

ANZECC Working Group on National Parks and Protected Area Management

Benchmarking Best Practice in Asset Management

Benchmarking Summary of ANZECC Agencies

Participant Organisations and Representatives

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John O'Malley
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Introduction

The fixed assets of State and Territory Governments make up the social and economic infrastructure which enable the provision of services to the public and to business. These assets play a vital role in the economy and in the quality of life of Australians. A key requirement is to secure a sustainable increase in public sector efficiency in the provision and management of infrastructure and other fixed assets.

Conservation and environmental management agencies are responsible for a major proportion of Australia's natural assets which are supported by a significant level of support infrastructure. The assets may be natural resources, building resources, land, plant & equipment, heritage and cultural assets or any other form of infrastructure.

Traditionally Governments have developed infrastructure without due planning and evaluation for the life cycle management of such infrastructure. Maintenance and replacement programs were not formulated or adequately funded, and risk management, particularly public liability, was not a core activity in asset management.

Asset management is a process to manage demand and guide acquisition, use and disposal of assets to make the most of their service delivery potential, and manage risk and costs over their entire life.

Strategic asset management provides the mechanism for appropriate assets to operate efficiently for effective service delivery and consequently enable agencies to meet their strategic objectives.

Background

In 1995, ANZECC commenced the National Benchmarking and Best Practice Programs aimed at five key areas. The Department of Environment & Natural Resources, South Australia took the lead responsibility for determining the best practice framework for Capital Works management. A working group was formed with all States and Territories represented and a project brief developed and endorsed.

In November 1995 the ANZECC working group met in Melbourne and a decision, subsequently endorsed by ANZECC executive, changed the scope of the project from Capital Works management to asset management. The working group contained its research, and consequently this report, to constructed assets which excludes natural assets and plant & equipment.

It was generally agreed that all ANZECC partners were only beginning to recognise asset management as an essential tool to manage core business. Consequently, development of policy frameworks and processes are in the earliest stage. This status was not restricted to ANZECC partners, but also to other Private and Public organisations. This factor has restricted the ability of the group to specifically identify 'best practice' organisations, but the report does provide the foundation for a best practice asset management regime.

Executive Summary

Governments across Australia are committed to strategic management of physical assets. The group confirmed considerable economic benefit can be derived from a best practice environment and importantly, a considerable improvement in service delivery will result from the strategic management of assets. The development of a strategic asset management framework creates the foundation for a best practice environment.

The working group concluded ANZECC partner agencies are not best practice organisations per sé, but demonstrate a varying range of best practice principles, policies and procedures in asset management. The group acknowledge that all ANZECC partners were deficient in management of assets after construction ie; operation, maintenance and disposal activities.

An integrated management system would considerably enhance efficiency and should include the following:

- Data Management and IT support systems.
- Integrated management programs for:
 - Development
 - Maintenance
 - Review/Assessment
 - Finance
- Standardised documentation and processes.
- Performance Management Indicators.

There is a need to continue information exchange and formalise a review process. The following needs have been identified to:

- further assess asset management practices of outside agencies.
- encourage member agencies to liaise and exchange information through informal networks.
- provide a commitment to improving asset management in ANZECC agencies through the National Parks and Protected Area Management Working Group, by monitoring development of agency asset management models.
- facilitate an annual assessment of best practice asset management.
- identify performance management indicators which should be applied to asset management.
- identify and promote core competency training required for strategic asset management.

Benchmarking Summary of ANZECC Agencies

The following is a summary of member agencies' Benchmarked for Best Practice.

L = DO NOTHING M = DEVELOPING H = ACHIEVING OUTCOMES

Planning Phase

	Core Business	Linked plan	Customer knowledge	Budget alloc/control	Vision	Flexible timeframe
SA	H	L	L	H	M	H
VIC	M	M	H	L	M	M
NSW	H	H	M	L	M	L
ANCA	M	L	M	H	M	M
TAS	H	M	H	H	L	L
WA	H	H	M	M	M	M
QLD	M	M	L	M	M	L

EVALUATION PHASE

	Rating priorities	Economics	Customers	Environmental	Community expectation	Strategic direction	Capability	Risk Management	Non asset solutions
SA	M	M	L	M	M	H	L	L	M
VIC	L	L	M	L	H	H	M	L	L
NSW	M	M	M	H	H	H	M	M	L
ANCA	L	L	M	H	H	M	M	M	L
TAS	L	M	H	H	M	M	M	L	L
WA	M	M	M	H	H	M	M	M	M
QLD	M	L	H	H	H	M	L	H	M

ACQUISITION PHASE

	Project Planning	Standards	Design	Pre-contract	Creation	Commission	Audit
SA	M	L	M	M	M	L	L
VIC	H	H	H	H	H	L	L
NSW	M	H	H	H	H	L	L
ANCA	H	H	H	H	H	M	M
TAS	M	H	H	H	H	L	L
WA	H	H	H	M	H	M	M
QLD	M	H	H	H	M	M	M

OPERATION PHASE

	Start Up	Asset Plan	Operation	Review	Disposal
SA	L	M	L	L	L
VIC	L	L	L	L	L
NSW	L	M	L	L	L
ANCA	L	M	L	L	L
TAS	L	L	L	L	L
WA	L	M	L	L	L
QLD	L	L	L	M	L

Determining Best Practice in Asset Management

Objectives of the project

To determine best practice in asset management by executing a Benchmarking project.

Specifically the project aimed to:

- undertake an internal review of Department of Environment & Natural Resources' (DENR) performance in asset management;
- research industry performance across ANZECC agencies;
- compare the results of the internal & external reviews and develop a model to promote best practice.

Scope of the Project

The scope of the project is determined by the need to establish a framework for best practice asset management which addresses:-

- strategic asset planning.
- resource planning - funding, staffing.
- capital budgeting - rolling program.
- project evaluation - viability, sustainability, non-asset solutions.
- project management - design, specifications, contracting, construction, commissioning, accountability, responsibility.
- asset maintenance programming - protection, cyclical maintenance, breakdown/repair.
- life cycle management of fixed assets - asset registers, financial accounting, insurance, replacement.

Methodology

An investigative review of theoretical and applied Benchmarking principles to asset management from internal and external agencies and private sector organisations will be undertaken.

Definition

For the purpose of this document, infrastructure assets are those constructed elements that include: buildings, roads, walking tracks, camping areas, jetties, etc.

Stage 1 Project Endorsement

- Develop brief for Benchmarking project
- Seek one month extension for final draft
- Seek executive endorsement for project brief
- Present to ANZECC project nominees and seek in principle support

Stage 2 Information Resources

- Review literature to identify appropriate Benchmarking principles and techniques applicable to asset management.
- Review internal & external agencies' practices in asset management.
- Analyse asset management policy and procedures of Government agencies.
- Reference to the ANZECC agencies' Corporate Strategic plan, Operational plans & Business plans.

Stage 3 Internal Review

- Select a diverse range of asset projects undertaken by agencies over the past 10 years.
- Identify objectives of the projects.
- Conduct an audit of selected projects to determine condition, operational & financial performance, and current suitability/relevance to agency needs.
- Review the project management process of each project and the relationship of the process to the outcome
- Review current asset rolling program.

Stage 4 External Review

- Identify best practice contacts in participating ANZECC agencies and identify suitable park agencies throughout Australia.
- Develop data collection method.
- Gather, collate and analyse data.
- Document results of data analysis.

Stage 5 Reporting

- Develop draft report of review.
- Present to DENR executive for comment and endorsement.
- Present to DENR management for comment.
- Present to ANZECC agencies for comment.
- Develop final report.
- Present to ANZECC.

Time Lines

	Planned	Actual
Stage 1	October 1995	October 1995
Stage 2	October 1995	October 1995
Stage 3	November 1995	November 1995
Stage 4	May 1996	August 1996
Stage 5	August 1996	August 1996
Final report	October 1996	October 1996

Strategic Asset Management Framework

The strategic asset management framework provides information to guide the direction and management of agencies' investments in physical assets in ways which will maximise benefits to the community and minimise costs to Government. It highlights the need to carefully consider and justify proposals for new or replacement services and the most appropriate means of service delivery. When new or additional assets are under consideration, and before initiating any asset creation projects, agencies are expected to consider all options for service delivery, taking time to examine a range of alternatives before making a firm commitment. The project management process for capital investment is a component of this strategy.

Framework for an integrated approach

Only by an integrated approach to asset management can agencies deliver quality services efficiently and effectively (*please refer to figure 1*).

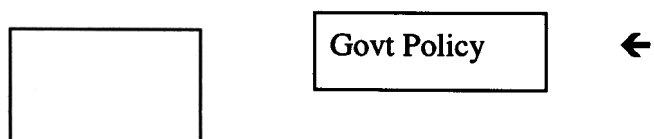
Agency corporate plans reflect and translate Government policy and customer needs into broad programs, service strategies and priorities.

These programs and service strategies may be non-asset-based or asset-based. For example, some may require additional capital facilities or increased use of existing facilities, while others may involve contracting out or leasing to make them operational. Each agency determines the best mix for its operating environment, consistent with overall Government policy.

The budget process involves the allocation of funds to carry out the non-asset and asset strategies.

The agency business plan translates strategies and budget into annual operational plans with output measures and performance indicators.

Finally, agency reports on service delivery outcomes and asset management activities provide important feedback into Government policy and corporate planning processes.



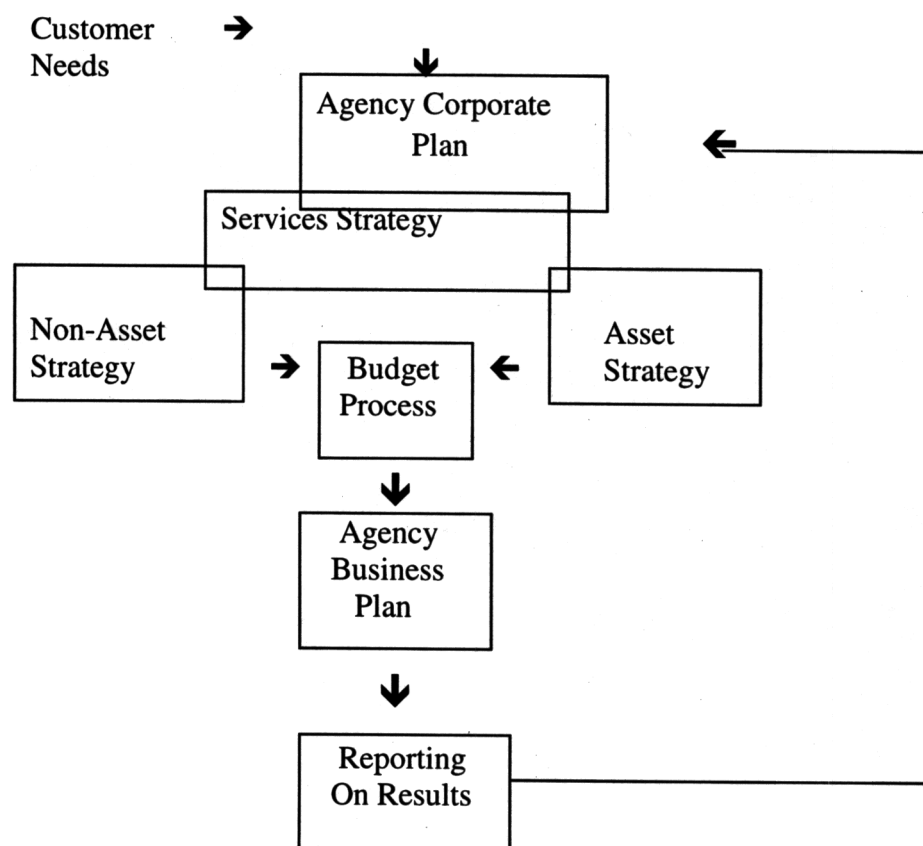


Figure 1

An integrated approach to asset management. An agency's planning process must link its non-asset strategies to service delivery needs and Government and administrative policy.

Asset Management Model

Decisions taken about an asset in one phase can affect its performance in others. As an example, seeking minimum capital cost solutions in the acquisition phase can have adverse effects on long-term operating costs. Inadequate attention to maintenance can accelerate the need for major repairs, or shorten the operational life of the asset. It can also prejudice the achievement of maximum returns on disposal. Conversely, careful management of existing assets can extend their effective life and avoid or defer the need for new acquisitions.

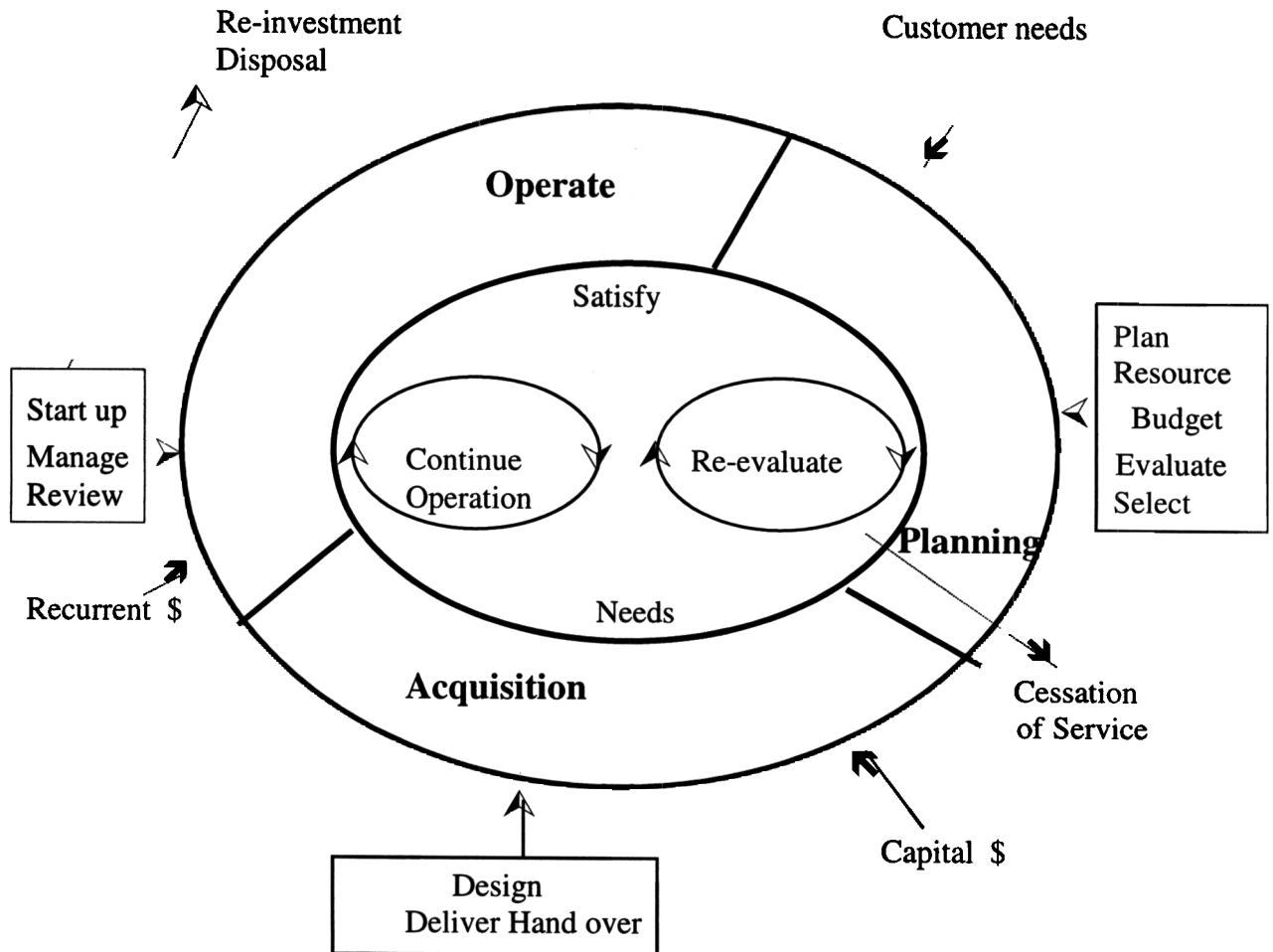
The concept of 'the asset life cycle' is aimed at encouraging an understanding of these effects, and at helping managers to reach decisions about assets in a whole-of-life context. Economic evaluation tools such as discounted cash flow, are often useful in assessing the long-term effects of individual decisions about assets.

Entities should consider whether the asset management responsibilities of their managers reflect a life cycle approach. Limiting the responsibility of managers to a single phase (such as acquisition, or operation and maintenance) will not lead to sound long-term decisions about assets. Asset managers should be accountable for the life cycle effects of their decisions.

A best practice model is shown in figure 1 which identifies 3 phases of the asset management cycle.

- Planning strategic asset planning, evaluation & selection
- Acquisition design, implementation, hand over
- Operation startup, management, review

Best Practice Asset Management Model



Descriptive Analysis of Model

Strategic Asset Planning

Developing service delivery strategies linked to corporate, group and operational plans.

In this phase, an agency systematically analyses the demand for its services, considers methods for delivery of the service and prepares a minimum of five years' service delivery strategy or a long term corporate plan. Agencies should have a range of ideas about the ways they can deliver the service which the community requires.

The final stage is when the agency moves from its broad, strategic asset development plan to individual projects which may need to be included in the agencies' strategic asset procurement plan.

Evaluation

Assessing all the options, quantifying the costs and benefits, recommending the preferred options.

This phase involves quantifying and costing the difference a project will make to the community by analysing the benefits of the options in terms of program or sub-program objectives and performance indicators, and selecting the most cost effective options.

Selection

Selecting the projects which provide the maximum return, and/or value on our investments or are the most critical in meeting our strategic objectives.

This phase provides the information in a clear, accurate format which identifies the benefits, function, value, cost and delivery option; the best option is selected from the short list, based on the analysis of the data.

Acquisition

Developing the design, documenting, approval, tendering and implementing.

The first stage of this phase develops and documents the preferred project concept option as a design to bring the project plan (including cost plan and time schedule) to a point where the agencies' Minister or delegate can consider whether the project should proceed.

The project brief is the basis for determining how the project will be delivered ie; asset or non-asset solutions. If approval is given to proceed, the project brief informs the organisation on what resources are needed to affect delivery (eg; internal or external human resources) of the final product or service. The organisation then proceeds with the project.

Delivery

The project delivery (implementation/construction) includes: a review definition phase of the design; determining the most effective method of delivery; approval to proceed; preparation of contract documentation; call & appraisal of tenders; and management of the physical implementation.

Hand over

Signing off the physical completion of the project.

A commissioning process is undertaken to evaluate the finished project to ensure compliance with specifications, transfer of warranties, etc.

Operation

Bringing the asset into operation for service delivery.

The operational phase includes the stages of startup, management and review.

Startup is where the agency commences operating the asset. Staff training and OHS&W considerations are mandatory.

A maintenance program is developed to maximise life cycle efficiency. Management is the process of ensuring the programmed management of assets results in optimum lifetime operating efficiency.

Monitoring and reporting of the following is essential to maintain service delivery efficiency:

- condition
- utilisation
- “fit”
- \$ performance

A continuous review must be undertaken to ensure the asset’s appropriateness to service delivery requirements. The review may culminate in the altering of the asset’s management, use/service, classification, or procurement of a more appropriate asset.

Disposal

Determine cost effective means for disposal of decommissioned, under-performing or surplus assets to best meet service needs.

Best Practice Leader Analysis

Leader Characteristics

The group identified key components within the model which are critical to best practice asset management: Leader organisations would demonstrate they are achieving these outcomes or be on a continuous improvement path towards best practice.

Best in Class

An analysis of ANZECC partners was undertaken to identify the “best in class” ie; those organisations currently achieving comparative best practice outcomes in these key areas.

The analysis provides the opportunity for partners to investigate and borrow better practices from other organisations. The group identified the need to extend the analysis to external organisations.

Planning Phase

Leader Characteristics Definitions

Core business

Leaders have identified and clearly defined their core business to ensure service delivery is maximised by appropriate development and management of physical assets.

Linked plans

Leaders have a corporate planning process that integrates operational plans such as fire management, park management, business plans and financial plan.

Customer knowledge

Leaders have detailed knowledge of customer use and needs by precinct (district) and park, including market segmentations, customer satisfaction and visitation trends.

Budget control

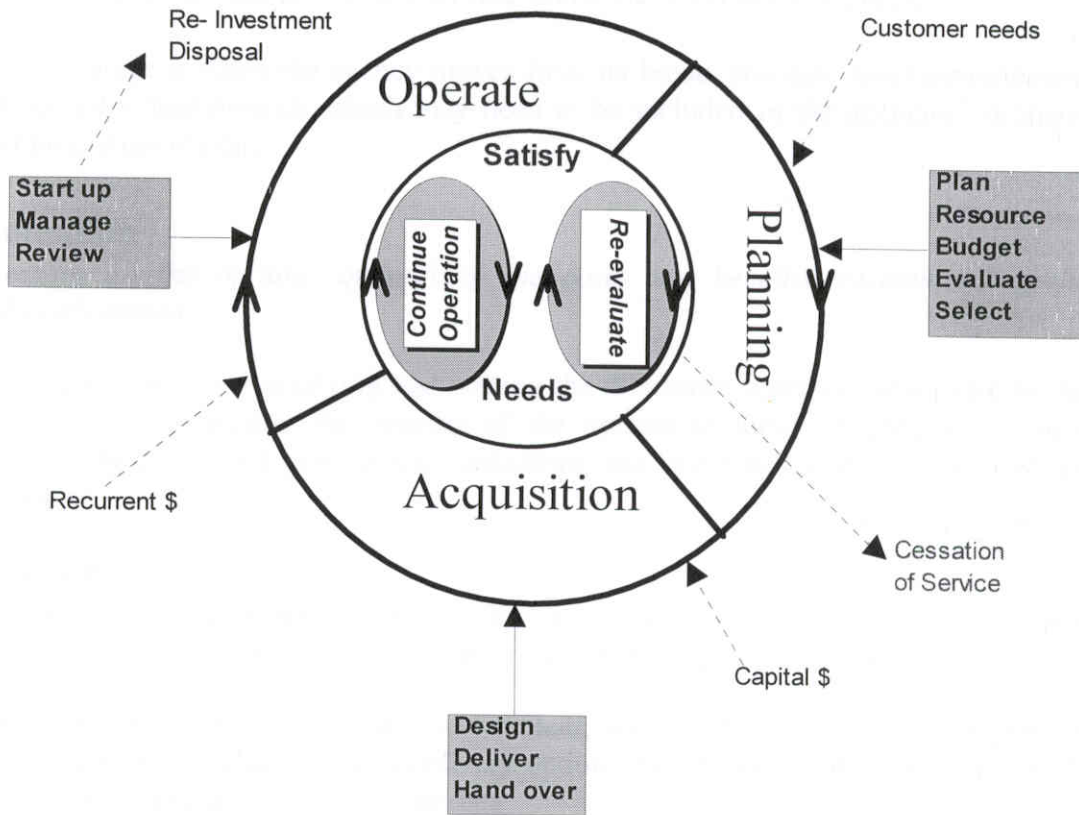
Leaders have discretion over the split between recurrent and capital allocation, within a global budget. Investment decisions are not subject to external bids to central agencies.

Vision

Leaders have a long term strategy outlining further product development based on predicted customer needs ie; big picture.

Flexible timeframe

Leaders have discretion to manage projects and associated budget over a number of financial years ie; rolling program, carry-over budgets.



PLANNING PHASE
Best in Class

	Core business	Linked plan	Customer knowledge	Budget alloc/control	Vision	Flexible timeframe
SA	H	L	L	H	M	H
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ANCA	M	L	M	H	M	M
TAS	H	M	H	H	L	L
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Core Business

SA South Australian (DENR) strategic plan identifies the core business of the agency. Key objectives have been developed to meet service delivery requirements. More detailed analysis of customer needs is necessary to ensure the correct product is being delivered. Key areas for investment have been identified.

NSW Core business has been defined in some short bullet points in the corporate plan, such as preservation of the environment, channelling Tourism and selected parks etc.

TAS Tasmanian National Parks and Wildlife Service prepared a corporate plan in 1992 identifying; a vision, mission statement, values, critical success factors, goals, strategies, performance indicators.

WA CALM has a Recreation and Tourism Strategic Plan 1996-2000 which clearly outlines the core business of the program. Twelve key management foci are identified and these form the structure through which the Plan is delivered. This Strategic Plan is complemented by Recreation and Tourism Strategies for each Region.

Linked Plan

NSW Fire management plans, operational plans, plans of management, incident control plans, conservation plans, etc have been linked to the corporate plan through a process of workshops throughout the NPWS.

WA Corporate Strategic Plans, regional plans, area management plans, land use management and industry plans, fire management plans, incident control systems, risk management and disability services plans are all drawn together to ensure integration of land management operations.

Customer Knowledge

VIC Victoria has developed detailed information on its customers including accurate monitoring of visitor numbers, customer satisfaction index and market segments.

Budget Allocation/Control

SA South Australia (DENR) operates a capital investment program from within its total source of funds. The application and level of funds allocated to capital investment is at the Chief Executive's discretion. The Government may allocate additional capital funds for non discretionary major initiatives.

ANCA Once budgets are assigned to the Northern Territory Directorate Inc, traditional owners, the park staff and the Executive Director, North usually decide project allocation at this level.

TAS Tasmania's Parks and Wildlife Service operates a financial management system that places budget responsibility deep in the organisation structure. Once corporate goals have been identified, funding is allocated to each district/business unit for them to operate programs to satisfy their customer needs. Regular (monthly) reviews of budget performance are undertaken to ensure expenditure allocations are not exceeded.

Vision

SA South Australian (DENR) strategic planning seeks to position the agency to maximise its service delivery potential over the next 5 years with the flexibility to adjust to changing circumstances. Key areas have been identified to focus development activity.

VIC Victoria has developed an overview strategy for the future growth and development of its key product areas and icons, based on customer needs and economic and business values.

NSW The vision for the Service is the long term general goal of the NPWS, which is to preserve, maintain and enhance the natural environment and to allow access to the community.

ANCA Park plan of management and projected visitor numbers. Anticipated 5 + 10 year growth plan for all districts currently being developed.

Flexible Timeframe

SA Flexible budgetary process - The South Australian Government budgetary management framework operates on a rolling program based on accrual accounting principles. Funding allocations are carried forward to the new financial year. A minimum timeframe of two years is envisaged for most major developments.

Evaluation Phase

Leader Characteristics Definitions

Rating priority

Leaders identify investment opportunity and needs which are primary in meeting our customer's needs and strategic objectives.

Economic

Leaders undertake analysis to determine the whole of life cost/benefit of the proposal for the life of the asset.

Customer value

Leaders identify maximum return on investment in value to customers.

Environmental impact

Leaders ensure the project has acceptable environmental consequences.

Community expectation

Leaders identify and consider political consequences of project.

Strategic direction

Leaders ensure the proposed investment meets predetermined strategic objectives.

Capability

Leaders ensure the organisation has the ability to initiate and manage the project for the whole of the project/asset life (cradle to grave).

Risk management

Leaders carry out risk assessments considering public liability, OHS&W as well as economic factors.

Non-asset solutions

Leaders consider all alternatives to meet functional requirements.

Project definition

Leaders clearly define outcomes for service delivery.

Best in Class

EVALUATION PHASE

	R a t i n g p r i o r i t i e s	Economic s	Customer s	Environ mental	Community expectation	Strategic direction	Capability	Risk Manag't	Non asset solutions
SA	M	M	L	M	M	H	L	L	M
VIC	L	L	M	L	H	H	M	L	L
NSW	M	M	M	H	H	H	M	M	L
ANCA	L	L	M	H	H	M	M	M	L
TAS	L	M	H	H	M	M	M	L	L
WA	M	M	M	H	H	M	M	M	M
QLD	M	L	H	H	H	M	L	H	M

L = DO NOTHING M = DEVELOPING

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Rating Priorities

SA South Australia (DENR) has developed a methodology for rating individual investment proposals against a predetermined criteria. The process aims to ensure investments meet strategic objectives and maximises the return on that investment. A certain degree of subjectivity is inevitable.

NSW Rating priorities for projects are evaluated by means of a manufactured formula incorporating a large number of weighted factors.

Economics

SA South Australia (DENR) conducts a systematic economic evaluation of capital investment to identify best options for service delivery. Net present value, cost benefit ratios and payback period calculations are standard applications.

NSW Economic evaluations are produced for projects > \$500,000 and for lesser costs projects by means of a business plan detailing risks, costs and revenue if any. This follows the guidelines in the Government's total asset management manual.

TAS Building construction procedures program stipulates the various procedures that must be undertaken when completing projects together with threshold values to indicate the next level of procedure.

Customers

TAS Tasmania's process of statutory management plans and site development plans require that the Service offers drafts for public comment prior to acceptance. In addition, regular surveys are undertaken to determine (as far as is possible) community expectations of the agency.

QLD Under the Nature Conservation Act 1992, management plans require public consultation in the development of a plan. In regard to site planning, the Queensland National Parks and Wildlife Service is initiating public comment in the development stage.

Environmental

NSW Environmental considerations are determined by Organisational Environmental Zone teams in Review of Environmental factors (REF's) or Environmental Impact Statements (EIS).

ANCA Environmental Impact Assessment (EIA) carried out on large projects. Smaller projects use local experience of rangers, environmental officers and/or traditional owners and further assessments are undertaken if required. KNP and UNP World Heritage standard is maintained and all staff are well aware of our commitment to protect the quality of our parks.

TAS A system called the "Project Proposal" form (PPF) requires all proponents of any activity likely to create a disturbance within a national park to circulate widely within the Parks and Wildlife Service, outlining details of what is proposed to be done. The ensuing comments are reviewed by senior staff (area managers) and the project is proceeded with, modified or abandoned

WA Management Plans and major projects are subject to scrutiny by National Parks and Nature Conservation Authority prior to being undertaken. Planning and design is co-ordinated by design specialists' branches with input from environmental specialists. At the region or district level, all projects are then subject to Environmental Checklist and a Dieback Disease Evaluation Form.

QLD In protected areas, particular emphasis has always been placed on identifying critical habitats, rare and threatened species and natural communities, and to minimise impact on the natural environment. With the promulgation of the Environment Protection Act, additional special requirements are now in place to minimise any impact of development proposals.

Community Expectation

VIC Victoria in evaluating individual projects, rates each project in terms of community expectation, interest and concern. The rating system used is based on field staff and stakeholder perceptions and is used to rate projects for risk of failure, and Government, stakeholder and community sensitivity.

NSW Community expectations are canvassed and detailed by media and neighbour relation officers in each district.

ANCA Existing extensive consultative process for implementation of projects.

- 1) Joint management with traditional owners, both during and outside of park board of management meeting.
- 2) Tourism organisation's Consultative Committee meeting.
- 3) Visitor's opinions/suggestions/satisfaction monitored.

WA Management Plans are subject to a 3 month public review period. During planning of major projects, surveys and comment cards are often used to gauge public views. Community advisory committees, friends' groups, tourism associations, local interest groups and volunteers are all canvassed for input. Social research and visitor monitoring are undertaken to assess attitudes and perceptions.

QLD As an extension of public consultation in this evaluation phase, the expectation and attitudes of the public are recognised and incorporated as appropriate into the evaluation of the project, within the constraints of both legislative and environmental requirements.

Strategic Direction

SA South Australia (DENR) mandatorily assesses investment proposals to ensure the outcome meets the strategic direction identified in the Strategic Plan.

VIC Victoria in its evaluation process ensures that all projects conform with the critical success factors and key strategies outlined in their 3 year corporate plan.

NSW Strategic direction is given by operational, conservational and corporate plans as well as plans of management.

WA Strategic direction is evaluated through corporate, divisional and regional strategic plans. Planning proposals and major action plans are reviewed by the Corporate Executive and the National Parks and Nature Conservation Authority.

Capability

VIC NPS currently investigating asset management systems and discussing asset management processes and systems with New Zealand partners. Selected staff developing competencies for asset management through training and self development.

NSW Treasury guidelines and the Government's total asset management manual indicate procedures for evaluating major projects in economic performance, value management, risk management, etc and the final reports are monitored by the Ministerial Capital Works Committee.

ANCA Organisation has a high standard of demonstrated ability to initiate and manage projects to acquisition. Planning the operation and ongoing management needs development.

Risk Management

SA South Australia (DENR) undertakes a risk assessment of investment proposals considering legislative standards, public safety, OHS&W, financial impact and legal implications of investment proposals.

NSW Public risk and OHS&W issues are examined individually for each project and safety is given a high priority. Project definition can be managed by the service with existing resources showing defined outcomes and has shown historic capabilities for delivery of the project on scheduled time and budget.

ANCA High awareness of public risk. NT parks already contain natural hazards such as crocodiles and visitors climbing Uluru.

Non Asset Solutions

SA South Australia (DENR) bases its evaluation of infrastructural development on functionality for service delivery. This requires the consideration of all options including non asset solutions.

Acquisition Phase

Leader Characteristic Definitions

Project Planning

Leaders determine the nature and scope of the proposal by evaluating stakeholder involvement, defining objectives, outcomes and resources required to undertake the project.

Leaders maintain appropriate separation between Land Managers as clients in the process and specialists as service providers to ensure that the customer needs are met with developments of the highest possible order of integrity.

Standards

Leaders ensure that the final products meet levels of compliance including statutory, aesthetic, functional and value.

Design

Leaders follow a systematic process to ensure the outcome meets the standards identified in the brief and complies with Government policy.

Pre-tendering

Leaders follow due diligence, adhere to statutory requirements and comply with Government policy to ensure best value for money is achieved.

Creation

Leaders have systems and processes in place to ensure that present management principles are followed.

Commissioning

Leaders undertake a systematic process of compliance assessment before sign off (the completion) of the project.

Audit

Leaders undertake an audit of the asset's performance to ensure that the asset is delivering the service standard as required by the brief.

Best in Class

ACQUISITION PHASE

	Project Planning	Standards	Design	Pre-contract	Creation	Commission	Audit
SA	M	L	M	M	M	L	L
VIC	H	H	H	H	H	L	L
NSW	M	H	H	H	H	L	L

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Project Planning

VIC Scoping briefs are prepared that reflect the essence of the Service Agreement but in greater detail. Service Agreements between Director (purchaser) and field management (provider) indicate terms and conditions for product delivery; identify budget, timeframe and quality standards. Centrally co-ordinated focus for planning, co-ordination and monitoring that utilises up to date IT.

ANCA For each park a plan of management is developed and subsequent area plans are developed which detail a 5 to 10 year development program. Visitor opinions/surveys are conducted. Modelling for future visitor numbers is undertaken.

WA Management Plans are prepared for each National Park and Recreation and Tourism Strategic Plans are prepared for each administration Region. Detailed planning is undertaken by specialist planners who co-ordinate work with field staff. Recreation and Tourism works are integrated with all other land management operations.

Standards

VIC Developed standards for infrastructure that includes a manual (2 vols) on design guidelines and techniques, and detailed approved designs. Adherence to agreed standards varies especially in terms of minor works and major maintenance.

NSW Has general manuals for standards of design and construction such as walking tracks, road design, the Building Code of NPWS of NSW (which incorporates the Building Codes of Australia); signs manual, furniture manual, leasing manual etc for all staff to adhere to. As a general rule the SAA are to be followed as well as the OHS&W Act.

ANCA Heritage Buildings for Heritage Parks as an ethos for defining the approach that high quality of designed assets (buildings, etc) are required in a world heritage park(s). Encourage the use of indigenous materials.

TAS All constructions are to comply with the Building Code of Australia (as it is applicable to the particular circumstance). A number of standards manuals have been assembled (walking tracks, signs, weed management) and more are under way (recreation facilities), or are being planned (asset management, risk management). Although not formal policy, it is standard practice for all major (< \$100,000) projects to be designed by appropriately skilled professional consultants.

WA Internal publications such as the Hardware and Small Building Portfolio, Field Construction Guide, Sign Manual, Visitor Interpretation Manual, all complement the National and State building codes. Works are supervised by staff who have undergone training in Recreation Planning and Management Courses.

QLD Queensland has in house Landscape Architects who are required to check all designs prior to approval and obtain statutory compliance certificates where appropriate. Although there is no manual, the unit maintains a large library of documents.

Design

VIC Conventional approaches to the design process are followed. The phases are approved with “sign off” by appropriate (internal) stakeholders eg; Minister or Director and documented as an approval matrix. At each of the sign off stages the project scope is reviewed based on costings provided at each phase. In sensitive projects (or high profile) a public consultation component is built in.

NSW Encapsulated in the standards section above. General approach to major projects is established by project manager / co-ordinator.

ANCA Briefing and requirement documents for all projects developed by technical expert ANCA project officers in-house. Consultant building professionals engaged and monitored by ANCA project staff.

TAS Generally covered in Standards section above.

WA Divisional staff attend the Recreation & Planning and Management Courses. All planning and works are undertaken in association with specialist design staff.

QLD The systematic process is published in the Site Planning Manual and makes allowance for differing levels of complexity and approval levels required as construction value increases.

Pre-Contract

VIC Employ contracts (for goods & services) that have been developed by the organisation. The main contract document is standardised and only one section (schedule) is manipulated to cover specificities of the contract. Contracts are approved through the organisation’s legal section prior to entering into any contract. Standard Government guidelines and procedures are followed.

NSW Contracts for goods and services are detailed in the organisation’s contract manual and accounting manual. Major building contracts must use AS 2124 as general conditions of contract. Specific and detailed conditions follow Government guidelines.

TAS A detailed Procurement Practices Manual is provided by the Tasmanian Government through the Department of Treasury and Finance. Procedures for preparation for project briefs, selection and appointment of consultants, documentation

procedures and requirements and tendering procedures are set out for major and minor works.

QLD Staff are required to follow the requirements of the Queensland Government *State Government Purchasing Policy* which contains examples of the necessary documents and includes standard amendments to AS 2124.

Creation

WA Processes for ensuring that management principles are followed are set up within the administrative structure. Project management and pre-determined development approval processes ensure that critical actions and procedures are followed.

Operation Phase

Leader Characteristic Definitions

Start up

Leaders develop operating procedures and identify staff training requirements within the plan to engage the initial operation of the facility.

Asset plan

Leaders develop an extensive life cycle plan including routine and cyclical maintenance programs for the continuing efficient operation of the asset.

Review

Leaders monitor and assess the effectiveness of the asset in accordance with the management plan. Leaders develop an appropriate performance measurement process.

Disposal

Leaders have developed an effective process to dispose of assets no longer required for service delivery.

Best in Class

OPERATION PHASE

	Start Up	Asset Plan	Operation	Review	Disposal
SA	L	M	L	L	L
VIC	L	L	L	L	L
NSW	L	M	L	L	L
ANCA	L	M	L	L	L
TAS	L	L	L	L	L
WA	L	M	L	L	L
QLD	L	L	L	M	L

L = DO NOTHING M = DEVELOPING H = ACHIEVING OUTCOMES

It was unanimously agreed that ANZECC agencies were not considered leaders nor in fact qualified for best in class in the operation phase.

Several agencies were beginning to develop asset plans for management of their assets. South Australia has recently completed an extensive asset management plan for Cleland Wildlife Park. The maintenance programs within the plan are yet to be implemented.

The working group in identifying this short coming has recommended agencies investigate external best practice organisations to begin the process of improvement in this critical phase.

Support Systems

Appropriate support systems and resources are required to ensure the effective application of the framework and model identified in this report.

Networking

The working group identified the need to continue the process of improvement by involvement of all partners in an annual review of agencies' performance.

The results of this review will be documented and circulated through ANZECC.

Human Resources

To achieve best practice, agencies must have adequate staffing resources, appropriately skilled in the disciplines of asset management. The structure and reporting relationships are specific to the agency.

There is a need for a core central group, skilled in the disciplines of facilities' management to oversee the management of assets. Field staff require a knowledge of the principles of asset management, but should not have autonomy in the creation and management of built infrastructure.

Financial Resources

It is unanimously agreed that the critical funding requirements for asset management are not in the provision of capital funds, but a committed **recurrent** allocation for maintenance and replacement of existing or proposed infrastructural assets.

Best practice organisations develop asset plans and maintenance programs which identify and allocate adequate funds.

Funding levels are determined during the evaluation phase and are regularly reviewed to ensure the asset managers efficiently and effectively maintain service delivery.

IT Systems

Best practice in asset management cannot be achieved without appropriate management systems. Asset registers and management programs are becoming readily available, however the working group did not find evidence of a total system to suit all user needs.

The move to accrual accounting will drive the need to develop appropriate registers for valuation of assets and this should be seen as the catalyst to the implementation of total management systems.

The New Zealand Auckland Regional Council have a management program network, which should be investigated.

The South Australian Building Land Asset Management System is highly developed, but specific to building assets.

Staff Development

A formal program of staff development in asset management is essential. Key areas for skill development are:

- Project management
- Landscape design
- Economic and financial evaluation techniques
- Facilities' management
- Risk management

Agencies should identify key groups to target skill development.

Reference should be made to ANZECC Best Practice Staff Training model.

Support Documentation

The development of standard process and information documentation creates efficiencies and effectiveness. Standard contract documentation provides legal and quality assurance. Standard process pro formas ensure efficient processing of data.

Catalogues of product information are a valuable information source to maintain standards.

Policy and procedure manuals provide the mechanism for skill development and compliance to regulated procedures.

South Australia has developed a project management field guide which guides field operators through the steps of project management.

Measuring Performance

The ongoing monitoring and measuring of an asset's performance is essential to ensure the effective and efficient operation of that asset.

The development of performance indicators is the first necessary step.

The group identified several indicators which may be used:

- Cost of maintenance
- Breakdown / down time frequency
- Operating cost
- Customer satisfaction
- Usage

It was agreed further investigation into performance measurement was necessary, particularly to identify a user friendly model to measure performance.

Summary

Government throughout Australia and New Zealand have embraced the trend to develop a strategic approach to the management of physical assets.

Environmental and conservation agencies are major stakeholders in the management of Government owned assets including natural, constructed and equipment type assets.

Indicative of many organisations, the major emphasis with ANZECC partner agencies has been on creation rather than maintaining assets. The group agreed the operation phase is possibly the most critical in the cycle and a concentrated effort be placed on identifying external best practice organisations.

ANZECC assigned South Australia as the lead agency to develop and report on best practice asset management. A working group developed a framework for strategic asset management and a model for best practice. The model included leader characteristics and identified the best in class for ANZECC partners.

The next stage is to investigate external best practice organisations, “;borrowing from the best and doing it better”

Glossary

Asset

Economic resources owned or controlled by an organisation: Service delivery potential: Constructed assets are physical assets which have a value and include roads, sewers, bridges, buildings, trails & some heritage and cultural assets - intellectual property.

Asset Management

The process of managing demand and guiding acquisition, use and disposal of assets to make the most of their service delivery potential, and manage risks and costs over their entire life.

Asset Management Plan

Identifies the short and long term requirements of an agency and provides a framework for managing its asset portfolio. These needs are driven by goals defined in the agency's corporate plan and service delivery strategies.

Asset Register

A record of items considered worthy of identification as discrete assets. A physical asset register includes information about each asset, such as type of construction and technical details. (Details include location, value and construction type).

Breakdown maintenance

Action in the event of unforeseen failure of an asset affecting operations and/or creating a risk hazard.

Brief

Written goals, methods and desired results prepared by project participants, providing sufficient substantiation to approve advancement of the project to the next phase, and includes: functional and operational requirements, schematic design, limit of cost estimate, cash flow plan, outlining service delivery objectives, value statement, impact on the program and the financial and economic approach to be pursued.

Project Brief

The brief developed on behalf of the client as a result of rigorous evaluation of service delivery needs and options, and forwarded to the design professionals for interpretation into a design for a built asset(s).

Cost Benefit Analysis

A technique for the evaluation of projects, where all costs and benefits (direct and indirect) are considered. Costs and benefits would be quantified, but where this is not possible they should be listed.

Financial Analysis

A project evaluation technique which is undertaken from the perspective of the individual or agency, rather than having an economic or system-wide perspective, as used in cost benefit analysis.

Functional analysis

Information generated from a value management study of a concept or project, which details at different levels the functions required.

Infrastructure

Major capital works constructed to provide a framework for the social benefit and economic development of the State.

Life cycle

The cycle of activities that an item (or aggregation of items) goes through while it retains its own physical identity, comprising planning, design, acquisition and support rehabilitation.

Capital Works

Infrastructural developments which satisfy service delivery requirement

Non asset strategies

Methods of addressing demand other than by adding asset capacity ie no built solutions, contracting out etc.

Risk

The possibility that an outcome is not achieved or is replaced by another outcome, or an unforeseen event occurs.

Value analysis

A structured, systematic and analytical process, which seeks to determine value for money by providing all the necessary functions at the most economic cost, consistent with required levels of quality and performance.

Asset Plan

The document which identifies the requirements to maintain the asset to optimum operating efficiency including maintenance, schedule, monitoring process and performance indicators.

Cyclical Maintenance

Periodic works to restore the asset to optimum conditions eg; painting.

Routine Maintenance

Regular progress of works to prevent deterioration of the asset's capability eg; service to power generation.