The Auditor-General
Audit Report No.17 2004–05
Performance Audit

The Administration of the National Action Plan for Salinity and Water Quality

Department of Agriculture, Fisheries and Forestry
Department of the Environment and Heritage

Australian National Audit Office

ISSN 1036–7632

ISBN 0 642 80812 0

Australian National
Audit Office

Canberra ACT
15 December 2004

Dear Mr President
Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of Agriculture, Fisheries and Forestry and the Department of the Environment and Heritage in accordance with the authority contained in the *Auditor-General Act 1997*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit and the accompanying brochure. The report is titled *The Administration of the National Action Plan for Salinity and Water Quality.*

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's Homepage—http://www.anao.gov.au.

Yours sincerely

P. J. Barrett
Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office. The ANAO assists the Auditor-General to carry out his duties under the *Auditor-General Act 1997* to undertake performance audits and financial statement audits of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

For further information contact:
The Publications Manager
Australian National Audit Office
GPO Box 707
Canberra ACT 2601

Telephone: **(02) 6203 7505**
Fax: **(02) 6203 7519**
Email: **webmaster@anao.gov.au**

ANAO audit reports and information about the ANAO are available at our internet address:

http://www.anao.gov.au

Audit Team

Peter McVay
Layton Pike
David Crossley

Contents

Abbreviations

ABARE	Australian Bureau of Agricultural and Resource Economics
ANAO	Australian National Audit Office
BRS	Bureau of Rural Sciences
DAFF	Department of Agriculture, Fisheries and Forestry
DEH	Department of the Environment and Heritage
CMA	Catchment Management Authority
CRC	Cooperative Research Centre
CSIRO	Commonwealth Scientific and Industrial Research Organisation
GBRMPA	Great Barrier Reef Marine Park Authority
IGA	Intergovernmental Agreement
JSC	Joint Steering Committee
MDBC	Murray Darling Basin Commission
MOU	Memorandum of Understanding
NAP	National Action Plan for Salinity and Water Quality
NDSP	National Dryland Salinity Program
NLWRA	National Land and Water Resources Audit
NHT	National Heritage Trust
NRM	Natural resource management
PMSEIC	Prime Minister's Science, Engineering and Innovation Council
SHA	Single holding account

Glossary

Accreditation	A formal process for assessing the appropriateness of a regional plan for implementation.
Agencies	Within the context of this report 'agencies' refers to the Department of Agriculture Fisheries and Forestry and the Department of the Environment and Heritage.
Agro forestry	A collective name for land-use systems in which woody perennials (trees, shrubs) are grown in association with herbaceous plants (crops, pastures) and/or livestock in a spatial arrangement, a rotation, or both, and in which there are ecological and economic interactions between the tree and the non-tree components of the system.
Bilateral agreement	An agreement between two parties, in this case, referring to the Australian Government and each State / Territory.
Biological diversity (biodiversity)	The variety of life forms, plants, animals and micro organisms, the genes they contain, the ecosystems they form, and ecosystem processes.
Catchment	An area of land supplying water to a watercourse bounded by hills or ridges that direct the flow of water.
Conflict of interest	A conflict of interest arises where a person makes a decision or exercises a power in a way that may be, or may be perceived to be, influenced by either material personal interests (financial or non-financial) or material personal associations.
Dilution flows	The contribution of freshwater run-off to dilute the level of salinity in a stream or river.
Discharge	Groundwater that escapes into a stream, lake or ocean, or through the land surface.
Ecologically sustainable development	Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be addressed.

Engineering options	Engineering options in regard to salinity can refer to works in critical areas such as salt interception devices and groundwater pumping, removal of weirs and redundant structures and the creation of artificial wetlands.
Governance	Structures and processes for decision-making and accountability.
Groundwater	The water in the saturated pores of soil or rock.
Incorporated body	A legal entity that has authority, under law, as a separate legal person.
Intergovernmental agreement	An agreement between multiple governments, in this case, referring to the Australian Government and all States/Territories.
Intervention options	Action to address salinity or water quality, such as through reafforestation, engineering works, or protection of remnant vegetation.
Insolvent	The inability to satisfy creditors or discharge liabilities, either because liabilities exceed assets or because of inability to pay debts as they mature.
Memorandum of understanding	A written document detailing the understanding of the parties who are entering into an agreement.
Ministers	Within the context of this report 'Ministers' refers to the Australian Government Minister for Agriculture, Fisheries and Forestry and the Minister for the Environment and Heritage.
Monitoring	To check, supervise, observe and record the progress of an activity, action or system on a regular basis.
Recharge	Water that has drained below the root zone of any local vegetation and which is then able to drain downward to add to the underlying layer of saturated soil, or groundwater
Regional delivery model	The model involves the devolution of program delivery to a partnership arrangement between the Australian Government, all State and Territory Governments and 34 regional bodies based in 21 'priority regions'.

Risk management	The systematic application of management policies, procedures and practices to the task of identifying, analysing, assessing, treating and monitoring risk.
Salinity	The concentration of dissolved salts in groundwater, soil or river water. It includes salinity that results from irrigation systems—*irrigation salinity*—and from dryland management systems—*dryland salinity*. Both forms of salinity are due to water imbalances and the mobilisation of salt in the soil.
Salinisation	Degradation of the soil or water through the accumulation of salts. Land salinisation occurs following the accumulation of soluble salts at or near the soil surface, to a level that causes degradation—usually through the evaporation of groundwater that discharges through the soil surface. Water salinisation usually results from increasing salinity of run-off and groundwater.
Wetlands of international importance	An area that has been designated under Article 2 of the 1971 Convention on Wetlands of International Importance (Ramsar 1971). The relevant Minister may also declare a wetland in accordance with section 16 of the *Environmental Protection and Biodiversity Conservation Act 1999*.

Summary and Recommendations

Executive Summary

Background

1. Salinity is one of Australia's most complex and costly environmental issues causing damage to roads, buildings, agricultural production, biodiversity, rivers and water supplies. The cost of land and water degradation alone has been estimated at $3.5 billion per annum in economic terms.[1]

2. The National Action Plan for Salinity and Water Quality (NAP) was agreed in November 2000 as a joint initiative between the Australian Government and State and Territory Governments, involving expenditure of $1.4 billion over the next seven years. The Australian Government contribution was estimated at up to $700 million over this period with the States/Territories matching this contribution. The NAP is delivered jointly with the States/Territories through regional bodies who are responsible for the natural resource management plans and investment strategies.

3. The goal of the NAP is to motivate and enable regional communities to use coordinated and targeted action to prevent, stabilise and reverse trends in dryland salinity affecting the sustainability of production,[2] the conservation of biological diversity and the viability of infrastructure; and improve water quality and secure reliable allocations for human uses, industry and the environment. The NAP forms part of a suite of natural resource management programs that include water reforms, the Natural Heritage Trust and the National Landcare Program.

4. The objective of the Australian National Audit Office (ANAO) audit was to examine and report on the planning and corporate governance for the new regional delivery model of the NAP program, jointly administered by the Department of Agriculture, Fisheries and Forestry and the Department of the Environment and Heritage (the Agencies).

Key findings

Planning for results (Chapter 2)

5. Planning is the cornerstone of an economic, efficient and effective program and is vital to provide a degree of assurance that the program will achieve its objectives.

---

1 Council of Australian Governments, *Our Vital Resources: A National Action Plan for Salinity and Water Quality*, November 2000, p. 1.

2 Production refers to agriculture, fisheries and forestry.

6. The design of the NAP was based on a clear need to address the identified salinity and water quality challenges. The evidence at the time indicated substantial threats to Australia's agricultural regions and water quality from salinity. The threats were also likely to intensify in the foreseeable future. Nevertheless, the NAP goal is ambitious and technically challenging given the scale and diversity of the salinity and water quality problem and the range of private and public interests involved. There is also credible evidence to suggest that once established, dryland salinity is very difficult to contain, or reverse, in key regions.

7. At the national level, a risk management plan was developed by the agencies in 2003–04. The plan identified some of the key challenges in realising the intended outcomes of the NAP. However, there remain substantial technical and information challenges that need to be addressed as part of the ongoing management of risks. In particular, the challenges in targeting cost effective action and the limited availability of commercially attractive treatment options for regions are key risks that require careful management. Encouragingly, recent research by the Bureau of Rural Sciences has highlighted the potential for better targeting of management action in some regions in eastern Australia, due to the localised nature of salt in the landscape.[3]

8. The intergovernmental and bilateral agreements formed the basis of policy and administrative arrangements for the NAP. They were well designed and included standards and targets for salinity and water quality action, as well as clearly specified timeframes for program implementation. The agreements have contributed to important policy changes in natural resource management. While there were significant delays in reaching agreement, the reasons varied across each of the States/Territories. In general, these reasons related to policy and funding matters. Agencies have indicated that they were seeking to achieve a longer-term natural resource policy outcome and, consequently, there was little scope for compromise on the fundamentals of the agreements. However, the delays have had a flow-on effect for the NAP for the remaining years of the program.

9. The introduction of a new regional delivery model has been an evolving process that has built on some of the lessons learned from earlier programs. The regional delivery model involved significant institutional reform and a major shift in program delivery with new challenges and emerging risks. However, there have been significant delays in the rollout flowing from intergovernmental tensions and the institutional changes required. That said, from a survey of the NAP regional bodies, 77 per cent of respondents indicated that they strongly agreed or simply agreed with the

---

[3] Bureau of Rural Sciences, *Science for decision makers: five steps to tackling salinity*, BRS, 2003, p. 4.

statement that the NAP is a well-designed program and that it is appropriate to meet a recognised need in their region.

10. The design of the performance information framework was underpinned by intermediate measures, including management action targets, covering a one to five year timeframe. This is a significant improvement on the implementation of the original Natural Heritage Trust program (that involved the same agencies delivering similar projects). This should enable the agencies to measure and report on progress in implementing the NAP, which has much longer-term outcomes.

11. The ANAO recognises that significant progress has been made in reaching agreements between governments and setting in place a new regional delivery model. However this has taken almost four years to achieve. Outcomes for salinity and water quality are longer-term (that is, over a 10–20 year time horizon). If these are to be achieved, there are remaining risks for the program that will require careful management. For the remaining four years of the program, close attention must be paid to building on recent research initiatives and actively encouraging regions to put in place measures that are well targeted and appropriate for the formidable challenges being presented to the NAP regions of Australia.

The delivery of the program (Chapter 3)

12. Under the NAP, regional bodies are required to develop and implement integrated natural resource management plans as a basis for Government funding. These plans encompass catchment-wide activities to address a range of natural resource management issues in addition to salinity and water quality, and include programs such as the Natural Heritage Trust.

13. Agencies have made efforts to disseminate information to regional bodies via various publications, tool-kits, an annual community forum, and the employment of facilitators at the regional level. However, the inability of some regions to access adequate data and analysis at a useable scale on key issues has hindered the progress of quality planning for these NAP regions. A key area for improvement is the need to implement measures to further strengthen coordination and ongoing dissemination of lessons learned as well as better practice amongst regions. In addition, enhancing guidance to the regions must be given a higher priority. This should include clearer advice in relation to consistency with national water quality guidelines and compliance with relevant legislation.

14. The process of accreditation of the regional plans was intended to be an important mechanism for quality control. However, as a result of delays earlier in the program, as at 1 October 2004, only 62 per cent of the 34 regional bodies had accredited plans in place. These regional plans are varied in quality, with a

recent report to the Ministerial Council highlighting that it was doubtful that the targets in some plans were 'sufficiently robust to arrest or reverse the decline in some catchments'. The ANAO notes that agencies have sought to improve the quality of the process as new issues have emerged. However, the implementation of a quality assurance process involving a regular, routine review of a sample of plans, using the best available science and economic analysis, would assist in improving the substance of the plans. This would provide a degree of quality assurance within the adaptive management approach, without further delaying progress.

15. Once regional plans are accredited, regional bodies are required to develop investment strategies as a basis for government funding. As at 1 October 2004, 19 regional bodies had investment strategies in place. The structure and content of advice to Ministers on the investment strategies are reasonable given progress under the program. However, appraisal could be further strengthened through; more explicitly indicating the extent to which risks have been addressed; comments on whether or not the package represents value for money; and the extent to which the strategy is likely to contribute to the program objective.

16. From the survey conducted by the ANAO of regional bodies, only eight per cent of regions agreed with the statement that, 'decisions on funding for regional plans and investment strategies are timely and address the needs of the regions'. The process has not been assisted by the fact that investment strategies have generally been for only 12–18 month periods. While this has been in response to requests from various States and regions, the large scale of the projects, the five to ten year time frame for natural resource management plans, and the even longer time frame for outcomes, suggests that three-year investment strategies are more appropriate. While noting the recent progress in establishing three-year agreements in some States, there is now scope for seeking a commitment from the remaining States/Territories and regions for three-year investment cycles. This should help to strengthen the strategic focus of the investment process and lessen the transactional costs of the program.

Managing and reporting performance (Chapter 4)

17. The management of the NAP has involved joint arrangements between the Department of Agriculture, Fisheries and Forestry and the Department of the Environment and Heritage as well as joint arrangements between the Australian Government and those of the States/Territories. The joint delivery approach between Australian Government agencies has been an innovative and efficient response to program delivery and has demonstrated the advantages of simplifying the 'face of government' to clients.

18. The architecture of the governance arrangements has included a Ministerial Council, joint Australian Government/State Steering Committees and a national monitoring and evaluation framework. Regions are responsible for the on-ground delivery of the program, the achievement of milestones, and for reporting on performance. However, the capacity of regions to deliver the program introduces new risks and challenges. In particular, evidence from a recent Victorian Auditor-General report has highlighted some of the risks from the significant increase in Australian Government funding for regional bodies.[4]

19. While recognising the efforts made to implement training and enhance accounting systems for regions, it is essential to scale up corporate governance arrangements so that financial and project management systems and procedures match the level of risk—particularly in terms of managing potential conflicts of interest, and in improving the quality and consistency of output reporting. Evidence from the ANAO survey of the regions was that four regions in particular would benefit from improved training for board members on their responsibilities and potential liabilities.

20. Expenditure under the program has been substantially below that originally intended and appropriated. Delays in the planning stage of the NAP, combined with the technical challenges in completing regional plans, have been particular constraints. The NAP has only commenced significant investment in the 2003–04 financial year. Delays in funds reaching the regions have also been noted following approval and payment into the State accounts. Moving towards a focus on three-year funding agreements across all States/Territories should assist in expediting the program and removing some of the bottlenecks in decision-making and program expenditure.

21. The monitoring and reporting framework for the NAP is generally sound. However, to date, as with most stages of the program, there have been delays in establishing the framework. Performance reporting has been based on estimates rather than on actual performance. Greater attention to ensuring a consistent quality of actual performance outputs should be a high priority for the remainder of the program. It will be particularly important to report over time on the extent to which concentrated action under the program has lead to significant land or water use change.

Overall audit conclusion

22. The ANAO concluded that the administration of the National Action Plan for Salinity and Water Quality has been characterised by delays that have

---

[4] Victorian Auditor-General, *Report on Public Sector Agencies*, November 2003, pp. 193–223.

had flow-on effects for all stages of program implementation. It is only since 2003–04 that substantial investment in on-ground initiatives has occurred.

23. The reasons for the delays related largely to intergovernmental tensions over policy and funding matters. Agencies have indicated that they were seeking to achieve longer-term natural resource policy outcomes and that, consequently, there was little scope for compromise on the fundamentals of the agreements. However, further delays were then experienced at all stages of the rollout of the program.

24. To date, the program has achieved significant institutional change and facilitated planning and specific management action in identified NAP regions. This action will take some years to complete, but it should be possible to determine whether the results are likely to be cost effective and appropriately targeted by the end of the current program. Assessing the achievement of targets concerned with 'preventing, stabilising and reversing trends in salinity and improving water quality' is a long-term exercise. The consensus from consultations during the course of the audit, indicates that this will not be possible within the eight-year timeframe originally envisaged for the NAP. Consequently, to maximise program impact, the dissemination of information relating to good practices and lessons learned on a national basis, will be a crucial part of the process over the remaining years of the program.

25. The delivery of the program through regional bodies is a new and evolving process for agencies. High-level risks and corporate governance arrangements have been considered by agencies and the joint delivery approach between the two Australian Government agencies has demonstrated the advantages of simplifying the face of government to clients. The architecture of the governance arrangements has been specifically designed to reflect the challenging and unique characteristics of natural resource management.

26. However, at the regional level, strong and concerted action by all stakeholders is required if the program risks are to be effectively managed. In particular, there are substantial residual risks in small, newly established, community-based bodies having primary responsibility for delivering challenging outcomes and managing substantial allocations of Australian Government funds.

27. The ANAO intends to conduct a follow-up audit prior to the current NAP completion date of 2008 to provide Parliament with an assessment of the administrative effectiveness of the program.

Agency responses

28. The agencies have advised the ANAO of their joint response to the audit at Appendix 3. The response to the Executive Summary is as follows:

> The Departments of Agriculture, Fisheries and Forestry and the Environment and Heritage agree with the recommendations. The report has identified areas for improvement that build upon the landmark and pioneering approach the NAP has taken to natural resource management. Departments are committed to addressing each recommendation. Communities and regional bodies across the continent are developing and implementing a consistent and integrated NRM regional planning regime for landscape change and sustainable use of natural resources. Government investment is focussed strategically and targeted at outcomes identified in the regional plans. The NAP has contributed to significant institutional and policy reforms in the States / Territories which complement the on-ground investments made.
>
> The NAP is managed adaptively using feedback mechanisms such as the science-based National Monitoring and Evaluation Framework and the Community Forum, involving the chairs of the regional bodies. Additionally there is a comprehensive governance structure including agreements with the States / Territories and the joint delivery by the two agencies. Regional governance is maturing and best practice experiences will be used to promote good governance to all regions.
>
> Delays in expenditure in the early years arose due to the time required to engage and build capacity of communities, and negotiations with some states to agree the institutional and policy reforms needed to secure the investments made by government. Regions are now submitting plans and investment strategies to achieve the goals of the NAP.
>
> Knowledge management is central to the successful implementation of the NAP. Effective information exchange between regions and research organisations and governments is a priority.
>
> Due to the complex nature of NRM problems, the full effect of the NAP will be realised well beyond the life of the program. However, the institutional and policy reforms are expected to address the root cause of many salinity issues and the regional structures and program measures will continue to promote strategies to prevent, reduce or live with salinity.

Recommendations

Sets out below are the ANAO's recommendations with a joint response from the agencies. More detailed responses are shown in the body of the report.

Recommendation No.1 Para 2.16

The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage ensure that, in all future policy processes involving the allocation of public funds to selected regions or areas of need, analysis is documented to demonstrate the comparative assessment of needs as a basis of policy decisions.

Agency Response: Agree.

Recommendation No.2 Para 2.27

The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage, as part of the quarterly update of the risk management plan, give priority to:

(a) facilitating the documentation and management of key risks at the regional level, through the guidance of the joint steering committees; and

(b) ensuring that all significant risks to the objectives of the program emerging from research and practice are documented and considered within the ongoing implementation of the program.

Agency Response: Agree.

Recommendation No.3 Para 3.15

The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage in consultation with other service providers (including State and Territory agencies and national level research providers) develop measures to strengthen the access by NAP regional bodies to lessons learned and better practice NRM relevant to salinity and water quality in the NAP priority regions. These measures may include mechanisms to better link research providers to users and facilitate research at the

appropriate scale and in forms that can be better utilised by regional bodies.

Agency Response: Agree.

Recommendation No.4 Para 3.51

The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage, consult with the relevant State and Territory agencies, and regional bodies, as part of a concerted effort to introduce three year funding arrangements (as originally proposed) as soon as practicable.

Agency Response: Agree.

Recommendation No.5 Para 4.20

The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage consult with State and Territory agencies about developing appropriate corporate governance templates and core training/information to enhance the capacity of regional bodies to meet sound corporate governance practices.

Agency Response: Agree.

Recommendation No.6 Para 4.46

The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage in consultation with other service providers (including State/Territory agencies) consider implementing an integrated approach to quality assurance for, and the standardisation of, financial and performance data outputs across regions.

Agency Response: Agree.

Audit Findings and Conclusions

1. Background

This chapter provides an introduction to salinity and water quality issues and the National Action Plan for Salinity and Water Quality. The chapter also outlines the audit objective, scope and methodology as well as the structure of the report.

What is salinity and what are the threats to water quality?

1.1 Salinity is a natural part of the Australian landscape. Over geological periods of time, vast quantities of salt have accumulated in the Australian landscape. Some of the salts have been released by rock weathering (particularly from marine sediments), but most have been deposited in rainfall over the millennia, having been carried inland from the sea by the wind. Salt stores have accumulated because there is little capacity to drain the continent of salt and water.[5] Prior to European settlement and widespread land clearing, native vegetation adapted to the salt and a water balance existed.

1.2 The process of secondary (human induced) salinisation is caused by the mobilisation of these natural salt stores in the landscape. Since European settlement, native perennial vegetation has been replaced with shallow-rooted annual crops and pastures which has increased the amount of leakage into the groundwater, thereby mobilising salt within the landscape.

1.3 Dryland and other forms of secondary salinisation have been recognised for some time. The principal cause of dryland salinity has been known for 50 years or more, and the effects of dryland salinity on native vegetation have been known for 70 years.[6] However the national significance and scale of the challenge was highlighted to the government and the Parliament in published reports from the Prime Minister's Science, Engineering and Innovation Council (1998) and the National Land and Water Resources Audit (NLWRA) in 2000.

1.4 Secondary salinisation is one of Australia's most costly environmental issues causing damage to roads, buildings, agricultural production, rivers and water supplies.[7] The NLWRA also documented the loss of production in agricultural regions, damage to infrastructure and the substantial impacts on biodiversity and water supplies as being the main impacts of salinity. Salinisation can also affect the supply of drinking and irrigation water, with

---

5 National Land and Water Resources Audit, *Australian Dryland Salinity Assessment*, 2000, pp. 44–46.

6 S Briggs & N Taws, *Prospects for Biodiversity in Salinising Landscapes—Impacts of salinity on biodiversity—a clear understanding or muddy confusion?*, 2003, CSIRO/Australian Journal of Botany, Volume 51 Number 6, 2003, pp. 609–617.

7 Bureau of Rural Sciences, op.cit., p. 1.

serious economic, social and environmental consequences for rural and urban communities. Evidence from the NLWRA indicates that one-third of Australian rivers are currently in extremely poor condition.

1.5 A summary of the assets in areas of high risk or with a high salinity hazard was outlined by the NLWRA and is set out below in Table 1.1.

Table 1.1

Summary of assets within areas of high salinity hazard

Asset	2000	2020	2050
Agricultural land (ha) [A]	4 650 000	6 371 000	13 660 000
Remnant and planted perennial vegetation (ha) [B E]	631 000	777 000	2 020 000
Length of streams and lake perimeter (km)[B]	11 800	20 000	41 300
Rail (km) [B]	1 600	2 060	5 100
Roads (km) [B]	19 900	26 600	67 400
Towns (number) [C]	68	125	219
Important wetlands (number) [A D]	80	81	130

[A] Data from all States, Queensland only for 2050
[B] Data from Western Australia, South Australia, Victoria and NSW, Queensland only for 2050
[C] Data from Western Australia, South Australia, Victoria and NSW
[D] Including Ramsar wetlands (i.e- listed wetlands of international significance)
[E] Much of the remnant and perennial vegetation reported for each State occurs on agricultural lands.

Source: National Land and Water Resources, *Australian Dryland Salinity Assessment*, 2000, p. 8.

The response from Australian Governments

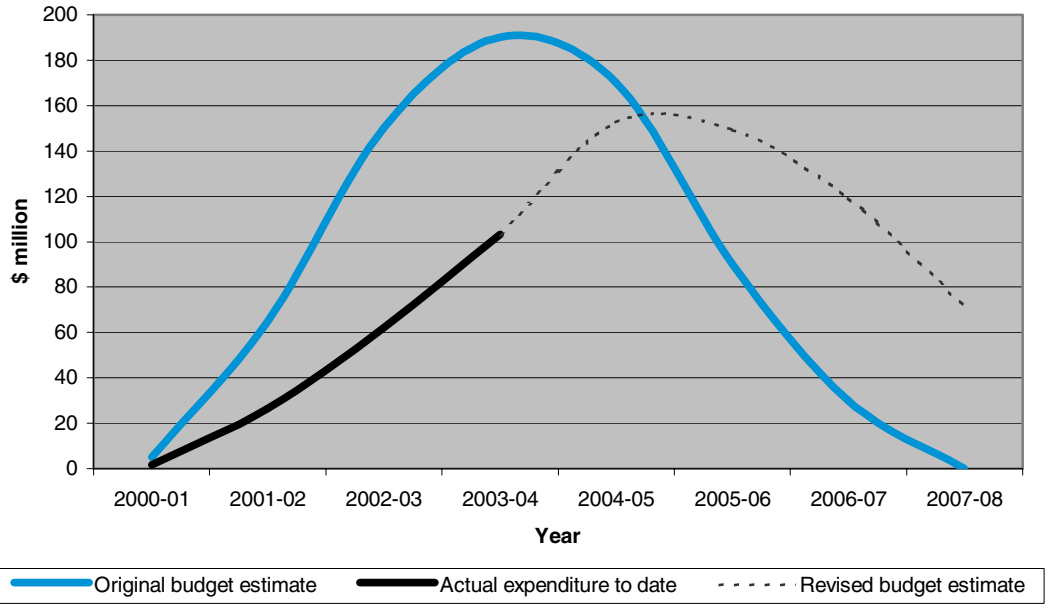
1.6 In 2000, dryland salinity and deteriorating water quality were regarded as seriously affecting the sustainability of Australia's agricultural production, the conservation of biological diversity and the viability of infrastructure and regional communities. Within this context, the Australian Government recognised that substantial land and water use change may be required to address the challenges to the viability of regional communities.

1.7 At the Council of Australian Governments' meeting in November 2000 a National Action Plan for Salinity and Water Quality (NAP) was agreed, involving expenditure of $1.4 billion over the next seven years. The Australian Government contribution was estimated at up to $700 million over this period with a requirement for the States/Territories to match this contribution with new funding. The level of appropriations is outlined in figure 1.1 and table 1.2 .

1.8 The goal of the NAP is to motivate and enable regional communities to use coordinated and targeted action to prevent, stabilise and reverse trends in dryland salinity affecting the sustainability of production,[8] the conservation of biological diversity and the viability of infrastructure; and improve water quality and secure reliable allocations for human uses, industry and the environment.

Figure 1.1

Total original and revised estimates for the Australian Government NAP contribution (2000–01 to 2007–08).



	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006-07	2007-08
Original budget estimate ($ million)	5	65	150	190	170	90	30	0
Actual expenditure / Revised budget estimate [A] ($ million)	***1.7***	***26.5***	***62.1***	***103.2***	152.7	149.1	119.3	71.6

[A] Estimates for the NAP were re-phased in the budget of 2001–02 and again in 2002–03 to address program underspends. A further re-phasing is anticipated for subsequent out years in order to align with the original $700 million commitment.

Source: ANAO based on figures from DAFF.

[8] Production refers to agriculture, fisheries and forestry.

1.9 The program was set up to be administered as a joint exercise between the Australian Government and each State and Territory Government. At the federal level, the Department of Agriculture, Fisheries and Forestry (DAFF) and the Department of Environment and Heritage (DEH) have joint responsibility for the program delivery. At the State and Territory level, the NAP was to be delivered by the relevant agencies with responsibility for Natural Resource Management (NRM) in that jurisdiction. In addition, the joint management arrangements extended to a Ministerial Council and a Joint Steering Committee (JSC) of Officials for each State and Territory and the Australian Government.

1.10 The NAP is targeting 21 'priority regions' across Australia. In total, 34 regional bodies are responsible for the delivery of the program within these 21 priority regions. Each region is covered by an NRM plan that provides guidance for regional investment under the NAP as well as other programs such as Natural Heritage Trust (NHT).[9] This regional approach is a significant change from the project application/submission model used for earlier natural resource management programs such as the NHT phase 1.

Audit objective and scope

1.11 The objective of the audit was to examine and report on the planning and corporate governance for the new regional delivery model of the NAP program. The scope of the audit encompassed the responsible divisions within DAFF and DEH. Both agencies have been involved in the implementation of the program in partnership with State and Territory agencies and regional bodies in the priority areas.

Audit methodology and structure of the report

1.12 The audit methodology was based on a review of files and records along with interviews with staff from the federal agencies involved in implementing the program. The ANAO also consulted with and invited submissions from State and Territory agencies and interested parties. Eleven formal submissions were received. A list of those making submissions is set out at appendix 2. A structured survey of all regional bodies involved in delivering the program was also carried out. Twenty-six responses (76 per cent of the regional bodies involved in delivering the program) were received and

---

[9] The NHT was set up by the Australian Government in 1997 to help restore and conserve Australia's environment and natural resources. In the 2001 Budget, the Australian Government announced an additional $1 billion for the NHT (phase two), extending the funding for five more years and ensuring the future of many important ongoing activities. The NHT received a further $300 million increase in the 2004 Budget, extending the funding until 2007–08.

used to provide an aggregated analysis of the perceptions of the program structure and delivery at the regional level.

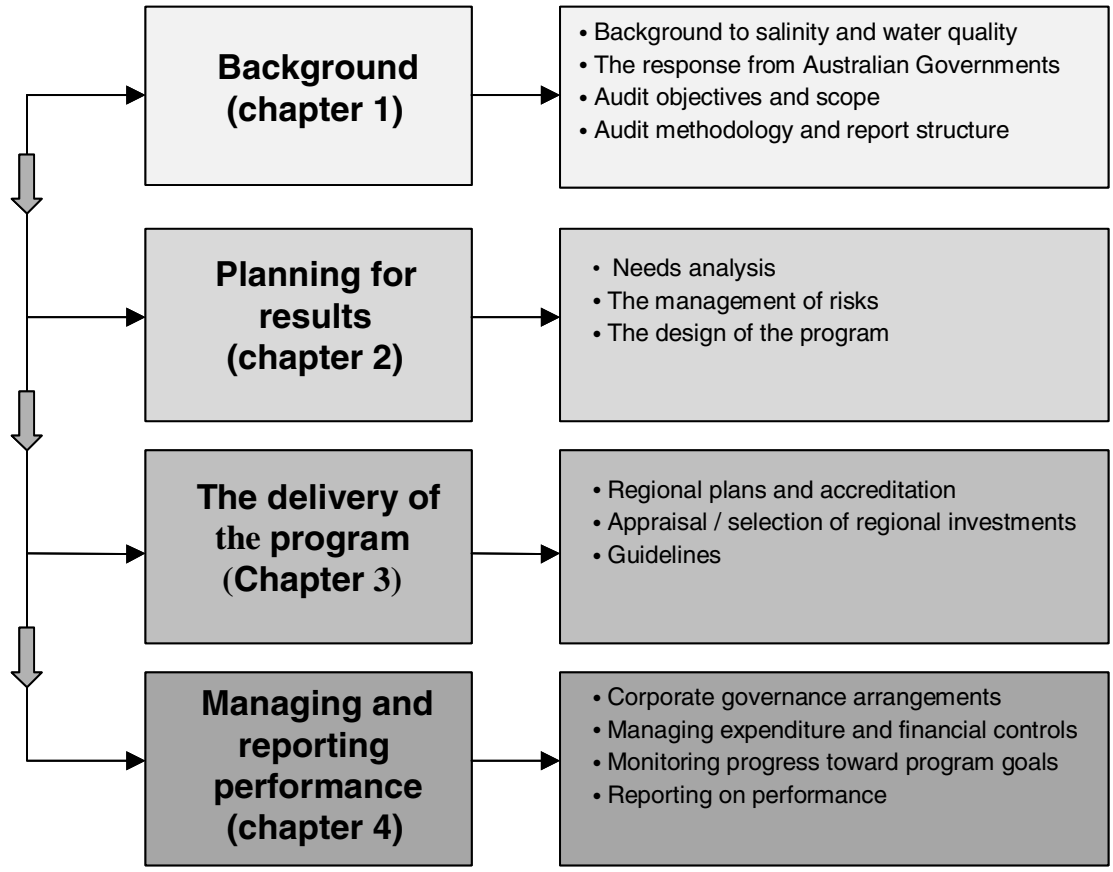
1.13 Direct consultations were also conducted with State and regional officials as well as interested parties in NSW, Victoria and Western Australia. The audit team also conducted site inspections of salt-affected regions in Victoria, New South Wales and Western Australia. The audit was conducted in accordance with ANAO auditing standards. The audit commenced in May 2004 and the bulk of the fieldwork was conducted between May and June 2004. The total audit cost was $311 200.

1.14 In developing the audit methodology, the ANAO took into account the six proposed elements to achieve lasting improvements for the NAP. These included, targets and standards, integrated management plans for catchments, capacity building, improved governance framework, clearly articulated roles and a public communication program. These elements are discussed throughout the report.

1.15 The report structure is outlined in figure 1.2.

Figure 1.2

Report structure



Source: Developed by the ANAO.

2. Planning for Results

This chapter examines how the relevant federal agencies planned to deliver the National Action Plan for Salinity and Water Quality. This includes a discussion of needs analysis, risk management and the design of the program.

Needs analysis

2.1 A needs analysis is an important part of the initial planning process for new programs. It is essential to demonstrate that program funds are well targeted and likely to achieve a value for money result within the anticipated timeframe.

Consideration of the need for the program

2.2 Documentation to support the basis of measures to address salinity and water quality was publicly available prior to the introduction of the NAP. In particular, reports by the Prime Minister's Science, Engineering and Innovation Council (PMSEIC; 1999) and the National Land and Water Resources Audit (NLWRA; 2000) provided assessments to justify the program. The NAP also built on some of the lessons learned from previous programs, including the National Landcare Program, and those highlighted in the ANAO Audit No.43 2000–01 *Performance Information for Commonwealth Financial Assistance under the Natural Heritage Trust* and the agency evaluation of the NHT.

2.3 In considering the need for the program and new expenditure, Ministers were advised that at least five per cent of cultivated land (2.5 million hectares) was affected by dryland salinity and that this could rise to as high as 22 per cent (12 million hectares) at the current rate of increase. The potential areas of high salinity hazard are outlined in figure 2.1.

2.4 The risks to water quality in eastern Australia were such that within 20 years Adelaide's drinking water was expected to fail World Health Organisation salinity standards in two days out of five. The cost of land and water degradation (excluding weeds and pests) was estimated at $3.5 billion per annum in economic terms in 2000 while the known biodiversity impacts were that bird species had been reduced in some agricultural areas by 50 per cent. Severe damage to rural infrastructure (buildings, roads [10]etc) was also documented as noted earlier in table 1.1.

2.5 Importantly, the PMSEIC report noted that:

---

[10] Council of Australian Governments., op. cit, p. 1.

> the time scales over which salinity establishes itself, spreads and has its effects can be long, but once established it can be very difficult or impossible to contain or reverse. As a consequence, salinity must inevitably continue to get worse in Australia as a result of land use decisions already made.[11]

2.6 Agencies advised the Australian Government that while the problems were severe, they could be substantially overcome with determined and sustained leadership, the right incentives and scientifically sound interventions. Concentrated action by governments and communities was considered necessary to lead to land use change supported by the application of scientific advances in mapping salinity, targeted tree planting and new cropping systems to manage salinity and water quality, and selected engineering solutions.

2.7 Overall, there was strong and timely evidence available to suggest that there were substantial needs in relation to salinity and water quality. These needs were of sufficient concern to warrant an appropriate and coordinated response from governments.

Selection of regions to be funded

2.8 As illustrated on the maps in figures 2.1 and 2.2, the threats from salinity differ across the landscape in terms of severity and type. As a consequence, determining the priority of areas for financial assistance to address salinity and water quality was essential. Agencies, in their early advice to Ministers, recognised that program funds should be preferably targeted to areas that were 'ready to commence detailed action planning or where investments now will avoid costly degradation in the future.'

2.9 Nevertheless, the selection of regions became an iterative and lengthy process. In October 2000 Australian Government Ministers considered an indicative list of 15 possible regions from which eight to twelve were to be selected. These regions were identified on the basis that they covered 'the majority (around three quarters) of the area currently identified as being highly affected or causing salinity (2.5 million hectares) or having water quality problems or at salinity risk (15 million hectares)'.

2.10 However, after consideration of the scale of the salinity and water quality problems in the Australian landscape, and the scope of the changes needed, Australian Government Ministers were interested in expanding the program to cover 'all of the areas for priority action' although this was not specifically defined. This involved increasing the indicative list of regions from up to 12 regions to the 20 most affected catchments, as well as increasing the budget from $500 million over five years to $700 million over seven years.

---

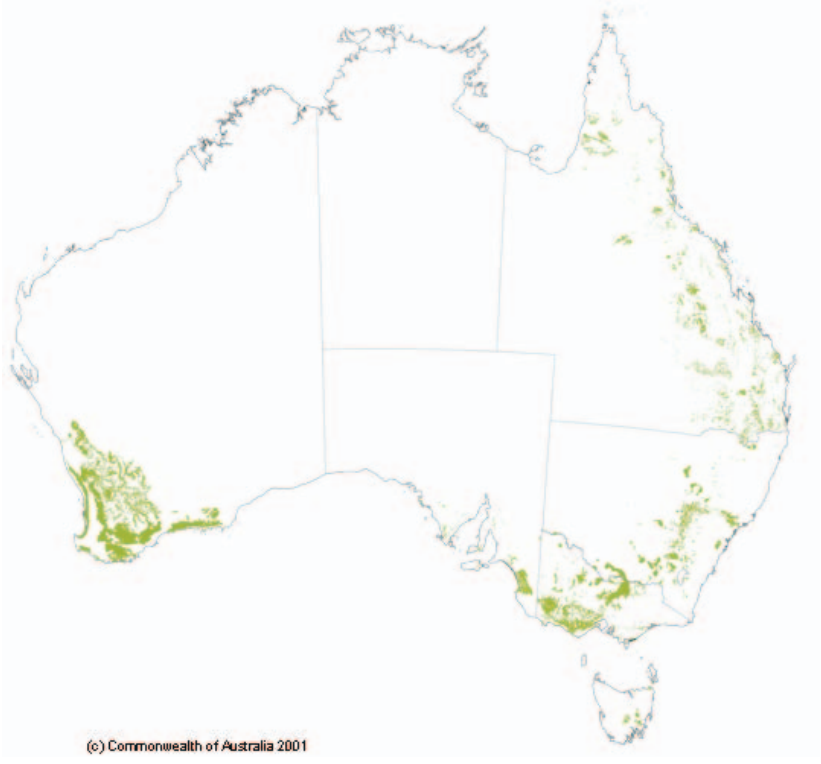
[11] Prime Minister's Science, Engineering and Innovation Council, *Occasional Paper No.1*, 1999, p. 8.

2.11 The final selection of regions was progressively negotiated with the States/Territories. The negotiations were contentious with differences of opinion on priorities apparent between Australian Government agencies and some States/Territories. During this period, there were negotiations over whether particular catchments were to be included in the NAP and whether they had significant salinity or water quality problems or were already receiving sufficient government funding.

2.12 Eventually, by May 2002, the Australian Government and all States/Territories had accepted a final list of 21 'priority regions' and entered into an intergovernmental agreement to formalise the program. The final 21 'priority regions' are outlined in figure 2.3. Because of the scale and diversity of these 21 regions, some 34 regional bodies are responsible for the delivery of the program at a sub-regional level.

Figure 2.1:

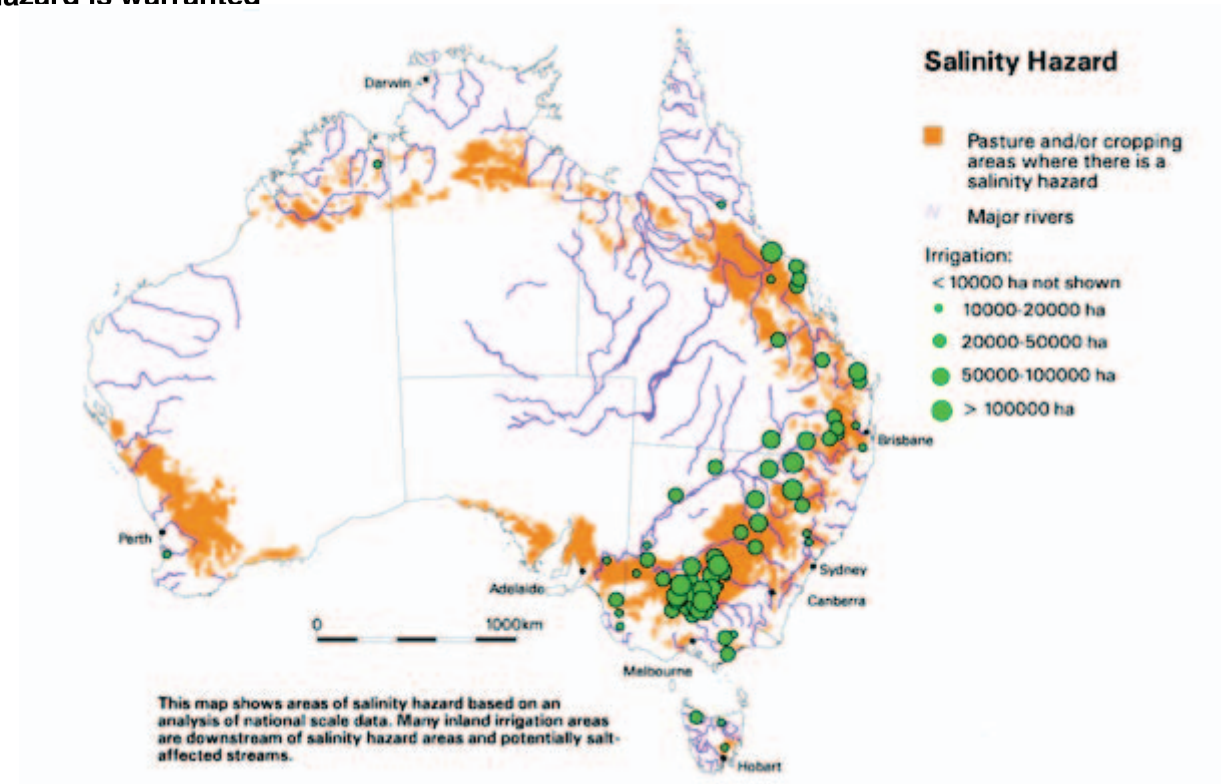
Challenges in reconciling salinity hazard assessments—National Land and Water Resources Audit—predicted areas of high salinity hazard, or risk, in 2050



Source: Ministerial Council Annual Report 2002–03 sourced from the National Land and Water Resources Audit.

Figure 2.2

Challenges in reconciling salinity hazard assessments—Bureau of Rural Sciences, area where further investigation of dryland salinity hazard is warranted



Source: Bureau of Rural Sciences May 2000

Figure 2.3
National Action Plan priority regions

Source: Ministerial Council Annual Report 2002–03

2.13 Evidence indicates a general alignment between the final regions identified with salinity or water quality problems (or potential problems, see figures 2.1 and 2.2) and those regions included for financial assistance under the NAP (see figure 2.3). The regions selected for funding include most of the primary agricultural regions of Australia.[12] The ANAO survey of regions highlighted that the majority of regions considered that their boundaries were appropriate and reflected coherent districts with common problems and potential solutions. Documentation from briefings and correspondence to/from the States/Territories during the negotiation process provides some evidence as to the reasons for the inclusion (or otherwise) of particular regions in the NAP.

2.14 However, the assessment process would have been improved through documentation outlining a comparative analysis of needs. While agencies had initiated a comparative analysis, it was not completed. The protracted nature of the negotiations was a contributing factor. Consequently, the file record does not explain how the agencies:

- 'weighted' regional priorities and needs in order to demonstrate consistency and fairness in setting funding priorities; or
- addressed the conflicting technical assessments. For example, it is difficult to reconcile the selection of regions from the salinity hazard risk assessment. This is because different methodologies and scales used in the various studies have produced conflicting assessments of hazards.[13]

2.15 The ANAO recognises that the NAP was not intended to meet the needs of all regions in Australia and that some rationing must occur if the program is to be well targeted and achieve value for money results. An objective assessment of needs was the basis of the early advice to Ministers. Documentation explains particular reasons for some individual decisions. While noting the protracted nature of the negotiations, the documentation does not explain the relative merits of selected regions on a comparative basis and does not provide sufficient assurance that all those regions selected were necessarily those 'most affected'. Agencies have accepted that their file documentation could be improved and are establishing protocols and information sessions for all staff to improve the documentation of decisions

---

[12] A survey in 2002 found that the NAP regions included 17 000 farms (87 per cent) showing signs of salinity and 1.3 million hectares or 66 per cent of the area showing signs of salinity. (Australian Bureau of Statistics, *Salinity on Australian Farms*, ABS, Aus Stats 4615.0, 2002, p. 2.).

[13] Studies that used rising groundwater levels produced different results to those using stream sampling which were based on an analysis of groundwater flow and airborne geophysical data. See for example the comparison between figure 2.1 and 2.2.

and file management. While this a positive step forward, the ANAO considers that performance could be further enhanced by ensuring that policy decisions of this type are supported by a comparative assessment of need.

Recommendation No.1

2.16 The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage ensure that, in all future policy processes involving the allocation of public funds to selected regions or areas of need, analysis is documented to demonstrate the comparative assessment of needs as a basis for policy decisions.

Joint agency response

2.17 Agreed. The report notes that regions were selected on the basis of iterative and contentious negotiations with the States/Territories. Additionally the ANAO survey of regions highlighted that the majority of regions considered that their boundaries were appropriate and reflected coherent districts with common problems and potential solutions. The report also notes that decisions on regions for the NAP were based on scientific assessments of salinity hazard. Other factors considered in the selection of regions include the value of assets affected and likelihood of preventing or addressing problems.

2.18 The views of the States/Territories were also taken into account in the final selection of regions. Natural resources information is frequently complex, commonly updated as new information or techniques become available based on new information and experience. Recognising this complexity, agencies will ensure that where resources are allocated between regions, a comparative analysis will be produced to demonstrate the basis upon which decisions are being made. Information to underpin such analyses will be built into the agencies knowledge management framework reflected in joint Policy and Procedures Manuals.

The management of risks

2.19 The management of risks is an integral part of the prudent administration of programs involving the expenditure of public funds. It should include a framework for cost effectively treating or minimising the risks to the program such as the realisation of program objectives or value for money outcomes. It is both an accountability and a management tool and should form an early part of program design to assist Ministers and agencies in their decision-making.

2.20 From the existing records of the development of the NAP, there is evidence that Ministers were advised of some of the potential higher order risks in the early stages of the program (late 2000). Following endorsement, the

agencies put in place mechanisms designed to address these risks. For example, the importance of the Australian Government and the States/Territories contributing equally to the program was identified early and became an integral part of formal partnership agreements. The timing of expenditure was recognised as being 'quite uncertain' as it depended on factors such as the length of time to progress regional initiatives. The timing issue was to be addressed through the Budget process and through a timetable jointly agreed by the Australian Government and the States/Territories.

2.21 A risk management plan for the NAP and the NHT was introduced in 2003–04 following agreements being reached with all States/Territories (except the ACT) through bilateral agreements. The plan included a quarterly review mechanism to update the risk assessment to take account of any changes in the business environment along with the proposed treatment. A sample of the risks highlighted in the plan included the:

- risk that the effective and timely delivery of programs using the regional model will be delayed/slowed;
- potential constraints to achieving the management targets for change in salinity and water quality in the regions over the life of the program; and
- challenges for regional bodies in making hard decisions on major land use change and tradeoffs.

2.22 While this initial Risk Management Plan highlighted some of the key challenges in realising the intended outcomes of the NAP, recent research has highlighted the importance of ongoing risk management at the regional level.

2.23 Recent research has highlighted the existence of ongoing risks and challenges for the program. The National Dryland Salinity Program (NDSP) that was funded in part through the NAP, documented many of these.[14] Some of these risks were also recognised as a key issue by the House of Representatives Committee report into Science and Salinity. The risks and challenges highlighted include that:

- salinity will not be addressed comprehensively with targeted revegetation treatments or discharge management (see figure 2.4) . The hope of finding a low cost solution, such as planting a relatively small proportion of the landscape with trees in strategic areas, is no longer

[14] 'Key lessons from the National Dryland Salinity Program' cited in House of Representatives Standing Committee on Science and Innovation, *Science Overcoming Salinity: Coordinating and extending the science to address the nation's salinity problem,* May 2004, Appendix E.

tenable—except where there are responsive, local aquifers which may yield a net benefit;

- the best that can be hoped for from recharge treatments is a slowing down of the rate of future salinisation. Rehabilitation of existing salinity damage is generally not economically viable, owing to the sluggish response of water tables to recharge reductions. The focus of policy should be on preventing future damage to high value assets, and on carefully prioritising on-ground investment so as not to waste money;
- revegetation management remains the key to managing water resources, although cost-benefit of revegetation catchments requires careful analysis. Cleared catchments can contribute to salinity but they also provide twice as much water for consumptive use compared with uncleared catchments. Also, close attention will need to be paid to the cost-benefits of protecting public versus private assets as well as revegetation. In some situations direct investment in public works to protect public assets may be more efficient than efforts to protect agricultural land;
- living with salt will become inevitable if profitable plant-based solutions are not available. Some salt land pastures have already proven viable, as well as profitable, but these need refinement and their use requires a mindset change among many farmers; and
- lack of capacity is an important, but secondary constraint, to managing salinity. Lack of skills, management expertise, poor access to information and financial difficulties are by no means the most significant factors in constraining land use change. In the absence of commercially attractive treatment options, it is unrealistic to expect farmers to change their current annual farming systems in favour of perennials or agroforestry. Under these circumstances no amount of capacity building or training will facilitate change.[15]

[15] In June 2004, this point was supported in a report for the Grains Research and Development Corporation. The report found that 'growers were aware of many of the intervention options such as Lucerne planting, agro forestry and engineering solutions. However these were regarded as being expensive in terms of upfront cost and forgone income. For many farmers, most intervention options were not regarded as being as profitable as annual crops and they were not convinced that major land use change would achieve the desired results at a landscape scale'. (House of Representatives Standing Committee on Science and Innovation, *Science Overcoming Salinity: Coordinating and extending the science to address the nation's salinity problem*, May 2004, p. xxxiii.)

Figure 2.4

Evidence of salinity from a line of dead trees in Western Australia

The above figure demonstrates the gradual expansion of salinity overtime at Lake Taarblin in Western Australia. In the foreground, the 'salt scald' has little remaining vegetation with the exception of saltbush. In the middle distance, the vegetation has died from the expansion of the saline aquifer while in the background the vegetation is still alive. This figure illustrates the importance of carefully targeting revegetation initiatives to avoid wasted resources. This is an important lesson learned for NAP risk management.

Source: ANAO June 2004

2.24 While noting that the program was designed to build capability at the regional level to find viable solutions appropriate to each region, there is a substantial risk that the anticipated results will not be achieved over the current life of the program. The ANAO notes that a DAFF internal report in March 2004 considered risk management in 28 priority plans, foundation funding proposals and regional plans. Of these, only five plans had any type of risk management formally documented.[16] These challenges, combined with

[16] Australian Government Department of Agriculture, Fisheries and Forestry, *The National Action Plan for Salinity and Water Quality Internal Audit Report*, March 2004, p. 12.

limited options for farmers and the delays that have already occurred create a high-risk business environment for the NAP.

2.25 The ANAO considers that the risk management plan that was introduced in 2002–03 did highlight some key issues. The need to continually adapt to emerging and unforeseen technical and scientific challenges highlights the importance of having an up-to-date risk management plan. Recent research by the Bureau of Rural Sciences (BRS) has highlighted the potential for better targeting of management action in some regions to the variable salt stores in the landscape.[17]

2.26 However, given that the program is delivered at the regional level, risk management should also be comprehensively adopted at the regional level. For the remainder of the program, there are substantial, residual risks identified that need to be treated as a matter of urgency if the program is to be ultimately effective in achieving its objectives.

Recommendation No.2

2.27 The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage, as part of the quarterly update of the risk management plan, give priority to:

(a) facilitating the documentation and management of key risks at the regional level, through the guidance of the joint steering committees; and

(b) ensuring that all significant risks to the objectives of the program emerging from research and practice are documented and considered within the ongoing implementation of the program.

Joint agency response

2.28 Agreed. The agencies currently include risks to regional delivery in the joint risk management plan. As a part of the Monitoring and Evaluation Framework annual evaluations, in 2004–05 agencies are reviewing current governance arrangements, including documenting and managing risk at the regional level. Some regions are developing a risk management plan at the regional level and discussions have commenced with Victoria about a 'whole-of-State' approach to managing risk at the regional level. Experience with these 'pilots' will be used to extend the risk management approach.

2.29 Agencies, in conjunction with States/Territories and regional bodies, will explore options to identify and respond to these risks using the

[17] Bureau of Rural Sciences, op.cit., p. 4.

monitoring and evaluation mechanisms currently in place. The risk management strategies will be updated as necessary.

2.30 Additionally, agencies, in conjunction with the States/Territories and regions, will monitor new knowledge from salinity research and program experience and document the risks and opportunities so that they can be built into future program development and project implementation at the regional level. The forward program of evaluations under the NAP and NHT includes a review of the salinity responses from the programs.

The design of the program

2.31 A well-designed program is crucial to the realisation of its objectives and anticipated outcomes. Clear, measurable objectives that specify the outcomes or results expected are key elements of good program design and management. The more specific the objectives, the easier it is to develop criteria for funding and an appropriate performance information framework. The design should take into account the major risks identified and have a focus on timely, value for money results.

2.32 The NAP program design was based on many of the key features recommended by the PMSEIC report (1998) including; the need to foster genuine commitment to change and improvement; an assessment of the costs and benefits of action; the importance of dealing simultaneously with the biological, physical, social, economic, policy and institutional factors involved; addressing causes rather than symptoms and enlisting the involvement of all key players in the process.[18] Key features of the program were the goal and performance information, the intergovernmental and bilateral agreements, the regional delivery model, and the coordination with existing programs and institutions.

Goal of the Action Plan and performance information

2.33 The primary goal of the NAP is 'to motivate and enable regional communities to use coordinated and targeted action to prevent, stabilise and reverse trends in dryland salinity affecting the sustainability of production, the conservation of biological diversity and the viability of infrastructure; and improve water quality and secure reliable allocations for human uses, industry and the environment.'[19]

2.34 This goal is clear, if somewhat broadly stated. Given the risks involved it could be regarded as ambitious given the scale and diversity of the salinity

---

[18] Prime Minister's Science, Engineering, Innovation Council Report, op. cit., p. 8.

[19] Natural Resource Management Ministerial Council, *Annual Report 2002–03*, May 2004, p. 6.

and water quality challenges across the Australian landscape and the range of private and public interests involved. This conclusion is supported by the PMSEIC Report (1999) that commented as follows:

> The salinity problem is serious and getting worse. It is putting at risk the economic and environmental sustainability of whole rural communities. The number and areas impacted will increase due to past actions; regardless of what actions we take now. At best we can slow the rate of increase and, in time, restrict the damage; it is unlikely we can reverse it.[20]

2.35 Nevertheless, the PMSEIC report went on to say that, 'the problem can not be ignored, due to the social and environmental degradation it will cause'.[21]

2.36 Given the uncertainties and obvious risks, the ANAO would expect that operational objectives, targets or standards would underpin the NAP goal. These were important given the long lead times associated with the goal of the NAP and the challenges involved in managing the risks.

2.37 In the design of the program, each region was required to develop specific targets and standards for salinity and water quality management. The NAP was intended to overcome the design shortcomings identified with the NHT where a lack of specific outcomes (including intermediate outcomes) and targets for water quality, salinity and other NRM attributes were recognised as a major barrier to reporting on results from the program. This issue was discussed in Audit Report No.43 2000–01 *Performance Information for Commonwealth Financial Assistance under the Natural Heritage Trust.*

2.38 The uncertainties involved and the long lead times for results in terms of resource condition highlight the importance of milestones and intermediate outcomes to measure progress towards the objective over the life of the program. The NAP performance information has been designed to measure progress against three levels of targets:

- **Aspirational targets**—that is, desirable longer term targets such as average salinity in streams or the extent of native vegetation cover over a 50 years + time horizon;
- **Achievable resource condition targets**—Pragmatic, achievable targets set over a 10–20 year time horizon relating to matters such as water quality in a particular stream or a specific native vegetation type within a region by a particular date; and
- **Management action targets**—Management action over a 1–5 year time horizon relating to matters such as the number of hectares of recharge

---

[20] Prime Minister's Science, Engineering, Innovation Council Report, op. cit., p. 9.

[21] ibid.

zones within a region to be revegetated by a particular year, the number of kilometres of fencing to be constructed for conservation purposes by a specific time. [22]

2.39 The ANAO considers such targets reflect a considered approach to performance management and provide a worthwhile mechanism to measure both intermediate and longer-term program performance. The primary constraint to the effectiveness of the targets was the absence of baseline data in a number of the less advanced regions. In effect, the NAP provided the resources to overcome some of the technical constraints to measuring NRM changes.

2.40 The NAP targets are also designed to be integrated with a set of broader resource condition targets that are yet to be finalised. These targets are applicable across all NRM programs and include:

- dryland salinity;
- soil condition;
- native vegetation communities' integrity;
- inland aquatic ecosystems integrity;
- nutrients in aquatic environments;
- turbidity/suspended particulate matter in aquatic environments; and
- surface water salinity in freshwater environments.

2.41 The design of the resource condition targets is sound. However, it might also be useful to include measures of infrastructure condition where there are management action planned in this field. This is important given the relevance of infrastructure to the program objective (see figures 2.5 and 2.6).

[22] Natural Resource Ministerial Council, *National Framework for Natural Resource Management Standards and Targets*, April 2003, p. 4.

Figure 2.5

Infrastructure (road) damage caused by highly saline watertables.

Salt damage to roads and highways includes the breakdown of concrete, bitumen and asphalt with associated pot holing, cracking and crumbling of the road base. The Wagga Wagga City Council estimated the cost of reconstructing one block of salt-affected urban road at $300 000 and 1km of highway at $700 000.[23] It is estimated that, by 2050, 67 400 km of roads across Australia will be at risk of damage as a result of salinity.[24]

Source: <http://www.dlwc.nsw.gov.au/salinity/effects.html>.

---

23 <http://www.dlwc.nsw.gov.au/salinity/effects.html>, Viewed October 2004.

24 National Land and Water Resources, *Australian Dryland Salinity Assessment*, op. cit., p. 8.

Figure 2.6

Urban salinity damage in Katanning, Western Australia

In the Western Australian Wheat Belt, the town of Katanning (with a population of approximately 4 146) is severely affected by rising water tables and dryland salinity. In 2002, the NDSP predicted damages from dryland salinity in Katanning over the next seven years at $6.9 million, with a predicted cost of full repair over that time of $7.6 million.[25] In 2002, a large proportion of the townsite area had a groundwater table within 0.5 metres of the surface.[26] The above figure shows a private house that is one of many in Katanning having structural repairs carried out on brickwork, crumbling mortar and the construction of perimeter drains. It is estimated that the cost of repairs would be between $2 000 and $6 000 per house per year.[27]

Source: ANAO June 2004

2.42 Further, it may also be useful to focus on the extent to which land and water use has changed in the NAP regions—particularly to address the PMSEIC comment that 'changes in land use must be considered; either tackling the cause by restoring water balance (eg farm forestry) or living with the

---

25 Media Release, *National Dryland Salinity Program,* October 2002.

26 Department of Agriculture Western Australia, *Rural Towns Program: Katanning,* September 2002, p. 4.

27 ibid.

symptoms because reversal is not an option'.[28] This latter point could form a key consideration within the evaluation of the NAP, planned towards the end of the program.

Intergovernmental and bilateral agreements

2.43 Intergovernmental and bilateral agreements provide the basis for administering programs where there is a joint interest or involvement by different levels of government. Their purpose is to set out the objectives, administrative and accountability processes, and establish the respective roles and responsibilities of each level of government.

2.44 The Intergovernmental Agreement (IGA) for the NAP sets out a broad framework of NAP principles, administrative processes and a timetable for next steps. It provided the basis for the operation of the Ministerial Council as well as the funding arrangements that would apply to the program. The intention was to foreshadow the requirements of more detailed bilateral agreements between the Australian Government and each State and Territory Government. The Prime Minister, State Premiers and Territory Chief Ministers signed the IGA in the first half of 2001 with the last party signing in May 2002.

2.45 The bilateral agreements were designed to provide detailed policy and administrative processes for progressing the NAP in each State or Territory. According to the intergovernmental agreement, the bilateral agreements were intended to be in place by June 2001. The bilateral agreements set out a commitment to the objectives of the NAP, the roles and responsibilities for each party to the agreement, requirements for establishing formal regional/catchment bodies, the process for accrediting NRM plans at the regional level, the level of investment to be made under the program, standards and targets, the nature of land and water reforms, funding arrangements, monitoring, evaluation and reporting. Setting timeframes for program implementation was particularly useful to guide the parties. These agreements have also contributed to important policy changes in natural resource management.

2.46 The bilateral agreements were signed by the Prime Minister and individual State Premiers and the Northern Territory Chief Minister from June 2001 to September 2003 (as set out in table 2.2). The ACT is not as yet a signatory (as at June 2004).

---

[28] Prime Minister's Science, Engineering, Innovation Council Report, op.cit., p. 8.

Table 2.2

Bilateral agreements

State/Territory	Date bilateral agreement signed
NSW	17 May 2002
Victoria	2 October 2001
Queensland	1 March 2002
Western Australia	11 September 2003
South Australia	8 June 2001
Tasmania	13 February 2002
Northern Territory	7 February 2003
Australian Capital Territory	Not yet signed

Source: National Action Plan Website: <www.napswq.gov.au>.

2.47 The ANAO's observation is that delays in the implementation of the program to date can be largely attributed to the delays in signing the bilateral agreements. South Australia was the only State that met the original timeframe.

2.48 The reasons for the delays vary across each of the States/Territories. Agencies have indicated that they were seeking to achieve a longer-term natural resource policy outcome and consequently, there was little scope for compromise on the fundamentals of the agreement. In several States, there was extensive negotiation surrounding the matching funding concept and whether initiatives prior to the NAP could be included. In particular, in September 2003 the Australian Government and Western Australia entered a bilateral agreement for $31.4 million but were unable to agree to the full $158 million allocation due to ongoing negotiations over levels of matching funding. It was only in August 2004 that the two parties reached agreement for the full $158 million funding.

2.49 A further reason for delay was that some State agencies were reluctant for Australian Government agencies to have a direct relationship with regional bodies. One State commented that delays were 'due to protracted negotiations over the roles and responsibilities of the respective parties and associated implementation details'. Another State commented that 'the development of the bilateral agreement was a new process and as a result took some time to finalise, particularly in relation to administrative and policy arrangements'. In some cases, institutional restructuring within State borders and policy conditions relating to the need for stronger land clearing legislation were further points of contention between governments.

2.50 Given the policy nature of the disputes and the fact that a clear timetable had been set in the IGA signed by the Prime Minister, Premiers and the Chief Minister of the Northern Territory, there was little scope for the Australian Government agencies to have accelerated the implementation process at this point. However, the fact that the implementation of the bilateral agreements has been delayed has clearly had a flow-on effect for the NAP over the remaining years of the program.

The regional delivery model

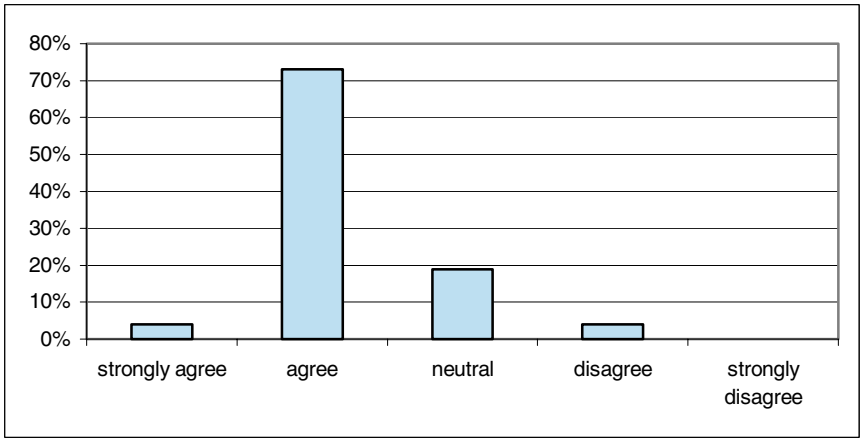
2.51 The NAP was designed to build on the work established under the NHT, the Murray-Darling Basin Commission (MDBC), State/Territory strategies and the Council of Australian Governments Water Agreement. In addition, the policy framework established through the IGA and bilateral agreements (as discussed above) with the States/Territories provided a documented and structured basis for the NAP.

2.52 A regional model for delivery of the NAP and other NRM programs was adopted to engage local communities in the efficient delivery of on-ground outcomes, tailored to specific regional circumstances and priorities. This involves 34 regional bodies having responsibility for the development of plans and the implementation of investment strategies within their respective catchments. In some cases, the implementation required a restructure of regional administrative arrangements and boundaries, the creation of new bodies or the development of new agreements between regions (which is further discussed in Chapter 4). While unavoidable if a catchment-based approach is to be delivered, this has contributed to further delays in the implementation of the program in some States/Territories.

2.53 Most regions surveyed by the ANAO considered that the design of the program was appropriate to their needs. Seventy-seven per cent of regions responding to the survey indicated that they strongly agreed or agreed with the statement that the NAP is a well-designed program and that it is appropriate to meet a recognised need in their region. The responses are illustrated in figure 2.7.

Figure 2.7

Responses from the regions to the statement: 'the NAP is a well-designed program that is appropriate to meet a recognised need in your region.'



Source: ANAO survey of NAP regional bodies.

2.54 While respondents from the regions were overwhelmingly positive about the design of the program, some qualified their comments. For example, a common response was that while the program is well designed and meets the needs of the region, the long lead times or delays in receiving financial assistance have led to frustration from regional bodies, who are not seeing action on the ground and can not appreciate why their needs are not being met. Agencies have commented that the Australian Government was seeking to purchase outcomes rather than providing funding on request. This suggests that clearer communication on expectations earlier in the process might have assisted in a smoother delivery of this aspect of the program.

2.55 The ANAO recognises that the implementation of a regional delivery model has been a challenging and evolving process. The model has many strong design features, including the flexibility to meet the needs of different regions with appropriate action and to empower local communities. The adoption of a regional delivery model has also built positively on some of the lesson learned from earlier programs such as the NHT. However, there are a number of outstanding issues that need to be addressed if the model is to be fully effective. These are discussed in Chapters 3 and 4.

Coordination with other programs

2.56 The coordination of programs is important to avoid duplication of effort and to maximise value for money outcomes. The coordination of the NAP with related Australian Government programs such as the NHT, the

National Landcare Program and existing institutions such as the MDBC and the Great Barrier Reef Marine Park Authority (GBRMPA) was important to maximise program effectiveness.

2.57 Various measures were put in place by agencies to coordinate the NAP with existing Australian Government initiatives, including the NHT. In particular, the NAP and the NHT are jointly delivered through block funding based on a single accredited regional NRM plan for each region. Also, monitoring and evaluation processes, communications strategies and capacity building strategies are integrated for the two initiatives. This joint delivery for the NAP and NHT provides an integrated service where the majority of NAP regions are eligible for funding under both initiatives. There has also been improved coordination through the joint delivery arrangements implemented between DAFF and DEH (discussed further in Chapter 4) and the partnership that has been formed with States/Territories.

2.58 In regard to coordination with existing institutions, the ANAO notes that there have been extensive consultations between agencies and a range of institutions, such as the MDBC and GBRMPA. Considerable efforts have been made to ensure a coordinated approach to respective roles and responsibilities. The importance of consistency between NAP regional targets and standards and those of both the MDBC and GBRMPA for water quality has been recognised by agencies. In particular, at the commencement of the program, agencies recognised the important role that the MDBC could play in managing the delivery of basin scale (that is, inter-regional scale) measures to address salinity and water quality, as well as providing quality assurance and the coordination of capacity building for the delivery of Murray Darling basin scale components of the program.

2.59 However, the regional bodies surveyed by the ANAO had mixed responses to a question concerning coordination of the NAP with other programs and existing institutions. While most regions were positive or neutral, eight regions (almost one-third of responses) mentioned difficulties in the coordination of the NAP with existing programs. Furthermore, a submission from one State agency commented that:

> There is an urgent need to better align the MDBC Salinity Management Strategy with the NAP particularly in the area of monitoring, evaluation and reporting. Such alignment is necessary to avoid inefficient duplication and overlap.

2.60 The ANAO considers that significant progress has been made to coordinate the NAP with other NRM programs and existing institutions. However, the number of different agencies and the scale of the challenge suggest that better communication with the regions on key NRM issues would be highly desirable. This should provide some assurance that stakeholders are

well informed about the various programs and how they link. Recent research by the Bureau of Rural Sciences has highlighted the potential for better targeting of management action in some regions in eastern Australia, due to the localised nature of salt in the landscape. This work is being disseminated to regions but the task is far from complete given the needs in the regions.

ANAO Conclusions

2.61 The design of the NAP was based on a clear need to address salinity and water quality challenges across the Australian landscape. The evidence at the time indicated substantial salinity and water quality threats to Australia's agricultural production, to biodiversity, to rivers, water supply and to infrastructure. While the intergovernmental agreements have been well designed and a risk management plan was introduced in 2003–04, there are substantial technical and information challenges that need to be addressed as part of the ongoing management of risks.

2.62 Significant progress has been made in introducing the new regional delivery model. This regional delivery approach has been an evolving process with new challenges and emerging risks. The delays in reaching agreement have had flow-on effect for the remaining years of the program.

2.63 Progress could be strengthened through closer attention to building on recent research initiatives and actively encouraging regions to put in place action that are well targeted and appropriate for the formidable challenges facing the NAP regions in Australia.

3. The Delivery of the Program

This chapter examines the regional planning and accreditation process for the NAP. It also considers the investment strategy and decision making process. It concludes with a review of the guidelines used for these processes and the client relations.

Regional plans and accreditation

Regional planning

3.1 Under the IGA, it was agreed that the 34 regional bodies would develop and implement integrated NRM plans as a basis for Government funding. The plans are non-statutory documents that set out the means for identifying and achieving the region's NRM targets.[29] This was considered fundamental to the quality of the outcomes envisaged for the NAP as well as for other NRM programs. The plans were to be agreed by governments and the community. Together with investment strategies for implementation, the plans were to define the goals and contributions that all parties would undertake.

3.2 The regional NRM plans have been designed to encompass catchment-wide activities addressing a range of NRM issues including land and water management, biodiversity and agricultural practices. Consequently, the plans relate to the NAP, the NHT as well as other NRM programs of the States/Territories. Plans were designed to be flexible with a different emphasis from catchment to catchment but with a core focus on water quality, salinity and associated impacts on biodiversity. Ministers were advised that the plans were anticipated to include action relating to:

- mapping of the salinity hazard and an assessment of catchment/region condition and associated issues;
- maintaining and improving the condition of existing native vegetation;
- establishing multiple purpose perennial vegetation in targeted areas;
- protecting and rehabilitating priority waterways, floodplains and wetlands;
- improving environmental flows where this is beneficial;
- improving stream water quality using engineering works in critical areas;

[29] The plans had no basis in legislation, and are advisory, strategic planning documents.

- installing drainage in catchments/regions where agreed by affected land managers, the downstream impacts are positive, and the overall benefits of the scheme provide substantial long-term results over other approaches;
- the harder adjustment and property amalgamation issues; and
- rural urban infrastructure (buildings, roads etc) degradation issues.

3.3 'Foundation funding' was provided by the Australian Government and State/Territory agencies to enable plans to be developed or refined for each NAP region. Approximately $49 million was approved for foundation funding to the regions up to June 2003 with a further $2.6 million provided to Western Australia in 2003–04 following joint endorsement of the bilateral agreement in 2003.

3.4 During the course of the audit, different regions have commented positively on the assistance and value of data provided by a range of expert bodies in the planning process. These include Cooperative Research Centres (CRCs), Land and Water Australia, the Australian Bureau of Agriculture and Resource Economics (ABARE) and State agencies. The ANAO has also noted the involvement of universities in providing assistance to regions in the preparation of salinity assessments and planning.

3.5 However, a recent Commonwealth Scientific and Industrial Research Organisation (CSIRO) report to the NRM Ministerial Council highlighted that:

> Some mature catchment management agencies employ 35 staff whilst some of the more nascent agencies have only 3 employees, so the ability of the agencies to seek out and assimilate science inputs into planning, target setting and management is highly variable.[30]

3.6 In many regions, State agencies, regional bodies and research institutions have commented on the challenges in the preparation of regional NRM plans. For those regions that had substantial resources or plans in place prior to the NAP, the task was obviously much easier than for those with few resources or those 'starting from scratch'. These regions often had substantial research material and a history of planning for their region. On some occasions, regional planning involved refinement of existing plans to clarify targets and standards. On the other hand, those regions 'starting from scratch' often have limited research material and have to build detailed information and data sets to enable them to undertake their regional planning. For those NAP regions without ready access to universities or research institutions the challenges are particularly significant.

---

[30] CSIRO Report to the Ministerial Council, *Scientific Advice on Natural Resource Management*, February 2004, p. 18.

3.7 One of the key challenges noted by many regions was the difficulty in obtaining adequate data and analysis at an appropriate scale on natural resource conditions and trends for the regional planning process. Most data from key research institutions is either at a national scale (such as the NLWRA) or selective in terms of its applicability to particular regions. A submission from a salinity research institution to the ANAO noted particular gaps for NAP regions in the:

- knowledge of salt stores and water flows in rural and urban landscapes necessary to provide accurate estimates of the extent, severity and the potential risks of salinisation of land and water resources;
- economic analysis of salinity mitigation options;
- mapping of salt hazards at a level suitable for property management purposes;
- identification of the sources of salinity in catchments; and
- the impacts of salt on wetlands.

3.8 An evaluation report on scientific advice conducted for the NRM Ministerial Council also noted the difficulties faced in obtaining good scientific data at the regional level. The report highlighted that 'the capacity, capability and understanding of how to use scientific information to its best advantage were extremely variable across catchment management agencies'. While acknowledging the advances that have been made in understanding the processes involved in NRM, the report commented that 'targets established under the NAP could have been better underpinned by scientific knowledge and data, or in the absence of data, predictive models'.[31] In some areas, the processes in place to monitor and evaluate progress towards the targets were not adequate. There are also real challenges in managing the trade-offs involved in NRM regional planning. This is illustrated in Case Study A, as follows.

Case Study A—The challenges in managing the trade-offs in regional planning

Regional NRM planning involves very difficult trade-offs with uncertain benefits in some cases. For example, the need for substantial land and water use change was recognised as crucial in tackling dryland salinity by the PMSEIC and in early advice from agencies to Ministers on the NAP. A report by the Bureau of Rural Sciences for the NLWRA indicated that 'high water using perennial vegetation would need to be introduced over some 80 per cent or more of most salt affected catchments to make a significant impact on catchment water balance'. However, the report also commented

[31] ibid., p. 3.

that 'the adoption of extensive catchment based revegetation programs required would be unlikely to be economically comparable with present land use'.[32]

A study of the Lachlan catchment in NSW in 2004 concluded that:

Broad scale planting of perennial species is likely to reduce economic welfare of downstream users in the Lachlan Catchment. While there will be some benefits to landholders of reducing recharge, downstream users will have less water available and it is likely stream salinity will increase…Focussing on managing salinity may indeed be counter productive. It might be more useful to focus on water management where the criteria for assessing management strategies would be land quality, water quality and stream yield. Managing some areas of land for dilution flows may receive greater consideration and may increase economic welfare and reduce the threat salinity poses to the environment.[33]

The limitations of revegetation action were also highlighted in a CSIRO study of particular relevance to Western Australia. Empirical work by George et al (1999) indicated that the effect of tree plantations on groundwater levels is quite localised in most cases (that is, the down slope impact on water tables rarely extends more than a few tens of metres away from the plantation). In fact, Salama and Bartle (1995) point out that in such flat landscapes, the groundwater sink that can develop under a plantation (or remnant woodland) can cause a reversal of flow towards the trees with the potential to impact on their health through localised salinisation, and there is evidence of rising water tables under remnant vegetation by this phenomenon. The study also highlighted how in Western Australia in particular, stakeholders with assets at immediate risk were choosing engineering options to protect those assets. However, the author was concerned that the collective failure of the technical community to direct adequate research and development and commercial investment in this direction had created a vacuum between need, intent and capacity. Expensive earthworks and pumping (see figure 3.1 and 3.2 below) were being incorporated into the Australian landscape with 'highly uncertain on-site benefits and off-site impacts, largely without the participation of the engineering or scientific professions'. Lack of adequate guidelines, design principles and regional planning will likely lead to uneven performance, elevated risk, unexpected externalities and wasted resources.[34]

3.9 This case study illustrates the real uncertainties and challenges in managing interventions to address salinity and water quality. It highlights the need to further develop the scientific and economic basis of the process. These are important lessons learned given all regions have or are developing targets

---

[32] Coram J E, Dyson P R, Houlder P A, Evans W R, *Australian Groundwater Flow Systems contributing to Dryland Salinity*, A Bureau of Rural Sciences Project for the National Land and Water resources Audit, 2000, p. 5ii.

[33] Bathgate A, Woolley J, Evans R, McGown I, *Downstream benefits of salinity management: A case study for the Boorowa Catchment*, Contributed Paper to the 49th Annual Conference of the Australian Agricultural and Resource Economics Society, Melbourne, February 2004, pp. 14–15.

[34] Hatton T J, *CSIRO Land and Water: Engineering our way forward through Australia's salinity challenge*, Technical Report, May 2002, p. 4.

for vegetation management, and because revegetation initiatives and engineering works are important components of investment strategies under the NAP.

Figure 3.1

Deep drains in Dumbleyung, Western Australia

Approximately 10 000km of drains have been installed in the broad valleys of the Western Australian Wheat Belt over the past 25 years.[35] At this stage, it is unclear as to the overall benefits from deep drains. They can reduce salinity on individual properties, but there can be severe downstream impacts of the effluent on biodiversity for adjoining properties, increased acidity and an increased risk of flood impacts. The Dumbleyung site has been partly funded under the NHT. In December 2003 Australian and State Ministers jointly announced $2 million under the NAP to evaluate salinity-engineering projects in Western Australia. The dissemination of lessons learned is likely to provide information on the costs and benefits of deep drainage, groundwater pumping and farm scale evaporation basins.

Source: ANAO June 2004

[35] House of Representatives Standing Committee on Science and Innovation, op. cit., p. 70.

Figure 3.2

Protecting priority wetlands of Lake Toolibin, Western Australia

Lake Toolibin is a seasonal wetland about 200km southeast of Perth that was listed as a Wetland of International Importance under the Ramsar Convention. Toolibin is now the largest remaining wetland representing a habitat that was once widespread across the Western Australian wheatbelt, but now has been lost to salinity. Various engineering options have been adopted involving integrated recharge and discharge systems.[36] *The options adopted include surface water management to divert the flow of salt (as shown in the figure) in conjunction with groundwater pumping.*

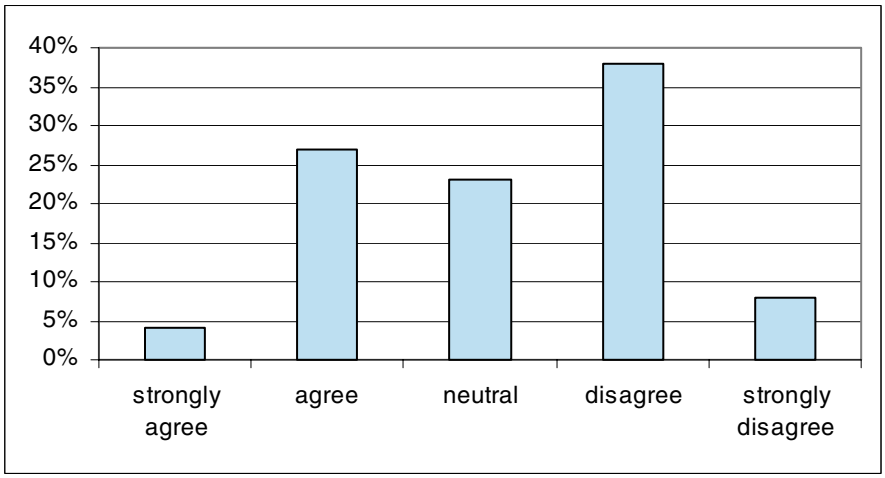
Source: ANAO June 2004

3.10 Regions in particular have commented about the shortcomings in the level of ongoing support in the preparation of regional plans. Forty six per cent of respondents disagreed or strongly disagreed with the statement that the level of ongoing support is adequate. This is illustrated in figure 3.3.

[36] <http://www.calm.wa.gov.au/projects/salinity/toolibin> viewed October 2004.

Figure 3.3

Response from regional bodies to the statement: 'the level of ongoing support (including scientific knowledge, economic information, technical data) is adequate to assist in developing regional plans and to target investment strategies to areas of highest need.'



Source: Survey of NAP regions.

3.11 Building capability was integral to the design of the NAP. Nevertheless, these findings highlight the design shortcoming of not having a knowledge support system in place as part of the program implementation. The CSIRO report commented that even the more mature regions were finding it a challenge to specify the cause and effect relationships and the action and target linkages required in their investment strategies. Lack of good scientific data at the catchment level and a lack of knowledge about what data is available have, in many cases, hampered the establishment of robust targets and may be contributing to a duplication of the research effort.

3.12 The ANAO recognises the significant role of the States/Territories in this area and the progress that has been made in scientific and economic knowledge of NRM issues and challenges at the regional level. The foundation funding and the program design requirements for targets and standards as integral components of regional plans have been instrumental in stimulating progress in this area. The recent introduction of the national NRM website and the employment of regional NRM facilitators by the Australian Government has further enhanced the capacity of the regions to access better quality information.[37] The recent release of a 'Tool-Kit' comprising manuals and a

[37] <http://www.nrm.gov.au/> Viewed October 2004.

CD-ROM by Land and Water Australia may also assist in improving the knowledge base at the regional level.

3.13 Agencies have commented that the Standing Committee of the Natural Resource Management Ministerial Council is considering a CSIRO and Bureau of Meteorology review of ways and means for improving the application of scientific knowledge to NRM. This follows on from earlier work, involving the CSIRO and the Bureau of Meteorology from 2002, to improve the application of science to NRM. A key challenge for the NAP has been undertaking research at the right scale and in forms that can be used by regional communities. Agencies have highlighted that a pilot approach to improve the flow of scientific knowledge between researchers and users has been initiated in South Australia. If successful, this could prove to be a useful model for application in other States/Territories.

3.14 Nevertheless, the ANAO considers that there is an urgent need to better link research providers and their products with regional groups, land managers and others undertaking on-ground works. This is clearly a joint responsibility for Australian and State Government agencies. In particular, it is crucially important in terms of the evolution of the NAP regional delivery model that the regions have access to the practical lessons learned and emerging science, economic analysis or better practice examples from other NAP regions and other relevant programs such as the National Landcare Program and the NHT. As noted from Chapter 2, there are significant risks that investment will be wasted if interventions are poorly targeted or not based on sound science or economics. Australian Government agencies (with their national focus, the NRM website, the employment of facilitators in all regions and the annual NRM forum) are well placed to provide these services and guidance to the regions in conjunction with State agencies.

Recommendation No.3

3.15 The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage in consultation with other service providers (including State and Territory agencies and national level research providers) develop measures to strengthen the access by NAP regional bodies to lessons learned and better practice NRM relevant to salinity and water quality in the NAP priority regions. These measures may include mechanisms to better link research providers to users and facilitate research at the appropriate scale and in forms that can be better utilised by regional bodies.

Joint agency response

3.16 Agreed. Promoting the outcomes of recent research on salinity in the regions is a priority for program improvement that is currently being pursued

with the States/Territories. As experience with salinity management grows at the regional level it will be important that this information is shared between regions as well as the science community.

3.17 Opportunities to share learning and extend scientific knowledge include:

- science forums at the annual Community Forum for chairs of regional bodies;
- making greater use of NRM facilitators and coordinators as information brokers;
- continuing to develop the NRM website (www.nrm.gov.au) as a comprehensive regional information source; and
- using the South Australian Centre for Natural Resource Management as a trial for promoting and brokering natural resource management-related research and development through researcher, regional, government and industry partnerships.

3.18 The National Land and Water Resources Audit is also conducting a monitoring and evaluation trial in most States/Territories to assess the accessibility to data and analysis by regions and the usefulness and relevance of the available data. The outcomes of this work will also help target information provision.

3.19 The 2004 annual CSIRO / Bureau of Meteorology report, jointly commissioned by the Australian Government and States / Territories, identified the importance of access to and use of scientific data and analysis to ensure regional NRM plans are science based. This evaluation will be conducted regularly to monitor progress with this element of the NAP.

Accreditation of NRM plans

3.20 The accreditation process for NRM plans was a requirement included in the IGA. The process envisaged in the agreement was that national criteria would be developed jointly with the States/Territories by February 2001. The Australian Government and the relevant State/Territory Ministers were responsible for accrediting NRM plans based on these criteria.

3.21 Accreditation is important as a quality control and assurance mechanism. Plans were to be accredited on the basis of their goals and objectives, analytical base, strategic planning, priority action, proposed targets and outcomes, accountability and performance monitoring, and reporting arrangements. Bilateral agreements allow for different circumstances, steps or timelines for accreditation in each jurisdiction. They also allow the regions

three years from the signing of the bilateral agreement to establish sufficient data to set targets.

3.22 In May 2002 (some 15 months after the scheduled deadline), the NRM Ministerial Council endorsed criteria for the accreditation of NRM plans, stating in its communiqué that 'the Commonwealth and States will use these criteria for accrediting the plans' and that the accreditation criteria 'promote a planning process that is: community owned and initiated; based on science; and fosters targeted and collective action for landscape change'.

3.23 As at June 2004, 21 out of the 34 regional bodies had accredited plans in place. These were all regions in South Australia, Victoria and NSW. This is illustrated in table 3.1 as follows.

Table 3.1

Accredited NAP regional plans

Month the plan was accredited	NAP region
April 2003	Mount Lofty Ranges (SA)
July 2003	Mallee (VIC) Western (Balonne/Maranoa) (NSW)
September 2003	Northern Agriculture & Yorke District (SA) Glenelg-Hopkins (VIC) Lower Murray (NSW) Murray (NSW) Murrumbidgee (NSW)
October 2003	Kangaroo Island (SA) Goulburn Broken (VIC) Wimmera (VIC)
November 2003	Border Rivers-Gwydir (NSW)
December 2003	Corangamite (VIC) North Central (VIC) Central West (NSW) Namoi (NSW)
January 2004	SA Murray-Darling Basin (SA) South East (SA) Lachlan (NSW)
July 2004	Fitzroy (QLD)
August 2004	Border Rivers (Balonne/Maranoa) (QLD)

Source: ANAO based on information from the Department of Agriculture Fisheries and Forestry and the Department of the Environment and Heritage.

3.24 This table illustrates that 62 per cent of regional plans for the NAP have been accredited.[38] The majority of the remaining regional bodies are anticipated to have accredited plans in place by the end of 2004—halfway through the life of the program. These delays place additional pressures on agencies and regions to progress the objectives of the program over the remaining four years. As one State agency commented to the ANAO:

> The time delay of over three years in the negotiations from the initial announcement of the NAP has caused considerable angst among regional NRM groups in terms of progressing with accreditation of regional strategies. The initial announcement raised expectations for these groups that could not be met in the short term, with no indication as to the quantum of funds they could expect to receive, nor the timing of receipt of these funds.

3.25 Given the earlier delays and difficulties associated with building a national program with high degrees of technical and scientific challenges, it is hardly surprising that the accreditation process was delayed. There is evidence that Ministers were kept informed of the reasons for delays. While the evidence suggests that there was little that could have been done to expedite the process, there are risks that the pressure to spend funds as quickly as possible over the remaining period of the program may compromise the quality of the regional accreditation process.

3.26 In the report to the Ministerial Council (April 2004) commissioned by NAP partners, the CSIRO considered that, 'the accreditation process has been largely overtaken by the pace of events and the need for rapid investment under the NAP'. Agencies have commented that they do not agree with the CSIRO view and that the accreditation process remains the key step for Ministerial approval and regional funding arrangements. They view continuous improvement or adaptive management as underlying the approach taken in regional plans. Within this context, agencies have advised that they are providing specific assistance to some regions to enable them to employ planning professionals. They have also introduced measures to streamline internal Australian Government processes.

3.27 Nevertheless, the ANAO notes that the quality of the regional plans accredited to date is variable, which may impact on the likely outcomes or the rate at which they can be achieved. In some instances, where shortcomings in the quality regional plans were identified, action by agencies has been taken to remedy the deficiencies. However, other shortcomings in the plans, such as inadequate attention to infrastructure issues and the difficulties in setting specific targets (especially in terms of biodiversity conservation for saline

---

[38] That is, 21 of the 34 regional bodies have accredited plans in place as at 1 October 2004.

affected areas) were noted by agencies in their advice to Ministers. These shortcomings were not deemed of sufficient concern to delay accreditation.

3.28 The ANAO is particularly concerned that the CSIRO report commented that, 'little information was forthcoming that suggested that targets, even if met, would be sufficiently robust to arrest or reverse the decline in catchment condition in many areas'. Nevertheless, the adaptive management approach allows continuous adjustments to be made to the targets in light of advances in scientific knowledge at the regional scale. However, from the progress made to date, this is likely to result in small-scale changes over time to land and water use. In some regions with limited scientific data and high uncertainty over the merits of program action, this may be the only practical way forward. However, careful judgement and advice to Ministers will be needed over the remaining years of the program to avoid an outcome whereby program funds are allocated to incremental land or water use change that may prove ultimately not to be cost effective or not at a sufficient scale to meet the objectives of 'preventing, stabilising and reversing' salinity.

3.29 Given that a significant number of plans are yet to be accredited, these lessons learned provide the opportunity to strengthen the process in these regions. This is particularly important in Western Australia, where one stakeholder indicated that the scale of the salinity problem is such that it may transcend regional or catchment boundaries and may require much larger scale or more concentrated action. The NLWRA also supported the view that for some regions in Western Australia, there are:

> No solutions affording dryland salinity mitigation. The groundwater basins are simply too large and the landscape is already too saline to afford opportunities for catchment based approaches.[39]

3.30 However while there are formidable challenges in many regions the following case study indicates that substantial progress can be made in particular catchments.

---

[39] Coram J E et al, op.cit., p. 6–emphasised *'living with salt strategies'* as the basis for management actions in some regions where it is unlikely that salinity can be reversed.

Case Study B—Can salinity be stabilised or reversed?[40]

The Collie River catchment in the southwest of Western Australia covers almost 3 000 square kilometres and includes one of Western Australia's largest water storage investments—the Wellington reservoir. The reservoir is a valuable resource for the State's growing population but the water is currently too salty for drinking, irrigation or other beneficial uses. The reservoir was built in 1933. River salinity began to increase prior to 1960 due to clearing of native forest for pasture. Despite controls over the further release of Crown land in 1961 and controls over land clearing in 1976, the removal of native vegetation was causing the stream salinity of the Collie River, just upstream of the reservoir, to increase by 42 milligrams per litre per year. It was estimated that if no further action was taken, the stream salinity would rise to an average value of 1 500 milligrams per litre (three times too salty for drinking water), resulting in 1 150 milligrams per litre in the reservoir. A new dam was built on the Harris River to supply local towns with drinking water in 1989.

The catchment is now one of the five recovery catchments earmarked within the State Salinity Strategy 2000 to ensure adequate supplies of drinking quality water for future generations. The target is to reduce salinity in the reservoir to 500 milligrams per litre (drinking water quality) by 2015. This standard is based on the World Health Organisation standard.

A State Government program of land acquisitions and reafforestation of 6 740 hectares was designed to reduce groundwater discharge into the rivers. Some 9 500 hectares of private plantations supported the government initiative. As a consequence, the increase in salinity has been stabilised although the salinity of the water flowing into the reservoir is now averaging nearly 900 milligrams per litre, which is far higher than the 500 milligrams per litre target. Modelling work (often based on studies from 'paired' sub-catchments) has indicated that a range of further options including further commercial plantations, lowland reafforestation in saline or waterlogged areas, planting of deep-rooted perennial pasture such as lucerne, shallow drainage, groundwater pumping (see figure 3.4) and water diversions could achieve the targets by 2015.

The catchment initiatives have received NHT funding support and are now a priority area for investment under the National Action Plan. $3.5 million has been committed from the Australian Government and this has been matched by the State Government. This case study highlights the importance of concerted efforts to tackle salinity and the need for comprehensive land and water use change if action are to be effective. The catchment provides a model for addressing salinity in the higher rainfall districts that are characteristic of coastal catchments. In the flatter, lower rainfall zones of Australia, the opportunities for stabilising or reversing salinity are far more challenging.

---

[40] Government of Western Australia Water and Rivers Commission. *'A fresh future for Water*: *Salinity situation statement for the Collie River Catchment',* November 2000.

Figure 3.4

Groundwater pumping in the East Collie Catchment

At the Maxon Farm in the East Collie Catchment in Western Australia, groundwater pumping has been adopted. The objective is to lower groundwater levels. A pipeline and associated pumping station is used to move saline water outside the catchment or, if possible, to a site for treatment.[41] *This intervention forms part of a suite of measures designed to improve water quality in the catchment to drinking water standard by 2015.*

Source: ANAO June 2004

3.31 The ANAO recognises the considerable challenges in progressing the accreditation process. The process is a different approach from the previous NHT project-based submission model. Different expectations of the substance of the regional plans between Australian Government and State agencies have not facilitated timely progress. Expectations of the regions have been substantial. In many cases expectations have not been realised because of the technical and administrative constraints faced by new bodies endeavouring to scale-up to the level of sophistication required to address salinity and water quality issues.

---

[41] ibid., p. 3.

3.32 As agencies have commented, adaptive management provides a way to improve the substance of the plans after accreditation. However, greater quality assurance is necessary to avoid the situation whereby cumulative action over time remain insufficient to achieve the objectives of the program. A quality assurance process could involve a routine review and examination of the relevance of a sample of plans in the light of the best available science and economic analysis that is relevant to the region. This should involve consideration as to whether the plan is likely (or not) to contribute to the achievement of the overall program objectives.

Appraisal and selection of regional investments

3.33 The measure of a good appraisal process is one that is sufficiently rigorous to ensure that those investments selected represent value for money in the context of the objectives of the program. Guidelines and criteria for investment should be provided in a timely manner and easily accessed by all potential clients. Documentation of the reasons for making decisions is important to meet administrative law principles and the requirements of transparency and accountability.

3.34 The NAP investment process to date has involved funding of priority action projects (prior to plan accreditation) as well as investment strategies based on the accredited regional plan.

Priority action funding

3.35 Priority action funding was provided in recognition that there were salinity and water quality issues that required urgent attention. Consequently, priority action funding preceded the accreditation of regional plans and investment strategies. $151 million was approved in total up to 30 June 2004 for these initiatives.

3.36 Because of the delays in the early stages of the program, considerable pressure had built up to fund urgent projects (including on-ground works). One State Minister for Environment was sufficiently concerned to write to Federal Ministers in July 2002 to advise that:

> …in the absence of advice on funding levels by this date [2 September 2002], some [catchment bodies] will need to consider staff redundancies and cessation of community grants such as support for Whole Farm Planning for salinity and water quality management. This would significantly reduce the capacity of these [catchment bodies] to gear up to implement these accredited Catchment Strategies and jeopardise landholder support and involvement.

3.37 In effect, the priority action funding enabled the program to maintain the momentum of initiatives designed to address salinity and water quality

prior to the completion of plans and formal investment strategies.[42] While there were substantial risks in proceeding with funding in the absence of accredited plans and strategies, there were also substantial risks in not doing so. Under these circumstances the ANAO would have expected agencies to advise Ministers of the risks and put in place appropriate treatment to mitigate the risks.

3.38 From the briefings provided to Ministers, it is clear that agencies were well aware of the importance of managing risks at this stage. The briefings included risk management analysis and consideration of the sensitivities of the proposals. Consideration was given to the contribution of the priority action to program objectives and the consistency of the action with pre-existing planning processes. For example, priority action projects in the southwest slopes of the Murray region of NSW were targeted at reducing salinity from the irrigation districts. The Murray Region Salinity Risk Assessment had shown that this district was contributing around five times the salt load going into the Murray river compared with other irrigation districts or lowland farming systems within the region.

3.39 Priority action funding has been targeted at regions where salinity and water quality plans already existed or where priority action (such as salt mapping in Queensland) were essential to progress the program.

3.40 Funding provided was generally conservative (in one State, funding was about one-third of that requested by the regions) and considerably less than that recommended by the States (about half of that recommended by the States). The ANAO considers that the priority action funding was a transparent process and documentation on the reasons for decisions was consistent with good practice.

Regional investment strategies

3.41 Regional investment strategies are the key financial mechanism for enabling regions to address salinity and water quality issues. They were designed to be based on the accredited regional NRM plans that provided much of the scientific and economic rigour for guiding investment priorities.

3.42 As at June 2004, 19 out of the 34 regional bodies had investment strategies in place. These were all the regions that had accredited NRM plans in place (as indicated earlier in table 3.1). The approved investment strategies are illustrated in table 3.2 as follows.

---

[42] These strategies were not approved in most regions of the three States approved to date (that is, South Australia, Victoria and NSW) until February 2004–over three years from the announcement of the program.

Table 3.2

Initial NAP investment strategies approved

Date the plan was accredited	NAP region
September 2003	Glenelg-Hopkins (VIC)
	Mallee (VIC)
November 2003	Goulburn Broken (VIC)
	North Central (VIC)
	Wimmera (VIC)
January 2004	Corangamite (VIC)
February 2004	Kangaroo Island (SA)
	Mount Lofty Ranges (SA)
	Northern Agriculture & Yorke District (SA)
	SA Murray-Darling Basin (SA)
	South East (SA)
	Border Rivers-Gwydir (NSW)
	Central West (NSW)
	Lachlan (NSW)
	Lower Murray (NSW)
	Murray (NSW)
	Murrumbidgee (NSW)
	Naomi (NSW)
	Western (Balonne/Maranoa) (NSW)

Source: ANAO based on information from the Natural Resource Management Ministerial Council, *Annual Report 2002–03*, p. 15. Subsequent to the publication of the Annual Report, six Victorian regions have had their second round of investment strategies approved in August 2004.

3.43 In advising and recommending funding to Ministers, agencies considered the alignment between the investment proposals and the regional plans, the endorsement (or otherwise) of the technical assessments of Independent Advisory Panels and consistency with the principles of ecologically sustainable development. There was a consistent format used across all the regions where funding had been recommended.

3.44 While the structure and content of advice to Ministers is reasonable given progress under the program, the appraisal of investments being made in the regions could be further strengthened through more explicitly indicating:

- the extent to which risks identified in the risks management plan have been addressed;
- whether or not the investment package represents value for money (that is, the package is targeted to achieve a positive response within an acceptable timeframe); and
- the extent to which the investment strategy for each region was likely to contribute to the program objective of 'preventing, stabilising and reversing trends in salinity and improving water quality'.

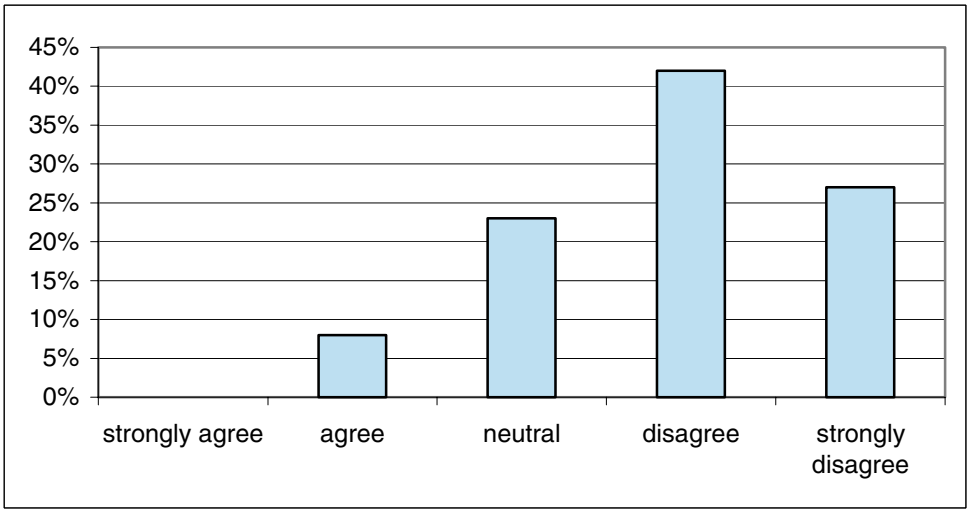
3.45 From the strategies examined, there was no evidence of Ministers disagreeing with agency recommendations. Consequently, documentation of reasons was sufficient to explain the basis of each decision on the investment strategy.

3.46 An issue noted by the ANAO during the course of the audit was the timing of decisions on investment strategies. A factor slowing the timing of decisions for regional investment strategies is that the decision process requires consideration by each Joint Steering Committee (JSC) and approval by both Australian Government and State/Territory Ministers. In some instances, it can require the approval of four Ministers. The ANAO noted that the coordination of approvals from all Ministers has involved delays of some three months.

3.47 Concerns over the timing of investment decisions were supported by the regional survey conducted by the ANAO. Only eight percent of respondents agreed that decisions on funding are timely (See figure 3.5). Over two-thirds of respondents from the regions (69 per cent) disagreed or strongly disagreed with this view.

Figure 3.5

Responses from the regions to the statement: 'decisions on funding for regional plans and investment strategies are timely and address the needs of the regions'.'



Source: ANAO Survey of Regions.

3.48 Concerns were apparent across regions. Two regional respondents commented as follows:

> There is concern at the slowness of approval at an Australian Government level. This is frustrating. A more streamlined process while still rigorous needs developing. This is an area where advances still need to be made.
>
> How can we agree when we struggled to meet a September 2003 deadline for our Investment Strategy and now we are into June 2004 and still have no funding and no projects started? Our 18mth period (1/04 to 6/05) is 6 months behind before we start—or longer.

3.49 The original intention of the NAP was to have three-year investment cycles with payments made on the achievement of milestones. The ANAO considers that this was a good design feature and was appropriate given the intention of the NAP was for long term, strategic initiatives at a catchment level. However, funding commitments to June 2004 from investor agencies have tended to be for relatively short, 12-18 month periods. This has reflected the reluctance of States/Territories and regions to accept a three-year funding cycle at this stage (which has been the preference of federal agencies). To a large extent, the reluctance of the States/Territories and the regions to accept the three-year investment cycle reflects the significant institutional change that has been occurring in a number of States and the annual financial cycles of State/Territory programs.

3.50 More recently, some regions have adopted three-year investment strategies. Agencies have advised that five Victorian regions and two NSW regions now have three-year investment strategies approved. Regions in South Australia are in the process of developing three-year investment strategies for 2005–06. Given the progress in establishing regional structures and investment strategies, there is now scope for seeking a commitment from the remaining States/Territories and regions for three-year investment cycles as originally intended. While recognising the complexities in the development of regional investment packages, the focus of the program on large scale, strategic initiatives and the five to ten year time frames for the plans lends itself to longer-term funding. This would provide greater certainty for the regions and the resources they employ to implement the investment package as well as minimising the delays in decision-making.

Recommendation No.4

3.51 The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage, consult with the relevant State and Territory agencies, and regional bodies, as part of a concerted effort to introduce three year funding arrangements (as originally proposed) as soon as practicable.

Joint agency response

3.52 Agreed. Three-year funding arrangements were intended in the original design of the NAP. To develop the financial and governance capacity of the regional bodies, a staged approach was adopted, including the introduction of one year funding agreements.

3.53 The initial lack of uptake of three-year funding cycles occurred due to regions requesting increased financial and governance capacity and the need for increased stability of regional body arrangements before being expected to manage large funds over extended periods of time.

3.54 As noted by the report, several regions have recently received approval for three-year investment strategies. Two NSW regions have had three-year investment strategies approved and the remainder in NSW are being developed. Five regions in Victoria also have had three-year investment strategies approved. All eight South Australian regions are now developing three-year investment strategies to commence in 2005–06. The agencies will continue to work with States / Territories to encourage regions to focus on longer term planning and a move to three-year investment strategies being applied more widely.

Guidelines

3.55 Guidelines for regional plans and investment strategies were important given the significant changes envisaged from the individual project submission model of the NHT to a targeted investment model. This was particularly important for newly established regions or regions where there was very limited State/Territory assistance.

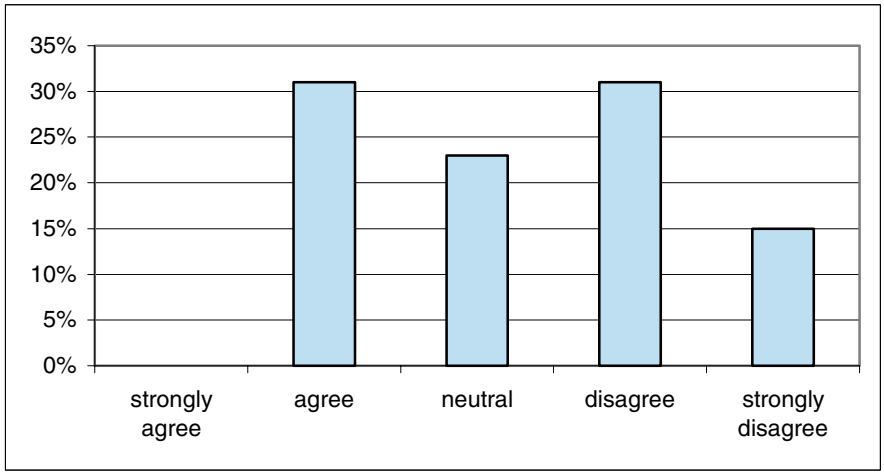
3.56 Guidelines for regional plans were attached to each bilateral agreement. They were designed to be broad and non-prescriptive and accompany State-developed guidance. The purpose of guidelines was to inform regional bodies about accreditation criteria. It was not intended that the guidelines would tell communities how to develop regional plans or describe the specific structures or processes to be followed. Criteria for accreditation required measurable targets relating to resource conditions to be pragmatic and achievable. While they were expected to be developed iteratively using cost/benefit analysis, there were no specific standards set for the regions.

3.57 For investment strategies, guidance and investment templates were largely a State responsibility although they are approved through the JSC. These guidelines generally cover the approved format for investment strategies and key information relating to the program, implementation, monitoring, and evaluation/reporting. A pilot study to trial the Victorian proposed guidelines for regional investment strategies was conducted in 2002 in the Glenelg-Hopkins region.

3.58 Responses from the regions as to the adequacy of the guidelines were mixed, although more regions (46 per cent) disagreed, or strongly disagreed than agreed (31 per cent) with the view that the guidelines were useful and clear. Responses are shown below in figure 3.6.

Figure 3.6

Responses from the regions to the statement: 'There have been guidelines that are useful and clear to assist in developing regional plans and investment strategies'.



Source: ANAO Survey of Regions.

3.59 Comments from the regions on this question indicated that the guidelines have not been provided in a timely manner and have changed over time. There was a clear sense of frustration in the responses from a number of regions. As one region commented:

> Guidelines took a long time to be developed. We had our plan 75 per cent completed before any guidelines were released. Guidelines are being continually updated with the expectation that plans will be changed to conform to the guidelines.

3.60 In particular, the design of regional plans was a highly complex and technical task. The challenges were apparent for State and Australian Government agencies, as much as for the regions. However, regions have indicated that they needed guidance and assistance earlier in the process to enable them to meet the standards required.

3.61 In relation to guidance for investment strategies, conflicting views from Australian Government and State agencies compounded the problem for the regions. Evidence suggests that many of the early investment strategies were characterised by confusion, a lack of transparency and poor communication with the regions. Guidelines and strategy templates were generally provided late to the regions. As a consequence, submissions to Australian Government agencies lacked clarity particularly in terms of the linkage between the investment strategies and the intended outcomes for each region. In one State

in particular, the material had to be substantially redrafted for Australian Government consideration.

3.62 An evaluation in one State in 2003–04 reinforced these results. The process was viewed by many stakeholders, especially those in the regions, as being 'a debacle from start to finish'. It was viewed as being developed on the run and not delivering the promised benefits of a consolidated multi-investor platform. The report noted that without process improvements there was a risk of losing support for the program. Concerns reflected a view that the process was confusing, poorly communicated and lacking transparency for the regions. The 'timelines' for decisions was considered to be a major problem.

3.63 While recognising that guidance was meant to be broad and non-prescriptive, the ANAO considers that there would be some merit in Australian Government agencies in partnership with the State and Territories, providing further guidance to the regions. In particular, compliance with the *Environment Protection and Biodiversity Conservation Act 1999* and relevant national standards, such as in relation to water quality, could be better communicated to the regions as part of the evolution of the regional delivery model. Given the scale and significance of projects being funded under the NAP and the potential impacts on biodiversity, it is crucial that the regional bodies can provide an assurance that there are no significant detrimental environmental impacts, for example on listed threatened species or wetlands of international importance. The difficult tradeoffs involved in managing salinity and water quality suggest this should be a continuing priority under the program.

3.64 The ANAO notes that both Australian Government and State agencies have been endeavouring to build on the experiences and lessons learned from the 2003–04 financial year. For example, for States yet to receive investment funds, current processes are designed to simultaneously accredit plans and approve investment strategies. The ANAO considers that process improvements discussed in this chapter, and the dissemination of lessons learned should be priorities as part of the guidance for investment in the remaining States/Territories.

ANAO Conclusions

3.65 Regional bodies funded through the NAP have been required to develop and implement integrated natural resource management plans as a basis for Government funding. These plans encompass catchment-wide activities to address a range of natural resource management issues in addition to salinity and water quality. As at 1 October 2004, only 62 per cent of the 34 regional bodies had accredited plans in place. These regional plans varied in quality, with a recent report to the Ministerial Council highlighting that it was

doubtful that the targets in some plans were 'sufficiently robust to arrest or reverse the decline in some catchments'. While efforts have been made to disseminate information and guidance from Australian government and State agencies, the ability of some regions to access adequate data and analysis at a useable scale on key issues has hindered the process of quality planning for these regions.

3.66 Once regional plans are accredited, regional bodies are required to develop investment strategies as a basis for government funding. As at 1 October 2004, 19 regional bodies had investment strategies in place. From the survey conducted by the ANAO of regional bodies, only eight per cent of regions agreed with the statement 'decisions on funding for regional plans and investment strategies are timely and address the needs of the regions'. The process has not been assisted by the fact that investment strategies have generally been for 12–18 month periods. While noting the recent progress in this area, there is now scope for seeking a commitment from the remaining States/Territories and regions for three-year investment cycles. This should help to strengthen the strategic focus of the investment process and lessen the transactional costs of the program.

4. Managing and Reporting Performance

This chapter examines the management of performance under the NAP. This includes the corporate governance arrangements in place for the delivery of the program, and the controls for managing expenditure under the program. This chapter also examines the monitoring, evaluation and reporting framework for the NAP.

Corporate governance arrangements

4.1 Corporate governance is basically about the strategic framework in which an organisation, or its programs, are managed. Good public sector governance is important for an agency to provide adequate accountability to its many stakeholders, including taxpayers, and to encourage performance improvement while satisfying control and compliance requirements.[43]

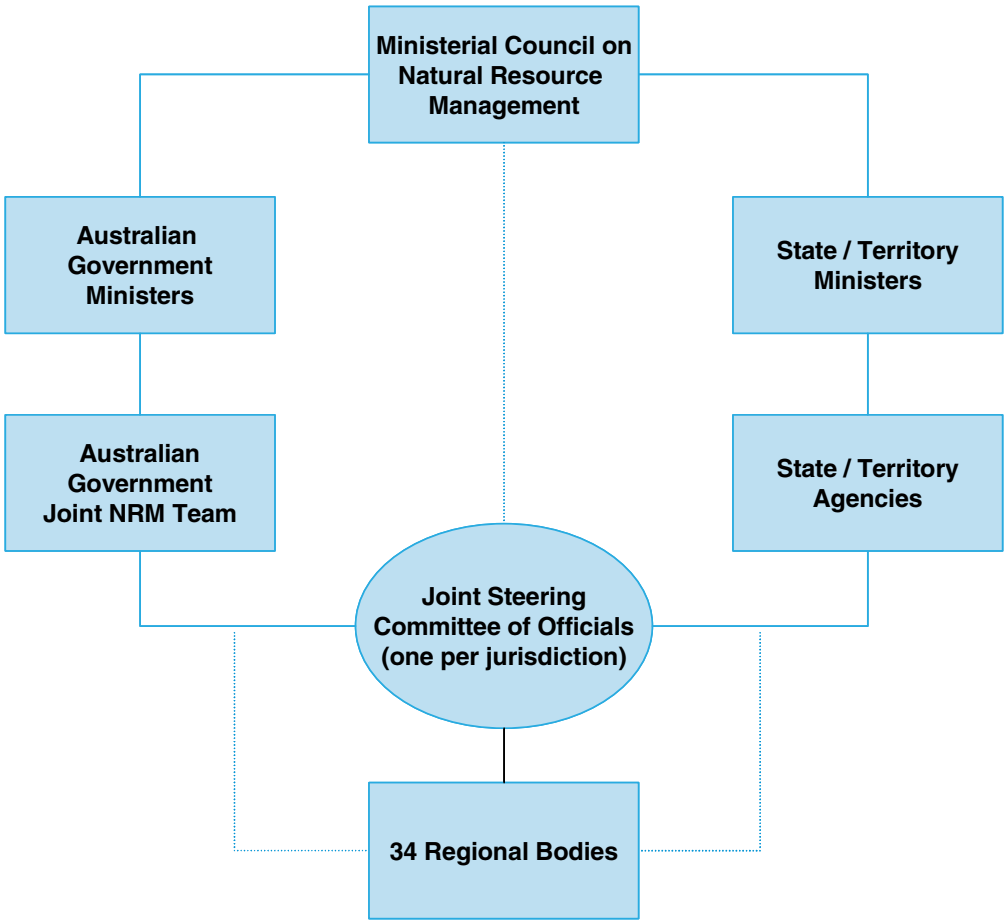
4.2 The program has a complex governance structure as a result of the large number of parties involved including two Australian Government agencies, all eight State and Territory Governments (some with multiple agencies), and 34 regional bodies. Each State or Territory agency is subject to its own legislative requirements and, with the exception of the ACT, each has entered into a bilateral agreement with the Australian Government for the implementation of the NAP.[44] There is also a very wide range of stakeholders with an interest in the program (as outlined in chapter 3). Figure 4.1 provides an overview of the NAP governance structure.

[43] Australian National Audit Office, *Public Sector Governance—Better Practice Guide*, ANAO, July 2003, Auditor-General's Forward p. iii.

[44] The ACT, while yet to sign a bilateral agreement with the Australian Government, has been included within the Murrumbidgee Catchment in NSW.

Figure 4.1

NAP Governance Framework



Source: Developed by the ANAO

Australian Government joint delivery arrangements

4.3 The NAP is delivered by the 'Australian Government NRM Team', which is a joint initiative between DAFF and DEH. The NRM team comprises more than 100 DAFF and DEH employees working together to deliver the NAP and the NHT. The team works directly to two Australian Government Ministers, the Minister for Environment and Heritage and the Minister for Agriculture, Fisheries and Forestry.[45] This innovative arrangement has allowed the Australian Government to provide an integrated, whole of government

[45] Management Advisory Committee Department of Prime Minister and Cabinet. *Connecting Government: Whole of Government Responses to Australia's Priority Challenges*, 2004, p. 129.

approach to State and regional stakeholders. The NRM team approach has also demonstrated the advantages of simplifying the 'face of government' to clients when dealing with the same target audiences on related matters.[46]

4.4 However, the ANAO considers that joint delivery arrangements could have been strengthened if they had been formalised in writing at the outset. A DAFF internal audit report in March 2004 noted that 'the arrangements between DAFF and DEH are informal and have not been formalised through an agreement or Memorandum of Understanding (MOU)'.[47] The ANAO considers that, while the current arrangements have been working effectively and there are joint manuals and business plans in place, it is good practice to formalise agreed operating protocols for accountability and management purposes. Such arrangements would facilitate the continuity of the arrangements over the life of the program. It is noted that (as at July 2004) the agencies have commenced work to implement the recommendation to establish an MOU between the two agencies.

Joint Steering Committees

4.5 As required by each respective bilateral agreement, the Australian Government agencies formed a 'Joint Steering Committee' (JSC) with each State and Territory. The JSC has responsibility for implementing the bilateral agreements. The JSC has responsibility for disbursement of funds from a single holding account (SHA) once Australian Government and State or Territory Ministers have approved investment strategies. The JSC's role extends to assistance for the regions in the development of plans and investment strategies, and the implementation of monitoring and evaluation.

4.6 The JSC generally consists of senior executives from the Australian Government and each State or Territory. In Western Australia, the bilateral agreement extends the JSC to include a non-voting member from that State's regions, as well as a local government representative and a community member. Evidence from the regions, the State and Australian Government agencies indicates that this has created a positive environment for progressing the NAP initiatives in this State. Agencies have indicated that they have been endeavouring to broaden participation in the JSCs. Agencies have advised that the JSCs in NSW, the Northern Territory and Tasmania also have community representatives observers.

4.7 The ANAO considers that the JSC has provided a key coordinating mechanism for the implementation of the NAP in each State and Territory.

---

[46] ibid., p. 130.

[47] Australian Government Department of Agriculture Fisheries and Forestry, *The National Action Plan for Salinity and Water Quality Internal Audit Report,* March 2004, p. 10.

From a review of the records of JSC meetings in different States/Territories, the ANAO notes that meetings have focused on a broad range of administrative issues and have been used as a mechanism to resolve intergovernmental disputes.

4.8 The ANAO considers that, given the importance of improving the client focus of the program, it may be appropriate to expand the approach to include regional and community members on the JSC in all the other States/Territories. By involving regional stakeholders, the JSC could improve communication on policy and administrative priorities, provide better consideration of regional priorities and constraints, and improve the client focus of the program.

Regional responsibilities and governance

4.9 A sound governance framework should guide the action of individuals by providing clarity of direction as to appropriate behaviour and decision-making. When working well, a governance framework produces better outcomes simply because it exists.[48] Appropriate governance arrangements are important given the changes involved in the regional delivery model and level of federal funding involved.

4.10 Within the context of the bilateral agreement, each regional body is responsible for developing and implementing priorities in the plans and investment strategies (as discussed in chapter 3). Regions are also responsible for the on-ground delivery of the program, the achievement of milestones and for reporting on performance.

4.11 Under the bilateral agreements, regional groups were to be largely a State responsibility. Nevertheless, the Australian Government agencies recognised that national principles and broadly consistent practices were important given the significant level of federal funding involved. The principles were designed to ensure that all regional bodies in receipt of NAP funding:

- were incorporated bodies;
- had a majority community membership with a balance between production and conservation interests;
- liaised with agencies, authorities and other bodies concerned with NRM;

---

[48] Uhrig J, *Review of the Corporate Governance of Statutory Authorities and Office Holders*, June 2003, p. 2.

- maintained proper financial accounts and detailed records for funds received;
- provided adequate public access to information regarding decisions by the NRM group including information on priority setting and expenditure;
- had the necessary skills and capacity to facilitate the development of an NRM plan that met accreditation criteria; and
- had the necessary skills and capacity to manage the implementation of agreed components of the NAP in each region.

4.12 In 2003 the Victorian Auditor-General highlighted the importance of corporate governance arrangements in State Government organisations. In a report to the Victorian Parliament (the Audit), he found problems with the financial management and management systems in place in Victorian Catchment Management Authorities (CMAs)—all of which had received Australian Government funding from either the NAP or the NHT.[49] He commented that:

> With the influx of Commonwealth funds, and associated growth in operations, many authority businesses have outgrown their basic financial and project management systems and procedures. In some authorities, management no longer has access to the type and detail of information needed to make informed business decisions.[50]

4.13 A problem was noted in the capacity of one CMA to meet existing financial commitments for projects and ongoing fixed costs. In this case, significant expenditure was made to a program from funds received for other purposes. The Board of Management was not kept informed of the shortcomings in financial management. The organisation would have been insolvent if it was required to repay grants received for work not completed, or complete all work for which it had received funding.[51]

4.14 More broadly, the audit noted concerns surrounding corporate governance for the State CMAs. The report highlighted that 'some boards lacked the level of knowledge and experience in financial management needed to adequately manage their businesses'.[52] In relation to NAP projects, the Audit noted that 'the absence of clearly defined responsibilities for projects, and a

---

[49] At the time of the report (November 2003), CMAs in Victoria were in receipt of $31.6 million in grants from the NAP and $8.95 million from the NHT for the year 2002–03.

[50] Victorian Auditor-General, op.cit., p. 221.

[51] ibid, p. 194.

[52] ibid, p. 207.

lack of adequately trained and skilled staff in some areas, has affected the ability of some authorities to effectively manage projects under their control'.[53]

4.15 The outcome of the Victorian audit is of particular concern given that Victoria is well advanced in this area when compared with other States/Territories. It is also worthwhile noting that Victorian CMA's receive about two-thirds of their funding from the Australian Government or State specific purpose grants. This has important implications for corporate governance as well as for cash flow management, which will be discussed further in the next section.

4.16 The ANAO considers that the significant level of federal funds involved suggests that strong corporate governance arrangements are essential to manage the risks involved. Regions in Queensland, Western Australia, Northern Territory and Tasmania have been scaled-up from small, voluntary, community-based bodies. Under the NAP they could have responsibility for managing millions of dollars of NAP funds over the next four years.

4.17 The majority of respondents to the ANAO survey of regional bodies said that their board was provided with training on their responsibilities and liabilities. However, four regions did note that there was either no training or that this area required significant improvement. One region in another State was not an incorporated body at the time of receipt of NAP funds.

4.18 A 'Review of the NAP Governance and Control Framework' in March 2004 (which was commissioned by agencies as part of continuous improvement) also noted that no mechanisms were in place to require regional body members to declare any conflicts of interest in their decision-making process. This is a crucial consideration given the level of funds being managed and the potential private benefits that could result. This in turn highlights the care needed to ensure that regional bodies are broadly represented and independent in their decision-making. Agencies have indicated that they are working with States/Territories to improve program governance arrangements.

4.19 The ANAO recognises that the establishment of a governance framework for a regional delivery model has been a substantial, ongoing task involving some intergovernmental tensions over the level of Australian Government involvement with regional bodies, and a considerable resourcing requirement to achieve the desired level of change. However, the regional delivery model has implicit risks that can be better managed through:

- strengthened corporate governance arrangements at the regional level;

---

[53] ibid, p. 217.

- enhanced training and information for regional board members on their legal and financial responsibilities (Agencies have advised the ANAO that the JSCs are currently doing some work in this area); and
- closer attention to managing potential conflicts of interest.

Recommendation No.5

4.20 The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage consult with State and Territory agencies about developing appropriate corporate governance templates and core training/information to enhance the capacity of regional bodies to meet sound corporate governance practices.

Joint agency response

4.21 Agreed. Agencies will review current governance arrangements, including:

- the current level of skills and capacity within regions for financial management and management systems;
- the project management structures and processes; and
- the potential for conflicts of interest and the capacity for regions to manage this risk.

4.22 In states where regional bodies are statutory organisations, such as NSW, Tasmania, Victoria and South Australia, the regional bodies are required to comply with the state governance arrangements. For example, in NSW the general managers and board members of each region have received training on their corporate governance responsibilities. In Victoria, a person has been specifically appointed to oversee the corporate governance arrangements in the regions.

4.23 The Australian Government has established a project through the National Landcare Program, one of the suite of Australian Government NRM Programs, to provide workshops for landcare groups / volunteers, facilitators and coordinators and members of regional bodies on risk management, public liability obligations and duty of care for community volunteers. At the end of this project a written report will be provided on the key issues for managing landcare groups and options on how to address the issues raised at the workshops.

Managing expenditure and financial controls

4.24 For a relatively large funding program such as the NAP, controls over payments are an essential element of good management. The control

framework is integral to good corporate governance and fundamental to managing risks and legislative compliance. Expenditure must be authorised at an appropriate level and provided in a timely manner to ensure the efficient and effective delivery of the program.

4.25 DAFF is the lead agency responsible for the management of NAP funds. Under the NAP, the Australian Government has allocated $700 million. Ministers were advised early that the timing of expenditure was quite uncertain. As outlined in table 4.1, $166.24 million of this amount has been paid to the States/Territories SHA as of 30 June 2004. The original appropriations to 30 June 2004 were for expenditure of $410 million.

Table 4.1

Aggregate payments to the States and Territories to June 2004

State/Territory	Australian Government commitment in the Bilateral Agreement to 2007 ($M)	Australian Government payments to SHA to 30 June 2004 ($M)	Australian Government payments to 30 June 2004 as a % of agreed allocation
NSW	198.0	50.44	25.47%
Victoria	152.0	53.53	35.22%
Queensland	81.0	18.11	22.36%
Western Australia	158.0[A]	2.65	1.68%
South Australia	93.0	39.55	42.53%
Tasmania	12.0	1.89	15.75%
Northern Territory	6.0	0.05	0.83%
ACT	Not signed [B]	0.02	N/A
Total ($ million)	**700.0**	**166.24**	**23.75%**

[A] $31.41 million was initially allocated in the bilateral agreement but was supplemented with an additional commitment of up to $158 million (including the initial allocation) provided it was matched by an equal amount from the WA Government from the 2004–05 Budget. The WA Budget record indicates that this was achieved and the Prime Minister formally agreed to the $158 million in August 2004.

[B] ACT expenditure was incorporated into the Murrumbidgee region of NSW.

Source: Based on figures from the Department of Agriculture, Fisheries and Forestry.

4.26 Given that we are now at the halfway point of the program, table 4.1 illustrates that payments are low compared with State/Territory allocations under the bilateral agreements, for all States/Territories except South Australia. Payments to Western Australia have been particularly low, which reflects the tensions between Governments over financial commitments. This

has some implications for the ultimate success of the program. The PMSEIC report stated 'Western Australia has by far the largest area of dryland salinity, with 1.8 million hectares already affected—amounting to over 70 per cent of the nation's currently affected land area of 2.5 million hectares'.[54] However, given the protracted dispute between the Australian Government and the State Government over financial contributions to the program there is little that could have been done to expedite payments ahead of the bilateral agreement being signed in September 2003.

4.27 Table 4.2, as follows, illustrates that significant expenditure under the NAP did not occur nationally until 2003–04.

Table 4.2

Actual payments to the States and Territories to June 2003–04

	2000–01 ($M)	2001–02 ($M)	2002–03 ($M)	2003–04 ($M)	Aggregate total to 30 June 2004 ($ M)
NSW	-	-	10.52	39.92	50.44
Victoria	-	7.90	20.38	25.25	53.53
Queensland	0.80[A]	2.01[B]	5.31[C]	9.99	18.11
Western Australia	-	-	-	2.65	2.65
South Australia	0.1	6.45	19.05	13.95	39.55
Tasmania	-	-	0.05	1.84	1.89
Northern Territory	-	-	-	0.05	0.05
ACT	-	-	-	0.02	0.02
Total ($ million)	**0.9**	**16.36**	**55.31**	**93.67**	**166.24**

[A] $0.76 million was also spent on salinity mapping as agreed between Australian and State Governments.

[B] $1.56 million was also spent on salinity mapping as agreed between Australian and State Governments.

[C] $0.11 million was also spent on salinity mapping as agreed between Australian and State Governments.

Source: Based on figures from the Department of Agriculture, Fisheries and Forestry.

4.28 The original intention of the bilateral agreements was for block grants with annual payments to be made by an advance payment, followed by instalments tied to the achievement of milestones (as outlined in chapter 3). However to date, payments from Australian Government agencies to the SHA have not been evenly spread. In the last quarter of the 2003–04 financial year,

[54] Prime Minister's Science, Engineering and Innovation Council, op. cit., p. 6.

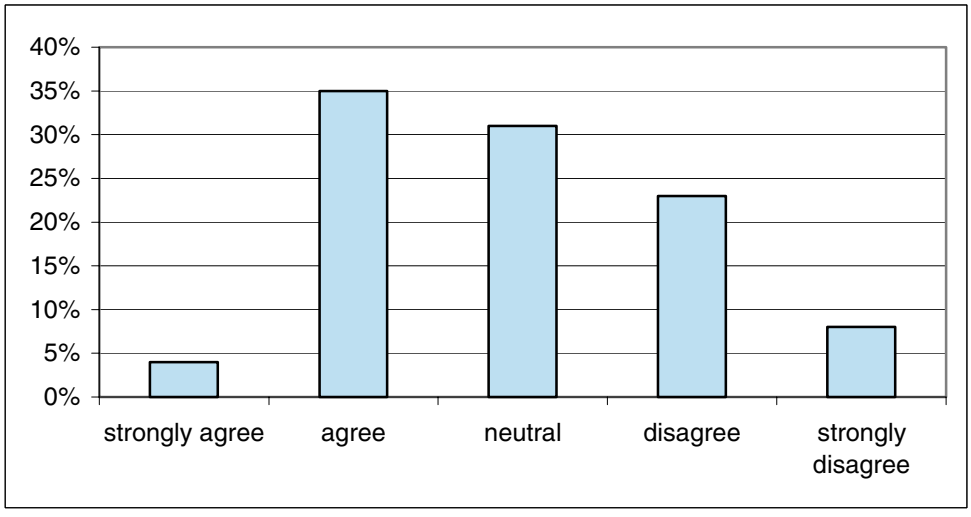
71 per cent ($66.4 million) of total Australian Government payments for that year ($93.67 million) were paid to the SHA. This reflects the various stages of the implementation of the NAP in different States/Territories. Some States/Territories have only received foundation and priority action funding while other States/Territories have full investment strategies in place. Agencies have advised that payments are expected to become more even once all investment strategies are in place.

4.29 However, even subsequent to Australian Government payments being made to a SHA there have been delays in this funding reaching the regions. Agencies have advised the ANAO that in one State, payments were not released from the SHA to the regions for some 5 months. Consequently, at times, the State payments from the SHA have not been aligned with the cash flow needs of the regions. While this is a State responsibility, it highlights the scope for concerted action through the JSC arrangements. In particular, an audit of payments from SHAs to the regions might provide a useful assurance that funds are not being unnecessarily delayed or if so, why this might be the case.

4.30 From the ANAO survey, the regions also commented about delays in NAP payments. Figure 4.2 highlights that there was a strongly positive or neutral response overall from the regional bodies. However, regions qualified this by expressing particular concerns about solvency risks, uncertainty about the continuity of staff positions and the relationships with stakeholders.

Figure 4.2

Responses from the regions to the statement: 'Payments made under the NAP are paid in timely intervals, with appropriate use of milestones'.



Source: ANAO survey of NAP regions.

4.31 Clearly, the timeliness of payments has important implications for the success (or otherwise) of the regional delivery model. As one regional comment in relation to this question included:

> Funds for NAP in 2002–03 were advised in October (i.e. a third of the way through the financial year). Funds in 2003–04 were advised in December (almost half way through the year). This brings up issues of trading whilst insolvent each year for our organisation. Advice by 30th June would be ideal. Advice in July or August acceptable. … The lumpy nature of funding has implications for our implementation. It takes us a long time to establish all the networks, links, and people etc to achieve outcomes. If funding is not advised in a timely manner we reach a point at which we need to make decisions to stop works, sack people and advise regional stakeholders. The confusion and angst that ensues is expensive and unacceptable.

4.32 The ANAO notes that, had the original concept of block grants for three-year investment strategies and quarterly payments been adopted earlier, this would have largely avoided the problems that have occurred. In some cases, the regional groups themselves have been reluctant to develop three-year investment strategies because of the considerable level of organisational change that has been occurring. However, to avoid the consequences of regions becoming insolvent or being unable to progress initiatives, concerted effort is required from both Australian Government and State agencies. The role of the JSCs is crucial in this regard.

4.33 A further concern raised by the regions in relation to payments is the system of project variation. During the course of the audit, various parties commented that the current system of delegations could be enhanced. One comment from a region in this regard was that:

> A clear need is for the Joint Steering Committee to give the respective Program Leaders the autonomy to make decisions on project variations due to any one of the following, financial (20% of project up to maximum of $100 000 per project), timeline and outcome changes. The regions should have the autonomy to make changes up to 10% or up to a maximum of $50 000 per project. Project extension beyond three months should go the Victorian and Australian Government Program Leaders.

4.34 One State agency also noted that:

> Issues such as delegations for the approval of variations to projects differ significantly between the NAP and the NHT, to the extent that little or no authority is delegated to the Joint Steering Committee and Directors. Clearly, it is not administratively effective if most changes to projects require variation requests being approved by Commonwealth Ministers.

4.35 In advice to Australian Government Ministers in March 2004, agencies highlighted that there was no specific delegation authority under the NAP. They recognised that across large programs such as the NAP there was likely to be some over and underspends, delays and requests to change outputs that could result in Ministerial authorisation being required for numerous small variations. Ministers agreed to authorise Australian Government members of the JSCs to approve budget variations of up to ten per cent where this did not exceed $100 000. Deadlines for large-scale rolling investments can also be extended by six months. The ANAO considers that this is a positive development that should largely address the concerns raised by the States/Territories and regions.

4.36 A consideration for the future evolution of the regional delivery model is that some minor administrative delegations could be further extended to the regions. Clearly these regions would need to demonstrate 'good practice' corporate governance and have a proven record of performance and accountability. The ANAO considers that this is likely to provide a further incentive to enhance corporate governance in the regions. It would also help to streamline the program and enhance the efficiency of project administration.

Monitoring progress towards program goals

4.37 Regular performance measurement and monitoring is essential to determine the extent to which desired outcomes have been achieved.[55] The monitoring of progress under the program is a key element of accountability to provide an assurance of the efficient and effective use of public funds.

4.38 With the long lead-time for results in NRM (discussed in chapter 2) and given the number of stakeholders at the Australian Government, State and regional levels with an interest in the program, monitoring and evaluation was never going to be a straightforward task. The overarching monitoring and evaluation requirements are outlined in the bilateral agreements. In addition, monitoring and evaluation was included as a requirement for accreditation of regional plans and approval of investment strategies.

4.39 As required by the IGA, agencies have put in place a national monitoring and evaluation framework for NRM programs (including the NAP). This framework was agreed to in May 2002—nearly two years after the start of the program. It provides a structure to monitor and evaluate both program performance and natural resource conditions. While all States/Territories have agreed in principle to the framework as at 30 June 2004, only three (Queensland, Victoria and NSW) of the eight States/Territories have

---

[55] Australian National Audit Office Better Practice Guide, *Administration of Grants*, 2002, p. 57.

formally adopted the framework through implementation plans. Agencies have advised that work is currently underway with other States/Territories to finalise monitoring and evaluation arrangements.

4.40 Monitoring at the regional level involves the collection of quarterly financial reports, as well as half yearly and annual financial and progress reports. These reports are considered by the JSC. No significant outcome reporting is anticipated until later years. In the meantime, reporting from regions will fall under different targets, including achievable resource condition targets and management action targets as discussed in chapter 2.

4.41 Regions have three years from the signing of the bilateral agreement to establish sufficient data to set targets. For Western Australian regions, this means that targets will not have to be in place until 2006. Consequently, it will be important that the management action are placed in context as part of the annual report and that progress towards targets is discussed in future annual reports. Close attention to monitoring the efficacy of some of the higher risk interventions such as revegetation and engineering works, will be particularly important and a high priority, so that the lessons learned can be disseminated across other regions.

4.42 A further issue relevant to the monitoring of the program relates to the challenges in achieving consistency in reporting from the 34 regional bodies. Without consistent measures, reports by regions cannot be aggregated to provide a summary. This was a key finding from the 2004 internal audit of the NAP. The report commented that:

> At present, regional bodies are developing their own management information systems, complicating the performance information and financial reporting process and resulting in inevitable variation and lack of consistency for management purposes.[56]

4.43 Agencies responded by indicating that a single information system was not feasible due to the resource constraints as well as the number and diversity of stakeholders. However, they recognised the need for a coordinated system.

4.44 Comments from the regions as part of the ANAO survey indicated some confusion in regard to the expectations of Australian and State/Territory agencies in this area. The regions commented that the co-ordination of performance information has been an issue for them. Indeed, there is a perception at the regional level that the current system is overly complicated, onerous and prescriptive. Some comments from regional bodies included:

> The real frustration has come from conflicting advice from different sources of information, particularly with regard to plan preparation/content and

---

[56] Australian Government Department of Agriculture, Fisheries and Forestry, *The National Action Plan for Salinity and Water Quality Internal Audit Report,* March 2004, p. 15.

> monitoring and evaluation requirements. A great deal of pressure is placed upon regional bodies to have reporting in on time; before those requesting the information have a consensus upon what they require.
>
> Ongoing reporting is an issue that still needs to be clarified. The Regional Investment Strategy reporting should be at the outcome level, not at project/output level. Generally there appears to be too much reporting, monitoring and evaluation -framework is still to be finalised—very difficult.

4.45 The ANAO considers that, in a program with so many stakeholders that ultimately relies on regional bodies to provide performance information, it would have been useful to develop a consistent, integrated system. However, if resource constraints are an issue, consideration must be given to an alternative quality control mechanism to provide an assurance that the quality and standardisation of data outputs are consistent across regions and accurate in terms of what is being measured.

Recommendation No.6

4.46 The ANAO *recommends* that the Departments of Agriculture, Fisheries and Forestry and Environment and Heritage in consultation with other service providers (including State/Territory agencies) consider implementing an integrated approach to quality assurance for, and the standardisation of, financial and performance data outputs across regions.

Joint agency response

4.47 Agreed. The agencies agree that consistency of data is important for monitoring and evaluation of regional delivery. The review of current governance arrangements, mentioned in response to recommendations 2 and 5, will also examine the quality of financial and performance data and the capacity of the regions to provide appropriate reports.

4.48 In conjunction with States / Territories, the Australian Government is developing an information system for data access and management at the regional level. This data system will enable information to be aggregated from the regions into an annual progress report on the NAP and NHT for the Natural Resource Management Ministerial Council. The information system will link State and Territory information banks with the Australian Government data system.

Reporting on performance

4.49 Good governance requires that an agency have a structured and regular system of reporting. Annual reports are the principal accountability mechanism by which agencies demonstrate results over the financial year to Parliament and other stakeholders. Effective public reporting should provide

Parliament and other stakeholders with sufficient information and analysis to make a fully informed judgement on performance.

4.50 As outlined in the IGA, an annual report was to be prepared for the Ministerial Council on the implementation of the NAP. The first annual report for Ministerial Council (for the 2002–03 financial year) was published in April 2004 and is available on the NAP website. Progress to date has been a challenge for agencies given the delays in the program and the contentious nature of intergovernmental relations.

4.51 The report contains an analysis of activities and funding for each regional group (where applicable). It examines particular areas for target (for example, land salinity, soil condition). It also includes a summary of performance, which to date includes outputs such as accreditation of regional plans. Performance information is largely based on estimates rather than actual data and most investment projects have yet to be completed. It is intended that the report will be completed annually and be publicly available.

4.52 In terms of the recent annual report, the reader is able to gain an understanding of progress against natural resource condition targets and for some of the gaps in terms of where regions are not currently progressing initiatives. Reporting on management action targets is useful in giving the reader a sense of the stages in development of the program. The reporting of intermediate outcomes can be useful in demonstrating that risks are being properly managed and the initiative is headed toward the intended overall result or if not, why this is the case.

4.53 Nevertheless, the Annual Report to the Ministerial Council notes that 'in many cases, there is insufficient data for the region to establish a measurable target in which the region can be sufficiently confident'.[57] This is a positive recognition of a key area for future improvement.

4.54 Future reports need to focus on the remaining challenges, constraints and how the residual risks are being managed. This would give the reader a balanced perspective of progress under the program. Also, documentation of the progress being made in corporate governance would assist in providing a stronger indication of the risk management implementation framework for the program. Given the importance of the goal of the NAP it would be useful for the annual report to provide a commentary on the extent to which concentrated action under the program has lead to significant land or water use change. This is crucial to reporting on the likely success of the program.

---

[57] Annual Report to the Ministerial Council, op. cit., p 10.

ANAO Conclusions

4.55 The management of the NAP has involved joint arrangements between the Department of Agriculture, Fisheries and Forestry and the Department of the Environment and Heritage as well as joint arrangements with the States/Territories. The joint delivery approach at the Australian Government level in particular has been an innovative and efficient response to program delivery.

4.56 Nevertheless, the new regional delivery model has introduced new challenges and risks. Corporate governance arrangements should be scaled up so that financial and project management systems and procedures match the level of risk—particularly in terms of managing potential conflicts of interest, and in improving the quality and consistency of output and outcome reporting.

4.57 Moving to a three-year investment cycle will assist in addressing some of the delays in investment decisions. Future reporting will benefit from a focus on the remaining challenges, constraints and on how remaining risks are being managed—including progress in implementing strengthened corporate governance. Given the importance to the NAP goal, commentary in the Annual Report on the extent to which the program has lead to significant land and water use change would also be useful.

Canberra ACT
15 December 2004

P. J. Barrett
Auditor-General

Appendices

Appendix 1: Summary of regional survey responses

The table below provides a summary of the qualitative responses received for the ANAO survey of NAP priority regions. Twenty-six responses were received from the 34 regional bodies. Each respondent was asked to rate 11 statements on a scale from strongly agree to strongly disagree.

Table outlining quantitative results from NAP survey

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1. The NAP is a well-designed program and is appropriate to meet a recognised need in our region.	4%	73%	19%	4%	0%
2. The regional delivery model for the NAP adequately addresses coordination issues with other natural resource management initiatives such as the Natural Heritage Trust, water access entitlements, water pricing and the integrated management of environmental water allocations.	15%	38%	15%	32%	0%
3. In our region, the regional boundary is appropriate and adequately reflects coherent districts with common problems and potential solutions.	15%	42%	27%	8%	8%
4. In shifting to the regional delivery model for the NAP and other initiatives, adequate guidance and information was provided to assist regions in dealing with an increased workload and responsibilities.	0%	19%	27%	42%	12%

		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5.	**General administrative support (including access to information and people) is easily accessible and provided in a timely manner.**	0%	27%	30%	35%	8%
6.	**The level of ongoing support (including scientific knowledge, economic information, technical data) is adequate to assist in developing regional plans and to target investment strategies to areas of highest priority.**	4%	27%	23%	38%	8%
7.	**There have been guidelines that are useful and clear to assist in developing of regional plans and investment strategies.**	0%	31%	23%	31%	15%
8.	**Decisions on funding for regional plans and investment strategies are timely and address the needs of the regions.**	0%	8%	23%	42%	27%
9.	**Information is readily available to us which describes successful / unsuccessful initiatives in other regions.**	4%	27%	30%	27%	12%
10.	**Payments made under the NAP are paid in timely intervals, with appropriate use of milestones.**	4%	35%	30%	23%	8%
11.	**Overall, the progress that is being made in our region through the NAP is positive and aligned with our expectations of what the program would provide.**	12%	50%	26%	8%	4%

Source: Developed by the ANAO

Appendix 2: List of submissions

1. Department of Environment, Australian Capital Territory
2. Department of Infrastructure, Planning and Natural Resources, New South Wales
3. State Natural Resource Management Office, Western Australia
4. Department of Sustainability and Environment, Victoria
5. Department of Primary Industries, Tasmania
6. Australian Salinity Action Network
7. The Cooperative Research Centre for Plant-Based Management of Dryland Salinity
8. Independent submission by Associate Professor David Pannell
9. Natural Resource Management Consultants
10. Centre for Salinity Assessment and Management, University of Sydney
11. Independent submission by Mr Garry English.

Appendix 3: Joint agency response

Australian Government

Department of Agriculture, Fisheries and Forestry

Department of the Environment and Heritage

Mr David Crossley
Executive Director
Performance Audit Services Group
Australian National Audit Office
GPO Box 707
CANBERRA ACT 2601

Dear Mr Crossley

Thank you for your letter of 28 October 2004 offering the Departments of Agriculture, Fisheries and Forestry, and the Environment and Heritage the opportunity to formally comment on the ANAO's Proposed Report on the Administration of the National Action Plan for Salinity and Water Quality (NAP). Enclosed is the formal response from the Australian Government Natural Resource Management (AGNRM) Team, which consolidates the comments of both Departments.

The Departments agree with the recommendations in the report and consider that they provide a constructive basis for improving the future implementation of the program.

The Departments have already commenced action in response to the recommendations. For example, in response to Recommendation 5, one of the 2004-05 evaluations of the Monitoring and Evaluation Framework will review regional governance arrangements, including risk management, the financial management capacity of regional bodies and conflict of interest.

I wish to thank you and your team for fostering the positive working relationship between the ANAO and the AGNRM Team and the constructive approach the ANAO has taken during its review of the NAP.

Yours sincerely

Joanna Hewitt
Secretary
Department of Agriculture
Fisheries and Forestry
29 November 2004

David Borthwick
Secretary
Department of the Environment
and Heritage
28 November 2004

Edmund Barton Building Barton ACT GPO Box 858 Canberra ACT 2601 ph +61 2 6272 3933 **www.daff.gov.au** ABN 24 113 085 695

Departments of Agriculture, Fisheries and Forestry and the Environment and Heritage response to the ANAO's Proposed Report on the National Action Plan for Salinity and Water Quality

Response to Executive Summary

The Departments of Agriculture, Fisheries and Forestry and the Environment and Heritage agree with the recommendations and consider that they provide a basis for improving program delivery.

The report acknowledges that the NAP is pioneering a new approach to natural resource management (NRM) as part of a suite of Australian Government NRM programs that address particular NRM issues. For the first time, communities and regions across the continent are developing and implementing a consistent and integrated NRM regional planning regime for landscape change. The plans are developed using technical, scientific and governance support. Government investment is longer-term and targeted at outcomes identified in the regional plans. The NAP has contributed to significant institutional and policy reforms in the States / Territories which complement the on-ground investments made.

Additionally, strategies to sustainably manage surface and ground water systems are part of the regional planning process. The land and water changes outlined under the Inter-Governmental Agreement are given effect through bilateral agreements with the States / Territories.

The design of the program recognises that NRM change is a long-term process, involving cultural and institutional change and complex cause and effect relationships in the natural environment. As such, the NAP is managed adaptively using feedback mechanisms such as the science-based National Monitoring and Evaluation Framework, the Community Forum (involving the chairs of all the regional bodies), the regular scientific report from CSIRO / Bureau of Meteorology commissioned by the Australian Government and States / Territories and the National Land and Water Resources Audit.

The adaptive management is coupled with a governance structure including: an Inter Governmental Agreement; bilateral agreements with the States / Territories; the Joint Steering Committees and the joint delivery by the Departments. Regional governance is maturing in some states, such as Victoria and NSW and the experiences of formal governance training and structured accountability will be used to promote good governance to all regions.

Knowledge management is central to the complex delivery arrangements for a program addressing two portfolio objectives and a partnership with States, Territories and regions. The knowledge framework encourages communities and governments to act on the best available information and to respond to new information. Effective information exchange between regions and with research organisations and governments is a priority for development.

Delays in expenditure in the early years arose from the time required to engage and build capacity of communities, and negotiations with some states to secure the institutional reforms. With the maturation of the program, regions are now submitting plans and investment strategies to achieve the short-term goals of the NAP. Due to the nature of the complex NRM problems, the full impact of the NAP is not expected to be realised within the life of the program. However, the institutional and policy reforms are expected to address the root cause of many salinity issues and the regional structures and program measures, which have now been established throughout Australia, will continue to implement and monitor measures to prevent, reduce or live with salinity.

The report has identified areas for improvement, which are instructive at this stage of implementing such a landmark approach to natural resource management and Departments are addressing each recommendation.

Response to Recommendation 1
Agreed

The report notes that regions were selected on the basis of iterative and contentious negotiations with the States / Territories. Additionally the ANAO survey of regions highlighted that the majority of regions considered that their boundaries were appropriate and reflected coherent districts with common problems and potential solutions. The report also notes that decisions on regions for the NAP were based on scientific assessments of salinity hazard. Other factors considered in the selection of regions include the value of assets affected and likelihood of preventing or addressing problems. The views of the States / Territories were also taken into account in the final selection of regions. Natural resources information is frequently complex, commonly updated as new information or techniques become available based on new information and experience. Recognising this complexity, Departments will ensure that where resources are allocated between regions, a comparative analysis will be produced to demonstrate the basis upon which decisions are being made. Information to underpin such analyses will be built into the Departments' knowledge management framework reflected in joint Policy and Procedures Manuals.

Response to Recommendation 2
Agreed

The Departments currently include risks to regional delivery in the joint risk management plan. As a part of the Monitoring and Evaluation Framework annual evaluations, in 2004-05 Departments are reviewing current governance arrangements, including documenting and managing risk at the regional level. Some regions are developing a risk management plan at the regional level and discussions have commenced with Victoria about a "whole-of-State" approach to managing risk at the regional level. Experience with these 'pilots' will be used to extend the risk management approach.

Departments, in conjunction with States / Territories and regional bodies, will explore options to identify and respond to these risks using the monitoring and evaluation mechanisms currently in place. The risk management strategies will be updated as necessary.

Additionally, Departments, in conjunction with the States / Territories and regions, will monitor new knowledge from salinity research and program experience and document the risks and opportunities so that they can be built into future program development and project implementation at the regional level. The forward program of evaluations under the NAP and Natural Heritage Trust includes a review of the salinity responses from the programs.

Response to Recommendation 3
Agreed

Promoting the outcomes of recent research on salinity in the regions is a priority for program improvement that is currently being pursued with the States / Territories. As experience with salinity management grows at the regional level it will be important that this information is shared between regions as well as the science community.

Opportunities to share learnings and extend scientific knowledge include:

- science forums at the annual Community Forum for chairs of regional bodies;
- making greater use of NRM facilitators and coordinators as information brokers;
- continuing to develop the NRM website (www.nrm.gov.au) as a comprehensive regional information source; and
- using the South Australian Centre for Natural Resource Management as a trial for promoting and brokering natural resource management-related research and development through researcher, regional, government and industry partnerships.

The National Land and Water Resources Audit is also conducting a monitoring and evaluation trial in most States / Territories to assess the accessibility to data and analysis by regions and the usefulness and relevance of the available data. The outcomes of this work will also help target information provision.

The 2004 annual CSIRO / Bureau of Meteorology report, jointly commissioned by the Australian Government and States / Territories, identified the importance of access to and use of scientific data and analysis to ensure regional NRM plans are science based. This evaluation will be conducted regularly to monitor progress with this element of the NAP.

Response to Recommendation 4
Agreed

Three year funding arrangements were intended in the original design of the NAP. To develop the financial and governance capacity of the regional bodies, a staged approach was adopted, including the introduction of one year funding agreements.

The initial lack of uptake of three year funding cycles occurred due to regions requesting increased financial and governance capacity and the need for increased stability of regional body arrangements before being expected to manage large funds over extended periods of time.

As noted by the report, several regions have recently received approval for three-year investment strategies. Two NSW regions have had three year investment strategies approved and the remainder in NSW are being developed. Five regions in Victoria also have had three year investment strategies approved. All eight South Australian regions are now developing three year investment strategies to commence in 2005-06. The Departments will continue to work with States / Territories to encourage regions to focus on longer term planning and a move to three year investment strategies being applied more widely.

Response to Recommendation 5
Agreed

Departments will review current governance arrangements, including:

- the current level of skills and capacity within regions for financial management and management systems;
- the project management structures and processes; and
- the potential for conflicts of interest and the capacity for regions to manage this risk.

In states where regional bodies are statutory organisations, such as NSW, Tasmania, Victoria and South Australia, the regional bodies are required to comply with the state governance arrangements. For example, in NSW the general managers and board members of each region have received training on their corporate governance responsibilities. In Victoria, a person has been specifically appointed to oversee the corporate governance arrangements in the regions.

The Australian Government has established a project through the National Landcare Program, one of the suite of Australian Government NRM Programs, to provide workshops for landcare groups / volunteers, facilitators and coordinators and members of regional bodies on risk management, public liability obligations and duty of care for community volunteers. At the end of this project a written report will be provided on the key issues for managing landcare groups and options on how to address the issues raised at the workshops.

Response to Recommendation 6
Agreed

The Departments agree that consistency of data is important for monitoring and evaluation of regional delivery. The review of current governance arrangements, mentioned in response to recommendations 2 and 5, will also examine the quality of financial and performance data and the capacity of the regions to provide appropriate reports.

In conjunction with States / Territories, the Australian Government is developing an information system for data access and management at the regional level. This data system will enable information to be aggregated from the regions into an annual progress report on the NAP and Natural Heritage Trust for the Natural Resource Management Ministerial Council. The information system will link State and Territory information banks with the Australian Government data system.

Index

Series Titles

Audit Report No.16 Performance Audit
Container Examination Facilities
Australian Customs Service

Audit Report No.15 Performance Audit
Financial Management of Special Appropriations

Audit Report No.14 Performance Audit
Management and Promotion of Citizenship Services
Department of Immigration and Multicultural and Indigenous Affairs

Audit Report No.13 Business Support Process Audit
Superannuation Payments for Independent Contractors working for the Australian Government

Audit Report No.12 Performance Audit
Research Project Management Follow-up audit
Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Audit Report No.11 Performance Audit
Commonwealth Entities' Foreign Exchange Risk Management
Department of Finance and Administration

Audit Report No.10 Business Support Process Audit
The Senate Order for Departmental and Agency Contracts (Calendar Year 2003 Compliance)

Audit Report No.9 Performance Audit
Assistance Provided to Personnel Leaving the ADF
Department of Defence
Department of Veterans' Affairs

Audit Report No.8 Performance Audit
Management of Bilateral Relations with Selected Countries
Department of Foreign Affairs and Trade

Audit Report No.7 Performance Audit
Administration of Taxation Rulings Follow-up Audit
Australian Taxation Office

Audit Report No.6 Performance Audit
Performance Management in the Australian Public Service

Audit Report No.5 Performance Audit
Management of the Standard Defence Supply System Upgrade
Department of Defence

Audit Report No.4 Performance Audit
Management of Customer Debt
Centrelink

Audit Report No.3 Business Support Process Audit
Management of Internal Audit in Commonwealth Organisations

Audit Report No.2 Performance Audit
Onshore Compliance—Visa Overstayers and Non-citizens Working Illegally
Department of Immigration and Multicultural and Indigenous Affairs

Audit Report No.1 Performance Audit
Sale and Leaseback of the Australian Defence College Weston Creek
Department of Defence

Better Practice Guides

Fraud Control in Australian Government Agencies	Aug 2004
Security and Control Update for SAP R/3	Jun 2004
AMODEL Illustrative Financial Statements 2004	May 2004
Better Practice in Annual Performance Reporting	Apr 2004
Management of Scientific Research and Development Projects in Commonwealth Agencies	Dec 2003
Public Sector Governance	July 2003
Goods and Services Tax (GST) Administration	May 2003
Managing Parliamentary Workflow	Apr 2003
Building Capability—A framework for managing learning and development in the APS	Apr 2003
Internal Budgeting	Feb 2003
Administration of Grants	May 2002
Performance Information in Portfolio Budget Statements	May 2002
Life-Cycle Costing	Dec 2001
Some Better Practice Principles for Developing Policy Advice	Nov 2001
Rehabilitation: Managing Return to Work	Jun 2001
Internet Delivery Decisions	Apr 2001
Planning for the Workforce of the Future	Mar 2001
Contract Management	Feb 2001
Business Continuity Management	Jan 2000
Building a Better Financial Management Framework	Nov 1999
Building Better Financial Management Support	Nov 1999
Managing APS Staff Reductions (in Audit Report No.49 1998–99)	Jun 1999
Commonwealth Agency Energy Management	Jun 1999

Cash Management	Mar 1999
Security and Control for SAP R/3	Oct 1998
Selecting Suppliers: Managing the Risk	Oct 1998
New Directions in Internal Audit	Jul 1998
Controlling Performance and Outcomes	Dec 1997
Management of Accounts Receivable	Dec 1997
Protective Security Principles (in Audit Report No.21 1997–98)	Dec 1997
Public Sector Travel	Dec 1997
Audit Committees	Jul 1997
Management of Corporate Sponsorship	Apr 1997
Telephone Call Centres Handbook	Dec 1996
Paying Accounts	Nov 1996
Asset Management Handbook	Jun 1996