LEGISLATIVE ASSEMBLY

2002

SELECT COMMITTEE ON SALINITY

REPORT ON LOCAL COUNCIL MANAGEMENT OF SALINITY

Together with the Minutes of Proceedings

May 2002

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TERMS OF REFERENCE

A select committee has been appointed to inquire and report with the following terms of reference:

To examine:

(a) Business opportunities created by salinity that contribute to the improved management of groundwater recharge and discharge areas.

(b) The options for salinity management that are available to local councils, including but not limited to, planning instruments, building codes, urban water management plans, differential rating, development of local council expertise and resource-sharing between councils.

(c) Any barriers to adoption of salinity management strategies by local councils, and means to overcome the barriers.

(d) The adequacy of the Commonwealth's response and contribution to addressing salinity.

CHAIRMAN'S FOREWORD

Many of the members of this committee are from metropolitan and rural areas affected by salinity. The committee is keenly aware of the national and local significance of the issue. There has been a high level of commitment and enthusiasm for learning about the problem and solutions to it. The committee has undertaken visits of inspection to Deniliquin, Wakool, Wagga Wagga, the Lower Murray, the Hunter, Western Australia and Northern Victoria where they have learnt a great deal from their extensive discussions with landholders, councils, government agencies and community groups. I thank all those organisations and individuals who have given generously of their time to inform us.

This report addresses two of the committee's four terms of reference, namely:

(b) The options for salinity management that are available to local councils, including but not limited to, planning instruments, building codes, urban water management plans, differential rating, development of local council expertise and resource-sharing between councils.

(c) Any barriers to adoption of salinity management strategies by local councils, and means to overcome the barriers.

The management of salinity by local government is a subject which is only beginning to receive attention. The committee was fortunate to be able to attend the National Local Government Summit on Salinity in Moama in July 2001. This conference organised by the Murray Darling Association and Institute of Public Works Engineering Australia provided councils with information on the subject and gave them an opportunity to discuss the issue.

The Inquiry has, therefore, provided committee members with an opportunity to contribute to the public debate at an early stage. One of the challenges of inquiring into a relatively new field of discussion has been to gather together the necessary information. Many councils are not fully aware of the implications of salinity and do not currently have a statutory responsibility to manage it. At this stage, many have not been in a position to comment.

While the NSW Government certainly has a number of initiatives in its *NSW Salinity Strategy*, to assist councils, its focus is on catchment level management.

The committee and its secretariat have, therefore, actively sought out research material and have contacted many organisations for information and invited submissions. At the time of publication, the committee met on 39 occasions, held eight public hearings including one in western Sydney and one in Moama, NSW, and hosted a very successful seminar at Parliament House.

Council management of salinity is part of the larger question of the role of local government in the management of natural resources. Historically, councils have focussed on urban areas and state agencies have been involved in natural resource management. In the last twenty years, as land degradation issues have come to the fore there has been an increasing focus on the need for development to be environmentally sustainable.

Legislative amendments, for instance, to the *Environmental Planning and Assessment Act*, have given councils broad-ranging environmental and natural resource management objectives. Councils have increasingly been delegated particular environmental and natural resource management functions such as managing acid sulfate soils and native vegetation.

However, the approach has tended to be piecemeal. There has not been a comprehensive discussion of the role of local government in the management of natural resources and a framework which links these different activities. Clearly the legislative requirement to link State of the Environment reporting with councils' management plans are an attempt at a more holistic approach.

At Commonwealth and State level there is recognition that many environmental and natural resource management issues need to be managed at a regional level. The Local Government and Shires Associations is concerned that local government is being marginalised by the creation of regional bodies to advise on, and manage, natural resources.

In order to achieve environmental sustainability, economic drivers and natural resource management need to be brought together in the same processes. Councils are very much involved with local economic and social issues through their roles in land-use planning and service delivery. Natural resource management planning is being undertaken by regional bodies based on catchments, bio-regions and other types of boundaries.

The NSW Government, under its PlanFIRST reforms, intends to have regional forums develop regional plans which take natural resource management plans into account. Councils will be required to translate these regional plans into new Local Environment Plans. This is an excellent initiative but it is anticipated that PlanFIRST will take five years to implement, subject to the resources being available for the program.

The question of the role of local government in these regional processes has not been resolved. Local government is represented but councils are not. There is currently no opportunity for councils to have formal collective input into natural resource management plans. There has not been a thorough examination of the extent to which natural resource management plans will require assistance from councils, particularly in land-use planning. It has been assumed that the plans will largely be achieved through incentives to land-holders. Policy experts on environmental planning believe the need for this to be supported by regulation has not been fully recognised. The role of local government in incentives for land-use change has also not been explored by the NSW Government in the context of regional planning.

The Australian Local Government Association and Local Government and Shires Associations stake a claim to be an equal partner in natural resource management. With assistance from CSIRO they intend to forge a new role. Discussions have commenced with their membership. The discussion of the role of local government in natural resource management is overdue. The committee trusts that this report, although confined to salinity, will make a significant contribution to the debate and the directions taken.

The committee also believes that the impact of salinity on urban areas has not received the attention that is warranted. Research material on this topic suggests that in areas where salinity is moderate or high, increasing proportions of local government revenue will be required to repair damage and that land values will decline shrinking the funding available for other community services.

The committee was shown data from the National Land and Water Resources Audit which shows that the cost hot-spots of salinity are the intersection of salinity with public infrastructure such as roads and bridges. Councils are responsible for the local road network. Catchment level salinity impacts on council infrastructure which is paid for by ratepayers. Ratepayers, therefore have an interest in how salinity will be managed and what the priorities for funding are.

Urban areas contribute to the salinity problem through over-watering, stormwater run-off, land clearing and development which intercepts underground aquifers and natural drainage patterns. Councils have a role in managing salinity as urban impacts are part of the cause, because salinity may impact heavily on council infrastructure and councils have a legislated role in environmental and natural resource management as well as service functions such as water supply, sewerage and stormwater, involved in managing salinity.

For all of these reasons, councils, as representatives of local communities, should be involved in natural resource management at a strategic, rather than purely operational level.

Part two of this report provides a comprehensive analysis of the barriers to effective council management of salinity along with recommendations to remove them. Part three sets out the elements of a long-term approach to build the capacity of councils to manage salinity. Part four examines the range of council functions which impact on, or are affected by, salinity and identifies where salinity needs to be managed as part of these functions. It recognises that councils are very diverse in size, resources and the number of professional experts that they employ. For this reason, it considers the management of salinity across the range of functions which the majority of councils have and separately considers some options for salinity management for larger councils or councils working in regional partnerships. It also includes information on initiatives and resources which may be helpful to local government.

This report contains 51 recommendations across the range of ministerial portfolios which include responsibility for matters relating to local government including Local Government, Land and Water Conservation, Planning, Public Works and Services, Agriculture, Education and Training and Transport. It also contains recommendations for the Premier in relation to whole-of-government matters and liaison with the Commonwealth Government.

The development of these recommendations has been cooperative and bipartisan. I am pleased to present this report to the Legislative Assembly. Salinity is a national challenge which will involve all three levels of government and the community pulling in the same direction to address it. I ask Members of the Legislative Assembly to give detailed consideration to the report's recommendations to ensure that local government can play an effective role in addressing this serious threat to our natural resources.

I thank the members of the committee for their high level of interest and cooperation in this inquiry and also the committee's secretariat for its hard work.

Hon. Pam Allan MP
Chairman

SUMMARY OF RECOMMENDATIONS

RECOMMENDATION 1: That the Premier request that the Prime Minister invite the Australian Local Government Association to be a full participating member of the Natural Resource Management Ministerial Council to bring together the three levels of Australian government to address the natural resource management challenges which face Australia.

RECOMMENDATION 2: That the Minister for Land and Water Conservation amend the representation of local government on Catchment Management Boards to provide councils with the opportunity to represent the interests of residents through a maximum of four representatives.

RECOMMENDATION 3: That the Department of Land and Water Conservation recommend a process whereby all councils in a catchment nominate and vote for councillors on each Catchment Management Board, to a maximum of four. The number of representatives to be determined by the size of the catchment and the number of councils within that catchment.

RECOMMENDATION 4: That the Minister for Land and Water Conservation streamline both the number of natural resource management committees and their boundaries to facilitate the process of consultation with councils.

RECOMMENDATION 5: That Planning NSW and the Department of Land and Water Conservation, in consultation with the Office of Western Sydney, ensure that the Hawkesbury Lower Nepean Catchment Management Blueprint provides direction on regional development in western Sydney which:

(a) is ecologically sustainable; and

(b) considers in some detail how the targets of the Blueprint, such as revegetation, might be addressed in land-use planning.

RECOMMENDATION 6: That the Premier ensure that prior to any NSW Government release of lands for development on the urban development program, the impact of salinity is thoroughly investigated and that the development is consistent with catchment management targets.

RECOMMENDATION 7: That in order to provide a foundation for regulation to support land use change, Planning NSW encourage councils to define more specific types of agricultural activities in their Local Environment Plans.

RECOMMENDATION 8: That Planning NSW encourage councils to make irrigated and intensive agriculture permissible with consent.

RECOMMENDATION 9: That the Departments of Land and Water Conservation, Agriculture and Planning and the Local Government and Shires Associations examine Catchment Management Blueprints to identify where they require support through land-use planning regulations, identify matters that need to be addressed at a NSW Government level and refer other matters to the relevant Catchment Management Boards for negotiation with councils. (See also Recommendations 2 and 3)

RECOMMENDATION 10: That Planning NSW, within twelve months, offer councils in salinity hazard zones a tool tailored to their area to guide decisions on planning applications.

RECOMMENDATION 11: That the planning tool referred to in recommendation 10 is either produced by Planning NSW or by the private sector through a public tender process and is available to councils at a rate subsidised by the NSW Government.

RECOMMENDATION 12: That a suitable planning tool for local government would:

- **provide a set of salinity hazard maps for each local government area based on the best available data which identify and prioritise salinity risk areas;**
- **identify assets (environmental, agricultural, social, urban infrastructure, water resources etc) that are at risk of salinity;**
- **summarise the legislative and strategic framework for the area in which the council operates and identify the appropriate role for the council in salinity and catchment management; and**
- **develop a local government planning decision support tool for salinity that considers:**
  - **the nature of salinity hazards in the local government area;**
  - **the types of land use and development in a local government area that may impact on salinity processes or be affected by salinity;**
  - **the types of issues that development proponents must address satisfactorily in their planning approval submissions, including guidelines on site-based investigations of salinity;**
    - **provide criteria for assessing development applications; and**
    - **provide recommendations with regard to future mapping and study requirements.**

RECOMMENDATION 13: That the use of the tool referred to in recommendations 10, 11 and 12, be included in a manual for councils on salinity management and that the manual be gazetted by the Minister for Planning, as is the case with the Floodplain Management Manual. (see also recommendation 16 on liability)

RECOMMENDATION 14: That the Ministers for Land and Water Conservation and Planning request that the Natural Resource Management Ministerial Council and Planning Ministers' Conference develop a standard national approach to the process by which development applications which may impact on, or be affected by salinity, are addressed and that this approach be adopted through legislative amendments in each State.

RECOMMENDATION 15: That Planning NSW with the assistance of the Department of Land and Water Conservation urgently produce a manual for councils, based on the best available information, containing a policy to guide planning decisions in relation to salinity hazard areas.

RECOMMENDATION 16: That the Minister for Planning give notification in the Government Gazette of the publication of a manual for councils on management of salinity and that councils be provided with good faith indemnity from liability for advice provided, things done or omitted to be done, substantially in accordance with the principles contained in that manual.

RECOMMENDATION 17: That councils' indemnity from liability be reviewed in five years, taking into account the range of information and expertise available at that time to guide the decisions of councils.

RECOMMENDATION 18: That the Minister for Local Government and the Minister for Land and Water Conservation place on the agendas of the Local Government Ministerial Council and the Natural Resource Management Ministerial Council the issue of funding local government to manage natural resources, with the recommendation that a working party be established to develop a funding options paper for consideration at the next meeting of the Ministerial councils.

RECOMMENDATION 19: That the Natural Resource Management and Local Government Ministerial Councils take into account the view of this committee that any funding program/s should fund councils for:

- **damage to infrastructure and the extra costs incurred in delivering services, subject to councils having a salinity management plan in place;**
- **building the capacity of councils to manage salinity; (ie staffing, training, mapping, research, monitoring, planning)**
- **actions linked to broader strategies and targets.**

RECOMMENDATION 20: That the following criteria apply to the eligibility of councils for funding to manage salinity:

- **councils are required to develop a long-term salinity management plan;**
- **the plan is consistent with broader strategies and targets;**
- **the plan includes measures necessary to build the council's own capacity to manage salinity over time; and**
- **councils identify a budget towards the cost of phases of the plan, according to their capacity to pay.**

RECOMMENDATION 21: That the NSW Government continue to negotiate with Commonwealth Ministers for Agriculture, Fisheries and Forestry and Environment and Heritage to have the Hawkesbury-Nepean and Hunter catchments included as priority catchments under the National Action Plan.

RECOMMENDATION 22: That the NSW Government negotiate with the Commonwealth Government to include severity of salinity impacts on urban infrastructure, including risks of future damage in the criteria for designating priority catchments.

RECOMMENDATION 23: That the Premier ensures that information sharing protocols are in place between NSW agencies and projects like that of the National Land and

Water Resources Audit which aim to provide free public access to consolidated information for the better management of Australia's natural resources.

RECOMMENDATION 24: That information sharing protocols include the provision of natural resource management data free of charge by NSW Government agencies to important regional, state-wide or national data sharing projects.

RECOMMENDATION 25: That the NSW Government either

(a) provide councils with access to funding for salinity mapping, as it has for floodplain studies; or

(b) provide DLWC with adequate funding to undertake mapping of local government areas at a level of detail suitable for land use planning purposes. (see also recommendation 12 on the development of a planning tool)

RECOMMENDATION 26: That any salinity mapping data undertaken by, or provided to, a local government agency be subject to data sharing protocols with other government organisations intra and inter state and be publicly available at the cost of transfer.

RECOMMENDATION 27: That the Ministers for Education and Training and Land and Water Conservation seek the assistance of their Commonwealth counterparts in ensuring that all national training packages for functions relevant to the management of salinity at local government level include competence in this area as a mandatory part of the package.

RECOMMENDATION 28: That the Minister for Education and Training seek the support of the Commonwealth Minister for Education, Training and Youth Affairs to liaise with NSW universities which offer courses in land-use planning, engineering and natural resource management to ensure that they prepare graduates to deal with a range of natural resource and environmental issues, including salinity, in urban and rural local government areas

RECOMMENDATION 29: That the NSW Government request that the Commonwealth Government continue to fund a training course for councillors and makes funding available for the development of a module on natural resource management, including salinity.

RECOMMENDATION 30: That the NSW Government provide funding to organisations with large memberships involved in council management of salinity for workshops, forums, information on websites and in newsletters and journals to engage members in addressing salinity, to disseminate information and share best practice.

RECOMMENDATION 31: That:

(a) TAFE Colleges and councils in salinity affected areas jointly develop courses for council staff who work in functional areas which are affected by salinity, and

(b) the need for supplementary TAFE funding be considered by the Minister for Education and Training.

RECOMMENDATION 32: That councils be given access to funding to monitor the impact of salinity through the installation of piezometers, and other relevant measures, and be

required to provide data to Catchment Management Boards to assist them to monitor the achievement of catchment plans and targets.

RECOMMENDATION 33: That Catchment Management Boards be required to share with all councils in the catchment any monitoring data provided by councils or analysis undertaken of that data.

RECOMMENDATION 34: That the Minister for Local Government request that the Commonwealth Minister for Regional Services, Territories and Local Government ensures that:

(a) a report is prepared on the outcomes of resource sharing projects by councils under the Local Government Incentive Program;

(b) the report is disseminated to all levels of government throughout Australia; and

(c) the report included on the National Office of Local Government website.

RECOMMENDATION 35: That the Minister for Planning seeks the agreement of the Building Regulation Advisory Council for the inclusion of requirements for building in salinity hazard areas in the Building Code of Australia. If there is not agreement by the Building Regulation Advisory Council for a national approach, or the matter is unduly delayed, that the Minister should include the matter in the Code to apply only to NSW.

RECOMMENDATION 36: That the Minister for Public Works and Services put a resolution to the Australian Procurement and Construction Ministerial Council to consider making third party quality certification mandatory for government projects, and extending it to product certification, including of cement and concrete products.

RECOMMENDATION 37: That the LGSA provide a representative to the Cement and Concrete Users Review Group Network to participate in discussions on the need for a third party quality and product certification scheme to be mandatory for government projects, including local government projects.

RECOMMENDATION 38: That the Minister for Planning put a resolution to the Building Regulation Advisory Council that it consider the merits of a requirement for third party quality and product certification in the Building Code of Australia, including ensuring that products meet Australian Standards for resistance to salt attack.

RECOMMENDATION 39: That the Minister for Planning seek a legal opinion on whether councils have indemnity from liability for providing information about salinity hazards on planning certificates under sections 149 (5) and 149 (6) of the Environmental Planning and Assessment Act and circulate this advice to all NSW councils.

RECOMMENDATION 40: That DLWC undertake an initial subjective assessment of the risk of damage to properties in salinity hazard zones based upon the best available data and that councils notify home owners and prospective buyers of this risk on planning certificates.

RECOMMENDATION 41: That the NSW Government launch a community education campaign on how to identify and address the impact of urban salinity. The campaign should be undertaken jointly with councils to coincide with notification of salinity risk on planning certificates.

RECOMMENDATION 42: That during the period prior to the establishment of Integrated Water Cycle Management Plans, the EPA request that councils check with DLWC whether they are in a salinity affected area with implications for stormwater management, and, where necessary, address the issue prospectively or retrospectively in Stormwater Management Plans.

RECOMMENDATION 43: That the Minister for Local Government provide the Local Government and Shires Associations and Water Directorate with an opportunity to comment on the draft legislation to provide councils with statutory powers of entry on private land to construct, maintain and repair water supply, sewerage and drainage facilities and services.

RECOMMENDATION 44: That Planning NSW and the Department of Local Government ensure that it be a requirement for development approval in salinity hazard areas that swimming pools discharge into sewers, to make it possible to test for, and where necessary, treat high salinity levels in effluent prior to disposal on land and in rivers.

RECOMMENDATION 45: That the Local Government Act be amended to make it clear that the prohibition on the discharge of salt into sewers does not apply to the disposal of swimming pool water from domestic premises.

RECOMMENDATION 46: That Planning NSW and the Department of Local Government issue a circular to councils to make it clear that saline swimming pool water should be discharged into sewers and that this should be a condition of development consent.

RECOMMENDATION 47: That the Department of Local Government seek advice from the Cooperative Research Centre for Waste Water Treatment Technology on whether the Carefree Water Conditioner can effectively and consistently treat saline swimming pool water.

RECOMMENDATION 48: That the Minister for Transport place on the agenda of the Australian Transport Council the need for a national road project by Austroads to identify best practice in maintaining roads in saline conditions to preserve the life of the road and to avoid exacerbating salinity.

RECOMMENDATION 49: That:

(a) the national road project, referred to in recommendation 48, involve Austroads, Australian Local Government Association, the Institute of Public Works Engineering Australia, relevant Catchment Management Boards and councils; and

(b) councils are involved in trialling different methods of road maintenance in saline conditions and reporting to Austroads. Austroads should widely disseminate the results of its research to road authorities, including councils, and produce a manual.

RECOMMENDATION 50: That the Minister for Land and Water Conservation, in consultation with the LGSA, lead a NSW Government review of the future role of local government in contributing to state-wide and national approaches to providing incentives for conservation and environmentally sustainable agriculture.

RECOMMENDATION 51: That the NSW Government, through its representation on the Council of Australian Government, support recommendations 22 and 25 of the House of Representatives Standing Committee on Environment and Heritage Report, *Coordinating Catchment Management, Report of the Inquiry into Catchment Management* for a review of government policies and taxation arrangements to remove any disincentives to ecologically sustainable land use.

PART 1 – BACKGROUND

1 WHAT IS SALINITY?

1.1 Naturally occurring salinity is part of the Australian landscape. Wind and rain weather rocks that contain salt, and carry salt from the ocean, depositing it on the landscape. Ideally, salt is slowly leached downwards and stored below the root zone, where it is safely stored, or out of the system. However, nature does not always take its course.

1.2 Human intervention in the Australian landscape, mainly in the form of land clearing and inappropriate land use (particularly the replacement of deep-rooted perennial plants and trees with large areas of shallow-rooted plants) have resulted in the watertable rising. When the watertable rises, salts stored in the landscape are mobilised.

1.3 Salinity is having a devastating impact on not only the nation's land and water resources but increasingly, its infrastructure.

1.4 There are three main types of salinity:

- dryland salinity;
- irrigation salinity; and
- urban salinity.

1.5 In 1998, the Prime Minister's Science, Engineering and Innovation Council (PMSEIC) estimated that costs of dryland salinity included $700 million in lost land and $130 million (annually) in lost production. (Walker et al., 1999, 127: EPA, State of the Environment Report.)

DRYLAND SALINITY

1.6 Rising groundwater mobilises salt stored in the soil profile. Dryland salinity can develop when the saline groundwater is discharged at the soil surface or where salts are concentrated as a result of evaporation. This is largely the result of human intervention in the natural landscape following European settlement, principally the wholesale clearing of land and the planting of shallow-rooted annual crops and pastures at the expense of perennial native vegetation. Crops and pastures use less of the rainfall that soaks into the ground, consequently increasing recharge to shallow aquifers. As a result, more water reaches the groundwater system and the watertable rises. From there, capillary action in the soil, transpiration by plants and evaporation at the surface draw up the saline water and concentrate the salt. Alarm bells generally ring when watertables rise to within two metres of the surface.

1.7 Once surface salt concentration reaches a certain threshold, some plant species will suffer and be replaced by salt-tolerant species. If left unchecked, surface salt concentration can reach levels which no plant species can survive, leaving the ground bare of vegetation, resulting in a 'salt scald'. Salt scalds act as the focal point for erosion to develop and spread, and for washing salt loads into rivers through run-off.

1.8 Unlike the impact of dryland salinity, which has a long lead-time, irrigation salinity problems (see below) manifested soon after the first irrigation systems were established. In turn, there is a more thorough understanding of the extent, causes and management options for irrigation salinity, which have been an integral part of the Murray Darling Basin Commission's (MDBC) activities for more than 20 years. National attention is now turning to dryland salinity. The National Land and Water Resources Audit (NLWRA) reports that:

approximately 5.7 million hectares of Australia's agricultural and pastoral zone have a high potential for developing dryland salinity through shallow watertables. (6: Australian Dryland Salinity Assessment 2000)

1.9 Dryland salinity can be subdivided into three categories based on the distance between recharge and discharge areas. Local salinity may have a separation of only a few metres from the crest of the slope to the drainage depression or up to three kilometres. In intermediate cases, the separation is larger, typically 5 to 10 kilometres, and may cover more than one sub-catchment. Regional salinity is associated with large distances, perhaps up to hundreds of kilometres with long, deep circulation depths independent of the local surface topography.

1.10 The extent of separation of recharge and discharge areas and the speed at which groundwater systems work (transmissivity) is a major factor in who is affected by the salinity problem and has implications for the methods used to tackle it. (Submission 5: Mr Warren Lee Hill)

IRRIGATION SALINITY

1.11 The significant difference between dryland and irrigation salinity is that application of irrigation water to land can exaggerate the leakage of surplus water past the root zone to groundwater (recharge) thereby increasing the rate at which the watertable rises. In addition, salts dissolved in irrigation water enter the land where insufficient leaching occurs to remove excess salts.

1.12 Major causes include over-irrigation of farm land; inefficient water use; poor drainage; irrigating on unsuitable or leaky soils; allowing water to pond for long periods; and allowing seepage from irrigation channels, drains and storages. Irrigation water that is not used by crops and vegetation builds up in the soil sub-surface, causing the watertable to rise. As the watertable reaches the land surface, the soil becomes waterlogged.

1.13 Soil saturation is compounded by periods of heavy rainfall, poor drainage and poor irrigation practices. Waterlogged plant roots have limited access to oxygen and as a result, crop and pasture growth falls and plants eventually die or are replaced with more tolerant species.

1.14 Salinity problems in irrigation areas can be made worse by irrigators having to use water containing increased salt concentrations, drawn from rivers flowing from affected dryland areas. Saline water can damage irrigation infrastructure and it constrains the types of crops able to be grown. (Department of Land and Water Conservation (DLWC) website)

URBAN SALINITY

1.15 Urban salinity in towns and urban areas results from a combination of dryland salinity processes and over-watering of urban areas. Towns are often located in areas prone to salinity (such as plains, in valleys, or at the foot of a ridge), but the problem is exacerbated by urban activities adding seepage to the groundwater.

1.16 A high watertable can cause structural damage to homes and commercial premises. It can destroy infrastructure such as roads, telecommunications systems, water, electricity and sewage supply systems as well as vegetation in parks and gardens.

1.17 Removal of vegetation for urban development has increased the amount of water entering groundwater systems. Over-watering of gardens and sports grounds, disruption of natural drainage lines, leakage from water, sewage and drainage pipes, and septic tanks – all increase the amount of water entering the sub-surface zone. (DLWC website)

1.18 In NSW, the problem is of concern in western Sydney, Wagga Wagga and in many other towns in central western and southern NSW. Including (in alphabetic order) Blayney, Boorowa, Canowindra, Condobolin, Cootamundra, Cowra, Crookwell, Dubbo, Forbes, Grenfell, Gunnedah, Harden-Murrumburrah, Junee, Lake Cargelligo, Leeton, Orange, Parkes, Queanbeyan, Tamworth, Wellington, Yass and Young among others.

SECONDARY SALINITY

1.19 As explained above, salinity is a naturally occurring phenomenon in many areas of Australia. This might also be termed primary salinity. Elsewhere in the country, increasing salinity is often the result of particular land use practices, such as over-clearing, urban development, river regulation, irrigation or cultivation of crops and pastures. This is also known as secondary salinity.

CAUSES OF SECONDARY SALINITY

1.20 The increase in salinity is partly explained by our predecessors' quite understandable lack of knowledge of Australia's natural resources. Early in the history of Australia's European settlement, the goal of government was to create wealth through development of Australia's apparently abundant natural resources. It is not difficult to imagine how ripe for the picking the Australian landscape must have seemed to European eyes. The sheer amount of land led the early settlers to value it cheaply, and thereby manage it as if the supply were inexhaustible.

1.21 Governments of the day provided incentives to clear trees through conditions on leases and tax concessions. From the 1860s to 1960, leases and conditional purchases were issued in NSW on proviso that a certain percentage of tree cover was to be removed each year. Failure to meet the condition could mean forfeiture of the lease or purchase. It was not until 1980 that any remaining clearing conditions were removed from leases. The Federal Government removed tax incentives in relation to clearing land in 1983.

1.22 The typically long lead times between the practices that cause salinity and the manifestation of the problem and, conversely, remedial action and a palpable solution work against the incentive for farmers to radically alter their farming practices.

1.23 Subsidised water supplies were provided to encourage the growth of irrigation industries, which have had considerable benefits to the economy. If water users are not required to factor in the true cost of water, there is little incentive to use water efficiently. (20: NSW Government, NSW Salinity Strategy, 2000)

1.24 Further, in many cases the people causing the problem do not have to suffer its consequences. People living in discharge or downstream areas pay for the actions of their counterparts in recharge or upstream parts. In economic parlance, this is an externality:

Property rights are used to define ownership, for example freehold title to land or permits to extract irrigation water and these rights are clearly defined. Property rights in relation to dryland salinity are poorly defined and provide no penalty for using the groundwater to dispose of water falling on one's property without regard for the impact on others. (Submission 5)

1.25 Since there appears to be nothing personal to be gained from changing their land management practices, the people causing the problem have little incentive to do so. At the same time, those who suffer may not be able to do anything to correct their situation; they depend on those upstream to act unselfishly.

1.26 Participants at the NSW Salinity Strategy saw this situation as an example of market failure (a failure of the market to allocate resources to achieve the greatest possible good). They advised the Government to develop a special-purpose investment vehicle to attract private sector and other funds for salinity remediation purposes in both rural and urban areas. (20-21: NSW Government op cit, 2000)

1.27 Recently, however, researchers are beginning to question this paradigm. Mike Read in 'New Knowledge Means New Approaches to Solving Dryland Salinity', in the December 2001 edition of *Connections*, reports on the results of four case study catchments. He says:

A common misconception of dryland salinity in Australia has been that it is typified by actions of particular farmers affecting mainly other parts of the catchment where salinity emerges, often long distances from the particular landholder (see for example, ABARE 1992). Such external effects represent 'economic externalities' and could justify government funding. The analyses that concluded that external effects were paramount were based on the view that there was a high degree of hydrological transmissivity such that changes in recharge at one location would benefit areas way beyond the area treated.

To the contrary, recent research has shown that the adoption of practices to reduce recharge mainly leads to benefits only for that land on which the treatment is implemented. For example, evidence of the limited area of benefits beyond the site of implementing works to reduce recharge comes from observations of extensive tree planting in Western Australia. George et. al. (1999) surveyed the effectiveness of tree planting as a salinity management measure at 80 sites in Western Australia and concluded that trees had little effect on the water tables beyond 10 to 30 metres from the planted area.
(www.agrifood.info/Connections/2001_1/index.htm)

1.28 The extent to which salinity is an economic externality for landholders and the extent of public benefits from government investment are fundamental to policy approaches. It is important that government policy is informed by up-to-date research. However, policy requires long lead times and it is a challenge to make effective policy in an area in which the science may change rapidly.

2 WHAT IS BEING DONE TO MANAGE SALINITY AT THE COMMONWEALTH AND STATE LEVEL?

Note: For a more detailed summary of the institutional framework for dealing with salinity, please see the committee's *Interim Report*, June 2001.

COMMONWEALTH GOVERNMENT

THE NATURAL HERITAGE TRUST

2.1 The Natural Heritage Trust (NHT) of Australia Reserve was established by the Commonwealth Government under the *Natural Heritage Trust of Australia Act 1997*. It is administered by Environment Australia and Agriculture, Fisheries and Forestry Australia. The NHT's objectives are to:

- provide a framework for strategic capital investment to stimulate additional investment in the natural environment;
- achieve complementary environment protection, natural resource management and sustainable agriculture outcomes consistent with agreed national strategies; and
- provide a framework for cooperative partnerships between communities, industry and all levels of government. The Trust has five key areas under which it provides funding for a range of programs: land, vegetation, rivers, bio-diversity, and coasts and marine.

2.2 Trust funding totals $1.499 billion over six years from 1996/97 to 2001/02. Almost half of approved funds nationally have gone to community groups. According to the report, *Enhancing Institutional Support for the Management of Dryland Salinity*, published in January 2000, only 11 per cent of NHT funding had been directed to dryland salinity. Grant for other projects such as revegetation, however, may also impact on salinity. The Department of Agriculture Fisheries and Forestry (AFFA) and the Department of Environment and Heritage advised the committee that from 1997/98 to 2000/01, $16.211 million was provided to NSW for 207 projects that contained the words 'dryland salinity' in the project description.

2.3 In March 2001, the Federal Minister for Agriculture, the Hon. Warren Truss, released the NHT's report, *Australian Dryland Salinity Assessment 2000*, as part of the NLWRA. The report is a comprehensive assessment of the problem which reveals that nearly six million hectares nationwide are at risk from dryland salinity. This could triple in 50 years to 17 million hectares.

NATIONAL ACTION PLAN ON SALINITY AND WATER QUALITY

2.4 On 10 October 2000, the Prime Minister launched a National Action Plan (NAP) for Salinity and Water Quality as a blueprint for salinity and water quality policy development, based on its assessment of the immediate actions required to address the problem. Among other matters, it sets targets and standards for natural resource management, particularly for salinity, water quality and associated water flows, and

stream and terrestrial bio-diversity. The NAP was endorsed by Premiers and Chief Ministers in November 2000.

2.5 The NAP calls for the implementation of integrated catchment/region management plans based on analysis of natural resource problems and priorities carried out at the catchment/region level by local communities assisted by governments in the context of wider regional objectives. pertaining

2.6 Under its proposal, the Commonwealth Government would fund communities to implement accredited plans through block funding, on a 50:50 basis with States and Territories, for the publicly funded element of the plan. It would require specific targets for salt, nutrients, water flow regimes, water quality, stream and terrestrial bio-diversity, and would jointly accredit individual plans that met criteria to timetables, performance measures, accountability and reporting arrangements.

2.7 Catchment plans may indicate substantial land and water use change is required to address dryland salinity and deteriorating water quality, potentially affecting the viability of regional communities. The Commonwealth states it would be prepared to consider a contribution towards appropriate compensation to the States and Territories to promote adjustment.

2.8 The NAP proposes that highly affected catchments/regions be addressed. The Commonwealth Government has designated 21 such catchments/regions as being highly affected . Its indicative list of catchments/regions for action is:

- Burdekin-Fitzroy (Qld),
- Lockyer-Burnett-Mary (Qld);
- Condamine-Balonne-Maranoa (Qld-NSW);
- Border Rivers (Qld-NSW);
- Namoi-Gwydir (NSW);
- Macquarie-Castlereagh (NSW);
- Lachlan-Murrumbidgee (NSW);
- Murray (NSW);
- Goulburn-Broken (Vic);
- Avoca-Loddon-Campaspe (Vic);
- Glenelg-Corangamite (Vic);
- Midlands (Tas);
- Lower Murray (SA-Vic);
- Mt Lofty-Northern Agricultural Districts (SA);
- South East (SA);

- Avon (WA);
- South Coast (WA);
- Northern Agricultural Region (WA);
- South West (WA);
- Ord (WA-NT); and
- Darwin-Katherine (NT).

2.9 The committee is concerned that the Hunter River in NSW is not among this list.

2.10 All jurisdictions except Western Australia have signed the Intergovernmental Agreement that sets out the overarching commitments and obligations of the National Action Plan. Bilateral agreements are in place with South Australia, Victoria, Tasmania, Queensland and New South Wales.

MURRAY-DARLING BASIN MINISTERIAL COUNCIL (MDBMC)

♦ **Integrated Catchment Management**

2.11 The MDBMC was established in 1985 comprising Ministers from the governments of NSW, Victoria, South Australia, Queensland and the Commonwealth holding land water and environment portfolios. An ACT Minister is a non-voting member.

2.12 The Ministerial Council's main functions, specified in cl.9 the *Murray-Darling Basin Agreement*, are:

- *generally to consider and determine major policy issues of common interest to the contracting governments concerning effective planning and management for the equitable efficient and sustainable use of the water, land and other environmental resources of the Murray-Darling Basin; and*
- *to develop, consider and, where appropriate, to authorise measures for the equitable, efficient and sustainable use of such water, land and other environmental resources.*

2.13 In 1990 the Council launched its *Natural Resources Management Strategy* in response to the Basin's declining health. That strategy led to a major change in management of the Basin's natural resources, based on integrated catchment management (ICM) and delivered through a community-government partnership.

2.14 The Council lists the characteristics of an integrated catchment approach to natural resource management as:

- decisions regarding natural resources are integrated at catchment scale;
- decisions about the environment of the catchment, its economic productivity and its people are integrated;
- responsibilities and accountabilities are clearly determined with matching capacities within the catchment;

- strategies and action plans for catchment natural resources are developed and implemented in partnership between communities and governments;
- the mix of mechanisms, including water, is determined on a catchment basis;
- catchment management delivers national, Basin and State outcomes within a system of agreed targets and within a long-term investment framework; and
- monitoring, evaluating and reporting systems support decision making at catchment scale.

2.15 There are 19 catchment management regions in the Murray-Darling Basin, each with a catchment management organisation, a regional or catchment strategy to direct actions, and a number of action plans to implement the strategy.

2.16 The Council has set the a timetable for setting targets for water quality, water sharing, riverine ecosystem health, terrestrial biodiversity, and catchment health.

♦ **Basin Salinity Management Strategy 2001 – 2015**

2.17 The Murray-Darling Basin Commission (MDBC) released its *Draft Basin Salinity Management Strategy 2001 – 2015* in September 2001. This was a response to the alarming findings of the Salinity Audit. The Strategy proposes that states are accountable for the impacts of future developments on salinity from:

- activities that affect dryland salinity (diffuse sources); and
- impacts in dryland areas that are a legacy of past land use and management decisions.

2.18 There are nine elements to the Strategy:

- developing capacity to implement the Strategy;
- identifying values and assets at risk;
- setting salinity targets;
- managing trade-offs with the available within-valley options;
- implementing salinity and Catchment Management Blueprints;
- redesigning farming systems;
- targeting reforestation and vegetation management;
- constructing salt interception works; and
- ensuring Basin-wide accountability: monitoring, evaluatiing and reporting.

2.19 The Strategy will be reviewed in 2007 and 2015.

2.20 The Strategy extends the life of the target set under the Salinity and Drainage Strategy for the Murray River at Morgan until 2015. It also extends the accountability

arrangement to South Australia and Queensland and introduces the use of end-of-valley salinity targets in each state to help maintain Basin target at Morgan.

COMMONWEALTH/STATES RESEARCH PROGRAMS

COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION (CSIRO) COOPERATIVE RESEARCH CENTRES (CRCS)

2.21 The CRCs Program, funded by the Federal Government, was launched in 1990 to strengthen collaborative links between industry, research organisations, educational institutions and government agencies.

2.22 They work together in long-term collaborative arrangements which support research and development and activities that are designed to achieve outcomes of national economic and social significance. CRCs provide inter-disciplinary, multi-institutional research environments focused on addressing industry and user needs.

2.23 These collaborative links increase efficiency and cost effectiveness of research and research training and make better use of research resources through sharing of major facilities and equipment.

2.24 CRCs provide an enhanced education and training environment through the involvement of people from outside the university system in education programs and by offering degree and non-degree courses and training focussed on industry and other user needs.

2.25 The Federal Government's stated objectives for CRCs are:

- to enhance the contribution of long-term scientific and technological research and innovation to Australia's sustainable economic and social development;
- to enhance the transfer of research outputs into commercial or other outcomes of economic, environmental or social benefit to Australia;
- to enhance the value to Australia of graduate researchers; and
- to enhance collaboration among researchers, between researchers and industry or other users, and to improve efficiency in the use of intellectual and other research resources.

2.26 As at July 2001, there were 64 established CRCs operating. Most CRCs operate at more than one site. They are located in all capital cities and about 40 locations all around Australia.

2.27 The established CRCs cover many areas of natural science and engineering: manufacturing technology; information and communications technology; mining and energy; agriculture and rural based manufacturing; environment; and medical science and technology.

2.28 The average size of a CRC is substantial. CRCs would normally have at least 30 full-time researchers, and staff will include a Chief Executive Officer, key researchers, administrative staff and postgraduate students. The average budget for a CRC is $7 million per year.

2.29 The amount of funding provided to CRCs supported in the last round averaged $2.45 million.

2.30 Of particular interest is the CRC for Plant-Based Management of Dryland Salinity, whose mission is to:

provide new plant-based land use systems that lessen the economic and social impacts of dryland salinity and thereby help to sustain rural communities.

2.31 It is a joint venture involving:

- Department of Agriculture, Western Australia;
- Charles Sturt University;
- Department of Conservation and Land Management, Western Australia;
- CSIRO;
- Department of Natural Resources and Environment, Victoria;
- Department of Agriculture, NSW;
- Primary Industries & Resources SA;
- University of Adelaide; and
- University of Western Australia.

2.32 Federal funding runs to $22 million over seven years.

2.33 CRC for Plant-Based Management of Dryland Salinity has identified the following outputs and outcomes:

- Better targeted information of greater value than would otherwise occur.
- Published advice suitable for communities, governments, industry and landholders about situations where plant-based solutions are or are not appropriate and acceptable.
- Advice to policy and program developers about the role of plant-based solutions within the package of policy strategies used, and better integration of policy strategies.
- Targeted activities to promote adoption of plant-based solutions that are more extensive, better focused and more valuable in economic, social and environmental terms, based on at least seven economic analyses.

NATIONAL DRYLAND SALINITY PROGRAM (NDSP)

2.34 The NDSP, an initiative of Land and Water Australia (LWA), was established in 1993. The program is managed and supported by a consortium of organisations from around the country, including the Commonwealth and all of the State Governments. Each of

these organisations contributes financially and/or through the provision of research or other in-kind services to the NDSP.

2.35 The first five-year phase of the program was completed in 1998. It focused on improving understanding of the causes of dryland salinity and on establishing a collaborative national focus on the research and development effort.

2.36 A larger, second five-year phase, valued at $15 million, is scheduled to be completed in 2003. It will use information on the costs and extent of salinity in Australia to develop policy options for federal, state and local governments to address pressing issues. It is also investigating socio-economic arrangements that encourage or impede appropriate management of salinity, new production options using saline resources and management of saline landscapes. It will work with scientific and industry sectors to develop strategies for better management responses that can be put into practice by communities and farmers.

NEW SOUTH WALES GOVERNMENT

NSW GOVERNMENT SALINITY STRATEGY

2.37 The NSW Government has injected $52 million of new expenditure into salinity management action over four years (see Table 1). Of this, $5 million every year of new funds goes to the new Environmental Services Investment Fund to finance strategic on-ground actions. That is in addition to the Government's expenditure of more than $30 million in 1999/2000 on specific salinity-related programs.

2.38 The following table shows how the budget has been allocated. The following agencies have been allocated funding directly and also via DLWC.

TABLE 1: DISTRIBUTION OF THE NSW SALINITY STRATEGY BUDGET ($52M)

DEPARTMENT	NSW SALINITY STRATEGY ALLOCATION
	Total $52,000,000
Department of Land and Water Conservation	$41,186,000 (of this, $1,650,000 has been allocated to other agencies) (Balance) $39,536,000
NSW Agriculture	$3,413,000
State Forests	$2,000,000
National Parks and Wildlife Service	$1,100,000
The Cabinet Office	$720,000
Planning NSW	$400,000
NSW Treasury	$250,000
Department of State and Regional	$250,000

Development	
BALANCE REMAINING	**$2,681,000**

Note: The allocations are for four years except:

- National Parks and Wildlife ($300,000 of their total allocation is for 2 years)
- NSW Treasury and Department of State and Regional Development have been funded for 2000-2001 only.

Information provided by The Cabinet Office 17 April 2001.

2.39 As previously mentioned, the NSW Salinity Strategy document is the NSW Government's response to the Salinity Summit held in March 2000.

2.40 The goal of the Strategy over the period 2000 to 2010 is to slow down the rate of increase in salinity by:

- protecting and managing native vegetation;
- using land so less water goes into the watertable;
- using water more effectively and efficiently;
- using engineering solutions;
- making better use of land affected by salt; and
- focusing efforts on priority salinity hazard landscapes.

2.41 The tools to achieve these outcomes are:

- targets for salinity at the end of river valleys;
- market-based solutions and strategic investment;
- business opportunities;
- regulation;
- government advice;
- information;
- scientific knowledge;
- planning systems; and
- accountability, reporting and evaluation.

♦ **Salinity Targets**

2.42 Salinity targets will be the main tool for planning salinity management, guiding the choice and location of actions on the ground, and measuring performance.

2.43 Salinity targets are designed to enable the Government and stakeholders to:

- quantify desirable salinity outcomes;
- manage the cumulative impacts of actions at various sites;
- compare the environmental, economic and social benefits and costs of different actions; and
- choose the most cost-effective actions to treat the problem.

2.44 There are two types of salinity targets:

- an **end-of-valley target** is a water quality target at the end reach of a river that expresses the overall salinity condition to aspire to; and
- a **within-valley target** is a water or land-based target within a catchment that expresses the salinity level to aspire to at that location.

2.45 The NSW Government has commissioned Catchment Management Boards (CMBs) to recommend salinity targets.

End-of-valley targets

2.46 To set end-of-valley targets, a location must be identified which is a meaningful and measurable respresentation of the salinty at the end of the catchment. The indicator will be an indicator of the overall salinity conditions in the catchment. In inland catchments and for the Hunter Valley, the end-of-valley location will be at the end of the catchment. In other coastal areas, end-of-valley targets will not be required.

2.47 Locations will need to be free from, or able to account for, localised impacts such as unmixed single-point sources of saline discharge. They will also need to be above, or account for, backwater effects.

Within-valley targets

2.48 Within-valley targets can be used to express desired salinity levels for:

- landscapes that contribute significantly to rising salinity;
- locations that are important in the functioning and our understanding of salinity processes in the catchment; and
- locations to protect local assets and values, such as wetlands or water supply.

2.49 Locating within-valley targets involves identifying the locations and landscapes for each of the above considerations within a catchment.

CATCHMENT MANAGEMENT BOARDS

2.50 In December 1999, the former Minister for Land and Water Conservation, Mr Amery, announced the establishment, under the *Catchment Management Act 1989* and the *Catchment Management Regulation 1999*, of the following 18 new CMBs across NSW.

- Border Rivers CMB
- Central Coast CMB
- Central West CMB
- Gwydir CMB
- Lachlan CMB
- Lower Murray Darling CMB
- Lower North Coast CMB
- Mid North Coast CMB
- Murray CMB
- Murrumbidgee CMB
- Namoi CMB
- Northern Rivers CMB
- South East CMB
- Southern CMB
- Southern Sydney CMB
- Sydney Harbour CMB
- Upper North Coast CMB
- Western CMB.

2.51 CMBs were established with the objective of enhancing the capacity of total catchment management to substantially improve the quality and sustainability of NSW's natural resources and environment.

2.52 The CMBs boards replaced all but two of the 45 Catchment Management Committees (CMCs) and the five Regional Catchment Committees (RCCs). Subsequently, the Hawkesbury-Nepean Catchment Management Trust ceased operation in April 2001.

2.53 The Government maintains that the new board system will, among other things, provide local government with the opportunity to have greater involvement in catchment management, resulting in better coordination between councils and other natural resource managers.

2.54 CMBs will not raise a levy, but will be resourced from funds used previously to support CMCs and RCCs.

2.55 DLWC plays a leading role, along with other government agencies and local government, in working with communities and industry groups to implement strategies developed by the new boards.

2.56 On 31 May 2000, the former Minister announced the appointment of members to the boards, drawn from representatives from the community, industry and government.

♦ **Role of the Boards**

2.57 CMBs focus on the following five specific tasks.

- Identifying the opportunities, problems and threats associated with the use of natural resources to support rural production and protection and enhancement of the environment.
- Identifying the first order objectives and targets, within the overall legislative and policy framework, for the use and management of the region's natural resources.
- Developing management options, strategies and actions to address the identified objectives and targets.
- Assisting in developing a greater understanding within the community of the issues identified and action required to support rural production and enhance the environment.
- Initiating proposals for projects and assessing against the targets, all projects submitted for funding under Commonwealth and State natural resource management grant programs.

2.58 CMBs are to examine and make recommendations to the Government on the NSW Salinity Strategy's interim end-of-valley targets by March 2001. CMBs will consider and agree on targets for salinity that represent acceptable and achievable levels of risk to environmental, economic and social assets and values. In developing their recommendations, the CMBs may also need to consider the impact and relevance of other salinity initiatives such as those of the MDCB and national strategies.

2.59 The NSW Government will then assess the recommendations of CMBs and finalise the end-of-valley salinity targets.

2.60 Further, CMBs are to develop a draft Catchment Management Blueprints that:

- recommends within-valley salinity targets that contribute to the end-of-valley targets and that achieve local salinity reductions or improvements;
- recommends actions to meet within-valley and end-of-valley salinity targets; and
- outlines the rationale for these recommendations.

2.61 Catchment Management Blueprints have been released for public comment by 30 April 2002. They will then be submitted to the Government for approval by 1 July 2002, along with suggested amendments.

3 COUNCILS IN NEW SOUTH WALES

BACKGROUND

3.1 As of December 2001, there were 172 councils in NSW (Department of Local Government).

3.2 Local government is the level of government with which citizens have the most direct contact and, in many ways, the one with the most visible impact on their day-to-day lives, certainly in their lives at home. Its influence and importance should not be underestimated.

3.3 People rely to a great extent on their councils for the amenity of their neighbourhoods and the infrastructure to build strong communities.

STRUCTURE OF COUNCILS

3.4 The States and Territories have constitutional responsibility for local government, providing the legal framework for the operation of councils and at the same time overseeing those operations. (The ACT Government is unusual in that it acts as both a local and 'state' government. There are no councils in the ACT.)

3.5 Importantly, the States mandate the electoral system for local government, establish boundaries, and regulate the services they provide.

3.6 There are therefore significant differences in the way each State oversees local government, and the way in which services are delivered. (*Local Government National Report 1999-2000*, National Office of Local Government (NOLG) p. 3)

3.7 Local governments are elected bodies, sometimes based on wards, or by the electorate as a whole, using first-past-the-post or preferential voting. Councils and the populations they serve vary significantly in size, but generally have eight to 25 councillors. (*Local Government National Report*, NOLG, p.35)

3.8 One of the significant differences between councillors and Members of Parliament is that positions on councils are almost exclusively part-time, and they are paid accordingly. The vast majority of councillors would have some other kind of employment to provide the majority of their income, quite often in the very community which they serve.

3.9 A council has responsibility for many of its community's most essential services including:

- planning;
- approval or consent for developments;
- building control and regulation;
- garbage disposal and recycling services;

- road building and maintenance;
- water supply;
- sewerage and stormwater services;
- recreational parks and gardens; and
- increasingly, childcare and aged care facilities.

3.10 In addition, a local council can provide vision and leadership for the community, and has a very real influence on the quality of its residents' lives.

3.11 Like the other levels of government, councils are supported by a team of public servants who put into effect the council's policies and carry out the various duties required to deliver services to residents. The administration of councils are headed up by a chief executive officer or general manager. These employees are, of course, not elected but appointed on merit.

WESTERN LANDS DIVISION

3.12 The potential for councils to manage salinity throughout NSW is tempered somewhat by the fact that no councils exist in the portion of the State known as the Unincorporated Area.

3.13 NSW' Western Division runs to some 335,000 square kilometres, 26 per cent of which is known as the Unincorporated Area. No local councils operate in the Unincorporated Area. Only about 800 people live in this part of NSW, comprising only two villages (Silverton and Tibooburra) and grazing and irrigation properties.

3.14 The small and scattered population cannot support a local government authority, so there are no rates levied. However, leaseholders pay rental to the Western Lands Commissioner, who is vested with the powers, authorities, duties and functions conferred and imposed on the Commissioner by the *Western Lands Act 1901*.

3.15 The Western Lands Commissioner has no jurisdiction over freehold land in the unincorporated area, although the vast majority of land is under leasehold, giving the State firm control over development there.

3.16 The significant factor for salinity is that DLWC and the Western Lands Commissioner, through the *Western Lands Act,* the *Native Vegetation Act*, the *Water Management Act* and the *Water Act*, have powers to assess and approve or reject applications for development in the Unincorporated Area.

FUNDING OF COUNCILS

3.17 Councils are funded through rates (local taxes on rateable land), grants from government, service charges and fees, borrowings and investment.

RATES

3.18 There are four categories of rateable land:

- farmland
- residential
- mining
- business.

3.19 The way that rates are levied on these categories of land is largely determined by councils. Their rating powers derive from the *Local Government Act 1993*. Councils can either rate land:

- ad valorum – per dollar of land value. (Generally the land values determined by the Valuer-General are used by councils); and/or
- a flat rate. (comprising up to fifty per cent of the total rate on each parcel of land).

3.20 Because rates have an impact on the overall economy, the NSW Minister for Local Government controls the maximum general income of councils. This sets a limit on rates and loans, which is often referred to by councils as 'rate-capping'.

GRANTS

3.21 The Commonwealth and State Financial Assistance Grants from the Commonwealth to local government are currently provided under the *Local Government (Financial Assistance) Act 1995*.

3.22 Funding is provided in two components:

- General purpose untied grants are distributed between the States and Territories according to population (ie, on a per capita basis).
- Identified local road grants are distributed between the States and Territories based on historical shares.

3.23 A local Government Grants Commission exists in each State and the Northern Territory to determine the level of funding to distribute to local government authorities in line with Commonwealth legislation and on the basis of agreed National Principles. (NOLG website)

3.24 The Grants Commission classifies expenditure as being due to either:

- unavoidable influences, such as the number of services which must be provided or the per unit cost of providing them; or
- avoidable differences in the standards and efficiency of service provision which councils can control through their decisions and management. (Local Government National Report, NOLG, p.118)

3.25 In determining the appropriate level of funding, the Grants Commission will have regard to the expenditure necessary to provide a *common* standard of service. Only the *unavoidable* differences in the cost of providing a common service are taken into account. Naturally, councils are free to make their decisions on services and

expenditure, but not all councils are equal in terms of finance, location or community needs.

3.26 To spread funding equitably, the Commonwealth employs a policy of horizontal equalisation.

3.27 Section 6(3) of the *Local Government (Financial Assistance) Act 1995* defines horizontal equalisation as an allocation of funds which:

a) ensures each local governing body in a State is able to function, by reasonable effort, at a standard not lower than the average standard of other local governing bodies in the State; and

b) takes account of differences in the expenditure required to be incurred by local governing bodies in the performance of their functions and in their capacity to raise revenue. (*Local Government National Report*, NOLG, p.18)

3.28 Under horizontal equalisation, grants are distributed based on an estimate of:

- the cost to each council of providing an average range and level of service; and
- each council's revenue from the average range and standard of rates and charges.

3.29 The grant is allocated to compensate for these expenditure/revenue variations and so equalise the capacity of all councils. For example, a council based around Sydney Harbour is going to have a far higher rate base and much lower transport costs than a rural council in a remote area. Horizontal equalisation would, ideally, give the remote council the same opportunity as the Harbour council to provide a common standard of service. Similarly, councils with disproportionately high levels of aged citizens or young children would have no real choice but to direct a high proportion of their expenditure to meet the need of their communities. Generally speaking, they would receive more funding based on that need.

POTENTIAL COSTS OF SALINITY TO COUNCILS

3.30 The costs of salinity damage to urban infrastructure has received less public attention than the costs to agriculture. There are significant cost implications for NSW councils both from the damage caused by salinity and by the loss of rateable land value.

3.31 According to the report, *Enhancing the Capacity of Local Government to Contribute to the Management of Dryland Salinity*, 400 local government councils in Australia are, or will be, affected by salinity. (Research Planning and Design Group (RPD Group): September 2001)

3.32 In NSW, the problem is of concern in many country towns in central western and southern NSW.

3.33 Salinity also affects metropolitan areas. The RPD Group reports that a recent subdivision on the urban fringe of Launceston, Tasmania is affected and

there is now evidence emerging that there could be up to 100,000 houses in western Sydney that are located in areas that will be affected by dryland salinity. (1: September 2001, RPD Group)

3.34 The RPD Group lists the following impacts of salinity on councils:

- *reduced life span and increased maintenance and replacement costs for roads, bridges, footpaths, parks, gardens, sporting facilities, street trees and drainage systems;*
- *lower property values in rural and urban areas;*
- *some town drinking water supplies being too high in salt for human consumption;*
- *septic tank systems unable to work;*
- *residential development areas unsuitable for housing;*
- *increasing flooding impact in saline affected watercourses.*

3.35 The RPD Group states:

The greatest long term financial impacts from dryland salinity may not be on agriculture, but rather on the life shortening effect on infrastructure such as roads, bridges, drainage systems and parks. (24: Local Government Project Final Report, January 2001)

3.36 The RPD Group reports that annually dryland salinity costs $130 million in lost agricultural production, $100M in damage to infrastructure, and $40 million in damage to environmental assets. (RPD Group, Some Initial Findings)

3.37 The RPD Group also makes the point that the costs of salinity may be highest for the councils with the smallest budgets (RPD Group, Some Initial Findings).

3.38 There has not been a systematic audit of the costs of salinity damage to council assets. However, a number of studies of the current costs of salinity damage are indicative.

3.39 The repair and replacement costs for assets in Wagga Wagga City damaged by salinity are around $100 million. Cost estimates also tend to increase each time they are made.

3.40 One of the most significant costs incurred by councils as a result of salinity is road maintenance. Councils are responsible for the local road network.

3.41 Thirty four percent of State roads and 21 per cent of national highways in south western NSW are impacted by high water tables with damage costing $9 million per year. (PMSEIC 1999). There is little data on the percentage of local road networks affected by salinity. While local roads are cheaper to build and maintain per kilometre, the network of local roads managed by councils is more extensive.

3.42 Study in the Loddon Campaspe region of Victoria shows that individual councils are incurring costs of up to $77,000 per year in repairs to salinity damaged roads. (24:January 2001, RPD Group)

3.43 In Western Australia sealed road life expectancy is being reduced by up to 75 per cent in areas with rising saline groundwater. (24:January 2001, RPD Group)

3.44 Projections of the impact of salinity on council finances in the report, *The Financial Costs to Local Government of Dryland Salinity*, prepared by Spiller, Gibbons Swan and

SMEC, September 2000, demonstrates why there needs to be a comprehensive approach to council management of salinity.

3.45 It makes predictions about the impact of salinity if no action is taken. The predictions are based on three scenarios, severe, moderate and low impacts of salinity. The model is based on case study municipalities and best estimates by experts on infrastructure and economic policies.

3.46 The model predicts:

- the impact of salinity on the cost of infrastructure repair and replacement to Local Government;
- the impact of salinity on land values;
- the change in demand on Council's rate revenue for infrastructure expenditure due to salinity induced decline; and
- the change in Council's ability to raise rate revenue due to the impact of salinity on land values.

3.47 The assumptions of the three scenarios and the projected impact on Councils are summarised in Table 2.

TABLE 2: PROJECTIONS OF THE COST OF SALINITY TO LOCAL GOVERNMENT

THE 3 SCENARIOS	IMPACT ON COUNCIL FINANCES AFTER 50 YEARS
Severe impact assumptions: 30% of the land base is affected by salinity. This increases by 3% per year. Land values decline at 10% per year in affected areas. 30% of the infrastructure base is affected. Annual maintenance and renewal costs increase by 13- 15% per year for most areas. Maintenance and renewal of street trees, open space and recreation reserves increase by 100%.	Almost 100% of income is induced by the affects of salinity. The income required to meet infrastructure expenditure has exceeded the value of land by 3.2 to 7.6 times. Land values have declined almost 100%.
Moderate impact assumptions 20% of the land base is affected by salinity. This increases by 2% per year. Land values decline at 5% per year in affected areas. 20% of the infrastructure base is affected. Annual maintenance and renewal costs increase by 8-12% per year for most areas. Maintenance and renewal of street trees, open space and recreation reserves increase by 100%.	About 85% of income is induced by salinity. The income required to meet infrastructure expenditure needs (as a percentage of land value) is 5.3-12.8%. Land values have declined by about 83%.
Low impact assumptions 10% of the land base is affected by salinity. This increases by 1% per year.	37% of income is induced by the affects of salinity. Income as a percentage of land value

	increases 1.33 to 3.23%.
Land values decline at 2.5% per year in affected areas. 10% of the infrastructure base is affected. Annual maintenance and renewal costs increase by 5-10% per year for most areas.	Land values have declined by about 36%.

(pp 3-4:September 2001, RPD Group)

3.48 The report states that the high impact scenario is conservative compared to actual high impact situations in the most seriously affected parts of Australia and that:

> *Application of the model to case study municipalities has demonstrated that, if left unchecked, salinity will become a major future driver of Local Government finances. Salinity will degrade Local Government provided infrastructure, requiring an ever increasing proportion of rate revenue to be dedicated to responding to salinity induced infrastructure repair and replacement requirements. It will also undermine Local Government's ability to raise rate revenue through degrading land value.* (4:September 2000, RPD Group)

3.49 There can be social as well as economic costs to local government areas. The Western Australian State Salinity Strategy comments:

> *Strong adaptive communities are those that can count on the involvement of residents in civic, cultural, social and educational pursuits. As individual landholders feel the pressures caused by salinity problems, they are likely to have less time for community pursuits. The sense of community will begin to erode as involvement declines. If the economic impacts on farming are extreme and people move off the land, the population of some towns may decline. In the past, this has led to withdrawal of services, closure of businesses and decline in the overall quality of life in a community.* (2: September 2000, RPD Group)

WHAT IS BEING DONE BY LOCAL GOVERNMENT TO MANAGE SALINITY?

3.50 The majority of councils in Australia, including in NSW, do not have a systematic, comprehensive or planned approach to addressing salinity. The reasons for this are discussed in this report.

3.51 However, a minority of councils and regional organisations of councils are leading the field in salinity management. These are:

- Wagga Wagga City Council (NSW)
- Coorong District Council (SA)
- Dubbo City Council (NSW)
- Western Sydney Regional Organisation of Councils
- Murray Darling Association.

WAGGA WAGGA CITY COUNCIL

3.52 In 1993, Wagga Wagga was the first town in NSW to recognise that a number of problems that the city was experiencing were linked to salinity. The city has a shallow saline watertable beneath it. Sporting grounds had been abandoned as grass would not grow on the site, trees and vegetation were dying, roads were lasting only 10 years instead of 30 and houses suffered rising damp and the decay of their foundations.

3.53 The Council and DLWC formed a committee with additional representation from EPA, Riverina Water County Council, Charles Sturt University, and Kendall and Sellick engineers.

3.54 The 1994 – 1997 Urban Salinity Action Plan investigated the worst affected areas and mapped the ground water levels across the city. It was funded by the Salt Action Program of the NSW Government, the Council and DLWC.

3.55 It showed that a substantial area of the city had a watertable within two metres of the surface that was impacting on the sustainability of the city. The Urban Landcare Group formed soon after the establishment of the salinity committee.

3.56 The 1997 Mayoral address placed salinity as the fourth highest priority for the Council's budget. The Action Plan for 1997 – 2000 put into place four programs including:

- An education program to raise awareness of the local community of the problem and measures to address it including a directory of Wagga Wagga businesses who can assist customers with salinity questions, a schools salinity program, and community education program.

- A natural resource management plan with a target to revegetate 25 hectares per annum, including an agreement with private landholders for revegetation on their land.

- A leakage reduction program, whereby one-sixth of the city's rubble pits will be removed by 2002, the roof water connected to the storm water system and homes across the area are progressively being tested for leaking water pipes.

- The establishment of a borefield to pump water from under the worst affected areas and discharge it into the river to lower the watertable.

- The Council also has 98 piezometers installed across the catchment to monitor ground water height and to collect samples of ground water for salinity testing.

3.57 The following initiatives are also relevant.

- The following wording has been added to s.149 Planning Certificates that by law are attached to the contract when land or a house is for sale. The Certificates state how the land may be used or zoned.

  The applicant's attention is drawn to the Department of Land and Water Conservation, Wagga Wagga Urban Land and Water Management Plan, Depth to Piezometric Surface Map of May 1997 that indicates potential for urban salinisation at a 1:25,000 scale.

- In 1998 Council adopted the 'Investigation of salinity risk for rezoning applications' policy. This applies to the rezoning of land from rural zones to more intense land use zones. It requires that the environmental study needed for rezoning applications provide an assessment of the current salinity status and the affect the change in land use will have on this salinity status.

- The Council has a draft DCP on Native Vegetation Cover for Rural Residential Subdivisions that specifies the number of trees and shrubs that need to be planted across certain areas of land to be sub-divided for 'hobby-farms'.

- The Revegetation Recharge Areas Scheme funded jointly by Council and the Natural Heritage Trust provides funding to farmers to fence 50 hectares of remnant vegetation and 50 hectares of new plantings using local native plants. The 50 hectares of new plantings have already been achieved.

- Since 1993 Wagga Wagga City Council has contributed $3.2M of its own funds and was successful in securing grants from the former Salt Action Program for $75,000 and from the NHT for $1M.

COORONG DISTRICT COUNCIL

3.58 The Coorong District has a Local Action Plan involving the Coorong District Council which offers incentives to land holders through a NHT grant which it disburses in addition to revenue provided by the Council.

3.59 The Coorong District has 57,000 hectares of salinised land with a further 77,000 hectares at risk within 20 years. The cost of doing nothing has been estimated at $77m over 20 years. Following a three year study into the cause of dryland salinity in the area by CSIRO, the Coorong District Soil Conservation Board, Animal and Plant Control Board and Coorong District Council developed a partnership to deliver a Local Action Plan. The support given by the council has been recognised as a role model for local government in natural resource management.

3.60 The Plan aims to put management practices in place within 10 years that will reduce recharge rates across the district by 50 per cent of the 1994 levels. A series of revegetation options for different land types have been developed. Options have been evaluated in terms of technical feasibility, community acceptance, barriers to adoption, social, environmental and economic benefits and costs and who benefits. Incentive payments are provided to landholders through an NHT grant. Priority is given to areas with shallow water tables and those at risk from land degradation due to agricultural practices and existing areas of native vegetation which offer opportunities for establishing vegetation corridors. Priority is also given to projects with the greatest impact on reducing recharge to groundwater.

3.61 A cost sharing framework was established of 60 per cent on farm, 20 per cent local government and 20 per cent State and Federal governments. Payments are based on a beneficiary pays-principle. The incentives for each project are more complex than this and depend on a calculation of the extent of public benefits from the outcomes of the project. The incentives range from $10 per hectare for the establishment of veldt/primrose pasture to $400 per hectare for the establishment of large blocks of vegetation which meet criteria set out by the committee.

3.62 The grants have the following safeguards to ensure tangible outcomes:

- a legal contract is signed by the landholder prior to the commencement of any works;
- all sites are inspected before commencement and after the completion of works;
- no payments are made until the works are satisfactorily completed and inspected;
- all sites are subject to spot checks by the LAP Committee or its representative and the contract includes provision of access for inspection, demonstration, monitoring and evaluation;
- all sites established to perennials are to be maintained under the perennial system for a period commensurate with the amount of public investment; and
- all LAP funds are audited annually in accordance with the *Local Government Act (SA)*.

3.63 A 1999 study estimated that the total cost of implementing the plan over four years would be $8 million with measurable benefits to the whole Coorong District community of $12 million.

3.64 The incentive program has been highly successful. The report states:

After the first three years of on-ground works it is evident that, in many cases, the farm community is willing to contribute significantly more than the on-farm split.

Funding was initially obtained in 1997 for a one year project piloting the on-ground implementation of perennial vegetation works as identified in the Local Action Plan…The response to the project was overwhelming. The aim was to have 1000 hectares of perennial vegetation established on 25 farms. The actual on-ground works implemented was 2,300 hectares on 50 farms.

3.65 The Coorong District Soil Conservation Board and Animal and Plant Control Board have since realigned their boundaries to match those of the Coorong District Council to provide a more efficient natural resource delivery mechanism.

DUBBO CITY COUNCIL

3.66 Dubbo City Council has been working on the salinity problem since 1995 in partnership with the Troy Gully Landcare Group and DLWC. This has involved investigative work, extensive planning, public awareness and on-ground works.

3.67 Like Wagga Wagga City Council, Dubbo City Council has adopted a strategic management approach to salinity as outlined in its Revised Draft Salinity Management Strategy.

3.68 The aim of the Dubbo Salinity Strategy is *to minimise the impact of salinity on the social, economic and environmental needs of the Dubbo community.* (14:2001)

3.69 The Plan is long term and aims to achieve the following over the next three to five years:

- *identification and mapping of sub-catchments and known recharge areas;*

- *benchmarking, monitoring and reporting;*
- *remediation works in Troy Gully (subject to funding);*
- *city wide data collection and analysis;*
- *public education programs;*
- *development of DCPs and other instruments; and*
- *cooperation and liaison with local government authorities in the upper catchment.*

3.70 The Dubbo Salinity Strategy has three components:

- formation of the Dubbo Salinity Taskforce;
- implementation of the salinity provisions of the Dubbo Environment Management Plan; and
- formation of the upper Macquarie councils' 'Salinity Action Alliance'.

3.71 The Salinity Taskforce comprises the four senior managers with responsibilities for implementing the Dubbo Salinity Management Plan. The Plan identifies a range of actions and responsibilities relating to the management of dryland, irrigation and urban salinity.

3.72 Mapping will be an important initial element. The data from the Central West Catchment Management Committee's Salinity Risk Assessment has been useful for assessing salinity risk and establishing priority areas. However, data at a finer level is needed to address salinity at sub-catchment and property level. Resources are another important element, and the council intends to apply to all, and any, available funding sources. The council recognises the regional scale of the problem and also the changes in funding that are likely to focus on regional scale projects.

3.73 The Salinity Action Alliance , a consortium of 11 local councils, has been formed to develop a regional salinity action project in consultation with the Central West CMB.

WESTERN SYDNEY REGIONAL ORGANISATION OF COUNCILS (WSROC)

3.74 WSROC, represents 10 western Sydney councils. It took up the issue of salinity and has lobbied Federal, NSW and local government for action to address it. In 1999, WSROC established a Salinity Working Party through the WSROC Regional Environmental Management Committee in partnership with DLWC and the former Hawkesbury-Nepean Catchment Management Trust.

3.75 The Working Party has representation from the WSROC councils, also Bankstown, Camden and Campbelltown councils, the Housing Industry Association, Planning NSW, Local Government and Shires Associations (LGSA) and the Office of Western Sydney. It applied successfully for a grant from the Natural Heritage Trust for a Salinity Officer to develop a Salinity Code of Practice for building industry and development.

3.76 The Officer has been recruited and work on the project has commenced.

MURRAY DARLING ASSOCIATION (MDA)

3.77 The membership of the MDA consists of local government, corporate groups and individual members. Funding comes from local government subscriptions, government contributions, members and fees for services, such as seminar attendance and project management.

3.78 The MDA's roles include:

- advocacy on behalf of members on natural resource issues in, or impacting on, the Murray Darling Basin; and
- representation by providing members on steering committees, working parties and/or advisory groups.

3.79 In relation to salinity, the MDA is currently undertaking four main activities.

♦ **Scoping Study**

3.80 The MDA has been funded by the MDBC to conduct a scoping study for which the terms of reference include that it determine:

- the current extent to which local government is involved in ICM in the Murray Darling Basin;
- the needs of local government to be more effectively involved in ICM;
- the key needs of catchment management organisations across the Basin from local government to help implement ICM; and
- the key drivers, key impediments, and opportunities to improving the strategic involvement of local government in natural resource management.

3.81 The report has been provided to the MDBC.

♦ **National Local Government Salinity Summit**

3.82 In July 2001 the MDA, with support from the Australian Local Government Association (ALGA) held a *National Local Government Summit on Salinity* in Moama, NSW, which was underwritten by Sinclair Knight Merz. The Summit, attended by members of this committee, is the first held by local government to address salinity. The committee has tabled a separate report on its attendance at the National Local Government Summit on Salinity.

♦ **Salinity Risk Assessment for the Shire of Buloke**

3.83 The MDA has engaged Sinclair Knight Merz and the RPD Group to provide, at a discounted fee for service, a report on the likely risk to any particular council in relation to salinity and a Local Government Planning Support Tool for Salinity.

3.84 A report was released in August 2001 on its trial in the Buloke Shire in Victoria. It will be further tested in Wakool Shire in NSW. Following an assessment of the process, the

MDA intends to make the service available to any council in the Murray Darling Basin that seeks to participate.

- **Local Government Policy Reform**

3.85 A funding application for an NHT project to provide advice to local government in relation to policy reforms that become necessary to address increased salinity was submitted in all four Basin states. It is reported that the application was only successful in South Australia.

3.86 Work will commence on this project when the scoping study is concluded. DLWC and councils have committed themselves to in-kind support of the project.

4 NSW AND OTHER STATE GOVERNMENT PROGRAMS DESIGNED TO ASSIST COUNCILS TO MANAGE SALINITY

NEW SOUTH WALES

NSW SALINITY STRATEGY

4.1 As discussed in Chapter One, the NSW Government released its Salinity Strategy in August 2000 and provided $52 million for its implementation between 2000 – 2004.

4.2 The NSW Salinity Strategy contains two actions to assist councils to manage salinity. Action 4.5 is to provide a model local environment plan linked to salinity hazard maps which can be adopted by councils to guide development consents. This action is the responsibility of Planning NSW (formerly Department of Urban Affairs and Planning).

4.3 Action 6.2 is to develop a local government salinity initiative. This is the responsibility of the DLWC. The committee was informed that the objectives of the initiative are:

- to raise the awareness of local councils of salinity issues;
- to provide access to information and technical instruments for local government;
- to develop methodologies to assess salinity hazard in urban areas;
- to encourage councils towards the use of a total water recycling approach;
- to facilitate research on building methods and materials that are suitable for saline areas; and
- to develop best practice guidelines for building codes for salinity.

♦ **Memorandum of Understanding**

4.4 As the first step in this process, the former Minister for Land and Water Conservation and Presidents of the Local Government and Shires Associations signed a Memorandum of Understanding on 2 March 2001 to provide for a cooperative approach to managing urban salinity.

The former Minister for Land and Water Conservation stated that DLWC will:

- *help to raise awareness of salinity issues among local councils,*
- *provide advice and information to the Local Government and Shires Associations in assessing salinity hazards,*
- *provide technical information and support on salinity management strategies,*
- *prepare an information kit – with input from the Local Government and Shires Associations – specifically tailored to the needs of local government,*

- *help local councils to link into Catchment Management Boards and other natural resource management committees.*

. . . Under the agreement the Associations will therefore:

- *promote the development of generic planning and development control options which specifically address salinity;*

- *promote the development of salinity-related guidelines on planning, consultation and consent processes, building codes, rating systems, development of local government expertise, resource sharing and other issues,*

- *promote a framework for coordinating salinity management between councils, government departments and other authorities.*

Under the Memorandum of Understanding the three parties will also investigate opportunities to complement and coordinate with activities being carried out nationally and within the Murray Darling Basin. (Media release, 2 March 2001)

4.5 The committee was also informed that a project plan was being developed between the three relevant NSW government agencies and the LGSA.

♦ **Urban Salinity Team**

4.6 DLWC is establishing six 'salt action teams'. One of these teams specifically addresses urban salinity. As at November 2001, the team had been established in western Sydney from where it will provide assistance on urban salinity across NSW. The role of the team will be to liaise between local councils, other relevant parties and reseachers and modellers to identify, standardise and fast-track the information needed.

4.7 The work plan for the team was being finalised in November 2001. The establishment of the team is expected to expedite the local government salinity initiative.

WESTERN AUSTRALIA

WESTERN AUSTRALIAN SALINITY ACTION PLAN

4.8 The Salinity Action Plan was launched in 1996, and has effectively been in operation since March 2000. Recently, the State Salinity Council reviewed the plan and developed a strategy that places greater emphasis on community-based programs. Goals of the strategy are:

- To reduce the rate of degradation of agricultural and public land, and where practical, recover, rehabilitate and manage salt-affected land.

- To protect and restore key water resources to ensure salinity is kept to levels that permit safe potable water supplies in perpetuity.

- To protect and restore high value wetlands, natural vegetation, and maintain natural (biological and physical) diversity within the region.

- To provide communities with the capacity to address salinity issues and to manage the changes brought about by salinity.

- To protect infrastructure affected by salinity.

4.9 The WA Government currently contributes about $40 million a year to salinity management. One of the major investments in salinity management in Western Australia is the Land Monitor Project, a NHT-WA Government initiative to map and monitor the extent of salinity through satellite imagery at the farm and catchment scale. The project aims to provide information about land condition — specifically salinity and the status of remnant vegetation — for the whole of the south-west agricultural region of WA.

STATE SALINITY COUNCIL

4.10 The State Salinity Council has a role in leading and supporting the community in addressing salinity. The council comprises representatives from both community and government stakeholder groups and provides a forum for interaction between them. The Council is an advocate for the community in its dialogue with government.

4.11 The role of the Council is to:

- Provide leadership
- Provide strategic advice to the Cabinet Standing Committee on Salinity Management
- Coordinate decisions and activities between stakeholder groups
- Monitor and evaluate the success of the Salinity Strategy.

4.12 The Chair is appointed by the Government. The executive comprises:

- Chair (same as chair of Council)
- One person with experience in primary production
- One person with experience in regional natural resource management
- One person with experience in local government
- One person with experience in conservation issues
- Three additional members based on merit.

4.13 The chief executive officers of Department of Agriculture, Department of Conservation and Land Management, Department of Environmental Protection and Water and Rivers Commission sit on the executive in an ex officio capacity as full members.

4.14 The council and executive can co-opt people with expertise to help with particular issues - forming working groups. The executive is empowered to manage salinity within the context of the State Salinity Strategy. A set of operating rules governs the operation of the council, executive and other committees.

RURAL TOWNS PROGRAM (RTP)

4.15 In 1997, the WA Government established the RTP under the 1996 Salinity Action Plan. The aim of the program is to help local government authorities develop strategies that will guide the community to address rising watertables in the catchment, establish water use plans for the towns and put education programs in place to promote water wise programs to protect assets. The program provides funding on a shared basis for detailed investigations, development of a salinity management strategy, planning and implementation of salinity and water control measures. More than 40 towns participate in the RTP, and that number is growing.

4.16 The RTP:

- helps local government authorities and communities develop capacity to manage the salinity threat to towns;
- increases self-sufficiency in the treatment of salinity which affects rural infrastructure;
- assists shires to develop specific strategies for controlling salinity and rising water tables;
- provides funding assistance on a 50/50 cost sharing basis for the investigation, planning, design and implementation of salinity control work;
- promotes awareness of townsite salinity and its management; and
- provides technical advice.

4.17 The WA Government allocates $1 million per year to the RTP. For the past three years the Federal Government has also contributed $400,000. Local shires and communities have spent an estimated $1 million per year in the form of matching funds and in-kind contributions.

4.18 The RTP funds on-ground works which, the management committee agrees, contribute to water and salinity management. Some activities may have benefits beyond those and may be considered for funding from other sources.

4.19 The wheatbelt town of Merredin is currently the site of a major trial involving pumping of groundwater, desalination of a proportion of groundwater with the resulting fresh water substituting for piped water from Mundaring Dam, and disposal of saline effluent in an evaporation pond outside the town. The results of the trial may have implications for salinity management throughout rural Western Australia.

SOUTH AUSTRALIA

DEVELOPMENT ASSESSMENT PANELS

4.20 A recent review of the *Development Act 1993* (SA) led to the establishment of a requirement that each council establish a Development Assessment Panel (DAP) to determine development applications, as delegated. Panels are appointed and operate under the *Development Act*, not the *Local Government Act*, and can exercise all of the development assessment functions and powers under the *Development Act*.

4.21 The panel arrangements are to be established by each council, enabling flexibility to suit local circumstances. The *Development Act* requires that each council must establish a Panel and determine:

- the extent of delegations to its panel;
- composition and membership of its panel;
- operating procedures including access to meetings; and
- the reporting requirements.

4.22 The rationale for the changes was:

- to make clear the distinction between the council as planning authority and decision authority;
- to strengthen the role of councils as the planning authority; and
- to simplify the process.

4.23 It was felt that there were potential or actual conflicts of interest where councillors wore both planning and development approval hats. The distinction between the two roles is reflected in the fact that the panels operate under the *Development Act* and not the *Local Government Act*. By being compelled to establish DAPs, councils are able to make independent decisions without undue outside influence from people and organisations with vested interests.

4.24 A panel can consist of council members only or include council staff. The Act also enables councils to appoint people with specific skills who are not council members or staff. For example, the inclusion of an independent person who has specific expertise in water catchment management may assist panels that are regularly considering water issues to make better informed decisions. The Act does not prescribe the number of members on a panel, but Planning SA suggests somewhere between 5-9 people would be the appropriate number for many councils. To ensure delegations to their panel remain appropriate and relevant, councils must review them at least once a year.

4.25 Councils also have the option of establishing *regional development assessment panels* (RDAP) with adjoining councils. RDAPs enable councils to share resources and could focus on significant development applications which have a regional impact beyond a single council area.

4.26 The committee is not aware that any RDAPs have been formed to date. It is probably still early days with the new system. Most councils are most likely trying to bed down their own DAP.

VICTORIA

SALINITY MANAGEMENT OVERLAY

4.27 The Victoria Planning Provisions (VPP) is a set of standard planning provisions and provides a standard format for all Victorian planning schemes. It provides the framework, standard provisions and State planning policy. The planning authority

(usually the municipal council) must provide the local planning policy content, including a Municipal Strategic Statement, and select the appropriate zones and overlays from the VPP, for inclusion in their planning scheme. The VPP also has references to a number of incorporated documents.

4.28 When any provision in the VPP is amended, all planning schemes containing that provision are also amended. Only the Minister for Planning can amend the VPP.

4.29 The suite of 25 standard zones in the VPP has been designed to be more flexible than previous zones. More uses are able to obtain a permit than in the past and fewer uses are prohibited. This approach however reinforces the need for State and Local Policy Frameworks to provide clear guidance for decision makers and applicants alike. Under this system, councils must select zones and overlays only from the VPP.

4.30 Overlays generally refer to the development of land. An overlay is also a planning provision, but one which is in addition to the zone provision. Overlays ensure that important aspects of the land are recognised (such as areas of significant vegetation or special heritage significance). Overlays indicate the type of development and/or protection which may be appropriate in that area.

4.31 The requirement of any overlays apply in addition to the requirements of the zone, with neither being more important than the other. There are 22 standard overlays for new Planning Schemes to use. Any particular Planning Scheme uses only those overlays which are relevant to its area. When land has more than one important aspect, multiple overlays can be used. The application of overlays is not mandatory.

4.32 The Salinity Management Overlay (SMO) is designed to

- implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies;
- identify land that is subject to significant salinity, including areas subject to saline groundwater discharge of high groundwater discharge;
- encourage revegetation of areas which contribute to salinity;
- encourage development to be undertaken in a manner which brings about a reduction in salinity recharge;
- ensure development is compatible with site capability and the retention of vegetation, and complies with the objectives of any salinity management for the area; and
- prevent damage to buildings and infrastructure from saline discharge and high watertables.

4.33 The SMO can be applied by planning authorities over land that has been investigated and technically justified as being subject to (or under threat of) salinity. It can be placed over any underlying land use zoning imposed through the VPP and introduces planning control through a planning permit process. It is important to note that utilising the SMO is strictly voluntary. Only nine councils have used the SMO, despite the fact that many more have saline affected land in their jurisdiction.

4.34 Most planning authorities have applied the SMO upon the expert advice received from authorities such as the Department of Natural Resources and Environment or the relevant Catchment Management Authority. Some councils have not had the hard data available to accurately identify the extent of areas within their municipality affected by salinity when the VPP was first introduced into Victoria in 1996.

4.35 A review is under way to identify improvements to the way the Victorian planning system addresses salinity, including an examination of the SMO. Issues include:

- in Victoria, only nine councils have used the SMO in their format planning schemes, despite the fact that salinity is widespread, and
- local planners should have access to mapping which shows salinity risk areas when making decisions under the planning scheme for new uses and developments.

4.36 Among the tasks which have been identified for completion are:

- in conjunction with the Department of Natural Resources and Environment, identify information which should be mapped to assist councils in making land use decisions, and prepare an inventory of what information is already available; and
- review of the State Planning Policy Framework to ensure it supports the objectives of Victoria's Salinity Management Framework.

PART 2 – BARRIERS TO THE INVOLVEMENT OF COUNCILS IN SALINITY MANAGEMENT

5 THE ROLE OF LOCAL GOVERNMENT IN MANAGING SALINITY

5.1 There is a consensus that salinity often has regional causes and impacts and needs to be addressed at a regional scale. Across Australia, catchment management organisations have been (or are being) established which will play the planning and coordinating role in natural resource management at a regional level.

5.2 The LGSA has expressed its concern that local government is being marginalised in the establishment of these new regional structures. The LGSA has suggested that councils, rather than CMBs, should play the regional planning and coordinating role in the management of salinity through regional consortia of councils.

> *Discussion documents produced in recent years by Commonwealth and State Governments on natural resource issues, including salinity, generally refer to regional level approaches rather than local ones. In such documents as the Murray Darling Basin Commission's Draft Integrated Catchment Management Policy Statement and Draft Basin Salinity Management Strategy, and the NSW Salinity Strategy, there is much discussion of regional approaches to strategic management. Local Government generally is not mentioned outside the context of implementation responsibilities.*
>
> *The rhetoric of these documents suggests to Local Government that the national and state spheres have in mind the establishment of a fourth 'regional' sphere to manage natural resources. Rarely do these documents define what is meant by regions or regional approaches, but Local Government is concerned that the choice of words and the absence of references to local governance, are deliberate.*
>
> *This is not to say that Local Government rejects the need for a regional approach to salinity management. On the contrary, dryland and riverine salinity in particular, are issues of such scale that their management transcends an exclusively local approach. In concert with the national and state spheres of government, Local Government proposes that these aspects of salinity be managed through a partnership of all governments through regional partnerships of local governments.* (Submission 20: Local Government and Shires Association)

5.3 The LGSA sees the following benefits in having consortia or regional partnerships of councils planning natural resource management:

- *It would reduce the cost of administration;*
- *It would reduce complexity of regulation through the creation of a single agency dealing with natural resource and environmental management at the local and regional level; and*
- *It would provide a democratically elected form of input into these processes.* (Submission 20)

5.4 The committee agrees that these would be the advantages of councils being responsible for catchment management. However, there would also be disadvantages in this arrangement.

BARRIERS OF SIZE AND COUNCIL BOUNDARIES

5.5 Regional partnerships of councils may not have the long-term stability or resources to drive regional action on an issue of national priority such as salinity. The National Local Government Biodiversity Survey, published in 2000, showed that only 86 councils nationally are involved in a regional planning process and that councils noted that regionally based partnerships are becoming increasingly difficult to undertake in rural and remote areas. (RPD Group, January 2001, pp16-17)

5.6 The committee has considered this matter and finds that regional partnerships have much to contribute, they would not be a substitute for CMBs. Regional partnerships of councils are unlikely to overcome the difficulty that there are often many councils in one catchment. Each council has its own policies, plans and priorities. Furthermore, the uneven distribution of the cost burden of salinity would be likely to lead to gridlock between councils on hard decisions on equity issues. Planning NSW states:

Councils have had difficulty in dealing with regional problems that extend beyond their local boundaries. Salinity is a good example in this regard. In some areas of the State councils have also had some difficulty in reaching a regional consensus. (correspondence 13 November 2001)

5.7 The size of many councils in rural areas means that they do not have the 'critical mass' in terms of revenue or employment of professional staff to manage natural resources. Environs Australia, the local government environment network, says in its submission to the House of Representatives Standing Committee on Environment and Heritage that:

There are great differences between the level of commitment, interest and capacity. Compare, say a high rate base urban council that is well educated and has a whole lot of factors that encourages it to commit to sustainable initiatives with a small wheat belt council that might have ten staff, a rate base of $3 million and all the pressures. It is barely dealing with its own roads. (*Public Good Conservation: Our Challenge for the 21st Century* p171: September 2001)

5.8 While councils lack the capacity to take on regional roles and service delivery it is likely that new institutional structures will be created to take on these roles. The Commonwealth Government in the *Local Government National Report* states, for instance, that:

Without change, councils face the possibility of an ever diminishing role as individual services are contracted out to the private or voluntary sectors, other concerns, such as the environment, are addressed by special interest groups or agencies. These changes can undermine local democracy and reduce service integration. (p41)

5.9 One approach that has been suggested for overcoming these problems is the amalgamation of councils to match natural resource boundaries.

5.10 The report, *Public Good Conservation: Our Challenge of the 21st Century,* by the House of Representatives Standing Committee on Environment and Heritage, notes that local government's role in natural resource management is limited by existing boundaries:

This committee has noted an impediment that may prevent local government being as effective as it could be: boundaries may not coincide with ecological divisions, which can lead to coordination problems and less effective administration. It may also lead to higher administrative costs. (p151: September 2001)

5.11 It recommends that council boundaries match ecological divisions:

This committee has recommended that local government boundaries be aligned with ecological divisions and that state governments ensure that local governments exercise their powers so that they are consistent with national principles and targets for the ecologically sustainable use of Australia's catchment systems. (p151:September 2001)

5.12 In New Zealand the *Resource Management Act 1991* integrated the management of natural resources and land use planning. It replaced 59 previous resource and planning statutes combining the management of land, air, water, coastal environment, geothermal and pollution. The Act has the single purpose of promoting the sustainable management of natural and physical resources. What is noteworthy here is that the Act was preceded by the reform of local government which rationalised 800 councils down to 88, including 16 regional authorities with resource management functions based principally on catchment boundaries. (NSW Parliamentary Library Research Service, Briefing Paper 13/99)

5.13 Both the Federal and NSW Governments support the voluntary structural reform of councils. The Federal Government support for structural reform includes:

- cooperative service provision;
- resource sharing;
- joint service delivery enterprises;
- boundary change; and
- amalgamations.

5.14 Under the Local Government Development Program, $1.3 million was provided to facilitate structural reform. The Commonwealth Government believes that larger councils deliver more cost-effective services, can offer a wider range and higher quality of services, can contribute to economic development and permit councils to employ a wider range of professionals.

5.15 The Local Government National Report says:

In South Australia, voluntary amalgamation of councils reduced council numbers from 118 to 68. As anticipated, council employment has remained stable as most elected to retain staff and use the savings to improve services. (p42)

5.16 The NSW Government also supports the amalgamation of councils. The *Local Government Amendment (Amalgamations and Boundary changes) Act 1999 (NSW)* aims to streamline the process of voluntary mergers. A proposal to amalgamate council areas or alter their boundaries can be made by the Minister, by relevant councils or by electors. The Minister must refer any proposals for amalgamations or boundary changes to the Boundaries Commission or Director-General for examination and report. In turn, they must seek the views of electors.

5.17 There is nothing in the *Local Government Amendment (Amalgamations and Boundary changes) Act 1999* (NSW) which prevents electors or councils from proposing that councils amalgamate on catchment boundaries. In fact, the Boundaries Commission received a submission in relation to the proposed amalgamation of Armidale and Dumaresq Councils from the UNESCO Institute for Bioregional Resource Management at the University of New England. The proposal is for regional local government based on bioregions and for a set of bioregions to form an eco-region (ie the whole of the New England Tableland). It is proposed that there be a main regional office for all NSW/Commonwealth government services at the ecoregional level. The Institute notes that internationally areas where social, political and ecological boundaries match, such as the alpine grazing system around the Swiss town of Torbel or the Spanish huertas grazing-irrigation system, have been more successful and sustainable.

5.18 However, Cr Mike Montgomery, president of the Shires Association, does not believe that it is possible for council boundaries to match natural resource boundaries:

> ***Cr MONTGOMERY:*** *Frankly, there may be some opportunity for council boundaries to equate to catchment boundaries, but it would be extremely rare for that to occur. I come from the Moree plains, I live half an hour north of Moree, I am in the Border River Catchment. As the crow flies I am probably 20 kilometres from Moree, which is in the Gwydir valley, but I am in the Border Catchment. It would be impossible for our boundaries to be adjusted so that we only take into account one catchment.* (Transcript of Evidence, 29 November 2001, p19)

5.19 The committee agrees that larger councils would be in a better position to play a key role in the management of natural resources. However, council amalgamations are a difficult issue, particularly in rural areas. There may be local economic and employment impacts on towns which lose council administrative centres, even when there is a net regional benefit. The committee also acknowledges the issues raised by Cr Montgomery at the public hearings:

> ***Cr MONTGOMERY:*** *Any opportunity to amalgamate councils is seen as a thrust from State Government and certainly you will find that the people will be rather sceptical about motives when people are being brought into collective or regional groups*. (Transcript of Evidence, 29 November 2001, p19)

5.20 The committee considered these issues at length and is of the view that matching council boundaries to natural resource management boundaries is unlikely to be practical. The question of amalgamations to form larger and better resourced councils is a matter which must be determined by local government and ratepayers.

5.21 The committee suggests that the Local Government and Shires Association places the future role of councils in regional matters, including natural resource management, on the agenda of the Annual General Meeting and National General Assembly.

SUMMARY

5.22 The committee finds that councils are not currently in a position to substitute for CMBs. Nevertheless, local government does have an important role to play in the management of salinity for four key reasons.

1. The committee has been advised that the financial impact of salinity on councils' infrastructure and assets may be as great, or greater, than the impact on agriculture. Ratepayers will be required to contribute towards the damage bill and to measures to address salinity. Addressing salinity damage to local roads, for example, which are paid for by ratepayers, will often require a catchment wide approach because the causes in many landscapes are at a catchment scale. Fixing roads in most landscapes cannot occur in isolation from catchment management activities. CMBs have neither the power nor expertise to direct councils on road maintenance. Councils and CMBs will need to work together to coordinate the response and as councils have statutory responsibility for local roads they will need to be in a position to negotiate suitable approaches.

2. The interests of local communities, therefore, need to be addressed as part of the catchment planning process but currently they are disenfranchised.

3. Land uses in urban areas contribute to salinity problems. The extent of the contribution by urban land users depends on the groundwater system.

4. Councils have powers and responsibilities across a range of functions important to the management of salinity.

5.23 Councils, therefore, need formal input into catchment management planning.

5.24 Councils are very diverse in their size and situation. However, the committee believes that all councils have an important role to play in managing salinity through their core functions of land use planning, water supply, sewerage and stormwater and road building and maintenance.

5.25 The committee also believes that larger councils can play additional roles in the management of salinity by:

- raising community awareness and facilitating community participation in salinity management;
- revegetation of council owned and administered land;
- offering incentives for land use change eg rate rebates, devolved grants, which may complement incentives offered by other agencies; and
- business ventures which address salinity such as environmental services provided by trees or commercial forestry on council owned land, and salt harvesting warrant consideration.

5.26 These options for salinity management are discussed in this report.

5.27 The committee finds that while some NSW councils have initiatives or projects in place, managing salinity is not currently regarded by councils as part of their core business, with the exception of Wagga Wagga City Council, Dubbo City Council and the WSROC. The long-term involvement of councils will require a specific program to build their capacity to manage natural resources. The elements of this approach are discussed in Chapter Four.

5.28 The committee has identified a number of barriers to the important role which councils can play in managing salinity. These are discussed in Chapter Six.

6 OTHER BARRIERS

ENGAGING COUNCILS ON A STRATEGIC LEVEL

6.1 The Commonwealth, State and Territory governments recognise that salinity is a national problem. The effects of salinity cross State boundaries and impact on States downstream in the Murray Darling Basin.

NATIONAL LEVEL

6.2 The policy approach to the management of salinity has been developed by the Commonwealth and States through the Murray Darling Basin Ministerial Council (MDBMC), the and Agricultural and Resource Management Council of Australia and New Zealand (ARMCANZ) and Australian and New Zealand Environment and Conservation Council (ANZECC). The Commonwealth Government is negotiating bilateral agreements with the Sstates on the NAP for Salinity and Water Quality.

6.3 As the RPD Group note in their report, *Enhancing the Capacity of Local Government to Contribute to the Management of Dryland Salinity*, the agenda has advanced a long way without the involvement of local government on a strategic level. While local government is not currently in a position to substitute for CMBs, consultation arrangements need to reflect the status of councils as a level of government.

6.4 Local government has not been represented on intergovernmental natural resource management committees such as ARMCANZ, ANZECC, or the MDBMC. However, ALGA is represented on the MDBC's Community Advisory Committee. Local government has not been involved in negotiations on the NAP. As a result, they do not feel valued as equal partners and this has limited the extent to which they have engaged with the challenge of addressing salinity.

6.5 In its submission to this inquiry, the LGSA states:

> *Local Government accepts that, in partnership, the national sphere is responsible for identifying national strategies and programs and for negotiating for their implementation by funding work at the State and local level, and that the State sphere manages programs by distributing funds and monitoring their expenditure and achievement of outcomes. The local sphere is best to manage and implement on-the-ground activity and to negotiate with local communities for the acceptance and achievement of goals.*
>
> *this pattern is recognised generally in the discussion of natural resource management issues, including salinity, the role of strategic policy and program formulation is consistently allocated to the national and State spheres to the exclusion of the local sphere. In effect, local government does not have a seat at the table, only a place in the field.*
>
> *This exclusion from the partnership results in the disenfranchisement of local communities in decision-making processes, a lowering of morale of local governments and an under-valuing of their capacity to contribute towards identifying solutions to problems…*
>
> *Local Government is a key partner in managing all aspects of salinity and stakes a claim to be an equal partner with the national and state governments when national approaches to salinity management are formulated.* (Submission 20)

6.6 The committee is pleased to note the decision of the Prime Minister to invite the president of ALGA to attend as an observer at the National Resource Management Ministerial Council (NRMMC) which subsumes the natural resource management issues from ARMCANZ, ANZECC, and Ministerial Council on Forestry, Fisheries and Aquaculture (MCFFA). The NRMMC had its first meeting on 31 August 2001.

6.7 ALGA is committed to building the capacity of local government to play a greater role in managing natural resources in the future.

6.8 In November 1999 the National General Assembly of the ALGA passed the following resolution:

That the National General Assembly of the Australian Local Government Association recognises that dryland salinity is an increasing problem in many areas of Australia and if unchecked has the capacity to:

- *Severely affect regional productivity*
- *Lead to substantial increases in the cost of maintaining physical infrastructure*
- *Threaten Australia's biodiversity*
- *Have such a significant impact on water quality that some streams could become unusable*
- *Impact adversely on the standard of living of many of our communities*
- *Result in serious degradation of the landscape*
- *Lead to massive land use change.*

That Local Government has a key role in addressing dryland salinity which should be acknowledged

That Local Government can, and should, in partnership with other spheres of government, make a positive contribution to addressing problems caused by dryland salinity both locally and regionally. (NDSP Local Government Project 2000 information sheet)

6.9 The President of ALGA is also represented on the Local Government Ministers' Conference and is therefore in a position to ensure that the role for councils in managing salinity is on both national agendas.

6.10 CSIRO addressed the annual National General Assembly of local government in November 2001 to initiate a period of discussion among councils nationally on their future role in the management of natural resources.

RECOMMENDATION 1: That the Premier request that the Prime Minister invite the Australian Local Government Association to be a full participating member of the Natural Resource Management Ministerial Council to bring together the three levels of Australian government to address the natural resource management challenges which face Australia.

CATCHMENT LEVEL

♦ Catchment Management Boards with a funding role

6.11 The committee believes that the integration of catchment management and land-use planning is important to achieving results in land use change. This is discussed in more detail later in this chapter. The committee was informed that the integration of catchment and land-use planning has not been achieved in any Australian state, at this stage. During a roundtable discussion between policy experts and the committee, Professor David Farrier, of the Centre for Conservation Biology and Law at the University of Wollongong, stated:

> ***Prof: FARRIER:*** *I agree that generally they* [catchment management organisations] *are moving in a much better direction in South Australia and Victoria, but they still have not sorted out the relationship between local council land use planning and catchment planning. The catchment plan is still not flowing through into local land use plans. They have provisions in the legislation; they are not used. Catchment organisations still go cap in hand. Again you are dealing with two different ministers, one minister going to another minister and saying, well, I want you to get your council to change this plan. So I think you have to work more effectively at integrating the catchment body, whatever it is, and local government.* (Transcript of Evidence, 21 September 2001, p 19)

6.12 However, it was noted that in States where catchment management organisations manage funds there has been closer cooperation with councils. Trevor Budge, director of the RPD Group and author of *Enhancing the Capacity of Local Government to Contribute to the Management of Dryland Salinity,* explained the situation in Victoria:

> ***Mr BUDGE:*** *In no way am I suggesting that the catchment management system that is operating in Victoria is anywhere near perfect and that we would not need substantial vision, but I want to indicate how that became the circuit breaker in Victoria, because it did three things.*
>
> *First of all, it created regional and local accountability for spending money. There was sufficient money allocated at the regional level, where the region would have to make the decision. Most of the catchment management authorities would be allocating $100 million. In other words, they were suddenly accountable and they could not blame anyone else if they spent the money the wrong way.*
>
> *The second thing they did was they raised enormously the awareness of the issue as a catchment issue…….they raised it in terms of you are sitting in a catchment and you have got the same people around the table, but in fact if you give them money to spend, they have to suddenly work out whether they are going to spend it at the top of the catchment, the bottom of the catchment, where they are going to allocate it.*
>
> *The third thing they did, and this is really starting to emerge now as the real driver, and that is that they have linked natural resource management with the economic development future of the region, and suddenly people have realised that they are actually there for the long haul because the economy is going to be very much driven by how you handle some of the big picture natural resource management issues. That is what has brought local government on board in the CMA's, because they have suddenly realised that there is an enormous economic driver.* (Transcript of Evidence, 21 September 2001, p18)

6.13 At the roundtable discussion, Professor Mike Young, director of the Policy and Research Unit at the CSIRO, explained the catchment management approach in South Australia, where local government collects levies for the catchment boards:

> ***Prof. YOUNG:*** *In South Australia we have catchment boards that have levies, the plans are statutory, and they have professional staff…….Catchment boards put together plans for five or ten years with the certainty that, through the levy, they have the revenue for that period of time so they can sign contracts for that length of time, and the State is committed to making these catchment boards manage catchments…….A Parliamentary finance committee, which is a sub-committee of the Parliament, has to approve the plans……...At the time it introduced the entire levy system it set up a whole hot-line expecting to have copious complaints and staffed it all. They had two complaints, two phone calls came in.*
>
> *...one of the important things is that local governments collect the levy. This is very important. Local government collects the levy on behalf of the catchment boards, so you are already starting to bolt them together, and they have set up a whole pile of institutional arrangements to engage local government and get the plans becoming consistent. Part of the strategy from day one was to bolt them together, and the way it was communicated to the community, and getting local government as the financier of the catchment management process was critical to getting local acceptance.* (Transcript of Evidence, 21 September 2001, p20)

- **Relationship of councils to Catchment Management Boards which do not manage funds**

6.14 In NSW, CMBs do not manage funds and there have to be other ways of engaging councils. The committee notes that the Lachlan Catchment Management Board and probably other boards, with which the committee has not spoken, do consult councils not represented on the board. However useful, this does not address the structural issue. There are no structures or processes that bolt CMBs and councils together in NSW and currently there is no integration between land use planning and catchment plans.

6.15 Under its PlanFIRST reforms, the NSW Government intends to pick up Catchment Management Blueprints in regional plans developed by regional forums which will be implemented by councils through new LEPs. The committee has been informed that the complete roll-out of PlanFIRST will take five years, subject to the resources being available to implement the program. Catchment Management Blueprints were released for public comment by 30 April 2002. There need to be interim measures to begin to integrate them with land-use planning.

6.16 The NSW Government introduced the *Catchment Management Amendment Bill* which was to give Catchment Management Blueprints a statutory basis. The Bill was withdrawn to make way for further consultation. However, Planning NSW advised that the Bill has no direct implications for councils:

> *There are no direct implications for councils because they remain responsible for local planning. The proposed amendment does not propose any powers over council actions or for catchment plans to over-ride LEPs. (Response to questions on notice, 20 December 2001)*

Formal Input by Councils into Catchment Management Blueprints

6.17 As a first step towards the integration of catchment management and land-use planning, councils need formal input into Catchment Management Blueprints, parts of which they will be implementing.

6.18 Local government is represented on the NSW State Catchment Management Coordinating Committee (SCMCC) which provides a central coordinating mechanism for total catchment management throughout NSW. Local Government is also represented on the Native Vegetation Advisory Committee, the Water Advisory Committee and CMBs in NSW.

6.19 However, councils have raised concerns about the nature of their representation on such committees, particularly CMBs. In its submission, the LGSA noted:

> *Discussion documents produced in recent years by Commonwealth and State Governments on natural resource issues, including salinity, generally refer to regional level approaches rather than local ones…Local Government generally is not mentioned outside the context of implementation.*
>
> *The rhetoric of these documents suggests to Local Government that the national and state spheres have in mind the establishment of a fourth regional sphere to manage natural resources. Rarely do these documents define what is meant by regions or regional approaches, but Local Government is concerned that the choice of words and the absence of references to local governance, are deliberate.* (Submission 20)

6.20 There are three local government representatives on CMBs but the number of councils in a catchment can be as great as 30. DLWC states that the average number of councils in a catchment outside of Sydney is seven (correspondence 23 November 2001) Furthermore, local government nominees to CMBs are included as individuals with 'local government expertise'. They do not represent particular councils and there is no formal structure for councils, which are not represented on the Board, to have input into the Plan at Board level.

6.21 At the public hearings, Cr Montgomery, in answering a question on whether shire councils were being included in the process by CMBs, stated:

> ***Cr MONTGOMERY:*** *Certainly local government is being engaged. I would not say that local councils are being engaged. There is local government representation on the boards, as there have been on a number of the natural resource management committees, but two members of local government in an area that is covering 14 or 15 councils, with no formal structure on how those representatives are to report back to their constituent members, the people they represent is not representation. It is certainly not adequate.* (Transcript of Evidence, 29 November 2001, p17)

6.22 A similar issue occurs with the proposed regional planning forums. Professor Farrier, an expert on environmental planning, explained to the committee:

> ***Prof. FARRIER:*** *[T}hey* [NSW Government] *are going to incorporate provisions from other plans, that is Vegetation Management Plans, Water Management Plans, and Catchment Management Plans, and that is where councils have got to, in theory, be a little bit concerned. These will set the framework for local environment plans, so again, although councils will be represented on the regional forum, as they are indeed represented on the*

Water Management Committee and the Catchment Board, they only have a place at the table. (Transcript of Evidence, 21 September 2001, p14).

6.23 Regional Forums will have five representatives from councils. The number of councils in a region will vary from two (Central Coast) to 19 (New England). Most regions have between 10 to 13 councils. These representatives will represent the interests of local government rather than representing their councils. In response to a question from the committee on how it will engage councils not represented on the regional forums, Planning NSW provided the following information:

Where not every council in a region can be represented, the Regional Organisation of Councils (ROC) for that region will nominate councils to represent the interests of local government. Where no ROC exists, councils in the region will nominate a suitable representative and a local government advisory committee can be established to provide advice on the preparation of a regional strategy… Each council, whether on the forum or not, will have an opportunity to make its own submission on the draft strategies during the proposed consultation phases. It is proposed that consultation will occur before the strategies are developed, and during their preparation as well as after the draft document is prepared.

The situation with councils is similar to other stakeholder groups, not all of whom will be able to be represented directly on individual forums. (Correspondence, 13 November 2001)

6.24 Councils are not being treated as a level of government, they are not being treated as partners in the management of salinity and furthermore are being prevented from working through issues which impact on local communities in the development and implementation of Catchment Management Blueprints. The President of the Shires Association expressed this concern to the committee:

Cr MONTGOMERY: *[L]ocal government takes the position that we are not a sectional interest. While we are water users, we should not be seen simply as a representative on a committee, as an irrigator would for example. Our purview is much broader that that. We need to look after the socio-economic effects of any legislation …*

Local government needs to have a role that is outside of that process of the catchment management boards, for example, where we can have a greater say in draft plans that are put up and given the appropriate time to look at those so we can comment in a way that is constructive …

There are plenty of people advocating for the environment and there is no-one advocating for the social part of the equation, and really that has to be local government, because we are the people out there who have to pick up the pieces of communities when decisions are made that impact upon them. (Transcript of Evidence, 29 November 2001, p18)

6.25 There will be conflicting interests between councils in a region that will have to be worked through in integrating Catchment Management Blueprints and Regional Strategies with land use planning.

6.26 The current arrangements undermine local democracy by denying councils the right to represent the interests of residents on matters which will affect them. Secondary salinity caused by agricultural land use change will impact heavily on council infrastructure paid for by residents through rates and taxes and also on houses in salinity discharge areas.

6.27 In evidence, Mr Clive Johnson, chairman of the Lachlan Catchment Management Board, told the committee:

> ***Mr JOHNSON:*** *We have got urban salinity in every town in the Lachlan except two I believe, Blayney and Hillston. I think they are the only two that we have not got urban salinity in. This is a major cost. All the hotel cellars are filling with water and have to be pumped out daily or every two days; buildings are starting to fall down. You have enormous social cost there. You have the roads, as I say, at Young, the infrastructure, concrete is just breaking down, even the bridges. They will have to use marine concrete. We are not in the sea.* (Transcript of Evidence, 29 November 2001, p3)

6.28 Councils in recharge areas will inevitably be asked to impose land use restrictions which some residents may object to.

6.29 It should be noted that this issue of representation is characteristic of natural resource management generally, not only of salinity. committee members attended the Australian Association of Natural Resource Management Conference in Dubbo in November 2001. Stuart Little, an employee of Planning NSW, delivered a paper, *The Native Vegetation Conservation Act and the Environmental Planning and Assessment Act: Improving the Links* [the views are not necessarily those of Planning NSW or the NSW Government]. He states :

> *Currently local government is only afforded one position on a RVC [Regional Vegetation Committee], irrespective of how many LGAs are implicated in the region and will be affected by the RVMP [Regional Vegetation Management Plan]. This single local government representative may not adequately represent the interests of all the LGAs covered by the region. The representative is also commonly a mayor or elected councillor. They may not have any relevant planning experience necessary for the RVMP preparation. The ability of local government to contribute to a Plan which will directly affect their local planning provisions (LEPs), is therefore limited.* (p7)

6.30 Councils should have high level input into Catchment Management Blueprints. Consultation arrangements need to reflect the status of councils as a level of government. However, at the end of the day the hard decisions must be made in the regional interest. While the interests of councils need working through, councils should not be in a position to subject CMBs or Regional Forums to gridlock.

6.31 The committee believes that the appropriate mechanism for councils to work through their interests would be a regional grouping of councils which could provide a nominee to the CMB and Regional Forums to represent the collective view of the member councils and to up-date them on relevant developments by the CMB. Given the size of some catchments, there would need to be several such regional groupings providing a nominee to the Catchment Management Board and Regional Forums.

6.32 Whether new or existing regional groups of councils are used is a matter for councils to determine. However, the following models were suggested formally and informally to the committee.

Regional Organisations of Councils

6.33 A number of areas have regional organisations of councils (ROCs). ROCs deal with many issues of concern to councils.

6.34 A difficulty for existing ROCs as the basis for high level input to catchment planning processes is that they are not structured on catchment boundaries. This makes it difficult for all councils in a particular catchment to get together to discuss catchment and land use planning matters as some may be on one ROC and some on another. Also some may not be represented on any ROC.

6.35 Another issue for ROCs is that the boundaries for various natural resource management planning processes are different. The committee understands that there are around 125 natural resource management committees in NSW with representation from councils and that the boundaries covered by these committees are not consistent. Catchments are the basis for some natural resource committees and plans. However, other committees are based on Local Government Areas, or parts of Local Government Areas based on biogeographic regions.

Regional alliances

6.36 In order to address this councils in the upper part of the Macquarie catchment have formed a single purpose regional alliance to address salinity. The alliance means that councils can align themselves more effectively with CMBs. In a paper to the National Local Government Summit on Salinity, Ken Rogers of Dubbo City Council states:

> *There are pretty strong arguments for local government councils to form regional natural resource alliances based on catchment areas. Such regional alliances should have two primary objectives, one to equally represent all stakeholders and two, to focus primarily on physically addressing NRM issues such as salinity 'on the ground'.* (Dubbo City Council, p7)

6.37 There are 25 councils in the Central West Catchment, an area of 92,200km with Oberon at the upstream end and Bourke at the downstream end.

6.38 Dubbo City Council is establishing a regional consortium of councils based on the upper part of the catchment. The Council has applied for an NHT grant for a salinity project officer to develop the project. The Salinity Action Alliance, as it is known, will develop linkages with the regional organisations of councils in the area.

6.39 Dubbo City Council also proposes that the Alliance develop salinity action projects which can be accredited under the Commonwealth Government's NAP arrangements so that the Alliance can access funding.

6.40 In a letter to Dubbo City Council, the chairman of the Central West CMB, wrote:

> *It will be through the formation of organisations such as yours that we will be able to facilitate and achieve the wide landscape change that is necessary. The regional partnership that you have formed will be integral in the implementation of the recommended strategies developed by the CWCMB….. The CWCMB hopes that your organisation will take this opportunity to comment and contribute to the direction of the Board's planning.* (Dubbo City Council, p9)

Joint committees and county councils

6.41 Joint committees and county councils are another model which was suggested to the committee.

6.42 Under the *Local Government Act 1993* the Minister can establish county councils to deliver services such as water supply and weed control. County councils:

- deal with natural resource management issues (eg water supply, weed control);
- have a regional focus;
- have a statutory basis under the *Local Government Act 1993*; and
- raise funds through rates, charges, levies and sometimes commercial activities.

6.43 The county council model has the benefit that the county councils could hold regional funds to undertake works to address salinity, raise part of their funding through rates, levies and/or service charges, employ staff and have a statutory basis. Residents are also familiar with the role of county councils and therefore would be more likely to accept additional charges and levies, if supported by a community education program which explains the benefits to them.

6.44 County councils responsible for managing salinity could be established by the Minister for Local Government to carry out actions required under Catchment Management Blueprints. Councils already have a general power to establish joint committees to undertake activities, works and services and may raise funds individually for expenditure on joint works across council boundaries. The capacity of joint committees is similar to county councils.

6.45 County councils or joint committees could be invited to nominate a representative to the CMBs.

6.46 DLWC is examining this issue. At the public hearings, Mr John Verhoeven, representating DLWC, informed the committee:

> ***Mr VOERHOVEN**: [Y}ou are correct, the members are representing councils generally, they are not representing either themselves or their particular council, and it is an issue that has been put to us throughout this year as well and certainly been put to the Minister when the Catchment Management Amendment Bill was tabled in the House, people started to look at the percentages there as well. Councils could establish regional groupings and that might be one useful way that they have actually got forums to meet regularly between meetings of the Catchment Management Boards to download information, to look at the implications for local government and to prepare position papers or positions to take back to the boards, so that in fact the members on the boards are speaking for local government generally, not just for themselves, and those alliances could in fact be sub-committees of the board, so the board with the prompting of local government, could say, well, we will actually formalise this as a sub-committee, so you have that direct link and recognition. Another possible model could be the greater use of regional organisations of councils, although there might be boundary issues with that, the boundaries of the ROCS may not align with those of the catchment management boards … Another that we have looked at, and at this stage we are just looking at different possibilities, is the establishment of county councils to carry out the management actions in the catchment management plans …* (Transcript of Evidence, 28 November 2001, p17)

6.47 The interests of all councils in a catchment should be represented on CMBs. The committee is of the view that DLWC should organise a process where all councils in a catchment nominate councillors to the CMBs and that councils then vote for a maximum of four representatives. The mechanism through which councils develop their collective input to catchment management planning and channel these views to their representatives is a matter for them to determine.

RECOMMENDATION 2: That the Minister for Land and Water Conservation amend the representation of local government on Catchment Management Boards to provide councils with the opportunity to represent the interests of residents through a maximum of four representatives.

RECOMMENDATION 3: That the Department of Land and Water Conservation recommend a process whereby all councils in a catchment nominate and vote for councillors on each Catchment Management Board, to a maximum of four. The number of representatives to be determined by the size of the catchment and the number of councils within that catchment.

The need to streamline natural resource management committees

6.48 The DLWC paper *Strengthening Catchment Management in NSW* states that there were a growing number of natural resource management committees:

- 45 Catchment Management Committees;
- 5 Regional Catchment Committees;
- 22 water management committees;
- 15 Regional Vegetation Committees; and
- 70 floodplain and coast/estuarine committees.

6.49 DLWC states that … *this has placed strain on, and limited, the number of people available, willing and skilled to contribute to them.*

6.50 In evidence, Cr Montgomery described the difficulties for councils in these arrangements:

> ***Cr MONTOGOMERY:*** *I do not believe it is being done appropriately at the moment. It is not something that LGSA has been able to manage appropriately through the committees. There is a plethora of them around NSW, 72 I think in the natural resource management area. It has not been managed well. It certainly has not been managed well by the department……A number of the representatives of local government try to keep their fellow councillors informed but it is not easy. There is a meeting next week of local government representatives on natural resource management committees to try and have a common view and also to disseminate information that may not have gone out from one committee to another.*
>
> *It is very difficult to bring local government representatives together on a regular basis because councils meet at different times. If we could get two thirds of those representatives in a room together at the same time, I would be particularly happy, and frankly, we are not going to be able to do that. It is virtually impossible to have that dissemination of information. And a lot of these boards have varying levels of expertise in their administrative offices. Some of them have a huge churn factor and change their personnel quite regularly and get out of the habit of informing their members and those people that the members represent. Others do it very well and I should acknowledge that.* (Transcript of Evidence, 29 November 2001, p18).

6.51 During 1999 the SCMCC undertook a review of the number of natural resource management committees and their functions. There was community support for reducing the number of committees. The committee is pleased to note that the former Minister for Land and Water replaced five Regional Catchment Committees and 43 Catchment Management Committees with 18 CMBs. The committee believes that this process of reform will have positive outcomes in terms of more effective planning and consultation. The committee believes there is merit in the current minister continuing this process of reform to streamline both the number of natural resource management committees and possibly also their boundaries. This would make it easier for councils to establish regional structures to consult on natural resource management matters and to integrate land use planning with natural resource management.

RECOMMENDATION 4: That the Minister for Land and Water Conservation streamline both the number of natural resource management committees and their boundaries to facilitate the process of consultation with councils.

INTEGRATING NATURAL RESOURCE MANAGEMENT AND LAND USE PLANNING

6.52 Historically there has been little integration between natural resource management and land-use planning.

6.53 At the roundtable discussion, Professor Farrier informed the committee that "*…we have land use control coming out of the planning system, not resource management."* (Transcript of Evidence, 21 September 2001, p12). He explained that this was due to the planning culture in NSW and was not "*mandated by legislation"* . The *Environmental Planning Assessment Act* (ss5(a) and 26) and *Local Government Act* (s403) all include wording about encouraging management of, and conserving, natural resources. However, these sections of the Acts have rarely been given effect.

6.54 He informed the committee that planning culture has:

- been regulatory – (The approach has been *"Are there prohibitions on development or requirements to get consent?")*
- been restrictive – *("It does not mandate a vision or plan of what the land use should be")*
- focused on development (Development is defined broadly in the legislation but "*very narrowly"* by local government)
- exempted existing land uses from control
- no tradition of dealing with nature conservation (environment protection zones might be set but there is no consideration of what environmental management might be required*)*
- no tradition of absolute prohibition *(" …you can actually apply for development which is prohibited, so we do not like saying no to people, we like handing out approvals. There is a long tradition of handing out approvals. We think we can have our cake and eat it, we can have development and we can also attach conditions which will protect the species or prevent salinity or whatever.. If you go through the legislation*

and try and find absolute provisions then you have to look at things like nuclear activities…")

- *"been based on councils not catchments."* (Transcript of Evidence, 21 September 2001, p 12, 15)

6.55 Under its PlanFIRST reforms, the NSW Government intends to address some of these issues. Professor Farrier noted the following positive aspects of the proposed changes:

Prof FARRIER: *We have now got the document coming out of DUAP which has a lot of promise but a lot of problems as well. ….It recommends things called regional strategies. These will be whole of government. Thank god, at last we are going to have a whole of government strategy rather than individual departments doing their own thing. They are going beyond development control and I think that is absolutely crucial. They are going to go beyond regulatory instruments, they are going to deal with incentives and action plans and they are going to incorporate provisions from other plans, that is Vegetation Management Plans, Water Management Plans, and Catchment Management Plans, …These will set the framework for local environment plans,…* (Transcript of Evidence, 21 September 2001, p14).

6.56 The committee supports the proposal for regional planning by regional forums proposed in the White Paper on Planning. In particular, the committee supports the proposal that Catchment Management Blueprints, including on salinity, will be integrated into regional plans. Further that new LEPs will be prepared to give effect to regional strategies on salinity, that LEPs will be developed concurrently by all councils in the region and will cover the whole LGA.

6.57 The committee is, however, concerned that this reform will take an estimated five years to implement. Catchment Management Blueprints will soon be ready for implementation and there is currently no integration with land use planning. The committee has two concerns in this regard:

- Firstly, to what extent will meeting salinity targets in Catchment Management Blueprints rely on land use planning for their implementation?

- Secondly, councils are having to make planning decisions about salinity affected sites without the guidance which they would get if they had a specific statutory requirement to address salinity.

IMPLEMENTATION OF CATCHMENT MANAGEMENT BLUEPRINTS

♦ Urban land releases and the development of western Sydney

6.58 To be effective in supporting measures to address salinity, land use planning by councils needs to be coordinated on a regional basis. In addition, Catchment Management Blueprints need to be integrated with land use planning by councils. There is an urgent need to address these issues, particularly in western Sydney in relation to urban land release areas. This emerged as a major concern in the inquiry.

6.59 Blacktown City Council and Baulkham Hills City Council share the Parklea release area with an expected 100,000 new residents, of which half would be in the Blacktown Local Government Area.

6.60 At the public hearing in Blacktown, Mr Blacktown City Council representative Ms Glennys James advised the committee:

> ***Ms JAMES:*** *That area is now being mooted as also a potential problem area for salinity and the governments in the last decade released that land for urban development. Obviously salinity will have an impact on those areas in terms of structures, affect on infrastructure. The other thing we do not know is what affect development has on salinity. What are the cross-effects? There is so much we do not know. It is very difficult at this stage in the absence of any real data to be able to say that development should or should not proceed.* (Transcript of Evidence, 28 May 2001, p9)

6.61 Penrith City Council has written:

> *The vulnerability of our region to salinity is clearly represented in the Draft Salinity Hazard Map for Western Sydney……Of significance is the fact that the entire City of Penrith is indicated as being potentially affected by salinity. The implications of salinity to our local government area, and western Sydney regionally, are far reaching. Penrith supports a population of about 175,000, and 90 per cent of the community reside in urban areas. A number of these areas are exhibiting signs of salt affectation with private residences, public buildings, parks and reserves and infrastructure impacted. The economic and social impacts of this situation are not yet fully understood.*
>
> *Penrith is also one of the fastest growing areas within the Sydney metropolitan region with five new major release areas underway or planned for. Indeed, the ADI site itself shall present a major new urban development- a development that this Council does not support in its current form given the issues associated with the site, not least of which, is salinity.* (correspondence dated 14 September 2001)

6.62 At the public hearing at Blacktown, Ms Julia Ryan, representing WSROC, said:

> ***Ms RYAN:*** *The latest figures show that approximately 10 per cent of the Australian population reside in western Sydney and there is pressure for development in western Sydney and in particular, for that growth to be fast and affordable. The issue of salinity must be considered as a landscape feature of western Sydney that may constrain development. This means that the issue of salinity needs to be thoroughly investigated and planned for prior to any State Government release of lands for development onto their urban development program.* (Transcript of Evidence, 28 May 2001, p12)

6.63 At the same hearing, Councillor Peter Woods, president of the Local Government Association advised the committee:

> ***Cr WOODS:*** *…I am also concerned about the great push on the consolidation of the population within the Sydney area. That is why local government of NSW has adopted a policy to try to curb the growth of Sydney and to start a program of whole-of-State development……I really think from this perspective of salinity, because of so many unknowns, …from the perspective of other environmental consequences such that there might be an inquiry on a few other things. If we continue down this path, I think that there has to be some fundamental change of direction. The sooner we start in that change of direction and start looking at whole-of-State development, start drawing together our scientific knowledge and try and tie it in to our economic planning imperatives, and not just have one driving without considering the implications of the other, then I think we will possibly see far greater problems relating to the salinity issue within the Sydney metropolitan area.* Transcript of Evidence, 28 May 2001, pp.23-24)

6.64 The *Draft Salinity Management Targets for Western Sydney* [Hawkesbury Lower Nepean Catchment] tabled by DLWC on 28 May 2001 contains no discussion of how development should be managed at a catchment level although it raises issues with regional planning implications such as:

- *A catchment approach to the management of salinity should be taken, whether new areas of greenfield development are being built or where salinity has become an issue in an already developed area.*

- *The mapping shows four classifications of salinity hazard: known areas of salinity, areas of extensive salinity hazard, areas of localised salinity hazard; and areas of no known hazard. These categories have been used because the concept modelling of salinity has shown that salinity may be an issue almost anywhere in western Sydney, even close to the top of a hill.*

- *Any change in this balance, either natural or induced by land management, is likely to affect the extent and severity of salinity in the future. Predicting the direction of change is difficult and in the absence of certain knowledge, planners and others should apply a cautionary approach to management and aim for the least possible disruption of the hydrologic cycle.* (DLWC, 2001, pp1,3,4)

6.65 It does not address these issues in the context of regional development and then proceeds on the assumption that development will be managed on a site-by-site basis by local councils, for example:

While the Department strongly advises that investigation and matching of appropriate management options should be undertaken on a site-specific basis, the management targets outlined will assist the types of management options which could be considered.

6.66 Some of the targets appear to be incompatible with the current approach to the regional development of western Sydney, for example:

Areas of Extensive salinity hazard

- *reduce nett loss of deep rooted vegetation;*

- *maintain and increase vegetation on hazard areas adjacent to riparian zones;*

- *establish vegetation on areas identified as recharge areas*

6.67 The Blacktown and District Environment Group in its submission states for instance that the remnant native vegetation of the Cumberland Plain Woodland has been recognised as a threatened ecological community yet development applications which further deplete the woodland are approved.

A few years have passed since scheduling of Cumberland Plain Woodland as a Threatened Ecological Community and still no recovery plan has been produced. Blacktown City Council shows no initiative in this respect. Council prefers to wait for a lead from the NSW Government and, in the interim, supports development applications which result in further depletion of the Cumberland Plain Woodland. (Submission 28: Blacktown and District Environment Group)

6.68 Other targets appear to be impossible for councils to enforce or monitor, for example:

Install waterwise gardens.

6.69 It is hard to see how the council would prevent residents converting water wise gardens into water thirsty lawns.

6.70 The paper states:

Identify limitations for the purpose of providing solutions or exclusion of the site from further development. Avoid construction activity in susceptible locations. Avoid disturbance of natural flow lines.

6.71 It would seem far more sensible to address these issues in a pro-active way in the context of regional development rather than on a site by site basis triggered by development applications. That is to say, a regional approach must be taken to land use planning to ensure that it is ecologically sustainable. Site-based investigations will also be necessary for development applications on land on local groundwater systems, such as western Sydney.

6.72 The integration of Catchment Management Blueprints and land use planning is estimated to take five years to implement. As WSROC says, salinity must be considered as an issue which constrains development in western Sydney. The NSW Government should not release any further areas for urban development without a thorough consideration of the ecological sustainability of development in the region, including of the impact of salinity.

6.73 Where areas have already been released and subsequently found to be affected by salinity, it is the responsibility of the NSW Government to make suitable arrangements to fund the initial research and works required before any development can take place.

6.74 During discussion at the public hearings, Mr Jim Anderson MP (Member for Londonderry) explained the difficulty of addressing issues like salinity after urban release areas have been approved, particularly where they cross council boundaries:

Mr ANDERSON MP: *... Erskine Park is certainly saline affected and it shows in all the grasslands around the place, so there is going to have to be some major work done there before a development can go in. Can I just use the example of Sydney Water. To do the head works the first developer has to find $100 million and it has been a real problem. Erksine Park has just sat there and has not been developed because of this technicality. The Government will not put the money up front to do the head works. Somebody is going to have to find it and the council is trying to use some very ingenious ways of providing the funding. I see the same thing happening with salinity because not only is Erskine Park serviced by the Penrith Council but just across the creek in the same area you have Blacktown Council and they have this major SEP plan going ahead for the land in and around Wonderland, for instance, which goes right up to the Penrith boundary. When one development application comes in, say, to Penrith, how can they possibly do a detailed survey of all the lands when some encroaches into another local government area and they certainly will not contribute to it. Surely your department picks up that responsibility?* (Transcript of Evidence, 28 November 2001, p19)

Existing regional initiatives: the role of the Office of Western Sydney

6.75 The committee took evidence from the Office of Western Sydney and was provided with copies of the *Western Sydney Environment Strategy* and the report *Western Sydney a region of environmental achievement.* The executive director, Ms Margaret Ryan, provided the following information on its role:

> ***Ms RYAN:*** *The Office of Western Sydney is a small strategic government agency established in 1998 as a key agency to deliver strategic whole-of-region initiatives and solutions to advance the interests of western Sydney. It reports to Kim Yeadon, Minister for Western Sydney, and forms part of the NSW Department of Information Technology and Management. Its key roles are to provide high-level strategic advice to the Government on western Sydney issues, regional leadership and the development and driving of strategic innovative initiatives to address economic development, social and environmental priorities for the region, in partnership with industry, government, the community and other key stakeholders. In this context the Office of Western Sydney has been developing, leading and driving an integrated approach on environmental issues in western Sydney.* (Transcript of Evidence, 28 May 2001, p28)

The NSW Cabinet approved the *Western Sydney Environment Strategy* in October 1999. It was launched in November 1999. The Strategy provides for joint action by the private sector, local councils, research organisations, industry, the Government and the community on key regional environmental issues.

The Western Sydney Environment Task Force was established in September 2000. Its terms of reference are to:

- *Identify integrated approaches to current and emerging environment;*
- *Lead the implementation of strategic initiatives to deliver improved environmental outcomes; and*
- *Evaluate progress on the region's environmental achievements and advise the Minister.* (Information Sheet Western Sydney Environment Taskforce)

6.76 The membership of the Taskforce includes State Government agencies, local government (regional organisations of councils), Commonwealth Government (Australian Greenhouse Office), Catchment Management authorities, waste boards, community organisations (environmental action groups).

6.77 Action Agenda 2 of the Environment Strategy is *Developing an Integrated Regional Approach*. The focus is the integration of emerging environmental issues to assist stakeholders to better prioritise and address environmental issues in the region. This is a major challenge in itself. However, there is no indication in the document that the Office of Western Sydney has a role in the integration of regional land use planning with environmental sustainability. This will be part of the major PlanFIRST reform of the planning system driven by Planning NSW.

6.78 The Office of Western Sydney established a formal salinity working group on 12 October 2000 with the following membership:

- DLWC
- WSROC
- MACROC
- former Hawkesbury Nepean Catchment Management Trust
- DUAP (since renamed Planning NSW)

- University of Western Sydney
- Office of Western Sydney.

6.79 Ms Ryan informed the committee that:

> ***Ms RYAN:*** *The task force salinity working group chaired by the Regional Director of DLWC developed a clear four-pronged approach to assist with the management of salinity in western Sydney:*
>
> - *draft salinity hazard mapping to provide local government and other stakeholders with information on salinity;*
> - *a comprehensive research strategy for investigation of salinity issues in western Sydney to build on previous research studies;*
> - *salinity monitoring through data logging of piezometers and specific locations; and*
> - *development of guidelines for management of salinity in partnership with industry and State and local government to complement the development of a code of practice being developed by WSROC and DLWC with $77,000 in Natural Heritage Trust funds. Staff of the Penrith office of DLWC developed details of these projects.* (Transcript of Evidence, 28 May 2001, p29)

6.80 Again, this does not include the integration of salinity targets in the Hawkesbury Lower Nepean Catchment Management Blueprint with regional land-use planning for western Sydney.

6.81 There need to be interim arrangements to integrate Catchment Management Blueprints and land use planning. The issue is particularly pressing in western Sydney.

6.82 The Hawkesbury Nepean Catchment Management Trust was abolished and currently there is not a catchment authority for the area. The Hawkesbury Lower Nepean Catchment Management Blueprints is being finalised by the Sydney/South Coast Regional Office of DLWC with input from a Local Government Advisory Group. The committee believes that senior planning officials need to be involved with the the DLWC Sydney/South Coast Regional Office and Office of Western Sydney to ensure that development in western Sydney contributes to, rather than undermines, catchment targets and that the Hawkesbury Lower Nepean Catchment Management Blueprint provides direction on regional planning for western Sydney.

RECOMMENDATION 5: That Planning NSW and the Department of Land and Water Conservation, in consultation with the Office of Western Sydney, ensure that the Hawkesbury Lower Nepean Catchment Management Blueprint provides direction on regional development in western Sydney which:

(c) is ecologically sustainable; and

(d) considers in some detail how the targets of the Blueprint, such as revegetation, might be addressed in land-use planning.

RECOMMENDATION 6: That the Premier ensure that prior to any NSW Government release of lands for development on the urban development program, the impact of

salinity is thoroughly investigated and that the development is consistent with catchment management targets.

- **Regulation of Agricultural Land Use**

6.83 Integration of land use planning and natural resource management is important as CMBs in NSW do not have powers to require their Plans to be implemented and must rely on NSW and local governments to do so. Financial incentives may be provided to gain the cooperation of landholders but regulation is also likely to be required to implement Catchment Management Blueprints. Professor David Farrier explains this:

> *the Commonwealth clearly envisages that these [integrated catchment/region management plans] plans will do much of the work of implementation, in practice they will have to be integrated with existing land use planning and management frameworks in the States. Here much of the work of land use regulation/development control is still carried out through zoning arrangements made under the offspring of town and country planning (land use planning) systems, with local government playing a significant role. the clearance of native vegetation, the crucial factor in dryland salinity has been dealt with by most States through special legislative schemes, which in turn need to be integrated with catchment planning, clearing proposals are not the only land use issue in the salinity context. For in situations where the issue is one of remediation, through revegetation, as distinct from prevention, the parameters set by land use planning system become crucial. For example, if land that has been cleared in the past is zoned so as to allow residential development, incentives to encourage revegetation are going to have to be very much higher than if it is zoned rural or environmental protection.* (Integrated Natural Resources Management in the Murray Darling Basin, Australia: the Dryland Salinity Lever)

Powers of councils to regulate agricultural land use

6.84 Under the *Environmental Planning and Assessment Act* (NSW) (EPAA) existing uses are protected. In terms of agricultural land this means, for instance, that if a planning instrument is introduced under which development consent would no longer be given for certain agricultural activities in a salinity hazard zone this could not apply retrospectively to landholders already engaged in those agricultural activities. It would be inequitable for legislation to attempt to do so. Incentives to landholders will be needed to bring about widespread change to existing agricultural practices and uses.

6.85 Professor Farrier, one of the authors of the widely used Environmental Law Handbook, told the committee in evidence:

> ***Prof. FARRIER:*** *There is a long tradition of not regulating agriculture and forestry. Even if they* [councils] *tried to regulate it now, it would be protected under existing use provisions from regulation, and agriculture and forestry are the big issues in relation to biodiversity and in relation to salinity, carbon credits, et cetera. So they have been substantially neglected by the planning system.* (Transcript of Evidence, 21 September 2001, p12)

6.86 Councils do, however, have the power to regulate uses of land, including agricultural land, when these uses are altered. Councils can introduce an instrument such as a LEP which controls modifications of land use by making a use that was previously permissible without consent become permissible with consent. In other words, a business, including a farm, would have to apply for council approval to modify its land use. Few councils use this power to regulate agriculture. Although regulation of other businesses to minimize environmental impacts is accepted, there is a tradition by councils of not regulating agriculture. Many councillors are themselves farmers.

6.87 The Environmental Defender's Office (EDO) explained that the definition of agriculture used in the local environment of most rural councils covers a whole range of rural activities with differing impacts on the groundwater table. This means that landholders could change from grazing to annual cropping or intensive livestock keeping without requiring development consent and could rely on existing use provisions in the Act.

6.88 The Act states that an existing use right does not allow expansion or intensification of an existing use and abandonment of the activity will cause those rights to be lost. This is easy to apply to things like opening hours of businesses but very difficult to apply to agriculture, because of the wide definition of agriculture used in most LEPs. Landholders can argue, for instance, that moving from grazing to grape growing is not 'intensification' but a completely different activity.

6.89 The wording of the Act is hard to apply to agriculture; as various experts have pointed out to the committee planning legislation is still urban focused. It is hard to argue legally that a certain agricultural activity has been abandoned because leaving land to rest is an essential element of agricultural practice.

6.90 Professor Farrier, Mr Budge and the EDO all expressed concerns to the committee that agricultural land use changes, which may impact on groundwater levels, can currently proceed without development consent. In evidence, Mr Budge advised the committee:

> ***Mr BUDGE:*** *The first thing that should be said about rural municipalities is that most of the land use changes that we talk about…will not require development approval and therein, I think, lies one of our weaknesses, that major wholesale changes can be made to the landscape in many cases with minimal interference by the council as to whether this is an appropriate change or not. Now certainly there are things, like native vegetation clearance, major changes of land use from dryland to irrigation, things like that, that will require approvals, but many of the subtle changes that are made in both urban and rural situations do not require planning approval in the first instance, so one of the things that we have to do is have a look at whether some of these things need to be brought up as requiring approval.* (Transcript of Evidence, 21 September 2001, p 10)

6.91 The submission to the Inquiry from the EDO also raises this point that existing uses are currently protected under the EPAA:

> *In many rural areas in western NSW, agricultural activity is permitted without the need to obtain development consent. If new LEPs or other planning instruments are imposed to require development consent for a certain use of land, and land was being used for this purpose immediately before the land came into force, and the purpose was a lawful one, there is no need for development consent* (s109(1) EPAA Act) (Submission 22: Environmental Defender's Office)

6.92 The committee wrote to Planning NSW about regulating modifications of land use. It said:

> *Historically, the State Government has not regulated the use of agricultural land. However, with increasing environmental awareness and sensitivity, councils in Western NSW are beginning to regulate the number of uses that are permissible without consent.*
>
> *As part of our Comprehensive LEP reviews, the Department has suggested to Councils that both irrigated and intensive agriculture should be permissible* ***with*** *consent in their new LEP's. Councils do have the power to regulate agriculture through their local environmental planning instruments.*

Additionally, 'land forming' and the creation of 'artificial water bodies' require consent if they are big enough to be classed as designated development under Schedule 3 of the EP&A Regulations. This requirement exists even if the intended use is ancilliary to agriculture and that agricultural use does not require consent.

There are some cases where the Minister has encouraged Council to introduce plans with the power to require consent for agriculture, irrigated agriculture and intensive agriculture. A raised understanding of the externalities associated with these land uses, and their respective impacts, has enabled a more regulated approach to agricultural land use management.

The introduction of Plan FIRST provides the potential to solve these problems from a regional planning perspective. There is an opportunity to integrate catchment management and water planning, and link them to a holistic approach to the appropriate landscape suitability of the land (eg recharge/discharge areas) (Correspondence)

6.93 As stated earlier, PlanFIRST is estimated to take up to five years to implement. In terms of the definition of agriculture, the EDO advocates that any proposed amendments to the EPAA **require** [emphasis added] LEPs to define more specific types of agricultural activities. This is supported by the comments of Professor Farrier and Mr Budge that there is a strong culture in rural councils against regulating agriculture.

Models of agricultural land-use regulation

Acid Sulfate Soils

6.94 The approach to addressing acid sulfate soils involves land use regulation by councils. Landholders are required to apply to councils for excavation works on land at risk of acid sulfate soils.

6.95 Acid sulfate in soils, like salinity, is mobilised by multiple actions on privately owned land where these actions have not traditionally been regulated. However, an interesting model allied with this approach is industry self-regulation.

6.96 Arrangements have been made with the sugar cane industry that it become self-regulating in exchange for developing its own rules, which meet Planning NSW requirements, in contracts with farmers. Farmers have a contract with the sugar mill and the contract contains a section on environmental performance. Only farmers who comply with these requirements can send their sugar cane to the mill. The committee understands that Planning NSW regards the self-regulation scheme as a success as the environmental measures put in place by the industry went further than the minimum requirements and that the industry has reported that better environmental management has led to greater productivity.

6.97 Self regulation may not be possible unless there is a central focus such as access to a mill. It may also not be possible where farmers in an industry have had such poor economic returns that they cannot afford to invest in changed practices.

Land use control through DLWC approval processes

6.98 Planning NSW informed the committee that there were strong controls on agricultural land use outside of the planning process in NSW:

It is worth noting that the NSW planning system is different to other states. Focussing on development controls ignores the very strong planning controls in NSW. NSW planning legislation has strong controls over the environmental impact of activities. As well as relating to development consents these provisions also relate to the decisions made by natural resource management agencies. This means that environmental planning factors are considered in all permitting and approval processes which agricultural activities need to meet even where they don't require development consent… (correspondence)

6.99 At the public hearings, however, a DLWC representative told the committee:

***Mr VERHOEVEN**: …the Department of Planning's advice in that particular question, certainly the wording that I have got from the question [supplied in advance by the committee] the point I should make is that that could be misinterpreted to mean that even if development consent is not required, that Department of Land and Water Conservation approval would be required. This is not always the case. At a farm level, for example, the department has some ability, not total, but some ability to control agricultural land use changes.* (Transcript of Evidence, 28 November 2001, p 20)

6.100 Any approach to controlling agricultural land use changes would need to be consistent and comprehensive.

Mandatory Farm Management Plans

6.101 An alternative approach to development consent by councils suggested to the committee by Cr Montgomery is mandatory farm plans, compiled by NSW Government agencies or accredited consultants, which build from the bottom up into a Catchment Management Blueprints:

***Cr MONTGOMERY:** From my observations a lot of the issues in regard to planning at a catchment level have been done the wrong way round and it is my view that there should be local farm plans developed that can then be coordinated with their neighbours and gradually build up a catchment plan, rather than having it done by a small number of people in the catchment with some technical expertise from the department and put on public view….and then when no-one comments assuming everyone is happy, it is not necessarily going to deliver the sorts of plans that are appropriate in a catchment. Whereas if you have individuals doing their own farm plans and doing those in conjunction with their neighbours and gradually building up a catchment picture that can deliver the sort of outcomes that those on the ground require and the community expects, then all of a sudden we can see some real change in the way land and water is managed in this country…..*

The department can do farm plans now and in fact do do farm plans….I think the department can probably subsidise the process …There should be a standard. It does not have to be done by the department. It could be done by private enterprise, accredited groups and business to do that…Obviously they would need to be done in conjunction with the neighbours, but it is a good management tool for farmers regardless….

I think it needs to be mandatory. ….Ultimately it is in their interests, but if we are talking about preserving this nation's natural resources, we are going to talk about mandatory actions anyway. (Transcript of Evidence, 29 November 2001, pp 21)

6.102 Farm plans really belong in the category of incentive schemes rather than land use regulation. While regulations specify what people cannot do, they cannot effectively prescribe what they must do in their businesses. Changes to farming practice or land use set out in plans would need to be economically viable. Farmers would have to be willing and financially able to invest in change. Land-use change will need to proceed

through education and incentives. While incentive schemes have much to recommend them and the role for local government in such schemes needs to be explored, there is also a role for regulation.

6.103 It will be up to individual landholders whether they choose to be involved in an incentive scheme, but regulation can be used systemically to at least maintain the status quo by ensuring that landholders do not change to less environmentally sustainable land uses and that land is not zoned to require higher incentives for change.

The committee believes that as elected bodies councils should be encouraged rather than required to regulate agricultural land use changes..

RECOMMENDATION 7: That in order to provide a foundation for regulation to support land use change, Planning NSW encourage councils to define more specific types of agricultural activities in their Local Environment Plans.

RECOMMENDATION 8: That Planning NSW encourage councils to make irrigated and intensive agriculture permissible with consent.

RECOMMENDATION 9: That the Departments of Land and Water Conservation, Agriculture and Planning and the Local Government and Shires Associations examine Catchment Management Blueprints to identify where they require support through land-use planning regulations, identify matters that need to be addressed at a NSW Government level and refer other matters to the relevant Catchment Management Boards for negotiation with councils. (See also Recommendations 2 and 3)

Regulatory basis of salinity credit schemes

6.104 The committee understands that currently the market for salinity credits is ill-defined. This is currently a significant barrier to leveraging private investment. Private investment is needed to meet some of the costs of addressing the degradation of the environment which are beyond the capacity of governments to fund. This is a matter which the NSW Government is working on.

6.105 The committee understands that credit schemes like the Hunter River Salinity Trading Scheme or US SO2 Allowance Trading Program rely on regulating the output of pollutants. This is a challenge for diffuse sources of pollution such as recharge to groundwater tables. Control of land clearing is one approach but it is hard to see how it would work in areas that had already been extensively cleared. Another approach would be regulating recharge through recharge offset accounts.

6.106 At the roundtable discussion, Professor Young informed the committee:

> ***Prof. YOUNG:*** *We do not yet have salinity trading schemes that operate on a farm by farm basis. We do have it between States, or the main States I should say, but it seems State with State, not private business, and landholders are told not worry too much about salinity, that is a State Government problem. If we were serious about doing it, we would not do that, we would be engaging landholders and setting up arrangements that would enable them to fix up the problem themselves and have something where there is a proper salinity credit and salinity trading market. The best model that I can find around the world of such a system operates in the Netherlands. It has operated in the Netherlands now since the early 1980's incredibly successfully. They have a nitrate pollution problem in their groundwater, which means that unless they are very careful the groundwater that they have is not safe for human consumption, and so they have set up a groundwater nitrate pollution recharge*

management system which is serious about making a difference, and the characteristics of it are very interesting. They place a limit on the amount of recharge per hectare. They require every farmer to prepare a simple return every year, and if you were doing it for salinity, you would take the area under cereals and you would multiply it by your main recharge, the same for the area under your native trees and you would work out the limits, and everyone would have to submit a return, and actually in the Dutch system, you have a framework where you are only allowed to use unused capacity, but if we were serious about reaching targets at the end of valleys, we have to start accounting for where the salt is coming from and regulate it. (Transcript of Evidence, 21 September 2001, p 4)

6.107 The committee understands that the system is administered by local government in the Netherlands.

PLANNING DECISIONS ON SALINITY AFFECTED SITES

6.108 As stated earlier, councils do not currently have a specific statutory obligation to manage salinity. Guidance and resources from State governments to councils tend to follow statutory obligations.

6.109 There are several relevant initiatives for councils planned under the NSW Salinity Strategy. However, it appears to the committee that the role of local government in managing salinity is regarded as peripheral to the main game and therefore not a priority. However, once DLWC identified salinity as an issue in local government areas, there was a duty of care on councils for the decisions they make in land-use planning approvals. So councils have to make decisions about salinity affected land but currently lack sufficient guidance and information.

6.110 However, the lack of guidance and information is one of the most serious impediments to council management of salinity, perhaps the most serious. This was also one of the key findings of the report, *Enhancing the Capacity of Local Government to Contribute to the Management of Dryland Salinity,* for the National Dryland Salinity Program. Mr Budge, author of the report, told the committee:

Mr BUDGE: *One of the biggest problems we found in the national study that we did was that even a council like Wagga said to us in the survey returns, We are spending about $4m a year of our own money in terms of addressing natural resource management issues and salinity, specifically in terms of land use planning, but we cannot find any person at the State and Commonwealth level who can tell us that what we are spending $4m on is the best use of our money . In other words, even those councils which are facing the greatest problems have turned themselves into an organisation to address the issue, there is no repository of information and knowledge or wisdom that will say these are the things you should be doing if you have got the power to do that. Certainly, when you get down to the individual level of a council assessing a development application, the capacity of councillors and staff, where do they turn to ensure that they are making wise decisions in terms of land use planning, so I would endorse anything that the State does in terms of establishing a clear State policy as to what should happen in terms of land use decisions.* (Transcript of Evidence, 21 September 2001, p 9)

6.111 Following is a case study of the issues that can emerge, at the individual level of a council assessing a development application in the absence of a state government policy and guidelines. The case is that of the Boral site in the Holroyd Local Government area.

- **Case Study of planning decisions on salinity affected sites: Boral Site, Holroyd Local Government Area**

6.112 Boral Resources Ltd (Boral) operates a quarry on a large area of land in the Holroyd Local Government Area. The lease for operating the quarry will finish in 2007 and Boral is selling the land.

6.113 In February 1999, the Minister for Urban Affairs and Planning, (since renamed Minister for Planning) under State Environmental Planning Policy (SEPP) 59, zoned the site 'employment, regional and open space'. About half the land on the site is zoned 'employment' and the other half 'residential'. SEPP 59 requires development to be consistent with the principles of ecologically sustainable development.

6.114 In December 2000, the Department of Land and Water Conservation released the draft salinity hazard map and guidelines for western Sydney. The Boral site is in an area of localised salinity hazard with areas adjacent to Greystanes Creek being potentially at higher risk of salinity.

Northern Employment Land part of the site

6.115 Under SEPP 59 the owner of the land or council prepares a precinct plan for public consultation.

6.116 ERM Australia, consultants to Boral, prepared a precinct plan for the half of the site zoned 'employment', which Holroyd City Council felt had a number of shortcomings. The Minister, keen to progress employment opportunities on the site, used his authority to over-ride the council.

6.117 Planning NSW worked further on the Draft Precinct Plan with other NSW Government agencies, including DLWC. The Precinct Plan addresses salinity in general terms.

6.118 The Minister approved the Northern Employment Land Precinct Plan and Development Consent No 23-02-01 for the Subdivision of the Northern Employment Lands, Greystanes Estate in June 2001. The development consent was provided subject to conditions, including one relating to salinity.

6.119 Condition 67 on salinity states:

Prior to the issue of a Construction Certificate, the Applicant shall prepare a detailed Salinity Assessment Report for the Northern Employment Lands and shall submit the report for the approval of the Director-General in consultation with DLWC. The report shall address:

- *areas of known salinity within the DA area;*
- *proposed monitoring procedures;*
- *the potential impacts of salinity on works to be carried out as part of this DA;*
- *proposed management procedures;*
- *design measures (including road pavement details) to address these impacts;*

and shall be consistent with Section 7.8 of the Greystanes Estate-Employment Lands Precinct Plan. DUAP approved the Plan (Submission 30: Holroyd City Council)

6.120 Boral itself is the applicant for the first subdivision of the land which establishes the roads and drainage works. ERM (consultants to Boral) prepared a Salinity Assessment Report (SAR) for the whole site in July 2001.

6.121 DLWC provided advice on the SAR in correspondence to CRI (project managers for Boral) on 17 September 2001. DLWC recommends that a number of issues in relation to the investigation of the site are addressed including the extent of groundwater testing and the technical criteria used to measure the presence of salinity in the urban context. The letter also states:

The Department recommends that:

1. *The issues raised above [in relation to the investigation] are addressed;*

2. *The constraints and their locations for the site should be better defined;*

3. *The subdivision and infrastructure layout, structural design and landscaping considerations to mitigate the impacts of salinity should be drafted into a DCP for the Estate once the assessment is more comprehensive;*

4. *Monitoring should be started as soon as possible, and for this monitoring to be on-going for many years after the site has been fully developed.* (Correspondence to CRI 17 September 2001)

6.122 In a letter to the DUAP on the Northern Employment Lands Subdivision, Greystanes Estate, DLWC repeated the same concerns:

Therefore, based on the initial investigations provided in the report by ERM/PPK, recommendations were made to further investigate groundwater (which should include long term monitoring for a minimum of 10 years) and the implementation of practices designed to mitigate salinity (including the use of good drainage practices). This could lead to best management practices being implemented in the area for the management of salinity (correspondence to DUAP dated 26 September 2001)

6.123 Holroyd City Council also had concerns about the investigations of salinity on the site. In correspondence dated 17 August 2001, to DUAP, the council requested:

that detailed assessment of the existing groundwater situation is necessary in order to establish a basis for future comparisons. In this regard, groundwater monitoring should also continue into the operation phase of the development to identify potential rises in the groundwater table. (Submission 30)

6.124 On 16 October 2001, Holroyd City Council requested that their concerns regarding salinity be addressed prior to the approval of the Environmental Management Plan for the Northern Employment Lands.

6.125 On 25 October 2001, the council received correspondence from DUAP advising that planning approval had been granted, on advice from DLWC, in spite of the council's concerns:

In relation to the Salinity Assessment Report, approval was granted in accordance with condition 67 on 28 September 2001. This followed consultation with, and advice from, the Department of Land and Water Conservation (DLWC). (Submission 30)

6.126 It is anticipated that there will initially be nine separate developments on the site. However, these lots could be further sub-divided according to the nature of the demand (whether for factory sites or smaller businesses).

6.127 Construction work has already commenced on the Employment Lands part of the site.

Draft Residential Lands Precinct Plan

6.128 The precinct plan, also prepared by ERM Australia, for the residential part of the site went on exhibition on 31 October, 2001 for four weeks. The Draft Plan sets out broad zoning and the structure for future development. It contains 'super-lots'. If approved by the council, the land would be sub-divided to provide for a minimum 1,440 dwellings on the 96 hectare site (based on a minimum 15 dwellings/hectare).

6.129 The Draft Plan calls for a monitoring strategy *for a minimum period of 12 months or until development is commenced on all lots within the Northern Residential Lands* and for the development application to include the following building techniques to address salinity prevention and management measures:

- Thicker layer of sand under slabs
- Increase the strength of the concrete
- Use correctly installed brick damp courses
- Use exposure quality bricks
- Prepare gardens that do not require excessive watering
- Use native plants
- Reduce lawn areas
- Increase the use of mulch
- Only install automatic watering systems that measure soil moisture content. (Submission 30)

Concerns regarding the Residential Lands

6.130 Both DLWC and the council have concerns about the mitigation measures in the Draft Precinct Plan and the investigations of the site.

6.131 The council stated in its submission to this inquiry:

The draft plan addresses the issue, however, it defers any finding and requires monitoring which will occur concurrently with development. It also requires multiple third parties to undertake assessments on specific sites within the estate as a prerequisite to each party lodging a development application. This is both inappropriate and ineffective when considering the issue should be addressed at a landscape scale.

In the event that any area is determined to be of a 'potentially excessive salinity hazard' the prescribed building measures will prove difficult, if not impossible, to effectively implement or regulate as the area develops and people move into the area.

The current uncertainty is of concern to Council as a regulatory authority. It is essential that an assessment of the current position in terms of salinity and potential impacts be established before development commences. Failure to do so could place Council in a position where it is liable for future claims should the problem be worse than anticipated. It could also be construed as a failure by Council to exercise its proper duty as a public or consent authority. (Submission 30)

6.132 Holroyd City Council acknowledges that the consultants have followed the guidelines which accompany the Draft Salinity Hazard Map for Western Sydney and that there are no other relevant guidelines or policies that set the standard or criteria for site-based salinity investigations and mitigation measures.

6.133 The council states:

The Department of Land and Water Conservation plan is generated at a landscape scale. It is considered that the background report undertaken by ERM Australia, is based upon available information, including the Draft Guidelines to accompany Draft Salinity Hazard Mapping for Western Sydney prepared by Department of Land and Water Conservation. However, the recommendations proposed in the draft Plan are considered inadequate to enable Council to make an informed decision on the issue of salinity.

The lack of detailed information results in the type of general recommendation found in section 7.8 of the draft Plan. Without more reliable data this approach is not unexpected.

6.134 After being given the opportunity to comment on the Draft Precinct Plan, DLWC expanded on its concerns in relation to the site in a letter to the Council dated 20 December 2001:

<u>Recommendations</u>

1. *All the recommendations of the Salinity Assessment Report be incorporated throughout the Precinct Plan so that salinity is fully considered in the landscaping plan, stormwater plan and construction methods and materials prior to work commencing on the site;*

2. *Water cycle management be reassessed so that conflicting issues such as encouraging infiltration and controlling groundwater rise are solved prior to the need for expensive remediation or retro fitting. This includes avoiding water holding structures in areas that may lead to increased infiltration.*

3. *A groundwater monitoring and reporting system be implemented as soon as possible with clear lines of ongoing responsibility and ongoing funding.*

4. *Variation to subsoil drainage across the site through cut and fill, compaction or change in materials be minimised both on a suburb and house lot scale. Where it is unavoidable alternative drainage and construction methods should be investigated and their impacts upslope monitored.*

5. *It should be noted that conditions are subject to change over time whether or not development is undertaken, and that the results of any tests do not provide any guarantee that salinity will not become a land management issue in the future.*

6.135 A further issue which arises from this case is the lack of a consistent approach across NSW Government agencies and consent authorities.

6.136 DLWC's concerns about the SAR, expressed in the letters quoted above, appear to have been resolved in relation to the half of the site zoned for employment, for which the Minister for Planning is the consent authority. Planning NSW, in evidence to the committee, stated:

> *When queried, DLWC advised that the letter[dated 17 September 2001] referred to the Residential Lands of the Greystanes Estate. This letter was later passed onto Holroyd Council. The SAR for the Employment Lands was approved subject to appropriate conditions* (Response to Questions on Notice, 20 December 2001)

6.137 Council states that a review of the content of both precinct plans reveals that the chapter on salinity in the Draft Residential Lands Precinct Plan is *largely identical* to that of the Northern Employment Land Precinct Plan, approved by the Minister for Urban Affairs and Planning in June 2001, and that the same Map is referenced in both plans.

6.138 Boral's consultants have expressed their frustration with the process and do not understand why measures that were considered adequate on one half of the site are not adequate on the other side.

6.139 From the council's perspective, they are not experts in salinity and are exposed to legal liability claims should salinity damage buildings or the amenity of the site. It is, therefore, unlikely that they would choose not to act on the advice of DLWC.

6.140 The council states:

> *Based on the above [advice from DLWC], the current available information is inadequate, and accordingly Council should not (if it adopts the precautionary principle) approve the Draft Plan until further monitoring is undertaken. This is a brownfield site and therefore is an opportunity to establish appropriate benchmarks prior to development commencing. The situation can then be monitored, and together with an education and awareness program, any potential impacts from Salinity can be managed in a timely manner.*

6.141 The council identifies the issues as:

- *What investigation should be undertaken to establish an understanding of the current situation regarding salinity?*
- *What guidelines exist to enable council to ensure that assessments are undertaken in a consistent manner?*
- *How was the issue of salinity assessed in the Northern Employment Lands Precinct Plan and how is it intended to implement the recommendations of that Plan when it requires ongoing monitoring and review concurrent with construction?*
- *What comments did the Department of Land and Water Conservation have regarding the Northern Employment Lands Precinct Plan and how does the draft Northern Residential Precinct Plan differ?*

6.142 The council comments that:

- *To obtain a definitive position further interpretive analysis must be undertaken but the question is to whom does the responsibility fall? The issue is one of natural resource management that should be addressed at a landscape or region/catchment scale by the State agencies. Local government can assist but requires support from the State Government in providing the proper tools to be effective. The NSW Salinity Strategy recognises that Information is a key tool that underpins all sound salinity management decisions. In this regard investigation, identification and the establishment of the appropriate management solutions must be developed objectively and not left solely to proponents as part of their responsibility in preparing a development application.*

6.143 The committee is aware of similar dilemmas for Wagga Wagga City Council in relation to the site of the former teachers' college.

Comments

6.144 A number of problems emerge from this case study. As previously discussed, there is not currently a regional planning approach to environmentally sustainable development which provides a framework for councils. Planning NSW expects the full roll-out of PlanFIRST to take five years, subject to the appropriate level of resources being made available. The extent to which PlanFIRST will address these issues is not clear to the committee.

6.145 There is currently a lack of research on the nature and extent of the salinity problem in western Sydney. In this context, developers may object to costly and time-consuming investigations and mitigation work.

6.146 There is agreement that the level of salinity hazard mapping is inadequate for land-use planning but no agreement on whose role it is to pay for adequate mapping.

6.147 There is no policy and guidelines for councils and developers on site-based salinity investigations or mitigation measures by DLWC and Planning NSW.

6.148 There are also systemic issues with mitigation measures which need to be addressed. These include an amendment of the Building Code of Australia (BCA) to include salinity which in turn may rely upon changes to the relevant Australian Standards.

6.149 The assistance promised to councils under the NSW Salinity Strategy, at this point in time, has not materialised.

These issues are discussed in more detail later in this chapter.

- **Progress of the NSW Government on measures to support councils in managing salinity in land use planning**

6.150 As previously discussed, Planning NSW expects PlanFIRST to take five years to fully implement, subject to the resources being available to support its proposed program. Planning NSW further advised the committee that in the interim they will be developing transitional regional planning controls and the model salinity LEP which councils will be required to follow. The information on transitional regional planning controls was provided late in the inquiry and the committee was not provided with any detail.

Model LEPs linked to Salinity Hazard Maps

6.151 Model LEPs have been used successfully as part of a package of measures to assist councils to manage acid sulfate soils along with a manual and this approach has the support of the LGSA. The committee supports the concept of a model LEP linked to salinity hazard maps which should assist in the development of LEPs flowing from regional plans. However, the committee is concerned that the Model LEP being produced will have limited usefulness because the data on which it relies is inadequate. The committee is also concerned that the Model LEP will not be accompanied by sufficient guidance such as a policy or manual. The Department of Planning stated:

The model LEP is intended to provide a basic planning guideline that is immediately available for councils to use by plugging in the relevant local salinity information. It is proposed that the model will be designed to accommodate different scales of salinity information, from broad overview information to finely detailed salinity hazard mapping. A precautionary approach based on broad landscape information is sufficient to address fundamental salinity problems so that cost effective approaches can be taken to protect against salinity damage.

DUAP is intending to provide information to support councils in salinity affected areas. However, no final decision has been made on exactly how this will happen…Any action towards this will be carried out in conjunction with the salinity teams that have been established under the NSW Salinity Strategy. (correspondence 13 November 2001)

6.152 It is hard to see how the model will be immediately available for use when the relevant local salinity information does not exist. In western Sydney, for instance, there is little research on how salinity is occurring and DLWC states that it does not have the resources to undertake mapping at a level suitable for land use planning. The model LEP for Acid Sulfate Soils was linked to mapping at 1:25,000 scale. The salinity hazard map for western Sydney is at 1:100,000 and it is not possible to tell whether a particular parcel of land is in or out of a particular hazard zone.

Building Code

6.153 Councils also need urgent guidance on what suitable building materials and techniques should be used on salinity affected sites. It would be challenging for councils to make these approaches mandatory in the absence of a state-wide or national approach. For instance, Australian Standards, such as for cement, do not include salinity as a mandatory requirement and optional requirements must be called up in building specifications At the public hearings, the committee raised this issue with Mr Don Geering, representing the Department of Urban Affairs and Planning:

Mr MAGUIRE MP*: To come up with standards that councils have expressed that they need urgently because they are dealing with lands affected by salinity. How long will that take and when can we expect some answers with the building code?*

Mr GEERING**:** *The building code is a longer time frame because that is a national approach and the Australian body that administers the building codes has initiated some research which they are looking to do over the next twelve months*…. (Transcript of Evidence, 28 November 2001, p8*)*

Urban Salinity Team

6.154 The DLWC has established six 'salt action teams' around NSW and one, based in western Sydney, deals with urban salinity. The team leader was appointed in

September 2001 and the team is now operational. At the public hearing, the DLWC representative provided the following information on its role:

> ***Mr VERHOEVEN:*** *That team …is in fact working with local government and with the Department of Planning to better work out the working relationships in relation to salinity, for example, so that as questions come in you are able to fast-track that process. In fact when you look at the salinity strategy, the role of the salt action teams is not to go out there and to be another extension officer. Their role is to collapse the time and the distance between what catchment boards need, for example or councils need or our front line staff need or other organisations need and what is being developed by researchers or modellers or what have you, so they will be working with local government in the case of development applications for salinity and exactly what data is needed and what sort of mapping and information is needed to come to an agreed position and to try and standardise the process so that it can be fast tracked.* (Transcript of evidence, 28 November 2001, p18)

6.155 Both DLWC and the LGSA noted that progress with the Local Government Salinity Initiative had been slower than anticipated. Mr Verhoeven informed the committee that this would change now that the urban salinity team had been recruited. The work plans for the teams were due in early December 2001 and would include draft target dates for a range of actions. The team includes a member from Planning NSW.

6.156 Currently, the mapping and research to underpin model LEPs to address salinity falls short of the level of information supplied to councils to deal with other natural resource management issues. There is also a sense of history repeating. Experience with other natural resource matters suggests that councils are unlikely to address salinity in land-use planning until they have funding, statutory responsibilities or State government policies, guidelines and information tools tailored to their LGAs.

- **Assistance to councils from the NSW Government with management of acid sulfate soils and floodplains**

6.157 The management of acid sulfate soils by the NSW Government commenced with soil mapping. Over an 18-month period soil surveys were assembled on the basis of knowledge of the risk areas. One hundred and twenty-two maps at 1:25,000 scale were produced and 1,600 soil profiles undertaken. Samples were taken only in areas where there was uncertainty about the risk of acid sulfate soils. Mapping was completed in 1997.

6.158 Councils in relevant areas were provided with one copy of the maps free of charge to assist them to manage areas of acid sulfate soil which had not been exposed. DLWC provided $150,000 for the launch and community awareness campaign.

6.159 In 1997 the NSW Government allocated $2.016 million to the Acid Sulfate Soils Program (ASSPRO) for 1997-2000 through a Treasury enhancement. Organisations can apply for project funding for education and training; community participation; and management technology. This includes funding to councils and other organisations to investigate problem areas, design appropriate remedial works, initiate on-ground works and monitor results.

6.160 The Acid Sulfate Soils Management Advisory Committee (ASSMAC) of the Department of Agriculture was established in 1997 comprising government agencies, industry and community organisations. ASSMAC decides on where these funds will be spent by voting on submissions to give them a priority ranking.

6.161 Councils requiring additional mapping can approach DLWC to do the work which would result in a combined application to ASSMAC for funding. Grants applicants, including councils, are required to contribute substantially to the project either in cash or in kind. A further Treasury enhancement of $1.7m has been allocated for 2000 to 2003.

6.162 The management of acid sulfate soils needed to be included in LEPs so that development consent was required for excavations in risk areas. Uncontrolled works by farmers and other groups who need to excavate land was uncovering and mobilising acid sulfate.

6.163 In the two years following the release of the hazard maps, few councils had included acid sulfate soils in their LEPs so measures were put in place to progress the matter.

6.164 DLWC was provided with $73,000 by ASSMAC to reformat the risk maps as planning maps for councils which match the maps used for Local Environment Plans. There was still some pressure on DLWC from councils to provide maps at 1:4,000 scale. DLWC's view was that councils should apply the precautionary principle and that if groups such as farmers or developers wanted to excavate soil in risk areas they should demonstrate that there was no risk of disturbing acid sulfate soils.

6.165 The EPA produced a standard set of investigations required by developers. A preliminary test for acid sulfate soils was developed which could be used by farmers. If the test is negative, farmers can apply to councils to excavate.

6.166 With assistance from DUAP and ASSMAC, guidelines were produced for councils to encourage them to develop Local Environment Plans. In 1998, DUAP issued a circular (Acid Sulfate Soils Advisory Circular) directing councils to incorporate acid sulfate soil hazard maps into LEPs. It was also recommended that coastal councils consider acid sulfate soils in strategic planning and that acid sulfate soil provisions apply to any existing zoning as well as in rezoning land identified in the acid sulfate soils risk maps.

6.167 Training was an important aspect. Two or three staff in DUAP were given the responsibility as part of their duties to act as points of contact for inquiries about the management of acid sulfate soils as well as visiting all councils to brief local government planners.

6.168 ASSMAC funded training which was provided by the Department of Agriculture and DLWC to council engineers, bulldozer drivers, consultants and government agencies. The training was practical and took place on sites. It covered how to assess and manage acid sulfate soils. The committee understands that DUAP considers the training as significant in bringing about attitudinal change.

6.169 Under the Floodplain Management Program, flood studies were initially carried out for councils by the Department of Public Works and Services and the Water Resources Commission. Subsequently, councils can apply to DLWC under the program for funding for flood studies to be carried out by consultants and are provided with 60 per cent of the funding. Councils also receive support and advice from DLWC with preparing tenders. There is a Floodplain Management Manual and councils are provided with good faith immunity from liability under the Local Government Act if they follow the process set out in the manual.

6.170 It is clear that these resources will need to be in place before councils address salinity. Having identified salinity as a risk, it is incumbent on NSW Government agencies to put

adequate resources in place in a timely manner so that councils can make effective decisions. Councils are, to a large extent, being left to deal with the uncertainties of salinity. This is not fair and reasonable.

- **Assistance to councils from non-government organisations and the private sector**

6.171 Much of this work has already been initiated by non-government organisations keen to fill this gap. WSROC has undertaken work on site-based investigations for salinity and a voluntary building code for councils. This work should be able to inform the national research and could be adopted as an interim measure. This committee discusses this issue later in this report.

6.172 The Murray Darling Association (MDA) commissioned Sinclair Knight Merz and the RPD Group to develop a Local Government Planning Support Tool for Salinity. It provides a clear framework for incorporating salinity impacts into the process of decision-making on development applications.

6.173 The MDA has subsidised the cost of the development of the tool in order to trial it in Buloke Shire in north west Victoria. The consultants developed the tool at a discounted fee of $2,000. Buloke Shire is representative of many municipalities under severe threat.

6.174 Seven per cent of the land in the shire is in immediate threat of salinity, 50 per cent is potentially under threat of rising water tables. The shire has a low financial base. It covers an area 50 x 130 kilometres and has lost 25 per cent of population in last 25 years. It has almost no staff resources for assessing development applications. The trial demonstrates the effectiveness of the tool in a municipality with very limited resources.

6.175 There are two parts to the tool:

Salinity risk assessment

6.176 The consultants gathered together every piece of relevant information known about salinity in the municipality and mapped it to a common scale. Three maps were produced to provide an overall assessment of the salinity risk.

6.177 As has been discussed throughout this report, the consultants noted that the lack of sufficiently detailed hydrogeological, salinity and asset mapping available meant that it was not possible to produce maps suitable as a planning overlay. However, they state that:

> *Despite this, the maps provide a good indication of dominant groundwater processes contributing to salinity and of salinity risk in the municipality.* (Salinity Risk Assessment for the Shire of Buloke, August 2001, p4)

6.178 This process would have the additional benefits of identifying with some precision what additional data were needed by each council.

Local Government Planning Support Tool

6.179 The consultants went through every potential type of development application and assessed what its likely impact in terms of salinity would be, including on specific sites in the municipality. In evidence, Mr Budge advised the committee::

> ***Mr BUDGE:*** *[T}hey use a five stage model on which they will review each application. First of all they look at what the development type is, they identify what the general impacts on the water and salt balance are of a particular development; they identify the general potential impacts on the catchment at a broad scale level; and then the salinity processes at a specific location; then they work out some management options for consideration of the application.* (Transcript of Evidence, 21 Septeber 2001, p12)

6.180 The MDA intends to subsidise another council in the Murray Darling Basin to have the tool developed, as a second trial. After this the service will be offered to other councils in the Murray Darling Basin and in the long-term will be offered more widely. After the trial, the service will be offered on a fully commercial basis. The cost will vary according to the size of the shire and the amount of existing data. The committee understands that the cost for Buloke Shire, if it had been fully commercial, would have been around $5,000.

6.181 The Local Government Planning Support Tool for Salinity has been developed for the MDA which represents 80 councils. Clearly, the tool is tailored to their needs. The committee provided the report of the assessment of the tool in the Buloke Shire to the former DUAP for comment. DUAP responded, in part:

> *The Department of Urban Affairs and Planning supports the use of any tool which can be used to aid local salinity planning. However, DUAP believes that effective strategies can be implemented to deal with salinity without the use of such a detailed tool as the one noted in your letter, particularly given the variable quality of the information that will be available and the limited ability of councils to fund such work.* (correspondence)

6.182 At the public hearings, the DUAP representative advised the committee::

> ***Mr GEERING:*** *As part of the Salinity Strategy the Department is initiating work on putting together some planning instruments to actually support councils and the intention is to design appropriate planning instruments which would include looking at the sorts of conditions you might want to place on particular developments and to link those in with the general type of information that is available on salinity around the State itself … Our hope is that we will have some material drafted by the end of this financial year, by about June 2002.* (Transcript of evidence, 28 November 2001, p 2)

6.183 What Planning NSW is producing appears to be a more general version of the model planning tool produced for the MDA which tries to get around the need for further research and mapping of urban areas. The committee does not accept that the existing salinity research and mapping in NSW is adequate for land-use planning decisions. As discussed later in this report, Professor Young from CSIRO, who is working on the NLWRA, also believes that the NSW data is on too coarse a scale for looking at infrastructure. He points out that the data in NSW is very poor compared to that of other States where the extent of salinity can, at least, be identified down to hundreds of metres. This is obstructing research as well as planning approaches.

6.184 As discussed in Chapter Two, a Salinity Management Overlay was produced in Victoria to assist councils. Only nine councils have used it and it is being reviewed. The committee understands that councils that have used it received expert assistance from other agencies to apply it to their own area. The committee understands that reasons

for not using it are lack of sufficiently detailed salinity mapping to underpin it, the fact that the council must tailor the overlay to its own area and the lack of a requirement that they use it.

6.185 Experience suggests that the Model LEP being produced by Planning NSW will not be adequate to the needs of councils. A suitable tool needs to be based on more detailed mapping over the LGA, be tailored to local government areas, and provide incentives or requirements that it is used.

6.186 The confusion and delays that currently impede planning decisions on salinity affected development sites are not in the public interest. The NSW Government needs to find the resources to provide councils with the tools they need to make decisions.

RECOMMENDATION 10: That Planning NSW, within twelve months, offer councils in salinity hazard zones a tool tailored to their area to guide decisions on planning applications.

RECOMMENDATION 11: That the planning tool referred to in recommendation 10 is either produced by Planning NSW or by the private sector through a public tender process and is available to councils at a rate subsidised by the NSW Government.

RECOMMENDATION 12: That a suitable planning tool for local government would:

- **provide a set of salinity hazard maps for each local government area based on the best available data which identify and prioritise salinity risk areas;**
- **identify assets (environmental, agricultural, social, urban infrastructure, water resources etc) that are at risk of salinity;**
- **summarise the legislative and strategic framework for the area in which the council operates and identify the appropriate role for the council in salinity and catchment management; and**
- **develop a local government planning decision support tool for salinity that considers:**
  - **the nature of salinity hazards in the local government area;**
  - **the types of land use and development in a local government area that may impact on salinity processes or be affected by salinity;**
  - **the types of issues that development proponents must address satisfactorily in their planning approval submissions, including guidelines on site-based investigations of salinity;**
    - **provide criteria for assessing development applications; and**
    - **provide recommendations with regard to future mapping and study requirements.**

6.187 The processes used in the tool should be part of the process set out in a manual for councils on the management of salinity. Councils which follow the process set out in the manual should be provided with good faith indemnity from liability. This is discussed further later in this chapter.

RECOMMENDATION 13: That the use of the tool referred to in recommendations 10, 11 and 12, be included in a manual for councils on salinity management and that the manual be gazetted by the Minister for Planning, as is the case with the Floodplain Management Manual. (see also recommendation 16 on liability)

THE NEED FOR NATIONAL CONSISTENCY IN LINKING LAND USE PLANNING WITH NATURAL RESOURCE MANAGEMENT

6.188 There is a consensus that there needs to be a national approach to addressing salinity. The NAP is being negotiated with the States. As discussed earlier, little consideration is given to the role of councils. The Paper *Managing Natural Resources in Rural Australia for a Sustainable Future: A discussion paper for developing a national policy.* (ARMCANZ and ANZECC, December 1999) states:

> *Local government should be encouraged, including through a legislative obligation, to adopt policies and engage in activities that are consistent with State and Territory and national policies and regional plans for natural resource management.* (p28).

6.189 This glosses over the enormous challenges for local government in moving from a development centred approach to a natural resource management approach, which are addressed in this report. Furthermore, it does not address the need for national consistency of approach to assessing developments which may impact on, or be affected by, salinity. Mr Budge told the committee:

> ***Mr BUDGE:*** *[T]here is enormous disparity between councils as to how they link land use planning with natural resource management. Some have a long tradition, for others it is almost an untouchable subject, and there are a whole range of cultures that exist, and particularly pronounced in some rural communities in terms of the way in which decision-making in terms of land use is made, and frequently that relies more on what I would call the old boy network than any sort of rational approach to making decisions.*
>
> *These situations create a number of problems. We have clearly got inconsistent frameworks at the national and State levels at regional levels, and as a result it is not clear in many cases what sort of development approval is required even in respect of land uses and whether there is an impact on salinity. You can move from one local government jurisdiction to another and find that the same issue requires a permit in one and does not require a permit in the other, and that may be due to the way in which their planning control is worded or it may be simply due to the way it is interpreted at the local level.* (Transcript of evidence, 21 September 2001, p9)

6.190 The lack of a regional, State-wide or national approach is particularly acute for councils in areas like western Sydney which are facing development pressure.

6.191 There is a need for a national approach to natural resource management to be underpinned by a national approach to linking natural resource management and planning. While this is a long term proposition, Mr Budge believes that it is possible to at least achieve consistency between States and councils on the process by which development applications which may impact on salinity, or be affected by salinity, are assessed:

> ***Mr BUDGE:*** *Despite the fact that we may be operating under six different legislative land use planning systems in Australia, there is no reason why we cannot have the same process by which you assess applications…..Each state can write into its own legislation, into its own planning instruments, a process that everyone can use to assess development*

applications so that it fulfils the same impact assessment approach. (Transcript of Evidence, 21 September 2001, p.9)

RECOMMENDATION 14: That the Ministers for Land and Water Conservation and Planning request that the Natural Resource Management Ministerial Council and Planning Ministers' Conference develop a standard national approach to the process by which development applications which may impact on, or be affected by salinity, are addressed and that this approach be adopted through legislative amendments in each State.

6.192 There are 400 municipalities across Australia, which are in salinity hazard areas and would need to operationalise this process, if the proposal was accepted. The committee suggests that the processes in the tool referred to in recommendations 10-12 be considered as the basis for a national approach.

GOOD FAITH IMMUNITY FROM LIABILITY

LIABILITY CONCERNS OF COUNCILS

6.193 The LGSA informed the committee that councils' current exposure to liability claims for information provided in good faith in relation to salinity is a barrier to councils managing salinity. WSROC informed the committee that councils are concerned about being held liable for salinity damage to any developments that they approve.

6.194 Blacktown City Council identifies liability as one of its three main barriers to addressing salinity. This is particularly, the case because there are no clear statutory responsibilities on councils for managing salinity and a lack of guidance and information tools for decision making on salinity affected sites.

6.195 In the case of floodplain management, councils have guidance from the NSW Government through the Floodplain Management Manual and information from detailed flood plain studies. There is also a manual and more detailed mapping to guide councils on the management of acid sulfate soils.

6.196 A range of measures is being put in place by the NSW Government under the NSW Salinity Strategy which will provide councils with information. According to DLWC, however, this will not include detailed mapping owing to resource constraints.

6.197 Salinity hazard maps available to councils are at a small scale (1:100,000 scale) and the local processes leading to discharge of saline water are not always known. Blacktown City Council states:

Our concerns have grown since the release in late 2000 of the DLWC Draft Salinity Hazard Map for Western Sydney, which identifies all of the Blacktown Local Government Area as having either known areas of salinity, areas of extensive salinity hazard or areas of localised hazard- ie all of Blacktown could potentially be affected by salinity……..

While Council is in possession of the DLWC Draft Salinity Hazard Map for Western Sydney, it is not at a scale which can identify individual lots affected by salinity. Therefore, Council may only act on the premise that ***all*** *of the Local Government Area is affected by salinity, which is clearly not the case.* (Submission 27: Blacktown City Council)

INDEMNITY FOR OTHER NATURAL RESOURCE MANAGEMENT FUNCTIONS

6.198 Councils are provided with good faith indemnity under the *Environmental Planning and Assessment (Contaminated Land) Amendment Act* and the *Local Government (Flood Liable Land) Amendment Act*. The relevant ministers in their 2nd reading speeches give the same reason for providing indemnity:

6.199 Mr Carr, then Minister for Planning and Environment:

> *…a number of councils adopt an unnecessarily conservative approach that sometimes leads to unnecessary refusal of development applications or the application of unnecessary and costly development and building conditions.* (Hansard, 16 April 1985, 6025)

6.200 Mr Knowles, then Minister for Urban Affairs and Planning:

> *This has already led to an inhibiting effect on the current development of land in NSW. In an effort to minimise the exposure of councils to liability, councils have displayed a highly conservative approach in their dealing with development applications and rezoning of land, the outcome of which may lead to a greater number of appeals reaching the courts on the grounds of deemed refusal.* (Hansard, 6 December, 1995, 4285)

6.201 Councils are not currently restricting development, as many are either unaware of the full implications of the problem. Highly restricted development by councils is a possible future response, but at this stage issue is that councils must make decisions on development applications in the absence of adequate information in circumstances where they are exposed to liability claims for damage caused by refusing or approving an application. This does not seem fair or reasonable.

POSITION OF MINISTERS ON INDEMNITY FOR SALINITY MANAGEMENT

6.202 The committee raised the issue of liability with the Minister for Planning who stated:

> *Unlike the impact of flooding (for which local government is covered by indemnity), the impact of salinity is hidden and gradual. Salt affects much more slowly. However, salt damage can be lessened – even prevented – with good planning and the use of correct building materials and techniques.*
>
> *detailed mapping and modelling for salinity is not always available, reasonable assessments of risks can be made and appropriate planning controls put in place. I understand that this approach has been used successfully in the regional centres of Dubbo and Wagga Wagga.* (correspondence 5 December 2001)

6.203 The Minister's response does not address the fact that councils have indemnity in relation to contaminated land which has greater similarities to salinity affected land. Salinity problems are already present on many sites in NSW on which councils must make planning decisions. This is similar to having to deal with sites which are contaminated by chemicals.

6.204 It is at least twelve months, and probably more, until salinity is addressed in the BCA.

6.205 When the committee was in Wagga Wagga on a visit of inspection, City Council representatives informed the delegation that they were struggling to make a decision on a development application on the site of the former teachers' college, and had received little support from Planning NSW.

6.206 During discussions at the public hearings, Mr Tony McGrane MP (Member for Dubbo), made the following comments:

> ***Mr McGRANE MP:*** *Dubbo is a little bit different, because in Wagga Wagga they have stopped the development, so there can be no approvals given because of the land contamination [by salinity] as it appears. Now, in the city of Dubbo approval was given some few years ago, when salt in the area was not on the agenda, a number of homes were built and all of a sudden up comes the salt. Now we have got a terrible situation in a number of homes, and there is court action pending. The problem for local government is that they have given the approval in good faith six or eight years ago and all of a sudden the place is now infested with salt. Those councils are doing a lot of work and have spent hundreds of thousands of dollars on that area in regard to tree planting and all that type of thing, but the people who built these bought in good faith and now have got homes that it would cost two or three hundred thousand to build that are worth about half that. So that is the problem, and every council can face that problem.* (Transcript of evidence, 28 November 2001)

6.207 The Minister for Planning and the Minister for Local Government do not support good faith indemnity, although for different reasons. and circular. The Minister for Planning argues that councils would not have an incentive to keep their risk policies up-to-date:

> *Extending the indemnity offered by section 149(2) to cover advice on salinity is not favoured. To do so would deny access to legal proceedings to a party adversely affected by advice given on salinity. It may also diminish the integrity of planning certificates and lessen the incentive for councils to keep their adopted risk policies up-to-date.* (correspondence 5 December 2001)

6.208 The Minister for Local Government argues that it is not possible for councils to establish risk policies for salinity upon which to base good faith indemnity:

> *NSW councils face onerous public liability exposure due to the range of services, facilities and land management functions that they provide. However, tort law immunity can be inequitable to an injured party and can take pressure off councils to maintain competence and to properly manage risks.*
>
> *The public liability of councils has recently been examined by the Public Bodies Review Committee of the Parliament. The committee recommended the extension of a conditional good faith indemnity from liability for injury arising from pedestrian trips and falls on land under the control of council in circumstances where the action taken or not taken by the council was in accordance with a recognised standard……The indemnities that are currently provided apply to action in relation to flooding and contaminated land and related to core functions for which councils have recognised competence and specific statutory responsibilities. These indemnities are conditional on compliance with recognised published standards and accountability measures. In the case of salinity affected land both competence and recognised standards have yet to be developed.*
>
> *….the movement of salinity is dynamic and in many parts of NSW the factors influencing salinity movement are complex and not understood with certainty…….The argument presented for provision of a good faith indemnity for councils is that it would provide an incentive for them to undertake salinity assessments and management programs. At this stage it is not possible to identify the range of salinity assessment and management actions that may be appropriate for local councils or to quantify the associated risks.*
>
> *…..The [NSW Salinity] Strategy includes actions to develop a local government salinity information program (DLWC) and a model local environmental plan for salinity affected land*

(DUAP). It is expected that these initiatives will assist councils to begin developing appropriate assessment and management procedures.

In the absence of a reliable basis for assessing risk and of recognised standards for council action in relation to salinity affected land it is not considered appropriate to provide an indemnity from liability. However, the need to do so will be kept under review. (draft correspondence)

6.209 Since there is little information upon which councils can base a risk policy on salinity, it is hard to see how indemnity would lessen the incentive for councils to keep their adopted risk policies up-to-date.

6.210 If senior public servants in the relevant NSW Government agencies feel that the level of information on salinity is inadequate to develop standards for councils to follow, it is hard to see how council staff would feel confident making planning decisions based on the same data.

6.211 It is not fair or reasonable for the NSW Government to expect councils to bear the legal risks of making planning decisions in the absence of an agreed standard. Nor is it appropriate to arrive at an agreed standard through the courts. Neither is it in the public interest for councils, which lack competence in managing salinity, to set their own standards on approval of developments in salinity hazard areas.

6.212 It is the responsibility of the NSW Government to develop a policy on salinity for councils to follow based on the best information currently available.

6.213 Good faith indemnity does not protect councils from legal action where they have been inept. The parliamentary report, *Public Liability Issues Facing Local Councils* states:

Good faith indemnity can still be tested in court and if courts find that councils have not acted in good faith they will be liable for damages. In their submission to the Attorney-General's Department the Joint Metropolitan Liability Pools describe the case of Mid Density v Rockdale Council 1993 44 FCR 290.

In this case, the court considered that the concept of good faith called for more than honest ineptitude . The claimant purchased a commercial property relying upon a certificate issued in accordance with Section 149 (5) of the Environmental Planning and Assessment Act. The Certificate had been incorrectly issued and the land was liable to flooding. The officer dealing with this matter had relied on his knowledge and had given an incorrect answer to the question on the certificate which asked has the Council information which would indicate that the land is subject to, inter alia, the risk of flooding or tidal inundation. The Council certificate also included a rider that the above information has been taken from the Council's records and Council cannot accept any responsibility for inaccuracy. Clearly, however, the Council did have information that indicated that the land was flood-prone and either the information was inaccessible or the officer did not check. (p47)

6.214 The committee has recommended that a planning tool tailored to each council area be offered to councils at a subsidised rate within twelve months to guide decisions on development applications (see Recommendation 10). The committee believes that use of the tool should be included in a manual for councils on salinity management gazetted by the Minister for Planning. The committee is firmly of the view that councils should be given good faith indemnity from liability in relation to salinity for following the policy set out in the manual.

RECOMMENDATION 15: That Planning NSW with the assistance of the Department of Land and Water Conservation urgently produce a manual for councils, based on the

best available information, containing a policy to guide planning decisions in relation to salinity hazard areas.

RECOMMENDATION 16: That the Minister for Planning give notification in the Government Gazette of the publication of a manual for councils on management of salinity and that councils be provided with good faith indemnity from liability for advice provided, things done or omitted to be done, substantially in accordance with the principles contained in that manual.

RECOMMENDATION 17: That councils' indemnity from liability be reviewed in five years, taking into account the range of information and expertise available at that time to guide the decisions of councils.

OPTIONS FOR PROTECTION FROM LIABILITY CLAIMS

6.215 In the interim, councils have several options to protect themselves from liability.

6.216 They can adopt a precautionary approach and reject development applications on salinity risk areas. The precautionary principle under the *Protection of the Environment Administration Act* states:

> *that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (Farrier et al, Environmental Law Handbook 1999, p6)*

6.217 In the absence of NSW Government policy, rejection of development applications would be likely to lead to challenges in the Land and Environment Court after delays, frustration and costs to the parties.

6.218 Councils might be wise to adopt their own policy. David Greenwell, a barrister, delivered a conference paper, *Liability of Public Highway Authorities- Non-feasance Immunity and the Law of Negligence: where to now?,* at the National Local Government Summit on Salinity. He said that currently, the best defence against liability claims is for councils to be acting on the basis of *a policy* and *resulting system* even where that policy and system are rudimentary.

6.219 While a policy and resulting system may provide a good defence, it does not prevent councils being taken to court, with the associated legal costs.

6.220 At the public hearings, Mr Robert Irvine, representing the Department of Local Government, suggested an option whereby councils may refer complex development decisions to the Land and Environment Court:

> ***Mr IRVINE:*** *I am conscious that councils are dealing with applications for development in areas that are known to be salt affected reasonably regularly and they seem to have developed, particularly in Wagga Wagga strategies for addressing that. When very large amounts of risk are involved, as they are with this particular site [Boral] that you are alluding to, I am not surprised to see that decisions are placed in the too hard basket. I think they are too hard. There is a capacity for a council to not make a decision in such a case when it feels it is not equipped to and for the matter to be referred to the Land and Environment Court. When the decision is taken by the Land and Environment Court the risks to councils in terms of liability exposure are lessened.* (Transcript of evidence, 28 November 2001, p 24.)

6.221 Referral of matters to the Land and Environment Court may be the best way that councils currently have of protecting themselves from liability claims. It is a matter of urgency that a tool be developed to guide planning decisions in salinity hazard areas, that the use of the tool be part of NSW Government policy set out in a manual and that the Minister for Planning introduces an amendment to the EPAA to provide good faith indemnity to councils which follow that policy.

6.222 There is a further discussion of the issue of liability in relation to planning certificates later in the report.

FUNDING

THE SCALE OF THE PROBLEM

6.223 Secondary salinity is a national problem. Its causes lie in widespread land-use change, particularly the removal of native vegetation and its replacement with annual crops. The impact of salinity is unevenly distributed and the causes are often far removed from the impacts. At the roundtable discussion, Professor Young explained to the committee that it may take more than a century to see the benefits of measures to address salinity in some areas:

> ***Prof. YOUNG:*** *Another important point is how long it takes for systems to arrive at equilibrium when you change them. The fast systems are around 20 or so years. The medium term ones are 50. There are a lot in NSW and other States that are over 100 years before you get to equilibrium.* (Transcript of evidence, 21 September 2001, p3)

6.224 During his evidence, the chairman of the Lachlan Catchment Management Board said:

> ***Mr JOHNSON:*** *As I see it, it has taken us 100 years to get to where we are and it is not something that we are going to correct overnight. I think 250 years is realistic.* (Transcript of evidence, 29 November 2001, p5)

6.225 It is of the utmost importance that there are long term, targeted funding programs to address natural resource management issues like salinity.

6.226 The committee has been advised that the long-term financial implications of salinity for local government may be significant. Professor Young said that a model of salinity developed by the Australian Bureau of Agricultural and Resource Economics shows that if nothing is done salinity in the Murray River will get 20 per cent worse. This is not likely to happen because there are a lot of planned interventions. If the increase in salinity can be kept down to 1 per cent most of the impacts will be on farms. However, the model shows that if salinity gets 5 per cent worse, a third of the economic impacts will be on infrastructure.

6.227 Professor Young also informed the committee that the costs of salinity damage to infrastructure in NSW will increase:

> ***Prof YOUNG:*** *If you look at the overall impacts, that is the impacts over the next 20 years, where are things going to get worse in infrastructure terms in NSW, Victoria and all the other States of Australia? Victoria and NSW are the two States where things are going to get much worse in terms of impacts on infrastructure, this is roads, bridges and houses and buildings. Most of the problems have already occurred in Western Australia. This is rather interesting. A lot of people think that Western Australia is the worst, but salinity tends to put*

itself low in the landscape, and so to roads and bridges and so forth, and all the areas have already gone in Western Australia. There is a new wave coming through in Victoria and NSW. (Transcript of evidence, 21 September 2001, p2)

6.228 As discussed in Chapter One, projections of the impact of salinity on council finances in the report, *The Financial Costs to Local Government of Dryland Salinity,* prepared by Spiller, Gibbons Swan and SMEC, September 2000 suggest that, if nothing is done, the financial implications for councils could be devastating:

Application of the model to case study municipalities has demonstrated that, if left unchecked, salinity will become a major future driver of local government finances. Salinity will degrade local government provided infrastructure, requiring an ever increasing proportion of rate revenue to be dedicated to responding to salinity induced infrastructure repair and replacement requirements. It will also undermine local government's ability to raise rate revenue through degrading land value (4 September 2000, RPD Group)

6.229 Given the scale of the problem and the cost of addressing it, it is not appropriate for local councils to foot the bill for the management of salinity within a local government area. It is appropriate for ratepayers, through councils, to make a contribution.

FUNDING BY COUNCILS

6.230 Local government has indicated that it is willing to contribute. In evidence, The president of the Shires Association stated:

Cr MONTGOMERY: *[E]ach year the local government runs the National Assembly of Local Government in Canberra where councils provide information and get together to discuss issues of importance….we were addressing that issue….on how councils are to be engaged in natural resource management, and indeed, we have been working with members of the CSIRO to develop up a proposal for councils across the nation on NRM. The proposal which was adopted at the conference and will be put out for further comment from local government is that local government needs to commit to natural resource management, and, indeed, commit with hard dollars and the amount of $100 million a year was mentioned……..*

At a local government level, local council level, there needs to be the ability of that council to raise funding and environmental levies seem to me to be sensible, particularly when there is a regime that does not allow for rate increases of the general fund, because of rate pegging, to address those issues….

You can raise your environmental levy locally in the same way as rates are, but that should not be the whole answer to environmental remediation. The local people should not be asked to specifically pay for every bit of work that is done, but I think they need to make a contribution. …..It is going to take hundreds of millions of dollars to address this issue and it is not going to be raised by rates or at a local level. (Transcript of evidence, 29 November 2001, pp20,24,25)

6.231 The Minister for Local Government is willing to provide an exemption to general income limits (rate capping) to councils with a well-planned and managed approach to salinity, and other natural resource management issues. At the public hearings, the Department of Local Government representative stated:

Mr IRVINE: *The Government has adopted a position in relation to local government revenue raising through rates and charges that it will support the expansion of the rate*

burden on rate payers in local government areas where councils are undertaking a properly integrated environmental management program that is a new service for the community. So the Government's position in relation to councils' own revenue raising is that it is appropriate in circumstances where the strategies the council have implemented are core functions, adopted as core functions of the council and managed in a business like way in the same way that council manage their other functions. (Transcript of evidence, 28 November 2001, p 27)

6.232 The committee has suggested, in the chapter on capacity building, that councils need to adopt a well planned approach to managing salinity. It is clear that this approach would also be likely to make them eligible for exemptions to general income limits, as their contribution towards the cost of delivering a plan of action on salinity. However, there has been no consideration of sources of external funding for salinity management by councils.

EXTERNAL FUNDING

6.233 The NSW Government released the *NSW Salinity Strategy* in August 2000. The Commonwealth Government released its NAP in November 2000 with a commitment to providing funding to priority catchments to be dollar matched by the States. The bilateral agreement with NSW has been endorsed. The issue of funding has therefore been focussed on securing funding for catchments. The issue of funding for councils has received little attention.

6.234 However, this matter needs to be addressed urgently as it is one of the key barriers to the involvement of councils, both large and small.

6.235 Wagga Wagga City Council has been actively addressing salinity for several years. It described to the committee's secretariat, on a visit to the region, the frustration of seeking funding for a coherent plan of action via submission based programs which are not purpose built for local government.

6.236 The Manager of Design Services explained that Wagga Wagga City Council has an annual budget of around $60 million, and of this it spends $1 million annually on salinity control.

6.237 The council has spent $3.5m over three years and has received $1.2 million of NHT funding and $75,000 from the Salt Action Program. It has sold its gas business to Southern Energy and is using the proceeds to fund salinity control. The council wants to raise an environmental levy.

6.238 The manager of Design Services stated that council approached both the NSW and Commonwealth Governments to seek $12.5m funding required for implementation of the council's Natural Resource Management Plan. The council was informed that the amount sought was too large and that it should instead seek funding on a project basis. It has had to lobby government departments and ministers for funding and is repeatedly being asked to wait until the next stage of salinity planning is available.

6.239 The council advocates that resources should be available with a funding formula the same as that of flood mitigation works, which is dollar matching by both the NSW and Commonwealth Government of every dollar spent by the council.

6.240 The lack of an identified funding program or sub-program for local government is frustrating the attempts of even the most committed councils to deliver a coherent and planned approach to managing salinity. Constant submission writing is a waste of local government resources that could more usefully be applied to managing natural resources.

6.241 Many councils cannot afford to fund research or actions to address salinity as their budgets are close to fully allocated on existing core business, because they are rate capped, the costs involved may be large and because the rate base of some rural councils is declining. At the public hearing in Moama, NSW, the committee was advised by by Leon Broster, representing the MDA, that MDA research showed that councils in South Australia expend 70 per cent of their income on existing statutory responsibilities, leaving little to address new and emerging problems like salinity:

Mr BROSTER: *When we did some work- I cannot say that it will fit straight over to NSW - something like 70 cents in the dollar of local government income are required to be spent in a statutory obligation. So the discretionary dollar is fairly limited.* (Transcript of evidence, 18 July 2001, p5)

6.242 The current lack of a funding program for councils for salinity is inconsistent with the approach taken by the Commonwealth and NSW Government to assisting councils to address other natural resource management matters such as acid sulfate soils or floodplain management. At the public hearings, DLWC representative Mr Neville Pavan, were questioned about funding arrangements for other natural resource management issues: by councils is discussed.

MR JIM ANDERSON MP (ACTING CHAIRMAN): *Another land and water management issue such as acid sulfate soils and floodplain management, is there a funding formula for research and mapping of which other agencies are funded?*

Mr PAVAN: *… The Commonwealth acid sulfate soils program administers funds principally research works at a one to one funding ratio. NSW Agriculture administers the Acid Soil Action Program which has an acid sulfate soils component known as Acid Soil Action Program (ASSPRO)…..The environmental trust is the principal source of funding for stage 1 of the acid sulfate soil hotspot remediation program. The program is aimed at reducing acid discharge frequency and intensity from the worst acid sulfate soil areas and is 100 per cent funded by the State Government, that is 2.4 million through the Environmental Trust, although local councils are contributing significantly in kind with the establishment and management of stakeholder committees to develop solutions.*

Floodplain management is funded through the NSW Government's flooplain management program. This program is made up of two sub-programs, namely the State only and Commonwealth assisted sub-programs. Both programs have traditionally provided funding for both studies and management measures and is administered by DLWC. The State only program is a partnership between the State Government and local government agencies. The State Government makes grant offers to local government to cover 60 per cent of the costs of investigations and works based upon priorities for the same on a statewide basis. The Commonwealth assisted program is a partnership between the Commonwealth, the State Government and local government agencies. This program has had a number of funding ratios with the traditional ration being $2 Commonwealth, $2 State and $1 local.

However, in recent years the funding ratio for new projects has fallen to $1 Commonwealth, $1 State and $1 local due to changes to Commonwealth Government funding program rules. Funding is allocated dependent upon state –wide priorities and applications for

implementation measures. A State assessment committee asesses the applications and makes recommendations to the Minister for Land and Water Conservation. The Minister in turn makes recommendation to the appropriate Commonwealth Minister. In both the State only and Commonwealth assisted sub-programs, local government is responsible for the completion of the project with technical assistance provided by DLWC in fulfilling the requirements of the floodplain management process outlined in the floodplain management manual. (Transcript of evidence, 28 May 2001, p 42)

6.243 The committee is disappointed to note, in spite of the NSW Government's commitment to addressing salinity under the *NSW Salinity Strategy* and signing of a Memorandum of Understanding with the Local Government and Shires Associations, that NSW Government agencies are not addressing the issue of funding councils. This was evident in the public hearings in the following comments from Mr Irvine, representing the Department of Local Government::

MR MARTIN MP: *In relation to the funding issue again, without being specific, has your department or your people addressed…….what sort of mechanism might be workable…?*

MR IRVINE: *…there is no obvious funding mechanism for the development of a role for local government in NSW in relation to environmental management. That is certainly a question that has occupied the minds of various inquiries over the past ten years…….The question about external funding is rather more difficult because both the Commonwealth and State governments are struggling to find the sort of quantum funds that would be required. If we look to history, the State Government engaged with local government in relation to the construction of water supply and sewerage services around the State. It has been a program which has operated for over a hundred years and has had I think very beneficial impacts on the quality of life of residents in regional areas. That may provide a model for a more active role for local government in environmental management, but I cannot say that consideration of a strategy is on the department's agenda at this stage.* (Transcript of evidence, 28 November 2001, p27)

6.244 And from comments by Mr Verhoeven, representing DLWC:

Mr VERHOEVEN (DLWC): *…if they are wanting to get on the front foot, there is the opportunity for them to look to where they might need some in-fill mapping and actually have that carried out if they can see a lot of development commencing and happening in that area in the future, and there are ways that they can obtain resourcing to help them to do that, for example, through things such as the Natural Heritage Trust or other investment sources.* (Transcript of evidence, 28 November 2001, p17)

6.245 Clearly, NSW Government agencies are hoping that the Commonwealth Government will address the issue of funding for councils. Currently, access to NHT funding is the only source available to councils to manage salinity. This is not an effective way of engaging local government in salinity management. It is clear that with other natural resource management matters, there is a specific funding program for councils with a funding formula. However, the committee is not suggesting that there be yet another single issue natural resource management funding program for councils. Rather than proliferating the number of separate natural resource management programs, administrative arrangements and funding programs, it would be better if the Commonwealth, States, Territory and local government developed an approach for funding local government to manage natural resources, including salinity.

6.246 The committee has examined a number of possible funding sources (see appendix 1) and recommends the following.

RECOMMENDATION 18: That the Minister for Local Government and the Minister for Land and Water Conservation place on the agendas of the Local Government Ministerial Council and the Natural Resource Management Ministerial Council the issue of funding local government to manage natural resources, with the recommendation that a working party be established to develop a funding options paper for consideration at the next meeting of the Ministerial councils.

RECOMMENDATION 19: That the Natural Resource Management and Local Government Ministerial Councils take into account the view of this committee that any funding program/s should fund councils for:

- **damage to infrastructure and the extra costs incurred in delivering services, subject to councils having a salinity management plan in place;**
- **building the capacity of councils to manage salinity; (ie staffing, training, mapping, research, monitoring, planning)**
- **actions linked to broader strategies and targets.**

RECOMMENDATION 20: That the following criteria apply to the eligibility of councils for funding to manage salinity:

- **councils are required to develop a long-term salinity management plan;**
- **the plan is consistent with broader strategies and targets;**
- **the plan includes measures necessary to build the council's own capacity to manage salinity over time; and**
- **councils identify a budget towards the cost of phases of the plan, according to their capacity to pay.**

6.247 The committee believes that the Financial Assistance Grants Program should be given consideration as an effective way of assisting councils with the costs of damage caused by salinity and the extra costs of delivering services. It would require agreement to a measure of salinity damage to be applied in the horizontal equalisation process. The committee understands that data being developed by the NLWRA may be useful in this regard.

6.248 The committee believes that access to funding to the regions under the NAP warrants consideration as an effective way to fund councils for actions which contribute to broader strategies and targets.

6.249 Consideration needs to be given to an appropriate funding source for councils to build their capacity to manage natural resources in the long term and to funding councils which are not in priority catchments for actions which align with broader targets and strategies.

6.250 The committee notes that CSIRO is developing a paper on natural resource management and the issue of finances is being addressed in a parallel process. The president of the Shires Association said that local government would be putting a position to the central government, possibly through Council of Australian Governments (CoAG), for a change in the way government funding is delivered. The committee

suggests that the working party established to develop a funding options paper on funding local government to manage natural resources, including salinity, take this position into account.

♦ **Priority catchments under the Commonwealth National Action Plan**

6.251 The committee has recommended that the Local Government Ministerial Council and the Natural Resource Management Ministerial Council establish a working party to develop a funding options paper to identify the most appropriate means of funding councils to manage salinity. The committee believes that councils should be funded to undertake actions to manage salinity which align with broader targets and strategies and that the most effective way of doing this may be to provide councils with access to funding under the NAP. However, two regions of NSW with significant salinity problems have not been included in the priority catchments for funding by the Commonwealth Government.

6.252 The Hunter and Hawkesbury-Nepean regions are both significantly affected by salinity. The Hunter River has higher electrical conductivity (EC) levels than many rivers in catchments designated as priority under the NAP. Western Sydney in the Hawkesbury-Nepean catchment is a dense urban area where the costs of damage to infrastructure are potentially the largest in Australia.

RECOMMENDATION 21: That the NSW Government continue to negotiate with Commonwealth Ministers for Agriculture, Fisheries and Forestry and Environment and Heritage to have the Hawkesbury-Nepean and Hunter catchments included as priority catchments under the National Action Plan.

6.253 Currently, potential or actual damage to infrastructure is not one of the criteria for designating priority catchments. The committee urges the NSW Government to advocate to have this criterion added.

RECOMMENDATION 22: That the NSW Government negotiate with the Commonwealth Government to include severity of salinity impacts on urban infrastructure, including risks of future damage in the criteria for designating priority catchments.

INFORMATION AND EXPERTISE

AVAILABILITY AND COST OF DATA

♦ **Access to data**

6.254 Access to data is fundamental to the successful management of salinity. It is in the public interest for all data on salinity to be shared and consolidated. Where data has been produced or funded by a government agency, it has already been paid for by taxpayers and should be publicly accessible. Throughout the inquiry the committee heard anecdotally that data from NSW government agencies, necessary for salinity management, was expensive and difficult to access. Many of these organisations chose not to put their concerns on record.

6.255 DLWC witness, Mr Verhoeven, informed the committee at the public hearings that the agency provides data at 'cost of transfer' which covers the staff time and materials and sometimes provides it free of charge.

Mr VERHOEVEN: *The Department's policy is in fact to provide data either on a cost of transfer basis or at no cost to local government. In fact, very often the package of data required is of such a small nature that administratively it is more expensive to actually charge for it, so it is given at no cost . . . The Department provides its data on this cost of transfer basis, and that is a policy generally adopted by NSW Government agencies, and that basically means that we include the time and the materials costs to actually provide the data, but there is no mark-up overhead, there is no profit. There is nothing like that put in it. It is just the cost of having to pull that information together.* (Transcript of evidence, 28 November 2001)

6.256 Cootamundra Shire Council was invited by the committee to make a submission on the difficulties it had experienced with accessibility to, and cost of, data from the Land Information Centre, for a project which had been funded by the NSW Government and included mapping of salinity.

In 1999, Council, in concert with the Cootamundra Development Corporation (CDC), received funding of $16,000, from the NSW Department of State and Regional Development (S&RD) under the Developing Regional Resources Program to undertake a study into the potential to attract new agribusiness to the area. This study included mapping of salinity and associated geology and geography.

In 2000, the project was awarded to Environmental Research and Information Consortium Pty Ltd (ERIC) who undertook to produce the data required but were unable to place the data on a cadastral layer for the contract price. Inquiries revealed that the purchase of the cadastral data layer in digital form from the then Land and Information Centre (LIC) would cost Council more than the total cost of the agribusiness project.

Council then employed Polmark Pty Ltd to approach government on its behalf and attempt to obtain the data at an affordable cost. This became necessary as neither Council or ERIC had been able to negotiate any affordable arrangement with LIC.

By mid-late 2000 the agribusiness project was complete, however, the cadastral data was still not available to attach to the other data. In practical terms, this meant Council had access to good intelligence regarding salinity, geology, soil characteristics, drainage patterns etc but was not able to relate this to a point on the ground.

In late 2000 an agreement was reached with LIC whereby the cadastral data would be made available free of charge to the S&RD who would then allow use of the data through the CDC specifically for this project. This offer came with a variety of restrictions which would have made it difficult for Council to recover costs involved in disseminating the information in digital format to the effected landholders. Nevertheless, Council accepted the offer and the project was completed.

In May 2001 Council signed a Digital Data Licence Agreement with Land and Property Information (LPI) allowing Council, or its consultants and contractors, to use cadastral data for any legitimate purpose. This agreement is based on a one-off cost of $1,238.14 for the cadastral data and an annual licence fee of $866.14. As such the information contained in the agribusiness report has become available for dissemination where necessary.

This sequence of events was extremely frustrating for Council, particularly as Council was informed that cadastral data was freely available to government bodies in Victoria in an attempt to stimulate development in that State.

Council felt that some Government agencies were not operating in the interest of the state as a whole and were certainly not communicating with other agencies to achieve a unified

outcome. This was evident in S&RD granting money to Council in identifying and attracting new development only to have that aim nearly thwarted by LIC's costing policies. (Submission 29: Cootamundra Shire Council)

6.257 The House of Representatives Standing Committee on Environment and Heritage raises similar issues in its report, *Coordinating Catchment Management,* about the difficulties which the NLWRA had in accessing information from government agencies in Australia. Like Cootamundra Shire Council, the NLWRA also had to enter into protracted negotiations to get data from government agencies. The Select Committee on Salinity understands that NSW government agencies were amongst those to which these comments refer. The House of Representatives Standing Committee on Environment and Heritage states:

The NLWRA also indicated that obtaining access to environmental data held by the states can be problematic. It was pointed out to the committee that state agencies do not foster a culture of information sharing, and often demand high prices for access to data. The NLWRA, who have been involved in a project which requires access to information held by the states, found that it took them 18 months to obtain information held by some states.

6.258 Councils need access to data to assist them to manage salinity. The NLWRA has an important project to consolidate all relevant data and make it publicly available on internet. The web site contains an Atlas. The Atlas is a web-based public interface to the information prepared by the NLWRA. The Atlas provides links to information available from other government agencies allowing government and the public alike to access an extensive range of information about Australia's natural resources, including salinity. The Atlas provides a query and mapping facility, enabling users to prepare customised publication quality reports and maps.

6.259 It is not in the public interest for this process to be obstructed.

6.260 The House of Representatives Standing Committee on Environment and Heritage itself experienced difficulties in accessing data. It states:

In addition, the committee itself experienced the difficulties associated with gaining access to environmental information. attempting to source maps of catchment areas, the committee contacted a number of government agencies in each state. The committee was often met with unhelpful responses, agencies with little knowledge of the issues even within natural resource management departments. The committee also found that the price that many agencies charged for what should be essential and basic information was excessively high.

The committee was advised by the NLWRA that the lack of coordination between different departments and natural resource management groups results in the duplication of data collection. As well, owing to the lack of communication between agencies and other groups, information may not be collected in a uniform manner, therefore, decreasing the ability to apply the data at a national level. (Coordinating Catchment Management p62)

6.261 The House of Representatives Standing Committee on Environment and Heritage recommends:

…that the Government enter into negotiations with all state and territory governments to establish clear protocols for the exchange of information concerning the ecologically sustainable use of Australia's catchment systems and that:

- *funding to the states and territories be dependent, in part, upon entering into information sharing protocols;*

- *this information be collected and maintained on a national basis, in a national database maintained by the NLWRA; and*

- *information be freely, publicly available through catchment area district offices and over the internet.* (pxviii)

RECOMMENDATION 23: That the Premier ensures that information sharing protocols are in place between NSW agencies and projects like that of the National Land and Water Resources Audit which aim to provide free public access to consolidated information for the better management of Australia's natural resources.

RECOMMENDATION 24: That information sharing protocols include the provision of natural resource management data free of charge by NSW Government agencies to important regional, state-wide or national data sharing projects.

♦ **Scale of salinity mapping by DLWC**

6.262 Councils have complained that salinity hazard maps which are at 1:100,000 scale are too coarse to be used for land-use planning. It is not possible, for instance, to tell whether an individual property is inside or outside of the hazard zone. WSROC states:

> *More detailed hazard maps are needed if decision-making, and particularly Planning Instruments are to be based on them. For example, the Acid Sulfate Soils Manual is based on maps at the 1:25,000 scale; this scale is appropriate for further salinity hazard mapping. Revised Soil Landscape maps identifying problem materials and landscapes are also needed. Specific mapping in areas of known salinity (scales around 1:10,000 and 1:5,000 are also needed). This detailed mapping should be combined with geophysical and geohydrological research where possible.* (Submission 25: Western Sydney Regional Organisation of Councils)

6.263 As discussed earlier, research on the assistance the NSW Government gave to councils to deal with acid sulfate soils and floodplains shows that planning measures by councils were preceded by a period of more detailed mapping and that guidance and the responsibilities of councils were set out in manuals.

6.264 At the public hearing in Blacktown, the committee asked the DLWC, Mr Pavan, the cost difference between 1:25,000 scale mapping which councils say they need with 1:100,000 scale mapping which is what DLWC provides. Mr Pavan stated:

> ***Mr PAVAN:*** *Soil landscape mapping of 1:100,000 scale are estimated to be about $150,000 and that is sampling at one per seven square kilometres, or 350 samples over 250,000 hectares. To compare that, 1:100,000 are one observation per seven kilometres or one per 700 hectares. A 1:10,000 scale map would need 21 observations per square kilometres, so that is 21 observations per 100 hectares. So, the scale in observations and mapping jumps quite exponentially in that area.* (Transcript of evidence, 28 May 2001, p39.)

6.265 DLWC has informed the committee that councils can obtain further mapping by requiring developers to undertake site-based investigations. The committee does not regard the role of councils in salinity management to be limited to managing the impact of new developments on salinity. Councils can play a pro-active role in managing

salinity. For this they need data to set priorities, strategically locate initiatives and to monitor outcomes.

6.266 This issue was raised with Mr Verhoeven, from DLWC, who responded:

> ***Mr VERHOEVEN****: With the broader scale mapping which the Department of Land and Water Conservation is developing, and there is already one, for example available for western Sydney, councils are able to link the findings of the more detailed investigations or maps back into that map to see that the two in fact align and that you are not getting different stories from a larger scale or small local map linked back up into the regional map…..if they are wanting to get on the front foot, there is the opportunity for them to look to where they might need some in-fill mapping and actually have that carried out……and there are ways that they can obtain resourcing to help them to do that, for example, through things such as the Natural Heritage Trust or other investment sources.* (Transcript of evidence, 28 November 2001, p 17)

6.267 Site-based investigations in western Sydney will be necessary as part of development applications due to the local groundwater system which makes the emergence of salinity hard to predict. However, having individual councils writing numerous applications for grants for mapping hardly seems an adequate or coordinated approach to regional mapping for land use planning. Councils are not the only organisations which regard the NSW salinity mapping program as inadequate. In evidence, Professor Young stated:

> ***Prof. YOUNG:*** *If you look at infrastructure across the nation, the first point I must make is that the data is of a very, very poor quality. There is very poor data on the extent of salinity. The NSW data supplied for the National Land and Water Resources Audit is on a very coarse grid. Actually NSW and Queensland's data compared to the other states is of very poor quality. It is mapped on 5K grids most of the other States are down to hundreds of metres, identifying exactly where the problem is. This means that to get comparable national data you have to divide the NSW data by six and seven, which horrifies me. I do not have time to talk of the reasons why that is.* (Transcript of evidence, 21 September 2001, p2)

RECOMMENDATION 25: That the NSW Government either

(c) provide councils with access to funding for salinity mapping, as it has for floodplain studies; or

(d) provide DLWC with adequate funding to undertake mapping of local government areas at a level of detail suitable for land use planning purposes. (see also recommendation 12 on the development of a planning tool)

6.268 As discussed above, councils will have to require developers to undertake site-based investigations in salinity hazard areas, particularly those on local groundwater systems such as western Sydney. It is in the public interest for this data to be shared and compared to smaller scale mapping. WSROC sees standardised investigations and data sharing as important:

> *Requesting information and testing by land developers, both on small scale and large scale sites has already begun in some councils and will continue as the realisation of the salinity problem within councils grows, and as the community becomes more aware of the risks. It makes sense that this information is pooled in a regional database and is used as a reference point for development and land management in adjoining sites. WSROC is*

working on a standardised list of testing procedures appropriate for developers to undertake on different sized lots. This list requires co-operation with geo-technical experts and funding is required to gather this technical advice. (Submission 25)

RECOMMENDATION 26: That any salinity mapping data undertaken by, or provided to, a local government agency be subject to data sharing protocols with other government organisations intra and inter state and be publicly available at the cost of transfer.

TRAINING

6.269 Currently, many councils have little information about salinity and do not have the expertise to deal with it. Councils are composed of three collective groups: elected councillors, corporate management and operational staff.

The RPD Group describes their roles in its report *Enhancing the Capacity of Local Government to Contribute to the Management of Dryland Salinity*:

- Councillors have responsibility for determining strategic directions and policy and approving the budget allocation;
- corporate management is responsible for providing strategic and tactical advice, allocation of resources and management of services;
- operational staff are involved in the delivery of services. Their role, function and experience provide important feedback to the organisation. (11:2001)

6.270 If salinity is to be part of the core business of local government then corporate management and operational staff need to be appropriately trained and qualified. In order for councillors to demonstrate high-level commitment and leadership on natural resource management issues they also need information tailored to their needs.

♦ **Training for council staff: vocational training**

6.271 There is a well-established program of training for local government within the National Training Framework. In March 2000, Commonwealth State and Territory Vocational Education and Training Ministers agreed to the National Local Government Training Package. National Industry Training Ltd has devised a qualification model for local government employees. The training package provides a framework for national competency standards and assessment guidelines. It also assists with training, job descriptions and professional development for all Australian councils (Local Government National Report p 45).

6.272 The training package can be used to provide training and qualifications for entry level staff and existing employees without qualifications. A small subsidy is available from state training authorities mainly for new recruits but some subsidies may also be available for training existing staff. Subsidies are paid per person. The qualifications from these packages are portable across Australia.

6.273 The local government specific qualifications are divided into three pathways representing three focuses of government activity:

- governance and administration;

- planning and management of physical environment;
- and environmental health and regulation.

6.274 Qualifications from other industry training packages are also included as part of the framework where they represent key areas of operations and functions of local government. Some of these are relevant to the management of salinity:

- horticulture;
- building and construction;
- water sector ;
- asset maintenance;
- asset development and maintenance.

6.275 The committee believes that competencies for identifying salinity and addressing it should be incorporated into the training packages of all relevant employment categories for council staff. Once endorsed, industry training packages must be reviewed every 18 months to identify gaps. The committee believes that when the Australian Local Government Training Board and other relevant industry training advisory boards develop new units or redevelop old units that competencies in addressing salinity issues should be included.

6.276 The president of the Shires Association informed the committee that he supported the inclusion of salinity in training packages but added:

> ***Cr MONTGOMERY:*** *Salinity should not be seen on its own. There is obviously a problem, but I think salinity is more of a symptom rather than a cause and the solution is not always going to be about treating the symptoms. Certainly it is an issue and something needs to be done about salinity specifically but in training I think people should take a holistic view and look at all of the issues of natural resource management.* (Transcript of evidence, 29 November 2001, p23)

6.277 The committee wrote to the Australian National Training Authority (ANTA). It has addressed salinity in its Conservation and Land Management Training Package and the approach taken is along the lines suggested by Cr Montgomery, for example, the competency standard Conduct biological surveys includes, river health, native vegetation, water quality, soil erosion, salinity and coastal management.

6.278 ANTA undertook to address salinity in the Local Government Training Package:

> *…ANTA will discuss the salinity issue with the Local Government Industry Training Advisory Body to ensure that the salinity issue is examined during the review of the Local Government Training Package. It can also be dealt with in the Water Industry Training Package through importing relevant units of competency.* (correspondence 26 November 2001)

6.279 The NSW Department of Education and Training emphasised the point that many training packages relevant to the functions of local government are, in fact, developed by other industry training advisory boards and imported into the Local Government Training Package. This is because these types of jobs are found in, but are not limited

to, local government. The Department of Education and Training has been attempting to negotiate the inclusion of salinity into national training packages. The Department has identified three relevant training packages. However, the Rural Training Council of Australia has decided that salinity will only be included if considered relevant by the workplace and/or relevant training provider. The inclusion of salinity in these training packages will rely on the awareness and understanding of salinity by training organisations, workplaces and industry bodies. The Department informed the committee that:

TAFE NSW is attempting to have salinity issues incorporated into relevant national training packages to ensure salinity is addressed in training for local government staff and others. Inclusion of salinity into such training packages is critical to ensuring that salinity is covered in vocational education and training across Australia. TAFE NSW has provided extensive input about this matter to the Industry Training Advisory Boards responsible for developing training packages.

The National Local Government ITAB is developing competencies only in areas that are specific to local government functions, such as Environmental Health and Regulation, and Planning and Management of the Physical Environment. Competencies that are not specific to local government are accessed from other training packages, for example, horticulture and library competencies. The National Local Government Training Package is about to be reviewed and TAFE NSW will be consulted during the review.

Other Training Packages relevant to the issue of salinity are the Agriculture, Horticulture and Conservation and Land Management Training Packages. It is most appropriate for salinity units of competency to be included in these training packages and imported into others, such as the Local Government Training Package, as required.

The NSW Board of Vocational Education and Training will encourage training in the area of salinity through the NSW Strategic Plan for Vocational Education and Training 2002 – 2004 and the NSW Innovation Strategy which forms part of the NSW VET Plan 2002. Both plans include initiatives to address environmental issues and foster innovation in rural and regional communities. New training services will be particularly targeted to sustainable agriculture/horticulture and new environmental technologies.

TAFE NSW has conducted extensive discussions with the Rural Training Council of Australia (RTCA) for greater inclusion of sustainability issues, particularly salinity, into these three training packages. The RTCA have decided that the study of salinity issues will be included as part of demonstration of competence if considered relevant by the workplace and/or registered training organisation.

The RTCA approach aims to provide greater flexibility in qualifications issued under a training package by ensuring they can be tailored to a particular workplace or situation. However, this means that salinity is optional and the degree to which it is included will rely on the awareness and understanding of the issue by registered training organisations, workplaces or industry bodies. (correspondence 10 December 2001)

6.280 The committee has identified lack of information and expertise as a key barrier to the management of salinity by local government. It has also been identified as a key barrier in the report *Enhancing the Capacity of Local Government to Contribute to the Management of Dryland Salinity (RPD Group for the National Dryland Salinity Program, January 2001)* Salinity is one of the most serious environmental problems facing Australia. There are national and NSW strategies to address it. However, changes on the ground require knowledge and skills that will only come through training and

experience. The national and state-wide priority given to salinity needs to be reflected in national and state training priorities. Furthermore, national and state training priorities need to include the knowledge and skills necessary to identify and manage salinity at local government level. This report discusses the range of actions that councils can take to manage salinity. Local government staff at all levels in these functional areas will require training to manage salinity. This means that salinity needs to be included in vocational training and in training for existing staff.

6.281 The potential costs to local government, if nothing is done, may be enormous. At the same time, community awareness of salinity, including its urban impacts and how to address them, is low. If decisions on the inclusion of salinity in training packages are made at the level of workplaces and training providers, it is likely that national and NSW expertise on how to manage salinity will be patchy and improve only slowly.

6.282 It is most important that high level negotiation occur between Commonwealth and State agencies responsible for salinity strategies and research, Commonwealth and State agencies responsible for vocational education and training, Australian and State local government associations and ANTA and national industry training advisory boards to identify the range of functional areas involved in the management of salinity at local government level and to ensure that all relevant national training packages include competence in the management of salinity as a core component.

RECOMMENDATION 27: That the Ministers for Education and Training and Land and Water Conservation seek the assistance of their Commonwealth counterparts in ensuring that all national training packages for functions relevant to the management of salinity at local government level include competence in this area as a mandatory part of the package.

♦ **University courses for planners and engineers**

6.283 Professor Farrier identified that the urban focus of planning, which neglects natural resource management, is partly due to the training which planners receive:

> ***Prof. FARRIER:*** *[I]n NSW there are massive problems with land use planning education, and land use planners are still taught in an urban context….Planners are now being expected to deal with threatened species issues in NSW apart from salinity issues. They basically have no idea what is going on.* (Transcript of evidence, 21 September 2001, p13)

6.284 Councils are increasingly being faced with natural resource management issues such as:

- SEPP No 14 Coastal Wetlands;
- SEPP NO 19 Bushland in Urban Areas;
- SEPP No 26 Littoral Rainforests;
- SEPP NO 44 Koala Habitat Protection;
- assessing the impact of proposed developments on threatened species;
- managing contaminated land;

- acid sulfate soil;
- community land management provisions in terms of the Draft NSW Biodiversity Conservation Strategy;
- protected areas under the *National Parks and Wildlife Act 1974*;
- involvement with community Landcare groups
- issuing environment protection licenses in relation to water pollution from non scheduled premises;
- issuing preventive environment protection notices to control pollution (Sproats and Kelly, *The Role of Local Government in Natural Resource Management*, January 1998)

6.285 The content of university courses for planners needs to ensure that they have the knowledge and skills to address natural resource management and environmental matters. Similarly, training for engineers should also include management of salinity.

RECOMMENDATION 28: That the Minister for Education and Training seek the support of the Commonwealth Minister for Education, Training and Youth Affairs to liaise with NSW universities which offer courses in land-use planning, engineering and natural resource management to ensure that they prepare graduates to deal with a range of natural resource and environmental issues, including salinity, in urban and rural local government areas

♦ **Training for councillors**

6.286 The LGSA stakes a claim to be treated as an equal partner in natural resource management. Arrangements in this area are progressing and are at a critical point where councils can either choose to be involved at a strategic level or risk being left behind. Dubbo City Council and the other councils in the upper Macquarie Catchment have chosen to be involved and have established a regional salinity alliance to liaise with the Catchment Management Board and hold funds for works. There is not a great deal of information at this point. It is an area where leadership is required for councils to forge a new role for themselves. In order to demonstrate leadership councillors need to be informed.

6.287 The president of the Shires Association, Cr Montgomery, informed the committee that local government representatives to natural resource management committees, such as CMBs, need training:

> ***Cr MONTGOMERY:*** *The issue is resourcing, making sure that, firstly, the skills are there, not just among the staff, but also among those representatives who are on council. Often that will include a great amount of training for the local government representatives, because they are not necessarily expert in this field.* (Transcript of evidence, 29 November 2001, p19)

6.288 The committee notes that under the Federal Government's former Local Government Development Program, State and local government associations were funded for a project 'Strengthening the Participation and Capacity of Elected Representatives and Managers in NSW'. The projects provided training to prospective and elected council

members through a series of training workshops to assist them to develop a greater awareness of key management issues relevant to councillors.

RECOMMENDATION 29: That the NSW Government request that the Commonwealth Government continue to fund a training course for councillors and makes funding available for the development of a module on natural resource management, including salinity.

- **Information sharing for non-government and professional organisations**

6.289 Organisations such as the MDA, Institute of Public Works Engineering Australia (IPWEA) and Water Directorate have large memberships which will be involved in addressing salinity at council level. The MDA and IPWEA organised the National Local Government Summit on Salinity in July 2001 which was well attended by councils. IPWEA, in its submission, expressed an interest in disseminating information.

6.290 The committee believes that there is value in providing a modest amount of funding to organisations with large memberships involved in council management of salinity for workshops, forums, information on websites and in newsletters and journals to engage members in addressing salinity, to disseminate information and share best practice.

RECOMMENDATION 30: That the NSW Government provide funding to organisations with large memberships involved in council management of salinity for workshops, forums, information on websites and in newsletters and journals to engage members in addressing salinity, to disseminate information and share best practice.

PART 3 – BUILDING THE CAPACITY OF COUNCILS TO MANAGE SALINITY

7 CAPACITY BUILDING

7.1 Councils have a significant role to play in the management of salinity. However, in its report, *Enhancing the Capacity of Local Government to Contribute to the Management of Dryland Salinity,* the RDP Group *identified* that salinity is not currently regarded a the core business of councils.

7.2 Addressing salinity is a very long term challenge which requires extensive land use change. It will require a coordinated response by all levels of government and the community. Both the Commonwealth and NSW Governments recognise the need for the alignment of targets and plans from a national to local level.

7.3 In order for local government to address salinity as part of its core business the capacity of local government to manage natural resources needs to be developed over time. It needs to be recognised that the capacity of larger well-resourced councils will be very different to small rural councils. The report, *Public Good Conservation: Our Challenge for the 21st Century,* quotes the evidence of Environs Australia, the local government environment network:

> *There are great differences between the level of commitment, interest and capacity. Compare, say a high rate base urban council that is well educated and has a whole lot of factors that encourages it to commit to sustainable initiatives with a small wheat belt council that might have ten staff, a rate base of $3 million and all the pressures. It is barely dealing with its own roads.* (p171: September 2001)

7.4 Mr Ian Rogan, chairman of the Central West CMB, also informed the committee that the capacity of local government is widely variable:

> ***Mr ROGAN:*** *The capacity, the readiness of local government to be dealing with salinity issues varies hugely between different local government organisations. Councils such as Dubbo, I guess because of the scale and perhaps the fact that there are a number of individuals on staff that are pretty committed to this sort of area- I would regard Dubbo City Council as one well placed to deal with issues relating to salinity and other smaller ones- I live in Narromine Shire- certainly shires such as Narromine and Warren, though really well intentioned and concerned, by their own admission have an extremely limited capability to deal with the issues. They say so. Their financial and people resources are such that they are feeling really threatened and challenged by it and having little capability to deal with it.* (Transcript of evidence 29 November 2001, p 6)

7.5 There needs to be a long term program with funding from the State and Commonwealth Governments to develop the capacity of local government to manage natural resources, including salinity. The elements of a long-term approach are outlined below.

7.6 Without boundary changes, however, the capacity of local government will remain variable. Resource sharing between councils and regional partnerships may overcome some of the structural and financial limitations of councils by sharing or pooling of resources and expertise. This is discussed later in this chapter.

ELEMENTS OF CAPACITY BUILDING

7.7 Programs which aim to bring about long-term institutional change, such as Equal Employment Opportunities, have certain features in common:

- leadership and responsibility at the highest levels;
- a plan which includes responsibilities, timelines and measurable outcomes;
- an identified budget;
- allocation of responsibilities and accountabilities for planned activities across the whole organisation;
- an identified position to provide advice, coordinate, report and evaluate the implementation of the planned activities;
- integration of planned activities into corporate plans and action plans;
- training and information for staff;
- communication strategy to inform and consult clients;
- monitoring and evaluation systems.

LEADERSHIP

7.8 Councillors with the assistance of senior managers determine the priorities for councils. Without their support it would be unlikely that an issue like salinity would become part of the core business of a council. As discussed earlier, elected members need to be provided with information on natural resource management, including the implications of salinity for councils. (see recommendation 29)

PLANS AND BUDGET

7.9 As discussed earlier, long term funding needs to be provided to develop the capacity of councils to manage natural resources, including salinity. Chapters 8 and 9 discuss a range of actions which councils can take to manage salinity. In order to be eligible for funding, councils should be required to provide a plan for developing their capacity and delivering actions linked to broader strategies and targets. There should be a funding formula which requires councils to identify a budget towards the cost of delivering phases of the plan. (see recommendation 20)

7.10 In terms of planning, Wagga Wagga City Council and Coorong District Council provide examples of councils with a planned approach to the management of salinity. The committee understands that the Urban Salinity Team in the Department of Land and Water Conservation will be working with councils.

7.11 In order to develop an effective plan, councils need data on salinity in their area. This is essential to knowing what actions to take, setting priorities and ensuring that actions are cost-effective. It should be noted that Wagga Wagga City Council initially undertook an economic study of the impact of salinity and several years of investigation of the extent and nature of the problem prior to developing its Urban Salinity Action Plan.

7.12 The data currently available to councils, in most cases, is not adequate for detailed planning purposes. However, there is data available which may give a good indication of groundwater processes and salinity risk areas. Many councils have not accessed the data which is available.

7.13 As stated earlier, data is available free of charge from the NLWRA's web site (www.nlwra.gov.au/atlas) which contains an atlas. The atlas is a web-based public interface to the information prepared by the NLWRA. The atlas provides links to information available from other government agencies allowing Government and the public alike to access an extensive range of information about Australia's natural resources, including salinity. The atlas provides a dynamic query and mapping facility, enabling users to prepare customised publication quality reports and maps.

7.14 The brochure for the Australian Natural Resources Atlas states:

By typing in a location (a town or city) the Navigator allows you to quickly move to relevant national, state or regional reports, or identify reports relating to a place.

Regional profiles provide national, state or regional reports integrated with key statistics, maps, text, tables and graphics on your screen. Expert explanation, is provided to assist you interpret the information. These profiles are linked where possible to other detailed information available over the Internet from State and Territory agencies.

The Map Maker allows you to construct a map for a region of interest, and incorporate a wide range of natural resource, environmental, social and economic information. For example, create your own map of salinity risk or water quality and overlay a map of land use.

7.15 It is recommended that all local government authorities use the salinity hazard maps being prepared by State and Commonwealth agencies with a view to estimating the likely impact of salinity on infrastructure that they maintain. The IPWEA is producing a Local Government Salinity Management Handbook. The draft provides advice on undertaking a risk assessment and asset management process for salinity (www.ipwea.org.au) Where costs are expected to emerge, local government should examine opportunities to take action to control them. One control option, for example, is planting of trees on either side of the road so that evapotranspiration from the trees prevents local water table rise into the road surface.

7.16 As discussed earlier, the MDA has a project to offer councils in the Murray Darling Basin a local government planning support tool for salinity on a fee for service basis. It commissioned Sinclair Knight Merz to develop a salinity risk assessment tool. The RPD Group has expanded on the original project to provide a planning tool based on the salinity risk assessment, which has recently been trialed in Buloke Shire (RPD Group and SKM, August 2001 Salinity Risk Assessment for the Shire of Buloke, www.skmconsulting.com).

7.17 One part of the tool brings together all the existing information to identify regions within the local government area that are potentially at risk of salinity and to determine priority risk areas. This was discussed in more detail in the section 'Integrating Natural Resource Management and Land Use Planning'.

7.18 As discussed earlier, councils have informed the committee that the available data are not adequate or sufficiently detailed. The committee has recommended that more

detailed mapping be undertaken either by NSW Government agencies or through councils accessing funding to employ consultants.(See Recommendation 25)

IDENTIFIED POSITIONS AND THE ALLOCATION OF RESPONSIBILITIES ACROSS THE ORGANISATION

7.19 It is important that councils which want to implement a systematic, planned approach to managing salinity have an identified position with an officer dedicated to provide advice, coordinate, report and evaluate the implementation of the planned activities. A suitable position may be an environmental officer. Small councils would need to share an environmental officer as research data shows that currently only large councils are able to employ them.

7.20 In 1999/2000 ALGA conducted a survey of all councils across Australia, the *National Local Government Biodiversity Survey.* The RPD Group comments that only 35 per cent of councils surveyed employed an officer dedicated to dealing with environmental resource issues. Of the 144 councils with an identified position, 109 had budgets exceeding $10 million. Rural and remote areas had 90 per cent of councils without an identified position and 63 per cent of these felt that they could not attract an officer even if resources were available. They were the most willing to share an officer with other councils.

7.21 Of the 65 rural NSW councils *without* a dedicated environment officer:

- 12 indicated they could easily attract an appropriately skilled person;
- 28 indicated that they could but with some difficulty;
- 20 indicated that it would be doubtful; and
- five indicated no response to the question.

7.22 The survey also showed that only 86 councils nationally are involved in a regional planning process and that councils noted that regionally based partnerships are becoming increasingly difficult to undertake in rural and remote areas. (RPD Group, January 2001, pp16-17)

7.23 Sharing resources, such as an environmental officer, and establishming regional partnerships of councils are important to providing smaller councils with the capacity to manage natural resources. It would also assist councils to have effective input to strategic planning at a regional level. The Commonwealth Government has funded a number of resource sharing projects under the Local Government Incentive Program which may provide useful models for resource sharing in the area of natural resource management. This is discussed below.

7.24 The employment of an environmental officer or another dedicated position is important to providing a focus for planned activities, providing other staff with advice, linking areas of council together to achieve outcomes and reporting and evaluating progress. However, the employment of an environmental officer is not a substitute for a whole of council approach to salinity management. It should be noted that salinity management will only become the core business of councils if responsibility and accountability for it is allocated across council, and a planned approach is driven by the general manager and/or councillors. If natural resource management is left solely to the environmental officer to deal with, it will remain a marginal activity of councils.

INTEGRATING PLANNED ACTIVITIES INTO CORPORATE PLANS

7.25 In terms of integrating salinity management into corporate plans, there is already a statutory framework under *The Local Government Act 1993* which requires local government to identify environmental problems and include them in the annual Management Plan, which is a public document.

7.26 *The Local Government Act 1993* requires councils to:

- include activities to manage or restore the environment in councils' annual Management Plan, along with activities to address priorities identified in councils' annual State of the Environment report.
- include in their annual State of the Environment report their plans, projects and the impact of council activities on the environment.

TRAINING AND INFORMATION

7.27 If salinity management is to be the core business of councils all staff need information on salinity and what council is doing to address it. Frontline staff may not be delivering on action plans but will be providing information and answering enquiries from the public.

7.28 Staff with responsibilities in areas which impact on, or are affected by, salinity or who are delivering on planned activities need training. They should also be involved in evaluating the progress of planned activities and approaches.

7.29 The committee has recommended that the National Local Government Training Package and other relevant industry training packages and university courses be revised to include salinity management (see recommendations 27 and 28). If accepted, this is likely to take several years.

7.30 In the meantime, the committee understands that councils can work with existing training organisations such as TAFEs (which are 'registered under the Australian Recognition Framework) to provide courses with qualifications which will be recognised widely. The committee understands that more information is available from National Industry Training Ltd or the National Local Government Industry Training Advisory Board in Melbourne.

7.31 It would be more efficient if councils in adjacent areas jointly approached TAFE to develop courses for council staff. It may be possible for on-line tools for distance learning to be developed. The Australian Local Government Training Board is working on an on-line package to provide information to council staff on native title issues.

7.32 The need for supplementary funding to TAFE colleges to support these courses needs to be addressed by the NSW Government.

RECOMMENDATION 31: That:

(c) TAFE Colleges and councils in salinity affected areas jointly develop courses for council staff who work in functional areas which are affected by salinity, and

(d) the need for supplementary TAFE funding be considered by the Minister for Education and Training.

COMMUNICATION STRATEGY TO INFORM AND CONSULT RESIDENTS

7.33 As elected governments, councils must have the support of the majority of residents for the actions that they take. It is essential that a communication strategy is built into a planned approach to deal with salinity. Residents may be concerned when a salinity problem is announced in a local area and a strategy should include information provision on how council is addressing the problem and training for staff to answer enquiries from the public.

7.34 Wagga Wagga City Council emphasizes the need for a well-developed education program and particularly that community education needs to be a structured part of every project:

> *Central to all these projects is the education program. Council has employed a full-time 'Urban Salinity Facilitator'. We believe salinity is a community issue that needs to be addressed on a broad scale through careful planning considerations and controls but also cooperation and involvement of the general public. The community needs to be aware of the extent and nature of salinity, what can be done to minimise the impact, why and how they can help.* (Sian McGhie, Planning to Combat Urban Salinity, NDSP Local Government Project 2000, p 5)

7.35 a full time urban salinity facilitator may be beyond the reach of small rural councils or not be appropriate in lower risk areas, a communication strategy to reach residents should be an integral part of addressing salinity.

7.36 The community education program of Wagga Wagga City Council includes the following initiatives:

- a directory of Wagga Wagga businesses who can assist customers with salinity questions;
- schools salinity program (many piezometers are located in school grounds and the students take the readings);
- 'Docents', a team of volunteers who provide education sessions to community groups;
- salinity social surveys conducted by DLWC and Charles Sturt University to measure the effectiveness of community education programs;
- sharing information through publications, conference presentations and tours of affected areas of the city.
- water wise plants demonstration sites in council parks and nature strip planting with salt tolerant ground cover as an alternative to lawns (maintained by residents);
- training of local nurseries to provide salinity testing and advice on water wise and salt tolerant plants

- green card voucher system which provides those who contribute to salinity prevention, for instance by attending a salinity information night, with a voucher to spend on water-wise plants at the local nurseries. (Wagga Wagga City Council, August 2000, *Urban Salinity, Wagga Wagga: A community problem being addressed by our community)*

- signs at salt sites.

MONITORING AND EVALUATION

7.37 In addition to accessing data for planning, councils will need on-going data to monitor the effectiveness of the plan. Wagga Wagga City Council has 98 piezometers installed to monitor ground water levels and a program of taking readings. During the years of initial investigation, the council installed a monitoring bore network, did electromagnetic surveys, soil testing and a water balance of a pilot area. From the monitoring bore data and with expertise from DLWC on local geology, they produced a Depth to Piezometric Surface Map. (Sian McGhie, Wagga Wagga City Council, Planning to Combat Urban Salinity, NDSP Local Government Project 2000) The monitoring bore network allows on-going monitoring.

7.38 Councils could perform a very useful role in collecting data and supplying it to CMBs to assist them to monitor the effectiveness of Catchment Management Blueprints in meeting targets.

RECOMMENDATION 32: That councils be given access to funding to monitor the impact of salinity through the installation of piezometers, and other relevant measures, and be required to provide data to Catchment Management Boards to assist them to monitor the achievement of catchment plans and targets.

RECOMMENDATION 33: That Catchment Management Boards be required to share with all councils in the catchment any monitoring data provided by councils or analysis undertaken of that data.

RESOURCE SHARING BETWEEN COUNCILS

7.39 As discussed earlier, resource sharing between councils is important to overcoming some of the structural and financial limitations of councils. It may facilitate the involvement of smaller councils in natural resource management.

7.40 The Federal Government supports voluntary structural reform of councils including:

- cooperative service provision;

- resource sharing;

- joint service delivery enterprises;

7.41 One of the three focuses of the Local Government Incentive Program (LGIP) for 2000/01 is: *activities that lead to adoption of best practice and sharing of technical expertise across councils*. Examples of suitable projects include: s*haring a shire engineer or heritage or environmental officer, sharing plant, equipment and other resources*. (Local Government National Report p 65)

LOCAL GOVERNMENT INCENTIVE PROGRAM

7.42 The Federal Government's two-year LGIP provided grants to assist rural and regional councils improve delivery of services to the communities. This included delivery of environmental services and natural resource management.

7.43 Local government was eligible for grants of up to $100,000 where two or more councils had a cooperative project, with smaller grants available for individual councils. Projects were required to attract additional funding from other sources including in-kind contributions from the councils themselves.

7.44 The project identified three national priority areas which projects might address:

- activities that lead to the adoption of best practice and sharing of technical expertise across councils;
- the promotion of an enhanced role for local government in leading their communities; and
- increasing the capacity of local government to contribute to regional development.

7.45 In 2000-2001, the final year of the program, around $4 million was provided for 55 projects.

7.46 The committee lists below some of the projects relevant to resource sharing in the area of natural resource management, together with a brief summary of those projects. These projects provide models of resource sharing, and if successful, could be applied to addressing salinity.

♦ **Project: Building Regional Environmental Management Capacity in Rural Councils**

7.47 Participating councils: Hunter Region Organisation of Councils (HROC): Lake Macquarie, Newcastle, Maitland, Cessnock, Port Stephens, Gloucester, Dungog, Great Lakes, Singleton, Muswellbrook, Scone, Meriwa and Murrundi councils.

7.48 Lower Hunter and Central Coast Regional Environmental Management Strategy (LHCCREMS): Lake Macquarie, Newcastle, Maitland, Cessnock, Port Stephens, Gosford and Wyong councils.

7.49 The project's objectives are to:

- build capacity of rural councils in the area of environmental management by extending the LHCCREMS network and programs to the eight councils of the upper Hunter; and
- facilitate the coordination of key natural resources and environmental management activities of the Hunter and Central Coast councils, in concert with relevant regional planning processes and organisations.

7.50 The LHCCREMS is a regional program initiated by the seven councils of the region in 1984. The councils recognised the benefits of working together to improve and

integrate environmental management across local government boundaries. They also acknowledged that significant environmental and community outcomes could be derived from the sharing of expertise and ideas. LHCCREMS focuses on promoting cooperative action, facilitating networking and identifying opportunities for the sharing of resources and knowledge.

7.51 The current project would build capacity of rural councils through:

- introducing the environmental capacity building programs and projects of LHCCREMS to the eight councils of the upper Hunter;
- facilitating coordination of an upper Hunter REMS program;
- sharing resources, expertise and networks between small rural and larger urban-coastal councils;
- a specific training and development program; and
- employing a dedicated upper Hunter project officer to coordinate project.

7.52 The upper Hunter is defined as the LGAs of Singleton, Muswellbrook, Scone and Murrundi and is a region of significant economic and employment activities including agriculture, mining and extractive resources, energy, service industries and urban and rural settlement. Councils in the region are challenged to deliver the range of services and appropriate management resources to respond to natural resources and environmental management issues and policies, as well as the needs of rural communities undergoing economic pressures. They therefore have an interest in exploring the opportunities that come with collective projects which provide networks, information and opportunities for resource sharing.

7.53 The benefits of this approach include:

- capacity building, resource sharing and effective networking;
- coordinated local government approach to regional natural resource and environmental management;
- a cost-effective opportunity to extend best practice programs to other councils; and
- access to a program which councils, individually, would not be able to resource.

7.54 As discussed in Chapter 6, regional partnerships such as the Salinity Action Alliance may provide councils with an effective mechanism for input into catchment management planning and regional partnerships such as county councils and joint committees could give councils the capacity to deliver the on-ground works to give effect to aspects of Catchment Management Blueprints.

♦ **Project: Toward a Sustainable Dryland Agricultural Environment**

7.55 Participating councils: Buloke, Hindmarsh and Yarrambiack Councils (Victoria).

7.56 The councils proposed to employ a skilled environmental manager to produce a land suitability study to identify alternative sustainable enterprises for a dryland environment. The environmental manager would lead the community by fostering cooperation between all stakeholders.

7.57 The objectives of the project are to:

- identify the current situation;
- produce a land suitability study;
- identify opportunities for improvement;
- identify alternative enterprises;
- produce a risk assessment for future sustainable management;
- promote community and stakeholder involvement;
- promote information sharing; and
- establish a database.

7.58 The successful applicant would be selected by a Steering Committee comprising one representative from each council but would become a fixed-term employee of Buloke Shire Council.

7.59 In the event, the coordinator of the project was appointed for 12 months in October 2001, and is working on building understanding and communication between government agencies and stakeholders throughout the region. The coordinator is to carry out the land suitability study with a view to identifying land where sustainable, alternative cropping types such as grapes and olives can be grown. Consideration will also be given to the introduction of saltbush and broom brush on saline land.

7.60 If successful, this model could equally be applied to employing a skilled environmental officer to produce a salinity management plan which covers several adjoining council areas.

♦ **Project: Research and Training in Water Resource Management in SA**

7.61 Participating councils: Local Government Association (South Australia).

7.62 The main objective of the project is to help local government identify its roles and responsibilities in water management, and the links to water resources and natural resource management. Information and training sessions would be given on an individual, regional and sector-wide basis.

7.63 Secondary objectives include research into legislation and government policies and programs pertaining to water resources issues, and the production of issues papers.

7.64 It was envisaged that the program would be completed within six months of the LGIP funding becoming available, but the project has not progressed very far at this stage.

7.65 The project would be linked to the LGA's environmental services delivery project to identify water related matters and in particular the current and potential roles of local government in them.

7.66 There is also a separate, related project being undertaken by a South Australian catchment group which is researching what education and training programs exist in water management. It envisaged that the LGA's LGIP project would overlay its findings with that of the catchment group so as to target resource developments where in areas where there are gaps.

7.67 This model, if successful, could be applied to developing training and resources to councils to deliver on-ground works to manage salinity flowing from Catchment Management Blueprints.

♦ **Comment**

7.68 Most of these projects are still in the investigation stage, so the committee is unable to make any comments on preferred options for resource sharing between councils to better manage salinity.

7.69 It is the committee's view that the Commonwealth Government should assess the projects funded under the LGIP at an appropriate time and report on their success in relation to programs aims. It should disseminate that information to all levels of government throughout Australia by way of a published report, and include it on the National Office of Local Government website.

RECOMMENDATION 34: That the Minister for Local Government request that the Commonwealth Minister for Regional Services, Territories and Local Government ensures that:

(d) a report is prepared on the outcomes of resource sharing projects by councils under the Local Government Incentive Program;

(e) the report is disseminated to all levels of government throughout Australia; and

(f) the report included on the National Office of Local Government website.

PART 4 – OPTIONS FOR SALINITY MANAGEMENT BY COUNCILS

8 ALL COUNCILS

8.1 As discussed earlier, without boundary changes, the capacity of local government to manage natural resources, including salinity, will remain variable. Small councils, with assistance, will be able to manage natural resources as part of their core functions of land-use planning, water management and road building and maintenance. Larger councils will be able to play a greater role in revegatation and business opportunities such as salt harvesting, forestry or salinity credits.

8.2 This chapter discusses options for salinity management for all councils as part of their core functions. It then discusses options for larger councils in revegetation and business opportunities.

LAND USE PLANNING

THE ROLE OF COUNCILS ROLE IN ADDRESSING SALINITY THROUGH PLANNING CONTROLS

8.3 The consistent message to the committee regarding land use planning is that there is much more that councils can do to ensure that land use does not exacerbate salinity and that salinity does not impact on developments. While councils are not currently specifically required to implement measures to address salinity, there is nothing in the relevant legislation which prevents them from doing so. In fact, the following legislation provides the scope for councils to adopt a natural resource management approach:

- *Environment Planning and Assessment Act 1979* (definition of the environment and ss.5a and 26) objectives of the Act and objectives of environmental planning instruments;
- *Local Government Act* (s.403) contents of draft management plans;
- Councils' charter under the Local Government Act as amended by the *Local Government Amendment (Ecologically Sustainable Development) Act 1997*;
- *Protection of the Environment Administration Act* requiring regard for the principles of environmentally sustainable development in the conduct of council responsibilities, including the precautionary principle.

♦ **EPAA s.5a**

To encourage:

(i) the proper management, development and conservation of natural and man made resources, including agricultural land, natural areas, forests, minerals, water, cities towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment;

(ii) the promotion and coordination of the orderly and economic use and development of land;….

(iii) the protection of the environment including the protection and conservation of native animals and plants….

(iv) ecologically sustainable development…

- **EPAA s.26**

(1) Without affecting the generality of section 24 or any other provision of this Act, an environmental planning instrument may make provision of or with respect to any of the following:

(a) protecting, improving or utilising, to the best advantage, the environment

(b) controlling (whether by the imposing of development standards or otherwise) development

…

(e) protecting or preserving trees or vegetation,

…

(e1) protecting and conserving native animals and plants, including threatened species, populations and ecological communities, and their habitats,

(f) controlling any act, matter or thing for or with respect to which provision may be made under paragraph (a) or (e)…

- **Local Government Act s. 403**

(1) A draft management plan must contain the following statements with respect to the council's activities for the period to which it relates:

(c) a statement of the principal activities that a council proposes to conduct

(d) a statement of the objectives and performance targets for each of its principal activities…

(2) The statement of principal activities must include the following particulars:

(a) activities to properly manage, develop, protect, restore, enhance and conserve the environment in a manner that is consistent with and promotes the principles of ecologically sustainable development

(b) activities in response to, and to address priorities identified in, the councils current comprehensive report as to the state of the environment….

- **Councils' charter under the Local Government Act**

8.4 Under the *Local Government Act*, as amended by the *Local Government Amendment (Ecologically Sustainable Development) Act 1997*, each council's charter includes the responsibility to:

… properly manage, protect, restore, enhance and conserve the environment of the area for which it is responsible in a manner which is consistent with and promotes the principles

of ecologically sustainable development. (Farrier, Lyster and Pearson, Environmental Law Handbook , 1999, p22)

- **Principles of environmentally sustainable development**

8.5 The LGA requires councils to have regard to the principles of ecologically sustainable development in carrying out their responsibilities, as stated in the *Protection of the Environment Administration Act.* The principles include the precautionary principle:

namely that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. (Farrier, Lyster and Pearson, *Environmental Law Handbook,* 1999, p6)

8.6 It is clear that councils do have a role in natural resource management.

- **Planning tools**

8.7 Councils have a range of planning tools at their disposal including:

- LEPs;
- Development Control Plans;
- council codes and policies
- section 149 (planning certificates).

LEPs

8.8 A local area is divided into zones on a map and the purposes for which that land can be used or developed are set out in zoning tables. Development standards set out particular requirements that must be met by certain kinds of land development (eg height restrictions, parking requirements).

8.9 LEPs are prepared by councils and approved by the Minister after public exhibition. LEPs can deal with a vast range of environmental issues but these are limited to the council area.

Development Control Plans (DCPs)

8.10 Like LEPs, DCPs set out development standards, though often in more detail. They are not legally binding in decisions about whether a development project may go ahead but must be taken into consideration before a decision is reached. (*Farrier, Lyster and Pearson,* Environmental Law Handbook, *1999,* p95)

- **Council codes and policies**

8.11 Council codes and policies deal with the same matters as DCPs but are not made in accordance with the procedural requirements for DCPs. They can be taken into account when decisions are made but have no official status under the EPAA. (*Farrier, Lyster and Pearson,* Environmental Law Handbook, *1999,* p96)

♦ Section 149 (planning) Certificates

8.12 These set out the legal ground rules for development on a particular parcel of land. It also includes whether or not there is a council policy affecting the land because of any risk to the land (eg flooding). (Farrier *Farrier, Lyster and Pearson,* Environmental Law Handbook, *1999,* p113)

8.13 There is general support for councils to use their planning powers to address salinity. Some environmental organisations provided their views on the planning instruments that could be used to achieve this.

8.14 The EDO takes the view that LEPs should be used to regulate the local causes and impacts of salinity whereas Regional Environment Plans should be used to address regional impacts and solutions. They see the advantages of LEPs as:

- can require assessment of environmental impacts of proposed developments;
- are transparent, accountable, allow public participation in decision-making processes and ensuring compliance with consents; and
- can increase certainty for developers and the community by setting clear land-use controls.

8.15 There were other suggestions about how the EPAA could be fully utilised to manage salinity:

- councils should adopt local policies to identify salt sensitive land and restrictions on use of such land (Submission 22);
- salinity action plan and or salinity management strategy to reduce recharge to address the causes of salinity;
- model DCPs should be drawn up that contain conditions and advice to applicants on how to address salinity in development applications (Submission 24: Australian Conservation Foundation and Nature Conservation Council);
- there should be conditions placed on activities addressed under part V of the EPAA (Submission 24); and
- councils should include a statement on S149 certificates that alert owners and potential purchasers to the existence or risk of a salinity problem (Submission 24:).

8.16 The EDO states that Part 3, s.26 of the EPAA, which deals with matters that can be addressed in an environmental planning instrument, is broad enough to include salinity but as State and local governments have failed to take advantage of this scope, salinity should be specifically added to s.26.

8.17 Also PlanFIRST, the NSW Government's White Paper on planning, states that in future all local plans will have sustainability indicators. The EDO advocates that the wording of the legislation should ensure that the indicators address salinity.

8.18 Planning NSW also intends that councils in relevant areas will address salinity but does not intend to introduce a specific statutory requirement:

….one of the key outcomes of the proposed changes to the plan making system will be a more efficient and effective translation of natural resource management targets into planning objectives through the development of Regional Strategies. Salinity will be a key consideration as it is obviously one of the major issues confronting planning, particularly in the western part of the state. Salinity catchment targets and the various mechanisms proposed for achieving them will be important inputs into the development of Regional Strategies.

The legislation to support the Plan First system will create this mechanism and provide for salinity issues, amongst others, to contribute to the development of a single local plan for entire local government areas. In this way the salinity components of the Regional Strategy will translate directly into local action at the Local Plan Level. In this sense councils will need to address salinity in their Local Plans. (correspondence dated 10 August 2001)

8.19 Further,

[c]ouncil plans will not be legally valid unless they include salinity issues as set out in the relevant strategy. (Questions on notice email 20 December 2001)

8.20 On the subject of sustainability indicators, Planning NSW informed the committee:

It is anticipated that salinity will be included as an indicator in salt affected areas. They will be statutory as it is expected regional strategies will give clear directions for local plans to meet specified salinity targets. (Questions on notice email 20 December 2001)

8.21 Planning NSW informed the committee that the timeline for the completion of the PlanFIRST reforms is five years:

Planning NSW anticipates that it will take 5 years for the completed roll out of planFIRST. This is of course contingent on the Department being allocated the necessary resources to support its proposed program ……In the meantime the Department will be developing transitional regional planning controls and a model salinity LEP which councils will be required to follow. (Questions on notice email 20 December 2001)

8.22 The committee has made recommendations for improving the usefulness of planning tools to councils.

OPTIONS FOR ADDRESSING SALINITY THROUGH PLANNING CONTROLS

8.23 Currently, the following are the options for councils for managing salinity through planning instruments. Councils can ensure that new developments or more intensive agriculture, do not take place in areas that are affected by, or will affect, salinity. Councils can use environmental planning instruments to:

- prevent or modify developments that would increase salinity problems;
- require vegetation to be retained and reestablish vegetation on high recharge and also discharge areas;
- ensure that developments are built to withstand the damage that can be caused by salinity (building codes); and

- ensure that interested persons are aware of the salinity hazard to a block of land;

♦ **Prevent or modify developments that would increase salinity problems**

8.24 Councils have the power to prevent or modify developments through zoning and development standards. The following are examples of developments which may impact on salinity:

- multi-lot subdivisions eg housing estates
  - increased area of impermeable surfaces may decrease recharge and increase stormwater run off
  - increase in recharge due to vegetation clearance and watering of gardens.
  - increase in salt loads if stormwater drainage is located in areas with high watertables.
- Irrigation developments (eg agriculture, effluent disposal, sporting grounds)
  - increased recharge largely as a result of irrigation application but also due to cleared vegetation and ponding caused by some earthworks.
  - increased run off (irrigation induced)
  - increased salt and nutrient loads in drainage water and surface water.
- Drainage works
  - drainage of saline areas will increase salt loads leaving the catchment.
  - can be beneficial in reducing groundwater recharge
- Earthworks (sams >3 mL) including water storages or settling ponds
  - increased recharge as a result of dam leakage
  - reduced run-off and stream flows in the catchment
- Intensive animal industries (wet waste industries eg piggeries, cattle feedlot etc)
  - increased area of impermeable surfaces (rooves, sheds etc) may decrease recharge and increase run-off and stormwater
  - wastewater reuse (land disposal) may significantly increase recharge locally
- Native vegetation clearance
  - increased recharge potentially leading to a rising watertable
  - increased run off

– rising water tables and increased run off could potentially impact on local stream and supply water quality. (Local Government Planning Support Tool for Salinity flier tabled by Sinclair, Knight Merz).

Development control initiatives

8.25 Sian McGhie, formerly employed by Wagga Wagga City Council, includes in a paper *Planning to Combat Urban Salinity* the following development control initiatives which could be taken by planners:

- requiring developers to remove contour banks and furrows and planning stormwater system to take the extra water;
- controls on the construction of dams, wetlands, retention basins- to prevent leakage;
- controls on stormwater – (Wagga Wagga City Council has a policy that stormwater is only to be discharged on the surface and also has a 'no new rubble pits' policy.)
- Guidance to developers on site-based investigations (WSROC has a project: Guidelines for the Investigation of Salinity Prior to Development. It aims to develop a standard list of investigations for salinity, which will be adopted by each western Sydney council.)

8.26 While there are many ways in which unsuitable developments can be prevented or modified by councils, they often lack a strategic approach. In evidence, Mr Budge advised the committee:

> ***Mr BUDGE:*** *Another thing that is, I think a way forward is that councils have got to undertake salinity assessment in terms of development applications, not only just assessing applications one by one, application by application, but they have got to actually have themselves a strategic approach. ……..each council has to have its own strategy worked out, what is it trying to achieve. I think this is an issue that land use planning too much in the past has been seen as a process to assess individual applications, not as a process to set a strategy of where you want to go in terms of land use, …….about where you see the landscape going in the future are part and parcel of that strategic approach.* (Transcript of evidence, 21 September pp 9-10)

Barriers to the adoption of development control initiatives

8.27 At the roundtable discussion, the committee was informed that in Victoria, where planning instruments specifically require local government to address salinity, there is also no guidance to councils on how to do this.

> ***Mr BUDGE:*** *Despite the fact that their……existing planning instrument quite clearly says that they should look at salinity as an issue in assessing any application, thee is no guidance. Have a look at salinity as an issue if you are considering this development application. Well to what effect, to what end on what basis?* (Transcript of evidence, 21 September p11)

8.28 As stated earlier in this report, the MDA has commissioned Sinclair Knight Merz and the RPD Group to develop the Local Government Planning Support Tool for Salinity which brings together all available salinity data into a set of maps and provides a tool for

making decisions on development applications. The tool will be available to councils in the Murray Darling Basin on a user-pays basis. It is tailored to each LGA to produce a set of maps and planning tool.

8.29 Data is also available free of charge from the NLWRA's web site which contains an atlas. The atlas is a web-based public interface to the information prepared by the NLWRA. The atlas provides links to information available from other government agencies allowing government and the public alike to access an extensive range of information about Australia's natural resources, including salinity. The atlas provides a dynamic query and mapping facility, enabling users to prepare customised publication quality reports and maps.

8.30 The committee has recommended that a planning tool similar to that of the MDA be provided to councils by planning NSW (Recommendations 10, 11 and 12).

♦ **Require vegetation to be retained and re-establish vegetation on high recharge and also discharge areas**

8.31 Vegetation provides long term control of groundwater levels. Councils have several options for maintaining or revegetating land. Some of these options are regulatory such as:

- tree preservation orders
  - Wagga Wagga City Council has modified its Tree Preservation Orders to apply in urban and rural areas.
- vegetation development control plan for rural residential zones
  - Wagga Wagga City Council requires specific tree densities depending on land capability:

For example on the steep ridges 100 per cent tree cover is required on the flat country only 10 per cent tree cover is required. The DCP outlines what is considered to be 100 per cent tree cover ie 1000 stems per hectare, 1 to 4 ration of trees to shrubs, 85 per cent surviving two years after planting. Suitable species and local stock and seed is encouraged. (Sian McGhie, Planning to Combat Urban Salinity, NDSP Local Government Project, p4)

- environmental protection zone; and
- councils can require the dedication of land free of cost from developers as a condition of consent under s94 of the EPAA.
  - Professor Farrier advised the committee that this might also provide councils with the power to require developers to offset land elsewhere for conservation.
- councils can acquire key sites. This is beyond the capacity of many councils but might be an option for councils working together in a regional alliance to address natural resource management issues.

8.32 There are also a range of measures councils can take as owners of land, to provide incentives to private landholders and to support community participation. These are discussed later in the report in the section on revegetation.

- **Ensure that developments and council infrastructure are built to withstand the damage that can be caused by salinity**

8.33 Salinity can damage buildings. Agenda Item 23 for the 2001 National Technical Summit says:

> *Salt damp is similar to what is known as rising damp. The only difference between the two is that high concentration of salts cause salt damp. Therefore buildings areas affected by urban salinity are susceptible to salt damp. The four factors required for salt damp are salt, moisture, pervious materials and evaporation.*
>
> *Typical symptoms for a building affected by salt damp include salt crusting on bricks, concrete and pavers, deterioration of house foundations, reduced life of concrete slabs and corrosion of underground services and infrastructure such as pipes, cables and septic tanks.* (pp 146-147)

Protecting buildings against salt attack

8.34 There are currently a number of initiatives which address salinity in construction. These range in formality from advice, to a model code which councils can adopt, to changes to the BCA which would require councils to ensure that development applications comply prior to the issue of a construction certificate.

Initiatives to address salinity in building construction

Booklet: Building in a Saline Environment

8.35 Wagga Wagga City Council has a booklet *'Building in a Saline Environment'* published in October 1999. The council held a Builder's Information Night in 1997 and collated the information from the Cement and Concrete Association of Australia, Australian Standard 2870 for Footings, State Bank Building Booklet, advice from council building staff and local business on suitable materials. It estimates that the additional building costs would be $2,000 and would increase the life of the building by 50 per cent. The booklet offers general advice and builders are advised to obtain relevant maps of the groundwater levels and to contact and consulting engineer.

WSROC: Salinity Code of Practice

8.36 WSROC is producing a Salinity Code of Practice which will provide a management framework for the 13 councils of greater western Sydney. The code is being developed in partnership with DLWC and the Western Sydney Salinity Working Party which has representatives from councils, state agencies and the development industry.

8.37 In October 2001, three sections of the code had been drafted, including an introduction to salinity issues in western Sydney, recommended salinity investigations for developments in the region, and suggested planning responses, including the use of local environment studies, DCPs and considerations for Conditions of Consent. Additional sections covering the use of building controls and the management of infrastructure such as roads were being developed. The building controls will be a model which councils can adopt.

Planning NSW: Review of the BCA

8.38 Planning NSW is the NSW agency with responsibility, at State level, for the BCA. It has convened a subcommittee of the Building Regulations Advisory Council with the following objectives:

- *Investigate the extent and effects of rising salt damp in NSW in relation to its impact on building construction;*
- *Establish whether there is sufficient justification/validation to introduce regulatory controls to address the matter;*
- *If regulatory controls are deemed necessary, examine and assess potential technical solutions and make recommendations for amendments to the relevant building controls to address this matter;*
- *Consider the capability of local councils to deal with the salinity threat and any initiatives that might be needed to enhance that capability in the future.*

Through this work, Planning NSW believes that a national approach to addressing salinity is highly desirable. The Director-General of Planning NSW states:

> *The ABCB [Australian Building Codes Board] is therefore proposing to carry out research to determine the extent of the problem, to establish what changes to the BCA are necessary, and where building regulation authorities can cooperate with other authorities, eg planning, to tackle the problem more comprehensively. The ABCB intends to identify State, Territory and Local Governments that have or are proposing salt attack provisions, with a view to progressing a uniform approach to the problem. The ABCB seeks to engage the expertise of State and Territory officers in a National Working Group on salt attack.*(correspondence)

8.39 The committee understands that the National Working Group will identify the severity and look at technical options for solutions. It will look at each of the building elements necessary to withstand salinity eg concrete, masonry, damp-proof course and see whether the Australian Standards for these elements require review.

Local versus national approaches to ensuring that buildings withstand salinity

8.40 The inclusion of matters in the BCA is not the only way in which requirements for building in saline conditions can be applied. Councils can establish their own local building codes which are non-statutory but have legal force through the *Local Government Act*. These can be used to apply requirements to specific geographic areas or situations.

8.41 There are some differences of opinion on whether a code for building in a saline area should be mandatory. Wagga Wagga City Council supports a change to the BCA as do a number of western Sydney councils, However, the LGSA would rather that model codes be developed which could be adapted by councils to suit their local situations:

> *Local government does not propose that there be mandatory requirements imposed on councils regarding site and building design, and construction in salinity affected areas, but rather that model codes be developed which may be adapted by councils to suit their local situations and applied through their building and development approval processes, and land use planning activities……mandatory codes do not provide flexibility when dealing with local site variations which can create anomalies and resistance to compliance.* (Correspondence 27 June 2001)

Arguments against a local approach

8.42 In a document tabled by WSROC, councils raise the issue of the difficulty of changing building practice from the local level. They say that in the current environment where there is a low general awareness of salinity, there is resistance from the development and building industry and no pressure from consumers for housing that can withstand salinity. The pressure from consumers is for the cheapest available housing.

8.43 The committee understands that arguments against local level building codes are:

- if one council establishes a building code for salinity which adds to the costs of developments, developers may prefer to undertake projects in another council area. Councils in rural areas with a declining population do not want to deter developments or industry;
- An ad hoc approach by councils in which building codes were not consistent across NSW is not likely to be acceptable to developers or the housing industry; and
- A consistent State-wide or national approach to suitable building materials is likely to be needed to encourage, or negotiate with, industry to produce a greater range of materials which are suitable for building in saline conditions.

A national approach to addressing salinity in building construction

8.44 Building materials and construction methods are regulated and procured at State and national levels through a system involving industry standards, technical codes, product and systems certification schemes, product appraisals and technical/contractual procurement specifications.

8.45 There are two Australian regulatory technical codes. These codes cover: buildings and stormwater drainage. Outside the property boundary there are other codes for a variety of infrastructure such as roads and utilities.

The BCA

8.46 The technical code for buildings is the *Building Codes of Australia*. It contains technical provisions for the design and construction of buildings for structural soundness, fire resistance, access and egress, fire-fighting equipment, mechanical ventilation, lift installations and certain aspects of health and amenity. The BCA is based on Australian Standards. It is produced and maintained by the Australian Building Codes Board (ABCB) on behalf of the Commonwealth, State and Territory Governments. The BCA has been adopted into building regulation by all States and Territories. In NSW, it is covered under the EPAA. The ABCB website explains that:

The BCA is brought into operation by enabling building regulatory legislation in each State and Territory. The legislation prescribes or calls up the BCA to fulfil any technical requirements which have to be satisfied in order to gain approval of a building proposal. …..Administrative type matters covered in the enabling or subordinate legislation include:

- *plan submission and approval procedures;*
- *issue of building permits;*

- *inspections during and after construction;*
- *provision of evidentiary certificates;*
- *issue of certificates of occupancy or compliance;*
- *review and enforcement of standards;*
- *fees and charges.*

8.47 This means that councils must ensure that developments in their area comply with the BCA.

8.48 Currently, salinity is not included in the BCA and is not a mandatory part of relevant Australian Standards.

8.49 Wagga Wagga City Council estimates that salinity mitigation measures add $2,000 to the building costs of a typical building and increase the building life by 50 per cent (2001 National Technical Summit, Agenda Item 23, Salt Damp)

8.50 A change to the BCA must be made through the Building Regulation Advisory Council (Ministerial council). There is an agreement to minimise variations to the code and a cost benefit analysis and regulatory impact statement must be undertaken to do so. The code covers matters which apply broadly to buildings across Australia but it can be unilaterally amended to include matters which apply in a single state.

8.51 The committee notes that the BCA covers matters which occur nationally but not in every area, such building in cyclone or earthquake hazard areas. The committee understands that hazard maps are used to identify areas to which such technical requirements apply. The inclusion of technical requirements for building in salinity hazard areas would, therefore, be consistent with the BCA and could be identified through salinity hazard maps.

8.52 The director-general of Planning NSW supports a national approach to addressing salinity in building construction. She stated:

> *Urban salinity is a growing problem that is affecting Australia's building stock. Some State and local authorities have provisions to address the issue to varying degrees. However, owing to evidence that is emerging about the growing threat of urban salinity, a national and holistic approach to combat the impact of salt on buildings needs to be considered. In developing such an approach, the feasibility of the various options must be considered while the expertise gained by the State, Territory and Local Governments in researching the issue will be able to make a valuable contribution to a more comprehensive solution.*
>
> *The widespread nature of the problem suggests it is now time for a national approach to ensure consistency between States. One appropriate mechanism for this is the BCA. ……The arguments against the potential inclusion of salinity provisions in the BCA are the possibility that national agreement may not be reached and the timeframes involved in a national process. However, if possible a nationally consistent approach and outcome in relation to this issue is highly desirable. If it is decided that a national process will not occur a state-based action will still need to proceed.* (correspondence, Planning NSW)

8.53 The committee believes that the BCA should be varied to include requirements for building in salinity hazard areas. This is consistent with the approach taken in cyclone

and earthquake hazard zones. The committee believes that it is preferable to err on the side of caution—that is to ensure that developments are not approved which will later be affected by salinity. Councils are often under considerable pressure to approve developments. Councils have identified that they lack information on which to make decisions regarding salinity or how to respond to inquiries by developers or residents. Currently, they would not be well-placed to make decisions on whether building requirements should apply in local site variations.

8.54 The ABCB website states that the BCA itself allows for considerable flexibility in building methods and materials:

> *The key to the performance-based BCA is that there is no obligation to adopt any particular material, component, design factor or construction method. An approval authority may still issue an approval if it differs in whole or part from deemed-to-satisfy provisions described in the BCA if it can be demonstrated that the design complies with the relevant performance requirement. (ABCB website 15 October 2001)*

RECOMMENDATION 35: That the Minister for Planning seeks the agreement of the Building Regulation Advisory Council for the inclusion of requirements for building in salinity hazard areas in the Building Code of Australia. If there is not agreement by the Building Regulation Advisory Council for a national approach, or the matter is unduly delayed, that the Minister should include the matter in the Code to apply only to NSW.

8.55 However, it is imperative that salinity mapping is undertaken at a more detailed level to ensure that additional costs are not imposed in building due to low risk areas being included on hazard maps. The committee has recommended elsewhere in this report that councils have access to funding to undertake more detailed mapping.

Australian Standards

8.56 The BCA regulates, and harmonises with, Australian Standards which detail the technical and other requirements for manufacture. Standards Australia explains that:

> *A Standard is a published document which sets out specifications and procedures designed to ensure that a material, product, method or service is fit for its purpose and consistently performs in the way it was intended to perform.*
>
> *most Australian Standards are used voluntarily by people who see the value of the knowledge and confidence that they carry, about 2,400 have been made mandatory by governments calling them up in legislation.*(website accessed 11 January2002)

8.57 The BCA includes a list of Australian Standards. Standards referenced in the BCA become regulatory.

8.58 Currently, some Australian Standards do address salinity but these are optional requirements that are dependent on purchaser specification, for example, the requirement to withstand salinity is optional in the Australian Standard for bricks (AS/NZS 4455:1997).

8.59 In saline areas, special class concrete is required for protection against chloride and sulfate attack. For this reason, some NSW Government agencies responsible for major infrastructure projects on foreshores, such as roads and water supply services, include special class (marine grade) concrete as a procurement requirement in their contracts. However, unless a person who is having a house built or modified, or his or her

architect, request these options in the specifications for the builder currently they are not likely to be supplied with materials that can withstand salinity.

8.60 The committee understands that an amendment of the BCA to cover building in salinity hazard zones, if called up in legislation, would have the effect of making the options in the Australian Standards mandatory for salinity hazard zones rather than subject to purchaser specification.

8.61 It is important that the BCA, as amended to apply to salinity hazard zones, cites Australian Standards for building products which can withstand salinity.

8.62 South Australia has, for instance, inserted a variation into the Building Code, at State level, to deal with construction requirements to resist the effects of salt damp. It relies on Australian Standards for damp proof course. Agenda Item 23 for the 2001 National Technical Summit states:

For damp proof courses, the SA provisions permit only embossed black polyethylene film, polyethylene coated aluminium and bitumen impregnated materials, providing they all comply with specific clauses from AS/NZS 2904. The BCA permits any material that complies with AS/NZS 2904 along with termite shields.(p147)

8.63 It is important that all products and techniques which are required to make a building, or other infrastructure, resistant to salt attack are covered by an Australian Standard which can be referenced in the BCA or other relevant documentation. In some cases, it may not be appropriate to have a separate Australian Standard for the product but it is important that there is an option within a broader Standard that can be clearly referenced.

8.64 It is also important that Australian Standards for products and techniques for resisting salt attack are adequate and are reviewed in light of any scientific or technological research or advances.

8.65 Standards Australia International is the body which develops standards. It is an independent, non-government organization with membership from user and purchaser groups, manufacturers' and suppliers' independent professional and technical bodies, consumers, regulatory bodies, research and testing organisations and unions. Members nominate representatives to the Standards Australia Council, which meets annually to elect a board of directors. Standards are maintained by 1,495 separate technical committees, involving 9,000 members.

8.66 The Commonwealth Government recognises Standards Australia as the peak non-government Standards body in Australia. (Standards Australia website, 11 January, 2002).

8.67 As Standards Australia is not a government authority, the revision of existing Standards or the development of new ones rests on consensus by the membership. There are economic as well as quality considerations.

8.68 Standards Australia states:

The Standards Development Process is based on consensus, transparency, and stakeholder balance. Every step in the standardizing process is open and available for scrutiny. In order to improve speed to market for Standards, which requires extensive

committee work to achieve consensus, Standards Australia has developed innovative IT and communication technology to both speed and ease the process…….

A guiding principle of Standards Development is that they in no way act as a barrier to trade, competition or innovative development. International Standards are to be adopted to the maximum possible extent. If there is no appropriate international standard, and the proposed Standard is not anti-competitive, a committee will prepare a draft for a new Australian Standard following a formal Request for a Standard from the community, an industry body or a government department and approval of the project. Before a project is approved, there must be genuine community support for the Standard, it must improve economic efficiency, show a cost benefit and be in the national interest. If research demonstrates this, approval by the appropriate Technical Committee and Standards Sector Board follows. (website)

8.69 The committee understands that, from past experience, not all requests from government agencies for revision of Standards have gained approval, even where government is a major purchaser of a relevant product. Salinity is a national issue. However, awareness of the damage which salinity may cause to houses and other urban infrastructure is not uniformly high. It is important that State/Territory governments network with each other and their client groups to build a consensus of support for changes to the relevant Australian Standards.

Protecting council infrastructure against salt attack

Strategic products: cement and concrete

8.70 Cement, concrete and concrete products are used in buildings, roads, bridges, water and sewerage systems, stormwater systems, pits and chambers in council areas. This public infrastructure can be corroded by salinity unless special classes of cement and concrete are used.

8.71 These products are also used extensively by Commonwealth and State government agencies. NSW Government agencies involved in major capital works requiring cement and concrete products, are working together through the Cement and Concrete Users Review Group Network ('the Network') to address a number of issues of concern, initiate the changes, and obtain national support for their implementation.

8.72 The issues include reduced requirements in Australian Standards for many of these strategic products, easier access for lower quality imported cements, and the need for leadership to drive both quality and product certification schemes.

8.73 In the case of salinity, for example, it is important to ensure that Australian Standards for special classes of products to resist saline attack are adequate, and it is equally important to ensure that the product which is supplied actually meets the Standard cited in the contract.

8.74 The NSW Government in 1993, through the Construction Policy Steering Committee (CPSC), introduced the Capital Project Procurement Manual, for the progressive introduction of reforms to the construction industry including quality certification. The reforms apply to NSW Government service providers such as consultants, contractors and other suppliers within the construction industry. The Cement and Concrete Users Review Group Network informed the committee that because the concrete industry is so large with Government agencies being fragmented in their purchasing requirements,

reform in the concrete industry has stagnated. For example, for pre-mixed concrete suppliers nationally, at this stage just over half are quality certified.

8.75 The Network would like to see third party quality certification made mandatory for government projects, and extended to product certification. Quality certification is aimed at the service provider's management system, Product certification focuses on testing of the product and ensuring it actually meets the Standard or the specification. Also it is proposed to develop a technical procurement document for the specification and supply of concrete for government projects. This document could include buildings. The Network is seeking the support of CPSC to help drive the initiatives.

8.76 CPSC, through the Minister of Public Works and Services, is linked to the Australian Procurement and Construction Council (APCC), which is the peak council of departments responsible for procurement and construction policy of the Commonwealth, State and Territory Governments. Council members comprise the Chief Executive Officers of these departments.

8.77 The APCC reports to the Australian Procurement and Construction Ministerial Council which comprises ministers with portfolio responsibility for procurement and construction policy. The Ministerial Council is currently chaired by the Hon. Morris Iemma MP, Minister for Public Works and Services, in the NSW Government. The Ministerial Council develops nationally consistent procurement policies, processes and practices, including ensuring that public sector infrastructure needs are met. (APCC website, accessed 7/12/1999).

8.78 If through CPSC, the Ministerial Council supported it, government agencies across all public infrastructure would require, as a condition of contract, that the suppliers comply with nominated schemes for strategic concrete products. The cost of the third party schemes, like quality certification, would be financed through product sales.

8.79 There would appear to be clear benefits for local government to adopt the same conditions of contract for supply of cement and concrete products and for them to provide input to the Cement and Concrete Users Review Group Network. The benefits would include ensuring that councils in salinity hazard zones were provided with products which met requirements for withstanding salt attack.

8.80 In order to ensure that the cement/concrete products supplied for building houses and commercial developments met relevant Standards, the scheme would have to be extended beyond contract compliance with government agencies. The requirement for cement/concrete products to be obtained through an accredited supplier would need to be included in the BCA and a certificate of conformity for the manufacturer/supplier checked by councils as part of the development approval process.

8.81 The Network pointed out that Product Certification schemes are in place in Australia for selected products, and have been in place in the UK and the USA for many years for the concrete industry. The Quality Scheme for Ready Mixed Concrete (UK), was established as a separate company in 1984. It accredits production plants to the relevant UK Standards. Although accreditation is not mandatory, it is widely accepted.

8.82 The Precast /Prestressed Concrete Institute, in the USA, has had a plant certification program since 1967. It conducts unannounced audits, twice a year by independently accredited engineers. Also it has had a Plant Quality Personnel Certification Program since 1985 with three levels of training and certification. In 1999, the Institute

commenced a Field Quantification Program which audits crews twice a year. (C&CURG Network, Presentation to CPSC, 14 December 2001)

8.83 The Network believes that reputable manufacturers will generally welcome these reforms, as they will create 'a level playing field' on product quality. Currently, manufacturers investing in quality systems and better products are at a disadvantage competing for contracts where the lowest price is the determining factor. The committee understands that members of the Network have concerns about the quality of some of the cements and concrete products currently on the market.

8.84 Certifiers of third party certification schemes will need to be accredited through the Joint Accreditation System Australia and New Zealand (JAS-ANZ), which has international reciprocity agreements. This will assist Australian exporters to compete in the global marketplace.

RECOMMENDATION 36: That the Minister for Public Works and Services put a resolution to the Australian Procurement and Construction Ministerial Council to consider making third party quality certification mandatory for government projects, and extending it to product certification, including of cement and concrete products.

RECOMMENDATION 37: That the LGSA provide a representative to the Cement and Concrete Users Review Group Network to participate in discussions on the need for a third party quality and product certification scheme to be mandatory for government projects, including local government projects.

RECOMMENDATION 38: That the Minister for Planning put a resolution to the Building Regulation Advisory Council that it consider the merits of a requirement for third party quality and product certification in the Building Code of Australia, including ensuring that products meet Australian Standards for resistance to salt attack.

- **Ensure that interested persons are aware of the salinity hazard to a block of land**

The Legislation

8.85 Planning certificates issued by councils are required under section 149 (2) of the EPAA to include any policies adopted by council or other public authorities that restrict the development of the land because of environmental hazards.

8.86 When property is sold in NSW, the vendor must attach a copy of the planning certificate to the contract documents. Any person can obtain a copy of a planning certificate from the relevant council on payment of a fee. This alerts owners and prospective buyers to possible problems with land that should be taken into account.

8.87 Under section 149 (5) of the EPAA, councils can include on a planning certificate any relevant matters affecting the land, for which it has not adopted a policy. This section is, for instance, used to warn buyers of possible flood risk to land even if that land is above the level which requires development controls. Councils have indemnity from liability for providing this information 'in good faith'.

8.88 Councils do not have a specific statutory requirement to address salinity and few have voluntarily adopted a salinity risk management policy. Most have also chosen not to notify salinity risks on planning certificates under section 149 (5) of the Act.

8.89 Wagga Wagga City Council is an exception. The Council undertook several years of investigations of the extent and nature of the salinity problem and produced a Depth to Piezometric Surface Map. Once the Council was aware of the salinity hazard zones, it amended the planning certificates. The Council states:

Once the map was released all 149 certificates (2 and 5) produced within the colour zones were attached with the following notation:

The applicant's attention is drawn to the Department of Land and Water Conservation Wagga Wagga Urban Land and Water Management Plan. Depth to Piezometric Surface Map of May 1997 that indicates potential for urban salinisation at a scale of 1:25, 000 (Sian McGhie, *Planning and Combat Urban Salinity, NDSWP Local Government Project,* p 4)

Barriers to including information on planning certificates under section 149 (5) of the EPAA

8.90 WSROC informed the committee of the reasons why councils currently choose not to notify residents of salinity hazards on planning certificates:

The potential liability of councils when notifying and publicising salinity problems within their Local Government Area is a major concern to the councils attempting to manage the salinity problem…….A further concern associated with that outlined above is the lack of guidance councils have received on how to alert residents of the problem and potential damages. Notification on 149 certificates is not a viable option, based on the level of information councils have at this time, however there is no other established mainstream way to alert large amounts of affected residents. This is a crucial issue, especially considering the need to change building materials and building techniques to address salinity on established properties as well as new properties. The draft Salinity Hazard Maps for Western Sydney released by the Department of Land and Water Conservation are at a scale where the information cannot be used for individual properties, which means that any salinity information provided on a 149 certificate, or similar land capability assessment tool would have to appear on all certificates issued on properties located on Wianamatta Shale soils. If this were the case, the impact and meaning of the information would lose relevance. (Submission 25)

8.91 In summary, the three reasons given were:

- exposure to liability claims for damages;
- the scale of risk mapping which does not identify individual properties; and
- lack of guidance from the NSW Government.

Liability

8.92 The committee raised this issue with the Minister for Planning who stated:

Under section 149(6) a council does not incur liability for advice provided in good faith under section 149(5) except for advice in relation to contaminated land. Providing salinity affectation does not fall within the definition of 'contaminated land' in section 145A of the EP&A Act, councils could provide advice under section 149(5) in relation to salinity without attracting liability. This interpretation would require a formal legal opinion.(correspondence, 4 December 2001)

RECOMMENDATION 39: That the Minister for Planning seek a legal opinion on whether councils have indemnity from liability for providing information about salinity hazards on planning certificates under sections 149 (5) and 149 (6) of the Environmental Planning and Assessment Act and circulate this advice to all NSW councils.

Scale of mapping

8.93 The committee had stated elsewhere in this Report, that it does not regard the mapping provided by DLWC as adequate and believes that DLWC should undertake or fund mapping more suitable for land-use planning. However, the committee does not accept this as a valid reason not to provide home owners and prospective buyers with information via planning certificates that there is a risk of salinity damage. The Floodplain Management Manual discusses the use of initial subjective assessments:

In certain circumstances, particularly in relation to local overland flooding, definitive flood level data may not be available to enable determination of properties that should have a relevant section 149 certificate notification. In such cases, as a first step, an initial subjective assessment should be made to determine the properties likely to be at risk. The methodology used to undertake the subjective assessment should be documented and based upon historical information and reasonable assumptions given the catchment and channel size and terrain.

This assessment should only be used in the first instance, and be up-dated as studies are undertaken to provide a better assessment of flood extents as part of the preparation of a floodplain risk management plan for the area. (NSW Government, January 2001, L.6.1)

8.94 This system should be applied to salinity risk.

RECOMMENDATION 40: That DLWC undertake an initial subjective assessment of the risk of damage to properties in salinity hazard zones based upon the best available data and that councils notify home owners and prospective buyers of this risk on planning certificates.

Lack of guidance from the NSW Government

8.95 Another reason that councils are reluctant to use section 149 notifications to notify salinity hazards to blocks of land is that they are concerned about creating panic without having the information to address concerns. In its submission, WSROC stated:

Ramifications of Action Taken

- *negative effects on land values in the region, where publicity is given to the problem.*
- *anger in the community based on lack of detailed information about the extent of the problem and its causes* (Submission 25*)*

8.96 Sian McGhie, formerly of Wagga Wagga City Council, emphasizes the need for the release of salinity hazard maps and notation of section 149 certificates to be accompanied by a well-developed community education campaign:

The notation created a high level of concern within the community. This was eased through a well developed education campaign. For example a special day long training session which included a tour of the city was organised for real estate agents, solicitors and valuers. One mortgagee insurer present on the day stated she was now more likely to insure Wagga

Wagga homes because we had an active campaign to combat salinity other areas were ignoring the issue. Follow up sessions show that most people after reading the notation and then contacting council for further advice go ahead with the purchase. We emphasise that salinity is just one of the many issues that the home purchaser or builder needs to be aware of when making decisions regarding maintenance and construction, materials and costs. (Sian McGhie, p 4)

8.97 WSROC advocates that use of section 149 notifications are accompanied by a comprehensive State-wide education and awareness strategy to minimise community concern and alarm.

8.98 The committee believes that a comprehensive community education campaign should be an integral part of the use of section 149 notifications of salinity hazard. A suitable campaign should address public concerns by providing information on how to identify salinity damage to buildings, what can be done to protect buildings in relevant areas from damage and what sources of advice and assistance are available. More broadly a campaign should address the role the public can play in minimising salinity problems.

RECOMMENDATION 41: That the NSW Government launch a community education campaign on how to identify and address the impact of urban salinity. The campaign should be undertaken jointly with councils to coincide with notification of salinity risk on planning certificates.

Barriers to including information on planning certificates under section 149 (2) of the EPAA

8.99 The above measures should assist councils to notify salinity risks on planning certificates under section 149 (5). As discussed earlier, it is not mandatory, however, for councils to include environmental risks on planning certificates unless the council has adopted a policy on the matter.

8.100 The EDO recommends the legislative inclusion of salinity as a prescribed matter (environmental hazard in cl.7 of Schedule 4 of the Act) to require councils to include this information on planning certificates. (Submission 22).

8.101 Planning NSW has no plans to require councils to include salinity risks on planning certificates as part of its PlanFIRST reforms, although there will be a communication strategy to inform residents of salinity risks when regional plans are developed.

8.102 The committee believes that there are no NSW Government plans to make salinity a prescribed matter because there are no plans to resource a level of salinity risk mapping which identifies properties. The level of detail required under section 149 (2) is higher than that for section 149 (5) because it requires the adoption of 'policies' usually involving planning controls.

8.103 In the absence of this information, it is not reasonable to require councils to notify salinity risks under section 149 (2). The committee has recommended that mapping which is adequate for land-use planning is undertaken and that councils are provided with appropriate planning tools so that, where necessary, they can apply development controls.

8.104 If salinity was a prescribed matter, planning certificates would be issued by councils under section 149 (2) of the EPAA. Councils would be exposed to liability claims for the

information they provided. Given the information currently available to them, this does not seem reasonable. The committee has recommended that councils be given indemnity from liability for managing salinity until the information and guidance councils need has improved.

8.105 If salinity hazard maps are produced which identify properties or councils given indemnity from liability for information provided and councils are still not including salinity risks on planning certificates serious consideration should be given to including salinity as an environmental hazard in clause 7 of Schedule 4 of the EPAA.

REDUCING RECHARGE THROUGH SERVICE FUNCTIONS IN WATER SUPPLY, SEWERAGE AND STORMWATER

8.106 The committee understands that recharge to groundwater from water supply, sewerage and stormwater is unlikely to contribute significantly to salinity at a catchment level but can have local impacts, particularly on salinity hot spots in the municipality.

8.107 Local Government councils (and county councils) and water supply authorities (as per the *Water Management Act 2000*) are responsible for the planning, management and operation of water supply and/or sewerage services in areas outside the areas of operation of Sydney Water and Hunter Water.

8.108 With appropriate support and funding councils can reduce recharge to groundwater through such initiatives as: connecting houses to stormwater disposal systems, not approving rubble pits, reducing leakage from water pipes and septic systems, having water-wise plants in council parks and road verges and encouraging residents to have water-wise gardens. Wagga Wagga City Council has used all of these initiatives to reduce recharge.

8.109 There are NSW government programs which assist councils to develop best practice in the management of water supply, sewerage and stormwater.

NSW GOVERNMENT PROGRAMS TO ASSIST COUNCILS TO MANAGE WATER

- **NSW Water Conservation Strategy (DLWC)**

8.110 In August 2000, the NSW Government released the NSW Water Conservation Strategy to achieve a broader awareness and commitment to water conservation. It contains 19 strategies and 55 actions to be implemented by NSW Government departments, water industry associations and local councils. By conserving water, some of these actions will also reduce recharge to groundwater.

- **Country Towns Water Supply and Sewerage Program (DLWC)**

8.111 The NSW Government provides technical, management and financial support to local government through this program. The program is targeted to achieve best management practice in the planning and delivery of services and to ensure that those in most need receive the greatest benefit. The goal of the Program is:

Under the program, local government councils and DLWC effectively become partners to deliver:

Appropriate, affordable and well managed water supply and sewerage services in urban areas of country NSW which meet community needs, protect public health and achieve sustainable environmental outcomes while making the best use of regional resources. (p2)

8.112 The program has nine initiatives, initiative 4 is environmental management:

- *increased integration of environmental management practices and principles in the planning, management, and operation of water supply and sewerage schemes;*

- *improved environmental management and performance of water supply, sewerage, and drainage schemes by local councils.* (p8)

Integrated Water Cycle Management Plans

8.113 As a further initiative to achieve these objectives, DLWC is introducing an Integrated Water Cycle Management planning process. This process aims to set in place a long-term process to promote the sustainable management of water supplies and maximize the value of all water sources available to local water utilities. Water use in developed countries is increasing although the amount of water for direct human consumption may only be a small proportion of the total per capita water usage. This suggests that fresh water is being used inappropriately and that the natural water cycle needs to be better managed to secure a reliable water supply, better river flows and a cleaner environment. Material provided by DLWC states:

Integrated Water Cycle Planning is a way of managing water in urban areas so that all parts of the water system work together. For a local water utility, this means that the three main services – water supply, sewerage and stormwater are integrated so that all water is put to use and none wasted. It also means that council water planning is integrated with other council processes (street cleaning, garbage removal etc) and various external elements-global issues such as the greenhouse effect, Commonwealth and state policies, the catchment area and neighbouring local water utilities, the community and the natural water cycle. An important aspect of integrated water planning is the implementation of best practice throughout the water system….

8.114 Local water utilities will consider a range of factors in their risk assessment, and salinity is included on the checklist. Risk factors present in the area will need to be considered within the integrated plan. Salinity is one of the factors which councils must consider in developing plans. Advice is provided on prioritising problems in the water system by assessing the relative contribution of that problem in the catchment and urban areas. The local water utility must then make an economic evaluation of different options for achieving economic, social and environmental goals.

♦ Stormwater Management Plans and Stormwater Trust (EPA)

8.115 In May 1997, the NSW Government released the Waterways Package containing a range of initiatives to improve the quality of NSW's waterways. A key initiative was $60m over three years for the Urban Stormwater Program.

8.116 In 1998 the EPA issued a notice, under section 12 of the *Protection of the Environment Act 1991*, requiring councils to prepare catchment-based stormwater management plans. Larger councils were eligible for assistance from the Stormwater Trust for up to $30,000 and councils with fewer than about 10,000 residents up to $15,000. The committee understands that almost all NSW councils now have plans.

8.117 The Stormwater Management Plans set out a framework for action to protect the environment. The process includes:

- identifying environmental assets that need to be protected;
- setting stormwater management objectives to protect them;
- identifying problems and issues that may compromise the objectives and
- detailing non-structural and structural management practices to address these issues which are agreed by all stormwater managers in a catchment.

8.118 Other bodies such as DLWC, Planning NSW, NSW Fisheries, Waterways Authority and NPWS also play a role in stormwater management.

8.119 The environmental goal of urban stormwater management plans is worded broadly:

> *to facilitate the coordinated management of stormwater within a catchment to maximise ecological sustainability and the social and economic benefits of sound stormwater management practices. (Draft Managing Urban Stormwater: Council Handbook 1997)*

8.120 However, a review of relevant EPA documents demonstrates that the focus of the program is on surface water pollution issues to protect the health of waterways. This means that measures to dispose of stormwater on land are encouraged, such as stormwater infiltration and stormwater re-use. Salinity is a groundwater issue and disposal of water on land in such areas will make the problem worse. The EPA informed the committee that:

> *…the EPA has drawn councils' attention to the need to ensure that such practices are not used in areas with salinity problems. This advice has been included in guidance material provided to councils….Rather than require specific management actions to be adopted, the EPA's Direction required councils to prepare plans that identified local stormwater issues and proposed management actions tailored to these issues.*
>
> *A small number of the urban water management plans prepared to meet the EPA's requirements identified groundwater salinity as an issue of concern, or proposed actions relating to the problem.* (correspondence 27 November 2001)

8.121 The committee notes that the EPA, in guidance material, has raised the issue of salinity with councils. The committee also understands that where a council identifies a salinity problem the EPA will encourage them to adopt stormwater management methods which do not recharge to groundwater. The committee is concerned, however, that there is no formal requirement that they check whether the area is affected by salinity before proposing stormwater management actions which could potentially make the problem worse.

8.122 Research provided to the committee indicates that many councils may not be aware of salinity in their area. It is of concern that the EPA states that a small number of councils have identified salinity as an issue, as the committee understands that 50 NSW towns are affected by salinity. The proposed Integrated Water Cycle Plans, as the committee understands it, will require councils to indicate on a check list, as part of the planning process, whether certain environmental problems are present in the area.

8.123 The EPA also has *Draft Environmental Guidelines for Industry – The Utilisation of Treated Effluent by Irrigation.* The guidelines encourage the re-use of effluent where it is beneficial to do so, for example to irrigate crops and pastures. A source of cheaper water may be an economic incentive to landholders to put in annual crops or remove perennial vegetation and to councils to maintain or increase areas of lawn which will make salinity worse. The guidelines caution against this, for instance:

In areas subject to existing or potential problems from rising groundwater tables or in identified recharge areas, appropriate measures must be taken to ensure that effluent irrigation does not exacerbate these problems. (p20).

8.124 The guidelines also advise that site selection investigations include baseline groundwater chemistry and that ongoing groundwater monitoring is undertaken. They also encourage the use of irrigation systems which use water efficiently. The question is whether the safeguards are stronger than the economic incentives and cultural habits to over-water.

8.125 Effluent irrigation requires the EPA's approval prior to construction and a pollution control licence may be required to operate the system. The EPA believes that the issue is adequately addressed. The director-general states:

Where an environment protection licence is required under the Protection of the Environment Operations Act 1997, the guidelines are a point of reference for negotiating and developing appropriate conditions for specific licences. This will help ensure that when negotiating a licence for premises that propose to irrigate effluent, site-specific aspects, such as salinity risks, are taken into account.

The EPA would not intend to licence an effluent irrigation proposal where salinity effects could not be managed adequately or negative impacts prevented, and alternatives were available that would provide for a better environmental outcome. (Correspondence 27 November 2001)

♦ **Comments**

8.126 No criticism of the EPA is intended, but it is clear that each department involved in natural resource management has slightly different objectives. For instance, Mr Craig Butler, representing Penrith City Council, told the committee:

***Mr BUTLER**: There are conflicting initiatives being undertaken by the State Government. If we look at the north-west sector where we are looking to recycle effluent through the Rouse Hill Treatment Plant, there is a reduction in the cost for recycled water. People are tending to-because it is cheaper-use it more….That could impact on the issue of salinity in that particular area.* (Transcript of evidence, 28 May 2001, p7)

8.127 There is a danger that natural resource management may not be addressed effectively at council level if the requirements for action are competing or contradictory.

8.128 Councils may also be faced with a heavy administrative burden of requirements for plans on different administrative and budget cycles. The committee is pleased to note that the NSW Government has recognised these problems. The material provided by DLWC states:

This line of thinking at an institutional level has meant that water supply, sewerage and stormwater planning has often resulted in separately run systems with limited consideration

of how they impact on the environment and the community. As the demand for fresh water increases, water management can no longer be treated in isolation from the natural water cycle. Integrated planning ensures that present and future water cycle issues- including salinity, clearing, greenhouse gas, eutrophication, erosion, pollution and more- are also taken into consideration. guidelines and policies exist for many of these areas, their management is often undertaken in isolation without acknowledging the links between them. …It is important to remember that integrated planning is a long-term process, and may only show benefits after several years.

8.129 The committee hopes that Integrated Water Cycle Planning will be effective in coordinating water management issues to address natural resource management issues holistically. As it is a long-term process, the committee makes the following recommendationfor the interim.

RECOMMENDATION 42: That during the period prior to the establishment of Integrated Water Cycle Management Plans, the EPA request that councils check with DLWC whether they are in a salinity affected area with implications for stormwater management, and, where necessary, address the issue prospectively or retrospectively in Stormwater Management Plans.

POWER OF ENTRY PROBLEMS

8.130 Where councils do recognise salinity as a problem in managing stormwater, there is currently a barrier to addressing it cost-effectively. Wagga Wagga City Council has a program to remove rubble pits (stormwater soakaways on residential properties) and to connect house rooves to a stormwater disposal system.

8.131 In order to connect house rooves to stormwater disposal systems councils need legal rights to enter the private property to carry out and to maintain stormwater drainage. The removal of power of entry provisions from the *Local Government Act, 1993* means that to have these legal rights, the Council would have to negotiate legal easement rights with each landholder. This also means that the landholder cannot build over the part of the land (2m wide block). To negotiate an easement a survey must be undertaken, negotiations held with landholders, the mortgagee is involved and the easement must be registered with the State Land Information Centre. This must be done for each property. Wagga Wagga City Council estimated the cost to be $2,000 per easement. This sum is equal to the cost of the works being undertaken on each property. It does not include the cost of compensation to which residents may be entitled under the current arrangements.

In the trial area Council is working in at the moment, 1200 easements would need to be obtained, giving an extra cost of $2.4 million, and this is only about one sixth of the city area that needs this treatment….I am sure that when this right was revoked, it was never envisaged that it may be necessary to enter on private land to carry out remedial works for the whole community. (Submission 6: Wagga Wagga City Council)

8.132 This means that rates paid by residents must be used in legal fees and compensation for some householders, thereby reducing the benefit to the community as a whole.

8.133 The Water Directorate's *Report on Access Provisions for Local Government Water Services, May 2001,* addresses this issue which affects water and sewerage works and maintenance in general, not only in salinity affected areas.

8.134 The Water Directorate was established in 1999 as an initiative of local government water industry professionals. It provides:

- an independent source of advice to councils on water and sewerage operations;
- a more efficient operation of Local Government water and sewerage infrastructure;
- support and education on technical issues; and
- networking opportunities for water and sewerage engineers to share knowledge and improve communication within the industry.

8.135 The report states that local governments in all states and territories, except NSW, have power of entry provisions for works of construction or maintenance. The likely cost to local government in NSW of acquiring easements over private property where water and sewerage services are in place is estimated to be $1.275 billion.

8.136 The Water Directorate recommends that, as a matter of urgency, the NSW Government effect legislative changes to the *Local Government Act 1993* that embrace 'Power of Entry provisions' that enable local government authorities to undertake works of construction and maintenance of water services. The Water Directorate recommends further that it and the LGSA are given the opportunity to comment on drafts of the legislation.

8.137 The committee supports the recommendations of the Water Directorate's Report.

8.138 The committee was informed by the Minister for Local Government that:

> *Following a comprehensive review of powers of entry provisions for public water services it is proposed to provide councils with statutory powers of entry on private land to construct, maintain and repair water supply, sewerage and drainage facilities and services.*

8.139 Further advice from the Department of Local Government is that it expects to have a bill drafted for the first session of Parliament in 2002. Its introduction to Parliament is subject to the government business program.

RECOMMENDATION 43: That the Minister for Local Government provide the Local Government and Shires Associations and Water Directorate with an opportunity to comment on the draft legislation to provide councils with statutory powers of entry on private land to construct, maintain and repair water supply, sewerage and drainage facilities and services.

DISCHARGE OF SWIMMING POOL WATER IN SALINITY HAZARD AREAS

8.140 As stated earlier, local government councils (and county councils) and water supply authorities (as per the Water Management Act 2000) are responsible for the planning, management and operation of water supply and/or sewerage services in areas outside the areas of operation of Sydney Water and Hunter Water.

8.141 Section 638 of the *Local Government Act 1993* and section 6 of the *Local Government (Water Services) Regulation 1999* make it an offence for anyone to discharge prohibited substances, including salt, into sewers or drains. Not unreasonably, this has

been interpreted by some councils to mean that saline swimming pool water cannot be discharged into sewers.

8.142 Wagga Wagga City Council informed the committee that in the absence of legislation or regulations to prescribe an environmentally sound method of disposal, residents are discharging saline swimming pool water onto the ground. The council is concerned that this will contribute to the salinity problems in the area and runs counter to council initiatives to tackle the problem, for instance, by fixing leaking pipes.

8.143 The committee is not aware of any research which determines whether the quantities of water discharged present a significant problem but there is a need for clarification on the appropriate method of disposing of swimming pool water.

8.144 A member of the committee, Mr Daryle Maguire MP (Member for Wagga Wagga), raised this issue at the public hearings:

> ***Mr MAGUIRE MP:*** *sue for my area is discharge of saline water from swimming pools. The city council has attempted for a number of years to get a decision on what they are to do with regards to management of saline water…and their attempts to get some kind of clarification have failed.* (Transcript of evidence, 29 November 2001, p19)

8.145 The committee sought the advice of the Minister for the Environment, Minister for Local Government and DLWC on this matter. It is clear that the legislation is confusing.

8.146 The Minister for the Environment stated:

> *Local councils control the development of swimming pools and it may be useful for councils to also set controls over the discharge of swimming pool water…….There are three main options that local government might consider. Each option needs to be assessed on the basis of local water quality issues. These are discharge to sewer, reuse on land, and discharge to stormwater.*
>
> *You mention that discharge to sewer is prevented by Section 638 of the Local Government Act 1993 and Clause 6 of the Local Government Regulation 1999. However, Section 68 of the Act enables councils to approve the disposal of waste water into a sewer and this would be a viable option in some cases.*
>
> *Discharges to rivers or stormwater will contribute to the load of salt in the river and where the salt load in a river is already a problem, this would not be a preferred approach. However, saline discharges in some NSW rivers have been managed by restricting discharges to periods of high flow to dilute the salt. Local solutions similar to this approach would be worthy of consideration by councils when deciding how to manage pool water.*
>
> *I am advised that reuse of saline pool water for irrigation would be difficult and would require a number of site-specific factors, such as soil and plant type, to be considered. Again, the degree of difficulty of reusing pool water without causing local salinity problems will be site-specific but could be a viable option when carried out with careful management.* (correspondence dated 7 November 2001)

8.147 A draft response to the committee's letter to the Minister for Local Government states:

> *….a council may grant approval for the discharge of saline water into a sewer if it is appropriate to do so in the circumstances of the case. The council has no power to approve the discharge of saline water to open drains or gutters at this stage…….The distinction between a sewer and an open drain is relevant in this case because there is a reasonable*

expectation that matter discharged into a sewer will be treated and ultimately discharged or disposed of in accordance with performance standards and licence arrangements for sewage management.

8.148 One part of the Act makes it an offence to discharge salt into the sewer but another part of the Act permits a council to do so if it is appropriate in the circumstances. There has not been any guidance to councils on whether it is appropriate for residents to discharge saline swimming pool water into the sewers and requests for clarification from Wagga Wagga City Council have not been addressed.

8.149 Another issue is that the prohibition on discharge of salt into sewers is intended to apply to industrial waste and not domestic waste but this is not clear in the legislation.

8.150 DLWC is responsible for the Country Towns Water Supply and Sewerage Program for councils and for policy on the disposal of industrial waste into sewers. The Department states:

Clause 6 of the Local Government (Water Services) Regulation 1999 states that salt is prohibited from being discharged into sewers and drains. This is a carry over provision from the former regulations and its intent relates to the discharge of brine from industrial premises. It does not relate to swimming pool discharges, or to sewage itself which contains salt.

With regards to swimming pools, the common practice is for councils to require the backwash water to be discharged to the sewerage system. Backwash water from municipal pools is also discharged to the sewerage system.

8.151 It is now clear from the three responses that discharge to sewers is the most appropriate means of disposal and that the legislation is open to misinterpretation on whether the prohibition on the discharge of salt into sewerage refers to domestic waste or only industrial waste. Part of the confusion arises from the division of responsibility between different NSW government agencies for policy on water management. DLWC is responsible for policy on the design and construction of sewers but not responsible for operational matters. DLWC is responsible for policy on the discharge of trade waste into sewers but not domestic waste. The development of a consistent policy on operational matters in relation to domestic waste, such as swimming pool water disposal is the responsibility of the Department of Local Government, though DLWC is the expert agency on water management and salinity.

8.152 In evidence to the committee, Mr Verhoeven, representing DLWC, explained the division of responsibility:

***Mr VERHOEVEN**: [L]ocal government councils and water supply authorities as per the Water Management Act are responsible…for planning the management and the operation of water supply and sewerage services in those areas outside the operation of Sydney Water and Hunter Water, so for the rest of the State. In addition, the common practice is for councils to require that the backwash water be discharged to the sewerage system and backwash water from municipal pools is also discharged into the sewerage system, so you are looking at that from private individuals as well as from municipal pools. There is no known problem with discharging saline water from swimming pools into sewers….*

The Department of Land and Water Conservation does not have control over discharges from residential premises into the sewerage system and we do not have any suggestions for any legislative amendments to clarify how swimming pool water from domestic premises

should be disposed of. To us that is a local government issue as well because they are the ones who are responsible for the sewerage system, for example. The department works with local government on the design and construction of those systems, but the actual operation of those systems is the responsibility of local government.

Mr MAGUIRE MP: *But in the discharge of water in Wagga Wagga back into the river there is a salt requirement that has to be met, so they are in a 'Catch 22' situation because a certain level is required to be met before it can be discharged into the river. Am I correct?* (Transcript of evidence, 28 November 2001, pp 19 -20)

Mr VERHOEVEN: *You are right in that under the Local Government Act and its regulations approvals to discharge trade waste into the sewerage system require the concurrence of the Director-General of the Department. Trade waste is defined under the local government regulation as: Liquid trade or factory waste or chemicals or other impurities from any business, trade or manufacturing premises other than domestic sewerage, stormwater or unpolluted water , so trade waste does not include domestic sewerage. So as such then the pool discharges are not trade industrial waste and the department does not have a role in approving whether or not they can be put into the sewerage system. However, …municipal pools, which are council business, do fall within that definition and do require trade waste approval and concurrence and so the discharges must be approved in the sewerage system for health reasons……The Department has developed a model trade waste policy for liquid trade waste discharges to the sewerage system and is currently publishing a new concurrence guideline for trade waste discharges into the sewerage system…….These documents recommend a guideline acceptance limit for total dissolved salts concentration of up to 4,000 mg per litre…..So on the average [municipal pools].. would be well below that sort of level. Rather than saying you can't carry out a certain action, let's look at what the levels of salt would be in the discharge that are going to cause problems and make sure that council is operating below that level.*

Mr MAGUIRE MP: *There would be a requirement then to amend the legislation with regard to the Local Government Act?*

Mr VERHOEVEN: *Yes*

(Transcript of evidence, 28 November 2001, pg 20)

8.153 The committee raised the issue with, Mr Irvine, the representative of the Department of Local Government, in public hearings:

Mr IRVINE*: I heard my colleague on that question and I have to disagree with him. I believe there is no need for legislative amendment and I think that it is merely a question of understanding the legislation as it stands. Discharge of saline water into the sewer is the appropriate way to discharge swimming pool backwash in most cases. There is a requirement in the Local Government Act that that is only done with the council's approval. In effect that is to ensure that material other than normal domestic sewerage is not discharged into the sewer without a capacity for the council to say no, our system is not able to take that, but in most cases I would expect that permit would be issued as a matter of course.*

Swimming pools are constructed invariably with a requirement for council consent. The appropriate thing for the council to do is to determine the discharge arrangements for the saline backwash water at the time of development consent and to direct that it be discharged to the sewer, to require the applicant to obtain a permit from the council for that discharge, which is really just a simple administrative provision, and to operate within the terms of that permit. Now that permit might set some limits on the amount of discharge or

make some other practical administrative arrangements for the sewer to deal with that discharge, but certainly the requirement for approval is not intended to prevent the activity. What is prevented is the discharge of saline water into the environment, particularly into the stormwater system. It is possible under the Local Government Act for a council that has a sewerage system and a treatment system and a discharge arrangement where it is confident that it can cope with all of the saline backwash water discharged into its system from an urban area to make a general exemption from that requirement for approval and to have that operate throughout their area. (Transcript of evidence, 28 November 2001, pg 29)

8.154 The committee is aware that in some areas councils require swimming pools to discharge into stormwater and in others to sewerage, depending on their interpretation of the legislation. The committee is not confident that discharge of saline water into the environment is prevented. It may also be the case that some councils require freshwater pools to discharge to stormwater and that they may later be converted to salt water pools without the knowledge of the council:

Mr MCGRANE MP: *You make a DA asking for approval and it is approved for a freshwater pool, then a year later you decide to make it a salt water pool. Do you have to make a fresh application to council?*

MR IRVINE: *Probably not.*

MR MCGRANE MP: *That is what is happening of course. The councils probably think that they are all freshwater. I think that is something that we should look at.* (Transcript of Evidence, 28 November 2001, pg 30)

8.155 In inland areas stormwater and treated sewerage is disposed of onto land or into rivers. The extent to which the discharge of saline water from swimming pools may contribute to river salinity does not appear to have been studied. The committee understands that salt levels in sewerage are not usually tested for or treated. However, discharge of swimming pool water to sewers would make it is possible to test and treat salt levels. It would, therefore, be preferable if the development application process, in inland salinity hazard areas, made it mandatory for swimming pools to discharge into sewers rather than stormwater.

8.156 The disposal of sewerage or stormwater, whether saline or not, onto land in areas affected by rising groundwater could be a problem. This was discussed earlier.

RECOMMENDATION 44: That Planning NSW and the Department of Local Government ensure that it be a requirement for development approval in salinity hazard areas that swimming pools discharge into sewers, to make it possible to test for, and where necessary, treat high salinity levels in effluent prior to disposal on land and in rivers.

RECOMMENDATION 45: That the Local Government Act be amended to make it clear that the prohibition on the discharge of salt into sewers does not apply to the disposal of swimming pool water from domestic premises.

RECOMMENDATION 46: That Planning NSW and the Department of Local Government issue a circular to councils to make it clear that saline swimming pool water should be discharged into sewers and that this should be a condition of development consent.

8.157 As some councils have not been aware that saline swimming pool water should be discharged into sewers, there will be many existing swimming pools in salinity hazard areas discharging into stormwater.

8.158 The Departments of Land and Water Conservation, Local Government, Planning and Environment need to make an assessment of the likely environmental impact of the discharge of saline water from existing swimming pools in salinity hazard areas. If a significant impact is likely then consideration should be given to a program of connecting existing swimming pools to sewerage or filtration, if this is viable.

8.159 At the public hearings, the committee raised with DLWC witnesses the issue of whether residents could reasonably be required to desalinate the water before discharging it into sewers. DLWC states:

> ***Mr VERHOEVEN****: It is considered that it would not be viable to require residents to treat swimming pool wastes prior to discharge to the sewerage system. Standard filtration will not decrease salt levels. Effective processes for reducing salt are reverse osmosis, distillation, evaporation or crystallisation. None of these would offer practical or cost-effective solutions.*

8.160 The committee was informed by Carefree Water Conditioners that its water conditioner neutralises the effects of salts in water by applying a small electrical charge which causes the particles in minerals to repel and separate. The committee was presented with soil analysis reports showing that soil salinity had decreased after the Carefree Water Conditioner had been applied to irrigation water. Also provided were results of soil tests on an area where a a salt water pool had been backwashed for many years. The cost of the Carefree Water Conditioner for a swimming pool is $600 at the time of writing.

RECOMMENDATION 47: That the Department of Local Government seek advice from the Cooperative Research Centre for Waste Water Treatment Technology on whether the Carefree Water Conditioner can effectively and consistently treat saline swimming pool water.

ROADS

COST OF DAMAGE

8.161 The impact of salinity on roads has been identified as one of the highest costs of salinity damage. Across Australian local government, transport and communication is the largest area of expenditure (30 per cent of total expenditure) (National Report on Local Government, NOLG website).

8.162 The report *Salinity Impacts on Local Roads* by ARBB Transport Research for the Victorian Department of Natural Resources and Environment states that 80 towns have on-going costs related to salinity. In salt affected catchments up to 30 per cent of regional roads are affected with major highway reconstruction costing up to $1m per kilometre.

8.163 A case study of the costs of dryland salinity in the Loddon Campaspe catchments in central Victoria found that councils spend an average of $77,000 each year on repairs and maintenance to roads and buildings caused directly by salinity (Martin and Metcalfe, 1998)

8.164 The report *The Effects of Tree Planting on Ground water and Salinity Levels in the Yarragundry Catchment, Wagga Wagga, NSW* states that high water tables and associated salinity are damaging roads at a cost of $9m per year in the south western region of NSW (Duttmer, 1999)

8.165 The Lachlan Catchment Management Board informed the committee that the cost of dryland salinity to local government in the catchment is $1.73m of which 62 per cent is for reduced life of roads. (Submission 12: Lachlan Catchment Management Board).

THE NEED FOR BEST PRACTICE INFORMATION

8.166 Councils are responsible for maintaining the local road network and while maintaining local roads is cheaper per kilometre than maintaining regional roads or national highways, local road networks are more extensive. Several submissions and reports comment on the lack of available information on best practice information on designing and maintaining roads to prevent damage by salinity. The IPWEA states:

IPWEA research indicates that there is a scarcity of knowledge of practical solutions that will mitigate the impact of salinity on roads, buildings, parks and recreational facilities, services, utilities and other public infrastructure (Submission 15: Institute of Public Works Engineering Australia Ltd)

8.167 Road building and maintenance can make salinity problems worse. Katharine Duttmer in the report on the Yarragundry Catchment says:

It was suspected that up-grades to the Sturt Highway adjacent to the Yarrgundry site in 1982 – 1983 (which involved heavy soil compaction) altered sub-surface flow by acting as a barrier, thus exacerbating waterlogging and salinity problems that already existed. (Duttmer, 5: 1999)

8.168 Councils also need information to ensure that road building and maintenance techniques do not increase salinity problems. Some councils are already experimenting with different methods of maintaining roads in saline conditions this but there is not a national or Statewide coordinated trial. In its submission to this inquiry, Boorowa Shire Council advised the committee:

Council has experienced problems with roads directly due to salinity. In order to overcome these, experiments have been undertaken with sand drains, subsoil drains and layered construction (ie building a filter layer into the road). These have achieved varying degrees of success.

It is apparent that road building will have to take account of salinity and the cost per kilometer will increase accordingly. However, if the processes of salinity are ignored, then the road asset may not achieve its economic life.

Councils require more funding specifically to undertake remedial work. This work should be documented as part of an overall approach to determine what measures should be adopted in what situations. To my knowledge there is no overall direction to the work undertaken by various councils in response to the problems in their own areas.

It is my opinion that the whole process of road building and maintenance needs to be part of a documented program. This program should be financed such that its results can be published and the lessons learned disseminated to all road building authorities.

Experimental works should be able to be financed under the program to enable councils to trial methods in their own circumstances. (Submission 4: Boorowa Shire Council)

NEED FOR NATIONAL APPROACH

8.169 The report *The Impacts of Waterlogging and Salinity on Road Assets: A Western Australian Case Study* identifies that in many situations damage to roads can only be addressed through catchment wide measures, such as permanent tree belts on road reserves and adjacent private land. Road authorities cannot achieve results in isolation. The report identifies the need for works to be carried out in consultation with catchment groups. It states:

Mutual benefits would arise from offering support to farmers for the rehabilitation of land affected by ponding of water behind roadways. Successful collaboration on these 'simpler' land and water management issues could then lead to the necessary levels of cooperation between MRWA and the community to manage salinity;

Cooperation with farmers will be the largest factor in determining the success of salinity mitigation techniques to protect roads. Affected roads are situated in the lower part of the catchment making it unfeasible for the MRWA to work in isolation to achieve good results;

Increasing road reserve widths and subsequent reafforestation is potentially an option for MRWA. Due to the nature of the salinity problem, however, better results will be achieved by consulting and working directly with local communities already attempting to stabilise rising watertables on a sub-catchment basis. Attempts to regain the water balance locally (ie by acquiring more land) could potentially be defeated by farming practices in the upper catchment areas. (McRobert and Foley, 59: 1999)

8.170 The main recommendations of the report are:

- undertake a strategic assessment of the salinity problem and how it is affecting Main Roads Western Australia (MRWA) assets;
- investigate salinity management options, then demonstrate and evaluate at a number of sites;
- increased community involvement and participation by the MRWA in catchment management; and
- adopt pavement rehabilitation practices commensurate with site specific requirements.

8.171 Many smaller councils do not currently recognise that managing salinity is part of their existing core business. A road maintenance trial involving councils has been identified as a fruitful way of engaging councils in managing salinity as the management of local roads is accepted by councils and ratepayers as a core part of council business.

8.172 This is an area where many councils could be involved in trials of different approaches and reporting back. The hands-on experimentation by council staff would be of great value, within a framework coordinated by Austroads.

8.173 Austroads is the association of Australian and New Zealand road transport and traffic authorities whose purpose is to contribute to the achievement of improved Australian and New Zealand transport related outcomes. It acts as a common vehicle for national and international action. Austroads membership comprises the six Australian State and two Territory road transport authorities, the Commonwealth Department of Transport and Regional Services, the ALGA and Transit New Zealand.

8.174 A national roads research trial on salinity is consistent with the objectives of Austroads, particularly, asset management, environmental impacts, partnerships and the National Strategic Research Program.

8.175 Austroads has a National Strategic Research Program for roads and their use that supports Austroads programs and addresses emerging issues. Surprisingly, salinity does not appear to have been identified as an emerging issue

8.176 Austroads has a commitment to research and development in the area of ecologically sustainable development and the environment. Objective 5.2 of Austroads Strategic Plan has two strategies, one of which is:

In conjunction, with other responsible agencies, develop and promote research strategies, standards, guidelines and practices for arterial and local roads in relation to managing environmental impacts. However, salinity is not currently specifically identified as an environmental impact.

8.177 Objective 6.2 Partnerships states:

To maintain partnerships with related organisations to share and exchange information to undertake joint investigations for the enhancement of the overall transport system and for mutual benefit.

8.178 Austroads has a partnership with local government through the Austroads/Local Government Partnership Plan. This involves:

- *in conjunction with ALGA, involve council officers in Austroads activities;*
- *in conjunction with ALGA and IPWEA, encourage councils to participate in the development and implementation of Austroads technology transfer programs and monitor uptake of Austroads technology and practices by councils;*
- *examine, in conjunction with ALGA, the economic and social significance of local roads, their condition and problems clearly evident in some areas (eg deterioration of bridges).*
- *establish standards, in conjunction with ALGA, to enable improved collection and reporting of road statistics.*

8.179 ALGA has a roads and transport program which in 1999-2000 was funded from ALGA funds, Local Government Development Program grants and voluntary contributions from councils and associations to the ALGA's Road Trust Fund. The Road Trust Fund funds ALGA's membership of Austroads.

8.180 ALGA has a roads and transport strategy with the following components:

- *implementation of the Austroads Partnership Plan;*
- *national policy based on informed research and development*
- *promotion of asset management principles and exchange of information between councils; and*

- *Support for the role of national forums such as the Australian Transport Council and the Standing Committee on Transport.* (Local Government National Report, p 49).

8.181 The Austroads Partnership Plan ensures better returns for local government from Austroad activities. ALGA is undertaking a project for Austroads on the effect of heavy loading on low trafficked roads. The project involves 32 councils.

8.182 Project proposals are made by Austroads members through a reference group for consideration within the three-year strategic plan. Successful projects are those supported by the majority of members. However, Austroads Strategic Plan is significantly influenced by the Australian Transport Council's Strategic Plan of 1997.

8.183 The Australian Transport Council is the forum for Australian and New Zealand Ministers of transport. Austroads through the Standing Committee on Transport, was given primary responsibility for the implementation of ATC's Strategic Plan for the road modal sub-group. Accordingly, Austroads work programs in the past two years have reflected the need to support the ATC's Strategic Plan.

RECOMMENDATION 48: That the Minister for Transport place on the agenda of the Australian Transport Council the need for a national road project by Austroads to identify best practice in maintaining roads in saline conditions to preserve the life of the road and to avoid exacerbating salinity.

RECOMMENDATION 49: That:

(c) the national road project, referred to in recommendation 48, involve Austroads, Australian Local Government Association, the Institute of Public Works Engineering Australia, relevant Catchment Management Boards and councils; and

(d) councils are involved in trialling different methods of road maintenance in saline conditions and reporting to Austroads. Austroads should widely disseminate the results of its research to road authorities, including councils, and produce a manual.

8.184 At the public hearings, the committee asked the president of the Shires Association if he would support such a proposal. He responded:

> ***Cr MONTGOMERY****: Certainly road construction is going to be one of the huge costs that local councils in country areas are going to have to face. When we talk about delivering large amounts of money from council budgets into the salinity area, as well as other natural resource areas, some of it will be in remediation and maintenance of roads that are affected by salt. Having a coordinated approach to it that has engineering skills involved I think is a good idea. I understand that Boorowa Shire has put a submission in which is along those lines and we would certainly support that.* (Transcript of evidence, 29 November 2001, p23)

9 ADDITIONAL OPTIONS FOR SALINITY MANAGEMENT BY LARGER COUNCILS

9.1 Wagga Wagga and Dubbo City Councils are examples of larger councils. These additional options are likely to be beyond the budget and expertise of smaller shire councils. However, it may be possible for smaller councils to be involved through the establishment of regional organisations or partnerships of councils which involve sharing financial and human resources.

RETAINING VEGETATION AND REVEGETATION

9.2 As has been discussed earlier, councils face considerable costs from damage to infrastructure and from declining land values in salinity affected areas. It is in the interests of councils and land holders to conserve areas of native vegetation and to revegetate areas with perennial plants. Council areas with severe degradation of land may also experience depopulation as people move to areas with better amenity.

9.3 There are a number of ways in which councils can contribute to maintaining vegetation or revegetation. Those that involve land use controls through planning powers have been discussed earlier under land use planning. Councils can also contribute:

- as owners/administrators of land;
- through fostering and supporting community participation; and
- through incentives to private landholders.

AS OWNERS OR ADMINISTRATORS OF LAND

9.4 Councils can:

- plant trees and shrubs to prevent a large community cost in terms of damage to roads and infrastructure further down the catchment;
- plant salt tolerant plants on sporting ovals, parks and nature strips in discharge areas;
- use techniques such as flushing the salt from the surface layers of soil, importing fresh topsoil and localised drainage to maintain vegetation on discharge sites;
- involve the local community in planting trees and shrubs. (Sian McGhie, Planning to Combat Urban Salinity, NDSP Local Government Project 2000).

9.5 Councils are significant owners/administrators of land. Revegetation of council owned and administered land with trees and other perennial plants may assist in reducing recharge. In order to be effective, councils need access to expert advice on siting trees and appropriate species. Planting would be more effective in reducing recharge if undertaken within the framework of a Catchment Management Blueprint or similar regional approach. Many councils would also require external funding to plant enough trees to have a significant effect.

9.6 The committee has recommended that councils be funded to undertake actions which align with broader targets and strategies. If Catchment Management Boards identify the need for revegetation in an area where councils own land, councils should be able to access funding to assist them to revegetate land in order to assist with the implementation of Catchment Management Blueprints.

THROUGH FOSTERING COMMUNITY PARTICIPATION

9.7 Councils can support or initiate a program to encourage the planting and retention of trees, shrubs and perennial grasses by community groups.

9.8 Coorong District Council, for example, has a policy for the revegetation of road reserves. In the district, the remnant tree cover outside of national parks is largely on road reserves where it acts as a wildlife corridor connecting areas of native vegetation. It also assists in the management of run-off from adjacent land and reduces the need for weed maintenance.

9.9 The council provides grants and technical expertise to individuals and groups to revegetate road reserves and encourages the collection of native seed for revegetation projects. (National Dryland Salinity Program, Information sheet: Coorong District Council and Dryland Salinity)

THROUGH INCENTIVES TO PRIVATE LANDHOLDERS

9.10 It may be possible for councils to offer incentives through:

- grants, including devolved grants
- rate rebates and exemptions in exchange for a commitment to conserve an area of land through:
  - management agreements with a landholder
  - covenants
- revolving funds to buy land with high environmental significance and resell it under a covenant.
- lower rating categories for land in commercial production which is planted with perennial plants.

9.11 The report *Public Good Conservation: Out Challenge for the 21st Century* by the House of Representatives Standing Committee on Environment and Heritage, suggests that in many ways local government is the logical manager for conservation schemes:

> *…local government already possesses a considerable infrastructure and legal authority that can be expanded and adapted to promote sustainable land management activities. A number of other reports have also noted the importance of local government in effective, sustainable land management, especially the capacity of local government to focus incentives and target specific geographical areas of highest environmental need.* (p151: September 2001)

- **Grants**

9.12 As discussed in chapter two, the Coorong District has a Local Action Plan involving the Coorong District Council.

9.13 The plan aims to put management practices in place within 10 years that will reduce recharge rates across the district by 50 per cent of the 1994 levels. A series of revegetation options for different land types has been developed. Incentive payments are provided to landholders through an NHT grant.

9.14 The incentives range from $10 per hectare for the establishment of veldt/primrose pasture to $400 per hectare for the establishment of large blocks of vegetation which meet criteria set out by the committee.

9.15 The incentive program has been highly successful. The report states:

> *After the first three years of on-ground works it is evident that, in many cases, the farm community is willing to contribute significantly more than the on-farm split.* (Coorong District Local Action Plan, A draft for discussion, January 2000, p84)

9.16 Further,

> *[f]unding was initially obtained in 1997 for a one year project piloting the on ground implementation of perennial vegetation works as identified in the Local Action Plan…The response to the project was overwhelming. The aim was to have 1000 hectares of perennial vegetation established on 25 farms. The actual on-ground works implemented was 2300 hectares on 50 farms.* (Coorong District Local Action Plan, A draft for discussion, January 2000, p57)

9.17 The Coorong District Soil Conservation Board and Animal and Plant Control Board have since realigned their boundaries to match those of the Coorong District Council to provide a more efficient natural resource delivery mechanism.

- **Rate rebates, exemptions and revolving funds**

9.18 In NSW, the Nature Conservation Trust has been established as an independent body to encourage conservation on private land. It will negotiate binding property and conservation agreements on behalf of the Government and provide ongoing management advice to landholders and ensure conservation and property agreements are implemented. The NSW and Commonwealth Governments have each contributed $1 million to the Trust for a revolving fund to buy and sell land of conservation value, including placing conservation covenants on that land prior to its resale. The core operations of the Trust will be funded through private sources of funding through philanthropy and industry investment.

9.19 The Nature Conservation Trust arose from a proposal by the NSW Farmers' Association, the World Wide Fund for Nature, the Nature Conservation Council and Greening Australia.

9.20 The *Land Tax Management Act* and *Local Government Act 1993* have been amended to provide exemptions from liability from land and local government rates. The Act also exempts the Trust from the payment of charges under the *Stamp Duties Act* and the *Duties Act* in relation to its acquisition and leasing of land and disposal of land. This is

important, as Dr Binning and Professor Young of CSIRO have identified these as disincentives to conservation on privately owned land, in a series of five reports for the National Research and Development Program on Rehabilitation, Management and Conservation of Remnant Vegetation.

9.21 Although the Nature Conservation Trust Act provides exemptions from rates for land held or leased by the Trust, there is no active role for councils in the process. Local government is not represented on the Trust Board, although the Minister may appoint a member of the public who can provide advice on matters of local land use planning and management and the operation of local councils.

9.22 Dr Binning and Professor Young believe that local government has the potential to play a role in conservation on private land because it is involved in land use planning at the local level and has local knowledge. They believe that the exemptions and concessions from rates and land taxes for different classes of land could be extended to land covered by a conservation agreement with the council. They also believe differential rating could be extended to land zoned for conservation within formal land use plans.

9.23 They note that the significance of rate reductions and exemptions would vary enormously according to the size of the land to be conserved, the value of the land and the level of the rate. They acknowledge that the rebate on rates in rural remote areas is likely to be modest. A rate of $2 to $25 per hectare would provide an incentive worth $100 to $1,250 for 50 hectares. (*Conservation Hindered*, 1999).

9.24 Although rate exemptions in rural areas would not compensate for high value opportunities lost, they would go some way in off-setting direct annual costs of managing land for conservation. The House of Representatives Standing Committee on Environment and Heritage, for instance, says:

> *Remission of local rates and state government land taxes is not intended as compensation for loss of production. The remission of rates and land taxes may, in many cases be a symbolic gesture. However, many submissions did mention local government rates explicitly, and it is clear that the failure to remit them is a matter that causes many landholders to be disgruntled. Moreover, while the sums are small, for landholders on low incomes, they can represent real incentives and assistance with conservation activities. The committee believes that financial assistance should be provided by the Commonwealth to local and State governments to remit state land taxes and local government charges in order to facilitate public good conservation activities.* (p172 September 2001)

9.25 Additional complementary incentives would be required to encourage landholder participation. However, as the NSW and Commonwealth Governments are contributing to the Nature Conservation Trust, it does not seem practical for them to contribute to another conservation scheme.

9.26 However, another way that councils could be involved is to offer is lower rating categories or exemptions for land in commercial production which is planted with perennial plants. Again, the incentive which could be offered by councils would be modest but could be part of a broader incentive scheme involving CMBs. CMBs are being required to identify priorities for investment to bring about land use change to meet targets. Lower rates or exemptions could complement funds provided to landholders through the proposed Environmental Services Scheme and Environmental Services Investment Fund. Councils could ensure that land use planning requirements

complemented these measures and, with appropriate funding, could employ an officer to provide advice to landholders and monitor compliance with agreements.

9.27 Higher rates would have to be levied on other ratepayers to compensate for these incentives. It should be possible to establish the benefits to the broader community from changed land use practices. The Coorong District with the assistance of CSIRO has established a scientific basis for the relative amount of incentives offered based on a beneficiary pays principle. The larger the community benefits from the changed land-use, the higher the incentives provided. A similar approach could be used in community education to harness support for a rate increase or special levy to cover such incentives.

9.28 In order to bring this about there would need to be an amendment of the *Local Government Act 1993* to provide for exemptions for land under an investment agreement. The Local Government Act currently requires that:

> *If the ad valorem amount is different for different categories or different sub-categories within a category, the ad valorem amount for the category farmland (or each sub-category within that category) must be lower than the ad valorem amount in each other category (or each sub-category within those other categories.* (Part 1, section 530)

9.29 The Act would need to be amended at Part 1 s.493 to provide for an additional category of land and at s.530 to provide for that category to be rated lower than farmland.

9.30 The role of local government in offering incentives for conservation and environmentally sustainable agricultural production does not appear to have been formally considered by the NSW Government in the context of recent policy initiatives to address natural resource management challenges, such as salinity.

9.31 There are several initiatives by councils across Australia to offer rate rebates and incentives for land use change. More broadly, ALGA has informed the committee that it is currently discussing the future role of councils in managing natural resources.

9.32 The *NSW Salinity Strategy* has a key focus on offering incentives to landholders for change to environmentally sustainable production which reduces recharge. The committee believes it is timely for the NSW Government to formally consider the role of local government in contributing to incentives for land use change.

RECOMMENDATION 50: That the Minister for Land and Water Conservation, in consultation with the LGSA, lead a NSW Government review of the future role of local government in contributing to state-wide and national approaches to providing incentives for conservation and environmentally sustainable agriculture.

9.33 The House of Representatives Standing Committee on Environment and Heritage report, *Coordinating Catchment Management, Report of the Inquiry into Catchment Management,* addresses issues raised by Dr Binning and Professor Young of the CSIRO that there are currently taxation disincentives to conservation. The report recommends:

> *That an audit of policies be conducted to identify counter-productive incentives in respect of promoting ecologically sustainable land use that are contained in Commonwealth state and territory programs and that proposals be developed for their removal.* (Recommendation 22, p 128)

and

That the Government conduct a public inquiry into the disincentives for the ecologically sustainable use of Australia's landscape contained in the present taxation arrangements at all levels of government, and make recommendations for change, including costings. (Recommendation 25, p 138)

9.34 There has not been a response from governments to the recommendations of the report.

RECOMMENDATION 51: That the NSW Government, through its representation on the Council of Australian Government, support recommendations 22 and 25 of the House of Representatives Standing Committee on Environment and Heritage Report, *Coordinating Catchment Management, Report of the Inquiry into Catchment Management* for a review of government policies and taxation arrangements to remove any disincentives to ecologically sustainable land use.

BUSINESS OPPORTUNITIES

9.35 Section 24 of the *Local Government Act* states:

Provision of goods, services and facilities and carrying out of activities

A council may provide goods, services and facilities, and carry out activities, appropriate to the current and future needs within its local community and of the wider public, subject to this Act, the regulations and any other law.

9.36 There would appear to be no specific constraint on councils entering business ventures for profit, other than practical business considerations. Councils can enter into such ventures provided that the commercial risk is not unreasonable. For example, a council could not risk losing land that it owned if it were to enter into a commercial forestry venture, but it would not be constrained from doing so it if were in the community's interests and the risk was reasonable. Reducing water tables by growing native vegetation on council land on a commercial basis could justify such a venture as being in the interest of both the local and wider community.

9.37 The Department of State and Regional Development (DSRD) has a role under the NSW Salinity Strategy to facilitate business opportunities to address salinity.

9.38 It has a Salinity Action Group chaired by the executive director of the Regional Development Division, and is appointing a Business Development Facilitator to overcome barriers to salinity related business opportunities by:

- developing and maintaining a comprehensive overview of business and employment opportunities in Australia and overseas and to report this to DSRD and other stakeholders;
- improving communication, information exchange and cooperation between individuals and government agencies seeking to exploit the business and employment opportunities;
- working with individuals and groups to develop new projects, where projects are unlikely to progress without support;

- facilitating business opportunities by convening and supporting meetings, preparing documentation, publicity, arranging contacts with government to groups of stakeholders, facilitating projects with significant employment potential; and

- reporting on the growth of employment in NSW from projects to address salinity, particularly where DSRD has a had a role in it.

9.39 DSRD is holding one day forums in rural areas to showcase a range of business ventures developed in response to salinity.

9.40 DSRD will contract a network specialist to develop Salinity Central, a website for information exchange between business with expertise in salinity with investment, business development and salinity remediation as the main objectives. Initially DSRD will produce a directory of salinity goods and services on the site. The website has been launched by the Minister for Local Government, Regional Development and Rural Affairs. Its address is: www.salinitybiz.nsw.gov.au.

9.41 DSRD is providing support for several projects.

9.42 It is suggested that councils interested in business opportunities to address salinity contact DSRD for advice.

SALT HARVESTING

9.43 There are no commercial ventures by councils to address salinity currently in place, the committee is aware that DSRD has initiated an important project to address urban salinity, involving a partnership with the city councils of Wagga Wagga and Dubbo, the only such project in NSW.

9.44 The project, which commenced in September 2001, involves a feasibility study and pilot projects at both Wagga Wagga and Dubbo to test the suitability of patented technologies, in this case provided by a private company. Research of markets for the extracted salts will also be included in the study.

9.45 Field trials, involving testing salt extraction technologies in the pilot plants at Wagga Wagga and Dubbo took place in February and March 2002. Public demonstrations were also arranged in both cities.

9.46 If the pilot projects prove to be feasible both technically and economically, the city councils of Wagga Wagga and Dubbo are expected to establish business units that will pump ground water and extract and market the salts removed. The councils may contract this work to other organisations.

9.47 There is evidence that many local government councils are very interested in this project and the results obtained. Clearly, if the pilot projects are successful it will provide councils with an effective methodology to address urban salinity.

9.48 DSRD is providing $100,000 in funding. Funding is also coming from the Federal Government and the two city councils involved. The total budget for the project, including in-kind contributions, is $560,000.

9.49 The whole project, including a comprehensive report, will be completed in July 2002.

9.50 It may turn out that it is not actually profitable for councils to extract and market salt in this manner. There are cheaper ways of producing salt than extracting it from saline land. The fact remains, however, that councils will still need to deal with the salt. If such ventures could at least assist councils to offset the cost of removing salt – through, for example, a private processing company paying councils for access to the salt from the water pumped from beneath their land, or, looked at another way, councils using the salt as part payment for the cost of extracting it – that may in itself be a worth venture. According to DSRD, one of the outstanding aspects of the project is that there is no residue to dispose of – the process uses every gram of salt extracted.

SALINITY CREDITS

9.51 Councils would like to see salinity trading schemes extended across NSW and to be able to participate. Wagga Wagga City Council, in its submission, said:

> *Councils through their sewerage facilities can have a big impact in reducing saline discharges to watercourses. This is achieved by reuse of effluent, which traditionally has a higher concentration than the receiving waters. Councils should be encouraged to do so by allowing them to derive some benefit from the Salinity Credits system.* (Submission 6)

9.52 The NSW Minerals' Council's submission also suggests that mines might want to gain salinity credits by taking clarified saline effluent water from councils for use in mines. This would involve the siting of sewerage works close to mines, in relevant areas.

AQUACULTURE

9.53 In its visit of inspection to the Lower Murray region, the committee inspected the Bedford Groundwater Interception Project, an inland fish farm at Cooke Plain with which the Coorong District Council is involved. The project is sponsored by the Department of Primary Industries and Resources (South Australia).

9.54 Groundwater is only 1.5 metres below the surface in this low-lying area. The aim of the project is to use the saline groundwater to grow finfish and produce betacarotene in tanks for sale on the commercial market, while lowering the water table level and reclaiming salt-affected soil. The groundwater is pumped out into pools and tanks. Wastewater from the process is pumped into evaporation ponds where a salt product is harvested and used for preserving hides and for stock feeds. The brine that is left is used as a road stabiliser and as a soil conditioner.

9.55 In three years, the groundwater has been reduced by 60 cm.

COMMERCIAL FORESTRY

9.56 Larger councils and regional consortia of councils may wish to explore the possibilities of plantation forestry in partnership with investors. The establishment of forests on council owned land could have multiple benefits such as reducing salinity, providing council with revenue and creating employment opportunities. Plantations on council owned land may assist in meeting catchment targets while providing some revenue for councils. Perhaps forests could be sited to protect council assets such as roads while also providing revenue. It should be noted that forestry for 'carbon sinks' may also address salinity problems, if correctly sited.

9.57 On a visit of inspection to the Hunter Region, the committee was provided with information on a relevant initiative involving Musswellbrook Shire Council. It is addressing a range of economic and environmental problems through a trial with CSIRO and the University of New England to investigate the feasibility of commercial forestry as an option for rehabilitated mine spoil with saline irrigation and soil amendments to increase the growth of trees. Briefing information provided by the Council states:

The main water body in the area, the Hunter River is becoming increasingly saline as a result of excessive irrigation, removal of deep-rooted perennials, discharge of saline water from mines and removal of water from power stations. Salinity of both surface waters, groundwater and soil resources has now become a serious issue. The mining industry also faces serious problems from the accumulation of saline groundwater. This water may be stored on site until discharge conditions are acceptable.

All of the above issues are of extreme importance to the sustainability of the Musswellbrook Shire Council environment and economy. The recoverable resources from each mine are diminishing and MSC will be forced to invest in alternative land use options to replace the current economic contribution of the coal industry. There will also be a large amount of land to be rehabilitated once the six active coal mines within the Shire begin to close down.

9.58 The trial is located on a mild slope on 2.88 hectares within the Drayton Colliery. The trial will make recommendations based on the findings to Musswellbrook Shire Council and Drayton Colliery regarding the suitability of irrigating trees with saline water on rehabilitated sites under a range of soil conditions. The council says:

It is hoped that if this trial is successful then there can be commercial use of otherwise environmentally hazardous saline water rehabilitating mined areas. (Drayton Saline Irrigation Trial-Summary)

9.59 The power stations and mining industries provide the stimulus and support for commercial forestry which may not be available to councils in other regions. A steering committee representing commercial mining, power generation, community and local government interests was formed in 1999 with the support of the Minister for Forestry to promote commercial forestry to rehabilitate mine sites and buffer zones. Also the Federal *Renewable Energy (Electricity) Act 2000* sets a target for renewable energy, of which biomass from forestry is one source.

9.60 However, there are more general incentives for plantation forestry, and larger councils and regional partnerships of councils could explore these options for the use of council owned land in salinity hazard areas.

9.61 *The Plantations 2020 Vision Strategy* prepared by the Federal Government and the Forest Industry (with support from all State governments) aims to treble the size of Australia's plantation forestry estate from 1 million hectares (in 1997) to 3 million hectares in 2020.

9.62 The Kyoto Protocol to the United Nations Framework Convention on Climate Change 1997 (Kyoto Protocol) sets out greenhouse gas emissions targets for developed countries that are signatories to the 1992 Convention on Climate Change. It sets an individual target for each country for 2008-2012. Australia would need to reduce its emissions from its 1990 levels by 108 per cent.

9.63 The Kyoto Protocol, if ratified, will also create an international market in greenhouse gas emission reductions including carbon sequestration (ie planting trees and other perennial plants). At the moment there is no market driver for reductions in salinity. A project is underway in NSW Treasury/DLWC/Cabinet Office. Investment in land use change and forestry which may improve salinity has to be tied back to carbon credits, which although speculative, at least a potential market driver. Stakeholders are waiting for progress on the Kyoto Protocol. In the meantime, the NSW Government is preparing electricity retailers for carbon trading.

9.64 *The Electricity Supply Act 1995* makes it a requirement for a licence that retail suppliers have in place strategies to reduce greenhouse gas emissions as their contribution to any national greenhouse policies approved by CoAG. Suppliers must also report annually on their carbon dioxide emission levels. Under Schedule 2, as amended in 2000, they can count greenhouse gas reductions through investment in carbon sequestration in planted forests in calculating their emissions *in accordance with a methodology approved by the Minister.*

9.65 The Ministry of Energy and Utilities is currently working on this methodology (a draft report is available on the Ministry's website, www.energy.nsw.gov.au). The committee has not taken evidence on whether council-owned land would be eligible for planting for greenhouse gas emission offsets by energy retailers, but councils may wish to explore this option.

9.66 The MDBC is establishing a Vegetation Bank to purchase salinity (and perhaps carbon and biodiversity) credits from the owners of large scale plantations. The Vegetation Bank would tender for vegetation services in harmony with CMB requirements to mitigate salinity. It would invite government or private sector forest investors to tender for large scale forest establishment in critical dryland salinity areas.

9.67 The successful tenderers would run the commercial risk, own the forest, lease or buy the land and manage all silviculture practices and relationships with downstream purchasers. Again, the committee has not taken evidence on whether councils could be involved in a partnership with investors by leasing land and/or managing silviculture practices but this option could be explored by larger councils or regional consortia of councils.

APPENDIX 1 – FUNDING OPTIONS

A funding program/s for local government management of salinity needs to have the following components:

- compensation to councils for the costs of salinity damage and declining land values;
- a structured approach to developing the capacity of councils to managing salinity in the long term; and
- ensuring that actions taken by councils to address salinity contribute to meeting salinity targets in Catchment Management Blueprints and proposed regional plans.

Possible existing funding sources are as follows.

OPTION	ADVANTAGES AND DISADVANTAGES
COMMONWEALTH PROGRAMS	
General purpose financial assistance grants The Commonwealth Government pays grants to each State government as a tied grant to be passed on to councils in accordance with the approved distribution. Local Government Grants Commissions are State authorities which pass on the funds as untied grants to local government. The funding is distributed to compensate councils for variations in expenditure and revenue to bring all councils up to the same level of financial capacity. Councils which incur higher costs in providing normal services for example because of remote areas or aged populations receive additional monies. Grants are also distributed on the principle of effort neutrality which means that a council's grant is independent of its policies. Funding does not interfere with democratic processes. In 1999-2000, the Federal Government provided $1.271 billion.	The inclusion of salinity by the Local Government Grants Commission in NSW may be the most effective mechanism for compensating councils for the costs of salinity damage. It would require a system to be established for assessing the costs of infrastructure damage to councils caused by salinity. It would mean that salinity damage was a weighting factor in the distribution of existing funding. Additional funding could not currently be contributed by the Commonwealth as the basis for increases in the general purpose financial assistance grants from the Commonwealth Government are CPI and population increase. However, there is an argument that Commonwealth funding of the FAGS program has not kept pace with the changed functions and increases in responsibilities of councils and should be reviewed. General purpose financial assistance grants by their very principles are untied. It would not be an effective mechanism for funding actions which need to be integrated with Catchment Management Blueprints and regional plans.
National Environment Levy The House of Representatives Standing	At this stage, neither of the major parties has indicated their support for the recommendation.

Committee on Environment and Heritage has recommended in its Inquiry into Catchment Management *an assessment of the feasibility of an environment levy to pay for the public contribution to implementing the policy of ecologically sustainable use of Australia's catchments.*	Professor Young of CSIRO suggested in his paper to the National Local Government Summit that 30% of a national levy be provided to councils as dollar matching for funds raised locally through environmental levies. If the Commonwealth Government agreed to support this proposition, it would provide a very significant pool of funding for councils for action to address salinity and perhaps for capacity building. For political reasons, it is unlikely that the Commonwealth Government would want high profile funding spent compensating councils for infrastructure damage. It would mean that the costs of addressing salinity are borne by the whole community, which is appropriate. It would be an incentive for councils to address salinity to secure support for a local environment levy from residents. However, straight dollar matching may not be equitable and the concept may need adjustment The costs of addressing salinity in some rural areas may be higher than in areas with larger rate bases. Rural and remote councils receive a much larger proportion of their income as grants rather than rates. The rateable value of land is also lower. They would have a limited capacity to raise local levies and therefore to access Commonwealth funding. It is likely that councils would have to develop a significant capacity to manage salinity in order to gain the support of councillors and the community for a local environment levy. They would need funding to achieve this before they could access funding from a national environment levy.
National Action Plan for Salinity and Water Quality The Commonwealth Government proposes to provide block funding to 20 highly affected catchment/regions. The funding is to be matched by state governments. Funding will be contingent on having an accredited plan, which will assist in meeting agreed national outcomes.	This would be the most effective way of funding actions by councils in a way which integrates them with Catchment Management Blueprints and targets. It could also be a useful way of funding capacity building because the program is long-term. Catchments will be funded on the basis of accredited plans and councils could also be required to have plans accredited by Catchment

	Management Boards /DLWC. Councils would need to apply to the CMBs or NSW government, if it held the funds for CMBs boards. However, there has been no discussion of whether councils can access the funding. The NSW Government has not yet signed an agreement with the Commonwealth as some parts of the model are in dispute. Not all catchments in NSW affected by salinity will be funded. This is subject to negotiations currently but the Premier has informed the committee that the Commonwealth has not been flexible on this matter. Councils in non-priority catchments would have to be funded in another way.
Natural Heritage Trust The Commonwealth Government has provided $1.5 billion over six years under the Natural Heritage Trust (NHT). The NHT aims to accelerate activities in the national interest directed towards achieving the conservation, sustainable land use and repair of Australia's natural environment. The NHT has 21 sub-programs which focus on five key environmental themes - land, vegetation, rivers, coasts and marine, and biodiversity. Addressing salinity is not a specific sub-program but the relevant Natural Heritage Trust Partnership Agreements identify salinity as a key natural resource management issue. The Commonwealth Government informed the committee that salinity is addressed through an integrated approach to sustainable land and water management and conservation of biodiversity. In March 2001, 916 projects valued at $92 million had been funded which included the words 'dryland salinity' in the project description. Project funding is provided for a twelve month period for new activities where there is no other source of funds. Applicants must match the funding provided but this can include be the value of labour provided. Applicants must also undertake to continue the management of the initiative funded after project funding has ceased. The project must address the causes of the problem and must be aligned with regional	The Natural Heritage Trust is the main existing source of funding for councils to address salinity and has been identified as the funding source for catchments outside of priority areas under the National Action Plan. It does ensure that projects contribute towards salinity targets and national, state-wide and regional priorities. It is useful for funding some actions by councils which contribute to salinity targets such as revegetation. However, there are a number of salinity management actions which may need to be undertaken by councils which will not be directly relevant to the NHT program objectives. Project based funding means that councils will have to pick up the on-going costs once the funding has ceased. Submission based funding systems tend to allocate funding to the councils which need it least. This is because larger well resourced councils can often put in better submissions and demonstrate a greater capacity to manage the project successfully. Reliance on a submission based system could lead to a very uneven standard of performance by councils in managing salinity. It is important that councils are funded in a way which develops their capacity to manage salinity over time.

or catchment priorities. The main results sought are: • long term conservation of biodiversity, especially native vegetation and threatened species; • long term sustainable improvement in the productive capacity of Australia's natural resources; and • local communities given the opportunity to invest in and take responsibility for the ecologically sustainable development of the Australian landscape. Applications go through a six stage approval and assessment process comprising technical assessment panel, regional assessment panel, state assessment panel, State Ministers, Commonwealth Departments of Environment and Heritage and Agriculture, Fisheries and Forestery and Commonwealth Ministers. The Natural Heritage Trust Annual Report shows that many councils in NSW receive funding for revegetation and restoration projects, vegetation management plans and stormwater improvements.	Funding also needs to take into account equity considerations so that councils with the least capacity to pay are provided with the most assistance. This may be a useful source for funding some actions by councils. It is not a suitable source for long-term capacity building or funding councils for the costs of salinity damage to infrastructure. One option might be the creation of a sub-program specifically for councils.
Local Government Incentive Program This program is designed to improve local government contributions in areas of national priority. The focus of the program in 2000-01 includes: Objective 1: activities that lead to adoption of best practice and sharing of technical expertise across councils: For example: an environmental officer. Objective 2: promotion of an enhanced role for local government in leading their communities. Objective 3 of the program is *increasing the capacity of local government to contribute to regional development. For example, through: improved natural resource, environmental or infrastructure management.* The program is intended to help rural councils, small and medium urban regional councils and	Addressing salinity appears to be consistent with the objectives of the program. The Commonwealth Government would need to make salinity a national priority for future funding rounds. Additional funding, a requirement of grant, could be provided by the NSW Government. The budget of the program is too modest to be the main funding mechanism for action by councils to address salinity. However, it would be useful and consistent with the program's objectives to use it to fund councils to establish cooperative regional approaches to addressing salinity and other natural resource management issues through such initiatives as regional organisations of councils, joint committees and county councils. The program is currently project based and the national priorities are short term which would not address long term capacity building.

small and medium urban fringe councils. Local government is eligible for grants of a maximum of $100,000. Priority is given to councils which propose cooperative projects. Grants are contingent on additional funding from other sources. The budget for 2000-2001 is $4 million.	The program could be useful in funding action by councils to address salinity in areas which are not priority catchments. However, it is unclear how the program could integrate the actions of councils with Catchment Management Blueprints and regional plans.
NSW GOVERNMENT	
Funding by DLWC under the NSW Salinity Strategy. The NSW Government has provided $52m for 2000-2004 under the NSW Salinity Strategy. $2m is initially being invested by the NSW Government in an Environmental Services Scheme to invest in land-use change on properties. Currently the scheme is being trialed. In the longer term it is anticipated that landholders with agricultural properties will be eligible to apply for funding.	There is currently no funding program under the NSW Salinity Strategy to which councils can apply. However, funding programs specifically for councils were created by NSW Agriculture and Department of Land and Water Conservation to assist councils to manage acid sulfate soils and floodplains. Councils are also funded by the Commonwealth Government for floodplain management. The Environmental Services Scheme provides investment funding but it targets agricultural properties. Its objective is to incorporate environmental services into economic decision making and rural production to bring about sustainable land use. Councils may undertake actions such as revegetation on council owned or administered land which create environmental services. Even so, it is unlikely that they would be eligible as the program aims to bring about private, rather than public, sector change.
COUNCILS	
Exemptions from General Income Limits. Under some circumstances councils are given exemptions from general income limits to undertake identified activities for a period of time.	Councils could develop a salinity management plan and apply to the Department of Local Government for an exemption from rate capping for funding the implementation of the plan. This could be a useful way of contributing towards the cost of salinity action. It will be more effective in areas with a large rate base. The funding is not tied but there is a level of accountability to the Department of Local Government for the use of the extra rates. However, the costs of addressing salinity are likely

	to be too large in many council areas to be funded entirely by rates. It is also not an equitable funding method because the causes of salinity are widespread and largely not under the control of councils. Also salinity may be caused by land uses in one or more council areas but the damage will be done to other council areas, downstream or on lower ground.
Environment Levy. Councils can make a special rate for, or towards meeting, the cost of any works, services, facilities or activities proposed to be undertaken..	This could be a useful way of contributing towards the cost of salinity action. It will be more effective in areas with a large rate base. Although the levy may be raised for environmental purposes, it is not tied funding It may be used for other purposes if priorities shift or a new council is elected, unless there is pressure from the community. However, the costs of addressing salinity are likely to be too large in many council areas to be funded entirely by rates. Without additional external funding, it is not an equitable funding method because the causes of salinity are widespread and largely not under the control of councils. Also salinity may be caused by land uses in one or more council areas but the damage will be done to other council areas, downstream or on lower ground. It is likely that councils would have had to develop a significant capacity to manage salinity in order to gain the support of councillors and the community for a local environment levy. They would need funding from a prior source to achieve this.
Budget savings made by councils through amalgamations and other means The Federal Government has provided $1.3billion under the Local Government Development Program to facilitate structural reform, including voluntary amalgamations of councils. The merger of Armidale City Council and Dumaresq Shire Council is expected to make savings in net present value terms of $1.6m over ten years and $3m over 20 years. The merger of Nymbodia Shire and Ulmarra Shire Council is expected to have a net present value	Amalgamation of councils is currently voluntary and therefore cannot be relied upon as a funding source. However, councils which do amalgamate may have significant additional resources to contribute to addressing salinity and may have a better capacity for planning and managing natural resources. Again, while this may provide a significant contribution from relevant councils, it is likely to require supplementation from external funding sources partly due to the costs but also for equity

benefit of about $1.2 million over 10 years.	reasons. Without additional external funding, it is not an equitable funding method because the causes of salinity are widespread and largely not under the control of councils. Also salinity may be caused by land uses in one or more council areas but the damage will be done to other council areas, downstream or on lower ground. Additional funding by the NSW or Commonwealth Government to councils which identified savings to be spent addressing salinity would be more equitable and provide an incentive for use of funds for this purpose. To be really equitable the external funding formula would need to take into account the costs of addressing salinity and the council's capacity to make savings.

APPENDIX 2 – ACRONYMS

ABCB	Australian Building Codes Board
AFFA	Department of Agriculture, Fisheries and Forestry
ALGA	Australian Local Government Association
ANTA	Australian National Training Authority
APCC	Australian Procurement and Construction Council
ARMCANZ	Agricultural and Resource Management Council of Australia and New Zealand
ANZECC	Australian and New Zealand Environment and Conservation Council
ASSMAC	Acid Sulfate Soils Management Advisory Committee
ASSPRO	Acid Sulfate Soils Program
ATC	Australian Transport Council
BCA	Building Code of Australia
CMBs	Catchment Management Boards (NSW)
CMCs	Catchment Management Committees (NSW)
CMP	Catchment Management Plans. These have been renamed Catchment Management Blueprints
CoAG	Council of Australian Governments
CPSC	Construction Policy Steering Committee
CRCs	Cooperative Research Centres
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAP	Development Assessment Panel
DCP	Development Control Plan
DEH	Department of Environment and Heritage (Cwth)
DLWC	Department of Land and Water Conservation (NSW)
DSRD	Department of State and Regional Development
DUAP	Department of Urban Affairs and Planning (renamed Planning

	NSW on 3 December 2001)
EC	Electrical Conductivity – measure of salinity levels
EDO	Environmental Defenders Office
EPA	Environmental Protection Authority (NSW)
EPAA	*Environmental Planning and Assessment Act* (NSW)
HROC	Hunter Region Organisation of Councils
ICM	Integrated Catchment Management
IPWEA	Institute of Public Works Engineering Australia
JAS-ANZ	Joint Accreditation System Australia and New Zealand
LEP	Local Environment Plan
LGA	Local Government Area
LGIP	Local Government Incentive Program
LGSA	Local Government and Shires Associations
LHCCREMS	Lower Hunter and Central Coast Regional Environmental Management Strategy
LWA	Land and Water Australia
MCFFA	Ministerial Council on Forestry, Fisheries and Aquaculture
MDBC	Murray-Darling Basin Commission
MDBMC	Murray-Darling Basin Ministerial Council
MRWA	Main Roads Western Australia
NAP	National Action Plan for Salinity and Water Quality
NDSP	National Dryland Salinity Program
NHT	Natural Heritage Trust
NLWRA	National Land and Water Resources Audit
NOLG	National Office of Local Government
NRM	Natural Resource Management
NRMMC	National Resource Management Ministerial Council
PMSEIC	Prime Minister's Science, Engineering and Innovation Council

RCCs	Regional Catchment Committees (NSW)
RDAP	Regional Development Assessment Panel (SA)
ROC	Regional Organisation of Councils
RPD Group	Research Planning and Design Group
RTP	Rural Towns Program (WA)
SAR	Salinity Assessment Report
SCMCC	State Catchment Management Coordinating Committee
SEPP	State Environmental Planning Policy
SMO	Salinity Management Overlay (Vic)
VPP	Victoria Planning Provisions
WSROC	Western Sydney Regional Organisation of Councils

APPENDIX 3 – SUBMISSIONS TO THE INQUIRY

No.	Name	Organisation / Department
1.	Mr Lionel Henderson, Manager	Yates Botanicals
2.	Mr John Bradd	
3.	Mr Alan Stewart, General Manager	Tallaganda Shire Council
4.	Mr David Philpott, General Manager	Boorowa Shire Council
5.	Mr Warren Lee Hill	
6.	Mr Bryan Short, Design Services Manager Mr Graeme Faulkner, General Manager	Wagga Wagga City Council
7.	Mr Glenn Evans, Chief Executive Officer	Hunter Catchment Management Trust
8.	Mr Robert Prince, General Manager	Saltgrow Pty Ltd
9.	Mr Robert Gourlay, Managing Director	Environmental Research & Information Consortium Pty Ltd (ERIC)
10.	Mr Robert Uden, Director,	Care-Free Water Conditioners Australia
11.	Mr Paul Anderson, Environment & Planning Services	Tamworth City Council
12.	Ms Kate Lorimer-Ward, Executive Support	Lachlan Catchment Management Board
13.	Ms Sue Salvin, Manager, Environmental Services	State Forests of NSW
14.	Mr Denis Porter, Executive Director	NSW Minerals Council
15.	Mr Chris Champion, Chief Executive Officer	Institute of Public Works Engineering Australia Limited
16.	Hon Harry Woods MP	Minister for Local Government
17.	Hon Mr Michael Egan, MP	Minister for State Development, NSW
18.	Mr Len Reade	55 Church St, Forbes
19.	Hon. Kim Yeadon MP	Minister for Information Technology, Energy, Forestry and Western Sydney
20.	Cr Leo Kelly, Vice President	Local Government and Shires Association of NSW
21.	Mr Rod Towney, Chairperson	NSW Aboriginal Land Council
22.	Mr Marc Allas, Solicitor	Environmental Defender's Office (NSW)
23.	Mr Squires, VET Schools Consultant	DET, Bathurst
24.	Ms Kathy Ridge, Coordinator Corey Watts, Coordinator	Nature Conservation Council of New South Wales Salinity & Sustainable Agriculture Program Australian Conservation Foundation
25.	Ms Julia Ryan, Senior Project Officer	Western Sydney Regional Organisation of Councils Ltd

No.	Name	Organisation / Department
26.	Mr Gary Mitchell, Executive Officer	Water Directorate
27.		Blacktown and City Environment Group
28.	Ms Sylvia Nuttgens	Blacktown and District Environment Group
29.	Mr Shane Godbee, General Manager	Cootamundra Shire Council
30.	Mr Dennis Trezise, General Manager	Holroyd City Council
31.	Mr Sid Clarke	Landowner
32.	Mr Paul McCardell, Director	Fodder King Ltd
33.	Mr Noel H Wilson, Inventor	Migmaplas
34.	Mr Ninian Struthers	
35.	Mr Devon Roberts	
36.	Mr Neville Elphinston, Marketing Coordinator	Grazing Management Systems Pty Ltd
37.	Mr Stuart Carter, President	Scone-Parkville Environment Watch
38.	Mr Robert Prince, General Manager	Saltgrow Pty Ltd
39.	Mr George Nixon, Director	Saltbush Grazing Pty Ltd
40.	Mr Tony Hyles,	Gwydir Valley Turf Trees & Erosion Control
41.	Mr Bill Henty	W J Henty & Co
42.	Dr Aro Arakel, Director	Geo-Processors Pty Ltd
43.		GecOz, Geospatial & Environmental Consultants
44.	Mr Brian Hearne, Managing Director	Simple Grow Fertilizers & Hydroponics

APPENDIX 4 – LIST OF WITNESSES

WITNESS POSITION ORGANISATION	DATE APPEARED
ANGEL, Jeff Director Total Environment Centre	29 March 2001
BEACROFT, Warrick Division Manager, Information Sourcing Department of Information Technology and Management	28 May 2001
BLACKMORE, Don Chief Executive Murray Darling Basin Commission	11 April 2001
BROSTER, Leon General Manager Murray Darling Association	18 July 2001
BROWN, Amanda Environmental Health Officer Blacktown City Council	28 May 2001
BUDGE, Trevor Director Research Planning and Design Group	21 September 2001
BUTLER, Craig Manager, Building Approvals & Environment Protection Penrith City Council	28 May 2001
BUTTERWORTH, Perce Executive Director of Policy and Resources Department of State and Regional Development	26 March 2001
CARSON, Simon Assistant Director, Conservation and Resource Management NSW Farmers Association	29 March 2001
CLIFTON, Craig Senior Scientist Sinclair Knight Merz	18 July 2001

WITNESS POSITION ORGANISATION	DATE APPEARED
CONNOLLY, Phil Principal Adviser, Natural Resources Branch NSW Treasury	29 March 2001
CURLL, Mike General Manager, Strategic Review NSW Agriculture	9 & 26 March 2001
DAVIS, John Director Live Earth Resource Management Pty Ltd	6 September 2001
DAWSON, Gill Manager, Strategic Planning Holroyd City Council	28 May 2001
DEWAR, Liz Acting Executive Director, Resource Allocation New South Wales Treasury	29 March 2001
ELYARD, David Senior Manager, Strategic Projects Department of State and Regional Development	26 March 2001
FARRIER, David Professor, Centre for Natural Resource Law and Policy University of Wollongong	21 September 2001
FISHER, Tim Coordinator, Land and Water Ecosystems Australian Conservation Foundation	21 September 2001
GEERING, Don Director, Natural Resources Planning Department of Urban Affairs and Planning	11 April 2001; 28 November 2001
GOURLAY, Rob Managing Director, Environmental Scientist Environmental Research & Information Consortium	11 April 2001
HALE, David Senior Policy Officer, Water Local Government and Shires Association	28 May & 29 November 2001

WITNESS POSITION ORGANISATION	DATE APPEARED
IRVINE, Rob Senior Policy Adviser, Policy and Research Branch Department of Local Government	28 November 2001
IZMUR, Gul Assistant Director The Cabinet Office	9 & 26 March 2001
JAMES, Glennys Director, Environmental and Planning Services Blacktown City Council	28 May 2001
JOHNSON, Clive Chairman Lachlan Catchment Management Board	29 November 2001
KEOGH, Mick Policy Director, Conservation and Resource Management NSW Farmers Association	29 March 2001
KNOWLES, Jacqueline Research Assistant, Conservation and Resource Management NSW Farmers Association	29 March 2001
LEUTTON, Ralph Program Manager, Policy and Legislation Cotton Australia	18 July 2001
MCALOON, Jane Assistant Director-General The Cabinet Office	29 November 2001
MONTGOMERY, Mike President Shires Association	29 November 2001
MOONEY, Des General Manager, Land and Property Information NSW Department of Information Technology and Management	28 May 2001
NEWLIN-HARDY, Lindsay Consultant State Land Council	29 March 2001

WITNESS POSITION ORGANISATION	DATE APPEARED
NICHOLSON, Rebecca Salinity Project Officer Western Sydney Regional Organisation of Councils	28 May 2001
O'HARA, Tony General Manager, Investment Services Division State Forests	26 March 2001
OWENS, Derek Sales Manager Care Free Water Conditioners	6 September 2001
PAVAN, Neville Senior Natural Resource Officer Department of Land and Water Conservation	28 May 2001; 28 November 2001
RIDGE, Kathy Executive Officer Nature Conservation Council	29 March 2001
ROGAN, Ian Chairman Central West Catchment Management Board	29 November 2001
RYAN, Julia Senior Project Officer, Environment Western Sydney Regional Organisation of Councils	28 May 2001
RYAN, Margaret Executive Director, Office of Western Sydney Department of Information Technology and Management	28 May 2001
SALVIN, Sue Manager, Environmental Services State Forests	26 March 2001
SHARP, Brian President Murray Darling Association	18 July 2001
SMITH, Peter Manager, Building and Environmental Services Blacktown City Council	28 May 2001

WITNESS POSITION ORGANISATION	DATE APPEARED
SMITH, Tommy Manager, Land Rights Unit NSW Aboriginal Land Council	29 March 2001
UDEN, Robert Proprietor Care Free Water Conditioners	6 September 2001
VERHOEVEN, John Acting Director, Landscape Management Department of Land and Water Conservation	9 & 26 March 2001; 28 November 2001
WILLIAMS, Brad Executive Director Irrigators Council	29 March 2001
WOODS, Peter President, Local Government Association of NSW Local Government and Shires Association of NSW	28 May 2001
YOUNG, Mike Director, Policy and Economic Research Unit CSIRO, Land and Water	21 September 2001

DATE	LOCATION	DATE	LOCATION
9 March 2001	Sydney	6 September 2001	Sydney
26 March 2001	Sydney	21 September 2001	Sydney
29 March 2001	Sydney	28 November 2001	Sydney
11 April 2001	Sydney	29 November 2001	Sydney
28 May 2001	Blacktown		
18 July 2001	Moama		

APPENDIX 5 – MINUTES OF PROCEEDINGS

No. 1

Minutes of Proceedings of the Select Committee on Salinity

Wednesday 30 August 2000
at 1.00pm
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor

In the absence of the Clerk of the Legislative Assembly, the Clerk-Assistant (Committees) opened the meeting and read entry 14 from the Votes and Proceedings No. 55, dated 17 August 2000.

"Mr Amery moved, by leave, That:

1. A select committee be appointed to inquire and report with the following terms of reference:

To examine:

Business opportunities created by salinity that contribute to the improved management of groundwater recharge and discharge areas.

The options for salinity management that are available to local councils, including but not limited to, planning instruments, building codes, urban water management plans, differential rating, development of local council expertise and resource-sharing between councils.

Any barriers to adoption of salinity management strategies by local councils and means to overcome the barriers.

The adequacy of the Commonwealth's response and contribution to addressing salinity.

That such committee consist of Ms Allan, Mr Martin, Mr Black, Mr Hickey, Mr Anderson, Mr Windsor, Mr McGrane, Mr Maguire and Mr D.L. Page.

That the committee have power to make visits of inspection within the State of New South Wales and other States and Territories of Australia.

Question put and passed".

Election of Chairman

Resolved, on the motion of Mr Black, seconded by Mr Hickey:

"That Ms Allan be elected Chairman of the Committee".

Ms Allan made her acknowledgment to Committee Members.

Procedural Motions

Resolved, on motion (in globo) of Mr Anderson, seconded by Mr Hickey:

1. That arrangements for the calling of witnesses and visits of inspection be left in the hands of the Chairman and the Committee Manager to the Committee.

2. That, unless otherwise ordered, parties appearing before the Committee shall not be represented by any member of the legal profession.

3. That, unless otherwise ordered, when the Committee is examining witnesses, the press and public (including witnesses after examination) be admitted to the sitting of the Committee.

4. That persons having special knowledge of the matters under consideration by the Committee may be invited to assist the Committee.

5. That press statements on behalf of the Committee be made only by the Chairman after approval in principle by the Committee or after consultation with Committee members.

6. That, unless otherwise ordered, access to transcripts of evidence taken by the Committee be determined by the Chairman and not otherwise made available to any person, body or organisation: provided that witnesses previously examined shall be given a copy of their evidence; and that any evidence taken in camera or treated as confidential shall be checked by the witness in the presence of the Committee Manager to the Committee or an officer of that Committee.

7. That the Chairman and the Committee Manager to the Committee be empowered to negotiate with the Presiding Officers through the Clerk of the Legislative Assembly for the provision of funds to meet expenses in connection with advertising, operating and approved incidental expenses of the Committee.

8. That the Chairman be empowered to advertise and/or write to interested parties requesting written submissions.

9. That upon the calling of a division or quorum in the House during a meeting of the Committee, the proceedings of the Committee shall be suspended until the Committee again has a quorum.

10. That the Chairman and the Committee Manager make arrangements for visits of inspection by the committee as a whole and that individual members wishing to depart from these arrangements be required to make their own arrangements.

11. That pursuant to Standing Order 338, evidence, submissions or other documents presented to the committee which have not been reported to the House not be disclosed or published by any Member of the Committee or by any other person.

Staffing

The Clerk-Assistant (Committees) informed the committee on proposed staffing arrangements.

Briefing on Salinity

Mr R.P Smith, Director General of the Department of Land and Water Conservation, and Ms Mary Darwell, Principal Policy Officer – Salinity Action Unit of the Cabinet Office, were admitted and briefed the committee on various aspects of the salinity issue and on the Government salinity strategy.

General Business

The Committee deliberated on matters for inclusion in a committee workplan. The committee also agreed on a regular meeting time for 1.00pm on sitting week Thursdays.

The committee adjourned at 2.11pm until 1.00pm Thursday 12 October 2000.

_____ _____

Chairman Clerk-Assistant (Committees)

No. 2

Minutes of Proceedings of the Select Committee on Salinity

Wednesday 11 October 2000
at 1.00pm
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor

The committee met on a date amended by notice from the previous meeting.

Minutes

Resolved, on the motion of Mr Hickey, seconded by Mr Anderson:

That the minutes of the meeting of 30 August 2000, as circulated, be confirmed.

Resourcing

The Clerk-Assistant (Committees) updated the committee on arrangements for the resourcing of the committee.

Visit by South Australian Committee

The Chairman informed the committee of arrangements made for the visit by the Select Committee on the Murray River of the South Australian House of Assembly on Tuesday 31 October 2000.

Briefing on Urban Salinity

Ms Suzanne Hayward, of the Department of Land and Water – Penrith, and Mr Eddie Harris and Ms Ros Chivers, of the Strategy and Policy Unit, Department of Land and Water – Head Office were admitted and briefed the committee on various aspects of urban salinity.

General Business

The Committee deliberated on the possible visits of inspection to Wagga Wagga, Griffith and the Murray River valley.

Mr Maguire forwarded general correspondence.

The committee adjourned at 1.50pm until 12.30pm Tuesday 31 October 2000.

_____ _____

Chairman Clerk to the Committee

No. 3

Minutes of Proceedings of the Select Committee on Salinity

Tuesday 31 October 2000
at 12.30pm
Parliament House

Members Present

Ms Allan	Mr Maguire	Mr D L Page
Mr Anderson	Mr Martin	
Mr Black	Mr McGrane	

Apologies

Apologies were received from Mr Hickey and Mr Windsor

Discussions

The Committee held joint discussions on matters of mutual interest with the visiting South Australian House of Assembly Select Committee on the River Murray.

The committee adjourned at 2.05pm until 1.00pm Thursday 2 November 2000.

_____	_____
Chairman	**Clerk to the Committee**

No. 4

Minutes of Proceedings of the Select Committee on Salinity

Thursday 2 November 2000
at 1.00pm
Parliament House

Members Present

Ms Allan	Mr Maguire	Mr D L Page
Mr Anderson	Mr Martin	
Mr Black	Mr McGrane	

Apologies

Apologies were received from Mr Hickey and Mr Windsor

Minutes

Resolved, on the motion of Mr Black, seconded by Mr Maguire:

That the minutes of the meetings of 11 and 31 October 2000, as circulated, be confirmed.

Visit of Inspection

The Clerk-Assistant (Committees) distributed the finalised itinerary and the final arrangements for the visit of inspection to Deniliquin and Wagga Wagga on 6 and 7 November 2000.

Administrative Matters

The Clerk-Assistant (Committees) updated the committee on administrative matters as a consequence of the approval of funding for the committee.

General Business

The Committee deliberated on the possible future activities.

The committee adjourned at 1.30pm until 9.30am Monday 6 November 2000.

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Chairman **Clerk to the Committee**

No. 5

Minutes of Proceedings of the Select Committee on Salinity

Monday 6 November 2000
at 9.45am
Deniliquin Airport

Members Present

Ms Allan	Mr Hickey	Mr D L Page
Mr Anderson	Mr Maguire	Mr Windsor
Mr Black	Mr McGrane	

Apology

An apology was received from Mr Martin.

Briefings on Wetland Salinity

The committee was met at Deniliquin Airport by officers of the Department of Land and Water Conservation and proceeded to the Murray Region Office in Edward Street, Deniliquin.

The committee was given a brief over view of the Murray Region by the following officers of the Department of Land and Water Conservation: Kaye Dalton; Saji Joseph; and, Nimal Kulatunga, as well as Bill Currans, of the Murray Catchment Management Board.

The committee was given an outline of the Murray Irrigation districts by and Carl Mathers of Murray Irrigation Limited.

The committee was briefed on Murray Land and Water Management Plan strategies addressing salinity by Geoff McLeod, the Environmental Manger of Murray Irrigation Limited.

Inspections

The committee, accompanied by Saji Joseph, Bill Currans, Nimal Kulatunga, Carl Mathers and Martin Driver, proceeded on the following inspections and held discussions with:

- Martin Driver of Greening Australia at Oddy's Drain (15 kilometres north of Deniliquin) regarding a surface drainage scheme;
- Daniel Liphuyzen, farmer, at "Lochinvar" in the Denimein Irrigation District;
- David Shannon, Mayor of Wakool, and Bill Hetherington of Murray Irrigation Limited, and Carl Mathers, Manager of the Wakool Tullakool Sub Surface Drainage Scheme, at the Wakool Tullakool Sub Surface Drainage Scheme;
- Robert Mears, farmer, at "Bultara", Green Gully;
- Ian and Jan Ferguson, farmers, at "Womboo", Green Gully; and,
- Scott Holschier, farmer, at "Paringa Vale", Green Gully.

Inspections concluded, the committee returned to Deniliquin Airport to proceed to Wagga Wagga and adjourned at 5.30 pm, until 9.00 am Tuesday 7 November 2000.

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Chairman **Clerk to the Committee**

No. 6

Minutes of Proceedings of the Select Committee on Salinity

Tuesday 7 November 2000
at 9.00am
Wagga Wagga

Members Present

Ms Allan	Mr Hickey	Mr D L Page
Mr Anderson	Mr Maguire	Mr Windsor
Mr Black	Mr McGrane	

Apology

An apology was received from Mr Martin.

Inspection of Dryland Salinity

The committee, accompanied by Greg Bugden, Advisory Services Manager, Geoff Fishburn, Warwick Ford of the Department of Land and Water Conservation, Wagga Wagga, Kevin Wales, Mayor of Wagga Wagga, and Rob Kuiper, of Murray-Riverina Farm Forestry, proceeded on the following inspections in the Kyeamba Valley and held discussions with:

- Rick and Pam Martin, farmers, at "Burnbank", Corienbob, together a briefing by Rob Kuiper on reclamation work and native tree planting on the property;
- Sid Clarke, farmer, at "Simarra"; and,
- Peter Cregan, farmer, at "Teneriffe".

Inspections concluded, the committee returned to Wagga Wagga.

Briefing on Urban Salinity

The committee was briefed at the Civic Centre on urban salinity problems by Mayor Kevin Wales, Deputy Mayor Lindsay Vidler, Gary Wells, Manager of Engineering Services, Bryan Short, Manager Design Services and Elizabeth Madden, Urban Salinity Facilitator, of Wagga Wagga City Council.

Briefing concluded.

Inspection of Urban Salinity

The committee, accompanied by Greg Bugden, Kevin Wales, Lindsay Vidler, Gary Wells and Bryan Short, proceeded on an inspection of urban salinity sites in Wagga Wagga.
Inspection concluded, the committee proceeded to the Department of Land and Water Conservation Centre for Natural Resources, Wagga Wagga.

Briefing on Salinity Programs

The committee was briefed on salinity prediction and investigation programs and the work of the Murrumbidgee Catchment Management Board by Geoff Beale, Research Scientist, and Peter Barker of the Riverina Field Studies Centre.

Briefing concluded, the committee adjourned at 4.55 pm until 1.00 pm Thursday 23 November 2000.

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Chairman **Clerk to the Committee**

No. 7

Minutes of Proceedings of the Select Committee on Salinity

Thursday 23 November 2000
at 1.00pm
Parliament House

Members Present

Ms Allan	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor
Mr Hickey	Mr McGrane	

Also in attendance: Ms Christina Thomas, Project Officer.

Apology

An apology was received from Mr Anderson.

Minutes

Resolved, on the motion of Mr Hickey, seconded by Mr Martin:

That the minutes of the meeting of 2 November 2000, as circulated, be confirmed.

Briefing on National Action Plan

Mr Chris Guest, Assistant Director General of The Cabinet Office briefed the committee on the detail of Commonwealth Government's National Action Plan for Salinity and the proposed detail of its implementation and administration.

The committee noted correspondence to the Clerk to the Committee from the Natural resource Management Business unit of the Commonwealth department of Agriculture Fisheries and Forestry.

Administrative Matters

The Clerk-Assistant (Committees) introduced Ms Christina Thomas, the appointed Project Officer to the committee and advised that recruitment for the position of Research Officer was well advanced.

Planning for 2001

The committee deliberated on a possible program of inquiries, visits and activities to undertake in 2001 for the Chairman to consider.

General Business

The committee reviewed the visit of inspection to Deniliquin, Wakool, Green Gully, Wagga Wagga and Kyeamba Valley and endorsed the sending of thank you letters to the various Departmental and Local Government Officers and landholders the briefings, discussions and inspections.

The committee noted correspondence from Arthur Yates and Co forwarded by Mr D L Page.

The committee discussed the desire to have a further meeting next for discussions with the Minister for Land and Water Conservation.

The committee adjourned at 1.45 pm until 1.00 pm Thursday 30 November 2000.

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Chairman **Clerk to the Committee**

No. 8

Minutes of Proceedings of the Select Committee on Salinity

Wednesday 21 February 2001
at 12.20pm
Bengalla Mine, Muswellbrook

Members Present

Ms Allan	Mr Hickey	Mr Martin
Mr Anderson	Mr Maguire	Mr Windsor

Also in attendance: Ms Christina Thomas, Project Officer; and Ms Susan Want, Research Officer.

Apologies

Apologies were received from Mr Black, Mr McGrane and Mr D L Page.

Welcome

The committee was welcomed to Bengalla Mine by James Bailey, Environmental Manager of Bengalla Mine, and Harold Sternbeck, Chairman of the Hunter River Catchment Management Trust.

Briefings on Hunter River Salinity Trading Scheme

The committee was briefed on salinity in the Hunter Region and the Hunter River Salinity Trading Scheme by: Cathy Cole, Regional Director, of the Department of Land and Water Conservation; Jill Pattison, Director Regulatory Innovation, Environment Protection Authority (Hunter); and, James Bailey, Environmental Manager of Bengalla Mine.

Briefings concluded.

Discussions

The committee held round table discussions with: James Bailey, Environmental Manager of Bengalla Mine; Dean Chapman, Catchment Manager (Water), Hunter River Catchment Management Trust; Cathy Cole, Regional Director, of the Department of Land and Water Conservation; Jill Pattison, Director Regulatory Innovation, Environment Protection Authority (Hunter); Amanda Payton, Environmental Officer, Muswellbrook City Council; and Harold Sternbeck, Chairman of the Hunter River Catchment Management Trust.

Discussions concluded.

Inspections

The committee, accompanied by James Bailey, Dean Chapman, Cathy Cole and Jill Pattison, proceeded on an inspection of computer monitoring of environmental conditions and a tour of Bengalla Mine to inspect environmental protection measures and in particular mine discharge operations related to the Hunter River Salinity Trading Scheme.

The committee then proceeded to Blackjack Mountain with Cathy Cole to inspect dry land salinity and was joined by Tony Voller, Department of Land and Water Conservation, Muswellbrook Office, who briefed the committee on rehabilitation work being undertaken by the local Landcare group.

The committee then proceeded to Bayswater Power Station (Macquarie Generation) and was briefed by John Neely, Manager - Bayswater Power Station, and Peter Sewell, Production Manager.

Briefing concluded the committee, accompanied by John Neely and Peter Sewell, inspected Bayswater Power Station for environmental protection measures as participants in the Hunter River Salinity Trading Scheme.

Inspections concluded, the committee adjourned at 6.00 pm, until 9.00 am Thursday 22 February 2001.

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Chairman Project Officer

No. 9

Minutes of Proceedings of the Select Committee on Salinity

Thursday 22 February 2001
at 9.00am
Evelyn Wilkinson Vineyard, Pokolbin

Members Present

Ms Allan	Mr Hickey	Mr Martin
Mr Anderson	Mr Maguire	Mr Windsor

Also in attendance: Ms Christina Thomas, Project Officer; and Ms Susan Want, Research Officer.

Apologies

Apologies were received from Mr Black, Mr McGrane and Mr D L Page.

Inspections and Briefings

The committee was briefed by Chris Cameron, Managing Director and Vineyard Manager, Peppertrees, and inspected the Evelyn Wilkinson Vineyard desalination plant.

Briefing concluded the committee proceeded to Aberdare East.

The committee was welcomed by Phil Warren, General Manager – Hunter Plant Operator Training School and was briefed Greg Summerhayes, Principal Environment Officer of the Department of Mineral Resources, on rehabilitation of the derelict mine.

Briefing concluded, the committee accompanied by Greg Summerhayes and Michael Alexander, Environmental Planning Officer of Cessnock City Council, inspected the Aberdare East derelict mine to look at works to control saline and acid leachate from the old mine workings.

Inspections concluded, the committee adjourned at 12.30 pm, until 12.30 pm Thursday 1 March 2001.

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Chairman Project Officer

No. 10

Minutes of Proceedings of the Select Committee on Salinity

Thursday 1 March 2001
at 12.30pm
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor

Also in attendance: Ms Christina Thomas, Project Officer.

Minutes

Resolved, on the motion of Mr Anderson, seconded by Mr Hickey:

That the minutes of the meetings of 6, 7 and 23 November 2000, as circulated, be confirmed.

Correspondence

The committee noted various correspondence received and sent.

Hunter Region Visit of Inspection

Resolved, on the motion of Mr Maguire, seconded by Mr Martin:

That the committee endorses the arrangements made for the visit of inspection to the Hunter Region made on 21 and 22 February 2001.

Work Program

The committee discussed a work program to timetable the reporting on the terms of reference, including hearing dates and possible visits of inspection.

Resolved, on the motion of Mr Anderson, seconded by Mr McGrane:

That Messrs Hickey, Maguire and Windsor be the committee delegates to the 7th National Productive Use and Rehabilitation of Saline Land Conference, to be held in Launceston 20 –23 March 2001.

Resolved, on the motion of Mr Black, seconded by Mr Anderson:

That the committee undertake a visit of inspection to the Lower Murray and Upper South East Regions of South Australia, from 30 April to 4 May 2001.

Administrative Matters

1. The committee expressed a preference for executive summarises of submissions to be circulated to members.

2. The Clerk-Assistant (Committees) advised the committee that the Research Officer had resigned and that action had been taken to recruit a replacement.

General Business

The Chairman reminded members of the launch of the local government salinity initiative memorandum of understanding between the Department of Land and Water Conservation and the Local Government and Shires Associations in the Jubilee Room at 9.00 am Friday 2 March 2001.

Briefing

Mr Stephen Hunter, Deputy Secretary of Environment Australia and Mr Ian Thompson, Executive Manager – Natural Resource Management Business Unit, Department of Agriculture, Fisheries and Forestry, were admitted and briefed the committee on the Commonwealth position on salinity management and the range of programs administered by the Commonwealth addressing salinity.

Briefing concluded and Messrs Hunter and Thompson withdrew.

Resolved, on motion of Mr Hickey, seconded by Mr Martin:

That the committee write to the Commonwealth seeking reasons why the Hunter Region was excluded from the National Salinity program with a view to seeking priority funding for the Hunter Region.

The committee adjourned at 2.10 pm until 12.00 noon Monday 26 March 2001.

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Chairman Clerk to the Committee

No. 11

Minutes of Proceedings of the Select Committee on Salinity

Monday 26 March 2001
at 12 noon
Parliament House

Members Present

Ms Allan	Mr Maguire	Mr D L Page
Mr Anderson	Mr Martin	Mr Hickey
Mr McGrane		

Also in attendance: Ms Christina Thomas, Project Officer; Mr Chris Papadopoulos, Research Officer; and, Ms Cassandra Adams, Assistant Committee Officer.

Apologies

Apologies were received from Mr Black and Mr Windsor.

Hearings

The press and public were admitted.

By direction of the Chairman, the Clerk read the committee terms of reference and Legislative Assembly Standing Order No.'s 332, 333 and 334 relating to the examination of witnesses.

Mr John Verhoeven, Acting Executive Director, Landscape Management, Department of Land and Water Conservation, sworn and examined.

Evidence concluded the witness withdrew.

Dr Gηl Izmir, Assistant Director-General, The Cabinet Office, affirmed and examined.

Evidence concluded the witness withdrew.

Dr Michael Curll, General Manager, Strategic Review, New South Wales Agriculture, sworn and examined.

Evidence concluded the witness withdrew.

Mr Anthony O'Hara, General Manager, Investment Services, sworn and Ms Susan Salvin, Manager, Environmental Services, affirmed, both of State Forests examined.

Evidence concluded the witnesses withdrew.

Mr Perce Butterworth, Executive Director of Policy and Resources, sworn and Mr David Ellyard, Senior Manager, Strategic Projects, affirmed, both of Department of State and Regional Development examined.

Evidence concluded the witnesses withdrew.

The committee adjourned at 4.34 pm until 10.30 am Thursday 29 March 2001.

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Chairman Clerk to the Committee

No. 12

Minutes of Proceedings of the Select Committee on Salinity

Thursday 29 March 2001
at 10.30am
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor

Also in attendance: Ms Christina Thomas, Project Officer; Mr Chris Papadopoulos, Research Officer; and, Ms Cassandra Adams, Assistant Committee Officer.

Hearings

The press and public were admitted.

By direction of the Chairman, the Clerk read the committee terms of reference and Legislative Assembly Standing Order No.'s 332, 333 and 334 relating to the examination of witnesses.

Mr Michael Keogh, Policy Director, Mr Simon Carson, Assistant Director, and Ms Jacqueline Knowles, Research Assistant, of the New South Wales Farmers Association, sworn and examined.

Evidence concluded the witnesses withdrew.

Mr Brad Williams, Executive Director, New South Wales Irrigators Council, sworn and examined.

Evidence concluded the witness withdrew.

Mr Thomas Smith, Acting Manager, Aboriginal Land Rights Unit, New South Wales Aboriginal Land Rights Unit, and Mr Lindsay Newlin-Hardy, Secretary, Western Metropolitan Region Land Council, sworn and examined.

Evidence concluded the witnesses withdrew.

Ms Catherine Ridge, Executive Officer, Nation Conservation Council, and Mr Jeffery Angel, Director, Total Environmental Centre, affirmed and examined.

Evidence concluded the witnesses withdrew.
Ms Elizabeth Dewar, Acting Executive Director, Resource Allocation Directorate, and Mr Phil Connolly, Principal Adviser, Natural Resources Branch, both of New South Wales Treasury, sworn and examined.

Evidence concluded the witnesses withdrew.

The committee adjourned at 2.07 pm until 10.15 am Friday 6 April 2001.

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Chairman Clerk to the Committee

No. 13

Minutes of Proceedings of the Select Committee on Salinity

Wednesday 11 April 2001
at 9.45am
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr Windsor
Mr Black	Mr Martin	

Also in attendance: Ms Christina Thomas, Project Officer; and, Mr Chris Papadopoulos, Research Officer.

Apology

An apology was received from Mr D L Page.

Minutes

Resolved, on the motion of Mr McGrane, seconded by Mr Hickey:

That the minutes of the meetings of 21 and 22 February and 1, 26 and 29 March 2001, as circulated, be confirmed.

Terms of Reference

The Committee discussed the scope of the terms of reference with particular reference to the examination of "business opportunities created by salinity that contribute to the improved management of groundwater recharge and discharge areas".

Resolved, on the motion of Mr Martin, seconded by Mr Maguire:

That the definition of 'business opportunities' includes business opportunities arising from market-based solutions and strategic investment, such as the initiatives referred to in the NSW Salinity Strategy.

Interim Report

The Committee discussed the desirability of producing an interim report on what has been seen and to account for what the Committee has done and to foreshadow the future directions of the Committee wants to go.

Hearings

The press and public were admitted.

By direction of the Chairman, the Clerk read the committee terms of reference and Legislative Assembly Standing Order No.'s 332, 333 and 334 relating to the examination of witnesses.

Mr Donald Blackmore, Chief Executive, Murray-Darling Basin Commission, sworn and examined.

Evidence concluded the witness withdrew.

Mr Donald Geering, Environmental Scientist, Director of Natural Resources Planning, Department of Urban Affairs and Planning, sworn and examined.

Evidence concluded the witness withdrew.

Mr Robert Gourlay, Environment Scientist and Managing Director, Environmental Research and Information Consortium Pty Limited, affirmed and examined.

Evidence concluded the witnesses withdrew.

The committee adjourned at 1.20 pm until Tuesday 1 May 2001.

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Chairman Clerk to the Committee

No. 14

Minutes of Proceedings of the Select Committee on Salinity

Tuesday 1 May 2001
at 11.15am
Renmark Airport

Members Present

Ms Allan	Mr Maguire	Mr D L Page
Mr Anderson	Mr Martin	Mr Windsor
Mr Hickey	Mr McGrane	

Apology

An apology was received from Mr Black whose flight was delayed and would join committee members in Berri.

Inspections

The committee was met at Renmark Airport by Jack Seekamp, Horticultural Management and Drainage Consultant and Honorary Research Assistant, Flinders University, Stephanie Weinert, Office Manager, River Murray Catchment Water Management Board, and Ross Stockdale, Senior Technical Officer, Murray-Darling Division, Department of Water Resources (S.A.).

The committee, accompanied by Jack Seekamp and Ross Stockdale, was briefed on the Noora Drainage Disposal Scheme and the Chowilla Wetlands whilst conducting inspections of:

Disher's Creek Basin;

Chowilla Wetlands; and,

Noora Drainage Basin.

Inspections concluded, the committee proceeded to Berri and suspended proceedings at 4.30 pm until 6.30 pm.

Briefings

The committee, joined by Mr Black, resumed proceedings at 6.30 pm at Hamley House, Berri under the auspices of the River Murray Catchment Water Management Board [RMCWMB].

The committee met with and was formally and informally briefed by the following persons:

Jeff Parish, Presiding Member of the RMCWMB and CEO of Central Irrigation Trust and Graham Broughton, General Manger of the RMCWMB;

Margaret Evans, Mayor, and Michael Hurley, Chief Executive Officer of Berri Barmera Council;

Jan Cass, Mayor, and Trevor Burgemeister, Chief Executive Officer of Loxton Wakerie Council;

Rod Thomas, Mayor, and Bob Waples, Chief Executive Officer of Renmark Paringa Council;

Bruce Tonkin, Chairman, and Julie Sippo, Project Officer of Loxton to Bookpurnong Local Action Planning;

Theresa ter Bogt, Chairman, and Todd Goodman, Project Officer of Renmark to Border Local Action Planning;

John Gorman, Chairman, and Peter Waanders, Project Officer of Riverland West Local Action Planning;

Daryl Wuttke, Chairman, and Michelle Campbell, Project Officer of Berri Barmera Local Action Planning;

Keith Payne, Chairman of Murray-Mallee Local Action Planning;

Ross Forster, Regional Manager – Riverland, and Peter Forward, Manager – Salinity Control of SA Water Corporation;

Tony Meissner, Regional Manager of EPA Murraylands;

Neville Wurst, Chairperson, Murray Mallee Soil Conservation Board;

John Peterson, Chairperson of Central Irrigation Trust;

John Craker, Chairperson of Renmark Irrigation Trust;

Barry Harden, Chairperson of Golden Heights Irrigation Trust;

Tony Rae, Chairperson of Sunlands Irrigation Trust;

Leon Broster, General Manager, and Les Hill, Chairman – Region 5 of the Murray Darling Association; and

John Berger of the Mallee Water Resources Committee.

Briefings concluded, the committee adjourned at 10.00 pm, until 8.30 am Wednesday 2 May 2001.

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Chairman Clerk to the Committee

No. 15

Minutes of Proceedings of the Select Committee on Salinity

Wednesday 2 May 2001
at 8.30am
Berri

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor

Inspections

The committee proceeded on the following inspections and held discussions with:

Jeff Parish, Presiding Member of the RMCWMB at Lock 4 on the Murray River;

Jeff Parish, Reg Bristow, Operations Manager of Central Irrigation Trust, Peter and Jackie Schultz at the Schultz property, Loxton;

Jeff Parish, Reg Bristow, and Peter Kernich at the Kernich property, Loxton;

Wayne Piltz, Board Walk Supervisor of Banrock Station, at Kingston on Murray;

Peter Forward, Manager – Salinity Control of SA Water Corporation, on the Woolpunda Reach Salt Interception Scheme, at Banrock Station;

Allan Buckley, Vice President of Mallee Sustainable Farming Project, Ian Kroehm, member of the RMCWMB, and Chris McDonough, Rural Solutions – Department of Primary of Primary Industries and Resources at the Buckley property, near Waikerie;

Peter Forward, Manager – Salinity Control of SA Water Corporation, on the Waikerie Salt Interception Scheme, at Ramco Lagoon.

Inspections concluded, the committee proceeded to Adelaide and suspended proceedings at 3.30 pm until 6.45 pm.

Discussions

The committee resumed proceedings at 6.45 pm at Parliament House, Adelaide and held joint discussions with the South Australian House of Assembly Select Committee on the River Murray.

Discussions concluded, the committee adjourned at 8.45 pm, until 9.30 am Thursday 3 May 2001.

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Chairman Clerk to the Committee

No. 16

Minutes of Proceedings of the Select Committee on Salinity

Thursday 3 May 2001
at 9.30am
Murray Bridge

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor

Briefing

The committee was met at the office of the Lower Murray Irrigators Advisory Board at Murray Bridge by Wayne Thorley, Chairman, Terry Lee, General Manager, and Hans van Dyk, Financial Manager of the Lower Murray Irrigators Advisory Board.

The committee was briefed on irrigation and farming issues in the Lower Murray.

Inspections

The committee proceeded on the following inspections and held discussions with:

Darren Garret, Process Controller, of United Utilties operators of the water supply off-take and filtration plant at Tailem Bend;

Bill Patterson, CEO, and Clarry Fisher, Manager Environmental Services, of Coorong District Council at the Coorong District Council Fish Farm Project, Cookes Plain;

Bill Patterson, CEO of Coorong District Council, Graham Gates, Project Officer of Coorong Local Action Plan, Julian Desmazures, Presiding Member, and Evan Pettingill, Executive Officer, of the South Eastern Water Conservation and Drainage Board [SEWCDB], on the Coorong Local Action Plan at Meningie;

Roger Strother and Ken Strother of Strother Fish Pty Ltd on fish farm operations at Meningie West;

Evan Pettingill, Executive Officer of SEWCDB, on the Upper South East Dryland Salinity and Flood Management Plan at Morella Basin, Salt Creek and groundwater discharge channels in southern areas.

Inspections concluded, the committee adjourned at 4.45 pm, until 10 am Friday 4 May 2001.

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Chairman Clerk to the Committee

No. 17

Minutes of Proceedings of the Select Committee on Salinity

Friday 4 May 2001
at 10.00am
Parliament House, Adelaide

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor

Briefings

The committee was met by, and briefed on matters, as follows:

Leon Broster, General Manager of the Murray Darling Association on the Murray Darling Association and its current work concerning the issue of salinity; and

Paul Harvey, Manager – Murray Darling Policies and Judy Goode, Senior Policy Adviser, Salinity Management, Murray Darling Division of the Department of Water Resources, on the development of South Australia's Murray River Salinity Strategy and Dryland Salinity Strategy.

Briefings concluded, the committee adjourned at 11.45 am, until 9.30 am Monday 28 May 2001.

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Chairman Clerk to the Committee

No. 18

Minutes of Proceedings of the Select Committee on Salinity

Monday 28 May 2001
at 9.35am
Blacktown City Council Chambers

Members Present

Mr Anderson	Mr Hickey	Mr McGrane
Mr DL Page		

Also in attendance: Ms Christina Thomas, Project Officer; Mr Chris Papadopoulos, Research Officer; Ms Cassandra Adams, Assistant Committee Officer

Apologies

Apologies were received from Ms Allan, Mr Black, Mr Maguire, Mr Martin and Mr Windsor.

Acting Chairman

Resolved, on the motion of Mr Hickey, seconded by Mr McGrane:

That Mr Anderson be appointed Acting Chairman for the purpose of the hearing.

Hearings

The press and public were admitted.

By direction of the Acting Chairman, the Clerk read the committee terms of reference and Legislative Assembly Standing Order No.'s 332, 333 and 334 relating to the examination of witnesses.

Ms Glennys James, Director, Environmental Planning Services, Ms Amanda Brown, Mr Peter Smith, Blacktown City Council; Mr Craig Butler, Manager, Building Approvals and Environment Protection, Penrith City Council; and, Ms Gil Dawson, Manager, Strategic Planning, Holroyd City Council, sworn and examined.

Evidence concluded the witnesses withdrew.

Ms Julia Ryan, Senior Project Officer, Environment and Ms Rebecca Nicolson, Salinity Project Officer, Western Sydney Regional Organisation of Councils, affirmed and examined.

Evidence concluded the witnesses withdrew.

Ms Margaret Ryan, Executive Director, Office of Western Sydney, Mr Des Mooney, General Manager, Land and Property Information NSW, Mr Warrick Beacroft, Division Manager, Information Sourcing, Department of Information, Technology and Management, affirmed and examined.

Evidence concluded the witnesses withdrew.

Mr Neville Pavan, Senior Natural Resource Officer, Department of Land and Water Conservation, sworn and examined.

Evidence concluded the witness withdrew.

The committee adjourned at 2.33 pm until 1pm Thursday 31 May 2001.

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Chairman Clerk to the Committee

No. 19

Minutes of Proceedings of the Select Committee on Salinity

Thursday 31 May 2001
at 1.00pm
Parliament House

Members Present

Mr Anderson	Mr McGrane	Mr DL Page
Mr Black	Mr Maguire	Mr Windsor
Mr Hickey	Mr Martin	

Also in attendance: Ms Christina Thomas, Project Officer; and, Mr Chris Papadopoulos, Research Officer.

Apology

An apology was received from Ms Allan.

Election of Acting Chairman

Resolved, on the motion of Mr Hickey, seconded by Mr Black:

That Mr Anderson be Acting Chairman during the absence of the Chairman at this meeting and any subsequent meetings during June 2001.

Minutes

Resolved, on the motion of Mr Hickey, seconded by Mr Windsor:

That the minutes of the meeting of 11 April 2001, as circulated, be confirmed.

Correspondence

The Committee agreed to write to the Department of Land and Water Conservation to seek information on the allocation of the salinity budget by sub-programs and sub-actions.

The Committee agreed to write to the Premier to seek his support for the inclusion of the Hunter and Western Sydney regions in the list of priority regions under the Commonwealth Government's National Action Plan for Salinity and Water Quality.

Consideration of Travel Report and Feedback on skeleton Interim Report

Resolved, on the motion of Mr Maguire, seconded by Mr Martin:

That consideration of the travel report and feedback on the skeleton Interim Report be deferred until the next meeting.

Overseas Study Tour

Resolved, on the motion of Mr McGrane, seconded by Mr Martin:

That the Chairman, Mr Page and the Committee Manager undertake an overseas study tour to India, Copenhagen, the Netherlands and Brussels as per the submission to the Speaker.

Attendance at the National Government Summit on Salinity and inspection of businesses addressing salinity

Resolved, on the motion of Mr Black, seconded by Mr Hickey:

That the Committee and appropriate staff travel to attend the National Local Government Summit on Salinity at Moama and inspect businesses addressing salinity in Kyabram and Kerang (Victoria) from 16 – 20 July 2001.

It was agreed that the Secretariat would report back to the next meeting on the feasibility of taking evidence in Moama.

Staff Report of meetings in Canberra and Wagga

Copies of the report of meetings in Canberra nad Wagga Wagga held by secretariat staff during February 2001 were distributed to Members for reference. It was agreed that the report would not be tabled in Parliament but that a copy would be provided to the Clerk of the Legislative Assembly for information.

Submissions

Summaries of submissions 14-25 were distributed to Members for information.

Documents for Members

Members indicated that emailing and posting material to their electorate offices were the preferred mode of disseminating information to them.

Date for next hearings

The Committee agreed that its next public hearing would be held on 29 June 2001.

Proposed date for next deliberative meeting

The Committee agreed that its next deliberative meetings would be held on 7 June and 21 June 2001.

The committee adjourned at 1.55pm until 1pm Thursday 7 June 2001.

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Chairman Clerk to the Committee

No. 20

Minutes of Proceedings of the Select Committee on Salinity

Thursday 7 June 2001
at 1.00pm
Parliament House

Members Present

Mr Anderson	Mr Hickey	Mr McGrane
Mr Black	Mr Maguire	

Also in attendance: Ms Christina Thomas, Project Officer; and, Ms Cassandra Adams, Assistant Committee Officer.

Apologies

Apologies received from Ms Allan, Mr Martin, Mr D L Page and Mr Windsor.

Minutes

Resolved, on the motion of Mr Maguire, seconded by Mr Black:

That the minutes of the meetings of 28 May 2001 and 31 May 2001, as circulated, be confirmed.

Correspondence

Correspondence from Australian Senate Environment, Communications, Information Technology and the Arts References Committee regarding an inquiry into Australia's urban water management was circulated.

Resolved, on the motion of Mr Black, seconded Mr Maguire:

That the committee would consider making a submission at a later date.

Submission from Blacktown and District Environment Group was circulated.

Resolved, on the motion of Mr Maguire, seconded Mr Black:

That the committee accept the submission.

Travel Report

The report on visits of inspection undertaken by the committee having been previously circulated was considered.

Resolved, on the motion of Mr Hickey, seconded by Mr Maguire:

That the draft report on visits of inspection be adopted with amendment; and

That the draft report on visits of inspection be the Report of the Committee and that it be signed by the Acting Chairman and tabled; and

That the Acting Chairman and Committee Manager/Project Officer be permitted to correct stylistic, typographical and grammatical errors.

Interim Report

The Project Officer briefed the committee on the outline of the draft Interim Report which had been previously circulated.

National Local Government Summit on Salinity

The committee discussed arrangements for attendance at the National Local Government Summit on Salinity.

The committee adjourned at 1.55pm until 1.00pm Thursday 28 June 2001

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Chairman Clerk to the Committee

No. 21

Minutes of Proceedings of the Select Committee on Salinity

Thursday 28 June 2001
at 1.00pm
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	Mr Windsor

Also in attendance: Ms Christina Thomas, Project Officer; and, Mr Chris Papadopoulos, Research Officer.

Minutes

Resolved, on the motion of Mr Black, seconded by Mr McGrane:

That the minutes of the meeting of 7 June 2001, as circulated, be confirmed.

Correspondence

The committee noted out going correspondence.

Interim Report

The draft Interim Report, having been previously circulated and discussed at the previous meeting, was considered.

Resolved, on the motion of Mr Black, seconded by Mr Anderson:

- That the draft Interim Report be adopted;
- That the draft Interim Report of the Committee be the Interim Report of the Committee and that it be signed by the Chairman and tabled; and
- That the Chairman and Committee Manager/Project Officer be permitted to correct stylistic, typographical and grammatical errors.

National Local Government Summit on Salinity

The committee discussed the finalised arrangements for attendance at the National Local Government Summit on Salinity.

The committee adjourned at 1.35pm until Wednesday 18 July 2001.

_____ _____

Chairman Committee Manager

No. 22

Minutes of Proceedings of the Select Committee on Salinity

Wednesday 18 July 2001
at 5.15 pm
Moama Bowling Club, Moama

Members Present

Mr Anderson	Mr Maguire	Mr Black
Mr D L Page	Mr McGrane	

Also in attendance: Ms Christina Thomas, Project Officer; and, Mr Chris Papadopoulos, Research Officer.

Apologies

Apologies were received from Ms Allan, Mr Hickey, Mr Martin and Mr Windsor.

Election of Acting Chairman

Resolved, on the motion of Mr Page, seconded by Mr McGrane:

That Mr Anderson be appointed Acting Chairman for the purpose of the hearing.

Public hearing

The public was admitted at 5:25 pm.

Mr Ralph Leutton, Program Manager, Policy and Legislation, Cotton Australia Ltd, affirmed and examined.

Mr John Clements, Adviser to Policy and Legislation, Cotton Australia Ltd, affirmed and examined.

Evidence concluded, the witnesses withdrew.

Mr Brian Sharp, National President, Murray Darling Association, affirmed and examined.

Mr Leon Broster, General Manager, Murray Darling Association, affirmed and examined.

Mr Craig Clifton, Senior Scientist, Land and Catchment Management, Sinclair Knight Merz, sworn and examined.

Evidence concluded, the witnesses withdrew.

The committee adjourned at 6:43 pm until Thursday 19 July 2001.

_____ _____
Chairman Project Officer

No. 23

Minutes of Proceedings of the Select Committee on Salinity

Thursday 19 July 2001
at 1:00 pm

Members Present

Mr Anderson	Mr Black	Mr Maguire
Mr McGrane	Mr D L Page	

Also in attendance: Ms Christina Thomas, Project Officer; and, Mr Chris Papadopoulos, Research Officer.

Apologies

Apologies were received from Ms Allan, Mr Hickey, Mr Martin and Mr Windsor.

Site inspections: Pyramid Salt and salinity affected sites

The Committee inspected Pyramid Salt, and met with Mr Gavin Privett, Operations Manager and founding director.

The Committee then inspected salinity-affected sites en route to Moama, including Barr Creek, Cohuna and Kerang.

Inspections concluded, the committee adjourned at 6.00 pm, until a date to be determined.

_____ _____
Chairman Project Officer

No. 24

Minutes of Proceedings of the Select Committee on Salinity

Thursday 6 September 2001
at 9.00 am
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Martin	Mr D L Page
Mr Black	Mr Maguire	Mr Windsor

Also in attendance: Ms Christina Thomas, Project Officer; and, Mr Chris Papadopoulos, Research Officer.

Public hearing

The press and public were admitted.

Mr Derek Owens, Sales Manager, Carefree Water Conditioners Australia, sworn and examined.

Mr Robert Uden, Proprietor, Carefree Water Conditioners Australia, sworn and examined.

Evidence concluded, the witnesses withdrew.

Mr John Davis, Project Manager, Sydney Metropolitan - Dubbo Regional Organic Resource Management Project, sworn and examined.

Evidence concluded, the witness and public withdrew.

Minutes

Resolved, on the motion of Mr Hickey, seconded by Mr Martin:

That the minutes of the meeting of 1, 2, 3, and 4 May 2001 and 28 June 2001, as circulated, be confirmed.

Report on the National Local Government Summit on Salinity, 17 – 19 July 2001 and Inspection of Pyramid Salt Pty Ltd

The draft Report of the Summit, having been previously circulated, was considered.

Resolved, on the motion of Mr Anderson, seconded by Mr D L Page:

That the draft Report on the Summit be adopted;

That the draft Report on the Summit be the Report of the Committee and that it be signed by the Chairman and tabled; and

That the Chairman and Committee Manager/Project Officer be permitted to correct stylistic, typographical and grammatical errors.

Correspondence

The committee noted incoming and out going correspondence.

Resolved, on the motion of Mr Anderson, seconded by Mr Hickey that:

That letters be prepared to the Federal Minister for the Environment and Heritage and the Minister for Agriculture, Fisheries and Forestry recommending the inclusion of the Hunter and Hawkesbury-Nepean Catchments in the list of priority catchments under the National Action Plan for Salinity and Water Quality.

Resolved, on the motion of Mr Anderson, seconded by Mr D L Page that:

That Mr Gourlay of the Environmental Research Information Consortium be provided with a copy of the letter from the Director-General of the Department of Land and Water Conservation addressing the points raised in Mr Gourlay's submission.

Visit of Inspection to Western Australia

The Committee discussed possible dates for a visit of inspection to Western Australia.

The committee adjourned at 10:30am until 21 September 2001.

_____ _____

Chairman Project Officer

No. 25

Minutes of Proceedings of the elect Committee on Salinity

Friday 21 September 2001
at 9.00 am
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Martin	Mr D L Page
Mr Black	Mr Maguire	

Also in attendance: Ms Christina Thomas, Project Officer; and, Mr Chris Papadopoulos, Research Officer.

Apology

An apology was received from Mr Windsor.

Roundtable Discussion

The press and public were admitted.

Discussions were held with the following key policy experts: Mr Trevor Budge, Research Planning and Design Group; Professor David Farrier, Centre for Natural Resource Law and Policy, University of Wollongong; Mr Tim Fisher, Coordinator, Land and Water Ecosystems, Australian Conservation Foundation; and Mr Mike Young, Director, Policy and Economic Research Unit, Land and Water, CSIRO.

Discussions concluded, the participants and public withdrew.

Disclosure of Submissions

Resolved, on the motion of Mr Maguire, seconded by Mr McGrane:

That the Committee authorises the disclosure of all the submissions received by the Committee, except that of Mr Len Reade.

Visit of Inspection to Western Australia

Resolved, on the motion of Mr Maguire, seconded by Mr McGrane:

That the Committee and Research Officer undertake a visit of inspection to Western Australia from 28 October to 2 November 2001.

Australian Association of Natural Resource Management Conference

Resolved, on the motion of Mr Black, seconded by Mr McGrane:

That a delegation of the Committee and appropriate staff travel to attend the Australian Association of Natural Resource Management (NSW) Conference in Dubbo on 23 and 24 November 2001.

The committee adjourned at 11:20am until 18 October 2001.

_____ _____

Chairman Committee Manager

No. 26

Minutes of Proceedings of the Select Committee on Salinity

Thursday 18 October 2001

at 1.00 pm
Parliament House

Members Present

Mr Anderson	Mr Hickey	r McGrane
Mr Martin	Mr D L Page	

Also in attendance: Mr Leslie Gönye, Committee Manager; Mr Chris Papadopoulos, Research Officer; and Ms Cassandra Adams, Assistant Committee Officer.

Apologies

Apologies were received from Ms Allan, Mr Black and Mr Maguire.

Resignation of Member

The Committee Manager informed the Committee that Mr Windsor had resigned as a member of the Legislative Assembly on Tuesday 16 October 2001.

Election of Acting Chairman

Resolved, on the motion of Mr McGrane, seconded by Mr D L Page:

That Mr Anderson be appointed Acting Chairman for the purpose of this deliberative meeting.

Confirmation of Minutes

Resolved, on the motion of Mr D L Page, seconded by Mr McGrane:

That the minutes of the meetings of 18 and 19 July and 6 and 21 September 2001, as circulated, be confirmed.

Proposed hearing and meeting dates

Resolved, on the motion of Mr McGrane, seconded by Mr Hickey:

That the Committee hold a deliberative meeting on 16 November, and a public hearing on 28 November, with 29 November 2001 as reserved date.

Draft findings — proposed arrangements

Resolved, on the motion of Mr Martin, seconded by Mr Hickey:

That the Committee agree to the proposed timetable for the circulation of the draft findings and recommendations of the report on the role of councils, and to give feedback to the Project Officer.

Correspondence

Resolved on the motion of Mr Hickey, seconded by Mr Martin:

That the copies of correspondence circulated to the Committee be adopted as a record of the Committee's recent correspondence with agencies.

Visit of Inspection to Western Australia

Resolved, on the motion of Mr McGrane, seconded by Mr Martin:

That the Committee agree to the proposed itinerary for the visit of inspection to Western Australia.

Members wishing to add any item to the itinerary to contact the Secretariat.

Mr McGrane to follow up his suggestion for an inspection of a state-of-the art abattoir in Albany, subject to time.

Australian Association of National Resource Management Conference, Dubbo 23-24 November

Members wishing to attend the Australian Association of National Resource Management Conference to be held in Dubbo, on 23 & 24 November 2001, were invited to put in an expression of interest as soon as possible.

General Business

1. The Committee decided to wait until its deliberative meeting on 16 November 2001 for the release of the Murray Darling Association's CD-rom on the proceedings of the National Local Government Salinity Summit, Moama, July 2001, before the tabling of the report on the Summit.

   Should the CD-rom still not be available on that date, the Committee will proceed to table the report, and include appropriate disclaimers.

2. Resolved, on motion of Mr D L Page, seconded by Mr Martin:

   That the Committee write to the Commonwealth and the NSW Governments
   (a) seeking an update on the progress of bilateral agreements
   (b) urging acceleration in the negotiations; and
   (c) putting the Committee's strong view that Western Sydney and the Hunter Region designated priority catchments under the National Action Plan on Salinity and Water Quality.

The committee adjourned at 1.40 pm until Monday 29 October 2001.

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Chairman Committee Manager

No. 27

Minutes of Proceedings of the Select Committee on Salinity

Monday 29 October 2001
Western Australia
at 7:30 am

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr D L Page	

Briefing: Hon. Kim Chance MLC, Minister for Agriculture

The committee met in Perth with the Hon. Kim Chance, MLC, Minister for Agriculture, Mr Mark Pridham, Manager, Rural Towns Program, WA Department of Agriculture, and Mr Rex Edmonson, Chairman of the Rural Towns Program, for a briefing on salinity in Western Australia.

Briefing and site inspection: Rural Towns Program, Corrigin

The committee, accompanied by Mr Pridham and Mr Edmonson, proceeded to Corrigin and met with members and staff of Corrigin Shire Council for briefings on the Shire's approach to dealing with salinity in cooperation with the Department of Agriculture's Rural Towns Program. The Shire was represented by Mr Harry Gayfer (Pesident), Mr Brian Parsons, Mr Peter Doyle, Mr Bruce Mead and Mr David Abe.

The committee then inspected Corrigin with particular emphasis on the damage done by salinity and the measures in place to deal with the problem in and around the town..

Briefing and site inspection: Oil Mallee, Narrogin

The committee, accompanied by Mr Pridham and Mr Edmonson, proceeded to Narrogin and met with Mr Ken Wallace, Regional Manager, Department of Conservation and Land Management (CALM) and Mr David McFall, Regional Manager, Oil Mallee Project, for a briefing on the oil mallee project.

The committee then inspected an oil mallee plantation in Narrogin.

Inspections concluded, the committee adjourned at 5:30pm until Tuesday 30 October 2001.

_____ _____

Chairman Research Officer

No. 28

Minutes of Proceedings of the Select Committee on Salinity

Tuesday 30 October 2001
Western Australia
at 8:45 am

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr D L Page	

Briefing and site inspections: Rural Towns Program, Wagin

The committee, accompanied by Mr Mark Pridham, Manager, Rural Towns Program, Agriculture WA, and Mr Edmonson, chairman, proceeded to Wagin and met with members and staff of Wagin Shire Council for briefings on the Shire's approach to dealing with salinity in cooperation with the Rural Towns Program. The Shire was represented by Peter Piesse (President), Ian Bartlett and Michael Parker.

The committee then proceeded to Wagin for inspection of salinity impacts and efforts to control it in and around the town.

Briefing and site inspections: Rural Towns Program, Katanning

The committee, accompanied by Mr Pridham and Mr Edmonson, proceeded to Katanning and met with members and staff of Katanning Shire Council for briefings on the Shire's approach to dealing with salinity in cooperation with the Rural Towns Program. The Shire was represented by Mr Doug Cherry (Deputy President), Mr Clinton Strugnell and Mr Norm Reed. The committee was also briefed by Ms Louise Hopegood, hydrologist, Agriculture WA.

The committee then inspected Wagin with particular emphasis on the damage done by salinity and the measures in place to deal with the problem in and around the town.

Briefing and site inspection: Goundrey Winery, Mt Barker

The committee met with Cate Finlay, viticulturist, Goundrey Wines, for a briefing on and inspection of the various measures the company has taken to conserve water and minimise the impact of salinity on the property.

Inspections concluded, the committee adjourned at 4:30pm until Wednesday 31 October 2001.

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Chairman Research Officer

No. 29

Minutes of Proceedings of the Select Committee on Salinity

Wednesday 31 October 2001
Albany, Western Australia
at 9:30 am

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr D L Page	

Briefings: Agriculture WA, Albany

The committee met with and was formally briefed by the following persons:

Giles West, Manager, SRD, Agriculture WA
Ruhi Ferdowsian, Hydrologist, Agriculture WA
Naomi Arrowsmith , Waters & Rivers Commission
Paula Deegan, SCRIPT
Bill Porter
David Pannell, Associate Professor and Principal Research Fellow, Agricultural and Resources Economics, University of Western Australia
Michael Power
Geoff Woodall
Tim Overheu
Allan Seymour.

Issues raised included:

- Salinity impacts on agriculture and rural towns
- High water use farming systems
- Alternative perennial farming systens
- The community perspective
- New developments in hydrology.

Briefings and inspection concluded, the committee adjourned at 3:30pm until Thursday 1 November 2001.

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Chairman Research Officer

No. 30

Minutes of Proceedings of the Select Committee on Salinity

Thursday 1 November 2001
Parliament House, Perth

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr D L Page	

Briefings

The committee met with and was formally briefed by the following persons:

Don Crawford, Executive Officer, State Salinity Council
Alex Campbell, Chairman, State Salinity Council
Rex Edmonson, Chairman, Rural Towns Program
Garry English, State Salinity Council
Barbara Morrell, Regional Group representative
Neil Young
Michael Lloyd
John Bartle, Department of Conservation and Land Management (CALM)
Robert Lambeck
Ken Pech, Local Government representative
Fiannoula Forest, Chair, Salinity Taskforce

Issues raised included:

- Salinity in WA compared to Murray-Darling Basin
- State Salinity Council
- Treatment options and delivery systems
- Commercial farm forestry
- Water resource management
- Whole of landscape planning
- WA Salinity Taskforce
- Social impacts of salinity.

Meeting with the Hon. Dr Judy Edwards, MLA, Minister for Environment and Heritage

The committee met with the Hon. Dr Judy Edwards MLA, Minister for Environment and Heritage with special responsibility for salinity, for an exchange of information and ideas about the salinity problem in WA and NSW.

Briefings concluded, the committee adjourned at 5:00pm until a date to be determined.

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Chairman	Research Officer

No. 31

Minutes of Proceedings of the Select Committee on Salinity

Friday 16 November 2001
at 10.00 am
Parliament House

Members Present

Ms Allan	Mr Maguire	Mr D L Page
Mr Anderson	Mr Martin	Mr Hickey
Mr McGrane		

Also in attendance: Ms Christina Thomas, Project Officer; and Mr Chris Papadopoulos, Research Officer.

Apology

An apology was received from Mr Black.

Confirmation of Minutes

Resolved, on the motion of Mr McGrane, seconded by Mr D L Page:

That the minutes of the meeting of 18 October 2001, as circulated, be confirmed.

Draft Report: findings and recommendations

Having previously been circulated, the Committee discussed the draft findings and recommendations of the report on the role of councils and general feedback to the Project Officer.

Kyoto Protocol

Having previously been circulated, the Committee discussed the briefing note summarising concerns raised by Deutsche Bank at a meeting with the secretariat on 25 October 2001 regarding proposed carbon credits through land use changes other then forestry, which may also address salinity, under article 3.4 of the Kyoto Protocol.

Resolved on the motion of Mr Anderson, seconded by Mr D L Page:

That the Committee write to the Minister for Energy and Utilities seeking the consideration of article 3.4 of the Kyoto Protocol within the Minister's forthcoming discussion paper on methodologies for allowable carbon credits towards greenhouse gas reductions.

Correspondence

The Committee noted and discussed incoming correspondence from: WSROC concerning the Western Salinity Management Project; the Minister for Environment concerning the disposal of saline water from swimming pools; and the Department of Urban Affairs and Planning concerning aspects of regional planning to address salinity problems.

General Business

The Committee discussed the desirability of conducting, in the first quarter of 2002, a seminar at Parliament House hosting people with interesting messages regarding innovative approaches to salinity.

The committee adjourned at 1.45 pm until 10.00 am Wednesday 28 November 2001.

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Chairman Committee Manager

No. 32

Minutes of Proceedings of the Select Committee on Salinity

Wednesday 28 November 2001
at 10.00am
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr Black
Mr Martin		

Also in attendance: Ms Christina Thomas, Project Officer; and Mr Chris Papadopoulos, Research Officer.

Apology

An apology was received from Mr D L Page.

Hearings

The press and public were admitted.

By direction of the Chairman, the Clerk read the committee terms of reference and Legislative Assembly Standing Order No.'s 332, 333 and 334 relating to the examination of witnesses.

Mr Donald Geering, Environmental Scientist, Director of Natural Resources Planning, Department of Urban Affairs and Planning, previously sworn, examined.

Evidence concluded the witness withdrew.

Mr John Verhoeven, Group General Manager, Landscape Investment, and Mr Neville Pavan, Senior Natural Resource Officer, both of the Department of Land and Water Conservation and previously sworn, examined.

Evidence concluded the witnesses withdrew.

Mr Robert Irvine, Senior Policy Adviser, Policy and Research Branch, Department of Local Government, affirmed and examined.

Evidence concluded the witness withdrew.

The committee adjourned at 12.30 pm until 10.00 am Thursday 29 November 2001.

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Chairman Committee Manager

No. 33

Minutes of Proceedings of the Select Committee on Salinity

Thursday 29 November 2001
at 10.00am
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr McGrane
Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	

Also in attendance: Ms Christina Thomas, Project Officer; and Mr Chris Papadopoulos, Research Officer.

Hearings

The press and public were admitted.

By direction of the Chairman, the Clerk read the committee terms of reference and Legislative Assembly Standing Order No.'s 332, 333 and 334 relating to the examination of witnesses.

Mr Clive Johnson, Farmer and Grazier, Chair of Lachlan Catchment Management Board, sworn and examined.

Evidence concluded the witness withdrew.

Mr Ian Rogan, Consultant, Chair of Central West Catchment Management Board, sworn and examined.

Evidence concluded the witnesses withdrew.

Ms Jane McAloon, Assistant Director General of The Cabinet Office, affirmed and examined.

Evidence concluded the witness withdrew.

Mr Michael Montgomery, President of the Shires Association, sworn, and Mr David Hale, Senior Policy Officer of the Local Government and Shires Associations, previously sworn, both examined.

Evidence concluded the witnesses, press and public withdrew for the Committee to deliberate.

Report on Overseas Study Tour

Resolved, on motion of Mr D L Page, seconded by Mr McGrane:

That the draft Report on the overseas study tour be adopted as the Report of the Committee upon the consent of the Chairman and Mr D L Page; and

That the Report be then signed by the Chairman and tabled.

Correspondence

The Committee noted the following correspondence:

The outgoing letter to the Acting Director-General of the Ministry of Energy and Utilities and reply concerning the discussion paper on the methodology for calculating eleigible carbon sequestration for electricity retailers; and
Comments on the Interim Report from Environment Australia and the Department of Agriculture, Fisheries and Forestry-Australia.

General Business

The Chairman gave her felicitations and thanked all Committee Members and the secretariat for their support during 2001.

The committee adjourned at 12.25 pm until a date to be determined.

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Chairman Committee Manager

No. 34

Minutes of Proceedings of the Select Committee on Salinity

Thursday 14 March 2002
at 1.00pm
Parliament House

Members Present

Ms Allan Mr Hickey Mr McGrane

Mr Anderson	Mr Maguire	Mr D L Page
Mr Black	Mr Martin	

Also in attendance: Mr Chris Papadopoulos, Research Officer; and, Ms Cassandra Adams, Assistant Committee Officer.

In the absence of the Clerk of the Legislative Assembly, the Clerk-Assistant (Committees) opened the meeting and read the following extracts from the Votes and Proceedings of the legislative Assembly-

Entry 22, Votes and Proceedings No. 1, dated 26 February 2002:

"Mr Whelan moved, by leave, That:

1. A select committee be re-appointed to inquire and report with the following terms of reference:

To examine:

(a) Business opportunities created by salinity that contribute to the improved management of groundwater recharge and discharge areas.

(b) The options for salinity management that are available to local councils, including but not limited to, planning instruments, building codes, urban water management plans, differential rating, development of local council expertise and resource-sharing between councils.

(c) Any barriers to adoption of salinity management strategies by local councils and means to overcome the barriers.

(d) The adequacy of the Commonwealth's response and contribution to addressing salinity.

That such committee consist of Ms Allan, Mr Martin, Mr Black, Mr Hickey, Mr Anderson, Mr McGrane, Mr Maguire and Mr D.L. Page.

That the committee have power to make visits of inspection within the State of New South Wales and other States and Territories of Australia.

Question put and passed".

Entry 14, Votes and Proceedings No. 3, dated 28 February 2002:

"Mr Whelan moved, by leave, That this House refer to the Select Committee on Salinity all minutes and transcripts of proceedings and other documents of the Select Committee on Salinity appointed during the third session of the of the Fifty-second Parliament.

Question put and passed."

Election of Chairman

Resolved, on the motion of Mr Anderson, seconded by Mr D L Page:

"That Ms Allan be elected Chairman of the Committee".

Ms Allan made her acknowledgments to Committee Members.

Procedural Motions

Resolved, on motion (in globo) of Mr D L Page, seconded by Mr Hickey:

1. That arrangements for the calling of witnesses and visits of inspection be left in the hands of the Chairman and the Committee Manager to the Committee.

2. That, unless otherwise ordered, parties appearing before the Committee shall not be represented by any member of the legal profession.

3. That, unless otherwise ordered, when the Committee is examining witnesses, the press and public (including witnesses after examination) be admitted to the sitting of the Committee.

4. That persons having special knowledge of the matters under consideration by the Committee may be invited to assist the Committee.

5. That press statements on behalf of the Committee be made only by the Chairman after approval in principle by the Committee or after consultation with Committee members.

6. That, unless otherwise ordered, access to transcripts of evidence taken by the Committee be determined by the Chairman and not otherwise made available to any person, body or organisation: provided that witnesses previously examined shall be given a copy of their evidence; and that any evidence taken in camera or treated as confidential shall be checked by the witness in the presence of the Committee Manager to the Committee or an officer of that Committee.

7. That the Chairman and the Committee Manager to the Committee be empowered to negotiate with the Presiding Officers through the Clerk of the

8. Legislative Assembly for the provision of funds to meet expenses in connection with advertising, operating and approved incidental expenses of the Committee.

9. That the Chairman be empowered to advertise and/or write to interested parties requesting written submissions.

10. That upon the calling of a division or quorum in the House during a meeting of the Committee, the proceedings of the Committee shall be suspended until the Committee again has a quorum.

11. That the Chairman and the Committee Manager make arrangements for visits of inspection by the committee as a whole and that individual members wishing to depart from these arrangements be required to make their own arrangements.

12. That pursuant to Standing Order 338, evidence, submissions or other documents presented to the committee which have not been reported to the House not be disclosed or published by any Member of the Committee or by any other person.

Minutes

Resolved, on the motion of Mr Anderson, seconded by Mr D L Page:

That the minutes of the meetings of 29, 30 and 31 October and 1, 16, 28 and 29 November 2001, as circulated, be confirmed.

Business Opportunities - Seminar

The Chairman reported that the next inquiry of the Committee would address the “business opportunities” term of reference. The seminar to be hosted by the Committee “Investing in Solutions to Salinity” on 8 April 2002 would be the platform for the inquiry.

The secretariat reported on arrangements for the seminar.

Draft Report on Council Management of Salinity

The Committee agreed that preliminary consideration of the draft report on Council Management of Salinity be by way of the Project Officer discussing the draft report with individual Members.

General Business

The Committee Manager reported on arrangements for recruitment action for a second Project Officer to assist with the inquiry and report on the Commonwealth's response" term of reference.

The committee adjourned at 1.20 pm until 1.00 pm Thursday 21 March 2002.

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Chairman Committee Manager

No. 35

Minutes of Proceedings of the Select Committee on Salinity

Thursday 21 March 2002
at 1.00pm
Parliament House

Members Present

Ms Allan	Mr Black	Mr McGrane
Mr Anderson	Mr Maguire	

Also in attendance: Ms Christina Thomas, Project Officer; and Mr Chris Papadopoulos, Research Officer.

Apologies

Apologies were received from Mr Hickey, Mr Martin and Mr D L Page.

Confirmation of Minutes

Resolved, on the motion of Mr Maguire, seconded by Mr Black:

That the minutes of the meeting of 14 March 2002, as circulated, be confirmed.

Business Opportunities - Seminar

The secretariat updated the Committee on arrangements for the seminar.

Draft Report on Council Management of Salinity

The Project Officer reported on discussions with individual members concerning the draft report. These would be summarised and circulated to the Committee prior to the next meeting.

The Committee discussed the intention to adopt the draft report at the meeting on 11 April 2002 and to hold a joint press conference with representatives of the Local Government and Shires Associations.

General Business

The Project Officer was to pursue the Energy Review issue with interested members;

The most important correspondence was to be highlighted and circulated to the Committee at the meeting scheduled for 11 April 2002;

Members were notified that the papers from the "Getting it Right" natural resource management conference were available;

The Committee discussed a possible trip to the North West of Western Australia in August 2002;

Expressions of interest were called for attendance at the NCC seminar "Futurescape – Exploring the Interaction between the Environment, economics and Society" to be held in Sydney, on 29 and 30 April 2002; and

The Committee discussed the desirability of meeting with the new Minister for Land and Water Conservation.

Minister for Land and Water Conservation

Resolved, on the motion of Mr Anderson, seconded by Mr Black:

That the Minister for Land and Water Conservation, the Hon. John Aquilina, be invited to attend a meeting of the Committee; and

That the Committee secretariat meet with and brief the Minister's staff on the work of the Committee.

The Committee adjourned at 1.40 pm until 9.00 am Monday 8 April 2002.

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Chairman Committee Manager

No. 36

Minutes of Proceedings of the Select Committee on Salinity

Monday 8 April 2002
at 9.00am
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr Martin
Mr Anderson	Mr Maguire	Mr D.L. Page
Mr Black	Mr McGrane	

Also in attendance: Ms Christina Thomas, Project Officer; Mr Chris Papadopoulos, Research Officer, and Ms Cassandra Adams, Assistant Committee Officer.

Seminar: Investing in Solutions to Salinity

The public were admitted to the Committee-sponsored seminar, "Investing in Solutions to Salinity", which opened at 9.00 am.

The following persons presented papers at the seminar:

Mr David Pannell, Faculty of Agriculture, University of Western Australia
Dr Stephen Beare, Agricultural and Resource Economics, ABARE
Dr Bob Smith, Director-General, Department of Land and Water Conservation
Dr David Brand, Hancock Natural Resources Group, Australia
Ms Di Bentley, Convenor, Liverpool Plains Land Management Committee
Mr Ian McColl, landowner
Mr John Baryle, Department of Conservation and Land Management, WA
Mr Barney Foran, CSIRO Resource Futures
Dr Brian Dear, NSW Agriculture [and CRC on the Plant Based Management of Salinity]

The meeting concluded seminar at 3.50 pm and The Committee adjourned until 11.30am Thursday 11 April 2002.

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Chairman **Committee Manager**

No. 37

Minutes of Proceedings of the Select Committee on Salinity

Thursday 11 April 2002
at 11.30am
Parliament House

Members Present

Ms Allan	Mr Black	Mr McGrane
Mr Anderson	Mr Maguire	Mr D.L. Page

Also in attendance: Ms Christina Thomas, Project Officer; and Mr Chris Papadopoulos, Research Officer.

Apologies

Apologies were received from Mr Hickey and Mr Martin.

Confirmation of Minutes

Resolved, on the motion of Mr Black, seconded by Mr Anderson:

That the minutes of the meeting of 21 March 2002, as circulated, be confirmed.

Consideration of Draft Report

The Committee began consideration of the draft report. Members discussed the recommendations and agreed to certain changes.

The Committee requested that the secretariat provide Members with maps and other documents indicating:

Catchment Management Boundaries overlaid with Local Government Area Boundaries

A list of the Regional Organisation of Councils in NSW, including their constituent councils

Visit of inspection to USA and UK

Resolved, on the motion of Mr D.L. Page, seconded by Mr Black:

"That Mr Jim Anderson, Mr Daryl Maguire and an accompanying officer undertake a study tour to the USA and UK."

The Committee adjourned at 1pm until 3.30pm later this day on Thursday 11 April 2002.

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Chairman **Committee Manager**

No. 38

Minutes of Proceedings of the Select Committee on Salinity

Thursday 11 April 2002
at 3.45pm
Parliament House

Members Present

Ms Allan	Mr Hickey	Mr Anderson
Mr Maguire	Mr Black	Mr McGrane

Also in attendance: Ms Christina Thomas, Project Officer; and Mr Chris Papadopoulos, Research Officer.

Apologies

Apologies were received from Mr Martin and Mr D.L. Page.

Confirmation of Minutes

Resolved, on the motion of Mr Black, seconded by Mr Anderson:

That the minutes of the meeting of 21 March 2002, as circulated, be confirmed.

Consideration of Draft Report

The Committee began consideration of the draft report. Members discussed the recommendations and agreed to certain changes. The secretariat was instructed to effect those changes and present a revised draft to the Committee for the next meeting.

The Committee requested that the secretariat provide Members with maps and other documents indicating:

Catchment Management Boundaries overlaid with Local Government Area Boundaries

A list of the Regional Organisation of Councils in NSW, including their constituent councils

The Committee adjourned at 4.05pm until after the conclusion of Question Time on Tuesday 7 May 2002.

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Chairman **Committee Manager**