

DEPARTMENT OF ENVIRONMENTAL PROTECTION
ANNUAL REPORT 2001–2002

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ANNUAL REPORT
NOVEMBER 2002

Acknowledgments

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November 2002

Letter to the Minister

Hon Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT AND HERITAGE

In accordance with Section 65A of the *Financial Administration and Audit Act 1985*, I have pleasure in submitting for presentation to Parliament the Annual Report of the Department of Environmental Protection for the period 1 July 2001 to 30 June 2002.

This report has been prepared in accordance with provisions of the *Financial Administration and Audit Act 1985*.



Roger F Payne
ACTING DIRECTOR GENERAL

Perth, Western Australia
30 August 2002

Executive Review

As predicted in last year's annual report, 2001–02 was dominated by the challenge to build a new organisation, to develop our approach to environmental protection and natural resource management and to re-establish links with our stakeholders.

The task continues.

While legislatively we report as separate entities, the Water and Rivers Commission, Department of Environmental Protection and Keep Australia Beautiful Council are effectively operating as one under the working title of Department of Environment, Water and Catchment Protection.

Our role is to help manage the behaviours of community and industry to ensure a sustainable future for the environment and our quality of life.

We respond to this challenge by using a suite of approaches available to us: that is, to regulate, influence, educate, inspire and to negotiate.

Through this we are one of the key agents on behalf of the State for ensuring that sustainable development is allowed to proceed while maintaining Western's Australia's environmental and ecosystem capital.

And we must achieve this complex and important balancing role while retaining credibility and influence in a modern democracy.

We have the privilege of helping to deliver for our society, sustainable use and management of the natural resources to achieve an appropriate quality of life: that is, socially acceptable ecologically sustainable development.

And we should recognise that WA has potentially the best system for natural resource management and protection in Australia.

The merger of the former departments gives us the opportunity to define a new way to conduct our business and how we relate to the external world.

The merger brings with it the advantage of establishing an agency with the complete toolkit of negotiation, partnering and strong regulatory powers. And while I see these strong regulatory powers as a necessary part of our armoury, the department must also be adept at negotiation and influence.

This does not imply a weakening of environmental standards. They are absolutely necessary and rightly expected of us by the community.

This is about achieving good environmental performance in the most effective way. It is about having as mature relationship with industry where real negotiation is possible and sits alongside traditional enforcement.

We are also working across the agency to improve our links with the community and to engage them in meaningful ways in all aspects of our business.

It is clear from the year in review that we have come a long way but that we also have much work to do.

I thank all of the staff of the amalgamating agencies who have continued to give their best in this testing time.

I look forward to another productive year and the formal launch of the new department.



Roger F Payne
ACTING DIRECTOR GENERAL

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1 Corporate governance

During the 2001-02 reporting period, the Department of Environmental Protection, with the Water and Rivers Commission and Keep Australia Beautiful Council, began working to a common, draft Vision and Mission, and with shared Principles.

Our vision

A healthy environment and sustainable use of natural resources for the benefit of present and future generations.

Our mission

To lead the protection and enhancement of the State's natural capital, working in partnership with the community. We achieve this through managing and influencing people's attitudes and behaviours towards the environment and natural resources.

Our principles

For the environment and water resources, we will:

- Act in the long term public interest
- Consider environmental, social and economic needs; and
- Manage them in an integrated way with others.

And in all our dealings we will:

- Act with courage and integrity;
- Respect our stakeholder's views and contributions;
- Be willing to make a constructive difference; and
- Take responsibility for our individual and collective contribution.

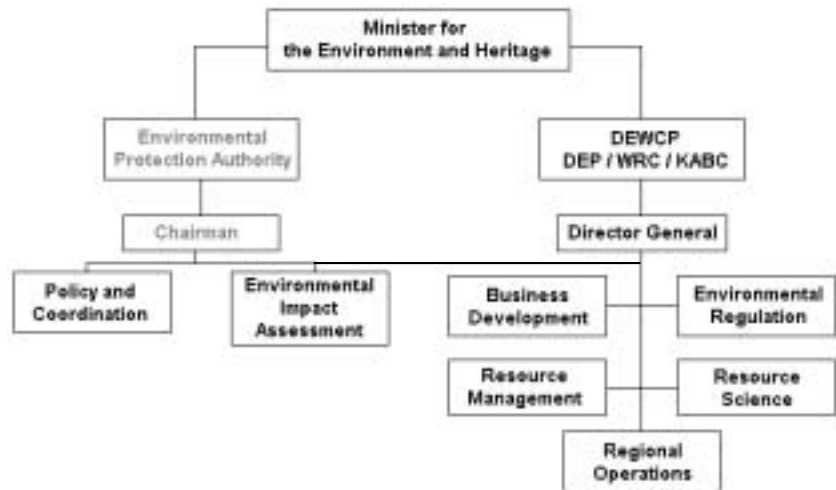
1.1 Governing legislation

The DEP has responsibility for administration of the *Environmental Protection Act 1986*. The two main objectives of the Act are:

- to ensure the environment is managed so that it is conserved and enhanced; and
- to ensure that development in Western Australia is environmentally acceptable.

1.2 Organisation structure

Early in the 2001-02 reporting period, the Department of Environmental Protection adopted a new divisional structure jointly with the Water and Rivers Commission and the Keep Australia Beautiful Council, which now operates under the Business Development Division.



The amalgamation and restructure are detailed in the section on Changes to the Department of Environmental Protection following the Machinery of Government Recommendations.

1.3 Changes to the Department of Environmental Protection following the Machinery of Government Recommendations

The State Government’s 2001 Machinery of Government Taskforce report recommended radical change for the environment and water resources portfolio. Most obvious and dramatic among these was the formation of a new agency, the Department of Environment, Water and Catchment Protection. This department is being formed by the amalgamation of the Department of Environmental Protection, the Water and Rivers Commission and the Keep Australia Beautiful Council.

Naturally, the scale and complexity of this change has ensured the project has consumed considerable resources during the past year. A key challenge has been to progress the development of the new department – organisationally and culturally – while maintaining our services to the community. This challenge has been difficult to meet in all cases but the benefit in the future will be an integrated environment and natural resource management agency for Western Australia.

The Department of Environment, Water and Catchment Protection’s key roles in resources assessment and allocation, coupled with strong environmental protection powers, will ensure sustainable use of resources for responsible development.

The new department will continue the commitment to work with the community, all levels of government and industry.

The Environmental Protection Authority remains as an independent statutory authority, serviced by its own staff for environmental policy development and environmental impact assessments. Its staff will be employed through the new Department but will report to the EPA.

Although the final operational model and governance structure is yet to be completed, the new department is essentially operational as a combined entity.

The Department of Environment, Water and Catchment Protection's roles are to:

- Investigate environmental systems such as waterways, groundwater and airsheds to ensure they are managed to meet environmental quality objectives.
- Share environmental resources between competing uses to ensure sustainable use and development.
- Reduce the amount of waste produced and ensure that waste is managed to meet health and environmental standards.
- Ensure discharges to the environment are minimised and that pollution of the environment is prevented or abated.
- Provide local environmental and resource management services to key regions.
- Support development of environmental and water resources management policy.
- Ensure the community has the opportunity to provide input and to become involved in environment and water resource management initiatives.

Delivering better service

The amalgamation of the Department of Environmental Protection and the Water and Rivers Commission is bringing together several resource and environmental management functions in a way that provides a more integrated service to stakeholders and the wider community. Some areas where integration will be effective are:

- Pollution control, contaminated sites management and waste management, with the new agency having the complete toolkit of negotiation, partnering and strong regulatory powers.
- Water resources and airshed policy and guideline development.
- Resource protection licensing. For example, permitting and regulating activities that may impact on the environment.
- Development approvals. Industry stakeholders will no longer need to go through the two separate agencies when they deal with issues such as subdivision or mining proposals.
- Environmental monitoring. The new Department will have improved capacity for monitoring environmental systems such as waterways, groundwater and airsheds.
- Community liaison and education. Community education and involvement will continue to be essential to the department's way of operating.
- Regional services delivery, providing the opportunity to present single shopfronts for our customers while still retaining sufficient specialisation in the issues we manage.
- Without doubt, one of the most important factors in improved land and water management is engaging landholders in sustainable catchment management. The new Department will help to deliver ecologically sustainable development in rural and urban environments.

During the year the following actions have been undertaken to progress the creation of the merged entity.

In some cases branches with the same functions have been amalgamated. Primarily these branches have been in the Corporate Services and Regional Services areas. In other cases branches with similar functions have been brought into the same divisions. In each case interim structures have been established. Co-location for some merged units has been achieved and is significantly advanced for others.

Appointments to senior positions within the merged structure have been made and all other employees have been accommodated within it.

The change-management process has been assisted by the development of a Staff Liaison Committee, cultural change initiatives, and working with stakeholders (within and outside of the agency) to create the new organisation.

A comprehensive staff communication strategy has been implemented to enable staff to understand the changes and to have input into the development of the new organisation.

All human resource information for the agencies has been converted to a single system, the Concept HRMIS. This system enables further development of the e-business relationship with our employees. It provides a self-service module to all employees via the agency intranet and allows access to human resource information and procedures. This further develops the self-sufficiency of managers and employees in the people management function.

The corporate development and change program is continuing and will ensure that the department is able to achieve the expected outcomes of the formation of the Department of Environment, Water, and Catchment Protection.

2 Divisional reports

2.1 Environmental Systems Division

The Environmental Systems Division plans and implements projects to increase knowledge and understanding of environmental systems under threat or pressure. The division applies this knowledge to the development of environmental quality objectives, strategies and policies to improve the management and protection of the environment by government, industry and the community.

2.1.1 Air

2.1.1.1 Perth Air Quality Management Plan

The Perth Air Quality Management Plan (AQMP) is a 30-year plan aimed at improving Perth's air quality for future generations. The Perth AQMP was released in December 2000 following input from working groups, government agencies and the community.

The Perth AQMP includes 126 actions that seek to reduce the emission of those air pollutants that are causing occasional episodes of unacceptable air quality now and prevent the development of future air quality problems.

Actions in the Perth AQMP cover the areas of health effects research, monitoring and modelling research, community education, and emissions from vehicles, domestic activities, burning, and industrial sources.

The Air Quality Coordinating Committee (AQCC), which has responsibility for development and implementation of the Perth AQMP, evaluated all actions for the purposes of prioritising those that would have the most significant impact on Perth's air quality. Three key areas were identified:

- Commuter behaviour;
- Vehicle emission reduction; and,
- Industrial emissions.

A detailed Implementation Strategy for the Perth AQMP was developed during 2001-02 to ensure timely and effective implementation of the actions within the Perth AQMP. The Implementation Strategy was launched on 24 June 2002 and has been developed with input from all agencies with responsibility for actions within the AQMP and from key industry and community representatives.

The AQMP Implementation Strategy included a program to develop an internet resource relating to air quality issues in Western Australia. An air quality web page was developed. This allows users to download the latest air quality monitoring data from around the state and to access information on air quality studies, publications and policies.

Links to programs related to the Perth AQMP can be found at the Department's website <www.viron.wa.gov.au>.

The Implementation Strategy will be reviewed after five years. Progress on all initiatives and programs will be considered, as will trends in air quality.

2.1.1.1 Perth Air Emissions Update

The Perth Air Emissions update was completed this year. This work updated the Perth Photochemical Smog Study, which was an emissions inventory developed around the 1992-93 fiscal year. The region covers an area of about 8,600 km², which includes the extremities of metropolitan Perth and all industrial and commercial premises expected to influence Perth's air quality.

2.1.1.2 Pilbara Airshed Study

The Pilbara Airshed Study will provide baseline data to enable future assessments of impacts of proposed developments on air quality in the Pilbara. The technical reports from this study are yet to be finalised.

2.1.1.3 BTEX Personal Exposure Monitoring study

The DEP, on behalf of Environment Australia, is coordinating a study on personal exposure to benzene, toluene, xylene and ethyl benzene. The study aims to identify and quantify the main contributors to personal exposure to selected volatile organic compounds. Details of this multi-agency study are available on the DEP web site.

2.1.1.4 Statewide Air Environmental Protection Policy (EPP)

The Air Quality Branch has continued with a joint work program (with the Policy Coordination Division) assisting the Environmental Protection Authority (EPA) to develop a Statewide Air Environmental Protection Policy. The Branch is responsible for providing strategic and technical advice.

Based on several considerations, including previous stakeholder feedback, the policy direction now focuses on implementing the standards and goals of the National Environment Protection Measure for Ambient Air Quality (NEPM). These standards are designed to protect the health and welfare of people where they live. A subsequent EPP that proposes additional ambient air quality standards may be developed in future as a separate policy.

Consultation with key stakeholders is continuing throughout the EPP development process.

2.1.2 Catchments

The risk-based environmental asset assessment framework, trialled in the Lake Chinocup Catchment in 2000-01, was broadly adopted for the entire State. This approach will ensure that the best investment options for salinity are achieved, as it makes it easier to ascertain the best use of available funds.

2.1.3 Geographic Information Systems (GIS)

The GIS Branch works with other branches and divisions to ensure appropriate and accurate data and maps are available for various studies. GIS is used extensively to establish boundaries for Environmental Protection Policies (EPPs). Previously, less precise methods were used.

In December 2000 a world datum shift occurred. This made it necessary for boundaries on all existing licences and legislation to be redefined. This year the boundaries on the EPPs for Kalgoorlie Sulphur Dioxide, Western Swamp Tortoise, Cockburn Sound and Kwinana Air were all redefined using GIS. Everything created now is GDA94 compliant.

During the year, the GIS Branch continued its vegetation clearing analysis. It worked with the Policy Branch to assess changes to vegetation extent, particularly in the Bunbury area as part of the Greater Bunbury Region Scheme.

GIS is also used by the Department to obtain spatial analysis on air, land and water quality data in the event of explosions or spills. For example, during 2001-02, dredging and dewatering at two estates on Karrinyup Road contributed to increasing groundwater acidity and resulted in significant arsenic concentrations in groundwater. GIS was used as a tool to understand the spatial extent of the contamination.

GIS is also used to help the Evaluation Division compile EPA Bulletins. For example, on the Tonkin Highway extensions, clearing proposals, submitted maps and other information was presented using GIS so that environmental concerns could be readily seen.

2.1.4 Marine

2.1.4.1 Development of Environmental Quality Criteria for Perth Coastal Waters

This year the Marine Branch has continued its work on Perth Coastal Waters. A Draft Environmental Quality Criteria (EQC) Reference Document was released to support the draft Cockburn Sound Environmental Protection Policy (EPP). Public submissions were received on the draft and the criteria are being reviewed in light of the submissions. After this review, they will be finalised to support the EPP.

A seagrass health assessment in Cockburn Sound and surrounding waters was completed.

Water samples were taken to characterise background water quality as it relates to toxicants and organic chemicals, heavy metals, and other low level contaminants. This sampling program will help establish natural background levels to refine the application of the criteria in Cockburn Sound and Perth Coastal Waters.

Hydrodynamic modelling of wastewater discharges to Cockburn Sound was commissioned to assess their dispersion and dilution in relation to meeting draft environmental quality criteria.

2.1.4.2 North West Shelf Joint Environmental Management Study

The North West Shelf Joint Environmental Management Study (NWSJEMS) is a \$6 million marine environmental study with the overall goal of achieving ecologically sustainable development of the North West Shelf (NWS) region and ecosystem. It integrates physical, biological and management models and is being conducted by DEP and CSIRO. The study began in 1998 and will be completed in June 2003. A major interim report detailing progress was released in July 2002.

A survey of NWS residents was conducted to determine important uses and values, as well as perceived threats to the marine environment. The survey strongly indicated that water

quality, the natural environment and ecosystems were the most important values in the region. The preferred outcomes for the region were found to be protection of marine plants and animals, unpolluted waters, and accessible beaches for swimming, diving and boating

The data sets compiled as a result of the study consolidate existing information about the NWS from a wide range of sources for the first time. Two products have been developed – one using Geographic Information System (GIS), and a Web-based tool called Data Trawler. The GIS product allows spatial data to be viewed, analysed and mapped. Via the internet, Data Trawler allows data access, review and transfer across different computers and programs, access to the GIS, and access to NWS data held by CSIRO.

Models have been developed to represent and predict the dynamics of the key physical and ecological processes on the NWS. The models provide the necessary tools to explore a broad range of human impacts, ranging from the dispersion of contaminants to the effects of trawling on benthic habitats.

A key output of the Study is a sophisticated computer-based system for evaluating current and proposed multiple-use management strategies in the region. The system provides a linked ecosystem and human impacts model of the NWS for predicting the cumulative impacts of multiple uses and the responses to management measures. The model deals explicitly with multiple, and potentially conflicting, environmental, social and economic objectives and with scientific uncertainty. It will predict the consequences of alternative management actions.

2.2 Waste Management Division

Major changes have occurred in the Waste Management Division this year as a result of the amalgamation. The division has been rationalised within the new structure:

- The controlled waste management responsibilities have been transferred to consolidate a licensing and enforcement function within the Environmental Regulation Division.
- Waste management operations have also been temporarily located within the Environmental Regulation Division, however negotiations are well advanced to move these responsibilities to other government agencies.
- Waste management policy and the administration of the Waste Management and Recycling Fund (WMRF) have been transferred to the Resource Management Division.

2.2.1 Waste 2020 Strategic Action Plan

In January 2002, the State Government announced the formation of the Waste Management Board, an expert committee formed to oversee the activities of WMRF and provide strategic advice to Government. The new committee replaced the Advisory Council of Waste Management and the State Recycling Advisory Committee. The DEP services the Waste Management Board.

The Board has adopted the strategic vision of working towards zero waste, building on the outcomes of the Waste 2020 planning process. During the first six months of operation, priorities have been:

- Progressing with drafting the Waste Management Bill;
- Reviewing the landfill levy and the grant funded programs;
- Reviewing the waste education strategy for the State; and
- Developing a program of community engagement on waste issues as part of its review of waste management strategies planned for 2002-03.

The Board is also going through a business planning process for the next year.

Work has continued on the implementation of various sector action plans. In particular, action plans for construction and demolition waste and problematic waste have moved forward. The department has worked with industry to prioritise activities to reduce these wastes to landfill, using the waste management hierarchy of avoidance, recycling, treatment and disposal.

2.2.2 Waste Management (WA)

Waste Management (WA) was established in 1998 as a body corporate of the DEP. It has been responsible for managing two strategic waste facilities – the Mt Walton Intractable Waste Disposal Facility and the Brookdale Liquid Waste Treatment Facility. The conflict of interest between management and regulatory responsibility within the DEP was emphasized this year with the review of the Brookdale facilities.

There have been negotiations within Government to remove the DEP as operator of all facilities and site remediation work. When amalgamation with the Water and Rivers Commission is complete, the new department will be well placed to transfer these management responsibilities to other relevant government agencies.

2.2.3 Mt Walton East Intractable Waste Disposal Facility

This year there was a disposal operation at Mt Walton. About 520 tonnes of arsenic contaminated equipment from CSBP, 300 litres of mixed low-level radioactive wastes, 8.3 tonnes of arsenic-based pesticides from the ChemCollect Program, and 3.5 tonnes of mercury contaminated soils from BP were disposed of.

2.2.4 Brookdale

Waste Management (WA) produced a Consultative Environmental Review (CER) to change the waste acceptance criteria of the Brookdale facility to allow it to accept and treat hazardous wastes. The proposal was rejected on appeal, having taken into account the historical context of the plant and a high level of community concern. The Brookdale facility has adjusted the wastes accepted for treatment based on advice from the EPA and conditions set by the Minister for the Environment.

2.2.5 Morangup Road, Toodyay

In 1997, preliminary investigations by the DEP determined that three properties on Morangup Road were contaminated with wood tar waste. The waste, from the Wundowie Charcoal Iron and Steel Industry, had been dumped on the land during the 1960s and 1970s, after which the land had been sub-divided and sold to the public.

During 2000-01, the former Waste Management Division undertook extensive characterisation of the soil and groundwater contamination and developed a remediation strategy. This strategy was submitted to the EPA as an Environmental Protection Statement in July 2001. A statement allowing the implementation of the proposal was issued in March 2002 after several appeals had been addressed. .

The State agreed to remediate these properties based on the inability to utilise the contaminated land for agricultural purposes. The DEP is currently transferring responsibility for the project management of this cleanup to LandCorp. LandCorp has extensive expertise in this area.

The DEP will regulate any remedial works undertaken by LandCorp. It is expected that remedial works will commence at the sites in late 2002.

The DEP has ensured that the local community and residents have remained informed during this process through meetings, personal conversations and letter drops. Consultation with the community will continue for the remainder of the project.

2.2.6 ChemCollect

This year the ChemCollect program completed its commitment to the State of Western Australia. The program, jointly funded by the State and Commonwealth Governments has seen over 123 tonnes of unwanted farm chemicals collected from rural, outer urban and regional areas. The program was designed to protect the environment, human health and trade. Further details can be obtained by visiting the website, <www.ea.gov.au/industry/chemicals/swm>.

In Western Australia, the collection was carried out using officers from the Department of Environmental Protection and the Department of Agriculture. Local Government infrastructure was integral to the success of the program with the last major collection regions being the outer urban area and desert region of the state. One shire will be revisited in 2002-03 and that will conclude the program.

Some of the collected material will be recycled through chemical manufacturers, while the remainder will be treated by licensed facilities.

2.2.7 Waste management and recycling fund

Five rounds of grant funding were approved in 2001-02 before the advertising of grants was suspended pending the outcome of a review of the program. In the five rounds, the fund assessed 116 applications seeking \$8.3 million. The Minister approved 46 grants totaling \$2.14 million. Payments of rebates to council recycling schemes totaled \$1.84 million and \$4.58 million was collected in landfill levies.

2.2.8 Government waste paper recycling

During the year Paper Recycling Industries collected about 705 tonnes of waste paper from metropolitan government agencies, an increase of 160 tonnes on 2000-01. New contract arrangements for waste paper recycling will come into effect on 1 July 2002, following the Department of Industry and Technology (DoIT) recalling the old contract.

2.2.9 DEP's Recycling performance

The DEP and Water and Rivers Commission recycle aluminium and the DEP St Georges Terrace office and the WRC Hyatt office together recycled 13.7 tonnes of waste paper.

2.3 Pollution Prevention Division

The Pollution Prevention Division develops and enhances systems, processes and policies to ensure that discharges into the environment are minimised and pollution of the environment is prevented or abated.

The division administers the provisions of Part V of the Environmental Protection Act 1986, and applies the provisions of other Parts of the Act in a manner consistent with the requirements and policy of the Act, with other divisions and sections of the Department.

2.3.1 National Pollutant Inventory

The National Pollutant Inventory (NPI) program started in 1998 as the first National Environment Protection Measure (NEPM) in Australia. Each year, large industrial facilities are required to estimate and report on specified emissions. In addition, government environment agencies estimate and report on aggregate emissions from area-wide sources (airshed and water catchments).

During 2001-02, the third year of NPI data was published on the NPI internet site (www.npi.gov.au). Emissions of specific substances to air, land and water from over 380 WA facilities (from over 60 industry sectors) are listed. Locations of the facilities can be seen via on-screen maps.

This year, the WA NPI unit has also contacted and advised WA industrial facilities of their duties under the NPI. Workshops were held in Perth and regionally to help companies with NPI reporting. Audit reporting was conducted on six reporting facilities.

A study of NPI emission estimates for the Blackwood-Scott catchment, focussing on average annual loadings of total nitrogen and total phosphorus, started this year.

2.3.2 Industry regulation

The DEP continued to administer licences, works approvals and registrations throughout WA as indicated in Performance Indicator 11. In addition to this, investigations were conducted into options for regulating inputs of waste into drains as part of the Swan-Canning Cleanup Program and alternative means of dealing with industry self-monitoring data.

2.3.2.1 Alcoa Wagerup

Considerable community concern has been expressed in relation to odour and noise levels, health implications and loss of amenity near the Alcoa Alumina Refinery at Wagerup. An action plan was put in place to address this matter. It included a major review of operating conditions and performance to be incorporated into the licence issued in September 2002. Significant emissions reduction projects were completed by 30 June 2002. These will significantly reduce odour levels in the community. This issue is the subject of intense media activity and is being investigated by the Legislative Council Standing Committee on Environment and Public Affairs.

The DEP has briefed the three local government authorities and will continue to liaise closely with the community as the improvement works, costing over \$70 million, take effect. A comparison of complaints for the period from January to May for 2001 and 2002 showed a large decrease in complaints in 2002.

2.3.3 Compliance inspections

Pollution Response Officers carried out inspections of prescribed industrial premises during the year to ensure that environmental protection standards were maintained. Where necessary, operators were educated and changes made to prevent pollution. Several other commercial premises were inspected as the result of complaints or pollution reports. A program of inspecting chemical storage facilities was conducted in conjunction with the Department of Mineral and Petroleum Resources, the Fire and Emergency Services Authority and Worksafe WA. Where deficiencies were detected, programs for improvement were instituted. This has resulted in reduced environmental risk and increased awareness of environmental protection within these industries.

2.3.4 Contaminated sites

Following consultation with major stakeholders, work has continued on drafting legislation on contaminated sites. It is expected that the Minister will submit the draft legislation to Cabinet in the last quarter of 2002.

The DEP released final versions of its technical series of guidelines to manage contaminated sites. These guidelines include investigation of contaminated sites, reporting on site investigations, and a guideline on community consultation

2.3.5 Search for buried chemical drums

In January 2002, the Pollution Response Section was requested to carry out an investigation into allegations of a stockpile of the herbicide 245 T. The investigation involved three lines of inquiry, these being Derby, Kwinana and Dwellingup. Excavations of three alleged sites were carried out in May 2002 and no buried drums were found. Investigations into Kwinana revealed that drums had been buried, but the remnants and contaminated soil from the site had been dug up and properly disposed of several years ago.

Investigations into allegations in Dwellingup resulted in electro-magnetic imaging identifying four possible sites, which were excavated in June 2002. Twenty-five drums, some partially full of liquids, were found in one site. Analysis revealed that some of the drums had contained 245 T in various dilutions and that some drums had leaked. Soil at the site that had been contaminated with 245 T was removed for proper treatment and disposal at an approved facility. No chemical drums were found in the other three sites. A possible fifth site was identified after the excavations, and was then electro-magnetically surveyed. The site appears to have a large anomaly, indicating buried metal objects that will be excavated in July or August 2002. Sampling was carried out to ensure the protection of public and the environment.

2.3.6 Pollution incidents response

The Department operates a pollution incident response service, which responds to reports of pollution, including pollution emergencies after hours.

The Pollution Response Service responded to a wide range of pollution incidents ranging from minor chemical spills and emissions, to major spills where wildlife was affected. There were also several large chemical fires and road transport incidents, such as a fatal truck accident and chemical fire at Cataby and a fireworks storage facility fire at Carmel. In the Cataby and Carmel incidents, DEP Pollution Response Officers were transported to the incident scene by the WA Police Service helicopter.

Where necessary, immediate action was taken to prevent or minimise environmental damage and to arrange prompt clean ups and decontamination. Solutions were initiated with companies and individuals when required to ensure that such problems did not recur. Where necessary, evidence was collected for possible legal proceedings.

The Department's emergency response equipment was reviewed during the year and improved where necessary. The DEP continues to provide a well-equipped emergency response vehicle to attend pollution incidents.

2.3.7 Inter-agency liaison

The Pollution Response Section has continued to forge closer relationships with other agencies and local governments to better protect the environment. The Branch represents the Department on several committees and working groups, including the Swan Canning Industry Working Group, the Metropolitan Environmental Health Managers Group, the Fire and Emergency Service Hazardous Materials Coordinating Committee, and the Kwinana Industries Emergency Management Liaison Group. Such liaison has resulted in better understanding of environmental protection issues as they relate to these organisations.

The Branch, in cooperation with Fire and Emergency Services, is developing a training course for people who may have to deal with pollution incidents, including council workers, rangers, police officers and fire fighters. Due to the set backs to the normal training program of emergency services after the September 11 2001 terrorist attacks, the finalisation of this course has been delayed. The first course is expected to be run late in 2002.

2.3.8 Firewood and wood heaters

Smoke from domestic wood heaters continued to be the cause of many complaints to the Department and local councils. DEP officers inspected a number of firewood retailers, and established that most were now complying with the regulations, which prohibit the sale of green wood. An amendment to the *Health Act 1911* is planned to permit local government officers to deal with individual smoky chimney complaints.

2.3.9 Environmental noise

The DEP has an Environmental Noise Section of three noise specialists who provide technical advice to the environmental impact assessment process. They also support the network of approximately 230 local government environmental health officers and also Police officers who enforce the noise regulations where possible. The Branch sets noise policy and deals with difficult noise issues, such as major rock concerts.

The results of a survey of local government noise complaints (handled under delegated powers) for the year to June 2001 were compiled. The survey indicated that, of the 4485

reported complaints, radios and stereos (20 per cent) and construction noise (16 per cent) were the most common causes. Air conditioners accounted for six per cent of reported complaints, with hotels and nightclubs and household parties representing six and five per cent respectively. The total number of local government noise complaints was estimated from the survey results to be 4869 for the year, or 2.7 for every 1000 people. This represented a small decrease for the previous year (2.9/1000 people).

Several initiatives were introduced in conjunction with industry representative groups. For example, the Department is working with the housing industry association to deal with construction noise. Air conditioner noise is also being worked on. This should lead to a reduction in the incidence of noise nuisances from these sources.

2.3.10 Ozone protection

The Department of Environmental Protection (DEP) enforces an Environmental Protection Policy for the protection of the Ozone layer, namely the Environmental Protection (Ozone Protection) Policy Approval Order 2000 (gazetted 17 October 2000).

The policy covers three main industry bodies – the refrigeration and air conditioning, automotive air conditioning, and fire protection industries. It contains provisions for the control of alternative refrigerants. This means that the provisions as applied to ozone-depleting substances also apply to alternative refrigerants.

Tier 3 infringement notices were introduced for breaches of the policy. This allows departmental officers to serve ‘on the spot’ infringement notices (\$250 and \$500) when necessary for certain offences against the policy.

The DEP is involved in the consultative process run by Environment Australia that, among other things, proposes to extend Commonwealth Legislation to cover end uses of ozone depleting substances. Comments have been formally sent to Environment Australia.

2.3.11 Rural landfill regulations

Following a multi-step consultation process commencing in mid-2000, the licensing process for landfills receiving up to 5000 tonnes per annum has been modified to allow these to become registered premises. Implementation of this change involved developing the Environmental Protection (Rural Landfill) Regulations 2002. The changes are designed to achieve the DEP’s aims of:

- Applying appropriate standards of environmental management at landfills;
- Reducing administration costs for the DEP and landfill operators;
- Imposing a charge for licensing/registration services consistent with the full cost recovery principle promoted by State Treasury;
- Simplifying the regulation of rural landfills by application of a single regulation rather than individual licences; and
- Applying a more appropriate enforcement regime to small landfills – breaches of regulations are Tier 3 offences (maximum penalty \$5000), whereas breaches of licence

conditions are Tier 2 Offences (maximum penalty \$125 000) under the Environmental Protection Act 1986.

The requirements in the regulations will be implemented over a 12-month period from July 2002 and are expected to result in some landfill closures, the introduction of more recycling and waste transfer stations, as well as a general improvement in landfill management.

2.3.12 Controlled waste regulations

The implementation of the Environmental Protection (Controlled Waste) Regulations 2001 and the amended Environmental Protection (Liquid Waste) Regulations 1996 proceeded on an industry by industry basis. The order of industries chosen was on the basis of their possible environmental impact or, as in the case of dry-cleaning waste, at the request of the industry peak body.

It was recognized that there would likely be some difficulties implementing the Regulations due to some shortcomings in their wording. For this reason there has been consultation with the industries concerned and working groups have been set up to advise and assist the DEP in the progressive implementation of these regulations.

2.4 Evaluation Division

The Evaluation Division assists the Environmental Protection Authority with the assessment of proposals under Part IV of the *Environmental Protection Act*. In 1999-2000, additional levels of assessment were brought in to streamline the assessment process. Work has continued in this format, with all matters coming into the Division being placed in one of ten categories. These categories, and the numbers of reports released for each in 2001-02, are shown in Table 1.

Table 1: Environmental Protection Authority reports released, 2001-2002

Evaluation Division Category	Reports released
Strategic assessment	4
Planning Scheme assessed – Environmental Review	1
Assessment on Referral Information (ARI)	5
Consultative Environmental Review (CER)	2
Environmental Review and Management Program (ERMP)	1
Environmental Protection Statement (EPS)	2
Formal, under Part IV	2
Public Environmental Review (PER)	8
Proposals Unlikely to be Environmentally Acceptable (PUEA)	2
Section 46, Change to Environmental Conditions	9

2.4.1 Environmental Impact Assessment

Of the four Strategic Assessment reports released, the most significant were one on petroleum exploration in the Shark Bay World Heritage Property and a strategic assessment of the Turquoise Coast Development Concept.

In August 2001, the DEP released a comprehensive technical report on the Shark Bay World Heritage Property, at the request of the EPA. This report was created by drawing together all the known information on the region's environmental values, cultural uses and potential petroleum industry impacts, and by undertaking public consultation. The study identifies the available information and knowledge on the risks of various environmental impacts on the Shark Bay World Heritage area and indicates whether they could be managed to protect World Heritage and other environmental values.

The EPA's report on the Turquoise Coast Development Concept was released in November 2001. It relates to a proposal to develop 2006 hectares near Jurien Bay for urban, recreational and tourism purposes. The site includes 1508 hectares of bushland. The EPA recommended that a vision should be developed to integrate the development with the natural character and landscape of the region.

The only Environmental Review and Management Program that the EPA assessed this year was on long-term (to 2034) access to shells and resources in Owen Anchorage. Cockburn Cement's proposal involved a total area of 783 hectares, comprising 168.5 hectares of seagrass and 614 hectares of unvegetated habitat. The EPA recommended that the proposal be allowed to proceed, provided certain environmental conditions were set and the proponent's commitments were met.

Notable among the Public Environmental Reviews carried out during the year were those relating to an iron ore mine 75 km north-west of Newman in the Pilbara, the Mt Margaret Nickel-Cobalt project near Leinster, and the Geraldton Port enhancement.

The two proposals that were assessed as being 'unlikely to be environmentally acceptable' were a rural/residential subdivision in Upper Swan and clearing of about 580 hectares of native vegetation west-south-west of Moora townsite. This category of assessment was introduced last year and provides a quick answer to proponents, based on information contained in a statement of reasons that they submit to the EPA. It can save time and resources for proponents and enables the DEP and EPA to deliver their advice in a timely and efficient manner.

2.4.2 Audit

The Evaluation Division continued its site audits as part of its regulatory role, to ensure companies comply with Ministerial conditions set from the environmental assessment process.

During the year, 14 site audits were undertaken at various locations throughout the State. In addition, 217 desk audits were conducted on 135 different projects; some were audited more than once during the year for different conditions. Six different projects were reported in non-compliance during the year, compared with fifteen projects in 2000-01.

2.5 Policy coordination

The Policy Coordination Division develops, analyses and implements environmental policy, manages the Environmental Protection Authority's formulation of statutory Environmental Protection Policies, coordinates State of the Environment reporting and national initiatives undertaken at state level, implements the National Greenhouse Strategy in Western Australia and provides community programs.

2.5.1 Bush Forever

Together with Department for Planning and Infrastructure (DPI), CALM and WRC, the Ecological Systems Branch is involved in implementing the Bush Forever recommendations. DEP has a particular role in providing technical advice on the flora and fauna values of Bush Forever Sites, especially in relation to development proposals submitted to the EPA for areas in, or adjacent to, Bush Forever Sites.

The Branch worked with DPI to report on 109 natural areas nominated in submissions to Perth's Bushplan as being worthy of inclusion. A final report on these areas has been completed and will be released to the public in July or August 2002. The Branch also participates in the government's Bush Forever Interagency Working Group and the WA Local Government Association Natural Heritage Trust (WALGA/NHT) Perth Biodiversity Project. This project is addressing aspects of the recognition, protection and management of locally significant bushland.

The Branch works with the Evaluation Division to give general advice on the flora, vegetation and fauna sections of environmental impact assessment documents. Of particular significance this year have been proposals for the Lancelin to Dongara Road, Maud's Landing, the Burrup Peninsular and mining proposals in the Goldfields.

The EPA, with assistance from the DEP, is formulating a response to the Draft Greater Bunbury Region Scheme. The DEP is working on a strategy for identifying and protecting regionally significant natural areas on the portion of the Swan Coastal Plain affected by the Draft Scheme. As part of this process, the DEP is consulting with DPI, WRC and CALM in the Bunbury area. Some flora and vegetation surveying is being undertaken as part of this project.

2.5.2 Ecoplan

A significant change for the Division occurred this year when, as a result of the Machinery of Government changes, the highly successful Ecoplan program moved to CALM in February 2002. In its 11-year lifespan with the DEP, Ecoplan trained and worked with hundreds of dedicated volunteers in Perth's urban bushland and several other urban centres in the System 6 area.

2.5.3 General flora and fauna advice

As time permits, the flora and fauna experts within the Ecological Systems Branch provide advice to the general public, other government agencies and local government as well as regularly presenting talks to interested groups.

2.5.4 Environmental Protection Policies (EPP)

2.5.4.1 Swan Coastal Plain Lakes

A range of options is being evaluated for the protection of conservation category wetlands on the Swan Coastal Plain. A Green Paper is being prepared to facilitate discussion of these options before amending the Lakes EPP.

2.5.4.2 South West Agricultural Zone Wetlands

The Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998 makes provision for landowners to nominate wetlands for protection in the south-west of the state. The Department is making slow progress on implementing the policy. Currently one wetland, Lake Monjigup in the Shire of Esperance, is on the register of protected wetlands. The EPA has approved the finalisation of a second wetland, in the Shire of Northam, to be recorded on Table 1 of the register. This is currently being progressed by the Department. Steps have been taken to have other wetlands protected under the EPP.

2.5.4.3 Cockburn Sound

The Draft Cockburn Sound EPP and the supporting Cockburn Sound Environmental Management Program (EMP) were released for a three-month public comment period. During this time, public workshops and discussions with stakeholders were held. The EPA is now reviewing submissions on the EPP. The Cockburn Sound Management Council is reviewing submissions on the EMP.

2.5.4.4 Western Swamp Tortoise Habitat

The EPA transmitted a Revised Draft Western Swamp Tortoise Habitat EPP to the Minister on 11 September 2001. The Minister invited those people considered affected by the policy to comment further on the draft. Comments closed on 30 November 2001. The Minister considered these comments and, in April 2002, approved the policy for drafting by Parliamentary Counsel.

The Policy and Coordination Division is working with the EPA to develop a 'Guidance Statement for the Protection of the Western Swamp Tortoise Habitat' for environmental impact assessment. The Guidance Statement will complement the EPP in its objective to protect the habitat of the Western Swamp Tortoise. It is likely that the EPP will be gazetted in mid-2002, together with the release of the draft guidance statement for public comment.

2.5.4.5 Goldfields Residential Areas (Sulphur Dioxide) EPP and regulations

In October 2001 the Department briefed the Minister recommending further consultations with industry stakeholders and the EPA on the Environmental Protection (Goldfields Residential Areas) (Sulphur Dioxide) Policy and associated regulations. The Minister completed consultations on the policy and regulations in April 2002, and approved for Parliamentary Counsel to proceed with final drafting.

It is anticipated that the EPP and regulations will be gazetted late-2002.

2.5.4.6 State Ambient Air EPP

Public workshops were held in preparation for the development of the State Ambient Air EPP, which is designed to implement the ambient air National Environment Protection Measure (NEPM) for WA. A policy is now being developed along with an implementation document explaining the details of how the policy will be used.

2.5.4.7 Coastal Zone EPP

Work on a Coastal Zone EPP has continued. The Department is working with other government agencies to prepare a discussion paper on the policy's scope and content. In particular, the Department is working with the Department for Planning and Infrastructure (DPI) Coastal Taskforce to ensure planning and environmental structures fit together.

Submissions on the State Coastal Planning Policy (SCPP), being prepared by the DPI, are currently being considered. Community issues identified in this consultation process will be incorporated into the Coastal Zone EPP discussion paper.

2.5.4.8 Peel Inlet–Harvey Estuary

In 1999, the EPA transmitted a Revised Draft Environmental Protection (Peel Inlet–Harvey Estuary) Policy 1999 to the Minister. The Minister requested that the EPA reconsider the draft policy, along with its review of the Progress and Compliance Report (PCR) from the Ministerial Conditions set on the assessment of the Peel Inlet–Harvey Estuary Management Plan, before proceeding with Ministerial Consultations.

To assist the EPA in its review of the PCR, it set up a Peel Harvey Expert Review Committee (PH-ERC) establishing three working groups. The working groups have now reported to the EPA and the EPA is expected to complete its review mid-2002. It is likely the Department will revise the policy later in 2002 with consideration of the recommendations within the PH-ERC Report and PCR. The second revised draft will then be transmitted to the Minister for her consideration.

2.5.5 Greenhouse

The Department contributed to the development of an updated Greenhouse policy.

2.5.6 State bilateral agreement

Discussion continued on the bilateral agreements called for under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. Cabinet agreed to the arrangements, subject to some amendments.

2.6 Regional Services Division

Regional operations arrangements have been reorganised with the bringing together of Department of Environmental Protection and Water and Rivers Commission regional offices into one operation in each of the regions. This has enabled better coordination of services and provided better support in regions where the department staff numbered three or less.

By the end of the reporting year the large vacancy factor in Karratha and Kalgoorlie had been resolved with two new appointments in each location.

A new Kwinana Peel Region was established. The integration of environmental and water allocation regulation has started, with these functions now being managed under a single program in each region. This allows considerable opportunities to reduce duplication in dealing with individual industries. It also provides a greater opportunity to achieve positive environmental outcomes.

An online handbook for licensing officers is being developed. The Intranet-based handbook will provide ready access to policies and procedures for licensing prescribed premises, which will improve the efficiency and quality of advice to industry and other stakeholders and management of prescribed premises in the regions.

2.6.1 Kwinana Peel Region

The Kwinana-Peel Region completed 30 formal inspections of prescribed premises during the year. These inspections involve auditing industry compliance with licence conditions. The regional office licensed 106 premises and managed 32 works approvals for new premises or alterations to existing premises, along with 68 registered premises. When non-compliance is identified, enforcement action is initiated as required. Enforcement actions include the issue of an infringement notice with a \$250 fine being paid by the licensee, a pollution abatement notice being issued, one prosecution in progress and the first modified penalty being issued, under recent revisions to the Environmental Protection Act, with a fine of \$2,500 being paid by the licensee.

The Regional Operations (Industry) Division does not have a database for storing and retrieving data on complaints and non-compliance. At present, IT are developing a database for complaints which we hope will be able to provide relational information. However, non-compliances are followed up by officers under the direction of the manager to ensure closeout in each case.

The management of industrial premises in the Region has been further enhanced through the establishment of stakeholder focus groups and increased community consultation during the assessment of works approvals and licenses. This process helped identify community concerns and improved response to these concerns. Where necessary, such response was through the regulatory process.

2.6.2 Midwest Gascoyne Region

The Midwest/Gascoyne Region completed 54 formal inspections of prescribed premises during the year. The regional office manages 96 licensed premises and 37 works approvals for new premises or alterations to existing premises, along with 118 registered premises. During 2001-02, the Midwest/Gascoyne office responded to 106 pollution complaints. This shows a further decrease in complaints in the region.

Several major infrastructure developments, such as the Port Expansion project and foreshore redevelopment works and the Southern Transport Corridor around the City of Geraldton, have required increased participation in stakeholder focus groups and community consultation during the assessment phase to help identify community concerns.

2.6.3 South West Region

The South West Region continues to experience significant growth in terms of population and economic development. The regional office managed 196 licensed premises, 14 works approvals and 126 registered premises during the 2001-02 financial year.

The year saw significant logistical changes. In February 2002, the office relocated from the Bunbury Tower on Victoria Street to the Leschenault Quays, joining the Water and Rivers Commission. During the latter part of the year the areas administered by each regional office and the Perth office were reviewed. This resulted in the South West Office retracting its northern boundary to the Shire of Harvey, extending its eastern boundary to include the shires of Cuballing, Wickepin, Narrogin, Dumbleyung, and Kent and adjusting its southern boundary. The southern boundary change resulted in the establishment of the South Coast Office.

The role of the office has broadened from the historical emphasis on the pollution prevention function, and now provides more input into environmental assessments and environmental policy. Ministerial advice continues to be a significant work area.

The South West Regional Office carried out compliance inspections on 72 licensed premises. As a result of inspections, 11 premises were found to be non-compliant with some of their licence conditions and several premises have had their licence conditions amended or tightened.

The South West Regional Office continues to record an increase in the number of pollution complaints received and investigated, and that represents a significant portion of the office workload. Major sources of complaints included an alumina refinery, oil recycling plant, wastewater treatment plants, an abattoir and rendering facility, and Port of Bunbury facilities.

The total number of complaints completed during during 2001-02 was 414, which shows an increase of 142 per cent from the previous year and is likely to be the result of increased environmental awareness in the community and the overlap of incompatible land uses.

2.6.4 Swan Goldfields Agricultural Region

The Swan Goldfields Agricultural Region completed 30 inspections of prescribed premises during the year and responded to 227 complaints. The regional office at Kalgoorlie licensed 54 premises and provided support to licences issued for the Goldfields through the Department's Licensing Section.

The Kalgoorlie office was closed in June 2001. In response to the subsequent community and stakeholder concern over the lack of regional representation from the Department, the Kalgoorlie office was re-opened in September 2001. A new environmental officer was appointed to the office in December 2001. It is expected that a new Program Manager will be based in Kalgoorlie from August 2002 to manage the Goldfields business for the Department and focus on customer relations and community consultation in the region.

The Department has also been working towards amalgamation of the Environmental Protection Act Part V licensing and Water and Rivers Commission water allocation licensing in the Goldfields. The aim is to enhance resource management and environmental protection for industry and the community, and to gain efficiencies in approval processes.

2.6.5 South Coast Region

Prior to the amalgamation, the South Coast Region did not have a DEP presence. All DEP activities for the region were provided either from the Perth office or, in the case of licensing and pollution prevention, from the Goldfields for the east of the region and the South West for the west of the region.

Establishing a regional presence for DEP activities has been the focus of activity during the latter part of 2001 and early 2002. This has included training staff, establishing contacts with local industries and stakeholders with licensed and registered premises and arranging a smooth transfer of functions from Perth, the Goldfields and the South West. The Region is, for example, trialing the regional delivery of landuse planning referral services.

2.6.6 North West Region

The North West Region completed 17 inspections of licensed premises. This result reflects a staff shortage, which existed during 2001–02, but was rectified in May 2002 with the appointment of the Program Manager. DEP staff relocated to the Water and Rivers Commission office in Karratha, where extensions to the existing building are expected to be completed in September 2002. During the year, 126 complaints were received and responded to.

Dust continues to be a major problem in the Pilbara. Staff members have been actively involved on the Dampier/Point Samson and Port Hedland Dust Working Groups. As a result of background emissions, the Pilbara does not comply with the specified dust standards in the WA Draft Ambient Air Quality EPP. Pilbara dust compliance will therefore be judged by best practice management guidelines, currently being produced, to which regional officers have contributed.

Landfill compliance has been an ongoing major issue. A successful meeting was held with DEP staff and Shire of Roebourne representatives to discuss local landfill non-compliance. Outcomes of the meeting included a commitment by the Shire to have the seven-mile tip totally compliant within six months. A commitment was also made to establish waste transfer stations in both Roebourne and Wickham to replace existing poorly managed landfill sites. The concept of landfill self audit, to enable local governments to audit their own performance against industry best practice, has also been developed and will soon be implemented.

Departmental officers have continued their involvement in responding to land use planning issues, particularly in relation to proposed new industrial developments for the Burrup Peninsular and the Maitland Industrial Estate.

2.7 Office of the Chief Executive Officer and Corporate Services

2.7.1 Community involvement framework

‘Working in partnership with the community’ has been identified as a key component of the business of the new department. While community involvement has been an essential approach of the amalgamating agencies for many years, the birth of a new department provides a great opportunity for recommitment and realignment to best practice and to new common goals and to benefit from the synergies of complementary programs.

The department has begun developing a Framework for Community Involvement, which will encompass and draw together a coherent policy framework for all staff.

In summary the process includes:

- Targeted research into the underlying corporate culture fostering DEWCP community involvement practices;
- Workshops with staff and external stakeholders; and
- Establishment of internal and external reference groups to provide input into the Framework's development.

Key elements of the Framework will be a clear policy direction in community involvement for DEWCP, a strategy for developing the community involvement culture in the agency and tools for program managers and officers to help incorporate community involvement in programs.

The benefits of Community Involvement Framework will include:

- Improving communication and reducing tension between the wider community and government departments;
- Better understanding public perceptions and better anticipating community response to actions and decisions of the department; and
- More effectively managing the expectations of the wider community and the department in consultation and involvement processes early in the development of projects.

The successful implementation of the Community Involvement Framework will require a long-term process to influence the corporate culture of the Department.

Part of the strategy to effect this change is research into the current corporate culture of DEWCP, and the motivators and barriers for implementation of a Community Involvement Framework. This research showed divergent views about where we are now, but very highly consistent and positive views about where we need to be in the future; that is, an agency that places very high value on communications and community involvement in our business.

As the framework is developed, with staff and stakeholder support, an intensive training program will be developed and implemented to ensure we have skills to deliver what is needed.

In the meantime, the good community involvement work already under way in the department will continue and, as the new department is finally launched, our relationships with stakeholders can be further consolidated.

This is already happening at an operational level, with the formation of a new Communications Branch encompassing the community support and public affairs functions of the Water and Rivers Commission, the Department of Environmental Protection and the Keep Australia Beautiful Council.

This area now hosts a suite of highly respected community education and involvement programs such as AirWatch, Ribbons of Blue and WasteWise, as well as the busy areas of media management, ministerial liaison, public information services and publications.

2.7.2 Legal

2.7.1.1 Prosecutions

Jenkins v WMC Resources Ltd

The re-hearing of the prosecution for breach of a section 6 exemption order in the Magistrates Court was completed in August 2001. The decision was handed down on 26 June 2002 in favour of the Department of Environmental Protection. The sentencing was not completed in the current reporting year.

Payne v Claflin

Jeffery Keith Claflin was charged with breaching section 58 pursuant to section 118 of the Environmental Protection Act in that, as a director of Waste Control Pty Ltd, he failed to comply with licence conditions to which Waste Control Pty Ltd were subject. Claflin entered a plea of guilty to three breaches of licence conditions and was fined a total of \$7,500.

Payne v Rose Valley Cheese Co. Pty Ltd

An action for breach of licence condition under section 58 of the Environmental Protection Act was begun by the Department of Environmental Protection against the Rose Valley Cheese Co. Pty Ltd.

Payne v Giura

An action for breach of licence condition under section 58 pursuant to section 118 of the Environmental Protection Act was begun by the Department of Environmental Protection against the Robert Mario Giura.

2.7.1.2 Freedom of Information

During the year, 31 Freedom of Information applications were received by the DEP. FOI applications to the Department were made by:

Individuals/companies	(18)
Members of Parliament	(2)
Solicitors	(5)
Community Groups	(6)

In reference to documents released, application packages ranged from one document to 141 documents per package; the average number of documents per application package was 26.

No applications were refused. There were two internal reviews and two external reviews. The average processing time for each application was 37 days.

Areas of interest for FOI requests included land development, compliance of licensing conditions of premises, water rights, and proposals submitted for assessment. Exemption clauses used were

- Cabinet and Executive Council;
- Personal Information;
- Commercial or business information;

- Law enforcement, public safety and property security;
- Deliberative processes;
- Legal Professional Privilege;
- Confidential communications; and,
- The State's financial or property affairs.

2.7.1.3 Legislation

The Department is involved in drafting legislation to enhance the protection of the State's environment.

Environmental Protection Amendment Bill

Finalisation of drafting of this Bill involved the inclusion of key Government policy commitments including a new system of clearing permits.

The Bill was introduced to Parliament just before the end of the reporting year. To quote the second reading speech "this significant reform of the State's premier environmental legislation introduces some long-awaited changes, corrects some unacceptable weaknesses, removes impediments and speeds processes to make the Act more effective and efficient in protecting the State's unique environment".

Carbon Rights Bill, Tree Plantation Agreements Bill and Acts Amendment Bill

The Carbon Rights Task Force drafted the Carbon Rights Bill and an associated amendment Bill. Given the close links to the already-drafted Tree Plantation Agreements Bill, the two Bills were progressed together, along with a joint amendment Bill.

The Carbon Rights Bill establishes a system for registering Carbon Rights and Carbon Covenants, and the Tree Plantation Agreements Bill does the same for plantation agreements. The Amendment Bill makes the necessary changes to land administration legislation to set-up the registration processes.

The Bills were introduced to Parliament late in the autumn session of 2002.

Contaminated Sites Bill

Drafting of the Bill was finalised following late, additional consultation to resolve concerns of local government. The Bill is expected to be introduced to Parliament late in 2002.

Waste Management Bill

An amended draft Bill is being prepared following public consultation and integration of the Government's policies. It is intended to include provisions to promote waste avoidance and minimization and a new Tier 2 offence for the unauthorized disposal of waste.

The Waste Management Board has established a committee to advise on drafting the Bill.

2.7.3 Information services

The merger of the WRC and DEP's information services required consolidation to a common standard in a wide range of areas. These included servers, desktop machines and network

configuration; telecommunications and telephony; records and mail services; corporate systems; software management; web sites (Internet and Intranet); Helpdesk services; email and diary services. In each case, consultations with staff were held and feedback on proposed solutions sought.

The most important issue was IT network service delivery – how PCs and servers are designed to interact with each other and deliver services across the network. The only commonality was in the software being used (Microsoft, Oracle and ESRI); hardware and network design was significantly different. Because of the seriousness of the decision, impartial external analysis and advice was sought. Internal consultation with owners of corporate systems helped ensure that the proposed solution was well explored and met requirements. The choice was based on lowest risk, equal treatment of all users, lowest cost (including hardware, software, and support), and greatest flexibility; it will mean that DEP's Macintoshes are replaced with PCs. Regional staff were early beneficiaries of the decision through improved access to corporate systems and data.

Central to the establishment of many merged services was the installation of a high-speed communications link between the Hyatt building and the Hartley Poynton building. It supports the IT network service delivery mentioned above, and also underpins record management, a single communication and scheduling environment, Helpdesk services, and corporate business management tools.

Common corporate tools were established to assist business and cultural integration. Existing systems for project management, business planning, phone manager, financial and human resources systems, licensing systems, and the Ministerial Tracking System were redesigned to cover the new agency's activities in the new IT environment. Extensive consultation with owners and users of these systems helped produce an improved suite of corporate tools.

Because of the number of staff relocations from the Hartley Poynton Building to the Hyatt, a new Hyatt PABX was purchased to handle the increase in extensions. A link between the PABXs enabled all inter-office calls to be internal calls.

The integration of records management services was a big issue due to the number of records involved and the need to meet new legislative requirements. Records management software was selected and an audit of both agencies' holdings was conducted, allowing record types to be identified and numbering systems proposed. A transfer of records into the new system followed.

2.7.3 People

2.7.3.1 Staff Numbers (FTE)

	2000/2001	2001/2002
Full-time permanent staff	177	177
Part-time permanent staff	26	12
Fixed term contract staff	35	39
Redeployees	0	0
Total	238	228
Staff recruited	41	47

2.7.3.2 Recruitment and selection

The Department manages its own recruitment and selection of staff. During the year, 52 positions were advertised. Internal applicants filled 29 of these positions and external applicants 19. Four positions were still subject to recruitment and selection action at the end of the reporting period.

As part of the amalgamation with the Water and Rivers Commission, the Department of Environmental Protection has started utilising the services of Spherion Outsourcing Solutions to supply recruitment and selection services.

2.7.3.3 Induction

The DEP has an active Induction Program that ensures all new employees are fully inducted into the Department's culture and objectives. Further review on the Induction Program is to take place as part of the formation of the new department.

2.7.3.4 HR Information System

The personnel and payroll records previously stored and processed external to the department were transferred to an in-house system, Concept HRMIS. As part of the agency amalgamation process all HR data and processing is now performed within the HR Branch. The conversion to this system has enable the use of an intranet based self service module so that staff can access and process their own HR information. The improved access to HR information and processes has resulted in greater self sufficiency by Managers and staff in the people management function.

2.7.3.5 Workers compensation

During 2001-02, two workers compensation claims were lodged. There were no claims involving lost time.

2.7.3.6 Equal Employment Opportunity (EEO)

The DEP worked to its Equal Employment Opportunity and Diversity Management Plan 1999–2002 throughout the year.

As part of the formation of DEWCP, an updated EEO Management Plan is to be developed which will ensure that the agency's managers and supervisors work towards the following objectives:

- The organisational culture values diversity and the workplace is free from harassment;
- The workplace is free from biased and discriminatory employment practices;
- Employment programs and practices include measures, where appropriate, to achieve diversity and equality of opportunity for people of EEO groups.

A meeting of all grievance officers from the merging agencies has taken place. Grievance, harassment and discrimination policies and procedures are currently being reviewed to ensure suitability for DEWCP.

These new policies will reflect any legislative changes and also cover issues such as bullying and intimidation currently not covered by EEO legislation.

2.7.3.1 Disability Services Plan

The Department of Environmental Protection continues to provide appropriate services and facilities for stakeholders with disabilities.

2.7.3.2 Grievance Officers

The Department currently has five grievance and contact officers, all formally trained in grievance resolution.

Departmental grievance officers have met with grievance officers of the WRC to form “GO Net”, a Grievance Officer Network. “GO Net” will meet quarterly and run in-house sessions to ensure an open forum of discussion on issues being dealt with by grievance officers.

2.7.3.3 Ethical standards

The Department requires all employees and contractors to exercise high standards of ethical behaviour in performing their duties, as set out in the DEP’s Code of Conduct. There were no breaches of the code during 2001-02.

2.7.4 Advertising and sponsorship

Under Section 175Ze of the *Electoral Act 1907*, the Department reports the following expenditure on marketing and advertising during 2000-2001:

Class of Expenditure	Total expenditure for class greater than \$1500	Name of person/agency where total annual payments are
Advertising agencies	Nil	-
Market Research organisations	Nil	-
Polling organisations	Nil	-
Direct mail organisations	Nil	-
Media advertising	\$119 733	Marketforce Productions \$119 733
Total Expenditure	\$119 733	

Statement of compliance with Public Sector Standards

In the administration of the Department of Environmental Protection, I have complied with the Public Sector Standards in Human Resource Management and the WA Public Sector Code of Ethics.

I have put in place procedures designed to ensure such compliance and have conducted appropriate internal assessments to satisfy myself that the statement made above is correct.

There were no applications for breach of standard reviews made during 2001-02.

Roger F Payne
ACTING DIRECTOR GENERAL

3 Performance Indicators



AUDITOR GENERAL

To the Parliament of Western Australia

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
PERFORMANCE INDICATORS FOR THE YEAR ENDED JUNE 30, 2002**

Matters Relating to the Electronic Presentation of the Audited Performance Indicators

This audit opinion relates to the performance indicators of the Department of Environmental Protection for the year ended June 30, 2002 included on the Department's web site. The Chief Executive Officer is responsible for the integrity of the Department's web site. I have not been engaged to report on the integrity of the Department's web site. The audit opinion refers only to the performance indicators named below. It does not provide an opinion on any other information which may have been hyperlinked to or from these performance indicators. If users of this opinion are concerned with the inherent risks arising from electronic data communications, they are advised to refer to the hard copy of the audited performance indicators to confirm the information included in the audited performance indicators presented on this web site.

Scope

I have audited the key effectiveness and efficiency performance indicators of the Department of Environmental Protection for the year ended June 30, 2002 under the provisions of the Financial Administration and Audit Act 1985.

The Chief Executive Officer is responsible for developing and maintaining proper records and systems for preparing and presenting performance indicators. I have conducted an audit of the key performance indicators in order to express an opinion on them to the Parliament as required by the Act. No opinion is expressed on the output measures of quantity, quality, timeliness and cost.

My audit was performed in accordance with section 79 of the Act to form an opinion based on a reasonable level of assurance. The audit procedures included examining, on a test basis, evidence supporting the amounts and other disclosures in the performance indicators, and assessing the relevance and appropriateness of the performance indicators in assisting users to assess the Department's performance. These procedures have been undertaken to form an opinion as to whether, in all material respects, the performance indicators are relevant and appropriate having regard to their purpose and fairly represent the indicated performance.

The audit opinion expressed below has been formed on the above basis.

Audit Opinion

In my opinion, the key effectiveness and efficiency performance indicators of the Department of Environmental Protection are relevant and appropriate for assisting users to assess the Department's performance and fairly represent the indicated performance for the year ended June 30, 2002.

A handwritten signature in blue ink, appearing to read 'D D R Pearson'.

D D R PEARSON
AUDITOR GENERAL
October 25, 2002

3 Performance Indicators

Performance indicators have been developed to enhance public accountability and to help the Department of Environmental Protection to assess and monitor its performance. Indicators are required to be relevant, free from bias and quantifiable (*Financial Administration and Audit Act 1985*).

In compliance with the requirements of Treasurer's Instruction 904, the DEP's audited performance indicators relate to the Department's outcome, which is:

- management, conservation and enhancement of the environment, and

The DEP achieves its goal of environmental protection by working with and through many other organisations, some of which take primary responsibility for parts of the environment.

Audited performance indicators are provided for issues for which strategies are in place or under investigation by the DEP. There are several distinct outputs against which the performance indicators are reported.

Tables shown represent amounts for the financial year 2001-02, however, in some instances, the data available only represents the financial year 2000-01.

Certification of Performance Indicators for the year ended 30 June 2002

I hereby certify that the performance indicators are based on proper records, are relevant and appropriate for assisting users to assess the Department of Environmental Protection's performance, and fairly represent the performance of the Department of Environmental Protection for the financial year ending 30 June 2002.



Roger F Payne
ACCOUNTABLE OFFICER

30 August 2002

Abbreviations used in Audited Performance Indicators

°C = degrees Celsius

ANZECC = Australia and New Zealand Environment Conservation Council

CBD = Central Business District

CEO = Chief Executive Officer

CO = carbon monoxide

DEP = Department of Environmental Protection

EPA = Environmental Protection Authority

EPP = Environmental Protection Policy

FWXL = flow-weighted mean concentration

gPb/L = grams of lead per litre

GWP = global warming potential

hPa = hectopascal

IWDF = Intractable Waste Disposal Facility

kg = kilogram

kL = kilolitre

km = kilometre

kPa = kilopascals

KIC = Kwinana Industry Council

LOA = level of assessment

LWTP = liquid waste treatment plant

m⁻¹ = per metre

ML = megalitres

mg/m³ = milligrams per cubic metre

µg/m³ = micrograms per cubic metre

µg/L = micrograms per litre

µg/Pb/L = micrograms of lead per litre

MAFRL = Marine and Freshwater Research Laboratory

n.a. = not available

NEPM = National Environment Protection Measure

NH&MRC = National Health and Medical Research Council

NO₂ = nitrogen dioxide

O₃ = ozone

% = per cent

PAN = Pollution Abatement Notice

Pb = lead

PCB = polychlorinated biphenyls

PM₁₀ = particles less than 10 microns (µm)

PM_{2.5} = particles less than 2.5 microns (µm)

ppb = parts per billion

ppm = parts per million

SO₂ = sulphur dioxide

SoE = State of the Environment Report for Western Australia 1998

STD = standard

STP = standard temperature (0°C) and pressure (1013.25 hPa)

t = tonne

TP = total phosphorus

USEPA = United States Environment Protection Agency

WA = Western Australia

WHO = World Health Organisation

Performance Framework

The performance framework below shows the relationships between what we sought to achieve and our performance indicators. Our main outcome is divided into sub-outcomes, which are separately identified into the management of the environment, conservation of the environment and the enhancement of the environment.

Management of the environment pertains to the activities involved in managing the formulation of environmental protection policies, managing the environmental impact assessment process and managing the regulatory functions in order to achieve improved environmental outcomes. The management of contaminated sites and coordination of pollution incident responses provide further elements of the environmental management role.

Conservation of the environment relates to the provision of advice to the community so as to promote positive environmental behaviours, conservation of wetlands and areas under threat through the development of policies to protect and conserve the environment in which we live. This includes the activities relating to development of policies that minimise discharges into the environment and prevent or abate pollution.

Enhancement of the environment relates to the development of strategies aimed at reducing the amount of waste produced and its impact on the environment through reduction, recycling and safe disposal options. The enhancement function also includes those activities that are undertaken so as to increase our knowledge and understanding of environmental systems that are under threat.

SUB OUTCOMES

Management	Conservation	Enhancement
PI 1 Photochemical smog (as measured by ozone) in Perth.		
PI 2 Haze in Perth, the Pilbara and the South West (as measured by visual distance loss and particles).		
PI 3 Nitrogen dioxide in Perth.		
PI 4 Carbon monoxide in Perth and Bunbury.		
PI 5 Lead in Perth.		
PI 6 Sulphur dioxide in Kwinana and Kalgoorlie.		
PI 7 Nutrient-related water quality of Cockburn Sound.		
PI 8 Solid waste management.		PI 8 Solid waste management.
	PI 9 Liquid waste management.	
PI 10 Dust.		
PI 11 Regulation of industry.		
	PI 12 Referral of projects to the EPA that may have a significant effect on the environment.	
	PI 13 Compliance with environmental conditions placed on approved development proposals through the environmental impact assessment process.	
		PI 14 Ozone depletion.

Effectiveness Indicator 1

Photochemical smog (as measured by ozone) in Perth.

Desired outcome

That photochemical smog, as measured by ozone in Perth's atmosphere, is reduced by the introduction of management strategies resulting in environmentally acceptable levels.

Objective

To monitor, analyse and report on the level of ground level ozone in the atmosphere. The target population is the Perth metropolitan community. Outputs include:

- monitoring, analysis and reporting;
- developing an implementation strategy for the Perth Air Quality Management Plan;
- continued development of a State Air Quality EPP; and
- NEPM reporting.

The Perth AQMP is a 30 year plan, containing 12 initiatives comprising 43 programs, to improve Perth's air quality. Air quality monitoring data will be used to perform regular reviews of trends in Perth's air quality to ensure that the management strategies listed in the Perth AQMP are effective in improving overall air quality in Perth.

Relevance to output description

Ozone at ground level can be detrimental to human health, and can damage vegetation and buildings. The issue should not be confused with ozone in the troposphere where it acts to filter ultra-violet radiation.

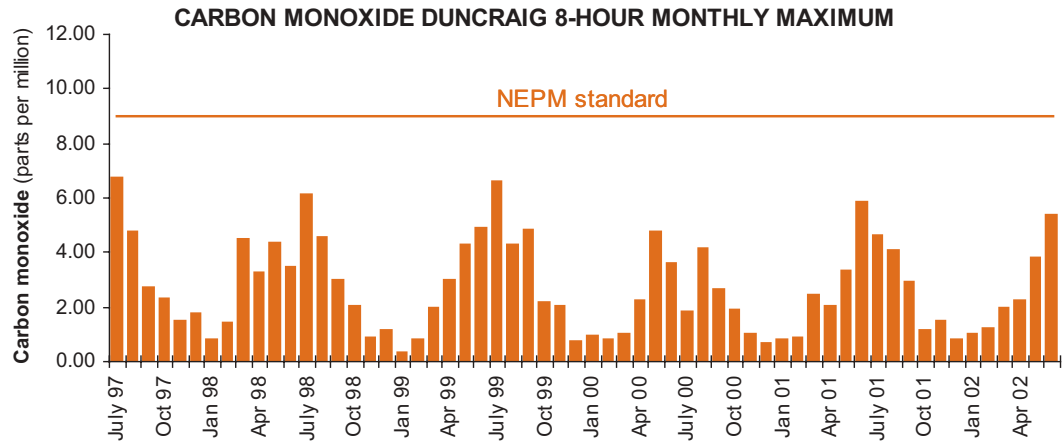
Photochemical smog has been identified in the 1998 WA State of the environment as having an environmental status rating of three. A rating of five indicates the highest priority for Government and community action, while a rating of one has the lowest priority.

Effectiveness indicator

The extent to which ozone levels are below the NEPM standard of 0.1 ppm averaged over one clock hour, and 0.08 ppm averaged over four clock hours.

Ozone concentrations at all sites in the Perth Metropolitan region were below the NEPM standard during 2001-02. The highest 1-hour averaged concentration of 0.091 ppm was recorded at Caversham and Rolling Green during January 2002 and February 2002 respectively.

The highest 4-hour concentration during 2001-02 was 0.07 ppm, recorded at Rolling Green during February 2002.



The graph shows the maximum one-hour averaged of ozone concentration for each month across the Perth metropolitan area. It demonstrates the seasonal fluctuation of ozone levels, with the highest levels occurring during summer months. Ozone levels (1-hour monthly maximums) were below the NEPM standard during 2001-02.

Year	Exceedances		Year	Exceedances	
	1 hr	4 hr		1 hr	4 hr
1996-1997	3	5	1997	2	4
1997-1998	2	4	1998	2	3
1998-1999	2	1	1999	2	1
1999-2000	0	0	2000	0	0
2000-2001	0	2	2001	0	2
2001-2002	0	0	2002 (6 months)	0	0

The table shows the number of days each year that one-hour and four-hour ozone concentrations exceeded the NEPM standard at one or more monitoring stations. The National Environmental Protection Council has set a goal that by 2008 the standard is not to be exceeded more than once per year at any one station. Exceeding the ozone standard indicates photochemical smog and is of concern to the Department.

Effectiveness Indicator 2

Haze in Perth, the Pilbara and the South West (as measured by visual distance loss and particles)

Desired outcome

That atmospheric haze levels are reduced by the introduction of management strategies resulting in environmentally acceptable levels.

Objective

To monitor particle levels in Perth, and the South West and the incidence of days on which visual distance in Perth and the South West is affected as well as identify the cause of haze events. The target population is the community in urban and regional centres. Outputs include:

- monitoring, analysis and reporting;
- developing an implementation strategy for the Perth Air Quality Management Plan;
- continued development of a State Air Quality EPP; and
- NEPM reporting.

The Perth AQMP is a 30 year plan, containing 12 initiatives comprising 43 programs, to improve Perth's air quality. Air quality monitoring data will be used to perform regular reviews of trends in Perth's air quality to ensure that the management strategies listed in the Perth AQMP are effective in improving overall air quality in Perth.

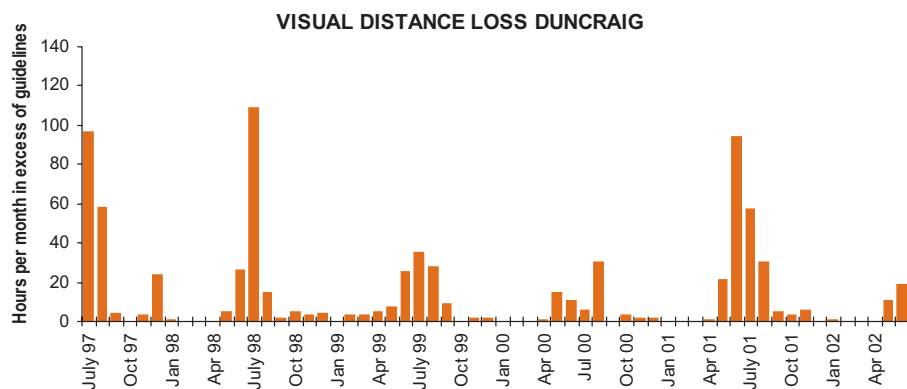
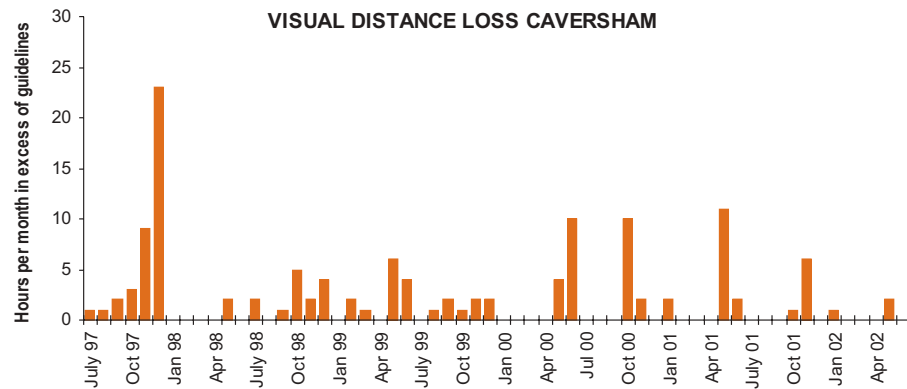
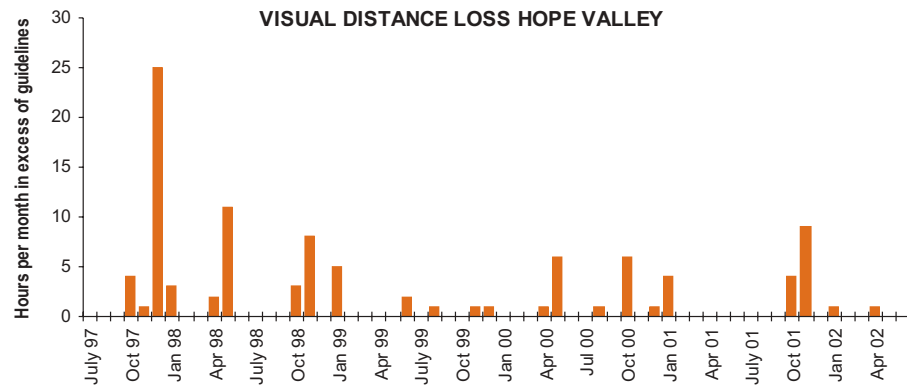
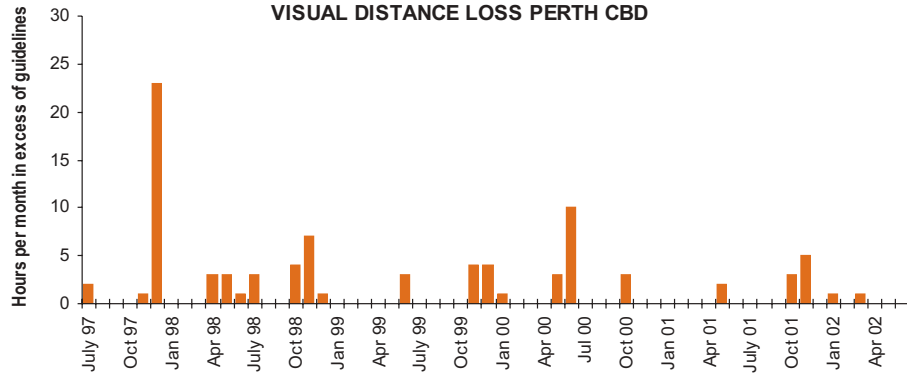
Relevance to output description

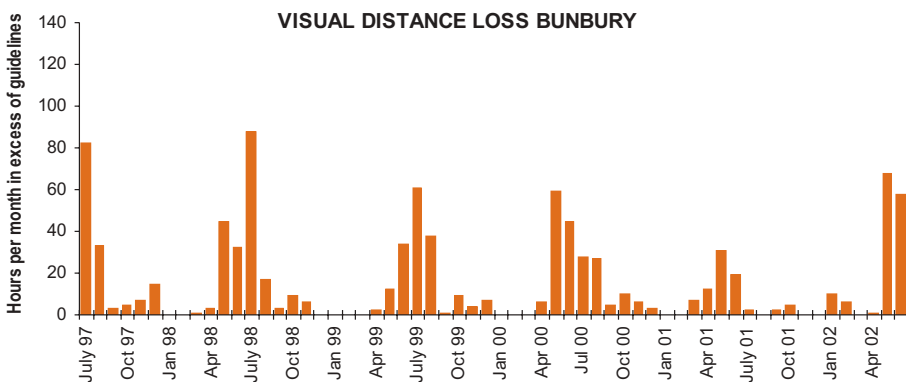
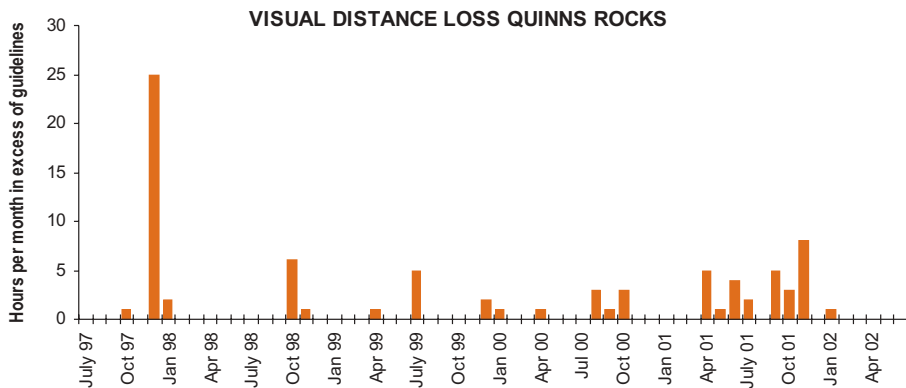
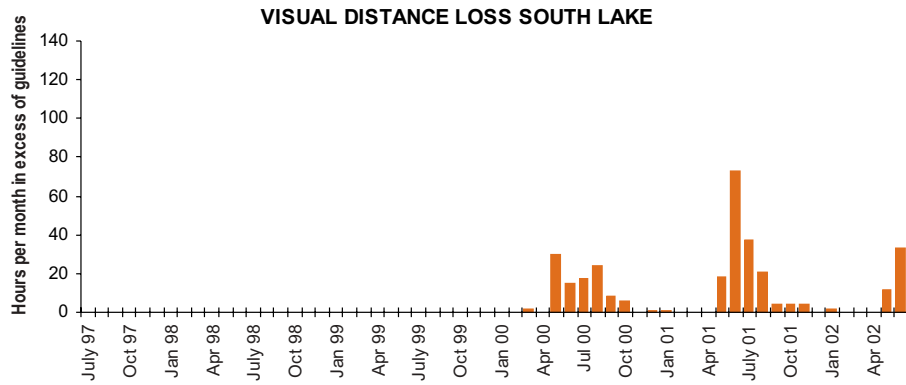
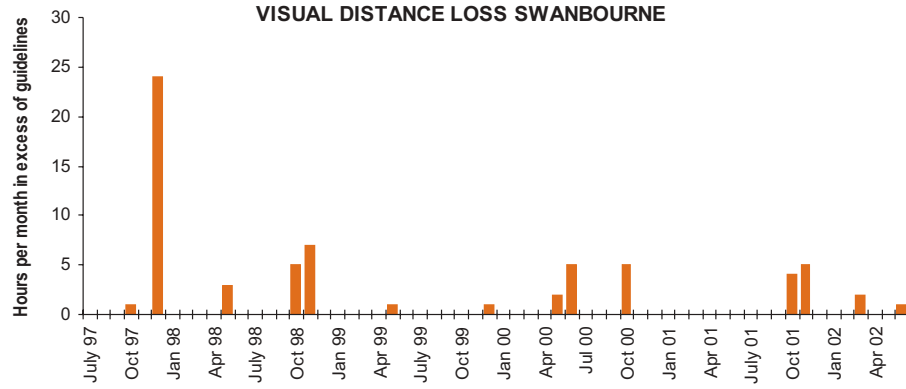
Research overseas and interstate is showing that fine particles in the air are the cause of, or major contributors to, respiratory illness. Visual distance loss is also a cause for considerable public concern and is a major contributor to loss of air quality in Perth and the South West. The identification of the cause of the increase in particles in the air in Perth, and the South West will support other initiatives to ensure the air in these areas remains healthy.

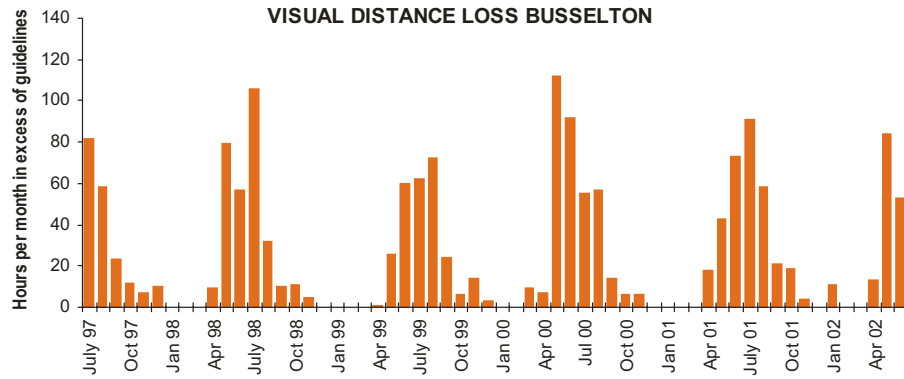
Effectiveness indicator

Extent to which visual distance loss as measured against Victorian EPA guideline (20km visual distance) is minimised, and particle levels as measured against the NEPM standard (PM_{10}).

Exceedences of the NEPM standard of $50 \mu\text{g}/\text{m}^3$ during 2001-02 occurred on 31 October 2001 at South Lake and Bunbury and on 14 January 2002 at South Lake. The former was caused by a bushfire in the lower southwest, while the latter was caused by dust from excavation work at a new housing development coupled with a local scrub fire.



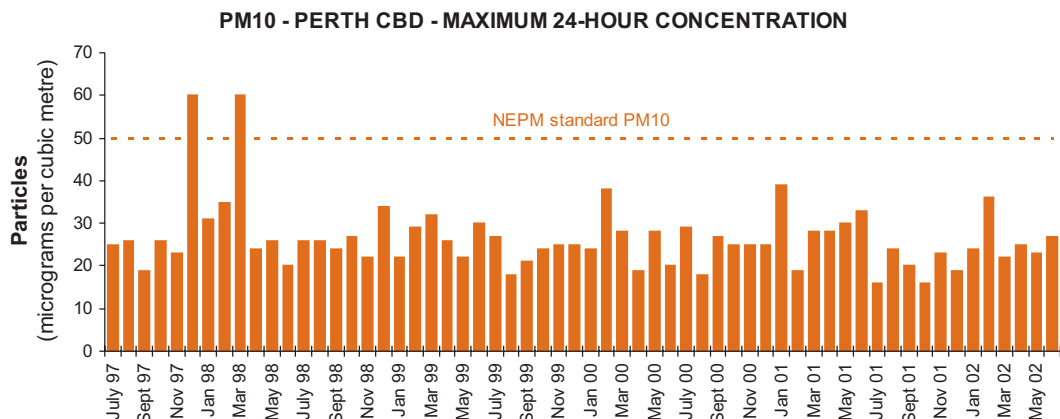


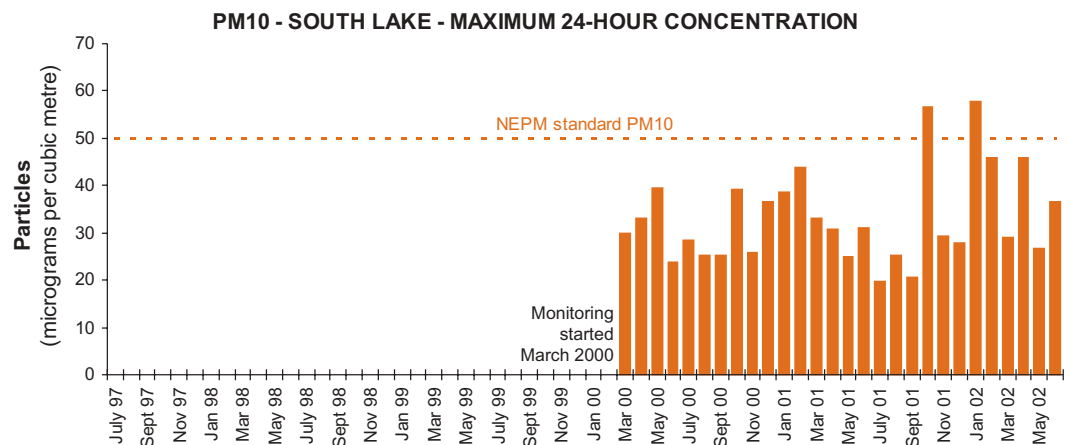
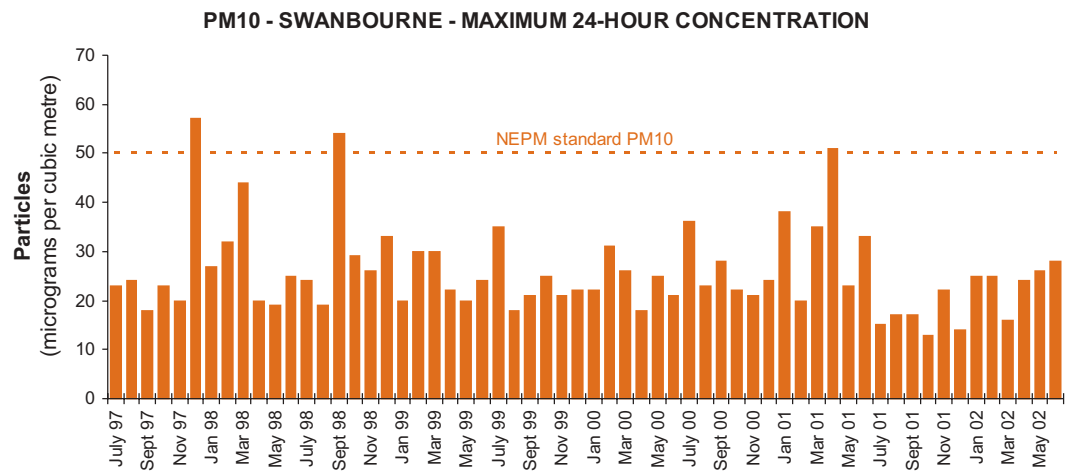
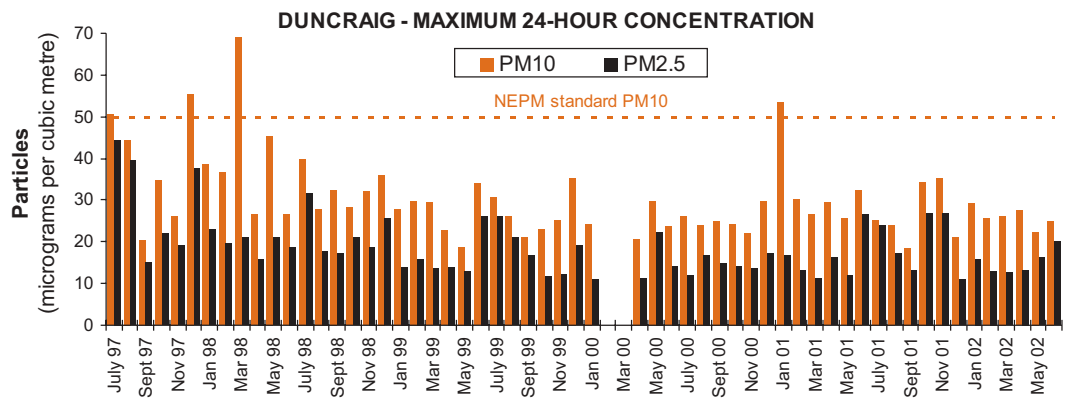
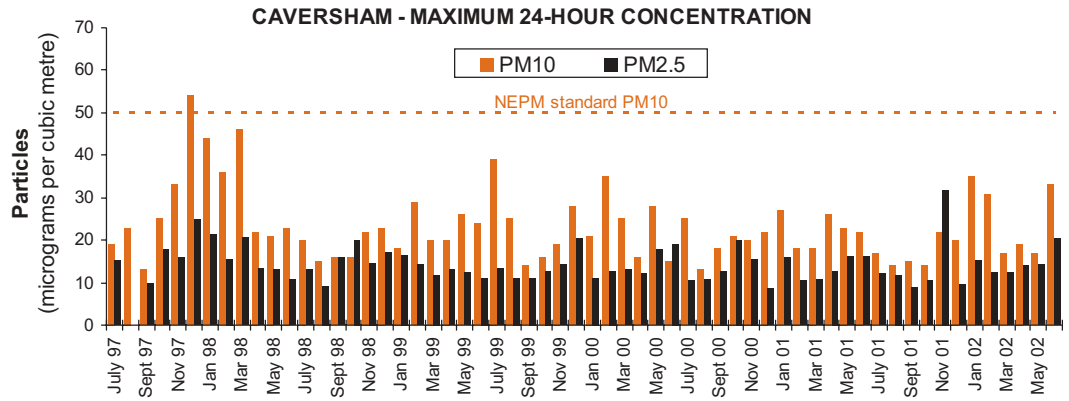


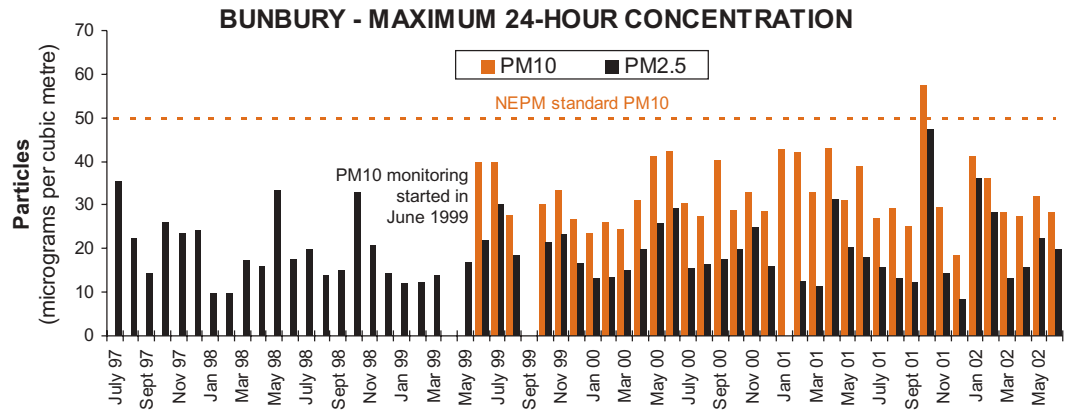
The graphs highlight the number of hours each month where visibility has been reduced by haze. There are no standards for haze, however the department uses a guideline equivalent to a visual distance of approximately 20 kilometres. The main causes of haze include motor vehicle exhaust emissions, domestic wood heaters, bushfires and burning of open vegetation.

Visual distance loss (hours per year)

	1997-98	1998-99	1999-2000	2000-01	2001-02
Perth CBD	33	18	22	5	10
Hope Valley	46	18	20	12	15
Caversham	41	27	17	27	10
Duncraig	218	181	103	159	132
Swanbourne	28	12	8	5	12
South Lake	-	-	-	148	117
Quinns Rocks	27	8	9	17	19
Bunbury	226	171	230	148	152
Busselton	337	251	401	272	354







The graphs show the maximum 24 hour concentration of particles less than 10mm (PM₁₀) and less than 2.5mm (PM_{2.5}) in diameter at various sites in the Perth metropolitan area and Bunbury.

The National Environment Protection Council has set a standard of 50 µg/m³ 24-hour average for PM₁₀ with a goal that by 2008 the standard is not to be exceeded on more than five days per year at any one monitoring station. There is currently no NEPM standard for PM_{2.5}.

Effectiveness Indicator 3

Nitrogen dioxide in Perth.

Desired outcome

That nitrogen dioxide levels in Perth are reduced by the introduction of management strategies resulting in environmentally acceptable levels.

Objective

To monitor, analyse and report on the level of nitrogen dioxide in the atmosphere. The target population is the community in the Perth metropolitan area. Outputs include:

- monitoring, analysis and reporting;
- developing an implementation strategy for the Perth Air Quality Management Plan;
- continued development of a State Air Quality EPP; and
- NEPM reporting.

The Perth AQMPP is a 30 year plan, containing 12 initiatives comprising 43 programs, to improve Perth's air quality. Air quality monitoring data will be used to perform regular reviews of trends in Perth's air quality to ensure that the management strategies listed in the Perth AQMP are effective in improving overall air quality in Perth.

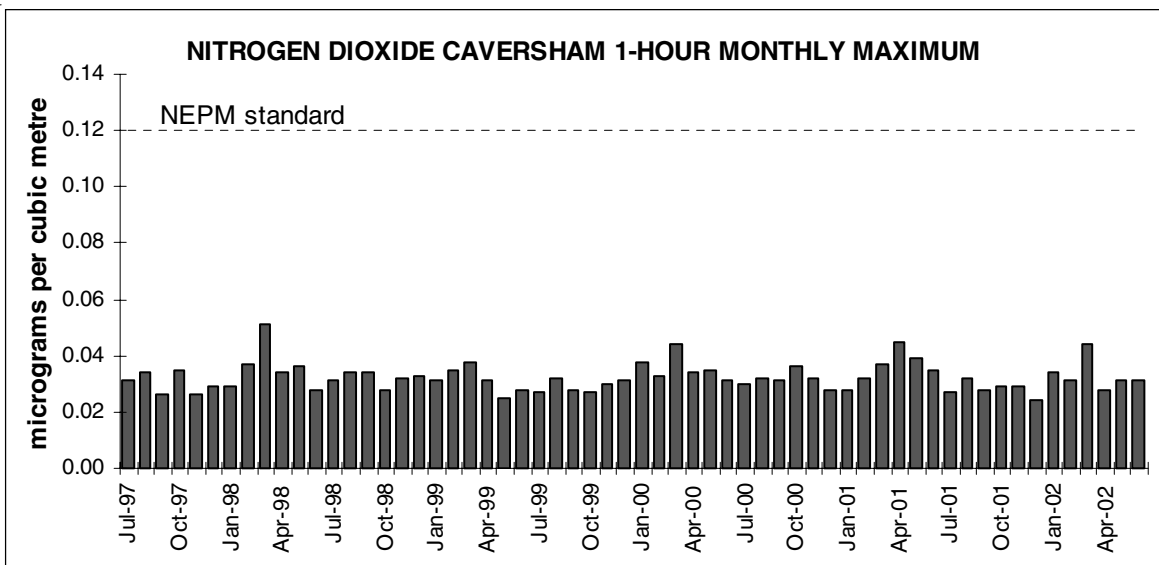
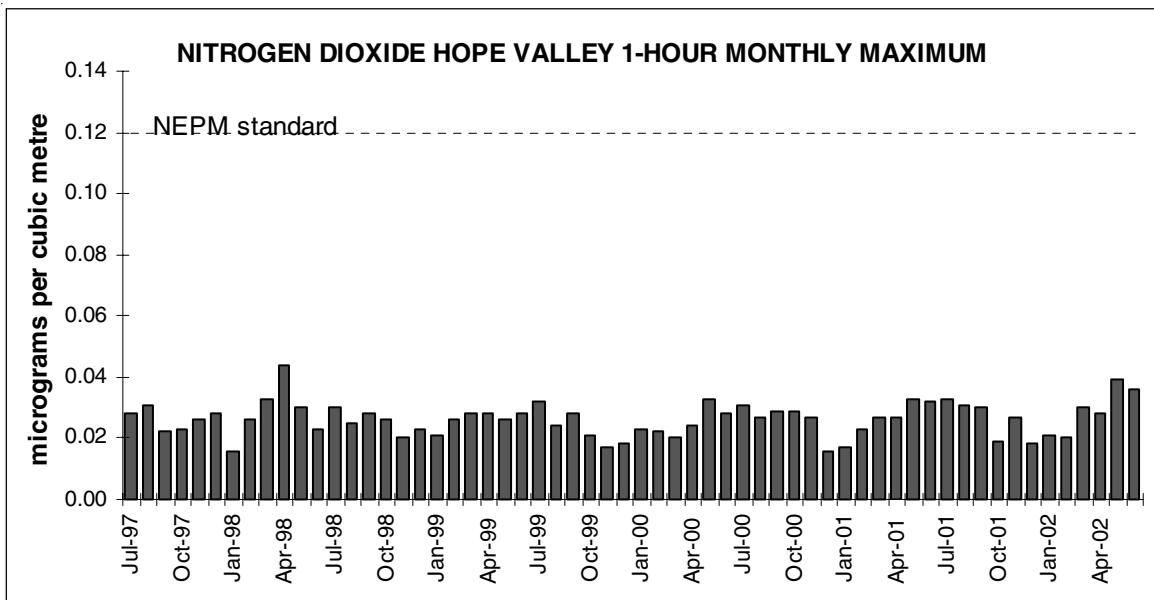
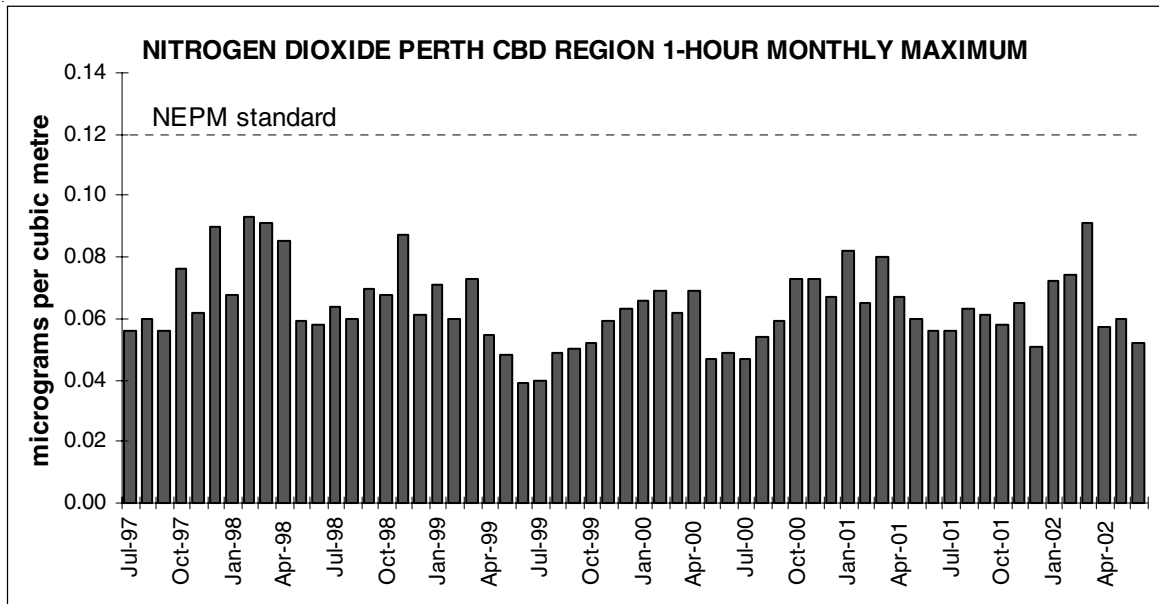
Relevance to output description

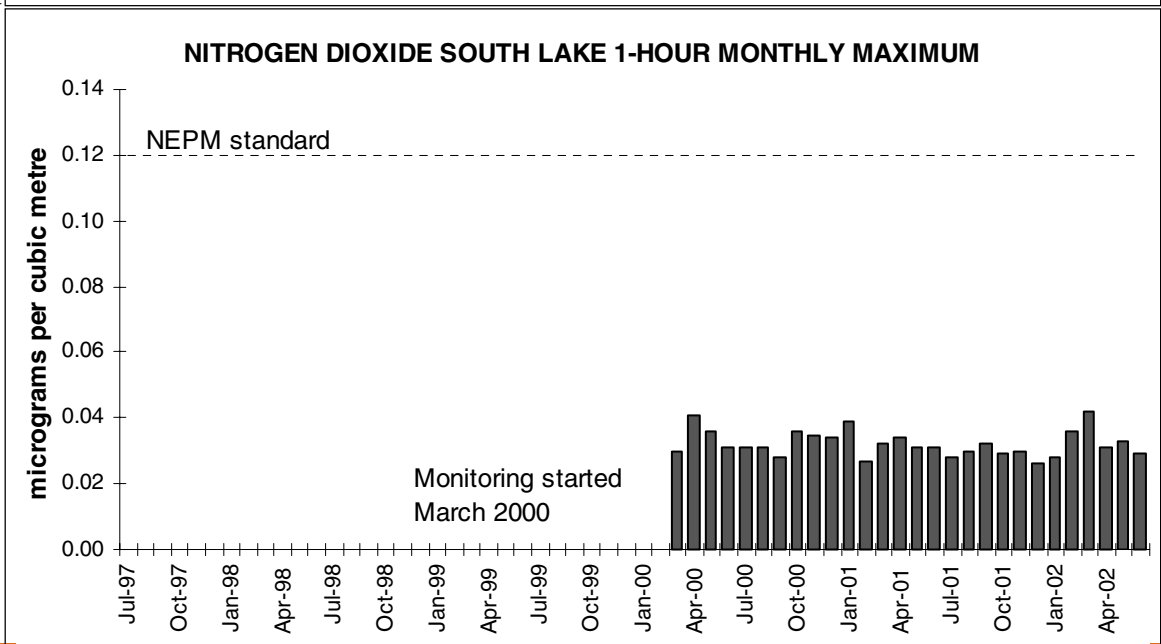
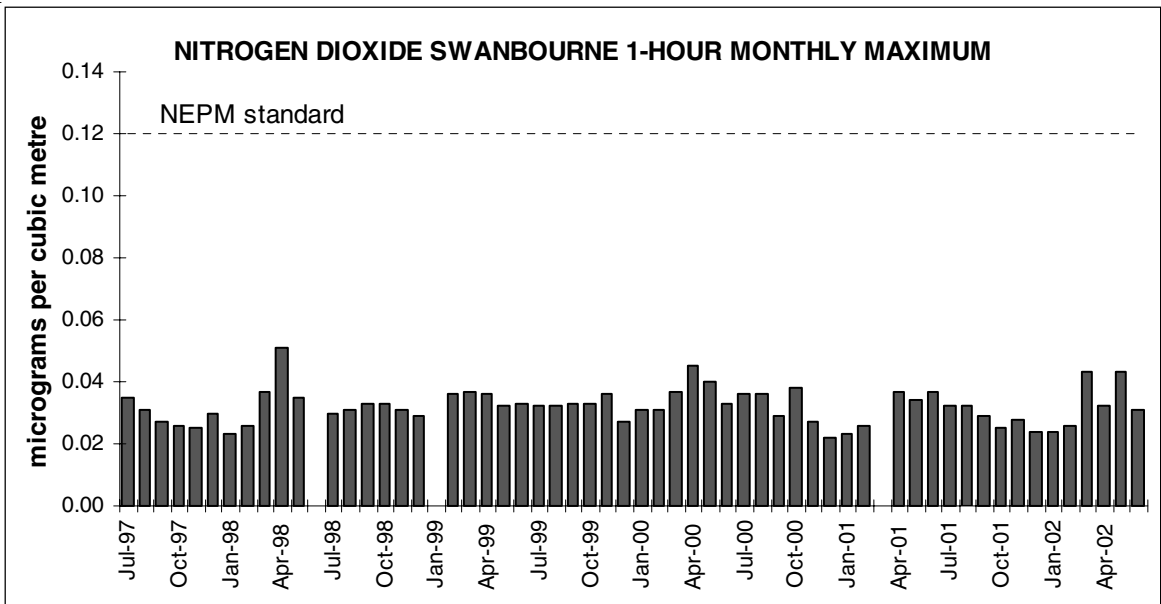
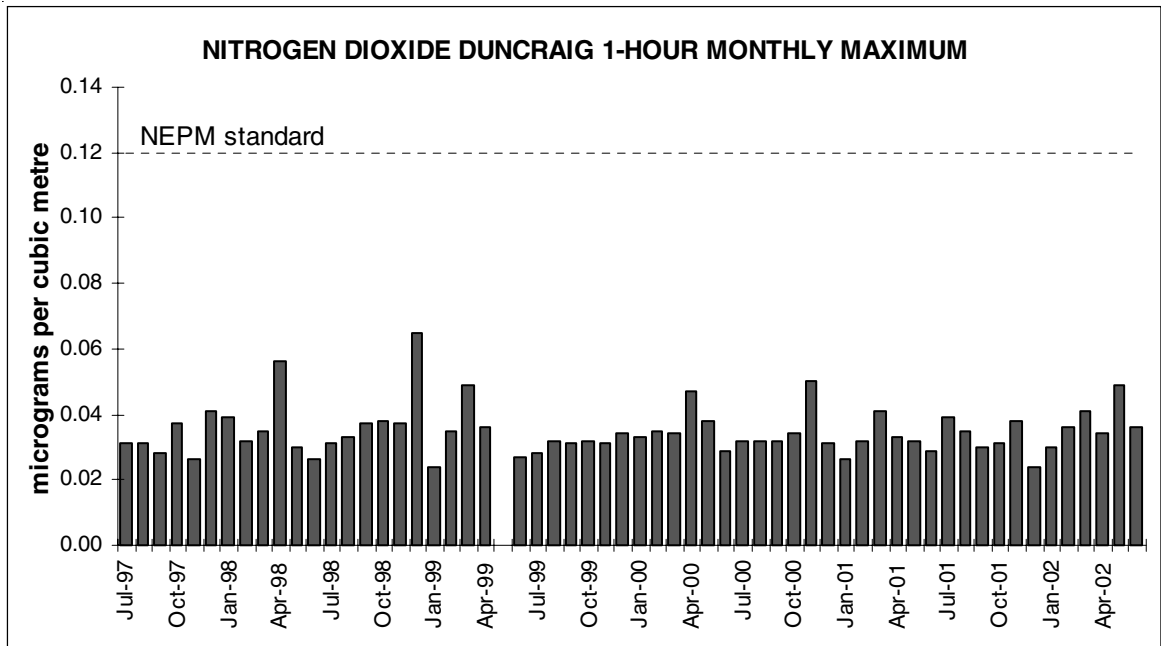
Nitrogen dioxide is the precursor to photochemical smog and an indicator of potential reduction in air quality. Nitrogen dioxide is an indicator of industrial activity and motor vehicle use. Nitrogen dioxide is a respiratory irritant.

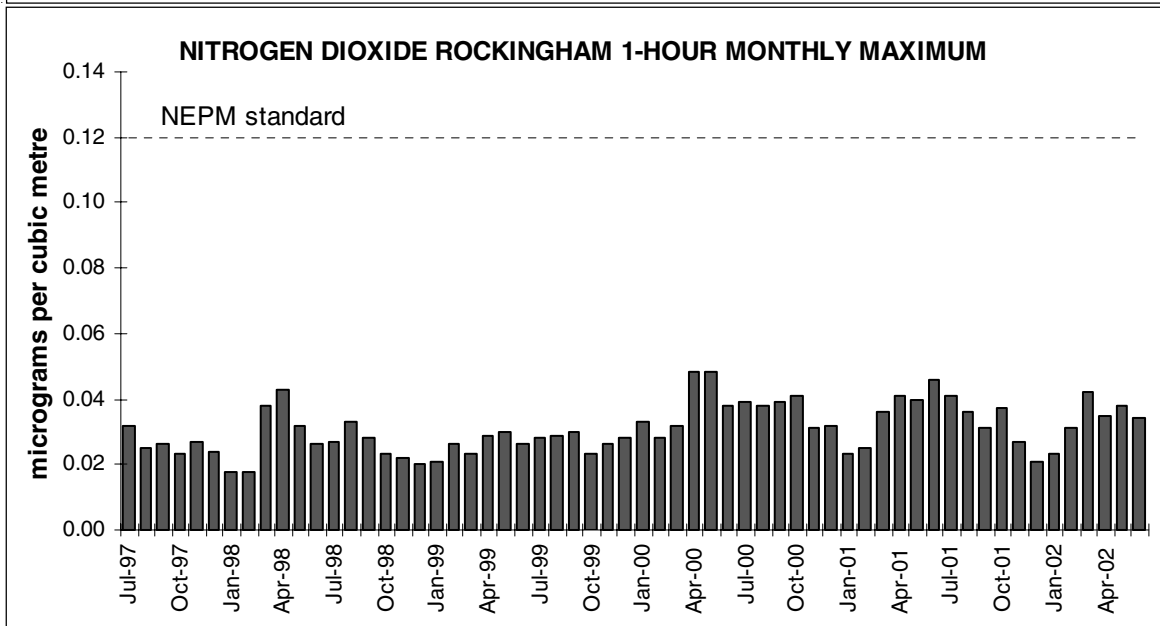
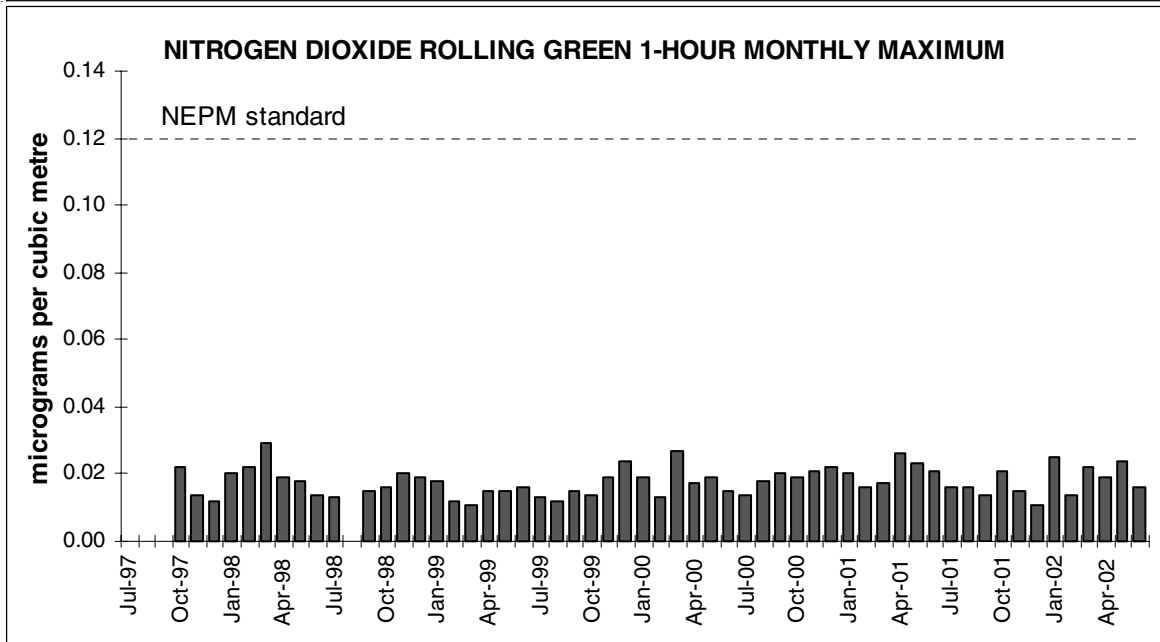
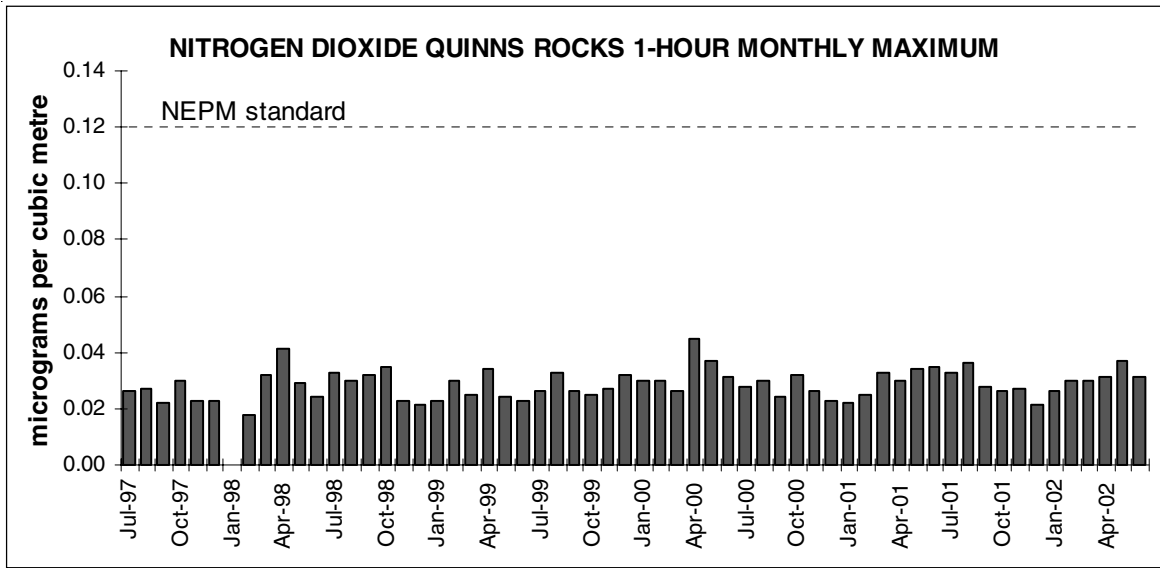
Effectiveness indicator

The extent to which nitrogen dioxide levels are below the NEPM standard of 0.12 ppm averaged over one clock hour and 0.03 ppm averaged over a calendar year.

All concentrations measured in 2001-02 were below the 1-hour and annual NEPM standards. The highest 1-hour averaged NO₂ concentration measured during 2001-02 was 0.091 ppm at the Perth CBD in March 2002. This represents approximately 76% of the NEPM standard.







The graphs show the maximum one-hour averaged nitrogen dioxide concentration measured in Perth's air.

The National Environment Protection Council has set a standard of 0.12 ppm 1-hour average with a goal that by 2008 the standard is not to be exceeded more than once per year, and a standard of 0.03 ppm annual average with a goal that by 2008 the standard is not to be exceeded.

No data were available for Rolling Green in winter 1997 due to a shutdown at the monitoring station.

Annual averages nitrogen dioxide ppm

	1997	1998	1999	2000	2001
Perth CBD	0.019	0.021	0.017	0.018	0.019
Hope Valley	0.004	0.005	0.005	0.005	0.005
Caversham	0.006	0.007	0.006	0.007	0.006
Duncraig	0.008	0.008	0.008	0.008	0.009
South Lake	-	-	-	0.008	0.008
Swanbourne	0.006	0.007	0.007	0.008	0.007
Quinns Rocks	0.003	0.004	0.004	0.004	0.004
Rolling Green	0.002	0.002	0.002	0.002	0.003
Rockingham	0.006	0.006	0.006	0.007	0.007

Effectiveness Indicator 4

Carbon monoxide in Perth and Bunbury

Desired outcome

That carbon monoxide levels in Perth and Bunbury are reduced by the introduction of management strategies resulting in environmentally acceptable levels.

Objective

To monitor, analyse and report on atmospheric carbon monoxide levels in Perth and the South West. The target population is the community in Perth metropolitan area and the South West. Outputs include:

- monitoring, analysis and reporting;
- developing an implementation strategy for the Perth Air Quality Management Plan;
- continued development of a State Air Quality EPP; and
- NEPM reporting.

The Perth AQMP is a 30 year plan, containing 12 initiatives comprising 43 programs, to improve Perth's air quality. Air quality monitoring data will be used to perform regular reviews of trends in Perth's air quality to ensure that the management strategies listed in the Perth AQMP are effective in improving air quality in Perth.

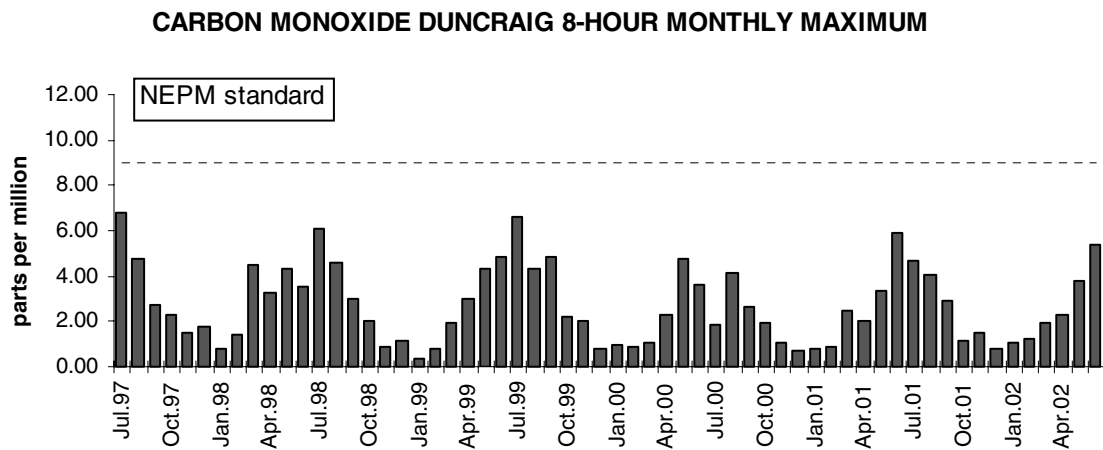
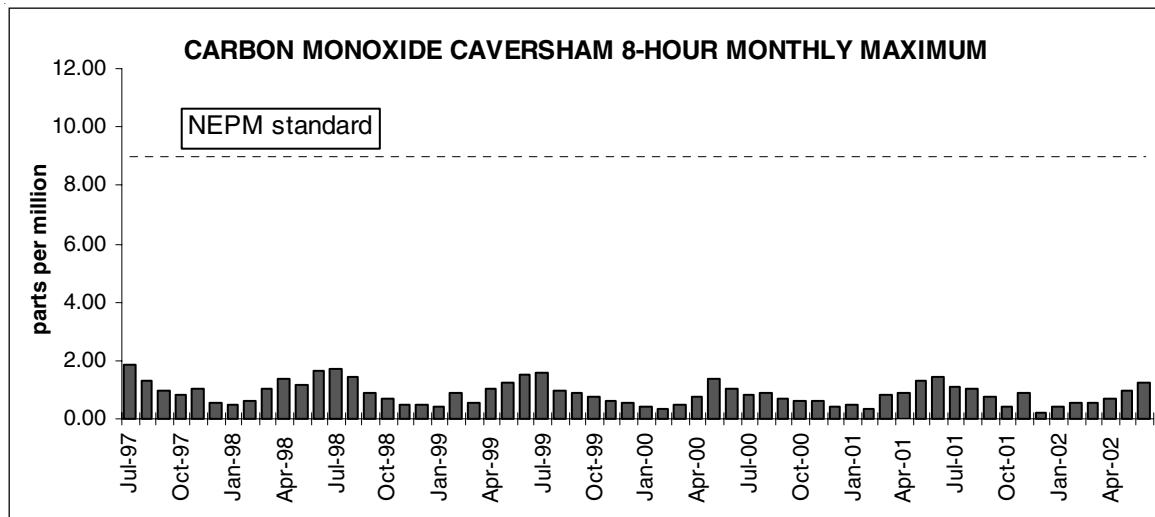
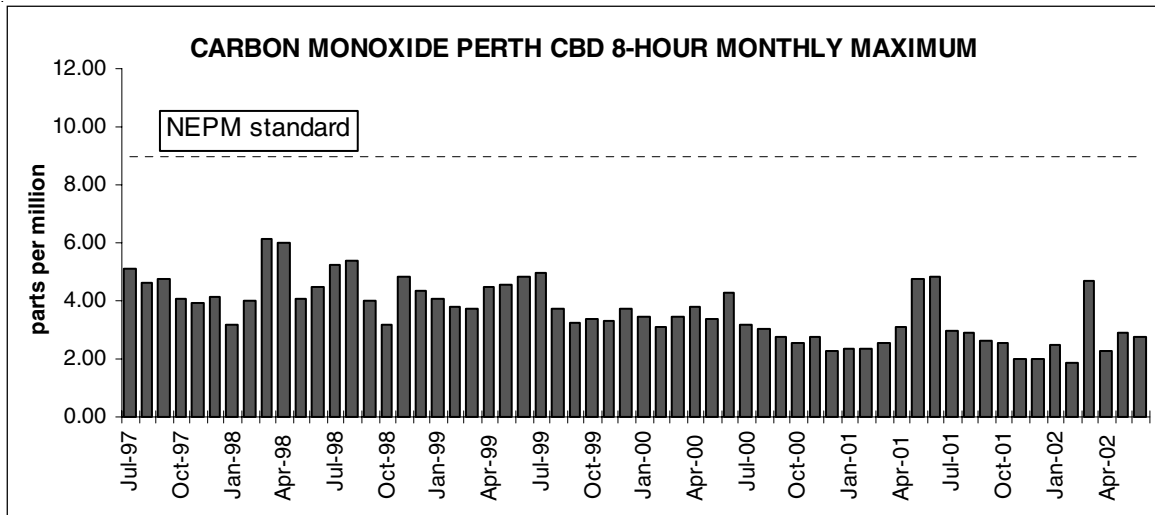
Relevance to output description

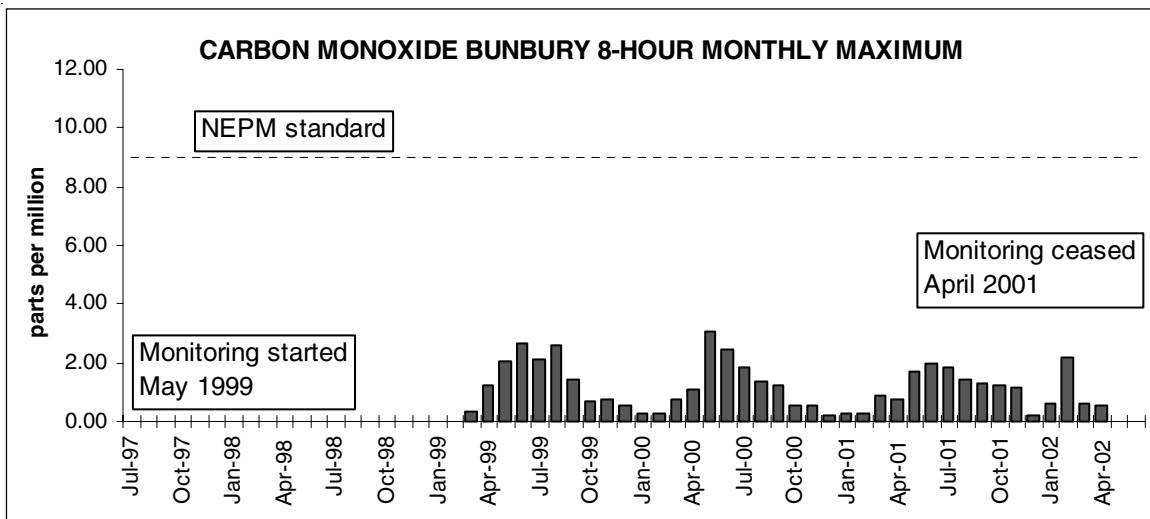
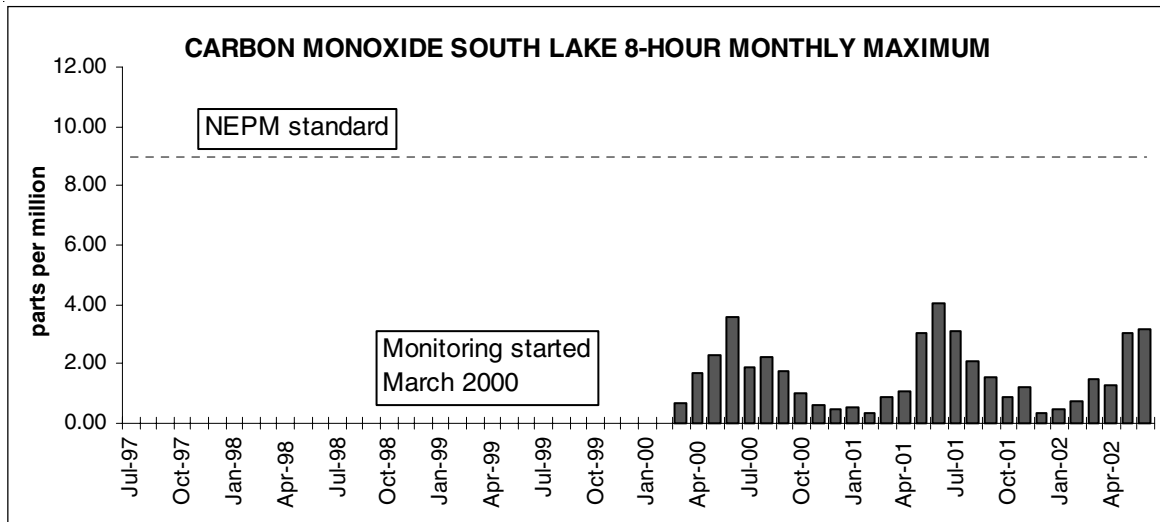
Given the major causes of carbon monoxide, critical locations for performance measurement are in Perth (vehicle emissions), suburban sites Duncraig and South Lake and the South West site Bunbury (wood heater emissions).

Effectiveness indicator

The extent to which carbon monoxide levels in Perth and Bunbury are below the NEPM standard of 9 ppm averaged over 8-hours.

The highest CO concentration during 2001-02 was recorded at Duncraig during June 2002. The concentration of 5.4 ppm represents approximately 60% of the NEPM standard.





The graphs show that the maximum 8-hour averaged level of carbon monoxide concentrations measured across the South West and Perth’s metropolitan area is below the NEPM standard. The high values in the Perth CBD are due to motor vehicle traffic, while the high values in Duncraig, South Lake and Bunbury are due to emissions from wood burning heaters.

Carbon monoxide monitoring at Bunbury ceased in April 2002. The monitor was installed as part of a 2-year screening campaign in accordance with the National Environment Protection Measure for Ambient Air Quality - Monitoring Plan for Western Australia to determine general carbon monoxide levels in Bunbury. As carbon monoxide levels remained below 60% of the NEPM standard over a 3-year monitoring period, carbon monoxide monitoring is no longer required in Bunbury.

The National Environment Protection Council has set a standard of 9 ppm averaged over eight clock-hours, with a goal that by 2008 the standard is not to be exceeded more than once per year.

Effectiveness Indicator 5

Lead in Perth

Desired outcome

That atmospheric lead levels in the Perth airshed are reduced by the introduction of management strategies resulting in environmentally acceptable levels.

Objective

To ensure that atmospheric lead levels remain below the relevant health standard. This is being achieved through a strategy to eliminate lead in super grade petrol sold in Western Australia, under requirements set out in environmental protection regulations, and a gradual transfer to unleaded petrol from 1986. The target population is the Perth community. Outputs include:

- monitoring, analysis and reporting;
- developing an implementation strategy for the Perth Air Quality Management Plan;
- continued development of a State Air Quality EPP; and
- NEPM reporting.

The Perth AQMP is a 30 year plan, containing 12 initiatives comprising 43 programs, to improve Perth's air quality. Air quality monitoring data will be used to perform regular reviews of trends in Perth's air quality to ensure that the management strategies listed in the Perth AQMP are effective in improving overall air quality in Perth.

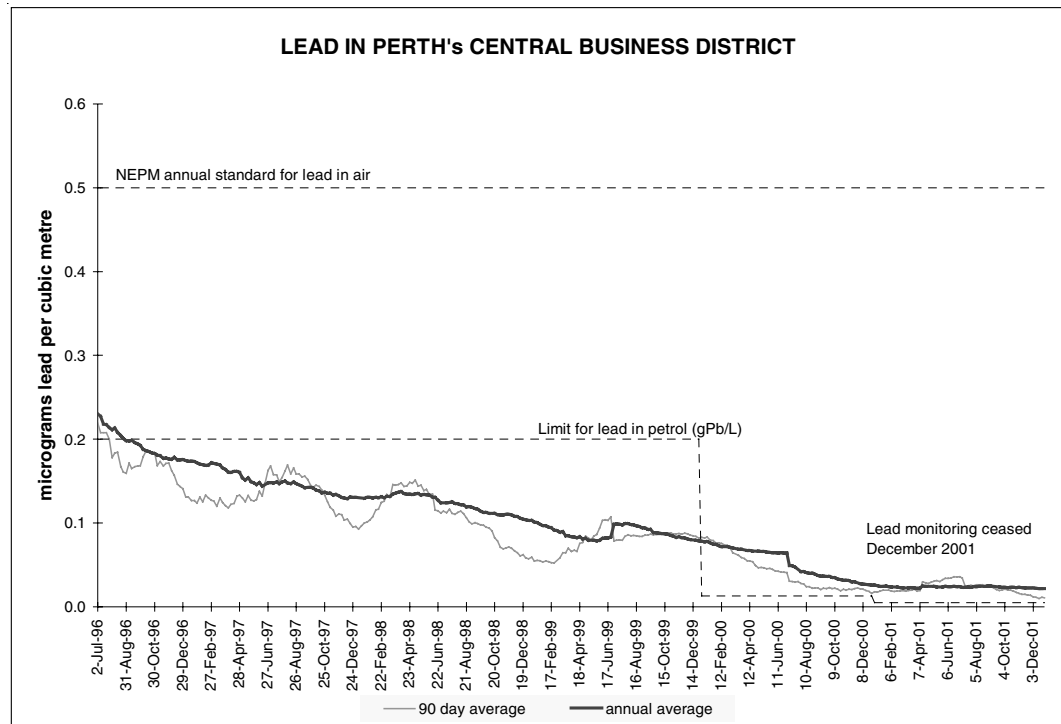
Relevance to output description

Lead levels in the atmosphere have been linked with elevated levels of lead in people's blood, which in turn has been linked with intellectual development problems, especially in young children.

Effectiveness indicator

The extent to which lead levels for Perth are below the standard of 0.5 mg/m³ averaged over one year.

The 2001 annual average concentration for Lead in Perth was 0.022 µg/m³. This represents approximately 4% of the NEPM standard. Given that the annual lead concentration measured in Perth is well below the NEPM standard and leaded petrol is no longer sold in Perth, lead monitoring will not be carried out in Perth beyond 2001.



The graph shows the 90-day average and annual average levels of atmospheric lead measured in central Perth. The graph also shows the staged reduction of lead in leaded petrol as required by the department’s regulation attached to the *Environmental Protection Act 1986*. The Western Australian value of 0.2 grams of lead per litre conforms to national protocol. The graph shows the continuing downward trend in atmospheric lead levels. Variations occur as a result of atmospheric conditions with higher levels in winter months. The permissible level for lead in petrol was progressively reduced from 0.3g/L in 1995 to 0.2g/L in 1996 to 0.013g/L in 2000 and further to 0.005g/L in 2001.

The National Environment Protection Council has set a standard of 0.5 µg/m³ annual average, with a goal that by 2008 the standard is not to be exceeded.

Annual averages

Year	Annual µg/m ³
1997	0.130
1998	0.100
1999	0.079
2000	0.026
2001	0.022

Effectiveness Indicator 6

Sulphur dioxide in Kwinana and Kalgoorlie

Desired outcome

That atmospheric sulphur dioxide levels in airsheds are reduced by the introduction of management strategies resulting in environmentally acceptable levels.

Objective

To ensure atmospheric levels of sulphur dioxide in the area covered by the Kalgoorlie and Kwinana Environmental Protection Policies (EPPs) do not exceed policy requirements. The policies set air quality objectives for sulphur dioxide (and particles for Kwinana). The objectives are achieved by setting licence conditions for environmental performance on industry. The target population is the community in the Environmental Protection Policy areas. Outputs include:

- monitoring, analysis and reporting;
- developing an implementation strategy for the Perth Air Quality Management Plan;
- continued development of a State Air Quality EPP; and
- NEPM reporting.

The Perth AQMP is a 30 year plan, containing 12 initiatives comprising 43 programs, to improve Perth's air quality. Air quality monitoring data will be used to perform regular reviews of trends in Perth's air quality to ensure that the management strategies listed in the Perth AQMP are effective in improving overall air quality in Perth.

Relevance to output description

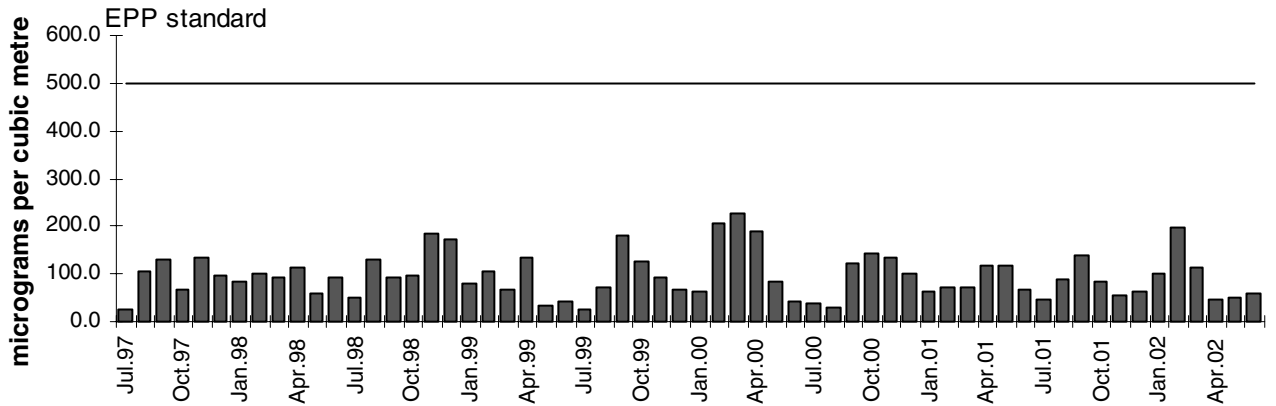
Sulphur dioxide at significant levels is dangerous to human health, particularly for those who suffer from asthma, and can affect some plant species.

Effectiveness indicator

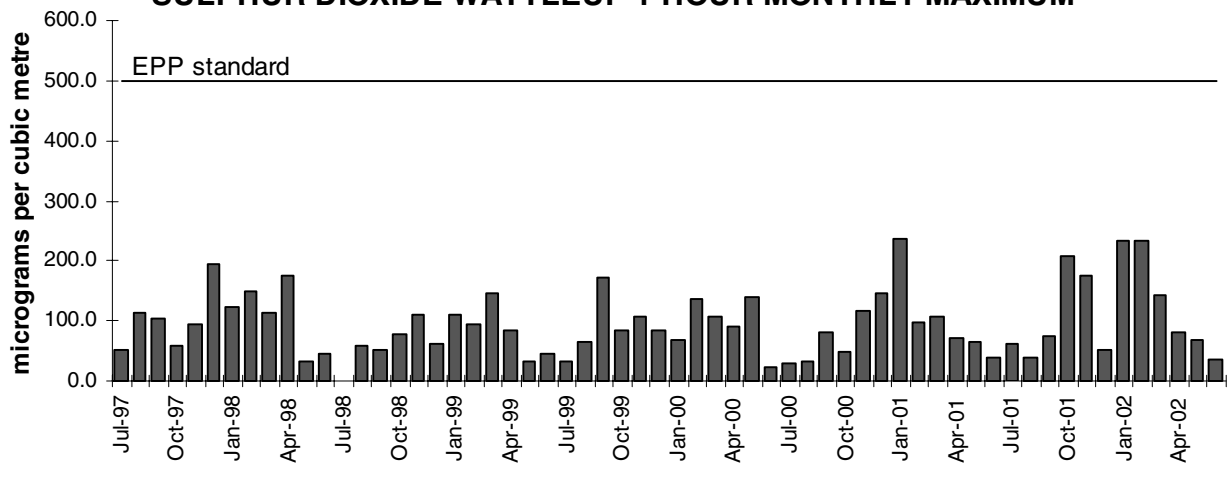
The extent to which levels of sulphur dioxide meet requirements set by the Environmental Protection Policies, and the NEPM standards.

All concentrations measured in 2001-02 were below the standard established in the EPP. There have been no exceedances of the EPP standard and limit since 1994.

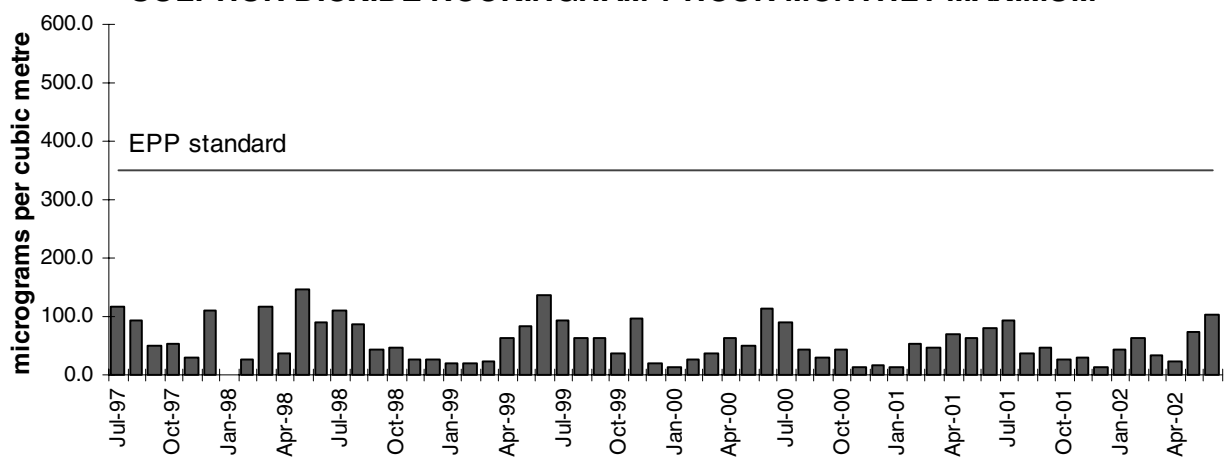
SULPHUR DIOXIDE HOPE VALLEY 1-HOUR MONTHLY MAXIMUM

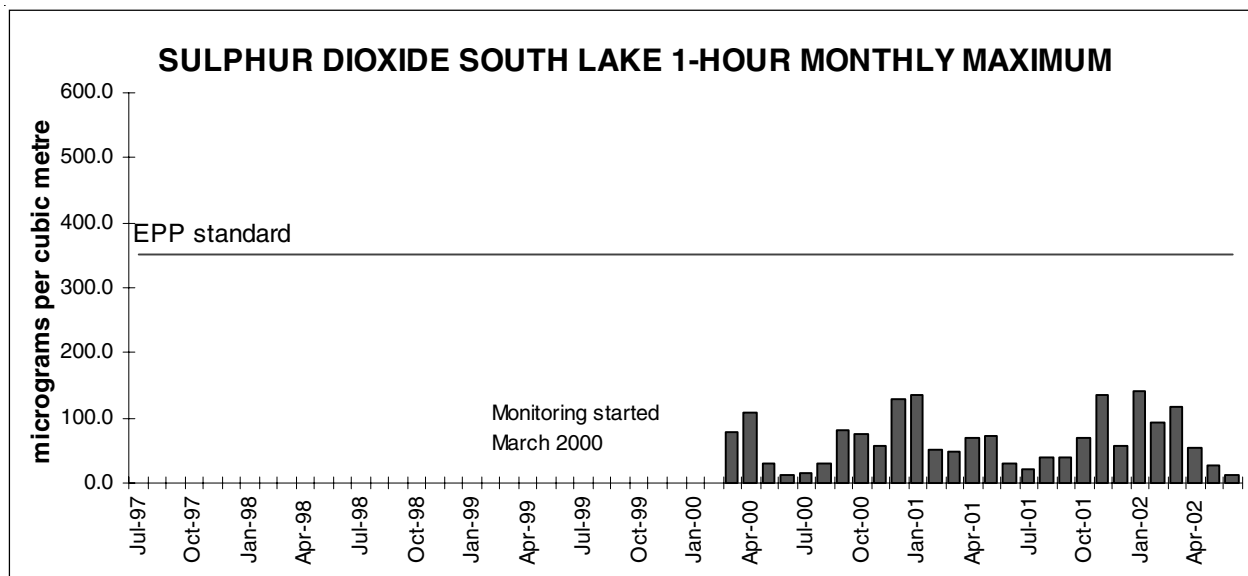


SULPHUR DIOXIDE WATTLEUP 1-HOUR MONTHLY MAXIMUM



SULPHUR DIOXIDE ROCKINGHAM 1-HOUR MONTHLY MAXIMUM





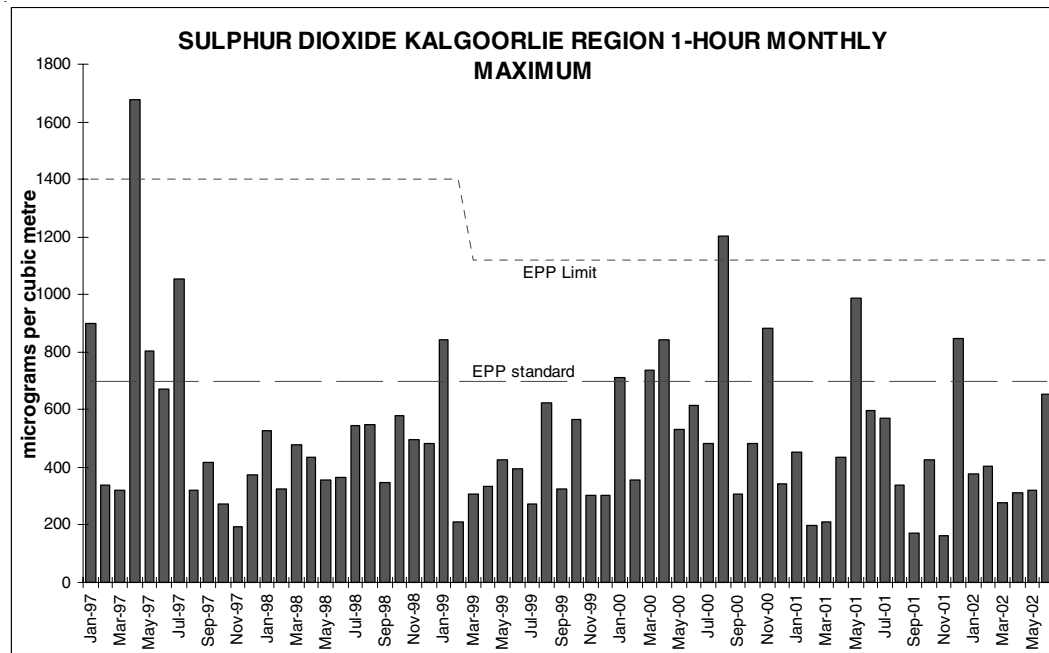
Note: While the NEPM for Ambient Air Quality requires measurements on the basis of ‘clock hours’, the data are presented on the basis of ‘running hours’ to maintain consistency with EPP standards.

The graphs show the monthly peak of one-hour average of sulphur dioxide concentrations at the department’s monitoring stations.

The National Environment Protection Council has set standards of 0.20 ppm (equivalent to approximately 570 mg/m³ @ STP) 1-hour average, 0.08 ppm (equivalent to approximately 228 mg/m³ @ STP) 24-hour average with a goal that by 2008 the standard is not to be exceeded more than one day per year, and 0.02 ppm annual average with a goal that by 2008 the standard is not to be exceeded. All concentrations measured in 2001-02 were below the 1-hour, 24-hour and annual NEPM standards.

Annual averages ppm Hope Valley, Wattleup, Rockingham and South Lake– sulphur dioxide (ppm)

Year	Hope Valley	Wattleup	Rockingham	South Lake
1997	0.001	0.001	0.001	n/a
1998	0.001	0.002	0.001	n/a
1999	0.001	0.002	0.002	n/a
2000	0.001	0.001	0.001	0.001
2001	0.001	0.001	0.001	0.001



Note: ‘Standard’ means the concentration of an atmospheric waste, which is desirable not to be exceeded. ‘Limit’ means the concentration of an atmospheric waste, which shall not be exceeded. The EPP limit was progressively reduced from 1800mg/m³ in 1995 to 1600mg/m³ in 1996 to 1400mg/m³ in 1997. Because the change was made in January of each year the exceedences are reported for calendar years.

While the NEPM for Ambient Air Quality requires measurements on the basis of ‘clock hours’, the data are presented on the basis of ‘running hours’ to maintain consistency with EPP standards

The graph shows the monthly peak of 1-hour average of sulphur dioxide concentrations at all monitoring sites in the Kalgoorlie region. These readings have been provided by industry and have not been formally verified by the department. The number of exceedences of the standard and limit is shown in the table below. No exceedence of the 24-hour average or the annual average was recorded. In July 1996, WMC Ltd’s Kalgoorlie Nickel Smelter completed the installation of an acid plant, which has reduced sulphur dioxide emissions from the plant.

Exceedences of environmental protection policy for goldfields

Year	Exceedences of EPP standard	Exceedences of EPP limit
1997	7	1
1998	0	0
1999	1	0
2000	7	1
2001	4	0
2002 (6 months)	0	0

Exceedances of air NEPM standards

	Year					
	1997	1998	1999	2000	2001	2002 (6 months)
Kalgoorlie Airport	1	0	0	3	0	0
Boulder Shire Yard	2	0	0	0	1	0
Coolgardie Primary School	0	0	0	1	0	0
Hannans Golf Club	1	0	0	1	0	0
Kambalda	0	0	0	0	0	0
Kalgoorlie Council Yard	0	0	0	2	0	0
Kalgoorlie Regional Hospital	2	0	0	0	1	0
Kurrawang	1	0	1	1	0	0
Metals Exploration	2	0	0	0	1	0
Westrail Freight Yard	0	0	0	1	0	0

The highest concentration of SO₂ at Kalgoorlie during the financial year 2001-02 was 0.238 ppm recorded at the Kalgoorlie Regional Hospital site in December 2001. This exceeds the NEPM standard by 19%. The NEPM goal of no more than one exceedance per year (at each site) was met during 2001.

Effectiveness Indicator 7

Nutrient-related water quality of Cockburn Sound

Desired outcome

That the quality of Cockburn Sound waters should be sufficient to support the environmental values established by the EPA in its publication 'Perth Coastal Waters: environmental values and objectives (EPA, 2000). The key outcome is related to the effectiveness of the environmental management of Cockburn Sound.

Objective

To ensure that the environmental quality objectives, designated by the EPA to support the environmental values established for Cockburn Sound waters, are achieved and maintained. The environmental quality objectives for Cockburn Sound identified in the Draft Environmental Protection (Cockburn Sound) Policy 2001 are: maintenance of ecosystem integrity; maintenance of aquatic life for human consumption; maintenance of aquaculture; maintenance of primary contact recreation values; maintenance of secondary contact recreation values; maintenance of aesthetic values; and maintenance of industrial water supply values.

Environmental quality criteria are the benchmarks that can be used to assess whether the environmental quality objectives are being achieved or maintained. The EPA is developing environmental quality criteria for each environmental quality objective. Draft nutrient-related environmental quality criteria (Source: Southern Metropolitan Coastal Waters Study (1991-1994): Final Report, 1996) are shown as interim targets until the final criteria are adopted by Government.

The target population is dischargers of nutrients to Cockburn Sound.

Outputs include:

- Regular monitoring, analysis and reporting of summer water quality of Cockburn Sound;
- Regular survey, assessment and reporting of the health of seagrasses in Cockburn Sound;
- Release of the 2001 State of the Environment Report for Cockburn Sound;
- Release of the Draft Environmental Protection (Cockburn Sound) Policy 2001 and the Explanatory document on the Draft Environmental Protection Policy;
- Release of the Draft Environmental Quality Criteria Reference Document (Cockburn Sound), December 2001; and
- Release of the Draft Environmental Management Plan for Cockburn Sound and its Catchment, December 2001.

Relevance to output description

Excessive nutrient inputs are a major threat to the ecological health of Cockburn Sound. Excess nutrients are detrimental to the health of aquatic ecosystems, and have caused the loss of extensive areas of seagrass in Cockburn Sound. Phytoplankton concentration and water clarity provide indices of the nutrient-related health of Cockburn Sound.

Effectiveness indicator

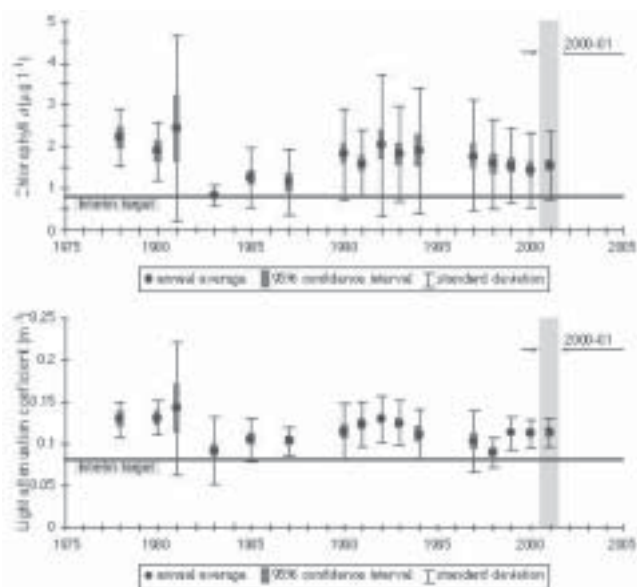
The nutrient-related water quality of Cockburn Sound measured by the phytoplankton concentration and water clarity.

Action

The DEP is assisting the EPA to develop, on behalf of the Government, an Environmental Protection Policy for Cockburn Sound. The interim targets in this current Performance Indicator will be revised once the Cockburn Sound EPP is gazetted.

Summer water quality in Cockburn Sound

(Source: Department of Environmental Protection 1978-94; Latchford et al, 1997; Hale et al, 1998 and Hale and Paling, 1999, 2000, 2001 and 2002)



Note: (1) Of the sampling sites, one in Jervoise Bay had to be relocated in 1997-98 due to the construction of a breakwater. This resulted in two new sites being established, one inside and one outside the breakwater. The datum point shown includes data for the site outside the breakwater.

(2) Data were not available from the site outside of the breakwater from early December 1997 to mid January 1998.

(3) This year's data were supplied by Marine and Freshwater Research Laboratories (MAFRL) and funded by Kwinana Industries Council (KIC). The data have not been formally verified by the department.

One of the primary effects of nutrients on the marine environment is to stimulate the growth of phytoplankton, which in turn reduces the clarity of the water, shading seagrasses and other bottom plants from essential sunlight. Phytoplankton abundance (measured as chlorophyll a concentration) and water clarity (measured as light attenuation coefficient - the reduction in light intensity per metre of water) are therefore good indicators of nutrient related water quality. These two graphs show greater than 20-year time series of phytoplankton concentration and light attenuation coefficient for Cockburn Sound during the summer months (December-March). Each point on these graphs is derived from a large number of measurements from throughout the sound. The error bar associated with each point represents the 95% confidence interval (shaded area). The standard deviation (thin vertical line) has also been included to indicate the variability of each year's data. The trend shows that, since the 1970s when the water quality of the Sound was at its poorest and *Posidonia* seagrass meadows disappeared from the eastern margin, both chlorophyll a levels and the light attenuation coefficient in Cockburn Sound decreased in the early 1980s, then increased again during the mid-late 1980s, and early 1990s. Chlorophyll a concentration has generally trended downward since the mid 1990s. Water clarity has also shown a similar trend to chlorophyll a up until 1998. Light attenuation coefficient rose in 1999 and remained elevated in 2000 and 2001. Light attenuation has reduced this year, indicating an improvement to the preceding three years.

Effectiveness Indicator 8

Solid waste management

Desired outcome

To contribute to the management of the environmental impact of landfills by reducing the amount of waste disposed.

Objective

In 1991, Western Australia became a signatory to the ANZECC Waste Reduction Agreement, which aimed to halve waste to landfill by the year 2000. This equated to a 5% per annum reduction.

Relevance to output description

The reduction of solid waste to landfill is one component of the objective to reduce waste generated by society and to ensure waste disposal meets public health and environmental standards.

This is supported by:

- the establishment of a Waste Management Recycling Fund to support waste reduction and recycling initiatives;
- a levy on waste disposed to landfill to finance the Waste Management and Recycling Fund; and
- requirements for landfill operators to report data to monitor compliance with the levy and to meet the State's obligations under ANZECC.

Effectiveness indicator

The annual per capita reduction in waste disposal to landfill.

Annual solid waste disposal rates

Year	Waste to landfill (tonnes per capita)			Annual change per capita (%)		
	Putrescible	Inert	Combined	Putrescible	Inert	Combined
97-98	0.86	0.81*	n.a.	n.a.	n.a.	n.a.
98-99	0.92	1.10	2.02	7.0	n.a.	n.a.
99-00	0.95	1.14	2.09	3.3	3.6	3.5
00-01	0.85	0.91	1.76	-10.5	-20.2	-15.8
01-02	0.82	0.85	1.67	-3.5	-6.6	-5.1
TARGET				-5%	-5%	-5%

* Six months' data only. Data collection from inert landfill sites in the Australian Waste Classification system format only commenced in January 1998

The baseline data for 1991 has proven to be very unreliable as it was based entirely on estimates of waste disposal at a time when regulation of waste management was much lower than at present and there were no requirements to report. Reliable reporting of waste disposal data did not commence for putrescible landfills until 1997, and for inert landfills until 1998.

The data received by the department are constantly reviewed. This review process identified inconsistencies in previous periods, which have now been amended. Continuing training of landfill operators has resulted in better reporting of data during this period.

Population figures to calculate these amounts are based on ABS figures for the Perth Metropolitan Area.

The downturn in waste disposed to inert landfill in 2000-01 is directly associated with the downturn in construction. The reduction in waste disposal to putrescible landfill is more likely to be linked to the effects on consumption of the current economic downturn, rather than any significant change in recycling or waste generating behaviour in the community.

Effectiveness Indicator 9

Liquid Waste Management

Desired outcome

To ensure that all liquid waste generated in the Perth metropolitan area is transported, treated and disposed of in a manner that will ensure conservation of the environment, and is done in accordance with appropriate legislation. Objective

To target liquid waste producers, liquid waste transporters and liquid waste treatment facilities and their managers to ensure that:

- all liquid waste generated in Perth is appropriately monitored;
- all liquid waste is transported in accordance with *Environmental Protection (Liquid Waste) Regulations 1996* (as amended); and the *Environmental Protection (Controlled Waste) Regulations*;
- all liquid waste is treated and disposed of in managed licensed facilities to prevent improper exposure of wastes or pollution to air, soil and water.

Outputs related to objectives

- 3364 grease trap and petrol and oil trap licences under the “Waste Track” system.
- 752 licensed producers of liquid waste.
- Monitoring inspections of licensed premises and licensed transport tankers.

Relevance to output description

The Swan River and Swan Coastal Plain are very vulnerable to chemical and organic pollution.

Strict monitoring of the production, transport and ultimate disposal of liquid waste combined with the promotion of waste reduction policies can lessen these impacts on the environment by reducing and ultimately eliminating sources of liquid waste pollution.

Effectiveness indicator

The extent to which liquid waste generators, transporters and disposers are monitored and recorded and the use of these indicators to further improve monitoring techniques..

Liquid waste management

Annual Analysis of Grease Trap Treatment	1998-99	1999-00	2000-01	2001-02
	(ML)	(ML)	(ML)	(ML)
Waste Track – expected registered volume of grease waste to be collected during year	21.21	22.59	22.78	23.61
Waste Track – actual registered volume of grease waste collected during the year (percentage of expected volume)	21.00 (99%)	22.24 (98%)	22.30 (98%)	23.39 (99%)
“Yellow Docket” system – actual non-registered volume of grease waste collected during year	1.81	1.76	1.63	2.1
Percentage of the volume of treated grease wastetrack waste to the total treated volume of grease waste	92%	93%	93%	92%
Total grease volume treated at treatment plant (increase from 1995-96 base year of 14.7 ML)	22.81 (55%)	24.00 (63%)	23.93 (63%)	25.49 (73%)

Annual Analysis of Petrol and Oil Trap Treatment	1998-99	1999-00	2000-01	2001-02
	(ML)	(ML)	(ML)	(ML)
Waste Track – expected registered volume of petrol and oil waste to be collected during year (increase in expected volume from base year)	2.50 (5%)	2.44	2.15 (-9%)	2.03
Waste Track – actual registered volume of petrol and oil waste collected during year (percentage of expected waste)	2.28 (91%)	2.41 (99%)	2.17 (101%)	1.81 (89%)
Total petrol and oil volume treated at treatment plants (increase from base year)	2.28 (7%)	6.89 (223%)	2.42 (14%)	4.03 (89%)

Effectiveness Indicator 10

Dust

Desired outcome

A reduction in dust levels below department guidelines or standards, where they apply.

Objective

To protect the health and amenity of the public and local environments by:

- reducing dust levels below department guidelines or standards, where appropriate; and
- ensuring that best management practices are achieved in existing and future development.

(Source: Environment WA 1998 SoE Report, page 50)

The target population is communities in urban, industrial and mining areas. Outputs include:

- best management practices for dust suppression and management; and
- dust control guidelines for urban development.

Relevance to output description

Atmospheric dust resulting from industrial activity and urban land clearing and development can have severe effects on amenity and can cause short-term nuisance events and local ecological impacts. Health impacts from atmospheric dust have not been detected.

Effectiveness indicator

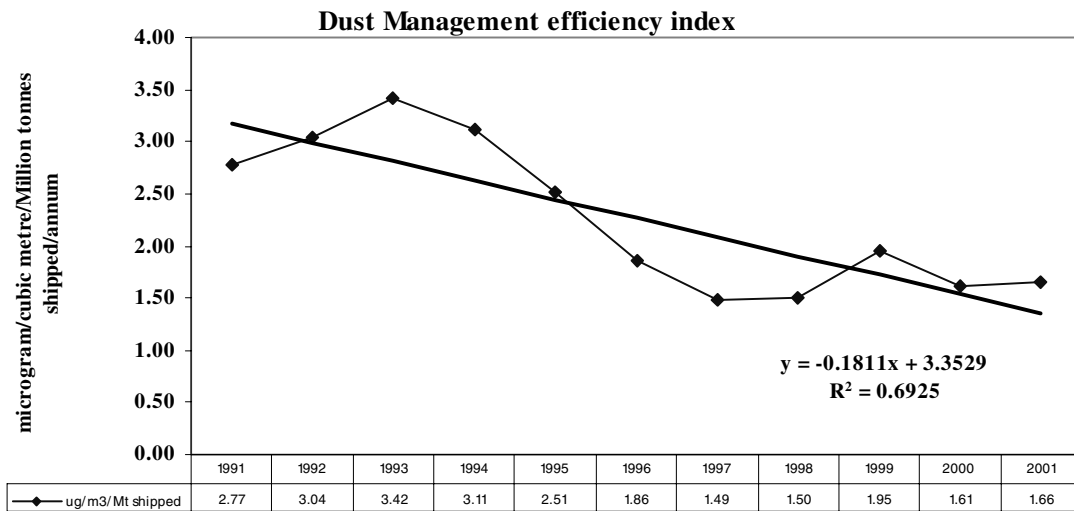
Reduction in the number of complaints relating to dust received by the department.

Number of dust complaints received by the department

	Metro	Kwinana	Bunbury	Karratha	Kalgoorlie	Geraldton	Total
1995-96	169	58	6	59	n.a	59	333
1996-97	145	40	52	13	21	21	292
1997-98	110	10	55	21	36	42	374
1998-99	183	52	39	9	32	38	353
1999-00	107	72	52	15	22	15	283
2000-01	80	1622	40	21	59	21	383
2001-02	32	73	37	9	25	12	188

Note: Dust complaint levels in all regions were lower than the 2001 figures. This is attributed to concerted efforts by the Department and industry to address community concerns.

Tonnage of ore handled through Port Hedland versus the annual average townsite dust concentration, 1991-2000 (Source, EPA, 1996 and BHP Iron Ore, 2000).



These figures have been provided by industry and have not been formally verified by the Department.

Although dust occurs naturally in all country areas, it is of particular concern in Port Hedland (Environment WA 1998 SoE Report, page 50). BHP Iron Ore has implemented a dust improvement program, which sets a target for annual dust levels at 90 µg/m³. The improvement program reduced dust levels from 1994 to 1997, but dust concentrations have fluctuated since that time. BHP Iron Ore responded to increased dust concentrations, which was due to a variety of factors, by reviewing its dust management across railways and port operations.

In April 2002, BHP released its Dust Management Program, which was designed to achieve continual Dust Management improvement over the following five years. By adopting a Best Practice approach to dust control, BHP aims to meet the NEPM standards for Ambient Air Quality as far as possible, within the context of the local conditions. It is expected that this program will begin to show more positive results in 2002-03.

Effectiveness Indicator 11

Regulation of Industry

Desired outcome

Prescribed development activities with the potential to pollute are properly managed.

Objective

To ensure that those industries with the potential to pollute as defined under the *Environmental Protection Act* are regulated to meet environmental conditions and standards. Licensing ensures that industry's environmental performance can be audited. The target population is prescribed industries that are regulated, and the community of Western Australia.

Outputs include:

- licences issues: and
- inspections of licensed premises.

Relevance to output description

Licensed industries are able to be assessed for environmental performance through an audit program.

Effectiveness indicator

Activity (mining and industrial) that is subject of an operating licence in monitored and evaluated against the environmental protection requirements of the licence.

Indicators based on licence compliance on inspection, and environmental incidents (complaints) received.

Compliance with licence conditions on inspection

	1998-99	1999-00	2000-01	2001-02
Number of regulated premises (1)	1915	1957	2204	2100
Number of active licences	923	910	986	844
Number of licensed prescribed premises inspected	297	425	377	269 (2)
Percentage compliance with licence conditions	89%	81%	85%	85%

(1) Regulated premises included and registered premises. Registration requires compliance with regulations or the provisions of *Environmental Protection Act*. Regulations have been introduced for fibre reinforced plastics, abrasive blasting, concrete batching and cement product manufacturing industries.

(2) Of the 269 inspections, 200 were conducted by the Regional Services Division and 69 by the Pollution Prevention Division.

Compliance with licence conditions on inspection

	1998-99	1999-00	2000-01	2001-02
Percentage of registered and licensed premises against which one or more environmental incidents (complaints) were received	13%	11.1%	10.5%	12%

Effectiveness Indicator 12

Referral of projects to the EPA that may have a significant effect on the environment.

Desired outcome

That the environment is protected from unacceptable impacts of development and that the EPA appropriately assesses proposals to ensure the environment is conserved.

Objective

Within the context of the EIA process:

- to evaluate the potential environmental impacts of referred projects;
- to determine the most appropriate assessment and regulatory mechanisms by which the referred projects can be managed; and
- for those projects with potentially significant environmental impacts, to recommend and appropriate level of environmental impact assessment to the EPA.

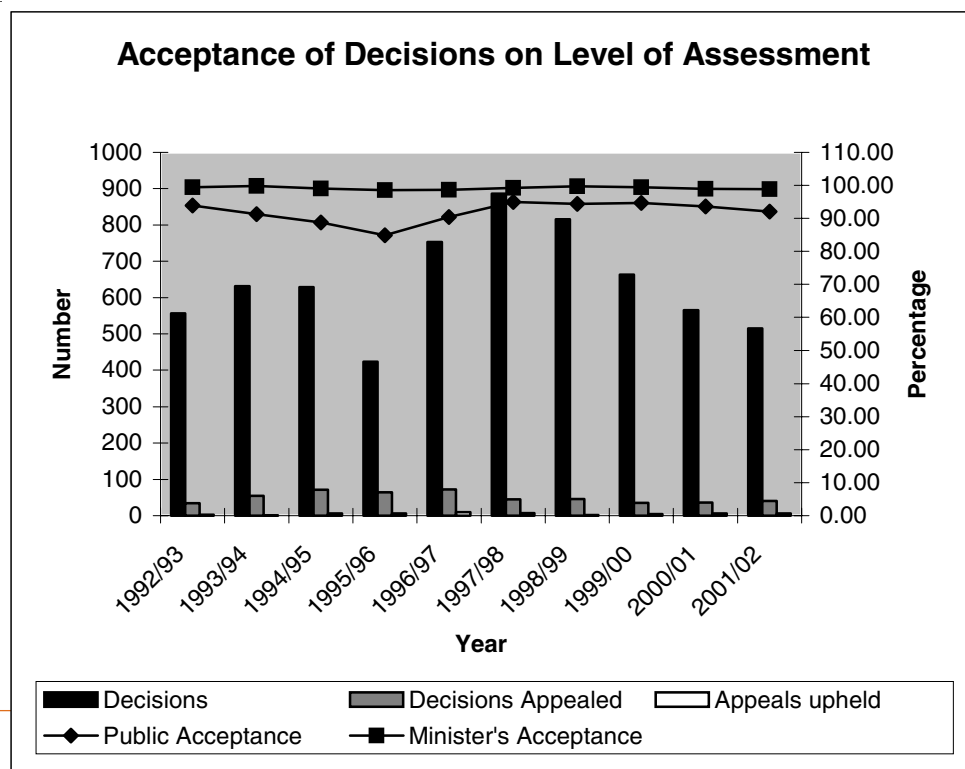
The target population is the potential proponents, the government, the community of WA and the EPA.

Relevance to output description

Through the DEP’s evaluation of project referrals, the appropriate level of assessment is determined such that the resultant regulatory regime is able to manage the potential environmental impacts of the proposed development or planning scheme.

Effectiveness indicator

The acceptance rate by the EPA, the Minister and the public of the level of assessment recommended by the DEP.

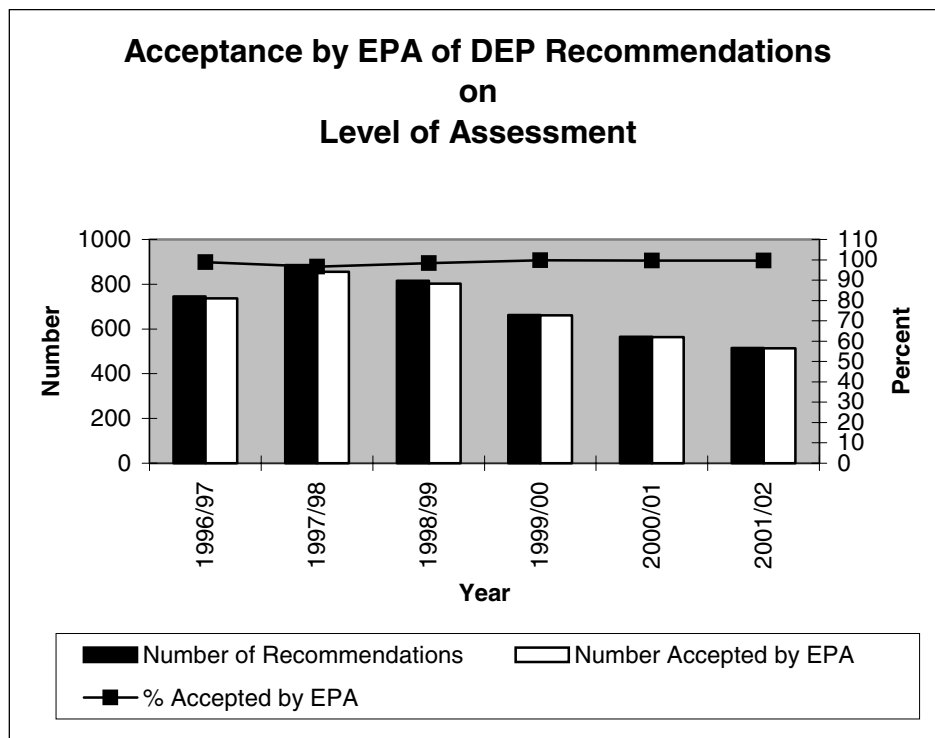


“Public acceptance” is the number of decisions which were not appealed expressed as a percentage of the total number of figures.

“Minister’s acceptance” is the number of decisions which were not changed by the Minister on appeal expressed as a percentage of the total number of decisions.

The graph shows the rate of acceptance of EPA decisions on level of assessment for developed proposals.

When a level of assessment is set on a referral, there is a two-week appeal period where the community or agencies can lodge an appeal to the Minister for the Environment and Heritage and ask that the referral be assessed more fully. The Minister makes a decision on any appeals received and either dismisses the appeal or upholds the appeal and raises the level of assessment. An effectiveness benchmark of 90% has been set for the percentage of referrals that do not have the level of assessment raised through the appeals process. In 2001-02 the percentage achieved was 98.8%.



The graph shows the rate of acceptance by the EPA of the Department of Environmental Protection recommendations on level of assessment for proposals referred to the EPA.

When a referral is received by the EPA, the staff of the DEP look at what is proposed and seek advice from other agencies, if necessary, to determine the likely environmental impacts. The DEP then makes a recommendation to the EPA on the appropriate level of assessment for each referral. A benchmark of 95% has been set for the acceptance, by the EPA, of DEP recommendations. In 2001-02 the percentage of recommendations accepted by the EPA on level of assessment was 99.6%.

Effectiveness Indicator 13

Compliance with environmental conditions placed on approved development proposals through the environmental impact assessment process.

Desired outcome

Through the EIA process, that the environment is protected from an unacceptable level of damage and an acceptable level of environmental performance such that the conservation of the environment is maximised.

Objective

By auditing the environmental conditions developed as part of the EIA process:

- the EPA and the Minister are assisted to achieve continual improvement of the environmental conditions;
- proponents are assisted to set or clarify the required environmental standards;
- the DEP is able to monitor the implementation of the projects; and
- the DEP makes public a record of the regulatory process.

The target population is the proponents, the government, the EPA and the community of WA.

Outputs include:

- Ministerial statements of conditions;
- audit tables;
- desk and site audit reports; and
- bi-monthly non-compliance reports.

Relevance of output description

The environmental performance of proponents is able to be monitored through an audit program and, therefore, encouraged to improve continually.

Effectiveness indicator

Compliance rate of audited projects with environmental conditions.

Project compliance with environmental conditions

	1998-99	1999-00	2000-01	2001-02
Number of active projects as at 30 June	220	263	297	285
Number of projects audited	23*	38*	108	135
Number of projects in non-compliance	1	8	15	6
Compliance rate of audited projects	96%	79%	86%	96%

* Site audits only. 2000-01 includes desk and site audits (30 site audits were conducted in 2000-01). The compliance rate for 2000-01 cannot be directly compared with the previous year's compliance rates due to the inclusion of desk audits, which provides a more comprehensive measure of the outcome of the compliance audit process.

Site audits involve a visit to the project site where evidence of compliance or non-compliance is collected. Desk audits involve assessing compliance based on information submitted to the department.

More projects were audited in 2001-02 than in previous years and the number of projects found to be in non-compliance dropped markedly. Hence the compliance rate of projects audited was 96%, which could reflect the success of the educative value of the compliance audit program, along with the agency's other programs, in encouraging sustainable business practices.

When the compliance audit process detects non-compliance with the conditions, the proponent is required to repair the environmental damage. The Environmental Protection Act enables fines to be levied on proponents should they fail to meet their obligations.

Effectiveness Indicator 14

Ozone depletion

Desired outcome

Through the regulation and coordination of ozone depleting substances, the future degradation of the ozone layer is reduced, enhancing the environment.

(Source: *Environment WA 1998 SoE Report, page 36*)

The target population is the government and the community of Western Australia. Outputs include:

- regulatory activities including inspections and prosecutions; and
- government and industry partnership in implementation of Environmental Protection Policies.

The revised Environmental Protection (Ozone Protection) Policy Approval Order 2000 was enacted in October 2000.

Relevance to output description

The Department of Environmental Protection has responsibility for ongoing coordination of the state of the environment reporting process, which involves integrating input from the community, industry and government. This coordination is undertaken through the Policy Coordination Sub-program. Industry coordination, regulation and support is managed by the Environmental Regulation Division. The report provides advice to government in setting priorities on key environmental issues and suggests responses to these issues. Ozone depletion has been identified in the report as having an environmental status rating of four (a rating of five indicates the highest priority for government and community action, with a rating of one being the lowest priority).

Effectiveness indicator

The extent to which the anticipated total of halon in WA has been collected.

Amount of halon 1211 and 1301 collected in WA

(Source: DASCEM Holdings Pty Ltd, 2001)

	Halon 1211 (kg)	Halon 1301 (kg)
Progressive total (WA) as at June 1998	208 555.62	67 288.60
Progressive total (WA) as at June 1999	211 164.62	79 415.58
Progressive total (WA) as at June 2000	215 438.94	84 635.23
Progressive total (WA) as at June 2001	217 428.84	86 302.23
Progressive total (WA) as at June 2002	221 834.07	100 539.13
Anticipated total of halon in WA	263 000.00	99 000.00
National total	1 372 974.21	602 714.03

The figures have been provided by DASCEM Holdings Pty Ltd. They have not been formally verified by the Department.

At the end of June 2001, approximately 221 t of halon 1211 and 100 t of halon 1301 had been collected in WA. The halon 1211 is destroyed through conversion into environmentally-safe products.

Western Australia's anticipated total of halon 1301 was 99 t, which has now been exceeded with the latest figures (over 100% of estimation). Western Australia's anticipated total of halon 1211 is 263 t. Total of halon 1211 removed from use to June 2001 is 212 834.07 (approximately 84%).

Remedial actions include inspection and enforcement activities related to the correct handling of ozone depleting substances.

Efficiency Indicators for Key Outputs

Overall performance in terms of the number of products and services provided and timeliness indicates that 2001-02 was very similar to 2000-01.

In 2000-01 the Department a new reporting regime was introduced to illustrate the Department's efficiency in delivering key products and services. This year, 2001-02 enables a comparative assessment to be made. However, care must be taken in any assessment. Accounting changes in 2001-02 have brought to account costs that were not considered in key performance calculations 2000-01. Specifically, expenses totaling almost \$4.0m have been included for 2001-02 which were not included last year. These costs relate to additional corporate costs associated with Capital User Charge and accrual expenses within each of the Department's outputs.

There are also some certain costs, the subject of factors outside the control of the Department, which have been excluded from measurement in assessing the Department's operational efficiency. The main costs excluded, are as follows:

	2000-01 (\$m)	2001-02 (\$m)
Liquid waste treatment charges	2.4	2.9
Recycling grants	3.8	5.9
Air Quality special grant projects	0.0	0.3
Co-disposal of waste with industry	0.0	0.9
Community programs and payments	0.0	0.7
Waste Control Pty Ltd fire cleanup	2.4	1.4
Management and remediation of containment sites	0.8	0.0
Total	9.4	12.1

Indicator	Note	2000-01	2001-02
Policy, Education and Advice			
Cost per Environmental Policy Program	2	146 099	256 589
Environmental Impact Services			
Cost per Environmental Impact Assessment performed	1	124 889	138 027
Cost per Compliance Audit	6	8 840	4 903
Pollution Regulation			
Cost per Regulatory Instrument	4	2 256	2 451
Cost per Recycling Grant Administered	5	5 171	4 205
Waste Management			
Cost per Regulated Premises	3	330	263
Environmental Systems			
Cost per Air Monitoring Station Report	7	66 930	89 365

Notes

1 Environmental Impact Assessments

	Quantity	Actual expenditure	Unit cost
Cost per Environmental Impact Assessment performed	48	\$6 625 297	\$138 027

Thirty-seven assessment reports for the Environmental Protection Authority were produced during 2001-02. A weighting of 1,2,3, was applied to these reports, most of which were prepared under Part IV of the *Environmental Protection Act 1986*, reflecting primarily the complexity and public involvement in the assessment and the weighting details are as follows:

One – Environmental Protection Statement, Proposal Unlikely to be Environmentally Acceptable, Section 16 (of EP Act), Formal Assessments, Section 46 (of EP Act), Consultative Environmental Review.

Two – Public Environmental Report, Environmental Review.

Three – Environmental Review and Management Program.

The calculated total weighting assigned to the assessment reports was 48. The number of assessments undertaken was slightly lower as a result of reduced staffing and increased complexity in several of the assessments. With a small quantity and large costs, the variation can be subject to reasonably large gaps.

2 Environmental Policy Programs

	Quantity	Actual expenditure	Unit cost
Cost per Environmental Policy Program	20	\$5 131 790	\$256 589

Environmental policy programs include the Department's contribution to statutory environmental protection policies (EPPs) that are issued by the Environmental Protection Authority. Environmental policy programs also include non-statutory policies and programs undertaken by the department. The significant increase in cost per unit between 2000-01 and 2001-02 is directly related to the additional costs as outlined in the above note. Additionally, the unit cost is subject to reasonable variation as a result of the small quantity and large costs.

3 Regulated Premises

	Quantity	Actual expenditure	Unit cost
Cost per Regulated Premises	4717	\$1 240 692	\$263

The Department has a responsibility to ensure that liquid waste, including septage, grease trap wastes and petrol and oil interceptor wastes, are collected and disposed of appropriately.

Pre-paid permits are issued for the collection of wastes and the costs redeemed by the appointed waste treatment facility from the DEP. Waste generators are licenced and inspected to ensure the proper handling and disposal of wastes. Waste transporters are licenced and vehicles are tracked using a GPS system. Enforcement action is taken where the regulations are breached. This work is conducted under the Environmental Protection (Liquid Waste) Regulation 1996 and the Environmental Protection (Controlled Waste) Regulation 2000. The increase in quantity is a reflection of increased effort in regulating premises. With two key pollution incidences in the past 18 months, the Department has placed increasing importance on improving regulations and inspections. The decrease represents reduced costs of more intensive inspections and assessments of waste disposal operations.

4 Regulatory Instruments

	Quantity	Actual expenditure	Unit cost
Cost per Regulatory Instrument	2 179	\$5 340 811	\$2 451

The Department works to prevent pollution through the control of waste emissions and potentially polluting activities by works approval and licence conditions or via regulations.

It does this by assessing relevant environmental issues and negotiating works approval or licence conditions as well as issuing works approvals, licences and registrations. Inspections of premises are made for compliance with conditions or regulations. As well, investigations are made in the case of complaints against premises. Enforcement action is taken where conditions or regulations have been breached. The relevant legislation for this work falls under Part V of the *Environmental Protection Act 1986* and associated regulations.

Performance for 2001-02 was similar to 2000-01.

5 Recycling Grants Administered

	Quantity	Actual expenditure	Unit cost
Cost per Recycling Grant Administered	183	\$769 593	\$4 205

The Waste Management and Recycling Fund supports a grants program for waste reduction and recycling activities. It is established under Section 110H of the *Environmental Protection Act*. Grant administration involves the advertising of six funding rounds per year, assessment through an independent committee, preparation of recommendations for the Minister's consideration and the development and administration of grant funding contracts.

6 Compliance Audits

	Quantity	Actual expenditure	Unit cost
Cost per Compliance Audit	145	\$710 964	\$4 903

Compliance audit under Section 48 of the *Environmental Protection Act* involves either desk or field audit. The relative weighting associated with the effort and cost of these is estimated to be 0.6 and one respectively. The weighted total Audits on this basis, for the year, was 145.

A total of 231 audits were conducted on 135 different projects. Some projects were audited up to six times when there was a lot of activity occurring and different conditions needed to be fulfilled at different times. There were over 280 projects that potentially may have required an audit although a significant proportion of these are either delegated to another government agency to monitor or not audited because they only conducted low risk activities

The significant improvement in performance is a direct result of increased audits undertaken. In 2001-02 the department undertook almost double the audits of 2000-01 (77 in total), almost halving the previous year's unit cost.

7 Air Monitoring Station Reporting

	Quantity	Actual expenditure	Unit cost
Cost per Air Monitoring Station Report	12	\$1 072 385	\$89 365

Ambient air quality is monitored at various monitoring stations in the metropolitan area and some regional centres. Air quality parameters monitored are NO_x, SO₂, ozone, PM₁₀ particles, CO and Pb. Not all parameters are measured at all stations. Measurements of these parameters are assessed against national health standards and goals as specified under the National Environment Protection Measure (NEPM) for Air Quality and reported on a monthly basis (i.e. 12 monthly reports were produced in 2001-02). Trends over time for these parameters are also recorded and reported monthly to:

- determine compliance with NEPM standards and goals which are set to protect human health;
- gauge effectiveness of long term air quality management strategies and controls;
- assess effectiveness of industry emission controls and management strategies; and
- inform State of Environment reporting.

Under the National Environment Protection Act, the State is required to monitor the six criteria air pollutants described above and report annually to the Commonwealth on the extent of compliance against the specified national standards and goals.



AUDITOR GENERAL

To the Parliament of Western Australia

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2002**

Matters Relating to the Electronic Presentation of the Audited Financial Statements

This audit opinion relates to the financial statements of the Department of Environmental Protection for the year ended June 30, 2002 included on the Department's web site. The Chief Executive Officer is responsible for the integrity of the Department's web site. I have not been engaged to report on the integrity of the Department's web site. The audit opinion refers only to the statements named below. It does not provide an opinion on any other information which may have been hyperlinked to or from these statements. If users of this opinion are concerned with the inherent risks arising from electronic data communications, they are advised to refer to the hard copy of the audited financial statements to confirm the information included in the audited financial statements presented on this web site.

Scope

I have audited the accounts and financial statements of the Department of Environmental Protection for the year ended June 30, 2002 under the provisions of the Financial Administration and Audit Act 1985.

The Chief Executive Officer is responsible for keeping proper accounts and maintaining adequate systems of internal control, preparing and presenting the financial statements, and complying with the Act and other relevant written law. The primary responsibility for the detection, investigation and prevention of irregularities rests with the Chief Executive Officer.

My audit was performed in accordance with section 79 of the Act to form an opinion based on a reasonable level of assurance. The audit procedures included examining, on a test basis, the controls exercised by the Department to ensure financial regularity in accordance with legislative provisions, evidence to provide reasonable assurance that the amounts and other disclosures in the financial statements are free of material misstatement and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion as to whether, in all material respects, the financial statements are presented fairly in accordance with Accounting Standards and other mandatory professional reporting requirements in Australia and the Treasurer's Instructions so as to present a view which is consistent with my understanding of the Department's financial position, its financial performance and its cash flows.

The audit opinion expressed below has been formed on the above basis.

**Department of Environmental Protection
Financial statements for the year ended June 30, 2002**

Audit Opinion

In my opinion,

- (i) the controls exercised by the Department of Environmental Protection provide reasonable assurance that the receipt and expenditure of moneys and the acquisition and disposal of property and the incurring of liabilities have been in accordance with legislative provisions; and
- (ii) the Statement of Financial Performance, Statement of Financial Position, Statement of Cash Flows, Output Schedule of Expenses and Revenues and Summary of Consolidated Fund Appropriations and Revenue Estimates and the Notes to and forming part of the financial statements are based on proper accounts and present fairly in accordance with applicable Accounting Standards and other mandatory professional reporting requirements in Australia and the Treasurer's Instructions, the financial position of the Department at June 30, 2002 and its financial performance and its cash flows for the year then ended.



D D R PEARSON
AUDITOR GENERAL
October 25, 2002

4 Financial Statements

Certification of Financial Statements for the year ended 30 June 2002

The accompanying financial statements of the Department of Environmental Protection have been prepared in compliance with the provisions of the Financial Administration and Audit Act 1985 from proper accounts and records to present fairly the financial transactions for the financial year ending 30 June 2002 and the financial position as at 30 June 2002.

At the date of signing we are not aware of any circumstances which would render any particulars included in the financial statements misleading or inaccurate.



Principal Accounting Officer
15 August 2002



Accountable Officer
15 August 2002

Statement of Financial Performance

for the year ended 30 June 2002

	Note	<u>2002</u> \$000	<u>2001</u> \$000
COST OF SERVICES			
<i>Expenses from ordinary activities</i>			
Employee expenses	4	13,182	14,034
Supplies and services	5	7,847	8,314
Depreciation expense	6	840	844
Administration expenses	7	2,141	1,754
Accommodation expenses	8	2,653	2,765
Grants and subsidies	9	5,180	3,988
Capital user charge	10	876	-
Doubtful debts expense	11	205	100
Total cost of services		<u>32,924</u>	<u>31,799</u>
Revenues from ordinary activities			
Other revenues from ordinary activities	12	157	530
User charges and industry contributions	13	10,546	8,871
Net profit/(losses) on disposal of non-current assets	14	(6)	50
Total revenues from ordinary activities		<u>10,697</u>	<u>9,451</u>
NET COST OF SERVICES		<u>22,227</u>	<u>22,348</u>
REVENUES FROM GOVERNMENT			
	15		
Output Appropriations (a)		26,453	21,811
Liabilities assumed by the Treasurer		147	978
Assets assumed/(transferred)		(815)	-
Resources received free of charge		700	129
Total revenues from Government		<u>26,485</u>	<u>22,918</u>
TOTAL CHANGES IN EQUITY OTHER THAN THOSE RESULTING FROM TRANSACTIONS WITH Western Australia STATE GOVERNMENT AS OWNERS		<u>4,258</u>	<u>570</u>

(a) Appropriation included capital in 2001

The Statement of Financial Performance should be read in conjunction with the accompanying notes.

Statement of Financial Position

as at 30 June 2002

	Note	<u>2002</u> \$000	<u>2001</u> \$000
Current Assets			
Cash assets	25(a)	5,057	1,233
Restricted cash assets	16	9,472	7,654
Receivables	17	1,839	1,592
Amounts receivable for outputs	18	800	-
Other assets	19	15	35
Total Current Assets		17,183	10,514
Non-Current Assets			
Restricted cash assets	16	350	329
Amounts receivable for outputs	18	420	-
Property, plant and equipment	20	2,351	3,252
Total Non-Current Assets		3,121	3,581
TOTAL ASSETS		20,304	14,095
Current Liabilities			
Payables	21	<u>2,287</u>	1,553
Provisions	23	1,919	1,389
Other liabilities	22	<u>462</u>	275
Total Current Liabilities		4,668	3,217
Non-Current Liabilities			
Provisions	23	701	1,001
Total Non-Current Liabilities		701	1,001
TOTAL LIABILITIES		5,369	4,218
Equity			
Contributed equity	24	800	-
Asset revaluation reserve		15	15
Accumulated surplus		14,058	9,862
Total Equity		14,120	9,877
TOTAL LIABILITIES AND EQUITY		20,304	14,095

The Statement of Financial Position should be read in conjunction with the accompanying notes.

Statement of Cash Flows

for the year ended 30 June 2002

	Note	<u>2002</u> Inflows (Outflows) \$000	<u>2001</u> Inflows (Outflows) \$000
Cash Flows From Government			
Output appropriations		25,233	21,011
Capital contributions (2001 appropriation)		800	800
Holding account drawdowns		-	-
Net cash provided by Government		26,033	21,811
Utilised as follows :			
Cash Flows From Operating Activities			
Payments			
Employee costs		(12,680)	(13,426)
Supplies and services		(6,331)	(9,215)
Accommodation costs		(2,653)	(2,769)
Other payments		(7,321)	(6,474)
Capital user charge		(876)	-
GST payments on purchases		(1,549)	(1,318)
Receipts			
Other receipts		157	791
User charges and industry contributions		10,259	8,909
GST receipts on sales		583	129
GST receipts from taxation authority		801	1,126
Net cash provided by/(used in) operating activities	25(c)	(19,610)	(22,247)
Cash Flows From Investing Activities			
Proceeds from sale of non-current physical assets	5		108
Purchase of non-current physical assets		(765)	(1,417)
Net cash provided by/(used in) investing activities		(760)	(1,309)
Net increase/(decrease) in cash held		5,663	(1,745)
Cash assets at the beginning of the financial year		9,216	10,961
CASH ASSETS AT THE END OF THE FINANCIAL YEAR		25(a)	14,879
9,216		-	

The Statement of Cash Flows should be read in conjunction with the accompanying notes.

Landscape page with output schedule of expenses and revenues

Department of Environmental Protection

Output Schedule of expenses and revenues

for the year ended 30 June 2002

	Policy, Education and Advice Environmental Systems		Total		Environmental Impact Services				Pollution Regulation		Waste Management			
	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001		
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000		
COST OF SERVICES														
Expenses from ordinary activities														
Employee expenses	2,936	2,571	3,553	3,538	3,325	3,421	1,614	2,055	1,754	2,449	13,182	14,034		
Supplies and services		714	517	724	428	1,447	2,879	3,872	3,637	1,090	853	7,847	8,314	
Depreciation expense		64	53	76	65	145	155	126	117	429	454	840	844	
Administration expenses		460	330	417	273	517	391	374	437	373	323	2,141	1,754	
Accommodation expenses		532	466	686	588	647	735	397	444	391	532	2,653	2,765	
Grants and subsidies	271	(59)	-	(13)	(14)	30	4,647	3,953	276	77	5,180	3,988		
Capital user charge	88	-	114	-	107	-	502	-	65	-	876	-		
Doubtful debts expense		-	-	-	-	-	-	205	100	-	-	205	100	
Total cost of services	5,065	3,878	5,570	4,879	6,174	7,611	11,737	10,743	4,378	4,688	32,924	31,799		
Revenues from ordinary activities														
Other revenues from ordinary activities				31	15	18	13	(1)	21	97	453	12	28	157
530														
User charges and industry contributions				278	283	5	-	172	196	9,931	7,975	160	417	10,546
8,871														
Net profit on disposal of non-current assets				(1)	1	(2)	2	-	(1)	(1)	(1)	(2)	49	
(6) 50														
Total revenues from ordinary activities				308	299	21	15	171	216	10,027	8,427	170	494	10,697
9,451														
NET COST OF SERVICES	4,757	3,579	5,549	4,864	6,003	7,395	1,710	2,316	4,208	4,194	22,227	22,348		
REVENUES FROM GOVERNMENT														
Output appropriations		5,330	2,288	6,868	4,336	6,452	6,050	3,878	4,577	3,925	4,560	26,453	21,811	
Liabilities assumed by the Treasurer				32	144	49	261	30	226	18	147	18	200	147
978														
Assets assumed/(transferred)			(164)	-	(212)	-	(199)	-	(119)	-	(121)	-	(815)	-
Resources received free of charge		140	13	182	29	171	36	103	22	104	29	700	129	
Total revenues from Government		5,338	2,445	6,887	4,626	6,454	6,312	3,880	4,746	3,926	4,789	26,485	22,918	
CHANGE IN NET ASSETS	581	(1,134)	1,338	(238)	451	(1,083)	2,170	2,430	(282)	595	4,258	570		

Summary of consolidated fund appropriations and revenue estimates

Statement of trust fund accounts

Statement of trust fund accounts CONTINUED

NOTES TO THE FINANCIAL STATEMENTS

for the year ended 30 June 2002

1 Departmental mission and funding

The department's mission is to ensure, with people across the community, that our environment, with the life it supports, is protected now and into the future.

The department is predominantly funded by Parliamentary appropriations. It receives substantial contributions from user charges. The financial statements encompass all Funds through which the department controls resources to carry on its functions.

In the process of reporting on the department as a single entity, all intra-entity transactions and balances have been eliminated.

The Machinery of Government Taskforce has recommended that most of the divisions of the Department of Environmental Protection be amalgamated with the Water and Rivers Commission to form the Department of Environment, Water and Catchment Protection. The completion of the amalgamation is contingent on the passage of amendments to the *Environmental Protection Act* and *Water and Rivers Commission Act*. This is anticipated to be completed around June 30 2003.

2 Significant accounting policies

The following accounting policies have been adopted in the preparation of the financial statements. Unless otherwise stated these policies are consistent with those adopted in the previous year.

General statement

The financial statements constitute a general purpose financial report which has been prepared in accordance with Australian Accounting Standards, Statements of Accounting Concepts and other authoritative pronouncements of the Australian Accounting Standards Board, and Urgent Issues Group (UIG) Consensus Views as applied by the Treasurer's Instructions. Several of these are modified by the Treasurer's Instructions to vary application, disclosure, format and wording. *The Financial Administration and Audit Act* and the Treasurer's Instructions are legislative provisions governing the preparation of financial statements and take precedence over Australian Accounting Standards, Statements of Accounting Concepts and other authoritative pronouncements of the Australian Accounting Standards Board, and UIG Consensus Views. The modifications are intended to fulfil the requirements of general application to the public sector, together with the need for greater disclosure and also to satisfy accountability requirements.

If any such modification has a material or significant financial effect upon the reported results, details of that modification and where practicable, the resulting financial effect, are disclosed in individual notes to these financial statements.

Basis of accounting

The financial statements have been prepared in accordance with Australian Accounting Standard AAS 29.

The statements have been prepared on the accrual basis of accounting using the historical cost convention, except for certain assets and liabilities which, as noted, are measured at fair value.

Administered assets, liabilities, expenses and revenues are not integral to the department in carrying out its functions and are disclosed in the notes to the financial statements, forming part of the general purpose financial report of the department. The administered items are disclosed on the same basis as is described above for the financial statements of the department. The administered assets, liabilities, expenses and revenues are those which the Government requires the department to administer on its behalf. The assets do not render any service potential or future economic benefits to the department, the liabilities do not require the future sacrifice of service potential or future economic benefits of the department, and the expenses and revenues are not attributable to the department.

As the administered assets, liabilities, expenses and revenues are not recognised in the principal financial statements of the department, the disclosure requirements of Australian Accounting Standard AAS 33, Presentation and Disclosure of Financial Instruments, are not applied to administered transactions.

(a) Output appropriations

Output Appropriations are recognised as revenues in the period in which the department gains control of the appropriated funds. The department gains control of appropriated funds at the time those funds are deposited into the department's bank account or credited to the holding account held at the Department of Treasury and Finance.

(b) Contributed equity

Under UIG 38 "Contributions by Owners Made to Wholly-Owned Public Sector Entities" transfers in the nature of equity contributions must be designated by the Government (owners) as contributions by owners (at the time of, or prior to transfer) before such transfers can be recognised as equity contributions in the financial statements. Capital contributions (appropriations) have been designated as contributions by owners and have been credited directly to Contributed Equity in the Statement of Financial Position. All other transfers have been recognised in the Statement of Financial Performance. Prior to the current reporting period, capital appropriations were recognised as revenue in the Statement of Financial Performance. Capital appropriations which are repayable to the Treasurer are recognised as liabilities.

(c) Net appropriation determination

Pursuant to section 23A of the *Financial Administration and Audit Act*, the Treasurer may make a determination providing for prescribed revenue to be retained by a department. Receipts in respect of all revenues recognised in the Statement of Financial Performance are the subject of a net appropriation determination by the Treasurer.

The net appropriation determination allows all prescribed revenues to be retained except for:

- revenues derived from the sale of real property; and
- one off revenues with a value of \$10 000 or more derived from the sale of property other than real property.

Prescribed revenues include moneys received other than from taxes, royalties and Commonwealth general purpose grants.

Retained revenues may only be applied to the outputs specified in the 2002 Budget Statements.

(d) Grants and other contributions

Grants, donations, gifts and other non-reciprocal contributions are recognised as revenue when the department obtains control over the assets comprising the contributions. Control is normally obtained upon their receipt.

Contributions are recognised at their fair value. Contributions of services are only recognised when a fair value can be reliably determined and the services would be purchased if not donated.

(e) Revenue recognition

Revenue from the sale of goods and disposal of other assets and the rendering of services, is recognised when the department has passed control of the goods or other assets or delivery of the service to the customer.

(f) Acquisitions of assets

The cost method of accounting is used for all acquisitions of assets. Cost is measured as the fair value of the assets given up or liabilities undertaken at the date of acquisition plus incidental costs directly attributable to the acquisition.

Assets acquired at no cost or for nominal consideration, are initially recognised at their fair value at the date of acquisition.

(g) Depreciation of non-current assets

All non-current assets having a limited useful life are systematically depreciated over their useful lives in a manner which reflects the consumption of their future economic benefits.

Depreciation is calculated on the straight line basis, using rates which are reviewed annually. Useful lives for each class of depreciable asset are:

Furniture and equipment	
– Noise and air monitoring equipment	5 years
– Air monitoring sheds	5 years
– GPS tracking equipment	10 years
– Other equipment	10 years
Computer hardware and software development	3 years
Information system	10 years

(h) Revaluation of land

The valuation of land has been determined on the basis of current market buying values.

The valuations were made in accordance AAS 38 with regular revaluation reviews.

(i) Leases

The department has entered into a number of operating lease arrangements for buildings, office equipment and motor vehicles where the lessor effectively retains all of the risks and benefits incident to ownership of the items held under the operating leases. Equal instalments of the lease payments are charged to the Statement of Financial Performance over the lease term as this is representative of the pattern of benefits to be derived from the leased property.

(j) Cash

For the purpose of the Statement of Cash Flows, cash includes cash assets and restricted cash assets. These include short-term deposits that are readily convertible to cash on hand and are subject to insignificant risk of changes in value.

(k) Accrued salaries

The accrued salaries suspense account (refer note 16) consists of amounts paid annually into a suspense account over a period of 10 financial years to largely meet the additional cash outflow in each eleventh year when 27 pay days occur in that year instead of the normal 26. No interest is received on this account.

Accrued salaries (refer note 22) represent the amount due to staff but unpaid at the end of the financial year, as the end of the last pay period for that financial year does not coincide with the end of the financial year. Accrued salaries are settled within a few days of the financial year end.

The department considers the carrying amount of accrued salaries to be equivalent to the net fair value.

(l) Receivables

Receivables are recognised at the amounts receivable as they are due for settlement no more than 30 days from the date of recognition.

Collectability of receivables is reviewed on an ongoing basis. Debts which are known to be uncollectible are written off. A provision for doubtful debts is raised where some doubts as to collection exists and in any event the debt is more than 60 days overdue.

(m) Payables

Payables, including accruals not yet billed, are recognised when the department becomes obliged to make future payments as a result of a purchase of assets or services. Payables are generally settled within 30 days.

(n) Employee entitlements***Annual leave***

This entitlement is recognised at current remuneration rates and is measured at the amount unpaid at the reporting date in respect to employees' service up to that date.

Long service leave

Leave entitlements are calculated at current remuneration rates. A liability for long service leave is recognised after an employee has completed four years of service. An actuarial assessment of long service leave undertaken by PricewaterhouseCoopers in 2001 determined that the liability measured using the short hand method was not materially different from the liability measured using the present value of expected future payments.

This method of measurement of the liability is consistent with the requirements of Australian Accounting Standard AAS 30 “Accounting for Employee Entitlements”.

Superannuation

Staff may contribute to the Pension Scheme, a defined benefits pension scheme now closed to new members, or to the Gold State Superannuation Scheme, a defined benefit lump sum scheme now also closed to new members. All staff who do not contribute to either of these schemes become non-contributory members of the West State Superannuation Scheme, an accumulation fund complying with the Commonwealth Government’s *Superannuation Guarantee (Administration) Act 1992*. All of these schemes are administered by the Government Employees Superannuation Board (GESB).

The superannuation expense comprises the following elements:

- (i) change in the unfunded employer’s liability in respect of current employees who are members of the Pension Scheme and current employees who accrued a benefit on transfer from that Scheme to the Gold State Superannuation Scheme; and
- (ii) employer contributions paid to the Gold State Superannuation Scheme and the West State Superannuation Scheme.

The superannuation expense does not include payment of pensions to retirees, as this does not constitute part of the cost of services provided by the department in the current year.

A revenue “Liabilities assumed by the Treasurer” equivalent to (i) is recognised under Revenues from Government in the Statement of Financial Performance as the unfunded liability is assumed by the Treasurer. The GESB makes the benefit payments and is recouped by the Treasurer.

From 1 July 2001 employer contributions were paid to the GESB in respect of the Gold State Superannuation Scheme and the West State Superannuation Scheme. Prior to 1 July 2001 the unfunded liability in respect of these Schemes was assumed by the Treasurer. An amount ‘equivalent to the employer contributions which would have been paid to the Gold State Superannuation Scheme and the West State Superannuation Scheme if the department had made concurrent employer contributions to those Schemes, was included in the superannuation expense This amount was also included in the revenue item “Liabilities assumed by the Treasurer”.

(o) Resources received free of charge or for nominal value

Resources received free of charge or for nominal value which can be reliably measured are recognised as revenues and as assets or expenses as appropriate at fair value.

(p) Site rehabilitation – Mt Walton

An amount of \$62 000 has been recognised as an expense in 2002 and credited to a Site Rehabilitation Provision account, established to provide for costs of rehabilitating the Mt Walton disposal site after the final intractable waste operation takes place in the future. This Provision will be added to each time a disposal operation occurs, ensuring the site will be restored appropriately.

(q) Comparative figures

Comparative figures are, where appropriate, reclassified so as to be comparable with the figures presented in the current financial year.

(r) Rounding

Amounts in the financial statements have been rounded to the nearest thousand dollars, or in certain cases, to the nearest dollar.

3 Outputs of the Department

Information about the department's outputs and, the expenses and revenues which are reliably attributable to those outputs is set out in the Output Schedule. Information about expenses and revenues, assets and liabilities administered by the department are given in notes 34 And 35.

The five key outputs of the department:

Output 1: Policy, Education and Advice

Coordinate the development and analysis of environmental policy, ensure its effective implementation, manage the Environmental Protection Authority's (EPA) formulation of statutory Environmental Protection Policies, coordinate State of the Environment reporting and provide sound, accurate and timely information about the environment to the community to promote positive environmental behaviours. To provide advice in response to enquires about rights, responsibilities and issues in relation to the environment from other government agencies, Parliamentary members, industry and the community.

Output 2: Environment Impact Services

Management of the environmental impact assessment process for the Environmental Protection Authority (EPA) and enforcement of conditions for the Minister, enabling sound environmental advice on development proposals and planning schemes/amendments to be provided to the government, developers and the public, to ensure the environment is protected for the community.

Output 3: Pollution Regulation

The development and enhancement of legislation systems, processes and policies, to ensure that discharges into the environment are minimised, and pollution of the environment is prevented or abated, and that contaminated sites are identified and managed. The

administration of the provisions of Part V of the *Environmental Protection Act* through issuing regulatory instruments and taking enforcement actions to ensure achievement of environmental objectives and compliance with regulatory standards. The provision of services to regional Western Australia in relation to policy, technical advice, liaison with key stakeholders and assessment of proposals.

Output 4: Waste Management

To develop a waste management strategy based on resource recovery and product stewardship and to facilitate and regulate to ensure its implementation in order to reduce the amount of waste produced its impact on the environment and public health, through the application of the waste management hierarchy (ie. reduce, recycle, safe disposal).

Output 5: Environment Systems

Plan and implement projects aimed at increasing our knowledge and understanding of environmental systems under threat of pressure and apply this knowledge to the development of environmental quality objectives, strategies and policies to improve the management and protection of the environment by government, industry and the community.

	2002	2001
	\$000	\$000
4 Employee expenses		
Wages and salaries	11,884	13,275
Change in employee entitlements	168	(219)
Superannuation	1,130	978
	<u>13,182</u>	<u>14,034</u>
5 Supplies and services		
Services and contracts	7,108	6,860
Other	739	1,454
	<u>7,847</u>	<u>8,314</u>
6 Depreciation expense		
Furniture and equipment	499	468
Computer hardware and software development	341	376
	<u>840</u>	<u>844</u>

	2002	2001
	\$000	\$000
7 Administration expenses		
Other staffing costs	804	590
Communications	399	389
Consumables	829	608
Maintenance of assets	109	167
	2,141	1,754

8 Accommodation expenses

Other expenses	15	55
Lease rentals	2,638	2,710
	2,653	2,765

9 Grants and subsidies

Expenses incurred during the year	5,180	3,988
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The increase is mainly due to the Mt Walton waste disposal operation and additional grants provided by the Waste Management and Recycling Trust Fund.

10 Capital user charge

876	-
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A capital user charge rate of 8 has been set by the Government for 2002 and represents the opportunity cost of capital invested in the net assets of the Department used in the provision of outputs. The charge is calculated on the net assets adjusted to take account of exempt assets. Payments are made to the Department of Treasury and Finance on a quarterly basis.

11 Doubtful debts

Wastetrack collection	205	-
Loan receivable – Waste Control Pty Ltd	-	100
	205	100

12 Other revenues from ordinary activities

Departmental revenue	157	530
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	2002	2001
	\$000	\$000
13 User charges and industry contributions		
Paid into trusts	9,601	8,804
Other restricted cash assets – Waste Management (WA)	945	67
	10,546	8,871

The increase is mainly due to contributions for funding of the Mt Walton waste disposal operation.

14 Net profit/(losses) on disposal of non-current assets

Profit on sale of non-current assets

– Computing hardware and software development	1	8
– Air monitoring equipment	-	58
– Noise pollution	3	-
	4	66

Losses on sale of non-current assets

– Computing hardware and software development	-	(1)
– Air monitoring equipment	(2)	(7)
– Furniture and equipment	(8)	(8)
	(10)	(16)

Net profit/(loss)	(6)	50
Gross proceeds on disposal of asset	5	108

15 Revenues (to)/from Government

Appropriation revenue received during the year:

Output appropriations ^(a)	26,453	21,011
Capital appropriations ^(b)	-	800
	26,453	21,811

The following liabilities have been assumed by the Treasurer during the financial year: ^(c)

– superannuation	147	978
Total liabilities assumed by the Treasurer	147	978

Prior to 1 July 2001, the unfunded liability in respect of the superannuation schemes was assumed by the Treasurer.

	2002	2001
	\$000	\$000
The following assets have been assumed from/(transferred to) other government agencies during the financial year: ^(d)		
– land	(815)	-
Total assets assumed / (transferred)	(815)	-
Resources received free of charge. ^(e) Determined on the basis of the following estimates provided by agencies:		
Office of the Auditor General	51	27
Department of Housing and Works	8	7
Department of Land Administration	566	3
Crown Solicitor's Office	75	92
	700	129
	26,485	22,918

- (a) Output appropriations are accrual amounts as from 1 July 2001, reflecting the full price paid for outputs purchased by the Government. The appropriation revenue comprises a cash component and a receivable (asset). The receivable (holding account) comprises the depreciation expense for the year and any agreed increase in leave liability during the year.
- (b) Capital appropriations were revenue in 2001 (year ended 30 June 2001). From 1 July 2001, capital appropriations, termed Capital Contributions, have been designated as contributions by owners and are credited straight to equity in the Statement of Financial Position.
- (c) Where a liability has been assumed by the Treasurer or other entity, the department recognises revenues equivalent to the amount of the liability assumed and an expense relating to the nature of the event or events that initially gave rise to the liability.
- (d) Where the non-reciprocal transfer of assets/liabilities is not a consequence of the restructuring of administrative arrangements, the transfer is disclosed here.
- (e) Where assets or services have been received free of charge or for nominal consideration, the department recognises revenues equivalent to the fair value of the assets and/or the fair value of those services that can be reliably determined and which would have been purchased if not donated, and those fair values shall be recognised as assets or expenses, as applicable.
- (f) The transfers referred to in (c) to (e) above cannot be treated as contributions by owners (equity) as no formal designation has been made and the other requirements specified in UIG 38(7) have not been met.

	2002	2001
	\$000	\$000
19 Other assets		
Current		
Inventory – AirWatch kits	15	35
	<u>15</u>	<u>35</u>
20 Property, plant and equipment		
Land		
At cost	440	815
Waste disposal site (at valuation)	15	15
	<u>455</u>	<u>830</u>
Furniture and equipment		
At cost and valuation	5,161	5,024
Accumulated depreciation	(3,807)	(3,346)
	<u>1,354</u>	<u>1,678</u>
Computer hardware and software development		
At cost	2,773	2,741
Accumulated depreciation	(2,231)	(1,987)
	<u>542</u>	<u>744</u>
Information system		
At cost	184	184
Accumulated depreciation	(184)	(184)
	<u>-</u>	<u>-</u>
	<u>2,351</u>	<u>3,252</u>

Reconciliations

Reconciliations of the carrying amounts of property, plant and equipment at the beginning and end of the current financial year are set out below.

	Land	Furniture & Equipment	Computer Equipment	Information System	Total
2002	\$000	\$000	\$000	\$000	\$000
Carrying amount at start of year	830	1,678	744	-	3,252
Additions	440	187	138	-	765
Disposal	(815)	(12)	1	-	(826)
Revaluation increments	-	-	-	-	-
Depreciation	-	(499)	(341)	-	(840)
Carrying amount at end of year	<u>455</u>	<u>1,354</u>	<u>542</u>	<u>-</u>	<u>2,351</u>

	2002	2001
	\$000	\$000

21 Payables

Trade payables	2,287	1,553
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Includes recycling rebate for the month of June 2002 of \$1,162,613.

22 Other liabilities

Accrued salaries	462	275
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Accrued salaries includes severance payments amounting to \$193,073.

Payments were made on the first pay week of 2003.

23 Provisions

Current

Annual leave	827	687
Long service leave	1,092	702
	<u>1,919</u>	<u>1,389</u>

Non-current

Long service leave	539	901
Site rehabilitation – Mt Walton (refer to note 2(p))	162	100
	<u>701</u>	<u>1,001</u>

Employee Entitlements

The aggregate employee entitlement liability recognised and included in the financial statements is as follows:

Provision for employee entitlements:

Current	1,919	1,389
Non-current	539	901
	<u>2,458</u>	<u>2,290</u>

24 Equity

Equity represents the residual interest in the net assets of the Department. The Government holds the equity interest in the department on behalf of the community. The asset revaluation reserve represents that portion of equity resulting from the revaluation of non-current assets.

Contributed equity

Opening balance	-	-
Capital contributions ^(a)	800	-
Closing balance	<u>800</u>	<u>-</u>

	2002	2001
	\$000	\$000
(a) From July 1 2001, capital appropriations, termed Capital Contributions, have been designated as contributions by owners and are credited straight to equity in the Statement of Financial Position.		
Reserves		
Asset revaluation reserve: ^(b)		
Opening balance	15	-
Net revaluation increments/(decrements):		
Land	-	15
Closing balance	15	15

(b) The asset revaluation reserve is used to record increments and decrements on the revaluation of non-current assets, as described in accounting policy note 2(h).

Accumulated surplus/(deficiency)		
Opening balance	9,862	9,292
Change in net assets	4,258	570
Closing balance	14,120	9,877
Total equity	14,935	9,877

25 Notes to the statement of cash flows

(a) Reconciliation of cash

Cash at the end of the financial year as shown in the Statement of Cash Flows is reconciled to the related items in the Statement of Financial Position as follows:

Cash assets	5,057	1,233
Restricted cash assets (refer to note 16)	9,822	7,983
	14,879	9,216

(b) Non-cash financing and investing activities

During the financial year, there were no assets/liabilities transferred/assumed from other government agencies not reflected in the Statement of Cash Flows.

(c) Reconciliation of net cost of services to net cash flows provided by/(used in) operating activities

	2002	2001
	\$000	\$000
Net cost of services	(22,227)	(22,348)
Non-cash items:		
Depreciation expense	840	844
Doubtful debt expense	205	100
Superannuation expense	147	978
Resources received free of charge	700	129
(Profit)/loss on sale of property, plant and equipment	6	(50)
(Increase)/decrease in assets:		
Current receivables	(287)	152
Other current assets	20	(7)
Increase/(decrease) in liabilities:		
Current payables	734	(1,823)
Current provisions	530	(280)
Other current liabilities	187	(39)
Non-current provisions	(300)	160
Change in GST in receivables/payables	(165)	(63)
Net cash provided by/(used in) operating activities	<u>(19,610)</u>	<u>(22,247)</u>

26 Commitments for expenditure

Non-cancellable operating lease commitments

Commitments in relation to leases contracted for at the reporting date but not recognised as liabilities are payable:

Within 1 year	1,836	2,527
Later than 1 year and not later than 5 years	5,700	7,451
Later than 5 years	-	989
	<u>7,536</u>	<u>10,967</u>

27 Contingent liabilities

There were no contingent liabilities that would materially affect the department.

28 Events occurring after reporting date

There were no events after balance that would materially affect the financial statements or disclosures.

29 Explanatory Statement

The Summary of Consolidated Fund Appropriations and Revenue Estimates discloses appropriations and other statutes expenditure estimates, the actual expenditures made and revenue estimates and payments into the Consolidated Fund, all on an accrual basis.

The following explanations are provided in accordance with Treasurer's Instruction 945. Significant variations are considered to be those greater than 10%.

(i) Significant variances between estimate and actual - Total appropriation to purchase outputs:

Although there was no significant variance in the total appropriation, there were significant offsetting variances in the following output expenditures.

	2002 Estimate \$000	2002 Actual \$000	Variance \$000
Waste Management	13,066	11,737	(1,329)

The variation is mainly attributable to a smaller than anticipated waste disposal operation at Mt Walton. The budget estimate for the operation was \$2.40m whilst the actual cost was \$1.00m, due to lower than expected volumes of waste.

Environmental Systems	6,017	4,378	(1,639)
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The variation is primarily attributable to under expenditure of \$0.45m against the Air Quality Management Plan and \$0.30m against the North West Shelf Marine Study. The under expenditure is due to delays in awarding the contracts associated with the projects. There was also lower than anticipated expenditure against the Air Toxics Trust due to a reduction in the amount of revenue.

Finally, changes to the manner in which the department apportions its corporate overhead, have resulted in a variation of \$0.63m between the estimate and the actual.

(ii) Significant variances between actual and prior year actual - Total appropriation to purchase outputs:

	2002 \$000	2001 \$000	Variance \$000
Net amount of appropriation provided to purchase outputs for the year	26,453	21,011	5,442
Retained Revenue - Section 23A Financial Administration and Audit Act	10,697	9,451	1,246

Net amount of appropriation provided to purchase outputs for the year

The increase in the appropriation for 2002 is primarily attributable to the receipt of additional funding for the implementation of the Air Quality Management Plan (\$1.43m), Waste Control Fire Clean Up (\$2.70m), and the adjustment for the accrual appropriation of \$3.07m. The

additional funds received were offset by reductions in the appropriation due to the completion of the Morangup project, and adjustments for the Priority and Assurance Dividend and travel and consultancy savings.

Retained revenue

The increase in retained revenue is primarily attributable to the receipt of additional revenue from the Waste Track program resulting from additional billing cycles conducted during the course of the year.

Output Expenditure

	2002	2001	Variance
	\$000	\$000	\$000
Policy, Education and Advice	5,065	3,878	1,187
Environmental Impact Services	5,570	4,879	691
Pollution Regulation	6,174	7,611	(1,437)
Waste Management	11,737	10,743	994

Policy, Education and Advice

The variation is mainly attributable to the additional expenditure associated with the Keep Australia Beautiful Council (\$0.19m), additional environmental advice to agencies (\$0.30m) and the allocation of corporate overheads which now include a share of the new Capital User Charge.

Environmental Impact Services

The variation is mainly attributable to a reallocation of funds from other outputs associated with referrals and scientific and technical advice and the allocation of corporate overheads which now include a share of the new Capital User Charge.

Pollution Regulation

The variation is primarily due to 2001 containing significant additional funding associated with the clean up of the Waste Control Fire site.

Waste Management

The variation is largely attributable to the fact that the 2002 year contained a waste disposal operation at Mt Walton. Also contributing is the allocation of corporate overheads, which now include a share of the new Capital User Charge.

(iii) Significant variances between estimate and actual – Capital Contribution:

No Significant variance.

(iv) Significant variances between actual and prior year actual – Capital Contribution:

	2002 \$000	2001 \$000	Variance \$000
Capital Contribution provided for capital services	765	1,397	(632)

The variation is mainly attributable to 2001 containing significant carryovers to fund, in the main, replacement of Air Quality Monitoring equipment.

(v) Significant variances between estimate and actual, and actual and prior year actual – Total administered appropriations:

No administered appropriations.

(vi) Significant variances between estimate and actual, and actual and prior year actual – Administered revenues:

	2002 Estimate \$000	2002 Actual \$000	2002 Variance \$000	2001 Actual \$000	Actual \$000	Variance \$000
	5,811	5,128	(683)	5,128	4,846	(282)

The variation is primarily due to the estimate containing a provision for accelerated increases in pollution licence fees, which was subsequently reviewed, resulting in a smaller than anticipated level of fee increases.

30 Financial Instruments

(a) Interest Rate Risk Exposure

The following table details the department's exposure to interest rate risk as at the reporting date:

	Weighted average effective interest rate	Variable interest rate	Fixed interest rate maturities			Non-interest bearing	Total
			Less than 1 year	1 to 5 years	More than 5 years		
2002	%	\$000	\$000	\$000	\$000	\$000	\$000
Financial Assets							
Cash assets	-	-	-	-	-	5,057	5,057
Restricted cash assets	4.7	9,822	-	-	-	-	9,822
Receivables	-	-	-	-	-	1,839	1,839
		9,822	-	-	-	6,896	16,718
Financial Liabilities							
Payables		-	-	-	-	2,287	2,287
Other liabilities		-	-	-	-	462	462
		-	-	-	-	2,749	2,749
2001							
Financial assets	6.1	6,329	-	-	-	4,479	10,808
Financial liabilities		-	-	-	-	4,218	4,218

(b) Credit Risk Exposure

All financial assets are unsecured.

(c) Net Fair Values

The carrying amount of financial assets and financial liabilities recorded in the financial statements are not materially different from their fair values, determined in accordance with the accounting policies disclosed in note 2 to the financial statements.

(d) Government agencies

Amounts owing by other government agencies are guaranteed are therefore no credit risk exists in respect of those amounts. In respect of other financial assets, the carrying amounts represent the department's maximum exposure to credit risk in relation to those assets.

The following is an analysis of amounts owing by other government agencies:

	2002	2001
	\$000	\$000
Government agencies of other jurisdictions	13	47
Local Government agencies	1,100	687
Commonwealth Government – ATO (GST)	228	63
	<u>1,341</u>	<u>797</u>

31 Remuneration of Senior Officers*Remuneration*

The number of senior officers, whose total of fees, salaries, superannuation and other benefits for the financial year, fall within the following bands are:

\$	2002	2001
20,001 – 30,000	1	-
40,001 – 50,000	-	1
90,001 – 100,000	1	-
100,001 – 110,000	0	5
110,001 – 120,000	1	2
120,001 – 130,000	3	-
130,001 – 140,000	1	-
140,001 – 150,000	-	1

The total remuneration of senior officers is:

734

970

The superannuation included here represents the superannuation expense incurred by the Department in respect of senior officers.

No senior officers are members of the Pension Scheme. Redundancy payments paid or became payable for the financial year amounted to \$266,661 (2001 - \$206,634).

The decrease in remuneration is due to the abolition of two positions as a result of a restructure of the department.

32 Affiliated bodies

The Environmental Protection Authority (EPA) is a government affiliated body in that it received financial support from the department. The EPA is not subject to operational control by the department.

	2002	2001
	\$000	\$000
<i>Recurrent</i>		
Employee expenses	390	384
Other staff costs	41	31
Communications	4	4
Supplies and services	179	154
Consumables	9	3
Other	2	8
	625	584

33 Supplementary information

Write-offs

Under the authority below, ratification was given to a prior period adjustment to the department's asset register, to correct the treatment of certain fully depreciated items, previously traded in.

	2002	2001
	\$000	\$000
The Accountable Officer	-	-
The Minister	-	-
The Governor	-	165
	-	165
<i>Losses through theft, defaults and other causes</i>		
Losses of public monies and public and other property through theft or default	-	6
Amount recovered	-	(6)
	-	-

	2002	2001
	\$000	\$000
<i>Gifts of public property</i>		
Gifts of public property provided by the department	-	-

34 Administered expenses and revenues

Expenses

Revenue paid to Treasury	4,970	4,846
Total administered expenses	4,970	4,846

Revenues

Waste licences	732	400
Pollution licences and permits	4,396	4,446
Total administered revenues	5,128	4,846

35 Administered assets and liabilities

Assets

Receivables	209	-
Total administered assets	209	-

Liabilities

Payables	51	-
Total administered liabilities	51	-

Previously, administered transaction were account for using the cash basis of accounting. Administered transactions are now recognised using the accrual basis of accounting.

NOTES TO THE FINANCIAL STATEMENTS

for the year ended 30 June 2002

Explanatory Statement

The Summary of Consolidated Fund Appropriations and Revenue Estimates discloses appropriations and other statutes expenditure estimates, the actual expenditures made and revenue estimates and payments into the Consolidated Fund, all on an accrual basis.

The following explanations are provided in accordance with Treasurer's Instruction 945.

Significant variations are considered to be those greater than 10%.

(i) Significant variances between estimate and actual –

Total appropriation to purchase outputs:

Although there was no significant variance in the total appropriation, there were significant offsetting variances in the following output expenditures.

	2002 Estimate \$000	2002 Actual \$000	Variance \$000
Waste Management	13 066	11 737	(1 329)

The variation is mainly attributable to a smaller than anticipated waste disposal operation at Mt Walton.

The budget estimate for the operation was \$2.40m whilst the actual cost was \$1.00m, due to lower than expected volumes of waste.

Environmental Systems	6 017	4 378	(1 639)
-----------------------	-------	-------	---------

The variation is primarily attributable to under expenditure of \$0.45m against the Air Quality Management Plan and \$0.30m against the North West Shelf Marine Study. The under expenditure is due to delays in awarding the contracts associated with the projects. There was also lower than anticipated expenditure against the Air Toxics Trust due to a reduction in the amount of revenue.

Finally, changes to the manner in which the department apportions its corporate overhead, have resulted in a variation of \$0.63m between the estimate and the actual.

(ii) Significant variances between actual and prior year actual –

Total appropriation to purchase outputs:

	2002 \$000	2001 \$000	Variance \$000
Net amount of appropriation provided to purchase outputs for the year	26 453	21 011	5 442
Retained Revenue – Section 23A Financial Administration and Audit Act	10 697	9 451	1 246

Net amount of appropriation provided to purchase outputs for the year

The increase in the appropriation for 2002 is primarily attributable to the receipt of additional funding for the implementation of the Air Quality Management Plan (\$1.43m), Waste Control Fire Clean Up (\$2.70m), and the adjustment for the accrual appropriation of \$3.07m. The additional funds received were offset by reductions in the appropriation due to the completion of the Morangup project, and adjustments for the Priority and Assurance Dividend and travel and consultancy savings.

Retained revenue

The increase in retained revenue is primarily attributable to the receipt of additional revenue from the Waste Track program resulting from additional billing cycles conducted during the course of the year.

Output Expenditure


SUPERSEDED?

Policy, Education and Advice**Environmental Impact Services****Pollution Regulation****Waste Management**

2002 \$000	2001 \$000	Variance \$000
5 065	3 878	1 187
5 570	4 879	691
6 174	7 611	(1 437)
11 737	10 743	994

Policy, Education and Advice

The variation is mainly attributable to the additional expenditure associated with the Keep Australia Beautiful Council (\$0.19m), additional environmental advice to agencies (\$0.30m) and the allocation of corporate overheads which now include a share of the new Capital User Charge.

Environmental Impact Services

The variation is mainly attributable to a reallocation of funds from other outputs associated with referrals and scientific and technical advice and the allocation of corporate overheads which now include a share of the new Capital User Charge.

Pollution Regulation

The variation is primarily due to 2001 containing significant additional funding associated with the clean up of the Waste Control Fire site.

Waste Management

The variation is largely attributable to the fact that the 2002 year contained a waste disposal operation at Mt Walton. Also contributing is the allocation of corporate overheads, which now include a share of the new Capital User Charge.

(iii) Significant variances between estimate and actual – Capital Contribution:

No Significant variance.

(iv) Significant variances between actual and prior year actual – Capital Contribution:

	2002 \$000	2001 \$000	Variance \$000
Capital Contribution provided for capital services	765	1 397	(632)

The variation is mainly attributable to 2001 containing significant carryovers to fund, in the main, replacement of Air Quality Monitoring equipment.

(v) Significant variances between estimate and actual, and actual and prior year actual –

Total administered appropriations:

No administered appropriations.

(vi) Significant variances between estimate and actual, and actual and prior year actual –

Administered revenues:

2002 Estimate \$000	2002 Actual \$000	Variance \$000	2002 Actual \$000	2001 Actual \$000	Variance \$000
5 811	5 128	(683)	5 128	4 846	(282)

The variation is primarily due to the estimate containing a provision for accelerated increases in pollution licence fees, which was subsequently reviewed, resulting in a smaller than anticipated level of fee increases.



Appendix A – Regional Office details

SWAN GOLDFIELDS AGRICULTURAL REGION

7 Ellam Street
VICTORIA PARK WA 6100

Telephone (08) 6250 8000
Facsimile (08) 6250 8050

Northam office

254 Fitzgerald Street
NORTHAM WA 6401
(PO Box 497, Northam WA 6401)

Telephone (08) 9622 7055
Facsimile (08) 9622 7155

KWINANA PEEL REGION

165 Gilmore Avenue
KWINANA WA 6167
(PO Box 454, Kwinana WA 6167)

Telephone (08) 9419 5500
Facsimile (08) 9419 5897

Mandurah office

Suite 8, Sholl House,
21 Sholl Street
MANDURAH WA 6210
(PO Box 332, Mandurah WA 6210)

Telephone (08) 9535 3411
Facsimile (08) 9581 4560

Cockburn Sound Management Council

Shop 1, 15 Railway Parade
ROCKINGHAM WA 6168
(PO Box 5161, Rockingham Beach WA 6969)

Telephone (08) 9591 3837
Facsimile (08) 9528 5387

SOUTH WEST REGION

Unit 2, Leschenault Quays,
Austral Parade
BUNBURY WA 6230
(PO Box 261, Bunbury WA 6231)

Telephone (08) 9721 0666
Facsimile (08) 9721 0600

Manjimup office

52 Bath Street
MANJIMUP WA 6258

Telephone (08) 9771 1878
Facsimile (08) 9771 8108

MID WEST GASCOYNE REGION

25 Forrest Street
GERALDTON WA 6530
(PO Box 73, Geraldton WA 6531)

Telephone (08) 9964 5978
Facsimile (08) 9964 5983

Carnarvon office

82 Olivia Terrace
CARNARVON WA 6701

Telephone (08) 9941 4921
Facsimile (08) 9941 4931

NORTH WEST REGION

Lot 980 Cherratta Road, KIE
KARRATHA WA 6714
(PO Box 836 Karratha WA 6714)

Telephone (08) 9144 2000
Facsimile (08) 9144 2610

Kununurra office

Lot 225 Bandicoot Drive
KUNUNURRA WA 6743
(PO Box 625 Kununurra WA 6743)

Telephone (08) 9168 1082
Facsimile (08) 9168 3174

SOUTH COAST REGION

5 Bevan Street
ALBANY WA 6330
(PO Box 525 Albany WA 6331)

Telephone (08) 9842 5760
Facsimile (08) 9842 1204

Denmark office

Suite 1, 55 Strickland Street
DENMARK WA 6333

Telephone (08) 9848 1866
Facsimile (08) 9848 1733

