

**CABINET COVER SHEET**

1. **TITLE:** Lower Murray Reclaimed Irrigation Areas:  
Funding of Reforms
2. **MINISTERS:** Hon John Hill MP                      Hon Paul Holloway MP  
Minister for the River                      Minister for Agriculture  
Murray    Food and Fisheries
3. **PURPOSE:** To seek approval to offer public funding to  
irrigators as assistance with restructuring and as  
contributions to rehabilitation costs.
4. **RESOURCES  
REQUIRED FOR  
IMPLEMENTATION:** Funding of \$22m for restructuring and  
rehabilitation is proposed under the National  
Action Plan for Salinity and Water Quality  
(NAPSWQ).
5. **RELATIONSHIP TO  
GOVERNMENT  
POLICY:** This proposal is consistent with Government  
initiatives to improve River Murray water quality  
and water use efficiency, and to divest  
government irrigation infrastructure. It is also  
consistent with the COAG water reform agenda  
and the State Water Plan.
6. **CONSULTATION:** Departments for Environment and Heritage,  
Water Land and Biodiversity Conservation,  
Human Services and Treasury and Finance,  
Water SA, River Murray Catchment Water  
Management Board, Offices of Economic  
Development and Government Enterprises. Also,  
the Integrated Natural Resources Management  
Group and the Lower Murray Irrigation Advisory  
Board in respect to reforms in general.
7. **FAMILY IMPACT  
STATEMENT:** Families benefit from improved water quality in  
the River. About a third of farming families will be  
impacted by the need to restructure, but none  
would have a future in the area if this  
restructuring and rehabilitation did not proceed.
8. **REGIONAL IMPACT:** Dairying in the Lower Murray is a major  
contributor to the regional economy and  
employment. These reforms are essential if  
dairying is to continue on the swamps.
9. **URGENCY:** Within the normal 6 working-day rule.

**10. RECOMMENDATIONS:**

It is recommended that Cabinet:

- 4.1 approve, subject to agreement by the Commonwealth, the commitment of \$22m of joint State-Commonwealth funding under the National Action Plan for Salinity and Water Quality to the restructuring and rehabilitation of the Lower Murray reclaimed irrigation areas over the next six years;
- 4.2 approve, subject to agreement by the Commonwealth, funding offers being made to irrigators in both government and private reclaimed areas on the Lower Murray as incentives to restructure the areas and rehabilitate the irrigation and drainage infrastructure, based on the key elements set out in the attached Annexure;
- 4.3 approve negotiations to take place between the Minister for the River Murray and the Commonwealth Government on a longer-term, forward commitment to funding shares between the Commonwealth and South Australian Governments;
- 4.4 approve an offer to private irrigators for the Government to accept ownership of their levee banks and associated riverfront land, subject to an acceptable risk assessment, with the land transfer costs met by the Government;
- 4.5 authorise the Minister for the River Murray to:
  - (1) negotiate with the Lower Murray Irrigation Advisory Board on the detailed terms and conditions of funding and related offers, and on the release strategy;
  - (2) finalise the detailed terms and conditions of funding offers in line with the key elements in the attached Annexure, after any fine-tuning arising from irrigator consultation and negotiation,
  - (3) release funding offers to irrigators as part of an integrated package of information on the terms and conditions of water licences, drainage licences and asset transfers, and the Funding Study reports;
- 4.6 note that:
  - (1) infrastructure rehabilitation on each reclaimed area will need to be negotiated separately and proceed at a different time, independently of progress on other reclaimed areas;
  - (2) a further submission will seek approval to proceed with rehabilitation when the specific required works become clearer.

**SIGNATURE  
OF MINISTERS:**

**PORTFOLIO:** *John Min*  
**MINISTER FOR THE RIVER  
MURRAY**

*Paul Holloway*  
**MINISTER FOR  
AGRICULTURE FOOD AND  
FISHERIES**

**DATE:**

*17/9/2002*

**TO: THE PREMIER FOR CABINET**

**RE: LOWER MURRAY RECLAIMED IRRIGATION AREAS – FUNDING OF REFORMS**

**1. PROPOSAL**

It is proposed that Cabinet:

- 1.1 Commit \$22m of joint State-Commonwealth funding under the **National Action Plan for Salinity and Water Quality**, to the restructuring and rehabilitation of the Lower Murray reclaimed irrigation areas over the next six years, subject to agreement of the Commonwealth.
- 1.2 Authorise the Minister for the River Murray to negotiate with the Commonwealth Government on a long-term, forward commitment to funding shares between the Commonwealth and South Australian Governments.
- 1.3 Authorise the Minister for the River Murray to negotiate with irrigator representatives prior to finalising the funding offers, and then to release the offers to irrigators together with other relevant information.
- 1.4 Make funding offers to irrigators in both government and private reclaimed areas on the Lower Murray as incentives to restructure the areas and rehabilitate the irrigation and drainage infrastructure.

**2. BACKGROUND**

- 2.1 The Lower Murray Reclaimed Irrigation Areas ('reclaimed areas') are the last non-rehabilitated irrigation areas on the River Murray in South Australia. There are currently 24 areas, covering 5000ha of reclaimed land that is flood-irrigated to grow pasture for dairying, and accounting for about 20% of the State's irrigation water use. Key issues in respect to dairying on these reclaimed areas are as follows:
  - Under current practices and infrastructure, irrigators use excessive amounts of water, and return heavily polluted irrigation run-off to the River.
  - Lower Murray dairying is a significant contributor to the economy of the Murray-Mallee region. It accounts for 15-25% of State milk production, with a current farm-gate value of \$36m pa that generates estimated Gross State Food Revenue of \$106m pa (source: Food for the Future).
  - In line with the SA Dairy Industry's 2010 Strategic Plan, which proposes a doubling of milk production in the State, at least maintaining the current level of production in the reclaimed areas is important.

- There has been a recent significant investment, around \$19m, in the expansion of the Jerois milk processing plant. The National Foods and Dairy Farmers companies are considering further expansion at Murray Bridge and Jerois.
  - Eight of the areas (covering 65% of the region) are government irrigation districts. These are the only remaining government districts on the River Murray.
- 2.2 The reform objectives for these areas are to:
- significantly reduce the impact of drainage on River Murray water quality;
  - significantly improve the efficiency of water use;
  - ensure a sustainable regional economy; and
  - devolve responsibility for government irrigation areas to irrigators.
- 2.3 In June 2001, Cabinet approved a four-stage reform strategy to achieve these objectives and the public release of a statement of 'reform directions'. A copy of that statement forms Attachment 1. The four stages to the strategy are:
1. the provision of information to irrigators on matters crucial to their decisions on whether to sell water and retire, or stay and invest in rehabilitation;
  2. a period of water trade and restructuring, of about one year;
  3. the finalisation of rehabilitation designs (post restructuring), and the necessary funding and self-management agreements with irrigators; and
  4. the rehabilitation works.
- 2.4 An 'Options Study' was conducted in the first half of 2001, to determine whether rehabilitation would be justified. The Study assessed the longer-term viability and sustainability of flood-irrigated dairying, and evaluated alternative management options for the reclaimed areas, including alternative irrigation technologies, land uses, etc.
- 2.5 The Options Study showed that while dairying itself had a good future, current irrigation practices were not sustainable. It demonstrated that rehabilitation of the most viable 70-80% of these areas for flood-irrigated dairying would produce the highest net benefit (the balance being low productivity/high rehabilitation cost land). However, it also identified that with new allocations and easier water trading, there is the prospect of a significant amount of water (in the order of 30%) being sold out of the region, with consequent land retirement. There is anecdotal evidence that there are irrigators who are considering retirement, but who are holding on until their new tradeable water allocations are finalised and other future requirements and access to public funding is clearer. Rehabilitation should therefore be delayed until after a period of water trade and farm restructuring, as provided by the above strategy.

### **3. DISCUSSION**

3.1 This submission proposes the approval and release of funding offers, in conjunction with other key information, to complete Stage 1 of the reform strategy. Those offers of public funding will indicate to irrigators the share of costs they will need to bear. This, together with information on water trading, EPA requirements and concept designs, will enable irrigators to make decisions about their farming futures.

3.2 The reclaimed areas have a number of unique features that mean precedents set in other irrigation areas are inappropriate, for instance:

- the main shared use infrastructure is for drainage rather than irrigation;
- there is a mix of government and private ownership;
- some private areas are under the *Irrigation Act 1994*, but others are not; and
- there are a large number of small areas, some being single farms.

Not surprisingly, there is a high community expectation of a significant public funding contribution to the costs of rehabilitation, given the precedents in other areas.

3.3 The Allen Consulting Group was commissioned to provide an independent view of the case for public funding contributions, both as restructuring assistance and as rehabilitation cost contributions. The Study shows that certain levels of public funding are justified for both (1) restructuring and (2) rehabilitation in the Lower Murray.

#### **(1) Restructuring assistance package**

3.4 Restructuring would provide major benefits for both the Government and irrigators through reduced rehabilitation costs and creation of more viable farm businesses. There will also be opportunities to convert retired land to wetlands. The extent of restructuring will depend on the combined effect of new water use and quality regulations, the proposed rehabilitation funding and the following proposed restructure assistance package.

3.5 The case for specific restructuring assistance is based upon:

- *effectiveness*: facilitating a better and more timely outcome; and
- *equity*: compensating those most disadvantaged by the reforms.

3.6 Two targeted restructure assistance programs are therefore proposed. They would have a time limit of 12 months on their take-up (subject to extension under exceptional circumstances) to motivate early restructuring and therefore allow cost-effective rehabilitation to occur without undue delay. The proposed funding also allows for subsidised business planning advice for individual farmers.

- (i) **Exit Assistance Program (EAP).** This would provide one-off funding to compensate those who retire land. Based on amounts offered in other industry restructure programs, it is proposed that \$45,000 be provided to those who sell all their irrigated land in the reclaimed area, and \$20,000 to those who sell at least 50% of their irrigated land in the reclaimed area and retire the rest. The latter is designed to accommodate those who need or wish to retire land from irrigation, but do not want to relocate. It is anticipated that the less productive and more costly-to-rehabilitate land would be retired from irrigation, but the more viable land released through this process would be acquired by other farmers for dairying.

Key conditions that need to be placed on this program to maximise its benefits, and minimise the potential for its abuse, are:

- to restrict it to land holders who are also the farmers of the land (or are dependent on the land), as the aim is to assist existing farmers rather than absentee landlords;
- to require the retirement of all the irrigated land in the case where the whole reclaimed area is a single farm, as there is no public benefit in just reducing the size of the farm.

- (ii) **Farm Adjustment Program (FAP).** Two measures are proposed to encourage consolidation of farms. One is a subsidy of \$300/Ha (half the unimproved value of the land) for those who buy neighbouring properties, plus a full reimbursement of Stamp Duty payments for those who swap land in order to create contiguous land holdings. Current land holdings on the reclaimed areas are of a 'patchwork quilt' nature, considerably increasing rehabilitation costs and creating farm inefficiencies. The transfer costs of land swaps are a deterrent to consolidation.

Key conditions that need to be placed on this program are:

- to subject the subsidy component to a means test, as it should assist farmers who have difficulty funding expansion rather than those who could afford to do so anyway (given that other considerations are likely to be more significant when deciding to expand a farm than the modest financial incentives proposed here);
- to require repayment of the subsidy if the land is sold again within seven years (based on the time needed to ensure rehabilitation has been completed and the benefits of consolidation have been gained).

**(2) Rehabilitation contribution package**

3.7 The case for a public funding contribution to the cost of rehabilitation works is based on the principles of:

- assisting those adversely affected by a government policy change; and
- achieving public benefits sufficient to justify the public costs.

(In the LMRIA, rehabilitation is needed to enable irrigators to reduce their water use and so operate within their new allocations and environmental requirements.)

**3.8 Based on these principles, it is argued that:**

- there should be no difference in the treatment of government and private areas (as the public benefits are the same regardless of ownership);
- funding should only be by way of one-off capital contributions to assist the transition, and should not have the effect of providing ongoing subsidies (which also would breach COAG full cost recovery and competitive neutrality principles);
- responsibility for levee banks should remain with the party that owns and controls them, but private landholders should have the option of transferring the levee banks to the Government as they serve a public purpose through their role in containing the River and providing public access to the waterfront (70% of them are already government owned).

(While no investment is proposed in levee banks, there is a small probability of a significant future liability, eg for repairs after a flood greater than in 1956. Acceptance of a levee bank would therefore be subject to a risk assessment.)

**3.9 In respect to various aspects of rehabilitation, it is argued that no public funding contribution should be made to the cost of the following works, for the reasons given.**

- *Highland irrigation works.* These provide private benefits and there are neither public benefits nor imposition of costs by policy change.
- *Rehabilitation works to serve land that is not currently irrigated, or is retired.* Even if this land is viable, there are no public benefits.
- *Laser-grading of irrigation bays.* Even though this provides significant public benefits by reducing water use, the commercial benefits justify private investment with an estimated payback of 2-4 years, as evidenced by 40% of the region having already been laser-graded without public funding.
- *Water meters.* These provide significant private benefits by enabling more flexible water trading, more effective water application and avoidance of overuse penalties.
- *Farm infrastructure works, such as crossings.* These provide private but no public benefits.
- *Drainage infrastructure works.* These provide private benefits by making reclaimed land useable, and by reducing future maintenance costs, but no public benefits.

3.10 On the other hand, it is argued that the following contributions are justified.

- **Water supply infrastructure.** A 100% public funding contribution to the cost of upgrading is proposed because this is needed in order to meet new regulated water use efficiency targets. Also, it is the public, rather than the irrigators, who capture the efficiency gains, ie the water savings are retained in the River and are not available to irrigators.
- **Wastewater reuse systems.** A 67% public funding contribution to the costs is proposed because this is a new requirement in order to meet environmental regulations that also delivers a significant private benefit through saved water, although insufficient to be commercially viable.

3.11 Generous public funding could encourage demands for excess infrastructure. It is therefore proposed to cap the above contributions at the amount need to rehabilitate 4000ha, ie 80% of the region, based on retirement of the less viable areas, and at a maximum of \$2000/ha for supply infrastructure and \$600/ha for reuse systems.

3.12 Final agreement on funding for each specific area will be conditional on government approval of a detailed rehabilitation design for the area after restructuring, and in the case of a government area, on irrigator agreement to self-management, ie its conversion to a private district. The funding offers proposed in this submission are for works of the type and standard specified in the concept designs prepared for five of the areas so far. Tonkin Consulting developed these for irrigators.

Risks to achievement of the objectives

3.13 Attachment 2 summarises the key risks arising from this approach, their consequences and proposed risk management measures. The key conclusions are as follows.

- The main risk is inadequate enforcement of regulations, because improved management is essential if the benefits of rehabilitation are to be achieved.
- A secondary risk is of delays and cost increases due to possible irrigator dissatisfaction with these offers, and/or general reluctance to make change. This could lead to protracted negotiation.

3.14 The release strategy proposed in the next section aims to minimise the risk of protracted negotiation. Should it prove necessary, the Government always has the fallback of tougher enforcement of regulations, ie setting firm deadliness for achievement of water use and quality targets, and applying significant penalties beyond those dates. In the case of the government areas, it also has the fallback of undertaking the rehabilitation itself and recovering costs through rates.

Release and communication strategy

3.15 Irrigators have not been consulted on these offers. To get maximum benefit from the reform strategy, the offers need to be 'firm'. It is important that irrigators are neither encouraged to defer decisions in the hope of a better offer, nor left uncertain about their rights and responsibilities. They can then make their decisions on water trade and restructuring, so that the less viable land can be retired, farms can be consolidated and rehabilitation can proceed.

3.16 The proposed approach, following Cabinet approval, is therefore to:

- brief relevant stakeholders on the funding offers, eg the Dairy Industry Development Board;
- consult with irrigator representatives, ie the Lower Murray Irrigation Advisory Board (IAB), on the specific details of the terms and conditions of funding offers, and on the release strategy;
- fine-tune the offers and the strategy in light of input from the IAB, while remaining within the parameters of the Cabinet approval;
- assemble an 'information package' containing the offers plus other relevant information on rights and responsibilities, eg EPA requirements; and
- release this 'information package' to all irrigators, together with copies of the Executive Summaries of the Funding Study reports and an invitation to attend business planning workshops (with release of the full study reports to the IAB and other key stakeholders such as the INRM Group).

Irrigators would then be able to take up an offer of access to one-on-one business planning support to assist them in making decisions about their futures.

Timeframes

3.17 By December 2002 all areas should have completed rehabilitation designs. Given the current rate of progress, the suggested timeframes are as follows:

Activity	Duration	Time frame
• consultation and finalisation of the offer details and the release strategy	4-6 weeks	Sep – Oct 02
• release of the information package and conduct of workshops	4-6 weeks	Oct – Nov 02
• make the funding offers (roll-out area by area as designs completed)	9 months	Dec 02 – Sep 03
• irrigators make structural changes (approx. timing, some may be quicker)	18 months	Apr 03 – Oct 04
• rehabilitation works start (staggered commencement)	18 months	Jul 03 – Jan 05
• rehabilitation works complete (duration depends on scope of works)	about 2-5 years	Jul 05 – Sep 08

Economic, Financial and Budget Implications

3.18 There is considerable uncertainty about the extent of water trade and the take-up of restructuring assistance, as well as the effect that they will have on final rehabilitation designs and costs. The best current estimate is that about 30% of irrigators could exit, although the area requiring rehabilitation would reduce by only about 20% (from about 5000ha to about 4000ha) because some remaining irrigators would acquire released land to expand their farms. No expenditure is proposed on retired land.

3.19 Based on the proposed funding offers and this degree of restructuring, the costs are estimated to be as follows.

COMPONENTS	Total	Public		Private	
	\$m	\$m	(%)	\$m	(%)
<i>Restructuring assistance:</i>					
• Exit Assistance Program (EAP)	2.1	2.1	(100)	--	(0)
• Farm Adjustment Program (FAP)	0.5	0.5	(100)	--	(0)
• Business planning support, admin, etc	0.5	0.5	(100)	--	(0)
• Total - restructuring package <sup>(1)</sup>	3.1	3.1	(100)	--	(0)
<i>Rehabilitation works:</i>					
• Reclaimed area irrigation system works <sup>(2)</sup>	10.7	9.6	(90)	1.1	(10)
• Reclaimed area reuse system works	4.6	3.1	(67)	1.5	(33)
• Reclaimed area drainage & other works	7.0	--	(0)	7.0	(100)
• Sub-total - reclaimed area works	22.3	12.7	(57)	9.6	(43)
• Highland water supply works	3.5	--	(0)	3.5	(100)
• Total - all infrastructure works <sup>(3)</sup>	25.8	12.7	(49)	13.1	(51)
<i>Support activities/contingencies:</i>					
• Capacity building, trials, etc (approved)	2.2	2.2	100	--	(0)
• Capacity building, trials, etc (sought) <sup>(1)</sup>	1.2	1.2	100	--	(0)
• Contingency (new trials, variations, etc)	2.8	2.8	100	--	(0)
• Total - support and contingencies	6.2	6.2	100	--	(0)
<b>TOTAL<sup>(3)</sup></b>	<b>35.1</b>	<b>22.0</b>	<b>63</b>	<b>13.1</b>	<b>37</b>

Notes: (1) Approval has already been sought from the INRM Group for funds for restructuring assistance and some support activities in the second round of NAP 'priority actions' (2002/03).

(2) 'irrigation system works' covers both supply infrastructure (100% public funding) and meters (0% public funding) for the reclaimed areas.

(3) Irrigators will also need to fund in full any related on-farm works still required, eg laser grading (estimated cost \$5m), plus any increase in scope or standard of works beyond that allowed for in these proposals, eg replacing the channel upgrades with pipes.

- 3.20 The State nominated Lower Murray restructuring and rehabilitation as one of its priority areas for funding under the NAPSWQ, and has sought Commonwealth agreement to this. The NAPSWQ funding of about \$190m covers the period to 30 June 2008, and is provided approximately 50:50 by the State and the Commonwealth. A notional budget of \$22m was originally identified for rehabilitation and related works, and approval of these proposals would utilise this full amount. The agreement of relevant State and Commonwealth Ministers is needed to spend these funds. The Ministers are advised by an 'Integrated Natural Resource Management Group' (INRMG), which has been briefed on and has so far supported funding of Lower Murray restructuring and rehabilitation as a priority project.
- 3.21 Irrigation and drainage works funded to date, as 'action priorities' under the NAPSWQ, involve no irrigator contribution (\$2.2m), nor do actions for which funding is currently being sought (a further \$4.3m). Adjustment to future funding contributions is therefore necessary to bring the total amounts into line with these proposals.
- 3.22 The cost of transferring each private levee bank is expected to be in the range of \$5-10,000 for surveying plus \$2-5,000 for transfer of titles, depending on the size of the reclaimed area. The Government is currently responsible for 70% of the levee banks, and ongoing expenditure is minimal. There are potentially up to 15 private areas involved, but for some the waterfront is already publicly owned. Only a few private irrigators may take up the offer to transfer their levee land to the Crown.

State Development, Social, Environmental and other Impacts

- 3.23 Rehabilitation of the most viable parts of the reclaimed areas would have positive outcomes in terms of:
- (a) regional employment benefits from a sustainable and viable dairy sector;
  - (b) a significant reduction in the pollution load to the River; and
  - (c) a significant improvement in the efficiency of water use for irrigation.
- 3.24 The Funding Study included an assessment of the impact on farm profitability of irrigators having to fund their contributions. It found the repayments on borrowed funds, after allowing for taxation concessions, etc, would amount to about \$350/Ha on average over a ten-year loan term, but ranging from \$220-\$440/Ha. The average would rise to about \$465/ha (up 50%) if there were only minor restructuring. Assuming restructuring to the extent anticipated, the net effect would be to reduce farm gross margins by between 4.4% and 9%, on an average estimated gross margin of \$212,500pa.

- 3.25 There is, however, a wide range of viability and profitability amongst dairy farms on the Lower Murray reclaimed areas. While average profit per hectare was estimated at \$919 in 1999/00, the top 20% had an average profit of \$1,257/ha (137% of the average) and the bottom 20% had an average profit of only \$310/ha (34% of the average). At the levels proposed, funding their share of rehabilitation costs will be a significant burden for the more marginal farmers, and so will present a strong incentive to retire from dairying. On the other hand, without this restructuring, the average cost to farmers of financing their contribution would increase by 50%, thus impacting on even more of them.
- 3.26 In the medium to longer-term, these irrigators will most likely need to pay more for their water. For instance, a levy could be introduced to pay for the costs of management of the River Murray. This is under review and not expected to be introduced in the near future. Irrigators that would have the greatest difficulty funding their contributions to rehabilitation would also be those who were the most severely impacted by new water charges.

Staffing Implications

- 3.27 There will be minor, short-term staffing requirements for program management and administration, which would be funded from within these programs.

Consultation and Impact Statements

- 3.28 The following government agencies were consulted during development of this submission:
- Departments of Primary Industries and Resources SA, Environment and Heritage, Water Land and Biodiversity, Human Services, and Treasury and Finance,
  - the Environment Protection Authority, SA Water and the River Murray Catchment Water Management Board, and
  - the Offices of the Economic Development, Regional Affairs and Government Enterprises.
- 3.29 This consultation has resulted in the following agreed impact statements:
- **Environmental Impact (DEH/DWLBC).** The original wetlands of the Lower Murray were impacted severely by reclamation and other development. Current wetlands are still adversely impacted by drainage discharges to the River. Rehabilitation offers the potential to restore some wetlands by converting retired land and, supported by other reforms that require improved irrigation and farm management, to reduce drainage impacts on the River. This is a positive benefit for biodiversity. SA Water advises that the expected 80% reduction in nutrients and micro-organisms will reduce risks, but will not reduce water treatment costs.

- **Regional Impact (ORA).** The proposals in this submission will support a viable, sustainable dairying industry with positive benefits for the region. The injection of public funds is also expected to provide regional economic benefits.
- **Regulatory Impact (DPC).** Not applicable.
- **Small Business Impact (OED).** Farm incomes will be impacted by the need to fund rehabilitation over the next decade. This will have a flow-on effect on regional small businesses. On the other hand, some would benefit from the injection of funds. Over time, the restructured farms will be larger and more productive, offsetting the loss of less efficient farms. The survival of a prosperous dairy industry in the region will ultimately benefit local small businesses.
- **Family Impact (DHS).** There would be no future for families of dairy farmers and those in supporting industries within the region without significant improvements to water use efficiency and water quality. The proposals in this submission will contribute to a more secure and prosperous future for the majority, but will require closure of the less viable farms and thus changed location or activity for about a third of current farming families (about 40-50 families). People close to retirement, with small inefficient farms or on poorer quality land are most likely to be affected. The Restructure Assistance Package has been designed to help with this adjustment. Families generally will benefit from the improvements in River water quality.

The Department of Treasury and Finance agrees with the project costs provided in this submission.

- 3.30 There is extensive ongoing consultation with irrigators and community groups over reform proposals and rehabilitation plans generally. Irrigators are strongly supportive of rehabilitation, as are groups interested in regional development and environmental aspects.
- 3.31 As part of this consultation, there has been regular confidential briefing of the irrigator-representative body, the Irrigation Advisory Board, during the conduct of the Funding Study. This has covered the principles and methods being proposed, but not the amounts and specific terms of funding that are the subject of this submission. Irrigator feedback has been used in the development of the current proposals.
- 3.32 The likely irrigator reaction to these offers is difficult to assess, although they can be expected to lobby for as much as they can get from government. Irrigators are likely to vary in their reactions depending on their personal circumstances. In general, they will probably be happy with some aspects, eg the restructure assistance and the proposed 90% funding for the irrigation system, which is higher than the 80% provided in Loxton. They are likely to be unhappy with others, eg zero public funding for drainage works and means testing for the Farm Adjustment Package. The offers form a 'package', and it will take some time for irrigators to digest and understand its full scope and complexities.

3.33 For this reason, prior to formal release of the offers, it is proposed to consult irrigator representatives on the specific terms of the offers and the release strategy. If needed, there could be adjustment of the release strategy and some fine-tuning of the offer terms and conditions without diverging from the key elements and expenditures proposed in this submission, eg adjustments to eligibility criteria.

Executive Council

3.34 This proposal does not require the consideration of Executive Council.

#### **4. RECOMMENDATIONS**

It is recommended that Cabinet:

- 4.1 approve, subject to agreement by the Commonwealth, the commitment of \$22m of joint State-Commonwealth funding under the National Action Plan for Salinity and Water Quality to the restructuring and rehabilitation of the Lower Murray reclaimed irrigation areas over the next six years;
- 4.2 approve, subject to agreement by the Commonwealth, funding offers being made to irrigators in both government and private reclaimed areas on the Lower Murray as incentives to restructure the areas and rehabilitate the irrigation and drainage infrastructure, based on the key elements set out in the attached Annexure;
- 4.3 approve negotiations to take place between the Minister for the River Murray and the Commonwealth Government on a longer-term, forward commitment to funding shares between the Commonwealth and South Australian Governments;
- 4.4 approve an offer to private irrigators for the Government to accept ownership of their levee banks and associated riverfront land, subject to an acceptable risk assessment, with the land transfer costs met by the Government;
- 4.5 authorise the Minister for the River Murray to:
  - (1) negotiate with the Lower Murray Irrigation Advisory Board on the detailed terms and conditions of funding and related offers, and on the release strategy;
  - (2) finalise the detailed terms and conditions of funding offers in line with the key elements in the attached Annexure, after any fine-tuning arising from irrigator consultation and negotiation,
  - (3) release funding offers to irrigators as part of an integrated package of information on the terms and conditions of water licences, drainage licences and asset transfers, and the Funding Study reports;

**MINUTES forming an ENCLOSURE to**

**RM02/0004CS**

**DWLBC 0822/02**

4.6. *note that:*

- (1) infrastructure rehabilitation on each reclaimed area will need to be negotiated separately and proceed at a different time, independently of progress on other reclaimed areas
- (2) a further submission will seek approval to proceed with rehabilitation when the specific required works become clearer.

*John Hill*  
**JOHN HILL**  
**MINISTER FOR**  
**THE RIVER MURRAY**

*Paul Holloway*  
**PAUL HOLLOWAY**  
**MINISTER FOR AGRICULTURE**  
**FOOD AND FISHERIES**

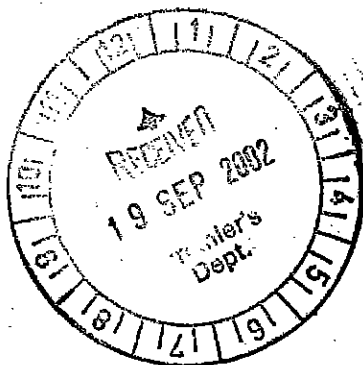
Date: *12.9.02*

*17/9/2002*

Attachments: **Annexure to Recommendation 4.2 & 4.5(2)**  
**Attachment 1: Reform Directions Statement (Aug 2001)**  
**Attachment 2: Risk assessment**

***In Cabinet***

**30 SEP 2002**



## ANNEXURE TO RECOMMENDATIONS 4.2 & 4.5(2)

### FUNDING OFFERS - KEY ELEMENTS

#### A. Restructuring assistance

##### A.1 Incentives to facilitate restructuring the reclaimed areas:

- (1) an *Exit Assistance Program* (EAP) for those who wish to leave dairying and retire land, providing \$45,000 for sale of all their currently irrigated land, and \$20,000 for sale of at least 50% of their irrigated land in the reclaimed area and retirement of the balance from irrigation, and
- (2) a *Farm Adjustment Program* (FAP) for those who wish to stay and consolidate their farms on the more viable land, providing a \$300/Ha subsidy to acquire reclaimed area land released by retirements, and a full reimbursement of Stamp Duty paid on land swaps;

##### A.2 Key conditions to the restructure funding offers:

- (1) available only for retirement and restructuring that results in reduced rehabilitation costs and more viable farm units,
- (2) available only for reclaimed area land that was irrigated in the 2001-02 irrigation season,
- (3) the EAP available only to land holders who are also the farmers of the land, and only for retirement of all irrigated reclaimed area land in the case of a single-farm reclaimed area,
- (4) the FAP subsidy means-tested,
- (5) the FAP subsidy repayable if the acquired land is sold within seven years,
- (6) available only for changes committed within a period of twelve months from the time a formal offer is made to irrigators on a reclaimed area (unless an extension is granted for exceptional circumstances);

#### B. Rehabilitation contributions

##### B.1 Incentives to rehabilitate the Reclaimed Areas Irrigation and Drainage Scheme (RAIDS) infrastructure:

- (1) a 100% public contribution to the cost of approved reclaimed area supply infrastructure works, up to a maximum of \$2000 per hectare and 4000ha,
- (2) a 67% public contribution (2 for 1) to the cost of approved reuse system works, up to a maximum of \$600 per hectare and 4000ha,
- (3) no public contribution to the cost of water meters, drainage infrastructure works, highland irrigation works, other farm works, eg crossings and fences, or laser-grading, and
- (4) no public subsidy to any recurrent costs of operating and maintaining irrigation and drainage systems;

##### B.2 Management arrangements for funding and implementing rehabilitation:

- (1) all works involved in the approved final RAIDS design for a reclaimed area managed as a single project, regardless of the funding contributions,
- (2) establishment of Project Funds into which both irrigator and government funding contributions are paid prior to making any expenditure commitments,
- (3) establishment of a joint government/irrigator Project Board to oversee expenditure and works in accordance with approved plans and schedules,
- (4) the costs of final designs and related processes funded 50:50 by initial Government and irrigator contributions to the Project Funds;
- (5) the Department of Water, Land and Biodiversity Conservation being the Project Principal and undertaking the project management.

**B.3 Key conditions to the rehabilitation funding offers:**

- (1) available only for the scope and standards of RAIDS works approved by government,
- (2) available only for works to serve currently irrigated land in a reclaimed area that will continue to be irrigated in future,
- (3) irrigators agreeing to provide the balance of the required funds, including the full incremental cost of works that are additional to or of a higher standard than needed to meet water use efficiency and water quality targets, and of works to serve currently non-irrigated land,
- (4) irrigators agreeing to the proposed funding and management arrangements for rehabilitation,
- (5) irrigators who have not yet laser levelled their irrigation bays doing so in parallel with the RAIDS works;
- (6) irrigators on a multi-farm reclaimed area agreeing to the overall final rehabilitation design for the reclaimed area,
- (7) irrigators on government reclaimed areas agreeing to convert to private districts, and
- (8) available only for a period of twelve months from the time the restructuring offer expires (unless an extension is granted for exceptional circumstances).

## LOWER MURRAY RECLAIMED IRRIGATION AREAS

### REFORM DIRECTIONS

(Released August 2001)

#### A time of change

Water quality in our rivers is a major and growing concern across Australia. Practices that pollute our rivers are no longer acceptable. This is true for all forms of industry and primary production.

In common with other primary producers, Lower Murray dairy farmers are recognising their responsibility to ensure their activities do not adversely impact on the environment. Many are already making the improvements necessary for dairying to be sustainable on the swamps. For instance, most farmers now have effective measures in place to contain and dispose of their dairy shed effluent.

As part of this drive to sustainability, and as irrigators are already aware, reforms to water use and drainage discharge are under way through the River Murray Water Allocation Plan and the *Environment Protection Act 1993* respectively. These reforms aim to achieve sustainable levels of water use and water quality. Irrigation management will need to be substantially improved to meet these new requirements. (The adjacent box provides an update on these reforms.)

The Government appreciates that irrigators have accepted the need for change, and are prepared to play their part in improving their water use efficiency and reducing the impact of their drainage discharges on the River. The Government also recognises that although improved irrigation management will deliver significant benefits, it will not be enough to ensure environmentally sustainable dairy farming on the swamps.

Rehabilitation of irrigation and drainage infrastructure will also be needed, and this requires major investment.

In this context, the Government commissioned an Options Study in late 2000 to investigate the best way forward. The Government is now considering how it could best assist irrigators in this process. This paper summarises the outcomes of the Options Study and the Government's proposed response to its recommendations. Your comments on these proposals are welcomed.

#### Current government reforms towards a sustainable dairy industry

##### Water use

The Government was recently successful in negotiating an increased cap on water diversions for Lower Murray irrigators (up from 38.4 GL to 108.5 GL). This will give irrigators enough water to grow pasture if their irrigation is efficient. However, many irrigators will still need to reduce their current water use significantly, as it is well in excess of their allocations.

Area-based water allocations will be converted into volumetric allocations, in line with the requirements of the River Murray Water Allocation Plan (WAP). In due course, water use will be measured and irrigators will incur penalties if they exceed their allocations. These allocations will be transferable in line with the provisions of the WAP, the licences and the relevant legislation (the *Water Resources Act 1997* and the *Irrigation Act 1994*). The River Murray Catchment Water Management Board will consult further on the draft WAP during the second half of this year.

After approval of the WAP, the Department for Water Resources can revise existing water licences, and this will happen during the first half of 2002, although meters will first have to be installed before portions of allocations can be traded.

##### Drainage discharges

Drainage discharges will be regulated under the *Environment Protection Act 1993*, subject to the outcome of consultation to occur shortly, the expected approach will have two parts:

- Drainage discharges will be licensed, based on approved environmental improvement programs (EIP) to be developed by the licensed entities.
- A code of practice for on-farm environmental management will be adopted under the *Environment Protection (Water Quality) Policy* currently being finalised by the Environment Protection Authority.

The code of practice will be developed in consultation with irrigators. This new code is likely to incorporate existing requirements for management of dairy shed effluent.

## The Options Study

The Options Study aimed to:

- assess the environmental sustainability and economic viability of flood irrigated dairying;
- evaluate the broad range of options available to Government for these swamps; and
- provide a preliminary assessment of the risks associated with the best option(s).

The study was completed in May 2001. It suggests a promising future for dairying in Australia generally, with many South Australian dairy farms continuing to be competitive milk producers following deregulation. Despite some uncertainty over future milk prices, current signals and longer-term market forecasts are encouraging.

While this indicates a positive future for dairying in the Lower Murray, the consultants concluded that current practices are not environmentally sustainable: the future of dairying in the Lower Murray therefore depends on overcoming its environmental impacts at an affordable cost.

Based on economic evaluation of a wide range of management options for the swamps, the consultants found the best performing options to be those that involve rehabilitation for flood-irrigated dairying of the most viable areas of the 24 irrigated swamps. (The adjacent box outlines the main options evaluated in the Study).

The proposed rehabilitation designs for flood irrigation are expected to greatly improve water use efficiency (up from about 40% to nearly 80%), and significantly reduce the pollutant load to the River (down by 70% to 80%).

### Management options evaluated

The consultants evaluated a broad range of options based on several variations and combinations of:

- > rehabilitation using sprinklers;
- > rehabilitation for flood irrigation;
- > conversion to wetlands or other agriculture; and
- > abandonment.

The best performing options were those based on the rehabilitation concept designs developed for the Lower Murray Irrigation Action Group (LMAG). These enable efficient flood irrigation by reducing water losses and intercepting and reusing irrigation run-off.

The consultants found that sprinkler irrigation was not economically justified. While sprinklers may provide some additional benefits, these were insufficient to offset their significantly higher capital and operating costs.

This should not stop individual irrigators from using sprinklers, if they decide that this form of irrigation would best meet their particular needs.

The less viable areas are those where pasture cannot be grown efficiently, or rehabilitation would be very costly. These areas need to be retired from dairying. They may be converted to other uses, such as wetland or other crops, or they may be abandoned. There may also be a need for some drainage-related works on the other three non-irrigated swamps. These are used only for seasonal pasture or fodder crops at present.

The consultants also identified the possibility of significant water sales from the swamps, once new allocations have been finalised and water trading becomes easier. This conclusion is based on use of a regional water trade model. However, it is also supported by anecdotal information that some irrigators wish to trade their water, rather than invest in rehabilitation. This could lead to retirement of some land from production, and restructuring of farms on the swamps.

Clearly, it would be unwise for either irrigators or the Government to invest in rehabilitation of the whole area, when the nature of area used for irrigated dairying may well change in the near future. At this time the degree of change is unclear, as the extent of water trading is likely to depend on farmers' expectations of future market prices for milk and water.

These two conclusions are complementary, namely that the highest economic and social benefit occurs with rehabilitation of only the most viable areas and that the area used for dairying is likely to reduce as a result of water trading. Irrigators who choose to remain would benefit because:

- the total and unit cost of rehabilitation would reduce following exclusion of poorly performing areas and a rationalisation of the layout of farms on the swamps, and
- the viability of the remaining farms would increase following retirement of smaller and less efficient farms, and a take-over and consolidation of the better land by the more efficient farmers.

Accordingly, in the Options Study the consultants:

recommend that:

- (a) the Government support rehabilitation of the most viable areas for flood irrigated dairying;
- (b) as a matter of urgency, the Government proceed to determine water licence allocations, rules regarding transferability of irrigation water, drainage management requirements and cost sharing frameworks for rehabilitation options;
- (c) the most appropriate rehabilitation option for each swamp be determined following adjustment of the regional dairy industry in response to the combined impacts of increased transferability of water, the new drainage management requirements and dairy deregulation; and
- (d) rehabilitation of the most viable areas on each swamp only proceed following a period of restructuring of the regional dairy industry and determination of the most appropriate rehabilitation option in light of this restructuring.

### **The Government response: a proposed reform strategy**

The Government supports rehabilitation of the most viable areas of the swamps as an effective way to improve water quality in the River and the efficiency of water use on the swamps. It will therefore consider offering some public funding as a contribution to irrigators' costs. Based on this offer, irrigators will be able to decide whether to accept this contribution and invest in rehabilitation, or sell their water and retire land.

Before the Government can advise irrigators of the amount and nature of its public funding contribution, it needs to undertake some further work. Specifically, it needs to assess the justification and best mechanisms for making public funding contributions for each aspect of rehabilitation. It also needs to do this in the context of rehabilitating only the most viable areas, and the possible restructuring in response to water trading. A Funding Study will therefore be undertaken through the second half of this year to determine the justifiable level of public funding contribution, and the best funding methods.

To implement the recommendations of the Options Study, the Government proposes a four-stage reform strategy, as set out in the adjacent box.

The first stage will be the focus of Government efforts over the next six months, involving consultation with the Irrigation Advisory Board and irrigators, and should be completed around the end of 2001. This would enable the Government to make a funding offer to irrigators early in 2002. (linked to self-management in the case of government irrigators). Irrigators should then be in a position to decide whether to trade their water, or stay and invest further in their dairy businesses.

It should be possible to issue new or revised water licences by early to mid 2002. Irrigators who wished to sell their water allocations, and retire from irrigated farming, could then do so.

Assuming successful and timely progress through Stages 2 and 3, Stage 4 should commence in about mid 2003. These dates are obviously provisional, because they depend on progress at each stage.

**Proposed reform strategy**

**Stage 1: Legal and policy matters, and terms of offers**  
This involves preparing government proposals for water allocation and trading, management of drainage discharges, the extent of public funding contributions, and for government irrigators' asset transfers over the next six months.

**Stage 2: Water trading and restructuring**  
This involves facilitating water trading and subsequent land retirement and farm restructuring over the following six to twelve months.

**Stage 3: Final designs and self-management negotiations**  
This involves finalising rehabilitation designs and evaluations after restructuring, and for government irrigators only, negotiating self-management.

**Stage 4: Rehabilitation and self-management**  
This is the commencement of rehabilitation and self-management for government irrigators, and is subject to the outcomes of stage 3.

In the meantime, the Government will seek ways to accelerate these reforms, so as to bring forward their benefits for irrigators and the community.

The State has requested the Commonwealth's agreement for seven priority actions across the South Australia, under the National Action Plan for Salinity and Water Quality. It has put forward the Lower Murray swamp restructuring and rehabilitation as one of these priority actions.

The adjacent box provides an outline of key aspects of the National Action Plan process.

The Government will consult with the Commonwealth and the Interim Integrated Natural Resource Management Group on the specific projects that could be progressed as priority actions.

Approval as a priority action would provide early funding to allow those projects to proceed.

### ***Invitation to comment***

A copy of the Options Study 'Conclusions and Recommendations' is attached, and the full Options Study report has been provided to the Lower Murray Irrigation Action Group (LMIAG) and the Irrigation Advisory Board (IAB) for comment.

We welcome your comments on the Options Study findings and the matters presented in this paper, particularly the Government's proposed reform strategy. Comments should be sent to:

*Chair, Lower Murray Reclaimed Irrigation Areas Steering Committee  
Sustainable Resources Group  
Department of Primary Industries and Resources  
GPO Box 1671  
ADELAIDE SA 5001*

The closing date for receipt of comments is Monday **21 September 2001**.

July 2001

### **National Action Plan for Salinity and Water Quality**

The State and the Commonwealth have entered into an agreement to tackle the State's salinity and water quality problems, as part of the National Action Plan.

Under this agreement, each government will provide \$93m over the next six years to fund South Australia's action plan.

The agreement also identifies three priority regions, one of which is the River Murray region within South Australia. It is one of the three priority regions.

An Interim Integrated Natural Resources Management (INRM) Group has recently been set up for this region. It will develop an Accredited INRM Plan and investment strategy for the region. It will also manage implementation of agreed actions under that Plan.

The agreement provides for Priority Actions to be agreed between the State and the Commonwealth prior to accreditation of the INRM Plans, where significant planning efforts have already been made in consultation with the community.

**LMRIA - RISK ASSESSMENT - SUMMARY**

**LMRIA reform objectives:**

In priority order, within the time frame of the NAPSWQ, the proposed reforms aim to:

- significantly reduce the impact of drainage on River Murray water quality;
- significantly improve the efficiency of water use;
- ensure a sustainable regional economy; and
- devolve responsibility for government irrigation areas to irrigators.

**Risks to achievement of those objectives:**

Risk	Consequence	Likelihood	Priority	Comment	Measures to minimise risk (if not defined have already been actioned or covered in the final)
Regulations are not adequately enforced	High	High	1	Risk arises through either lack of resources or lack of will, or both. Major improvements are enabled by rehabilitation, but management practices will determine whether or not the benefits are actually gained. Sanctions are needed for non-compliance and their enforcement must be seen to be the norm. Good data will be needed on impacts.	<ul style="list-style-type: none"> <li>• ensure commitment to monitoring compliance and applying penalties</li> <li>• ensure adequate resources by fees that provide full cost recovery, eg for monitoring data</li> <li>• demonstrate and publicise enforcement</li> </ul>
Restructure funding is not approved by NAP	Medium	High	2	Risk arises through uncertainty whether this is within the scope of the NAP program. Main consequences are increased costs (more of the area requiring rehabilitation and pressure for a bigger public share) and delays (reduced acceptance of the packages requiring longer negotiation and decision making).	<ul style="list-style-type: none"> <li>• make strongest possible case for benefits</li> </ul>
Costs going over budget (run out of funds)	High	Medium	2	Risk arises through poor project management, irrigator demands or unforeseen events. Consequence is that not all of the area can be rehabilitated and cost-effectiveness is reduced. Costs are increased and delays occur while additional funding is negotiated.	<ul style="list-style-type: none"> <li>• put a cap on the funding offers</li> <li>• retain project management responsibility in <u>advisement</u></li> <li>• use professional project management skills</li> <li>• undertake preliminary trials and investigations</li> </ul>

Irrigators do not make necessary management changes	High	Medium	2	Risk arises from irrigators having inadequate skills and/or attitudes that they don't need to change or can get away with things. Retention of old practices would prevent achievement of the benefits desired.	<ul style="list-style-type: none"> <li>enforce regulations (see above)</li> <li>industry take leadership role in reform</li> <li>irrigator education/demonstration/information</li> </ul>
Minimal restructuring despite funding packages and water trade opportunities	Medium	High	2	Risk arises for uncertainty over individuals' plans and circumstances. Consequences are higher costs and delays. Minimal restructuring, eg 6% would require another \$12m. Marginal farms would be kept in production (for a while), and later turnover would result in wasted investment.	<ul style="list-style-type: none"> <li>structure funding packages to provide incentives</li> <li>facilitate water trade, eg set up mechanisms</li> <li>inform and advise irrigators, eg concept designs, info pack, workshops</li> </ul>
Irrigators reject funding offer initially	Low	High	3	Risk arises from proposed package being less than expectations. Consequences are delays if negotiations become protracted, and higher costs if government were to increase the offer.	<ul style="list-style-type: none"> <li>adopt a principled approach to development of offer, with clear rationale</li> <li>develop a release and communication strategy to address this</li> </ul>
Major change in scope of project	Medium	Medium	3	Risk arises from changing government or irrigator requirements. The main consequence is cost increases and delays.	<ul style="list-style-type: none"> <li>ensure clear terms and conditions of funding offers</li> <li>put a cap on the funding offers</li> </ul>
Designs do not achieve the expected levels of improvement	Medium	Medium	3	Risk arises from uncertainty over the actual results achievable from the concepts developed. If designs are not fully effective, the benefits will not be achieved and alternative measures will increase costs.	<ul style="list-style-type: none"> <li>obtain best professional advice</li> <li>undertake trials before proceeding</li> </ul>
Regulatory requirements do not achieve the expected levels of improvement	Medium	Medium	3	Risk arises because of uncertainty over the extent of improvement in River water quality to be gained by changed farming or irrigation practices. Could revisit requirements and amend them if this were the case. Consequence is delays to delivery of benefits.	<ul style="list-style-type: none"> <li>investigate further, eg contributions from swamps to overall River water quality</li> <li>regularly monitor outcomes</li> <li>modify requirements in light of monitoring results</li> </ul>

Note: The top three priority risks are summarised here. Other risks were identified but assessed as having a low to medium consequence and likelihood.

**Comments:**

- The main risk to achieving these objectives is lack of enforcement of regulations, which would undermine rehabilitation benefits.
- There is little other risk to achieving the outcomes, as most other risks are to project costs and time frames, and not to outcomes.
- There is also always the fallback of tougher regulation and/or direct government rehabilitation of the 2/3 of the area it controls.
- Current actions and proposals address most of the cost/time frame risks, and some of these will be resolved in the near future.