer settlement, to conform to the Border Railways Agreement, in 1923.

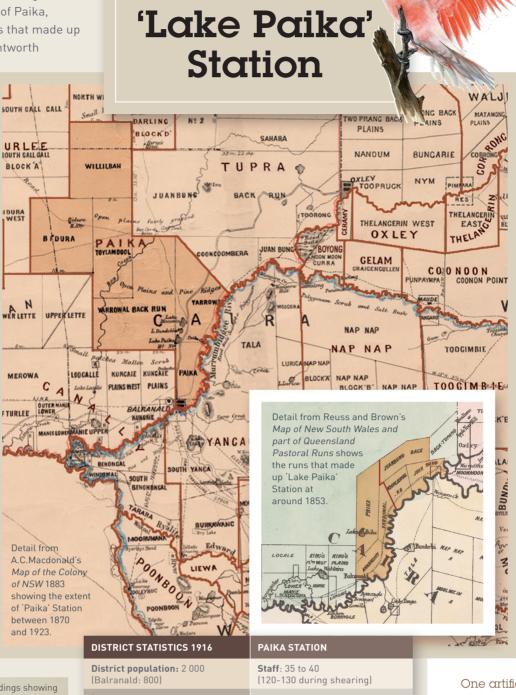


PAIKA LANDSCAPE

'Living on the edge'

'Paika's' location results in an ecologically rich landscape because it is at the interface of quite distinct geographical and ecological systems at global, continental, bioregional and local scales. Interfaces between different ecological systems are places of ecological 'tension' creating 'hot-spots' of biodiversity.

Its two parts have sharply contrasting geomorphology, soils and vegetation communities with their associated fauna. The most obvious is the contrast between the semi-arid mallee to the west and the lower Murrumbidgee floodplain wetlands and red gum forest to the east. That interface was once a meeting place between land and 'sea'. The sandy mallee area was once the floor of an 'inland' sea (the Murravian Gulf) and later a freshwater mega-lake (Lake Bungunnia). The floodplain was part of a giant delta formed as the ancestral Lachlan, Murrumbidgee and Murray rivers dropped sediment as they entered the sea, and lake.



(One hundred & twenty-one World Land area: 280 000 acres War I volunteers to March 1916) (Freehold 80 000 acres, Western Lands Lease - originally homestead lease - 200 000 acres) **Balranald Pastures Protection** Average Rainfall: 9.30 inches **District:** average of 500 000 sheep and 200 000 lambs Steamer trade: On average 8 000 **Stock**: Sheep 50 000 - 60 000 (carrying capacity six acres to the to 9 000 bales of wool shipped from Balranald each year and sheep), cattle: 800, horses: 120. shops in the town receive around 1 000 tons of goods from Echuca. Annual wool clip: Average annual wool clip: 1 000 – 1 500 bales 11 000 bales

PAIKA CREEK

Paika Creek forms a corridor between the two contrasting parts of the Paika landscape. It provided Aboriginal people with access to different resources and the concentrated biodiversity along its channel would have been a rich hunting and gathering area.

The creek also provides a life-giving flight corridor for the endangered eastern subspecies of the Regent parrot (*Polytelis anthopeplus ssp. anthopeplus*). Regent parrots are confined to areas where mallee vegetation occurs adjacent to riverine woodlands. They nest in red gum and black box communities but feed in the mallee. Their survival is dependent on links between the two. Communities at Hay, Maude and Balranald, supported by local newspaper editors, established river defence leagues and associations to lobby for the continued receipt of floodwaters to sustain the vast wetland ecosystem. The social, economic and ecological resilience of the whole district was linked to the health of the *flooded country below Hay*. Walter Macpherson of 'Paika' was the chair of the Balranald group.

Coordinated community action won the 'battle' but not the 'war'. A NSW Department of Public Works Board of Reference acknowledged in 1901: that the water diverted in the past and proposed to be diverted in the future, has had and will have, a deleterious effect upon the low-lying lands below Hay and recommended that a weir and lock be constructed by way of compensation.

The construction of the recommended ecological diversion weir never took place. The lack of infrastructure to compensate for greatly reduced flooding, resulting from upstream developments over the past century, has 'stranded' more than 65 000 hectares of rich alluvial flooddependent soil and taken it out of ecological and agricultural production. However, it has been acknowledged that ongoing vigilance by residents throughout the twentieth century has played a major role in the survival of this ecologically strategic floodplain to date.

LAND-USE

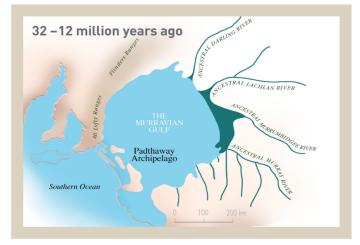
Evidence of a large Aboriginal population

The biologically rich and diverse landscape supported a dense Aboriginal population for more than forty thousand years. The explorer, Major Thomas Mitchell made the following observations when he passed through the 'Paika' landscape on 15 May 1836:

One artificial feature, not observed by me in other places, distinguishes the localities principally frequented by the natives, and consists in the lofty mounds of burnt clay, or ashes used by them in cooking ... Some of them were so very ancient, as to be surrounded by circles of lofty trees ... I saw the first of these heaps, when near the end of the last day's journey along the Lachlan ... I understood that the "Balyan" or bulrush-root (*Typha sp*), which is the chief food of the natives there, is prepared in those kilns.

Working with the environment -'ecological complementarity'

A feature of traditional European land-use in the western Riverina in the nineteenth century were strategies to deal with low rainfall, the Murrumbidgee flooding regime, and the vagaries of climate and markets. The key to social, economic and ecological resilience was the utilization of different ecosystems, called 'ecological complementarity'. When the floodplain was inundated each winter and spring, stock (sheep and cattle) was moved to graze on the surrounding saltbush plains, or on elevated areas within the floodplain. After the floodwaters receded, stock returned to graze on floodplain pastures during summer and autumn. This process



The Murravian Gulf - around sixteen million years ago, the approximate final eastern shore line of this 'inland sea' was through today's 'Paika' Station.

1899 – the birth place of Australia's first environmental movement to protect a wetland

As a high off-take, the reduced frequency of water flowing through Paika Creek into Paika Lake was an indicator to district residents by the 1880s that upstream water diversions were impacting on the extent of flooding on the lower Murrumbidgee floodplain and their linked livelihoods.

As the floodplain is flat, a reduction in flood height of just 20 centimetres can mean that hundreds or even thousands of hectares of land are not watered. Reduced flood heights and duration also mean that outlying billabongs and off-floodplain lakes, such as Paika Lake, are not filled, thus excluding large areas of the surrounding plains from grazing.

In 1899, local community action was triggered by a proposal to further widen and deepen the cutting into Yanko Creek, with government assistance. The greatest fear was a rumour that a weir was to be constructed across the Murrumbidgee to permanently divert water into the creek. supported high stocking rates, it allowed both ecosystems time for recovery, and provided a variety of feed for healthy animals.

During periods of difficult economic conditions, such as droughts or depressions, which generally occurred around once in a generation, community members made a living from red gum forest products. That meant that they did not have to leave their community to find work, and the local economy and social activities, such as football games, were sustained during 'hard times'. As forest work is 'hard' and dangerous, workers returned to their normal jobs as soon as conditions improved, leaving the forests to recover.

