Briefing Note

Irrigation in Southern NSW
The *Irrigation Corporations Bill 1994*

by

John Wilkinson

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INTRODUCTION

The purpose of this paper is to provide a brief survey of government irrigation in southern NSW with particular reference to proposals for administrative reorganisation envisaged by the state government in its *Irrigation Corporations Bill 1994.*

DEVELOPMENT OF IRRIGATION IN SOUTHERN NSW

Before the 1900s there had been little development of irrigation in NSW but the severe drought of 1895-1902 prompted public officials to begin the development of irrigation schemes in the south of the state. L.A. Wade, an engineer with the NSW Public Works Department was appointed to study the problem in 1905, and in 1906 the Barren Jack (Burrinjuck) Dam and Murrumbidgee Canals Construction Act was passed. Land resumption began in 1910 and in 1912 the Irrigation Act was passed under which Wade was appointed Commissioner for Water Conservation and Irrigation. Irrigation was expanded throughout the state during the following decade in connection with the soldier settlement (and other "closer settlement") schemes with the area under irrigation doubling to over 200,000 hectares by 1930. After the end of the Second World War irrigation in southern NSW was further expanded by the water made available through projects such as the Snowy Mountains Scheme. By the 1980s there were 2,675 kilometres of supply channels in the Murrumbidgee region and 2,822 kilometres of channels in the Murray region.[1]

LAW AND ADMINISTRATION

The two principal Acts under which government irrigation in NSW is administered are the *Irrigation Act 1912* and the *Water Act 1912.*[2]

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1 G C.H. Munro, *Australian Water Resources and their Development* (Angus and Robertson, Sydney, 1974), pp.135-136, 144. See also Roy Powell, "Farm Investment" in D.B. Williams, *Agriculture in the Australian Economy*, 2nd.ed. (Sydney University Press, Sydney, 1982), p.280; K.O. Campbell, "Land Policy" in ibid., p.236. For the length of channels built in the Murrumbidgee and Murray regions see Gutteridge Haskins and Davey Pty.Ltd., ACIL Australia Pty.Ltd. and Coopers and Lybrand W D Scott, *Water Distribution Operations in Irrigation Areas and Districts in NSW*, Report Prepared for the NSW Department of Water Resources (Sydney, 1989), pp.24,89.

2 Second Reading Speech, *Irrigation Corporations Bill 1994*, 21 April 1994, p.1642.

Administration of irrigation in NSW, from 1912 onwards, has been carried out first by the Water Conservation and Irrigation Commission and subsequently by the NSW Department of Water Resources. River valley regions where government irrigation has been undertaken in NSW are divided into Irrigation Areas and Irrigation Districts. According to a consultants' study of water distribution in NSW, "Irrigation Areas were established on land acquired from the Crown for lease to irrigators with construction of water supply and drainage infrastructure proceeding concurrently. Subdivision of the land was on the basis of its suitability for the particular type of farming proposed. Irrigation districts were freehold tenured land where no drainage works were provided other than an escape channel system. There is no direct State control over the subdivision or transfer of land in Districts." Irrigation Areas accordingly cover those regions developed through the soldier settlement, and other closer settlement schemes, implemented in the 1920s.[3]

There are 7 principal Irrigation Areas and 9 principal Irrigation Districts in southern NSW. All of these 7 major Areas, except one, are administered by the Department of Water Resources under the *Irrigation Act 1912*, and all of the 9 major Districts are administered by the department under the *Water Act 1912*.[4]

VALUE OF IRRIGATED AGRICULTURAL PRODUCTION

The main regions of irrigation are in the south of NSW in the Murrumbidgee and Murray river valleys. Together, in the 1980s, they accounted for 70% of the total area irrigated in NSW and in the early 1980s the total value of irrigated production in those two areas amounted to about $315 million (or just less than half of the total value of $645 million for all irrigated production in NSW). Professor Roy Powell and his colleagues wrote in their 1985 study of the economic impact of irrigated agriculture in NSW that in the case of the Murray and Murrumbidgee regions "the total effect of the irrigation industry on

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3 *Water Distribution Operations in Irrigation Areas and Districts of NSW*, pp.4,21.

4 Hansard, 21 April 1994, p.1642. Of the 7 major Irrigation Areas the Curlwaa Irrigation Area is administered under the *Wentworth Irrigation Act 1890*. There is one small Irrigation Area (the Hay Irrigation Area) which is administered under the *Hay Irrigation Act 1902* and there are two equally small Irrigation Districts (the Gumly and Lowbidgee Irrigation Districts) which are administered under the *Water Act 1912*.

the region economy represented about 30 per cent of that economy's output, income and employment."[5]

OPERATION AND USE OF THE IRRIGATION SYSTEM

Water for irrigation purposes is provided by the Department of Water Resources. Delivery is usually effected in the southern regions of NSW by the placing of weirs across a river and a channel, lined with earth or concrete, being run from the weir across the land. Each farmer wishing to obtain water for irrigation has to obtain a licence from Water Resources. The method of allocation, which has not changed radically since the mid-1980s, when the Water Conservation and Irrigation Commission was in existence, has been described by John Pigram as follows: "At the start of each season, the Commission determines the total volume of water likely to be available for irrigation in each valley and the percentage of allocations which irrigators can expect in that season. In 'normal' years irrigators could expect to be allocated 100 per cent of their entitlement. In more favourable years supplies might even be sufficient for 120 per cent of allocations. On the other hand, if resources were predicted to be 20 per cent below normal, perhaps only 80 per cent of allocations would be available. The announcements of water availability are made at the beginning of each irrigation season and are usually conservative with an indication given of the chances of a higher percentage of allocations becoming available."[6]

ECONOMIC EVALUATION OF IRRIGATED AGRICULTURE

The worth of irrigated agriculture has been one of the most debated issues amongst Australian economists. By the 1960s and 1970s economists were beginning to cast a reflective eye on the actual results of the various irrigation schemes in Australia. Pigram, in describing the polarisation of views on this topic, has written that "On the one hand are those who point to the impressive output from irrigated lands and the transformation in resource use and settlement which irrigation makes

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5 Roy Powell, Rodney Jensen and Anne Gibson, *The Economic Impact of Irrigated Agriculture in NSW*, Report to the NSW Irrigators' Council Ltd. (Department of Agricultural Economics and Business Management, University of New England, Armidale, 1985), pp.21, 96.

6 J.J. Pigram, *Issues in the Management of Australia's Water Resources* (Longman Cheshire, Melbourne, 1986), p.192.

possible. Munro (1974) is convinced that, given the necessary high standard of hydro-economic planning and operation, future investment in at least selected irrigation projects will be found to be a sound national investment. Munro concedes that many mistakes have been made in the past, but believes that Australia cannot afford to forgo the contribution to national economic productivity possible from government-supported irrigation schemes. At the other extreme, Davidson (1983) considers it doubtful whether any irrigation project in Australia can be justified on economic grounds and sees no reason for conserving water for this purpose unless it be the construction of additional small works aimed at utilising water stored in existing reservoirs more efficiently."[7]

On an overall level, economists' objections have centred on the provisions of large sums of public money for irrigation projects some of which have produced little in the way of return. Keith Campbell, writing in 1982, commented that, "In some cases, political expediency overrode economic rationality. This applied, in particular, to the Ord River irrigation area in the north of Western Australia, which proceeded despite adverse cost-benefit analyses by both the Bureau of Agricultural Economics and non-government investigators. The Western Australian government prevailed on the Commonwealth government to provide $13.5 million to supplement state funds to enable it to go ahead with this project, which involved the construction of a diversion weir in the first instance and later the construction of a dam, primarily to provide water for the production of cotton under irrigation. As was forecast, the project has proved to be an economic disaster. Fifteen years later and after the expenditure of nearly $100 million, the Commonwealth and Western Australian governments established a joint committee to review the situation and to make recommendations for its future. Seemingly contrary to the evidence, the Committee recommended against the abandonment of the project."[8]

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7 Pigram, op.cit., p.206. The works referred to in brackets are Colin Munro's *Australian Water Resources and their Development* (Angus and Robertson, Sydney, 1974) and B. Davidson, "Water Resources in Agriculture in Australia" in P. Crabb, D. Rich and S. Riley (eds), *Proceedings of Water Resources Conference*, Geographical Society of New South Wales, Sydney, July 21-8, 1983.

8 Campbell, ibid. Campbell had already contributed, in 1964, to the re-evaluation of irrigation schemes through his "An Assessment of the Case for Irrigation Development" in Australian Academy of Science, *Water Resources Use and Management* (Melbourne University Press, Melbourne, 1964). The Commonwealth Government review of the Ord River Scheme, to which he refers, was entitled *Ord River Irrigation Area Review 1978* (Australian Government Printing Service, Canberra, 1979).

On a particular level, economists have claimed that the charges levied on farmers by the various state water authorities do not cover all the costs of provision and are therefore an indirect subsidy. A report by the Organisation for Economic Co-operation and Development on water resource management states that in the Australian case the amounts charged to farmers "are set to recover the overseeing authority's administration costs (issuing licences, monitoring licence compliance, patrolling irrigation schemes, recording meter readings, etc.)." Only sometimes do these charges cover some or all of the current operating and maintenance costs of the water management and delivery system. The report comments that "A rule of thumb in Australia has been that revenue from charges has covered one-third of the full resource cost."[9]

Maintenance costs alone have emerged as a key issue with regard to the costs of irrigation schemes in the light of the gradual deterioration of the delivery infrastructure and the consequent need for replacement. The consultants' report on water distribution operations, cited above, stated that "The majority of infrastructure in the Murrumbidgee Region is 70-80 years old and the requirement for maintenance is increasing. The exception is Coleambally where the infrastructure constructed in the 1960s is still in good condition. In total there are 2,675 km of supply channels, 2,160 km of drainage channels and 22,916 structures of various types." With regard to the Murray region the consultants reported that it had "similar maintenance problems to the Murrumbidgee".[10]

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9 Organisation for Economic Co-operation and Development, *Water Resource Management: Integrated Policies* (OECD, Paris, 1989), p.85. Farmers on irrigated land, themselves, are prepared to acknowledge the validity of the economists' point of view, even if they do not accept it. In a paper to the *Water Options 2000 Conference*, held in Moree this year, R.W. Thompson, of the "Hampton" property in NSW, wrote that "economists have argued that dams and irrigation systems should never have been built because they would never be able to pay their way. This is probably right if the economists' narrow definition of the returns from investment in irrigation infrastructure is adopted. They would define the returns as the income generated from water sales and claim the income should cover the capital costs of dams and distribution systems as well as operation, maintenance and depreciation costs and, on top of that, provide a return on the investment." See R.W. Thompson, "The Economics of Water: Implications for NSW and Southern Queensland", Paper delivered at the *Water Options 2000* Conference, (Moree, 1994).

10 *Water Distribution Operations in Irrigation Area and Districts of NSW*, pp.66-67,100.

CHANGES TO THE ADMINISTRATION OF IRRIGATION IN NSW

The introduction of significant changes to the provision of irrigated water supplies were initiated in 1986. The *Water Administration Act 1986* was passed by Parliament by which a Water Administration Ministerial Corporation was established as a statutory body representing the Crown. The Ministerial Corporation is a corporation sole with perpetual succession. The Act also replaced the Water Conservation and Irrigation Commission with the Department of Water Resources and specified that the department and the Ministerial Corporation, to the maximum extent possible, act in a complementary manner so as to achieve a unified administration of the Acts confirming or imposing a function on the Ministerial Corporation (that is, the Department of Water Resources acts on behalf of and in association with the Water Administration Ministerial Corporation). The objects of the Ministerial Corporation, as set out in Section 4 of the Act, are as follows:

- to ensure that the water and related resources of the State are allocated and used in ways which are consistent with environmental requirements and provide the maximum long-term benefit for the State and for Australia.

- to provide water and related resources to meet the needs of water users in a commercial manner consistent with the overall water management policies of the Government.

The Ministerial Corporation is also vested, in Section 12(2) of the Act, with the right to the use, flow and control of water.

One particular section of the Act, Section 17, provided that the Minister may, by an order published in the Gazette in each case, establish committees for the purpose of:

- assisting or advising the Ministerial Corporation in the exercise of its functions.

- exercising delegated functions of the Ministerial Corporation.[11]

The reference in the Act to the "commercial manner" in which water was to be provided in the future, and the establishment of the "committees" signalled the beginning of a change in government attitudes towards the arrangements for the delivery of water to irrigated agricultural regions.

In 1988 the NSW government made a commitment to hand over, to Management Boards, the reticulation systems within the Areas and Districts and in 1989 the government commissioned a group of consultants (Gutteridge Haskins and Davey Pty.Ltd., ACIL Australia Pty.Ltd. and Coopers and Lybrand W D Scott) to examine water distribution operations in the regions of irrigation. One of the key recommendations of the report was the establishment of Irrigation Management Boards and these were set up later in 1989 (following the submission of the report), under section 17 of the *Water Administration Act 1986,* to advise the Minister and the Department on the operation of each irrigation scheme. Subsequently, in 1991, the government secured the passage of the *Statute Law (Miscellaneous Provisions) Act 1991* by which the *Water Act 1912* was amended to include Section 133E through which the "Governor may, by proclamation, revoke a proclamation constituting a provisional district", thus allowing for the possibility that the Districts and Areas could be eventually be abolished.[12]

The direction of the government's policy since 1989 has been to make the provision of water operate on a more commercial basis. Between 1989 and 1990 the government divided the Department of Water Resources into a "State" arm, responsible for water resource management functions, and an "irrigation areas and districts commercial" arm responsible for the efficient operation and management of water service delivery within the irrigation schemes. Pricing reform has reduced government subsidies to irrigation schemes by requiring irrigators to pay operating and maintenance costs; by

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11 *Water Administration Act 1986.*

12 *Water Act 1912*, Section 133E(1). See also *Water Distribution Operations in Irrigation Areas and Districts of NSW*, p.171; *Government Irrigation Areas and Districts: Privatisation?* (Department of Water Resources, Sydney, 1991), pp.2,17.

requiring irrigators to pay 70% of the costs of running the rivers; and by making irrigators provide a contribution, in the form of a levy, towards asset refurbishment.[13]

INTRODUCTION OF LEGISLATION

On 21 April the Hon. George Souris MP, Minister for Land and Water Conservation, introduced the Irrigation Corporations Bill into Parliament. Passage of this Bill would see the government move towards finalising its plans for the changed arrangements in the provision of irrigated water supplies in NSW. While the Bill envisages a further introduction of a commercial element into the provision of such services, the changes in the Bill are not wholly commercially driven. Irrigation schemes will not be for sale to private companies or to individual business people. Overall it is the Government's intention that the changes the Bill introduces will result in the disentanglement of the sometimes conflicting roles of the Department of Water Resources: being at present both a commercial service provider and (its proper role) a water resource manager in conjunction with other Government agencies. Under the Bill the Department of Water Resources, by advising the Governor on the granting of irrigation corporation licences and by measuring and monitoring water use, would be able to focus on the role of water resource manager. The irrigation corporations would operate at one remove from the Government and would be able to pursue commercial objectives for the benefit of their customers.[14] The second objective would be achieved through a two stage transformation of the present Irrigation Areas and Districts as follows:

(1) Class 1 Irrigation Corporations

The aim of the Bill is to establish State Owned Corporations (SOCs) within the meaning of the *State Owned Corporations Act 1989* to manage and operate (by way of delegation from the Department of Water Resources and from limited powers set out in the Bill) existing rural irrigation scheme areas currently owned and operated by the

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13 See *Rural Water Pricing Policy and 1989/90 Water Charges*, as amended April 1990 (Department of Water Resources, Sydney, 1990).

14 Hansard, 21 April 1994, p.1643.

Department of Water Resources. The Bill states that "A company mentioned in Schedule 1 to this Act becomes a class 1 irrigation corporation when its name is inserted in the SOC Act by section 6 of this Act."[15]

These various SOCs will function through the Water Administration Ministerial Council delegating some of the powers conferred on the Ministerial Council through the *Irrigation Act 1912* (in the case of the Irrigation Areas) and through the *Water Act 1912* (in the case of the Irrigation Districts).[16]

Class 1 Irrigation Corporations will be the owners of all works which will either be installed in or on land by such corporations, or are transferred to them, whether or not the works are constructed by the Irrigation Corporation.[17]

Essentially a Class 1 Irrigation Corporation will function as a delegate of the Department of Water Resources in the relevant irrigation area or district. To do this such a corporation must have an operating licence from the Governor.[18]

A Class I Irrigation Corporation will be given an operating licence to enable that corporation to undertake the business of supplying water provided to it under an irrigation corporation licence.[19]

A Class 1 Irrigation Corporation may be required, as part of the terms of operation of its licence, to "comply with the provisions of any applicable land and water management plan" and to demonstrate that its plans for the supply of water are commercially viable.[20]

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15 *Irrigation Corporations Bill 1994*, clause 5.

16 Hansard, 21 April 1994, p.1643.

17 *Irrigation Corporations Bill 1994*, clause 38.

18 ibid., clauses 11(2) and 11(3).

19 ibid., clause 38.

20 ibid., clause 41.

(2) Class 2 Irrigation Corporations

Following the formation of Class I Irrigation Corporations, the Bill allows for those bodies to be converted into corporations owned by existing irrigators within the relevant irrigation schemes, with ownership of these Class 2 Irrigation Corporations based on the holding of shares.[21]

A Class 1 Irrigation Corporation must apply to the Minister to be transferred to Class 2 status. Clause 20 of the Bill states that "The SOC Act does not apply to a transferring corporation on and after the appointed day for that corporation". Class 2 Irrigation Corporations are not, and do not represent, the State. They will not be exempt from any rate, tax, duty or other impost. And they cannot render the State liable for any debts, liabilities or obligations.[22]

The Bill also provides that the Class 2 Irrigation Corporations will be the owners of all works which are either installed in or on land by such corporations, or transferred to them.[23]

The Bill provides for the dissolution of any Irrigation Areas and Irrigation Districts connected with that Class 2 Irrigation Corporation, once that Class 2 Irrigation Corporation is listed.[24]

A Class 2 Irrigation Corporation will be provided with an operating licence which will not only enable that corporation to carry on the business of supplying water provided to it under an irrigation corporation licence but to exercise the functions given to it under the provisions of the Bill.[25]

Class 2 Irrigation Corporations, as in the case of Class 1 Irrigation Corporations, may have to comply with the provisions of a land and water management plan and to demonstrate that its plans for the supply

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21 ibid., clause 34.

22 Irrigation Corporations Bill 1994, clauses 13, 20 and 30.

23 ibid., clause 38.

24 Hansard, 21 April 1994, p.1644.

25 Irrigation Corporations Bill 1994, clause 39.

of water are commercially viable.[26]

Essentially, Class 2 Irrigation Corporations will substitute for the DWR in supplying water to irrigators within a given irrigation scheme area.

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[26] ibid., clause 41.