National History Challenge 2007

‘Lessons from the past’

What evidence is there to suggest that The Federation Drought 1895 – 1903 and The Great Eastern Drought 1914 – 1915 taught the Australian people any lessons which have helped them to cope with the present and plan for future drought.

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SLSA: PRG 1258 / 2 /2158. Bourke Bridge at low river level, c. 1900.

Photograph courtesy of the State Library of South Australia.

Drought has always been present in everyday Australian life causing hardship and suffering throughout the nation; destroying crops, killing thousands of livestock and proving hard times for the millions who are unprepared for such conditions. It is and has always been a lesson for the people of Australia because of the significant event which takes place, affecting people both locally and nationally, which is relevant to today's society. From the suffering experienced in the major droughts of the early twentieth century and the action taken by people at the time, many lessons have been learnt which can help Australians understand the present and to plan ways of coping with drought for the future.

Drought occurs constantly and a part of Australia is always being affected by it.[1] Australia has been struck by 13 major droughts since 1860 excluding the current drought of 2002 – 2007.[2] These major droughts include that of 1895 – 1903, often referred to as The Federation Drought, and The Great Eastern Drought of 1914 – 1915, which were among the most devastating in terms of lack of rainfall and the effects on primary production and the economy.[3] It is through these major droughts that many lessons have been learnt.

Land and natural resources were heavily relied on during the early twentieth century and it therefore proved a hard time for the river towns like Mildura, Balranald and Deiliquin when the Murray River stopped flowing as it often did in drought, as they heavily relied upon it for transport. of stock and supplies. During the Federation Drought, the Murray River had stopped flowing for 364 days.[4] The townspeople had learnt that alternative routes were required for transport when the river did dry out as in this circumstance. Paddle steamers were cheaper than trains however as other farming areas such as Broken Hill, New South Wales, had shown, the expense of train travel was justified by a dependable service and reduced

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[1] McKernon, M. Jan 2007, Past stories of people and drought in Australia, http://www.abc.net.au/water/stories/s1836657.htm. Retrieved 18/07/2007.

[2] Fin, K. 1990, *The Book of Australia*, The Watermark Press, Sydney.

[3] Australian Bureau of Statistics – 1301.0 Year Book Australia 1988, http://www.abs.gov.au/ , Retrieved 21/07/2007.

[4] NSW Department of Primary Industries, 2006, Australia and drought – A quick look back into history, http://www.ricecrc.org/rwn/cweb/droughtinsert.pdf, Retrieved 19/ 07/2007

stock loss.[5] The Murray River Royal Commission was put together in 1863 to address the conservation and water distribution between New South Wales, Victoria and South Australia.[6] Whilst the Commission looked at water allocation between the states, it also discussed the implementation of locks and weirs along the Murray System to improve navigation and water volume especially for times of drought. However, no further action was taken until 1902 and again in 1913. The River Murray Waters Agreement was established in 1902. The agreement allowed for the construction of weirs and locks, the construction of water storage at Lake Victoria, the construction of 26 weirs and locks in the Murray in South Australia, and 9 weirs on the lower part of the Darling and Murrumbidgee Rivers from 1913.[7] One of the major lessons which had emerged from drought was the need for cooperation. Drought has taught Australians to pull together and resolve issues relating to past droughts. The Murray River Royal commission of 1863 and Water Agreement of 1902 reflect such action. History reflects that whilst positive actions result from state and territory partnerships, problems of ownership of the land and water allocation often occur, hampering effective outcomes for Australia as a nation, which is also evident today.[8]

Apart from transport, the river was also depended on for its water for activities of daily living, livestock and produce. The early droughts made people aware that they needed to find other water sources available for their use. They learnt that new creative solutions to their problems were necessary to combat the hardships the drought brought upon them. The tapping of artesian waters was a positive outcome of the drought for a more regular and reliable source of water. Pastoralists were mindful to balance this water supply and their demand for water so that it didn't run out.[9]

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5 Davidson, G.; McCarty, J.W. and McLeary, A. 1987, *Australians 1888,* Fairfax, Syme and Weldon Assoc. Sydney.

6 'Murray River Water', *Argus*, 10 Dec. 1902.

7 Murray Darling Basin Commission, *The River Murray Waters Agreement,* http://www.mdbc.gov.au Retrieved 22/07/2007.

8 23/7/07 Adelaide Channel Ten News, *National Water Crisis.*

9 Davidson, G. et al 1987, *Australians 1888,* Fairfax, Syme and Weldon Assoc. Sydney.

NAA: A3560, 4939. The Cotter River below the Cotter Dam Wall and the footbridge over the river. It shows low water flows during drought, c. 1929.

Buggies and sulkies in the dry river bed of the River Murray (Held in the State Library of New South Wales).

They had also learnt that water depots should be placed at certain intervals along sheep grazing routes as sheep could not endure lack of water as much as cattle could, and this would reduce losses.[10] The scarcity of water also led to the construction of reservoirs and dams as early as 1860, the first in South Australia being the Thorndon Park reservoir in 1860.[11] The Barossa Valley Reservoir, South Australia, was built during the Federation Drought in 1902, possibly due to the effect of this drought and the scaristy of water at the time. After this time, it had become increasingly evident that a large number of reservoirs had been constructed particularly in South Australia which has been noted to be the driest state within the driest continent.[12] Minimal rainfall in this state and reliance on the River Murray promoted the development of water catchment areas such as these reservoirs which would allow the state to cope in such harsh drought conditions.

Sheep graziers often relied upon natural watercourses and rivers such as the River Murray which provided good grazing areas and feed for their stock. The long term drought devastated sheep and cattle numbers due to the lack of grazing available during this time. Sheep numbers had reached approximately 100 million but were reduced by up to half, and cattle by 40 percent.[13] Farmers learnt to adapt to the conditions through different farming strategies and life style changes such as moving their stock to available water courses and pasture when these resources were limited elsewhere. William (Bill) Hayes' Diary from 1914 depicts the devastation of drought in Red hill, South Australia and the effects associated with wheat farming and stock losses and the need to move stock in an effort to save their livelihood. [14] Following the drought of 1902, farmers had learnt to grow fodder in good seasons and stock pile for poorer seasons. They also recognized that it was important to keep stock of hardy constitution and not to keep too many old ones. The stock should not be

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[10] 'What the Drought Teaches', *Register*, 13 April, 1869, p3c.

[11] Government of South Australia, 28 April 2004, *Atlas of South Australia - water supply*, http://www.atlas.sa.gov.au/go/resourses/atlas Retrieved 22/07/2007.

[12] Government of South Australia, 28 April 2004, *Atlas of South Australia - water supply*, http://www.atlas.sa.gov.au/go/resourses/atlas Retrieved 22/07/2007.

[13] Australian Bureau of Statistics – *1301.0 Year Book Australia 1988*, http://www.abs.gov.au/ , Retrieved 21/07/2007.

[14] Mortlock Library of South Australia: D 7874 (L), Introduction and transcript of a diary by William (Bill) Hayes 1914.

allowed to deteriorate in condition before hand feeding them.[15] It was also very important not to overstock as this impacted greatly on pasture and water availability.[16] Other farmers did not have the luxury of finding water for their stock and crops. These farmers learned to diversify their skill often working in quarries or cutting and selling timber for firewood to earn a living for their families.[17] Wheat crops were always seen as the primary source of income nation – wide, supplemented by sheep farming with the impact of the drought causing a double blow to many families.[18]

The complete failure of the national wheat crop in 1914 was the result of The Great Eastern Drought, 1914 - 1915.[19] Wheat was relied on in normal seasons for individual consumption and to generate income though export sales. Due to the lack of wheat grown during these drought years, Australia had to import wheat from America in order for the needs of the Australian people to be met. This was a national crisis with South Australia being the only state to have a small surplus. From this crisis, the Australian people had learnt that they had been very dependant on the success of the wheat industry in the past and had not considered the effects of drought on the 'householder'. The importance of future planning of the nation's food supply had also been realized with farmers identifying that they had to conserve their seed through drought years for the good years where is would grow successfully. [20] Using science, forward thinking professionals such as G.W. Goyder had identified lessons from previous droughts. Goyder, a surveyor, from South Australia in 1860 had recommended that pastoral farming should not occur beyond a line of 250mm of rainfall per year. Early history reflects that farming north of Goyder's line has resulted in failed crops due to drought, rabbit plagues and soil erosion. [21]. South Australian farmers from today are

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15 Hayman, P. 2003, *Climate information to manage drought risk in NSW*, http://www.bom.gov.au/climate/droughtcom/abstracts/hayman_nsw_drought.pdf, Retrieved 19 / 7 / 2007.

16 Davidson, G. et al 1987, *Australians 1888*, Fairfax, Syme and Weldon Assoc. Sydney.

17 Davidson, G. et al 1987, *Australians 1888*, Fairfax, Syme and Weldon Assoc. Sydney.

18 'The Wheat Outlook', *The Argus*, 31 Oct. 1902.

19 NSW Department of Primary Industries, 2006, *Australia and drought – A quick look back into history*, http://www.ricecrc.org/rwn/cweb/droughtinsert.pdf, Retrieved 19/ 07/2007

20 'The Wheat Outlook', *The Argus*, 31October, 1902.

21 Whitelock, D .1984, *Adelaide - from Colony to Jubilee*, Savvas Pub. Adelaide.

well aware of the impact drought will play on their farming outside of Goyder's line.

Farmers and machine makers of the early twentieth century were not deterred by drought. They often rallied during the droughts improving machines with which to assist with farming productivity. The McKay Machine, a harvester, was built around the time of the Federation Drought and was an example of this.[22] Building on initiatives of the past, scientific developments continue to assist farmers today in managing drought conditions through the diversification of crops and seeding methods.[23] The Future of Australian's threatened Ecosystems (FATE) program is a current development which aims to increase the sustainability of crops through the adaptation of indigenous species, livestock and protecting the soil from erosion.[24] This reflects views of the past where pastoralists were aware of conservation and not stripping the land of its natural resources.

Australia's history depicts a country affected by a pattern of cyclic droughts. Two major droughts, The Federation Drought and The Great Eastern Drought, have produced a devastating impact on the National economy and psyche. Drought has been a good teacher, emphasizing the importance of water conservation and management, being able to find new creative solutions to the problem, identifying different farming strategies and life style changes to cope with drought, and the need of cooperation within the nation both in times of suffering and good years.[25] All of these aspects continue to be built on by today's society in the face of a national disaster, learning from these lessons of the past.

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22 Davidson, G. et al 1987, *Australians 1888*, Fairfax, Syme and Weldon Assoc. Sydney.
23 Healey, J. 2005, *Drought in Australia*, Sydney Press, Sydney.
24 Healey, J. 2005, *Drought in Australia*, Sydney Press, Sydney.
25 McKernon, M. 2005, *Drought – The red marauder*, Allen and Unwin, Sydney.

NAA: A3560, 4961. The Murrumbidgee River during a drought, c. 1928.

SLSA: PRG 1258 / 2 /2204. River Darling during low river level, c.1900.

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Primary Sources:

Documents:

Mortlock Library of South Australia: D 7874 (L), Introduction and transcript of a diary by William (Bill) Hayes 1914.

This document provided an actual account of the experiences of William Hayes during the Great Eastern Drought of 1914.

Newspapers:

Mortlock Library of South Australia: 'Help for Distressed Farmers', *Register*, 17 October 1896, p4f.

This article provided information about the action the farming community could take to survive the effects of drought.

Mortlock Library of South Australia: 'Murray River Water', *Argus*, 10 Dec. 1902.

This article identified early collaboration between New South Wales, Victoria and South Australia to address the water allocation, management and conservation of the River Murray.

Mortlock Library of South Australia: 'The Great Drought – Lessons to be Learned', *Observer*, 10 December 1904, p13a.

This article provided interesting information about the lessons learnt from past droughts and outlined strategies to overcome drought in the future.

Mortlock Library of South Australia: 'The Wheat Outlook', *Argus*, 31October, 1902.

This article highlighted the impact that The Federation Drought had on Australia's wheat economy in 1902.

Mortlock Library of South Australia: ‘What the Drought Teaches’, *Register*, 13 April 1869, p3c.

This newspaper article contained useful information about the lessons South Australian’s had learnt from early experiences with drought.

Photographs:

National Archives of Australia: A3560, 4939, ‘Cotter River below the Cotter Dam wall and the foot bridge over the river. Low water flows in drought.’

This photograph provided visual evidence of the devastation of drought to natural water courses.

National Archives of Australia: A3560, 4961, ‘Murrumbidgee River during a drought and low river flows,’ c. 1928.

This photograph was useful as it had shown the effect of major drought on a large river.

State Library of South Australia: PRG 1258 / 2 / 2204, ‘River Darling with low river level.’ c. 1900. Photograph courtesy of the State Library of South Australia.

This photograph showed that in past drought, major rivers were reduced to a trickle rather than a torrent.

State Library of South Australia: PRG 1258 / 2 / 2158, ‘Bourke Bridge at low river level, most of the river bed exposed.’ c. 1900. Photograph courtesy of the State Library of South Australia.

This photograph provided pictorial evidence that drought effected large rivers such as the one at Bourke Bridge.

Secondary Sources:

Books:

Davidson, G.; McCarty, J.W. and McLeary, A. 1987, *Australians 1888,* Fairfax, Syme and Weldon Assoc. Sydney.

This book provided information on the effects of drought on the everyday Australian and how they learned to adapt to the harsh environment.

Fin, K. 1990, *The Book of Australia,* The Watermark Press, Sydney.

This book provided useful facts about how many major droughts had been experienced since 1860.

Healey, J. 2005, *Drought in Australia*, Sydney Press, Sydney.

Drought in Australia outlined many of the valuable lessons learnt from past droughts and ways to manage future drought through strategies such as scientific developments and diversity in farming of indigenous plant and animal species.

McKernon, M. 2005, *Drought – The red marauder*, Allen and Unwin, Sydney.

This book was useful for background information on past droughts in Australian history and the suffering it caused to many individuals and families.

Whitelock, D .1984, *Adelaide - from Colony to Jubilee*, Savvas Pub. Adelaide.

This book provided adequate information about G. W. Goyder and Goyder's line in South Australia.

Websites:

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Hayman, P. 2003, *Climate information to manage drought risk in NSW*,

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This site gave an outline of the content in a series of articles titled 'Lessons of the Drought' put together by the Agricultural Gazette of 1902.

McKernon, M. Jan 2007, *Past stories of people and drought in Australia*,

http://www.abc.net.au/water/stories/s1836657.htm

Retrieved 18 / 7 / 2007.

This site provided information about both The Federation Drought and the current drought crisis. It also provided many interesting facts of The Federation Drought.

Murray Darling Basin Commission, *The River Murray Waters Agreement*,

http://www.mdbc.gov.au Retrieved 22/07/2007.

This site provided information on the River Murray Waters Agreement of 1902 and identified the action taken from this agreement by New South Wales, Victoria and South Australia to build weirs and locks along the Murray River to manage and

conserve the remaining water.

National Archives of Australia, 2007, http://www.naa.gov.au, Accessed 18 / 7 / 2007.
The National Archives site was useful as it provided some of the photographs used in this essay.

NSW Department of Primary Industries, 2006, *Australia and drought – A quick look back into history*, http://www.ricecrc.org/rwn/cweb/droughtinsert.pdf, Accessed 19/ 07/2007.
This site provided interesting factual information about the Federation Drought, The Great Eastern Drought, and the major rivers of Australia during the twentieth century.

Photographs:

'Buggies and sulkies in the dry bed of the River Murray, Myall near Kerang, Victoria.' (Held in the State Library of New South Wales). McKernon, M. 2005, *Drought – The red marauder*, Allen and Unwin, Sydney.
This photograph provided pictorial evidence of the effect of drought and how the extent of the drought allowed people to cross from one bank to another without a boat.

Miscellaneous:

23/7/07 Adelaide Channel Ten 5pm News Report, *National Water Crisis.*
This news report was useful as it supplied information about the current ongoing conflict of the River Murray Water management and conservation between New South Wales, Victoria, South Australia and the Federal Government.