and George Chaffey had, with the wave of his hand, as it were, marked out the main lines of reticulation. Later the surveyor and his party found the level and fixed the channel lines almost exactly as the master mind had first visualized (sic) them” 50.

8 Engineering Failures

The only engineering failure of significance that can be found in the record of the Chaffey projects relates to the high level of seepage through the walls of the channels. As initially constructed the channels were excavated through the sandy soil of the area and their inner surfaces were simply compacted before placing them into service. “The defects of the channels are due to the porosity of the soil, to the imperfect consolidation of some portions of the built banks, and the burrowing of crayfish” 51 52 53 54.

9 Outcomes at Mildura

By the early 1890s the Chaffey brothers and their companies were besieged by problems. As outlined in section 3 above there were concerted political attacks on them. “The irreconcilable minority” 55 amongst the settlers at Mildura were making unrealistic demands on the Chaffey’s and the Victorian Government. Furthermore it became clear that the Chaffey companies were under capitalised and this led to a lack of maintenance of existing plant and a cessation of any further developments.

In August 1893 Stuart Murray, Chief Engineer for Water Supply 56, was instructed to report on the complaints against Chaffey Brothers Ltd. He found that some were justified, and, largely on his recommendation, the Mildura Irrigation Trust was set up in September 1895 to take over the functions of the Mildura Irrigation Co. George had visited London in 1894 in a desperate effort to save his firm by selling the ailing Renmark concession, but failed to raise any money. On 10 December [1894] Chaffey Brothers Ltd went into liquidation, owing £22,000 in wages to its employees and with assets of some 438,000 acres (177,254 ha) of unsold land at Mildura and Renmark. The Bank of Victoria foreclosed on the mortgages of hundreds of settlers, but eventually the irrigation colonies at Mildura and Renmark grew to prosperity with assistance from the relevant governments” 57.


52 The crayfish most likely to cause damage to irrigation channels is the Common Yabby, Cherax destructor or the Murray Crayfish, Euastacus armatus. Both species are freshwater crustaceans. The Yabby is found widely in Australia but is most common in Victoria and New South Wales whilst the Murray Crayfish is found primarily in the Murray and Murrumbidgee Rivers and their tributaries. Both species are edible. The Yabby is edible but for country children ‘catching Yabbies’ is more play than a genuine bush tucker pursuit to feed the family.


Mildura thriving. Corner of 8th Street and Longtree Avenue, 1948.  
In 1896 (Sir) George Turner’s administration appointed a royal commission to inquire into the Mildura settlement and make recommendations for its future. The Chaffey brothers and Deakin were subjected to long questioning, and the commission’s report, tabled on 2 August 1897, largely blamed the Chaffeys for the troubles at Mildura, claiming that they had operated on insufficient capital and committed serious errors in planning” 58.

In August 1897 George sailed to the United States where he plunged into subdivision ventures before returning to irrigation projects. He tapped underground water to revive the Ontario settlement, diverted the waters of the Colorado River to irrigate the desert which he renamed Imperial Valley, and developed new colonies near Los Angeles. Finally he formed a banking partnership with his son Andrew, involving much travel in the United States and Canada. He died at Ontario, California on 1 March 1932. Extremely vigorous in both body and mind, George was a figure of Pacific importance, described by a friend as ‘limited only by his excesses’. No responsible person doubted his complete integrity, despite his astonishing variety of enterprises and the fact that some of the men closely associated with him later acquired reputations for very doubtful financial practices. In particular Deakin spoke of him frequently as a great pioneer in Australian agriculture and a valued personal friend 59.

10 Outcomes at Renmark

The causes of the early failure of the Chaffey schemes were largely external and hence the outcome at Renmark was much the same as at Mildura. Chaffey Brothers Ltd failed, government sponsored Irrigation Trusts took over the responsibilities for operating the infrastructure of the systems and it took many years to find stability and prosperity.


59 Ibid.
Renmark Hotel and park along Murray River in recent times. Another prosperous river town built on irrigation. *Image: Renmark Hotel.*

Renmark Irrigation Area from low earth orbit with the centre of Renmark marked. This image covers an east-west distance of 34 km. *Image: Google Earth.*
11 Legacy

The Chaffey Brothers left behind them at Mildura and Renmark irrigation systems which established the possibility of intense agriculture in semi-arid environments on a large scale by the use of modern technology and innovation.

After financial failure of the Chaffey projects in the 1890s commercial and operational models which were more sustainable evolved, and continue to evolve to this day.

Technically the greatest advance since the Chaffey era is the control of river levels in the Murray River by the installation of weirs and locks along the river facilitating the drawing of water from the river by providing relatively consistent and predictable river levels. Furthermore the storage of large quantities of water in major storage dams in the upper reaches of the river system has largely mitigated the problem of annual variation in rainfall and runoff.

The development of irrigated agriculture in Australia was critical to the nation, not only feeding itself in the driest continent, but also being able to export large quantities of agricultural product to world markets.

The Chaffey brothers made a huge contribution to the development of irrigated agriculture in Australia. However many others also contributed in other regions and in other ways to develop the industry we see today. The work is by no means over as we continue to struggle with balancing the various pressures relating to river health, irrigated agriculture and all the related environmental, social and economic factors.

References:


Frost Andrew, Kew in the 1890s Depression, Kew Historical Society, undated.


Appendix 3: Historic Individuals or Associations

Chaffey, George (1848–1932)

Chaffey, William Benjamin (1856–1926) 60

This is a shared entry.

George Chaffey (1848-1932), irrigation pioneer, engineer, inventor and entrepreneur, and William Benjamin Chaffey (1856-1926), agriculturist and irrigation planner, were born on 28 January 1848 and 21 October 1856 at Brockville, Ontario, Canada, sons of George Chaffey, a Canadian born at Zanesville, Ohio, United States of America, and his wife Anne, née Legoe, of Quebec. In 1859 the family moved to Kingston on Lake Ontario. George attended Kingston Grammar School. He seems to have been in poor health, and was certainly

uninterested in classroom instruction. But even at that early age he keenly sought out engineering books at the local library. He left school at 13, and soon became fascinated by the machinery in his father's shipbuilding yard and in the Lakes steamers. In May 1862 he was apprenticed as a marine engineer on Lake Ontario. Although entirely self-instructed, he obtained a United States certificate at 18, but in 1867 went to work in his uncle Benjamin's bank in Toronto. On 21 May 1869 he married Annette, only child of Thomas McCord, city chamberlain. In 1870-80 George was a partner in his father's shipyard, achieving a deserved reputation as designer and builder of shallow-draught steamers for the Great Lakes and the Ohio and Frazer rivers in British Columbia. During this period his three sons, Andrew, Benjamin and John, were born.

In 1878 George Chaffey senior moved to Riverside, near Los Angeles, California, to join other Canadian families in the Santa Ana River irrigation settlement. William Benjamin, who had been in his employment at Kingston, accompanied him. Their reports induced George junior to join them, since he had grown into a restless entrepreneur. The large profits that flowed from the Riverside venture encouraged George and William to become partners in the new irrigation colonies, named by them Etiwanda and Ontario, on the Cucamonga Plain. These settlements were based upon the purchase of land and water-rights by the Chaffeys at a low price, and resale to settlers in 10-acre (4 ha) blocks, with a mutual irrigation company to distribute water on a non-profit basis. Much of the success of irrigation at Etiwanda and Ontario was due to the use of cement pipes in the main water channels. Planned towns, social institutes and prohibition were features of both colonies, which were regarded as model settlements throughout western America. In addition to his vigorous and innovatory irrigation schemes, George became interested in electric lighting. He was president and joint engineer of the Los Angeles Electric Co., which gave to that city the most extensive lighting by electricity in the United States at the time. He also set up the first trunk line telephones in California.

In 1877-84 northern Victoria suffered from drought, and Alfred Deakin, a minister in the Service-Berry government and chairman of a royal commission on water supply, visited the irrigation areas of California in 1885. He met George and William Chaffey, admired their skill and energy and discussed the possibilities of irrigation in Victoria. Deakin's progress report, the dispatches of two journalists, (Sir) Edward Cunningham and J. L. Dow, who travelled with him, and the exaggerated tales of Stephen Cureton, a new-comer in Los Angeles, who had travelled in Australia, combined to tempt George to Melbourne, where he arrived in February 1886. Despite the later allegations of his political enemies, Deakin certainly never invited him to Victoria. At this juncture George's strong entrepreneurial instincts gravely affected his business judgment. He was plainly warned by Deakin and officials of the Water Supply Department that he would have little chance of obtaining a land grant on terms similar to those in California, but failed to understand the extent to which the Australian national outlook had diverged from the Anglo-American pattern of economic individualism. He was persuaded to look at the Murray Valley and returned to Melbourne excited about its potential for irrigation. Without fully realizing the import of his offer, Deakin assured George that the government would make available 250,000 acres (101,172 ha) of crown land on favourable terms. In April George somewhat rashly cabled his brother William to sell their Californian interests, which he did at a fraction of their real worth and then hurried to Victoria.

George returned to the Murray and selected a derelict sheep station at Mildura as the site for his first irrigation settlement. It was in the Mallee, described in a famous phrase as 'hissing desert', and 163 miles (262 km) from the nearest railhead at Swan Hill. But the Chaffey brothers signed an agreement with the Victorian government on 21 October, committing themselves to spend at least £300,000 on permanent improvements at Mildura in the next twenty years. A bill to validate this agreement, introduced into the Legislative Assembly by Deakin on 30 November, was violently opposed, the Chaffeys being termed 'cute Yankee
land grabbers'. The disposal of crown lands was a sensitive issue, and some of the Chaffeys' associates and salesmen were indeed deficient in truth and honesty. An amendment inviting tenders for the 250,000 acres at Mildura was passed. Meanwhile (Sir) John Downer, premier of South Australia, journeyed to Melbourne and offered a suitable block of 250,000 acres in his colony. The two brothers acted with their usual alacrity and selected river frontages in the Renmark area.

Since no tenders were received, the Chaffeys decided to go ahead at Mildura also. On 31 May 1887 they signed an indenture with the colony of Victoria, but in September transferred all their rights under it to the firm of Chaffey Brothers Ltd; twelve months later J. F. Levien replaced Cureton as a director, taking responsibility for the company's finances. With 500,000 acres (202,345 ha) of desert to develop, George showed astonishing energy and initiative in the next four years. William remained at Mildura, and a younger brother Charles came from California to manage the Renmark area. An expensive sales promotion campaign was initiated in Australia and Britain and, despite extreme difficulties of transport, 3300 people were at Mildura by December 1890 as well as 1100 at Renmark — about half of them new British migrants. The towns were well laid out and street trees planted lavishly in the style of Chaffey's American settlements. Difficulties and disputes abounded, but while revenue from land sales flowed in the Chaffeys remained confident. However, dissatisfaction among the settlers because of the loss of water from seepage was accentuated when B. C. Harriman, who had served in the Crown Law Department, told them that the operations of the Mildura Irrigation Co. were illegal and that the subdivisions were entitled to free water. Attacks on the Chaffeys' practices were carried to the Victorian parliament. A storm broke over their heads, intensified by the collapse of the land boom in Melbourne and a drift away from Mildura. City newspapers magnified the troubles at Mildura into a public scandal. Ministerial reports and a select committee failed to offer a solution. The radical elements among the settlers were determined to get rid of the Chaffeys and substitute government control.

In August 1893 Stuart Murray was instructed to report on the complaints against Chaffey Brothers Ltd. He found that some were justified, and, largely on his recommendation, the Mildura Irrigation Trust was set up in September 1895 to take over the functions of the Mildura Irrigation Co. George had visited London in 1894 in a desperate effort to save his firm by selling the ailing Renmark concession, but failed to raise any money. On 10 December Chaffey Brothers Ltd went into liquidation, owing £22,000 in wages to its employees and with assets of some 438,000 acres (177,254 ha) of unsold land at Mildura and Renmark. The Bank of Victoria foreclosed on the mortgages of hundreds of settlers, but eventually the irrigation colonies at Mildura and Renmark grew to prosperity with assistance from the relevant governments.

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of him frequently as a great pioneer in Australian agriculture and a valued personal friend. Chaffey's son Ben (1876-1937) had stayed in Australia, building up business interests in Mildura before becoming a prominent Riverina pastoralist and well-known racehorse owner.

William Benjamin Chaffey also remained in Mildura to 'see it through'. He worked long hours to bring his orchard of some 200 acres (81 ha) into production and established the Mildura (later Mildara) Winery Pty Ltd which in 1914 moved its headquarters to Merbein. Active from 1895 in the development of marketing procedures for local fruit, he became a leading member of both the Mildura and the Australian Dried Fruits associations and was president of the latter for many years. In 1903 he was elected president of the Mildura Shire Council and in 1920 first mayor of Mildura Borough. Known affectionately as 'The Boss' or W.B., he was president of the Old Pioneers' Association and of the local horticultural and agricultural society, and was an active Freemason. In December 1911 the residents of Mildura presented him with a Ford motor car, in appreciation of the 'ability and determination' shown by him in 'aiding the development of the area and in proving conclusively the value of irrigated horticulture'. He was appointed C.M.G. in 1924.

Chaffey's first wife Hattie, née Schell, whom he had married in Canada aged 23, died in Mildura in 1889 leaving a young family. On a return visit to the States in 1891 he married Heather Sexton Schell at Hamilton, Ohio. Chaffey died at Mildura on 4 June 1926 survived by his second wife, two sons and a daughter of the first marriage and two daughters and a son of the second; a son had been killed in World War I. His estate was valued for probate at £11,199; his home Rio Vista became a cultural centre. A statue of him by Paul Montford was unveiled in Mildura in 1929; he was commemorated by another in Renmark in 1930.

Select Bibliography

- J. E. M. Vincent, *The Australian Irrigation Colonies on the River Murray in Victoria and South Australia* (Lond, 1887)
- J. Smith (ed), *Cyclopedia of Victoria*, vol 3 (Melb, 1905)
- J. A. Alexander, *The Life of George Chaffey* (Melb, 1928)
- M. Cannon, *Land Boom and Bust* (Melb, 1972)
- *Parliamentary Papers* (Legislative Assembly, Victoria), 1896, 3 (19)
- F. D. Kershner, 'George Chaffey and the irrigation frontier', *Agricultural History* (Baltimore), Oct 1953
- *Australasian* (Melbourne), 16 May 1896
- *Argus* (Melbourne), 22 Dec 1911, 4 Mar 1932, 4 Mar 1937
- *Sunraysia Daily*, 5 June 1926
- *Sydney Morning Herald*, 18 Apr 1932
- *Herald* (Melbourne), 8 Oct 1936
- Chaffey Bros records (State Records of South Australia), and papers (University of Melbourne Archives)
- Elder Smith & Co. Ltd records (Australian National University Archives).
Alfred Deakin (1856–1919), barrister, journalist and prime minister, was born on 3 August 1856 at Collingwood, Melbourne, younger child of William Deakin of Towcester, Northamptonshire, England, and his wife Sarah, née Bill, of Llanarth, Monmouthshire, Wales. William and Sarah left England in December 1849 in the Samuel Boddington, bound for Sydney. In March 1850 they disembarked at Adelaide, where William's married sister lived and where their first child, Catherine Sarah, was born in July. William briefly pursued his former occupations of clerk and shopman before, late in 1851, joining the exodus of men to the goldfields of Victoria. The family soon followed; by 1853 William had abandoned the fields and the Deakins settled in Collingwood (later a part of Fitzroy), where they lived as respectable suburbanites of modest means. William undertook a variety of jobs, storekeeping, water-carting and carrying, before becoming a partner in a coaching business and later manager of Cobb & Co. in Victoria.

Alfred Deakin began his formal education aged 4 at a boarding school situated first at Kyneton and later at South Yarra. In 1864 he became a day-boy at the nearby Melbourne Church of England Grammar School. Already Deakin read avidly and day-dreamed habitually, practices which hampered his academic studies. He did not excel at games. Later he looked back upon his schooldays as a time of wasted opportunities. Nonetheless, he won a few subject prizes and survived happily enough to the upper school where he came under the influence of a young master, J. H. Thompson, and the school's renowned headmaster, Dr John Bromby, whose style of oratory, which Deakin's own later closely resembled, fascinated him. At last he was inspired to work seriously. He matriculated in 1871, 'passing' in English and Latin, and 'passing well' in history, algebra and Euclid.

Deakin strayed into the study of law at the University of Melbourne. By evening he attended lectures, by day he earned pocket-money as a schoolteacher and private tutor. He spoke frequently at the University Debating Club, where he met Charles Pearson. He gained further skill and experience in the Eclectic Association of Victoria, where members aired current notions on a range of intellectual topics. He was prominent in the spiritualist movement, attending seances, testing phenomena, arranging lectures and conducting the Progressive Lyceum, the spiritualist Sunday school. In 1874 he edited and contributed to the Lyceum Leader and a year later his small volume Quentin Massys: A Drama in Five Acts appeared. In 1877 he published A New Pilgrim's Progress, a lengthy allegory imbued with the loftiest moral principles, and he became president of the Victorian Association of Spiritualists. He passed in 1877 the final examination for the certificate in law then required for admission to the Victorian Bar. He took chambers in Temple Court, where with little enthusiasm for law and no great expectations he wrote poetry, essays and literary criticism.

An introduction in May 1878 to David Syme of the Melbourne Age rescued the restless Deakin from his near-briefless career. Syme, who became a close friend, engaged him as a paid contributor of reviews, leaders, sub-leaders and general articles on politics, literature and miscellaneous topics. In 1880 he edited the Leader, the Age's weekly. He excelled at

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journalism, which became his major occupation for some five years and provided a useful source of income for most of his life. Syme also converted him from free trade beliefs to protectionist, a change which helped both his journalistic and political ambitions. Deakin's interest in Victorian politics had been aroused by the resignation of the liberal parliamentarian, George Higinbotham one of his boyhood heroes, the entry into parliament of Pearson, and the constitutional conflict which Deakin described in the memoir (1900) published in 1957 as *The Crisis in Victorian Politics, 1879-1881*. With Syme's aid he became the Liberal candidate for West Bourke, a largely rural electorate, which he won narrowly in February 1879.

The young Deakin who entered parliament was an impressive figure. He was six feet (about 183 cm) tall, dark haired and dark eyed, his handsome, alert face fashionably bearded. He spoke rapidly in a rich, baritone voice which, he claimed, bore no trace of 'provincial' accent. In his maiden speech he startled members by announcing his resignation because of doubts about the fairness of the administration of the original poll. He lost the recontested by-election in August and lost again in the general election of February 1880, which also saw the defeat of (Sir) Graham Berry's government. In July he headed the poll in West Bourke after James Service, 'Conservative' leader, had secured a dissolution of parliament. Despite his youth and inexperience, and in the face of opposition from his own party and the *Age*, he was prominent in negotiating a compromise between moderates on both sides and helped to secure the Council Reform Act of 1881.

On 3 April 1882 Deakin married 19-year-old Elizabeth Martha Anne ('Pattie'), daughter of wealthy Hugh Junor Browne, a prominent spiritualist. The marriage, disapproved of by the Brownes, brought no material benefit to the Deakins. They lived for a time with Deakin's parents: in 1887 Llanarth, their house in Walsh Street, South Yarra, was completed. For the rest of his active life, Deakin walked, bicycled or took the tram into the city.

From March 1883 to November 1890 Deakin held office in coalition governments. He proved an able administrator, and he practised and polished the art of compromise. He introduced the Factories and Shops Act of 1885, a pioneer social measure based largely on British legislation that had impressed the royal commission of 1884. The Act, though mutilated by the Legislative Council, provided for the regulation and inspection of factories, enforcement of sanitary regulations, limited the hours of work of females and youths, and compensated workers for injury. He chaired the 1884 royal commission on irrigation, a cause he pressed with fervour. Late in the year he led a small party to California to investigate irrigation and conservation schemes. There he met the Chaffey brothers and reported enthusiastically on their experiments. The Chaffeys came to Victoria in 1886 and demonstrated their methods at Mildura. In June Deakin introduced the first legislation in Australia to promote an irrigation system. The bill broke with traditional English riparian law by placing ownership of natural waters under the Crown and provided for the construction of state-aided irrigation works by local trusts. Promise of early success faded because of technical problems, poor choice of associates by the Chaffeys, the depression of the 1890s and one of the worst droughts in Australian history. But in the long run successful irrigation and water schemes became a feature of rural Victoria and Australia.

Late in 1885 Berry and Service retired and were succeeded, as leaders of the coalition, by Deakin and Duncan Gillies. Deakin, chief secretary, also took the portfolio of water-supply to which was added, in 1890, health and, briefly, solicitor-general. He was Victoria's principal representative at the Colonial Conference of 1887. In London he met and impressed many prominent public figures, politicians, writers and intellectuals and formed lasting friendships. At the conference he played the role of native-born Victorian patriot pressing 'colonial' interests. He argued forcibly for better terms in the naval agreement, under which the colonies paid an annual subsidy towards the cost of an auxiliary squadron for use in Australian waters. With Sir Samuel Griffith, Service and Berry he confronted Lord Salisbury, prime minister and foreign secretary, over the issue of the New Hebrides. British officials
recognized in him the authentic, but not always welcome, voice of colonial nationalism. He returned home to a triumphant welcome.

Melbourne at this time was indeed marvellous and a massive inflow of British capital fuelled the Victorian boom. The coalition won the election of March 1889, but problems over proposed railway construction and use of the militia to protect non-union labour in the maritime strike—an action for which Deakin bore ministerial responsibility—caused the government's defeat in October 1890. By then the land boom was starting to waver and soon the bubble burst. Deakin, like many contemporaries of his social class, speculated heavily in the rush to be rich: he lost his own and his father's savings. Unlike many he repaid his debts. Nonetheless, the picture of him as an innocent intellectual unwittingly caught up in the brutal world of business seems too kind. He was chairman or director of many dubious companies, including those of the notorious boomer James Munro; Deakin's friend Theodore Fink possibly sometimes persuaded him to lend his name. As joint coalition leader he shared power and responsibility in a government whose own borrowing and investment policies contributed much to the onset of the collapse and the severity of the depression. As an individual investor he sought quick and easy profit with the rest of them.

Outwardly, after the coalition's defeat and financial disaster, Deakin seemed his familiar confident self. Inwardly, as copious note-books and diaries reveal, he was disillusioned. Tortured by self-doubt, he longed to restore his self-respect. He spent the next ten years as an influential back-bencher, the member from 1889 for Essendon and Flemington. Syme urged him to replace Munro as premier, (Sir) George Turner consulted him about the composition of his government in 1894, but he refused all offers of ministerial posts. He returned to the practice of law. He was engaged in several major cases, the most celebrated being as defender without fee in 1892 of the mass murderer Frederick Deeming, and as junior to James Purves in 1893-94 in the lengthy defence of Syme in a libel case. A respectable income at the Bar supplemented his parliamentary salary and helped to support a growing family, which in 1891 had seen the addition of his third and last daughter. In 1893 he published Irrigated India and Temple and Tomb in India, following a short working visit to India and Ceylon (Sri Lanka) financed by Syme. He read everything that came his way in English literature, biography, history and philosophy, French in the original, and German and the classics in translation. He was active in the Theosophical Society until 1896, when he resigned on joining the Australian Church, led by Charles Strong. He retained a wide interest in public affairs through the Protectionist Association, the National Anti-Sweating League, the Australian Natives' Association, the Imperial Federation League (of which he became president in 1905) and the Federal Council of Australasia. But his main preoccupation in the 1890s was the Federation movement.

Deakin's interest in Federation had been stimulated by Service and heightened by experience at the Colonial Conference of 1887, where colonial division thwarted attempts to overcome Imperial apathy. He attended all the official Federal conferences and conventions. He appears to have helped resolve differences between Gillies and Sir Henry Parkes, who convened the Australasian Federation Conference of 1890. Deakin was the youngest delegate to the National Australasian Convention of 1891 in Sydney, and he polled third in the popular election of ten Victorian delegates to the Australasian Federal Convention of 1897-98: in both he served on the constitutional committee. As a progressive liberal from a large colony he adopted a democratic stance on most issues. He opposed conservative plans for the indirect election of senators and sought a relatively weak 'States House' which he foresaw would be dominated by political parties. On the most vital constitutional issue of all, control of money bills, he tried to limit the Senate's power and make the House of Representatives supreme. He advocated wide taxation powers for the Commonwealth.

Backstage Deakin was the familiar eloquent proposer of compromises, the able conciliator, the tactful smoother of ruffled feathers. Even so, his reputation as an Australian nationalist seeking to overcome colonial parochialism, as a staunch Federationist urging delegates that
whenever they detected a Federal interest they should 'provide for it in advance', is not without minor blemish. At the first convention he claimed that special safeguards might need to be made for Victoria's protected factories. He reluctantly approved Charles Kingston’s proposed new Federal arbitration power, and his remarks that it could not possibly become a 'proper subject' for Federal legislation for a very long time and might be exercised 'less satisfactorily' than by individual colonies, did little to advance the idea.

While Deakin played a significant part in making and shaping the Constitution, his contribution to the 'popular' phases of the Federation movement was probably greater. The Constitution bill of 1891 was unpopular, and politicians and public alike lacked enthusiasm. Sir John Robertson’s boast that Federation was as ‘dead as Julius Caesar’ seemed valid and few but dedicated nationalists mourned its passing. In Victoria, Deakin set out to resurrect the corpse. In March 1893, at the annual conference of the A.N.A., he and Purves urged the association to broaden its appeals and campaigns. Deakin suggested combining with other Federal sympathizers, and (Sir) Edmund Barton was asked to create a central Federation league in Sydney. Later, Deakin prompted the Prahran branch to propose a Federation league, of which he became foundation executive chairman in 1894.

These efforts, and similar ones of Barton and others in New South Wales, took Federation out of the hands of parliamentarians, and helped to ensure its success. As chairman of the Federation League of Victoria and acknowledged leader and symbol of the cause in the colony, Deakin was the central figure in the referenda campaigns of 1898-99, when the Commonwealth bill was put to the popular test. His celebrated address at the A.N.A. banquet at Bendigo in March 1898 set the tone for the campaign and converted a hostile, but still suspicious, Age. A dithering Turner declared for the bill. In 1899 Deakin campaigned in Queensland, which had stood aside until it was clear that Federal union of at least four colonies was about to occur.

London staged the final act of the Federation movement. In January 1900 Joseph Chamberlain invited the colonies to send delegates for the passing of the Constitution bill through the Imperial parliament. Allan McLean, Victorian premier, appointed Deakin, who later in the month sailed for London with his wife, sister and daughters. Barton, Kingston, Sir Philip Fysh of Tasmania and (Sir) James Dickson of Queensland made up the team selected to defend the Constitution to the last comma. In the end differences came down to clause 74, which forbade appeals to the Privy Council in matters affecting the interpretation of the Constitution. At first Chamberlain deleted the whole clause. In this he was fortified by the defection of Dickson, the wavering of some colonial premiers—to whom he had appealed—and the devious conduct of several chief justices, notably Griffith and Sir Samuel Way. Deakin, Barton and Kingston put their case to the British public, at numerous complimentary functions. In the event they compromised: appeals involving constitutional issues required leave of the High Court, otherwise the right of appeal remained unimpaired unless further limited by the parliament of the Commonwealth. The triumphant trio danced 'hand in hand' in jubilation. In July, as he sailed home to a great welcome, an 'Act to constitute the Commonwealth of Australia' received the royal assent.

Deakin made a remarkable decision on his return. In London he had met Lord Glenesk, proprietor, and Nicol Dunn, editor, of the Morning Post. In November he accepted an offer to become their 'special' or 'Sydney' correspondent, furnishing weekly letters and occasional cables on Australian politics for £500 a year. In his just-completed manuscript (first published in 1944 as The Federal Story), he recorded an 'inner history' of the Federation movement. An anonymous Deakin was now to write an inner account of Federal politics for a Tory unionist paper even as he was about to become a minister of the Crown, and remain one for most of the thirteen years of his secret journalism. The money was useful and he persuaded himself that it was his duty to supply an ignorant British public with informed news and views on Australian politics. Later, in 1904-05, he was to write unsigned articles for the London National Review. The letters and articles were to prove vivid in style, intelligent in
comment, relatively free from bias and mildly critical of himself on occasions. By any standards it was extraordinary.

The turn of the century was a momentous time in the history of Australia and the Empire. Queen Victoria died and the South African War was being fought. Australians looked to the coming of the Commonwealth, and aspiring Federal politicians looked forward to the general election in March 1901. Deakin formed the National Liberal Organization, which united wings of the Liberal Party in Victoria, and as founder-president he espoused progressive liberal policies and selected candidates. He exchanged letters with Barton and Kingston, discussing platforms and tactics. The Earl of Hopetoun, governor-general, blundered in asking Sir William Lyne, premier of New South Wales but an anti-Federationist in the referenda, to form a caretaker cabinet. Deakin’s refusal to serve under Lyne proved decisive, and Hopetoun called upon Barton.

Deakin helped to select the ‘shadow cabinet’ and advised on the number and nature of departments and the distribution of portfolios. He himself was sworn in as attorney-general: the youngest member of cabinet. With fellow members he devised the Protectionist policy speech, delivered by Barton at Maitland on 17 January 1901.

The first Federal election resulted in a narrow majority for the Protectionists over Free Traders. Labor came in third and declared its tactics of support-in-return-for-concessions, which in practice meant giving general support to the Barton government. Free Traders outnumbered Protectionists in the Senate, and Labor surprised even itself by winning the balance of nearly a quarter of the seats. Deakin won handsomely in Ballarat, which he held until he retired in 1913.

Federal parliament opened in May and the Barton ministry in general, and Deakin in particular, faced daunting tasks. As leader of the House Deakin was frequently in charge of parliamentary business, and as attorney-general he headed a department which drafted bills for foundation machinery and policies, and provided advice and opinions on points of law for other ministers. While (Sir) Robert Garran, his energetic departmental secretary, was indispensable, Deakin was an active attorney-general, especially in preparing opinions and drafting bills for the public service, arbitration and the High Court. While (Sir) Robert Garran, his energetic departmental secretary, was indispensable, Deakin was an active attorney-general, especially in preparing opinions and drafting bills for the public service, arbitration and the High Court. On the immigration restriction bill he supported Barton against Labor, who wanted more direct methods of exclusion than the dictation test. His famous second reading speech on the bill lacked the vicious racism of many others, but his claim that Japanese must be kept out because of their good qualities, not their bad, neither pleased nor placated them. He took no part in interminable debates on the tariff, but his diplomacy in September 1902 averted possible deadlock between the Senate and House, and secured the measure which set the Commonwealth on the path to financial independence. By this time he was acting prime minister, a post he filled for six months while Barton attended the coronation and the Colonial Conference.

White Australia legislation was never in real danger and a uniform tariff had to be passed, but the Judiciary Act of 1903 needed all Deakin’s negotiating skills. The Constitution provided for a High Court, but it set down no mandatory timetable for its creation and the bill met unexpected hostility. Inside Federal parliament (Sir) George Reid, Opposition leader, played politics, blaming the government both for undue haste and improper delay: many Protectionists were uneasy. Outside, State politicians, newspapers and the public condemned the proposal on State-rights grounds and with telling charges of Federal extravagance. Deakin’s masterful second reading speech in March 1902 was widely regarded as a supreme example of parliamentary advocacy. In the end, passage of the bill probably owed less to the speech than to personal loyalty to ‘affable Alfred’ and hints of his possible resignation. While the bill to found the High Court was Deakin’s most ‘cherished’ measure, according to the anonymous correspondent, the conciliation and arbitration bill was Kingston’s. Kingston, pioneer of compulsory arbitration, became its first Federal
casualty when, in July 1903, he resigned over cabinet's refusal to extend the bill's scope to all seamen engaged in coastal trade. Deakin took charge of the measure. Most members agreed with the principle of arbitration, but disagreement arose on detail. Labor's Andrew Fisher, assisted by the Opposition, amended the bill to include State railway-workers. Deakin abandoned the bill for the time being.

When Barton retired to the High Court in September Deakin succeeded him as prime minister and minister of external affairs. He made several ministerial changes, bringing in Thomas Playford and (Sir) Austin Chapman. Deakin retained office in the December election, which produced three almost equal parties in the House, with informal Labor support. His government was short lived. He reintroduced the arbitration bill in March 1904, but Labor amended the bill to apply it to State public servants, a move he believed unconstitutional. He treated the defeat as a matter of no confidence and advised Lord Northcote, governor-general, to send for John Watson, Labor leader. Watson had less chance of keeping office than Deakin, who promised him 'fair play' provided he acquired a 'constitutional' majority. Labor, however, took office in April without making overtures to radical Protectionists such as Lyne and (Sir) Isaac Isaacs.

In May Deakin urged his party to accept Reid's terms for a working alliance though he himself would not serve in any coalition with Reid, whom he disliked and mistrusted. A divided Protectionist Party refused the offer and Watson's belated overtures. Labor pressed on with the arbitration bill until halted by (Sir) James McCay who, with Deakin's concurrence, later moved against its recommittal. Watson resigned in August after two days of bitter debate. Deakin's role in the affair marred his reputation and he lost much goodwill in parliament. Nevertheless, his own unexpected resignation, which forced Labor to accept responsibility for its actions, was a shrewd tactic. Labor's short, barren period of government curbed its irresponsible conduct and made it wary of taking office.

Deakin declined to join the Reid-McLean coalition of conservative Free Traders and Protectionists, but an opportunity for a return to office arose during the long parliamentary recess. The campaigns in New South Wales of anti-socialist leagues, which seemed much like old free trade bodies under new guise, and ideas of forming similar ones in Victoria, made Protectionists suspicious of Reid's motives. Multifarious pressure mounted to depose Reid before he called a premature election designed, the argument ran, to advantage Free Traders by prolonging the fiscal truce. Deakin warned that the anticipated reports of the tariff commission, appointed in December 1904, would inevitably disturb the truce. His speech at Ballarat in June just before parliament reassembled was regarded as a 'Notice to Quit'. Northcote's speech mentioned only one bill, and Deakin carried an amendment to the address-in-reply. Northcote refused a dissolution and called upon Deakin, who had Watson's assurance of 'cordial and generous support' for the remainder of the parliament. Reid's charges of treachery were to be expected, but Deakin's seemingly shabby treatment of the four Protectionists in the coalition, especially of Turner, lost him further goodwill and respect.

The second Deakin ministry, July 1905–November 1908, was remarkably productive. Many national policies and much practical legislation were placed on the statute books or would soon become law after the government's fall. Measures fixed the capital site, authorized the survey of a trans-continental railway-route, and provided for Australian statistics, meteorology, wireless telegraphy and copyright. The Contract Immigrants Act of 1905 established stringent procedures and safeguards for admitting contract labour, and the Commonwealth assumed full control of the former British New Guinea. The first protective Federal tariff was passed. 'New Protection' tried in devious ways to link the Commonwealth's exclusive control of the tariff with the State's power over wages and prices. The Commonwealth Literary Fund came into being and Australia involved itself in Antarctica. The Surplus Revenue Act of 1908 set the Commonwealth on the path to financial independence and dominance. Naval and military defence innovations were under way. Old-age pensions were introduced.
Most of these measures were the responsibility of Deakin's ministerial colleagues such as (Sir) William Lyne, Isaacs, Sir John Forrest, (Sir) Littleton Groom and Sir Thomas Ewing, and they were not his in any personal sense. But Deakin selected his colleagues and he led and kept in office a cabinet wherein he was manifestly not merely first among equals. Many were consensus policies favoured by members of all parties. Old-age pensions, for example, was a common cause. New Protection was neither a subtle scheme devised by Deakin to convert Labor to protection nor a Labor concession forced from Deakin, but an evolutionary policy sought by Free Traders, Protectionists and Laborites alike: none were more determined than Free Traders that if there was to be a system of protection it must take the new form. Conservative opponents of Deakin and some Labor politicians claimed that he was under Labor's thumb, the one to deny him credit, the other to claim it for themselves. Labor, however, was in a weak tactical position. Watson could not bargain or negotiate with Reid, now anti-socialist leader, and play him off against Deakin, and Labor's own brief spell of office in 1904 showed it was unlikely to govern effectively on its own.

Labor support for Deakin was vital, but it is doubtful if he conceded much in return. Though the platforms of the two parties had much in common, some policies were peculiarly Labor. None of them were implemented by Deakin, or Barton. The Immigration Restriction Act retained its indirect method of exclusion, and Deakin refused preference to unionists in his arbitration bill; there was no referendum on the tariff as favoured by Labor, no land tax or nationalization of monopolies. If anyone held the balance in parliament it was Deakin, between Labor and 'socialism' on the left and free trade or anti-socialism on the right. His negotiating skills, personal qualities and good relations with Watson enabled the Protectionist Party to retain office even after it emerged from the election of 1906 as the smallest of the three elevens. He provided stability of government enabling the passing of constructive legislation, and at the time only he seemed able to do that.

Deakin, by inclination and by virtue of his position as prime minister and minister of external affairs, was closely concerned with the related fields of 'foreign' policy, Imperial relations and defence. He took direct interest in Papua, where a faction-ridden administration limped on. In August 1906 he appointed a royal commission, which recommended the removal of the administrator, Captain F. R. Barton, and the sacking of some principal officers. In November 1908 he named (Sir) Hubert Murray, then chief judicial officer and acting administrator, as lieutenant-governor, an appointment Labor confirmed, and the thirty-year reign of the benevolent paternalist began. Deakin resumed old battles with the Imperial government over the future of the New Hebrides, urging that France be induced to accept British annexation. Apparent British ineptitude and the secretive nature of Anglo-French negotiations confirmed his low opinion of the Colonial Office. In the end, fearful of German activity in the islands, he perforce pressed for the immediate proclamation of the joint protectorate.

In March 1907 Deakin left for the Imperial Conference in London with three main aims: to reform Imperial organization, to advance the cause of Imperial preference and to revise the naval agreement. He was the most active and outspoken colonial premier on the theme that the Empire must draw closer together lest it fall apart. His proposal for a permanent Imperial secretariat to give self-governing dominions an effective voice in foreign policy, defence and economic co-operation, received a cold reception. The Colonial Office saw it as an attempt to undermine its authority, doubts about ministerial control arose and the idea lacked definition and practicality. Lord Elgin's creation of a dominions division of the Colonial Office was not much more than a change of name.

Deakin's pleas for Imperial preference as a means of strengthening the Empire politically and economically met with little support from colonial premiers and outright opposition from the British government. Sir Wilfred Laurier, Canada, was prepared to accept it if it was offered, Louis Botha, South Africa, spoke negatively. Neither, for domestic reasons, wanted further Imperial entanglements. Deakin's public campaign on the question touched sensitive issues in British politics. To conservative newspapers and Tories he was a hero, to their
liberal counterparts a villain. Asquith and Lloyd George remained implacably opposed. The Admiralty was more sympathetic to the notion of an Australian naval force, but differences on the naval agreement were not resolved.

Deakin had disliked the naval agreement since its inception in 1902, and his sustained efforts to implement Australian naval aspirations began several years before the Imperial Conference. He had also long believed in the virtues of universal military service; by December 1907, when he introduced the first bill to embrace such a scheme, Labor was about to adopt the idea and parliamentarians and the public at large had already been converted. Naval affairs, a more complex issue, inevitably involved the British government, the Admiralty, naval tactics and grand strategy, and from mid-1905 to early 1910 the subject absorbed him. He attacked the agreement and the Admiralty, and the rebuffs and insensitive denials of Australian naval ambitions merely spurred him on. Late in 1906 he announced an intended purchase of destroyers, but at the Imperial Conference the first lord, Tweedmouth, recommended submarines.

In 1908 Deakin placed further pressure on the Colonial Office and the Admiralty with his timely invitation to the American 'Great White Fleet' to visit Australian ports. By the time he resigned in November no vessels had been ordered but the Surplus Revenue Act of 1908 provided £250,000 for naval expenditure, a sum Labor used later. Eventually, after the naval scare of 1909, when Deakin played the opportunist by joining the cry for the gift of a dreadnought to Britain, the Admiralty suggested a powerful Australian fleet unit. For Deakin, the type of vessels and strategic questions such as those arising from the Russo-Japanese War of 1904-05 were secondary issues. The Commonwealth's defence power provided him with a means to two related ends, one external the other internal. An Australia prepared to share Britain's defence burden by being more self-reliant, particularly in naval defence, would earn a voice in Imperial policy. Service for the Commonwealth, especially military training for youths, would instil the 'maximum of good citizenship' and foster a 'sense of national unity' and a 'national spirit'. For Deakin acquisition of a navy and introduction of compulsory military service were essential steps in the evolution from colony to nation within the British Empire.

On returning from the Imperial Conference Deakin faced acute health and political problems. He travelled badly, slept fitfully and had frequent attacks of giddiness and exhaustion. His memory and speech faltered and he suffered a breakdown. Forrest, an old colleague, resigned in July 1907 over the Liberal-Labor relationship, which became more difficult after Watson resigned the leadership in October. Labor withdrew its support in November 1908 and the Earl of Dudley, governor-general, sent for Fisher. Deakin came under pressure to form a united front against Labor, whose militant 'machine' and electoral activities he feared increasingly. As Labor ranks had swelled at successive elections so Liberal-Protectionist numbers dwindled until the party was the smallest in the House, and its future looked bleak. Labor radicalism had outflanked and outpaced Deakinite liberalism. Neither (Sir) Joseph Cook, who had succeeded Reid, nor Forrest would serve under one another. Deakin, waiting in the wings, convinced himself that he could liberalize the conservatives and preserve radical liberalism. In May 1909 he agreed to the fusion of anti-socialists, Liberal-Protectionists and Forrest's 'corner' group. A bewildered Fisher was curtly dismissed. Close friends still believed in Deakin's integrity, but to many others his actions seemed nothing but a naked grab for power, a base move to regain office at any price by a man who thought he was indispensable. The political confusion produced some of the most dramatic scenes in Federal parliamentary history. Lyne — never a friend of Deakin and now a foe — denounced his former leader as a 'Judas', a charge which the vindictive Billy Hughes believed slandered the disciple.

Deakin was sworn in for the third and last time as prime minister on 2 June 1909. The Fusion government, given its short span of life and the few points of agreement between the uniting parties, was remarkably active. Deakin ordered the Australia, the nation's own
dreadnought battle cruiser and pride of the fleet unit. He invited the legendary Lord Kitchener to visit Australia to advise on military defence: later Labor largely implemented suggested changes in organization and creation of a military staff college. Bills were introduced to transfer the Northern Territory to the Commonwealth and to set up the Inter-State Commission, and one was passed to establish the high commission in London. Negotiations between Deakin, Forrest and State premiers produced the financial agreement of 1909, which gave the States per capita grants of 25s. annually: Deakin's attempted constitutional amendment failed in 1910, but in practice the agreement determined Commonwealth-State financial arrangements until 1927.

The Fusion government entered the election of April 1910 confident of victory, but in the event it was routed. In a heavy poll Labor gained absolute majorities in both the House and Senate. Deakin, who campaigned on a mainly negative anti-Labor platform, barely escaped defeat in Ballarat. Only a handful of his personal followers survived. He was ill-suited to the negative role of Opposition leader, especially as Labor was advancing many of his own, unfinished measures. His extensive campaign in 1911 against Labor proposals to amend the Constitution carried more conviction, but he retired in January 1913, a spent force. His last act as a politician was to support Cook against Forrest in the leadership contest.

In May 1913 Deakin emerged from retirement at Ballara, his hideaway at Point Lonsdale, to campaign against Labor's re-submitted referenda proposals. Later he declined Cook's offer of the first chairmanship of the Inter-State Commission. In August 1914 he became chairman of the royal commission to investigate wartime food supplies and prices and his colleagues carried him. As president of an Australian commission for the international exhibition at San Francisco he toured California in April 1915 with Pattie, but resigned after a renewed dispute with Hugh Mahon, Labor minister of external affairs. His health deteriorated and he visited specialists in London and New York in 1916-17. In retirement and in decline his increasingly introspective notebooks reflected his despairing sense of the emptiness of existence, the loneliness of a man spiritually and intellectually isolated for most of his life. Like many affable people he had few intimate friends, and apparently none knew the inner Deakin. After 1916 he lived as a recluse, his memory decayed, the famed silver tongue stilled. He died of meningo-encephalitis on 7 October 1919, survived by his wife and daughters. As befitted this independent Australian Briton he was given a state funeral, his coffin draped with the Union Jack. He was buried in St Kilda cemetery.

His wife Pattie, who died on 30 December 1934, was well known for her work for children's welfare, particularly the kindergarten, crèche and playgrounds movements, and for servicemen during World War I. Ivy, the eldest daughter, married Herbert Brookes, Stella married (Sir) David Rivett and Vera (Sir) Thomas Walter White. Deakin's sister Kate (or Katie) died unmarried in 1937; a talented pianist, she shared and encouraged her brother's interest in literature and remained his lifelong mentor and confidante.

Alfred Deakin, dominant figure of the first decade of Federation, was a complex character, the outer man the generally charming, confident, intelligent politician, the inner man the often morose, insecure, frustrated intellectual. The young man attracted to spiritualism and theosophy wanted to be a philosopher, poet, dramatist: instead he merely became a statesman. He was a gifted politician in an era that lent itself to his natural talents of compromise and persuasion. He had integrity, though he could play the opportunist when the need arose and the Fusion sullied his reputation for some. He was unusually modest and circumspect, declining all British offers of titles and distinctions in the belief that he had not earned them and that his independence might be compromised. In the late nineteenth century and early twentieth century he epitomized Victorian liberalism. His services to the Federation movement and the new nation were immense. The Commonwealth briefly gained recognition as a national laboratory for social experimentation and positive liberalism, and Deakin more than anyone brought that about. He was the embodiment of dual nationalism: pride in Australia went hand in hand with pride in Empire, membership of the A.N.A. with
membership of the Imperial Federation League. He had a mystical faith in the virtues of the
British race and his vision was of a great white Australia living at one with and within a
greater white Empire. The tragedy was that he became an anachronism. Liberalism
blossomed and withered in his own time, and the middle ground disappeared beneath his
feet. The sun was already setting on the Empire he envisaged.

Select Bibliography

- *Official Record of the Proceedings and Debates of the National Australasian Convention
  Held in the Parliament House, Sydney, New South Wales, in the Months of March and
  April, 1891* (Syd, 1891)
  May 5, 1897* (Adel, 1897)
- *Official Record of the Debates of the Australasian Federal Convention, Third Session,
  Melbourne, 20th January to 17th March, 1898* (Melb, 1898)
- H. G. Turner, *The First Decade of the Australian Commonwealth* (Melb, 1911)
- W. Murdoch, *Alfred Deakin* (Lond, 1923)
- J. A. La Nauze, *Alfred Deakin* (Melb, 1965)
- P. Loveday, et al (eds), *The Emergence of the Australian Party System* (Syd, 1977)
- *Historical Studies*, no 55, Oct 1970, p 376
  Australian National University, 1964)
- Edmund Barton papers (National Library of Australia)
- Alfred Deakin papers (National Library of Australia).
Mildura irrigation area. The two main pumping stations are in the centre of the image with the centre of Mildura city at top left. *Image: Google Earth.*
Renmark irrigation area on both sides of the Murray River. The hard line of different development is the South Australian (left of line) and Victorian (right of line) state border. The darker colour on the Victorian side is natural Mallee scrub whilst the lighter colour on the SA side of the border is farmland. *Image: Google Earth.*
The catchment of the Murray-Darling Basin extends into the states of South Australia, Queensland, New South Wales, Victoria and the Australian Capital Territory.

The markers on the map show Mildura (yellow) and Renmark (blue), 130 km further west.

The Murray-Darling Basin (highlighted in pink above) is 1,064,469 km² (409,835 square miles) in area; 3375 km (2097 miles) in length measured from north east to south west and the principal river, the Murray River is 2508 km (1558 miles) long.

Boundary of Older Irrigation Areas. *Image: Mildura Rural City Council.*
Appendix 5: Time Line for Key Dates for the Chaffey Brothers
Irrigation Projects in Australia

1848 George Chaffey born Ontario, Canada.
1856 William Benjamin Chaffey born Ontario, Canada.
1877-1884 Drought in Victoria.
1885 Alfred Deakin visits the United States to look at irrigation projects and meets the Chaffey Brothers.
1887 The Indenture signed for the Mildura irrigation project.
1887 Agreement signed with south Australian Government.
1890 Population of Mildura passes 3300, population of Renmark passes 1100.
Early 1890s Mildura project besieged by many problems.
1893 Stuart Murray, Chief Engineer for Water Supply instructed to report on complaints against Chaffey Brothers Ltd.
1894 Chaffey Brothers Ltd goes into liquidation.
1896 Royal Commission to inquire into the failures at Mildura.
1897 George Chaffey leaves Mildura for the United States.
1897 William Benjamin Chaffey decides to stay in Mildura and works for the community for the rest of his life, becoming a pillar of the community.
1926 William Benjamin Chaffey dies at Mildura aged 70.
1932 George Chaffey dies in the United States aged 84.
Appendix 6: Drawings of proposed Interpretation Panel

DIMENSIONS IN mm
SCALE: 1:10

THIS AREA TO
MOUNT MARKER
TO BE CUSTOM
DRILLED

NORMAL GROUND LINE

INTERPRETATION PANEL FRAME
SHEET 1 OF 2

DRAWN: OWEN PEAKE
DATE: 14. APRIL 2011
AMENDED TO REMOVE OUTLINE
OF Marker 16/1/2016
Appendix 7: Letter of approval from Psyche Bend Historical Reserve Committee

To be added later
Change Control

CHANGE CONTROL
VERSION 1  8 FEBRUARY 2017   2720 WORDS
VERSION 2  10 FEBRUARY 2017   4365 WORDS
VERSION 3  13 FEBRUARY 2017   13275 WORDS
VERSION 4  20 FEBRUARY 2017   18991 WORDS    MINOR EDITING; ADDED APPENDIX 2
VERSION 5  4 AUGUST 2017      19003 WORDS    MINOR EDITS BC