

Appendix **Twelve**



**Southern
Prospects**
2004 - 2009

*The South Coast Regional
Strategy For Natural
Resource Management*

**MONITORING AND EVALUATION
IMPLEMENTATION PLAN FOR THE
NATIONAL ACTION PLAN FOR
SALINITY AND WATER QUALITY AND
THE NATIONAL HERITAGE TRUST IN
WESTERN AUSTRALIA**

**MONITORING AND EVALUATION
IMPLEMENTATION PLAN
for the
National Action Plan for Salinity & Water Quality (NAP)
and the
Natural Heritage Trust (NHT2)
In Western Australia**

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1.0 INTRODUCTION

1.1 The Bilateral Agreements

The Commonwealth and WA State Governments are investing a total of \$72.8 million in the National Action Plan for Salinity and Water Quality (NAP) and approximately \$200 million in the Natural Heritage Trust extension (NHT2). The NAP Bilateral Agreement was signed 11 September 2003 and the NHT2 Bilateral Agreement on 17 December 2002.

NHT2 Bilateral Agreement <http://www.nht.gov.au/nht2/bilaterals/wa/index.html>
NAP Bilateral Agreement <http://www.napswq.gov.au/publications/bilaterals/wa/index.html>

The goals of NAP are to

- Prevent, stabilise and reverse trends in salinity, particularly dryland salinity
- Improve water quality and secure reliable allocations for human uses, industry and the environment.

The goals of NHT2, under section 19 of the *Natural Heritage Trust of Australia Act 1997*, relate to

- Biodiversity conservation
- Sustainable use of natural resources
- Community capacity building and institutional change.

Both the NHT2 and NAP Bilateral Agreements require the development of a WA monitoring and evaluation (M&E) plan which accords with the national Monitoring and Evaluation Framework and the Standards and Targets Framework. (See <http://www.deh.gov.au/nrm/monitoring/>)

This M&E Plan establishes the arrangements to monitor progress towards NAP and NHT2 objectives.

It clarifies Commonwealth, State and Regional responsibilities for data collection, management, reporting and evaluation. Operational details such as evaluation schedules and reporting formats will be appended as they become available.

1.2 NAP/NHT2 delivery

In Western Australia, the delivery of NAP and the regional component of NHT2 is devolved to non-statutory community-based Regional NRM Groups. These groups work in partnership with the Australian and State Governments and, where appropriate, coastal management groups.

The Regional Groups in WA are

- Northern Agriculture Catchment Council
- South West Catchments Council
- Avon Catchment Council
- South Coast Regional Initiative Planning Team
- Swan Catchment Council
- Rangelands Natural Resource Management Coordinating Group Inc.

NAP does not operate in the rangelands other than in the Ord catchment. The Avon and Upper Swan have been combined to form one region under NAP.

Regional Groups are responsible for the development and implementation of Regional Natural Resource Management (NRM) Strategies. Regional Investment Plans then set priorities and will be used to seek investment in the Strategies from NAP/NHT2 and other organizations including corporations and industry.

In the NRM regions, delivery of NHT2 and NAP funding is combined although reporting and evaluation remain separate.

2.0 NAP/NHT2 MANAGEMENT ARRANGEMENTS

2.1 Joint Steering Committee

Under the Bilateral Agreements for NAP/NHT2, a Joint Australian Government/State Steering Committee (JSC) provides the management of both programs. This includes

- Reviewing performance against milestones
- Authorising quarterly payments in advance
- Reporting decisions and decision making processes on investments
- Reporting annually to State Ministers and the NHT2 Board.

Further details are to be found in Section 7 of the NAP Bilateral Agreement and Clauses 2.40 – 2.46 of the NHT2 Bilateral Agreement.

2.2 Regional NRM Groups

The responsibilities of each Regional Group include

- Developing its NRM Strategy for accreditation
- Developing its Regional Investment Plan for agreement
- Implementing the Strategies and Plans in accordance with the Regional Partnership Agreements
- Reporting to the Joint Steering Committee.

Further details of these are to be found in Section 5 of the NAP Bilateral Agreement and Clauses 2.28 – 2.37 of the NHT2 Bilateral Agreement.

The main features of the NRM Strategy are

- Identification of natural resource assets, threatening processes and priorities for the region
- Setting aspirational, resource condition and management action targets
- A monitoring and evaluation strategy.

The Investment Plan will include

- Proposed actions/projects and responsibility for implementation
- The assumptions underpinning the chosen actions
- The investment required for each action/project
- The expected return on investment
- Timelines and performance indicators for each action
- An allocation of funds for monitoring and evaluating the individual actions.

2.3 Australian Government Regional NRM Team

The team

- Guides Regional Groups regarding progress in their Strategies and Plans
- Develops project milestones in partnership with project proponents
- Assesses progress reports against milestones
- Coordinates the Australian Government response as part of the accreditation process for Regional Strategies.

2.4 State Government NRM Agencies

State Government NRM agencies

- Coordinate WA State Government monitoring and evaluation activities as they relate to NAP/NHT2. This is through the WA Monitoring and Evaluation Working Group (WAMEWG) which reports to the NRM Senior Officers Group
- Provide resource condition data and manage ongoing agency monitoring programs

- Provide resource condition, trend and rate of change data for WA State of the Environment reporting purposes and the National Land and Water Resources Audit.

2.5 State NRM Office

The NRM Office

- Manages NAP and NHT2 funding in WA and the distribution of funds from the Australian Government to the Regional NRM Groups
- Provides secretarial support to the JSC
- Coordinates the State Government response as part of the accreditation process for Regional Strategies
- Manages the financial and progress reporting processes including aggregation of regional reports into a state summary.

3.0 REPORTING

3.1 General

The underlying logic of NAP/NHT2 is that

Resource Condition is changed by
Management Actions which are achieved by
Outputs and Activities which require
Investment

The primary purpose of NAP/NHT2 monitoring, evaluation and reporting is to demonstrate that investments contribute to meeting resource condition targets.

Supplementary purposes are to provide feedback and support adaptive management for NAP/NHT2 projects, and to contribute to a regional and national view of status and trends in resource condition.

The four areas of reporting are

Area of reporting	Report frequency
Resource condition, and progress in achieving resource condition targets	Annual
Management actions completed, compared with targets	Annual
Short term outputs and activities accomplished, compared with targets	Half yearly
Financial activity, compared with budget	Quarterly

For financial reporting the standard reporting period is 1 July to 30 June. For all other reporting the period will be from 1 April to 31 March since this allows time for review prior to the funding allocations to regions at the end of the financial year.

Following agreement by the JSC, the WA annual summary will be compiled into the annual report to be provided to the October meeting of the NRM Ministerial Council.

3.2 Reporting on Resource Condition

NAP/NHT2 focus on eight national resource condition outcomes which relate to salinity, biodiversity, ecological communities, ecosystem function, water quality, threatening processes, water allocation and sustainable production.

These are expressed as ten Matters for Targets which are

- Land salinity
- Soil condition
- Native vegetation communities' integrity
- Inland aquatic ecosystems integrity
- Estuarine, coastal and marine habitats
- Nutrients in aquatic environments
- Turbidity in aquatic environments
- Surface water salinity in freshwater aquatic environments
- Significant native species and ecological communities
- Ecologically significant invasive species.

Each 'Matter' may then have one or more indicators (Appendix 1).

Resource condition reporting requires the setting of targets (usually at the level of 'Matter for Target') and progress towards those targets is assessed by monitoring the associated indicators.

The cost of this monitoring is included in the program costs, not additional to it.

Targets

Regional Strategies will set Resource Condition Targets for each relevant Matter for Target. Where targets cannot be set because of lack of baseline or trend data there must be a commitment to establishing monitoring programs and to setting targets within three years of the Bilateral Agreements being signed.

(See Clause 12 of the Standards and Targets Framework at <http://www.napswq.gov.au/publications/bilaterals/wa/index.html>)

Regional Strategies may set additional targets for locally relevant issues.

Targets are only required if the Regional Strategy determines that a Matter is relevant in that region. Monitoring is only required if there is to be an investment.

The Resource Condition Targets which are set should be specific, measurable, achievable, realistic and timebound as set out in the National Standards and Targets Framework. The timeframe for achievement of these is likely to be 10 - 20 years. Targets could relate to absolute improvement in resource condition or decreases in the rate of degradation.

In some instances Regional Strategies may find it more convenient to set resource condition targets at the level of the individual indicators.

In establishing Resource Condition Targets, the Regional Strategy should also anticipate the resource condition for a particular Matter assuming no intervention. Over time the comparison of 'with treatment' condition against baseline or 'no treatment' condition should show the impact of the investments.

Regional Groups will report annually on resource condition change. It is acknowledged that external factors may influence the achievement of Resource Condition Targets.

Resource condition indicators and protocols

Resource condition indicators have been agreed nationally and Regional Groups should use these to measure the result of their Management Actions. Indicators are usually selected on the basis of cost, simplicity, consistency and practicality.

A region need only monitor those indicators which relate to specific investments in that region. Monitoring will take place where the impact of those investments can most effectively be measured. 'Off-site' monitoring or 'null treatment' monitoring may also be required to provide a comparison.

Protocols have been developed as a guide to measuring the indicators. However, any body actively engaged in resource condition monitoring will also need to use accredited measurement techniques or at the very minimum, to carefully document the measurement techniques used so that comparable measurements may be made in five, ten or twenty years time.

The indicators are listed in Appendix 1 and indicator protocols can be found at <http://www.ea.gov.au/nrm/monitoring/> Some refinement of these indicators, coordinated by the National Land and Water Resources Audit, can be expected.

Existing monitoring programs and databases

The state agencies monitor resource condition and trend in many different areas (Appendix 1) .

Existing state monitoring may provide baseline data or control site (null treatment site) data against which progress towards NAP/NHT2 targets can be compared. Data from NAP/NHT2 monitoring may be of value to state agencies in developing regional and state perspectives.

Data from state agency monitoring activities will be provided to Regional Groups at cost of extraction or free of charge. Where Regional Groups collect data they will need to contact the relevant data custodian (Appendix 1) to arrange for their data to be placed into the relevant state database.

Regional Groups should discuss proposed monitoring activities with the relevant state agency.

Data interpretation

Some level of data interpretation will be required to accurately represent progress towards targets. Regional Groups will be responsible for the interpretation of data in conjunction with the data custodians.

Allocation of resources

Efforts should be made to use data from the existing resource condition monitoring programs. However, Regional Groups may need to negotiate with agencies to develop additional monitoring sites or programs on a fee for service basis.

A series of principles have been agreed by the Natural Resource Management Standing Committee to guide investment in monitoring. The principles are that

- Investment Plans which address Resource Condition Targets must include a monitoring, reporting and evaluation component
- The monitoring and reporting component must use existing monitoring wherever possible. Investment by NAP/NHT2 could support new and additional monitoring which, following consideration of an appropriate cost/benefit analysis, would be a fully funded part of the Investment Plan
- Monitoring and reporting components of Investment Plan must be consistent with the state agency requirements for the relevant indicator

- State agencies will consider developing a medium to long term strategies to monitor indicators in the core set
- In developing these strategies, state agencies will consult with the National Land and Water Resources Audit to ensure consistency with national monitoring, data management and reporting arrangements.

Links to NLWRA

The National Land & Water Resources Audit (NLWRA) is responsible for coordinating the collation of resource condition data at a national level.

Since the state agencies will supply most of the Audit's data, they will need to monitor and manage data on the national (core) indicators.

Annual reporting of resource condition outcomes

The JSC and the NRM Ministerial Council require an annual report of progress towards each Resource Condition Target. The format of this report will be made available to Regional Groups.

3.3 Reporting on Management Actions

Because measurable progress towards Resource Condition Targets may take longer than the investment timeframe to materialise, shorter term Management Action reporting is used for both program improvement and accountability purposes.

The emphasis is on on-ground works and each Management Action should be demonstrably linked to a Resource Condition Target.

Each Management Action has an associated Management Action Target which will be measurable and have a time horizon of 1 - 5 years. Regions are accountable for the achievement of these Management Action Targets. Regional Strategies will provide for tracking progress towards Management Action Targets and show how the data will be used for adaptive management. Management Actions and their respective Targets can usually be expressed in easily measurable terms such as hectares or kilometres.

The National Standards and Targets Framework specifies three Matters for Management Action Targets which Regional Groups will set and track (in addition to any other appropriate indicators developed by the Regional Group)

- Improved land and water management practices adopted
- Critical assets identified and protected
- Water allocation plans developed and implemented.

Standardised reporting categories are being developed for trial during the 2004-05 financial year and Regional Groups will be invited to participate in these trials. The categories will assist regional reporting and are necessary for aggregating returns to state and national level summaries.

The cost of tracking Management Action progress is included in the program costs.

3.4 Reporting on Program Outputs (Shorter Term Outputs and Activities)

Program output reporting relates to outputs and activities that contribute to the achievement of Management Action Targets.

Program Outputs can be grouped into four categories.

The purpose of regional planning is to structure and sequence Management Actions. The development of resource management plans, catchment management plans, property management plans and codes of practice are included.

Capacity building relates to people's decision making ability and motivation. It may involve, knowledge, awareness raising, skills training, facilitation and motivation and institutional change.

On ground works as the name suggests are those outputs which can be reported directly in terms of hectares, kilometres, number of, etc.

Resource assessment includes baseline or trend studies, decision support tools, investigations and some research and development.

Standard templates for Program Output reporting will be developed to simplify both the regional reporting process and the preparation of state and national summaries.

3.5 Financial reporting

The five funding categories under the Bilateral Agreements are

- Foundation funding
- Priority actions
- Capacity building
- Regional investment
- 'Other'.

To demonstrate the value of this funding, the JSC requires regional and state level reporting against

- The funding categories
- Investment sources
- Regional budgets.

The State NRM Office currently administers NAP and NHT2 funding in WA. A database exists for this purpose.

The State and Australian Governments are currently finalising the reporting formats for the various funding categories. Financial reports currently detail funds received and expended by projects. These are aggregated by region and dissected by program.

The State also reports on its matching expenditure against Australian Government funds. Details for this are still being finalised by JSC. It is anticipated though that this will mirror the reporting of Australian Government funds.

3.6 Aggregation of Reports and the Common Reporting Structure

A common reporting structure is currently being developed to facilitate aggregation of regional data into whole of state and national summary reports. The concept is shown in the figure below. This common reporting structure will depend heavily on the use of standard data categories and reporting templates. These categories and templates will be made available as they are developed.

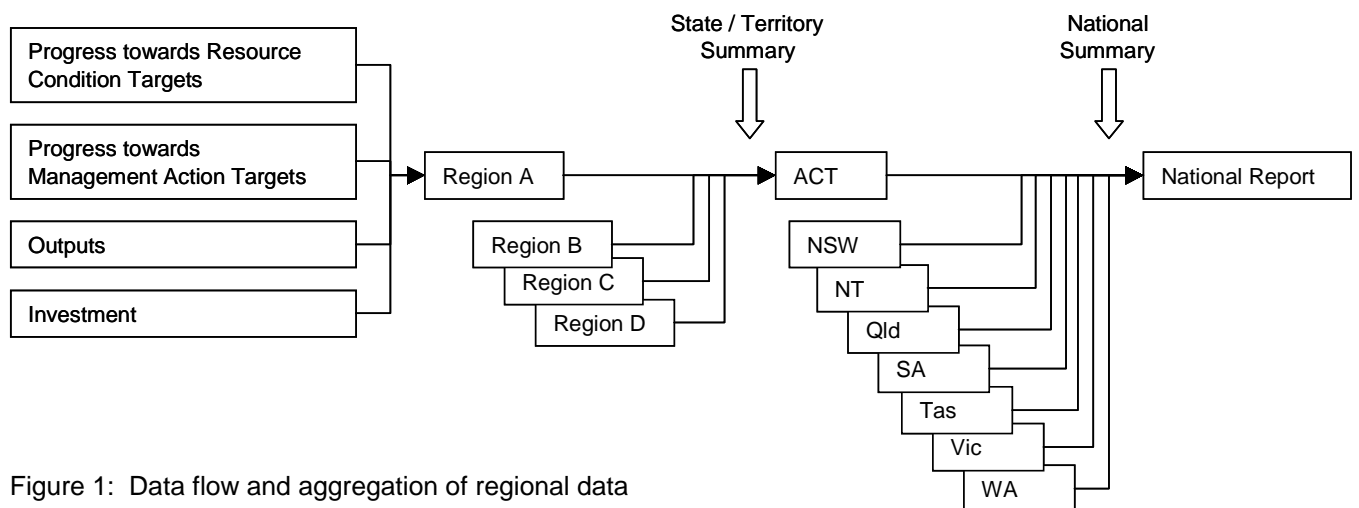


Figure 1: Data flow and aggregation of regional data

4.0 EVALUATION

Evaluations will be conducted during the course of the NAP/NHT2 Program and these could be at national, state or regional level.

They may ask questions about

Effectiveness - how well the program delivers on its goals?

- To what extent have resource condition targets been achieved
- To what extent have the management action targets been achieved
- To what extent have outputs and activities been delivered
- If these haven't been achieved, why not, do they or the timelines need to be reviewed.

Efficiency - how efficiently and cost effectively funding achieves its outcomes?

- Have activities been efficient in terms of the money spent
- Have activities been efficient in terms of integration with other work to ensure consistency and synergy and reduce duplication.

Appropriateness - whether the strategy and mechanisms are the most appropriate means of achieving high level objectives

- To what extent are there clear links between expected outcomes and planned activities
- To what extent is achievement of resource condition targets attributable to changes in related management action targets
- To what extent is achievement of management action targets attributable to the delivery of outputs and activities.

Unintended outcomes

- What have been the unintended outcomes, both positive and negative
- To what extent have these contributed to or detracted from effectiveness of other activities or achievement of overall goals.

4.1 Joint Steering Committee Evaluations

A schedule of evaluations to be conducted over the life of the programs will be jointly developed. The schedule will detail the purpose and focus of each evaluation. It will provide for the management of evaluations and the allocation of resources (physical, human and financial) to support them.

The JSC will establish

- The purposes and focus of the evaluation
- The key issues and questions
- Estimated time lines
- Other issues to be considered, and
- Appoint an Evaluation Committee for each evaluation it initiates.

The Evaluation Committee will

- Advise on program and evaluation issues to those undertaking the evaluation
- Guide and resolve major difficulties
- Report to the JSC on progress and any major issues that might arise
- Review drafts of evaluation reports and recommendations
- Recommend to the JSC acceptance of the evaluation findings and recommendations.

The Joint Steering Committee, or a nominated group, will receive and approve the final report.

4.2 Regional Evaluations

Evaluations at the regional level may be for the purpose of ongoing improvement, accountability or to inform decision making including the allocation of funds. Less formal reviews of progress may also be undertaken as needed to help refine processes, targets, etc.

The Regional Group will be responsible for planning and managing evaluations at the regional level including the provision of funds and any other resources which may be needed. The results of these evaluations will be provided to the JSC as a component of the Regional Group's full year performance report. With the agreement of the Regional Group, the results of any evaluations may be made available to other Regional Groups.

Appendix 1**NAP/NHT2 MATTERS FOR TARGETS & ASSOCIATED W.A. STATE MONITORING PROGRAMS (10 MARCH 2004)**

Matter for Target	Indicator heading	Recommended indicators	Relevant state monitoring programs	Relevant state database and data custodian
Land Salinity	Area of land threatened by shallow or rising water tables	Depth to groundwater	1. Saltwatch	1. AgBores/ DoA 2. Water Information Database (WIN)/DoE
		Groundwater salinity	1. Saltwatch	1. AgBores/ DoA 2. Water Information Database (WIN)/DoE
		Location and size of salt affected areas	1. Soil-Landscape mapping program 2. Land Monitor	1. Soil-Landscape map unit database/DoA 2. DoA, DLI
Soil Condition	Soil Condition	Soil acidity	No standard on-going programs	DoA
		Soil erosion – water	1. No standard on-going programs 2. Limited turbidity data at stream monitoring stations with ad hoc temporal measurements	1. DoA 2. HYDSYS database/DoE
		Soil erosion – wind	No standard on-going programs	DoA

Matter for Target	Indicator heading	Recommended indicators	Relevant state monitoring programs	Relevant state database and data custodian
Native Vegetation Communities' Integrity	Native vegetation extent and distribution	The extent of native vegetation by IBRA subregion measured in hectares	1. WA Vegetation and land use project (WAVLUP) 2. Land Monitor	1. DoA, CALM 2. DLI, DoA, CALM
		The extent of each present native vegetation type by IBRA subregion measured in hectares	WA Vegetation and land use project (WAVLUP)	DoA, CALM
		The proportion remaining of each native vegetation type by IBRA subregion measured as a percentage of the pre-European extent	WA Vegetation and land use project (WAVLUP)	DoA, CALM
	Native vegetation condition	The proportion of each native vegetation type in each IBRA subregion that is estimated to be in specified condition classes based on a selected set of attributes	WA Vegetation and land use project (WAVLUP)	DoA, CALM

Matter for Target	Indicator heading	Recommended indicators	Relevant state monitoring programs	Relevant state database and data custodian
Inland Aquatic Ecosystems Integrity (Rivers and other wetlands)	River condition	<ul style="list-style-type: none"> • Benthic macroinvertebrate community assemblages • Fish community Assemblages • Benthic diatom community assemblages • Riparian vegetation community assemblages • Riverine physical structure and in-stream habitat • Water quality • Hydrology 	AUSRIVAS (national program)	DoE
	Wetland ecosystem extent and distribution	Extent of regionally significant wetlands		DoE
	Wetland condition	<ul style="list-style-type: none"> • Colour • Community composition • Conductivity • Dissolved oxygen • Indicator species • Macro-invertebrates • Nutrients • Phytoplankton • Transparency • Vegetation 		DoE

Estuarine, coastal and marine habitats	Estuarine, coastal and marine habitat extent and distribution	Area of each estuarine, coastal and marine habitat type measured in hectares	Marine reserves monitoring program	Spatial data exists but currency unknown/CALM
	Estuarine, coastal and marine habitat condition	Condition of habitat at significant sites of selected estuarine, coastal and marine habitats	Marine reserves monitoring program	Database under development/CALM
Nutrients in aquatic environments	Nitrogen in aquatic environments	Total Nitrogen + flow leaving sub catchment or catchment	AUSRIVAS (national program)	DoE
	Phosphorus in aquatic environments	Total Phosphorus + flow leaving sub catchment or catchment	AUSRIVAS (national program)	DoE
Turbidity in aquatic environments	Turbidity/suspended solids	<ul style="list-style-type: none"> • Turbidity <li style="text-align: center;">OR • Total suspended solids (TSS) + Flow 	Temporally ad-hoc data collected at a limited number of stream measuring stations	HYDSYS database/DoE
Surface water salinity in freshwater aquatic environments	In-stream salinity	<ul style="list-style-type: none"> • Total dissolved solids (TDS) + Flow <li style="text-align: center;">OR • Electrical Conductivity (EC) + Flow 	Temporally ad-hoc data collected at a limited number of stream measuring stations	HYDSYS database/DoE

Significant native species and ecological communities	Selected native species	<ul style="list-style-type: none"> • Range area and location of each species • Area, location and condition of key habitat of each species • Relative abundance of each species 	Legislative requirement to report annually on species managed under recovery and interim recovery plans	<ol style="list-style-type: none"> 1. DEFL database for rare, threatened and priority flora/CALM 2. Faunafile database for rare, threatened and priority fauna/CALM 3. Protected species (international agreements) database/CALM
	Selected ecological communities	<ul style="list-style-type: none"> • Extent of each ecological community: estimated area (in hectares) • Condition of each ecological community 		Threatened communities database/CALM
Ecologically significant invasive species	Selected ecologically significant vertebrate invasive species – extent and impact	Reduction in impact of regionally significant invasive vertebrate pests (excluding fish)	1. Field Reporting System (FRS) within CRIS	<ol style="list-style-type: none"> 1. DoA 2. CALM
	Selected ecologically significant invasive vegetation species extent and impact	The areal extent and density of weeds under selected regulatory control that are being addressed by regional bodies or community projects	1. Field Reporting System (FRS) within CRIS	<ol style="list-style-type: none"> 1. DoA 2. CALM