Primary Industries and Resources South Australia

ANNUAL REPORT
2000 – 01
Dear Ministers,

I am pleased to present to you the PIRSA annual report for the year ended 30 June 2001. The report has been prepared under section 66 of the Public Sector Management Act 1995 and is in accordance with the Act’s accompanying regulations as well as the financial reporting requirements of the Public Finance and Audit Act 1987.

Dennis Mutton
Chief Executive
Primary Industries and Resources South Australia

28 September 2001
Chief Executive’s overview

I am pleased to provide you with Primary Industries and Resources South Australia’s (PIRSA) annual report for the 2000–01 financial year.

PIRSA is one of eleven principal agencies of the South Australian Government and is committed to sustainable management and development of the primary and resources sectors. As a government agency with primary responsibility for the care and utilisation of the State’s natural resources, PIRSA has the responsibility to ‘lead by example’ and demonstrate that its own operations, products and services are also managed in a sustainable way.

PIRSA released a new strategic plan in early 2001 that highlights the shift in emphasis to issues relating to sustainability.

To capture this approach as part of a management framework the agency has adopted triple bottom line reporting which considers the economic, environmental and social impacts of the way we do business and the goods and services produced.

In undertaking our work, staff of the agency aim to ensure that management and development decisions will realise positive economic, environmental and social outcomes through the policy advice and services we deliver in the development of the food, fibre, resources and energy industries in South Australia.

On one hand these sectors contribute to over half the State’s total exports. On the other, these sectors face some quite significant sustainability challenges.

To make a difference PIRSA works in partnership with industry, the community and other government agencies to provide integrated services in industry development, natural resource management and policy advice and support.

During the past several years community attitudes have reflected a growing concern with environmental issues and within this context it is essential that planning, management and decision making processes incorporate these broader community expectations.

Last year, South Australia faced one of the biggest locust outbreaks in the history of this State. A coordinated and multi-pronged program involving the farming community, as well as local and Federal Governments meant the control program was very successful in preventing the movement of major swarms into sensitive agricultural, horticultural and urban areas. This successful control effort was achieved under strict environmental and management criteria. Thus, in spite of this large locust plague, both the grains and grape industries achieved record harvests.

Agricultural sustainability is also increasingly important within the global context where international markets demand ecologically sound practices as well as safe produce. The provision of information on policy and investment aims to support sound primary production industries delivering safe products and a sustainable future for South Australians. The demands on the mineral and petroleum sector are no less exacting in relation to land use practices and environmental management.

Achievements in this area over the past year include:

- Continuation of the upgrade of the Loxton Irrigation district and work on establishing the Loxton Irrigation Trust, a $36 million project over four years.
- A pilot project in the South East utilising geographic information to allow better planning and use of land and water in the region.
- The formation of Outback SA, an inter-agency program encompassing the community as well as local service groups to coordinate delivery and infrastructure development in the Outback.
- The development of industry standards through improved licensing for each aquaculture sector has taken place after extensive consultation with industry, and with the emphasis on sustainable management practices and environmental standards.
Significant and long-term benefits have been made possible by the development of the National Action Plan to tackle water quality and salinity. This joint federal and State initiative involves a regional commitment to programs which ensure the productive and sustainable use of land and water resources across the State. In parallel with this PIRSA, in conjunction with the Soil Conservation Council, developed a Dryland Salinity Strategy for South Australia.

The deregulation of the dairy industry resulted in the formation of the South Australian Dairy Network Project with its objective of accelerating the adoption of new technology within the industry. Additionally, the newly formed Dairy Industry Development Board is developing a plan to give direction to a rapidly changing industry. Funding has been provided to assist the board develop a ten year plan. A challenging target to increase the State’s milk production to 1 billion litres per year has been proposed. This increase would enable cheese production to double and open new export opportunities for high value export products such as speciality cheeses and dairy food ingredients.

The South Australian Research and Development Institute (SARDI) continued its excellent work in the research areas of aquatic sciences, crops, horticulture and livestock systems. Research and development services are provided to agribusinesses, commercial enterprises, manufacturing and processing industries, natural resource conservation agencies, rural industry development corporations and State Government agencies.

During the year agreements were signed with three international companies to commercialise SARDI technology. New reproductive technology was applied to Matilda, Australia’s first cloned merino sheep, which resulted in surrogate ewes producing three lambs. SARDI was also successful in a proposal to establish the Cooperative Research Centre for Sustainable Finfish Aquaculture (Aquafin).

Food for the Future, a joint initiative with the Department of Industry and Trade, updated the State Food Plan after extensive consultation with food industry representatives. The updated plan is due for release along with an implementation program, later in the year. Also due for release is the website Food Online, which has been updated with a particular focus on the business needs of the food industry. The website will have the capacity to host food associations and individual food enterprises thereby providing a low-risk environment for smaller companies to adopt new technology.

Other significant partnerships in the rural sector achieved successful outcomes. In conjunction with Adelaide University, the Roseworthy Information Centre was completed in November. This is a hub for assembling and distributing a wide range of information to rural and agricultural communities.

Further afield, FarmBis, a federal and State funded program providing financial support to assist primary producers improve their business management skills, continued its excellent work throughout the State’s rural communities. FarmBis, in conjunction with PIRSA Rural Solutions consultants, have established strong networks with local communities and farmer-based group leaders.

The State’s resources sector now have an industry development board created to promote growth in this sector. Major achievements in this area include a number of airborne geophysical surveys, detailed mapping and successfully completed drilling projects. Additionally, the South Australian Resources Geoserver (SARIG) is now online providing local and international explorers with the opportunity to do business from anywhere in the world, as well as review the vast amount of geoscientific information relating to mineral exploration in South Australia.

Over $16 billion worth of petroleum has been produced from the Cooper and Otway Basins and this has provided royalties to the State of over $1 billion. A further $10 billion in proved and probable reserves are known and significant progress was made this year in negotiating native title agreements to allow the issue of new petroleum exploration licences in the Cooper Basin.

Energy SA was established in May 2001 to reflect the expanded effort to coordinate the development and implementation of policies and support for the competitive, sustainable, safe and reliable supply and use of energy for the benefit of South Australians. Significant effort is being put into programs to assist private investment and development of sustainable energy production with an initial focus power from wind and biomass. Two websites, Energy SA and Sustainable Energy SA, were developed to provide information and advice.
In conclusion, I would like to acknowledge the efforts of PIRSA staff. The achievements outlined in this report would not have been possible without the dedication and commitment from the skilled staff of this agency. PIRSA staff located right across South Australia have demonstrated an extremely high capacity and willingness to deliver services to industry and the community, sometimes under difficult circumstances.

I very much appreciate their support and that of their families in achieving very significant outcomes during 2000–01.

Dennis Mutton
Chief Executive
Primary Industries and Resources South Australia
Part one

Primary Industries and Resources South Australia
PIRSA ANNUAL REPORT 2000–01

Highlights

PIRSA highlights for 2000–01 are provided below, together with a page reference to their further discussion.

Food for the Future

• The Premier’s Food for the Future Council endorsed an updated State Food Plan 2001–2004 to accelerate the growth of the food industry. (p. 22)
• A whole-of-government State Food Program 2001–2004 was prepared to address the industry development priorities. (p. 22)
• A whole-of-government account management process was endorsed by Cabinet to provide a seamless government service for significant food industry development demand chain projects. (pp. 22–23)
• Food for the Future staff are assisting Supermarket to Asia build and stock an Australian pavilion in a Singapore supermarket. (p. 23)
• The first South Australian Food Online e-group forum was launched. (p. 24)

Food and fibre

Agricultural industries

• The Better Breeding project has influenced how 50% of wool producers now view their wool breeding programs. (p. 27)
• The SA Dairy Network was established to accelerate adoption of new technology and business skills. (p. 27)
• PIRSA led and coordinated a successful control campaign against one of the biggest locust outbreaks ever recorded in the history of the State, averting major crop damage. (pp. 27–28)
• Audits of South Australian meat processing businesses have verified that industry is operating in accordance with Australian Standards, with a reduction in non-conformance rates. (p. 32)
• The Roseworthy Information Centre was opened in November 2000. (p. 36)

Fisheries

• An issues paper on the National Competition Policy review of the Fisheries Act 1982 was released. (p. 38)
• The review of the recreational fishery was completed and the Recreational fishing guide updated and distributed. (p. 38)
• Formal risk management approaches to compliance planning processes were introduced. (p. 38)
• A memorandum of understanding for marine safety services was signed with Transport SA. (p. 38)
• The number of trained regional FISHCARE Volunteers increased by 15%. (p. 39)

Aquaculture

• The number of aquaculture authorisations and the gross value of aquaculture product exceeded that of the wild fisheries for the first time, demonstrating the increasing importance of the aquaculture industry to the State’s economic base. (pp. 41, 42)
• A review of aquaculture legislation was completed to provide a strong legislative framework for the future development and sustainability of the aquaculture industry. (p. 43)
• Together with the industry, Aquaculture SA developed and implemented new environmental monitoring requirements for all sectors, establishing a better ability to set and measure ecological performance standards. (p. 43)

Research and development

• SARDI was successful in a bid to establish the Cooperative Research Centre for Sustainable Finfish Aquaculture (Aquafin). (p. 45)
• Kukri, a prime hard quality wheat, is to be commercialised. (p. 45)
• Funding for apricot and plum breeding projects with China was approved. (p. 47)
• Manuals on oranges for overseas markets and the root disease accreditation course were published. (pp. 47, 55)
• New reproductive technology was applied to Australia’s first cloned sheep. (p. 48)
• The Livestock Systems Alliance was established. (p. 48)
Tests available through the root disease testing service have expanded. (p. 50)
Australia’s first oat doubled haploid population was produced. (p. 50)
Major new developments occurred in aquatic environment and ecology. (pp. 51, 56)
Agreements were signed between international companies to commercialise technology. (p. 57)

**Sustainable resources**

- Comprehensive soil and landscape information for agricultural areas was completed and is publicly available. (p. 59)
- Private investor involvement in trials of new low-rainfall perennial biomass energy crops was facilitated. (p. 59)
- Funding of $2.7 million was secured for eradication of branched broomrape. (p. 59–60)
- The consultation phase for the draft Integrated Natural Resource Management Bill was conducted. (pp. 60–61)
- PIRSA liaised with the Government, business, media, regional bodies and the community in preparation for the celebration of ‘100 years of food and fibre since Federation’. (p. 62)
- Stage 2 of ‘Loxton irrigation rehabilitation’ project and ‘Lower Murray Swamps rehabilitation’ was progressed. (p. 63)
- The Eyre Peninsula, Riverland and Murray Mallee Rural Partnership programs were completed. (p. 64)
- PIRSA has taken responsibility for the Pastoral Management program and commenced initiation of Outback SA. (pp. 64–65)
- PIRSA’s rural chemical information product ‘inFINDER’® continued to be taken up by industry and other State Government agencies. (p. 65)

**Minerals and energy resources**

**Mineral resources**

- TEISA programs were refocussed to include drilling, and airborne surveys were completed over the northern Musgrave Block. (pp. 67, 74–75)
- The Resources Industry Development Board was established. (p. 67)
- Amendments to the Private Mine legislation were commenced and a draft issues paper for the Mining Act 1971 review developed. (p. 71)
- Online access was delivered to information and services relevant to mineral exploration and development and includes the ability to complete tenement application. (p. 74)

**Petroleum**

- Four pipeline projects to bring gas into South Australia from southeastern and northern Australia have been proposed. (p. 79)
- Applications have been received for five geothermal energy licences (resulting in up to $135 million of new exploration expenditure) and 12 petroleum exploration licences targeting coal seam methane. (p. 79)
- The 1 billionth dollar of royalty from petroleum production was collected in late 2000 and royalties receipts were above budget forecasts. (p. 81)
- Royalty audits during the year detected underpayments which have subsequently been collected. (p. 81)
- The Petroleum Act 2000 was proclaimed in September 2000 and was successfully implemented. (p. 82)
- An innovative CD to highlight petroleum acreage investment opportunities existing in South Australia was produced. (p. 86)

**Energy policy**

- Energy SA was established, encompassing the functions of the Office of Energy Policy and providing the Government focus for sustainable energy policy development and program implementation. (p. 90)
- Additional funding of $1.29 million was secured for an enhanced sustainable energy program, including a rebate program for solar hot water systems. (pp. 93, 94)
- Energy SA and Sustainable Energy websites were developed to provide improved energy advisory and information services to business and the general community. (pp. 93, 95)
Agency support

- Two e-business systems were established improving agricultural (seeds) and mineral resources services. (p. 99)
- e-commerce capability was developed during the year to support new online applications in PIRSA’s business groups. (p. 99)
- A new framework for managing people — including recruitment and selection and performance development — using capabilities and behaviours, was developed. (pp. 100–101)
- The goods and services tax was successfully implemented. (p. 105)
The year ahead

Food for the Future

- Publicly launch the State Food Plan and Program 2001–2004 in October.
- Provide quarterly reports to the Premier’s Food for the Future Council on progress in implementing the whole-of-government State Food Program.
- Implement the new South Australia Food Online e-business capabilities in October.
- Extend the development of the Food Industry ScoreCard to include progress indicators and complete the regional ScoreCards.
- Work in partnership with regional development boards to conduct an ‘audit’ of regional food industry, in terms of the industry development priorities in the State Food Plan, and identify regional food industry development priorities to accelerate and sustain growth in their regions.
- Facilitate the development of a ‘whole-of-education, training and research and development’ audit and strategy against the industry development priorities in the State Food Plan.

Food and fibre

Agricultural industries

- Assist the Dairy Industry Development Board to facilitate development of a 10-year plan for the dairy industry in South Australia.
- Improve PIRSA’s disease surveillance, monitoring and investigation services and its emergency disease response capability through further recruitment of new skills.
- Minimise the impact of Mediterranean fruit fly incursions and review processes for control and management.
- Undertake succession planning and training of key staff, in both policy development and field operations, for maintenance and further improvement of PIRSA’s contribution to the State’s biosecurity and trading position in livestock products, and to public health and food safety programs.
- Continue to develop PIRSA’s activities in Food Safety in South Australia.
- Deliver comprehensive greenhouse modernisation training and industry skilling programs.
- Improve the financial viability of the Cropwatch service.

Fisheries

- Commence a full review of the Fisheries Act and develop a green paper.
- Implement the new Fisheries Prosecution Management System.
- Expand the use of the Vessel Monitoring System, build a new offshore fisheries patrol vessel and scope the introduction of electronic catch monitoring systems.
- Recruit, induct and train 15 additional fisheries compliance officers for regional deployment.
- Develop and implement arrangements with the Environmental Protection Agency for the monitoring of aquaculture activities across the State.
- Implement recognition and acceptance of ecologically sustainable development principles by fish farmers and the adoption of models for sustainability.
- Introduce EFTPOS facilities across the State for the payment of fisheries fees and services.

Aquaculture

- Finalise the implementation of a high-quality, integrated planning framework for the aquaculture industry, including legislation and policy development to ensure that the foundations for the sustainable development of the industry are strong.
- Establish efficient and effective aquaculture monitoring and reporting mechanisms against established standards.
- Complete five strategic aquaculture management plans for the State.
Research and development

- After a review, Aquatic Sciences will restructure the capture fisheries, giving fisheries research an ecosystems-based focus and establishing two new program areas: Great Australian Bight and Shelf Seas; and Gulf Waters, Estuaries and Inland Waters.
- Further integration and development will occur for the research capacity in fisheries, aquaculture and aquatic environment.
- Arrangements will be finalised for commercial and industry involvement in a range of crop research and development programs including; implementing a new company structure for barley programs and breeders; instigating new wheat breeding partnerships; the formation of a new company by Export Hay Producers to collect endpoint royalties; and the involvement of the private sector in the processing of samples.
- A joint horticulture venture will commence programs on controlling black dot of potatoes and managing western flower thrips, shiraz berry shrivel, field and postharvest control of snails, diseases of leeks, and the cool chain handling of cherries of export.
- Together with Adelaide University, the agency will host the Australasian Postharvest Conference held in Adelaide in September 2001.
- The Pastures Group will be involved in the new Cooperative Research Centre for Plant-Based Management of Dryland Salinity, which commences operations on 1 July 2001, providing 2.9 full-time staff to the program.
- The agency will establish a bio-science business incubator capability for plant and animal research outcomes
- Negotiations will continue in order to establish commercial linkages in plant science.

Sustainable resources

- State Flora Australia to develop further native plant species for their export market potential.
- Encourage private sector investment into new bio-energy options and other carbon sequestration initiatives that address greenhouse, natural resource management and economic issues.
- Begin consultation with the community on the use of the marine environment and develop marine protected areas as a joint initiative with the Department for Environment and Heritage.
- Prepare the Integrated Natural Resource Management Bill for consideration by Parliament and complete the first report on the condition of South Australian agricultural lands.
- Commence the final funding round for the current Natural Heritage Trust program. Begin negotiations with the Federal Government prior to implementation of Natural Heritage Trust Mark II, starting in 2002–03.
- Complete the 1993–2002 Mount Lofty Ranges Catchment program and the on-ground works investment initiative.
- Commence implementation of the National Action Plan for Salinity and Water Quality in Murray-Darling Basin, Mount Lofty Ranges, Northern Agricultural Districts and the South East.
- Release and implement the State Dryland Salinity Strategy.
- Initiate the new FarmBis Skilling Farmers for the Future program.
- Establish a pilot South East Regional Information Centre with local government, industries and agencies.
- Using the Natural Resources and Environmental Management System, commence a program to ensure access to, and availability of, integrated natural resource and environmental information to South Australian regions; provide Web access to extensive information on soil conservation and sustainable soil and revegetation management.

Minerals and energy resources

Mineral resources

- Complete all TEISA exploration initiative projects, including southern Musgrave Block airborne survey and Lake Harris aerial electromagnetic survey.
- The Resources Industry Development Board will develop priorities for land access issues, pre-competitive geoscience data acquisition and regional infrastructure.
- Identify and implement programs to stimulate mineral exploration activity in South Australia in line with the Resources Task Force recommendations of a target investment of $100 million per year by 2007.

Petroleum

- Review statements of environmental objectives for Otway Basin seismic, and Cooper Basin drilling, production and processing.
• Improve industry compliance with provisions of the Petroleum Act 2000, particularly relating to landholder/regulator notification and data/reports provision, through preparation and promotion of guidelines, direct communication and/or direction.
• Undertake appropriate amendments to the Petroleum Act to resolve a number of issues discovered during its implementation in 2000–01.
• Finalise Cooper Basin 1998, 1999 and 2000 native title agreements and issue respective exploration licences; commence right to negotiate process for all remaining exploration licence application areas.
• Promote exploration opportunities at international and national conferences.

Energy policy
• Continue to meet the contractual requirements of the Natural Gas Authority of South Australia.
• Improve and update systems and procedures to achieve a better efficiency in performing all functions that the Authority carries out.
• Continue to monitor security of supply for both gas and transport fuels, and implement procedures to manage available supplies to ensure that essential service providers continue to have access to gas and transport fuels for as long as possible following an interruption to supply.
• Improve and update systems and procedures to achieve a better efficiency in performing all emergency response functions (gas and petroleum products).
• Amend the Gas Pipelines Access (South Australia) Act 1997 to implement any changes agreed by relevant jurisdictional Ministers.
• Increase the number of installations of grid-connected and stand-alone renewable energy systems in South Australia through the delivery of Renewable Power Generation Rebates to the community.
• Implement the enhanced $1.29 million Sustainable and Renewable Energy Program.
• Fully implement the Government Energy Management Action Plan.
• Provide options to Government, including regulatory change, which will facilitate renewable energy.

Agency support
• Review organisational processes and business requirements to identify future opportunities for e-business developments.
• Implement PIRSA’s energy use action plan, revise agency targets and develop performance indicators.
• Implement new Employee Assistance Program to better respond to the health and well being of staff.
PIRSA’s role

Organisation

Minimal organisational change occurred during 1999–2000. Bio Innovation SA was established in March 2000, drawing on officers from a range of key agencies including PIRSA, and aims to accelerate the development of a commercial bioscience industry in South Australia. Restructuring occurred within Mineral Resources Group and two areas of PIRSA Corporate (Information Management and Corporate Finance) to achieve new outcomes in line with the new PIRSA strategic plan and to streamline efficiency.

Strategic context

VISION

• South Australia’s resources appreciated
• our people enthusiastic
• the future exciting.

BUSINESS

Optimising return on the State’s natural assets by:
• fostering sustainable management and development of the food, fibre, minerals and energy sectors
• facilitating global competitiveness and innovative solutions
• building partnerships between industry, the community and Government
• providing information and knowledge to help people make the right decisions for themselves
• regulating to preserve the benefits for future generations.

VALUES

PIRSA is an organisation that values people, commitment, integrity, empowerment and accountability, innovation, collaboration, customer service and achievement; these values drive the culture and style of the agency.

OUTCOMES

PIRSA will deliver these outcomes for South Australia:
1. growth and development of innovative and internationally competitive primary, resource and energy based industries in South Australia
2. ecologically sustainable development of the primary industries, resources and energy sectors
3. restored and enhanced productive landscapes and ecosystems
4. prosperous and self-reliant regional communities that confidently respond to change
5. PIRSA is a respected, credible and successful organisation.

STRATEGIC PRIORITIES

To realise outcomes 1–4, PIRSA will deliver programs and services with emphasis on the following strategic priorities:

• Industry development — provide support for industry and regional development that focuses on global market opportunities
• Innovation industry — promote and facilitate new and value-adding industry that builds on the States’ knowledge, infrastructure and innovation capability
• Risks and biological contaminant threats — successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access
• Integrated policy framework, regulation and compliance — create through consultation, effective policy and regulatory frameworks to enhance industry and community confidence
• Ecologically sustainable development — enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles
• Remedial actions — harness community and government resources to rehabilitate degraded systems and sites
• Building community capacity — build capacity, leadership and global awareness in industry, and rural and indigenous communities
• **Partnerships** — negotiate effective partnerships with industry, rural and indigenous communities, Federal Government and local government for regional and industry development
• **Access to information and services** — improve industry and regional access to information that supports better business decisions.

To realise outcome 5 PIRSA emphasises the following strategic priorities that describe the kind of organisation that it strives to be:

• **PIRSA is a great place to work** — we attract, develop and support our people; we provide a positive work culture
• **We manage results** — we manage our resources well; we provide leadership; our business processes are effective and efficient
• **We grow and harness our knowledge** — our knowledge is a key business asset
• **We build collaborative relationships with others** — our success depends on building and maintaining our relationships with clients, stakeholders and the community.

**OBJECTIVES**

PIRSA’s strategic plan is not prescriptive regarding Corporate goals and objectives because of the very diverse nature of the agency’s operations and responsibilities, and the difficulty of stating high level objectives that have any meaning for any single PIRSA group. Instead it seeks to provide everyone with a clear statement of priorities that are important to the Government, our Chief Executive and Executive, and the many staff and stakeholders who have been consulted during the planning.

The plan acknowledges that groups are in the best position to identify meaningful, practical objectives that will take PIRSA forward and towards delivering its outcomes. The PIRSA plan signals the agency’s priorities in both what is to be achieved and how those results are to be achieved. The latter describes the style and character of the organisation and the working relationships with stakeholders it wants to maintain or develop.

In the new plan there is a continuing emphasis on industry development in response to global market signals and opportunities, and the ongoing needs to ensure that the State's resources are not adversely impacted by those industries (acknowledging that mining and energy industries are extracting for community benefit, non-renewable resources). The scope of the plan continues coverage of simpler, integrated policy development, community development, response to emergencies, research and development and service delivery in its many forms.

**LINKS TO GOVERNMENT OBJECTIVES**

PIRSA’s strategic and operational planning processes ensure that the agency’s outcomes and outputs align with Government objectives. Whole-of-government ministerial outcomes define PIRSA’s strategic plan and in turn group strategic plans. Group strategic plans reflect the PIRSA strategic priorities and these define the programs and corresponding projects or services planned and executed by PIRSA groups.

The relationships between Government objectives, priority areas and initiatives, and PIRSA outcomes and outputs are illustrated in Figure 1. In addition, PIRSA collaborates extensively with other Government agencies as projects are increasingly cross-Government (for example Food for the Future).
GOVERNMENT OUTCOMES

- education and life-long learning
- employment and economic development
- regional communities
- culture, lifestyle and the environment
- health and communities
- justice and safety
- Government reform

PIRSA OUTCOMES, STRATEGIC PRIORITIES AND OUTPUTS

PIRSA OUTCOMES

- growth and development of innovative and internationally competitive primary, resource and energy based industries in South Australia
- ecologically sustainable development of the primary industries, resources and energy sectors
- restored and enhanced productive landscapes and ecosystems
- prosperous and self-reliant regional communities that confidently respond to change
- PIRSA is regarded as a respected, credible and successful organisation.

PIRSA STRATEGIC PRIORITIES

- industry development
- innovation industry
- risks and biological contaminant threats
- integrated policy framework, regulation and compliance
- ecologically sustainable development
- remedial actions
- building community capacity
- partnerships
- access to information and services
- PIRSA is a great place to work
- we manage results
- we grow and harness our knowledge
- we build collaborative relationships with others.

PIRSA OUTPUTS

- information services
  - data and information products and services
  - research and scientific services
- State resource regulation services
  - resource regulation planning services
  - licensing services
  - compliance services
  - incident response services
- coordination and advice
  - policy, advice and support services
  - legislation development and review services
- facilitation services
  - facilitation planning services
  - trade and market services
  - training and education services
  - portfolio program management services
  - natural resource based infrastructure project services.

MINISTERIAL* PRIORITY AREAS AND KEY INITIATIVES

- maximise the growth of the farmed seafood industry
- revitalise rural and regional communities in South Australia by a whole-of-government regional development strategy
- rehabilitate our natural resource and infrastructure assets
- oversee implementation of the State Food Plan and program
- accelerate the development of the South Australian bioscience industry through Bio Innovation SA
- build natural resource management capacity in the regions
- provide for ecologically sustainable development of the State's living marine resources
- implement the State Resources Plan
- ensure biosecurity of plant and animal industries
- ensure availability of renewable and sustainable energy sources in South Australia.

MAJOR INITIATIVES IN LINE WITH GOVERNMENT TARGETS

CROSS-GOVERNMENT PRIORITY AREAS

- responsible budgeting based on improved strategic planning
- more jobs through identifying opportunities and monitoring threats for strategic industries
- inter-government relations
- Government delivering to communities including early intervention services
- water and natural resource management
- maintaining a highly skilled and responsive public sector
- reducing harm from drugs
- youth
- maximising benefits for the community and South Australian businesses by capturing opportunities in the new economy
- participation in community life including volunteering
- rural and regional infrastructure
- advancing reconciliation across Government.

* Minister for Primary Industries and Resources
Minister for Regional Development
Minister for Minerals and Energy

Figure 1 PIRSA’s links to Government objectives
Corporate sustainability

PIRSA — a sustainable organisation?

As a government agency with primary responsibility for the economic development of the State’s natural resources, PIRSA also has responsibility to ‘lead by example’ and ensure that its own operations, products and services are, if practicable, also sustainable.

The concept of sustainability is defined in Australia’s 1992 National Strategy for Ecologically Sustainable Development as:

using, conserving and enhancing the community’s resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.

Sustainability can not be achieved simply by reducing usage of power, water, paper and other consumables — although measures to conserve resources are important steps. PIRSA also needs to consider whether the existence and/or use of its facilities and equipment, its processes and its activities are ‘sustainable’. To that end, the sustainability of the agency’s vehicles, buildings, research methods, pest control measures and the like need to be assessed. PIRSA’s sustainability is also dependant not only on its own practices and resource usage, but also on those of the suppliers of the goods and services used by PIRSA and the recipients of PIRSA’s goods, services and discarded waste materials (Fig. 2).

As part of its move towards sustainability, PIRSA is making the transition to ‘triple bottom line’ reporting in which it will take responsibility for the social, environmental and economic impacts of its business endeavours and report them in an open and transparent way. This transition takes the agency beyond the traditional ‘financial bottom line’ report and represents the first step towards PIRSA becoming a ‘sustainable’ organisation.

Although triple bottom line indicators across the economic, social and environmental parameters are yet to be developed, it is envisaged that in time, quantitative reporting will be provided to stakeholders; supported by reports of specific initiatives aimed at developing sustainability within PIRSA.

Initially, PIRSA will consider the use of the Global Reporting Initiative guidelines <www.globalreporting.org> as a basis for measuring and reporting its sustainability, and will adapt that framework to ensure that PIRSA’s approach is appropriate for a State Government agency in South Australia with responsibilities for natural resources development.

Some initiatives that PIRSA has commenced, which are in line with triple bottom line practices are:

- Energy management redesign by the SARDI Group at the Plant Research Centre, Waite Campus, is having a positive impact on the environment and economic bottom lines through the implementation of co-generation (power and heating) facilities and hot water recycling.
- Donation of PIRSA’s obsolete personal computers to community programs, volunteer groups and other ‘not for profit’ community organisations to commence in the 2001–02 reporting year, heralds a significant social initiative.
- Establishment of an Energy Management Working Group, to coordinate an energy audit of PIRSA by Energy SA resulting in the development of an energy management strategy.
- Plans to review and optimise vehicle fleet usage in 2001–02 should have a favourable influence on the environment and economic bottom lines.
- ‘Greening the office’ is an action plan which has been developed and implemented by Energy SA to reduce paper wastage and educate and encourage staff to recycle and be more responsible for their paper usage. This should favourably influence both the environmental and economic bottom lines of the organisation and the project will be expanded to include transport and energy usage issues.
- Environmental checklists have been developed by the Mineral Resources Group. These checklists are designed to ensure that the group’s field activities (including drilling, surveying, mapping etc.) are carried out in a responsible manner, and in accord with all relevant environmental and land access issues. Consideration of these types of issues will improve relations with the community, ensure that any impact an activity has on the environment is effectively managed and should have a favourable impact on both the social and environmental bottom lines. A ‘Land access manual’ is being developed to ensure that issues are properly managed.
• PIRSA assesses the potential of offering benefits to the community as part of negotiating access to land (for example, siting a seismic line where the community wants a road, or drilling a water bore while a rig is on site).

• PIRSA is currently funding research into measuring the rate of environmental recovery of areas that have been impacted by activities such as mining and petroleum exploration (for example, collaborative study with the South Australian Museum into viability of using ants as indicators of ecological damage caused by petroleum exploration).

• An ESD Task Force was established to develop a strategy for corporate sustainability. The task force has commenced the process of raising staff awareness and understanding of the issue and is expected in the coming year to:
  ◦ identify the significant natural resource impacts and sustainability issues faced by the agency
  ◦ define parameters and criteria by which the agency will measure its effectiveness in moving towards sustainability
  ◦ begin establishing systems and procedures to record the data necessary to monitor the agency’s sustainability.

• PIRSA supported the establishment of a network of officers from a range of State Government agencies, formed to pursue sustainability in government institutions and activities. As an economic development agency, PIRSA aims to ensure that development occurs in an ecologically sustainable context.

• The regulation of the upstream petroleum industry under the Petroleum Act 2000 ensures that the health and environmental wellbeing of the community is maintained as well as the achievement of economic objectives. The concepts of ecologically sustainable development and triple bottom line reporting are embedded in the objects of this Act and the attainment of these objectives is reported by the petroleum industry.

• To aid in the protection of Aboriginal heritage and foster responsible mineral exploration and development, Mineral Resources Group and the Division of State Aboriginal Affairs are developing an Aboriginal Heritage Sites database and Map Index of Traditional Aboriginal Authority.

• Continued consultation with Anangu Pitjantjatjara and funding of anthropological programs, as well as a study of the socio-economic impacts of mining on their lands, are designed to accelerate mineral exploration in the area and assist Anangu Pitjantjatjara in building capacity.

The coming year will see PIRSA tackle this critically important and challenging issue.
Is the supply of goods and services to PIRSA ecologically sustainable?

PIRSA
Are the existence and application of facilities, equipment, resources, processes and methods ecologically sustainable?

Is the provision of PIRSA's goods and services to Government, community and clients ecologically sustainable?
In this year’s annual report, performance is reviewed against strategic priorities.

**FOOD FOR THE FUTURE**

The aim of the South Australian Government’s State Food Plan is to achieve a globally competitive food industry that contributes $15 billion to the State economy by 2010.

The Premier’s Food for the Future Council, which is chaired by the Premier, endorsed an updated State Food Plan 2001–2004. The State Food Plan is supported by the State Food Program 2001–2004, which outlines the Government’s contribution to accelerating the development of the food industry.

The State Food Program will be delivered through PIRSA, the Department of Industry and Trade, and Transport SA. Progress will be monitored by the Premier’s Food for the Future Council. This unique initiative ensures a coordinated and consistent delivery of government programs with maximum impact on industry development outcomes.

The Premier’s Food for the Future Council Issues Group convened by the Hon. Caroline Schaefer MLC, ensures that food industry development issues are addressed across Government. An example of an improved Government process developed through the Issues Group is the account management process endorsed by Cabinet in December 2000. The account management process provides a seamless government service for significant food industry development demand chain projects. The Issues Group also provided oversight to South Australia’s contribution to the development of a National Food Strategy.

**Strategic priority 1— INDUSTRY DEVELOPMENT — provide support for industry and regional development that focuses on global market opportunities**

*State Food Plan 2001–2004*

The State Food Plan is a succinct statement of the food industry’s development priorities to accelerate the rate of growth of the food industry.

The State Food Plan 2001–2004 was endorsed at the September 2000 meeting of the Premier’s Food for the Future Council. The updated State Food Plan aims to create an innovative and internationally competitive food industry in South Australia through: innovative value-adding to commodity products; developing branded, differentiated products; developing integrated demand chains; and developing internationally competitive export systems to targeted markets.

These strategies were developed through extensive consultation across the food industry. The consultation process included a series of regional “Innovating Agribusiness” workshops conducted throughout South Australia.

*State Food Program 2001–2004*

The State Food Program represents the State Government’s commitment to support the food industry in achieving its growth objectives. State Government agencies were asked how they could contribute to achieving the objectives of the State Food Plan. The consultation process identified over 20 proposed new programs.

Fifty leaders from across the food industry reviewed the proposed programs and identified the highest priority programs. The priorities were then consolidated into a comprehensive program across government that was funded as an integrated budget bid from PIRSA, the Department of Industry and Trade and Transport SA. The new initiatives were funded for $1.8 million per year for the three-year duration of the State Food Plan 2001–2004. The Premier’s Food for the Future Council will oversee the implementation of the State Food Program.

**Account management process**

Resulting from an issue raised at a Premier’s Food for the Future Council meeting, the Issues Group developed a whole-of-government model for managing the delivery of government services to strategic food industry
projects. This process is an example of a structure and processes needed to improve collaborative outcomes across government and was endorsed by Cabinet in December 2000.

The process is managed by a subgroup of the Food for the Future Issues Group that includes PIRSA, Department of Industry and Trade, and Transport SA.

For strategic projects that meet criteria established by the group and endorsed by the Premier’s Food for the Future Council, an Account Manager can be appointed from the most relevant agency. If appointed, the Account Manager could assemble a team from across government agencies to prepare a critical path analysis for the project that identifies how and when Government could play a role in the development of the opportunity.

The benefit to the development project is that there is greater understanding from all parties on the steps and criteria required and a commitment to work to a common schedule.

Although the account management process is in its early days of implementation, a number of benefits are apparent to both the developers and the participating government agencies. The Premier’s Food for the Future Council will continue to monitor the implementation of the process.

National Food Strategy
Widespread industry support for the State Food Plan 2001–2004, lead the Deputy Premier to propose that the States work collaboratively with the Federal Government to develop a National Food Strategy that identifies the priorities of managing the challenges of international competition. The proposal was presented at the Agricultural and Resource Management Council of Australia and New Zealand meeting in New Zealand, early in 2001

Food for the Future worked collaboratively with the Department of Industry and Trade to establish the State’s input to the National Food Strategy, which is scheduled to be presented to Federal Cabinet in September 2001.

Export facilitation
The highly successful buyers program continued throughout 2000–01 with buyers visiting South Australia from Japan, Taiwan, Hong Kong, Singapore and the United States.

Food for the Future is providing management on behalf of Supermarket to Asia on a national demand chain demonstration project. Supermarket to Asia is working with a major retailer in Singapore to develop an Australian Pavilion to showcase Australian food products. Twenty-four South Australian companies are participating in the project and are provided with the opportunity to enter a new market with their products.

The South Australian food industry participated in major food exhibits in Tokyo (FOODEX), Singapore (Food and Hotel Asia) Taipei (Taipei International Food Show) and Dubai (Gulf Food) with assistance from International SA.

Demand chain quality and innovation
A series of commercially driven demonstration projects have been initiated to profile the capabilities required at each stage in the food chain to successfully compete in the global marketplace. Regional Innovation workshops were conducted throughout South Australia to showcase opportunities for innovation.

Premier’s Food and Fibre Awards
The 2000 Premier’s Food and Fibre Awards, held in November 2000, recognised and celebrated the achievements of individuals and companies who demonstrated a commitment to excellence. Categories included: Achievement in Horticulture, Meat, Field Crops, Dairy, Seafood, and Wool and other fibres.

Leadership Awards were presented to companies demonstrating leadership through innovation, new export development and training. In addition, two young achievers were recognised for their contribution to the industry. All finalists and award winners demonstrated the benefits of commitment to delivering quality products to customers’ specifications. The prestige of the awards is providing exposure to new commercial opportunities for winners and role models and success stories for others in the industry.

TARGETS FOR 2001–02
• Publicly launch the State Food Plan and Program 2001–2004 in October.
• Provide quarterly reports to the Premier’s Food for the Future Council on progress in implementing the whole-of-government State Food Program.
• Capture and promote the lessons learned from strategic demonstration projects.
• Work in partnership with regional development boards to conduct an ‘audit’ of regional food industry, in terms of the industry development priorities in the State Food Plan, and identify regional food industry development priorities to accelerate and sustain growth in their regions.
• Facilitate the development of a ‘whole-of-education, training and research and development’ audit and strategy against the industry development priorities in the State Food Plan.
• Manage the 2001 Premier’s Food and Fibre Awards.

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions

South Australia Food Online
The South Australia Food Online website has been redeveloped to become an integrated e-business tool for the South Australian food industry. E-capability is a requirement for businesses in the food industry. A comprehensive e-capability survey and industry workshops have provided detailed information for the industry on the required direction the website redevelopment should take.

The first of the South Australian food industry e-chat forum websites was launched for Flavour SA, an industry association. This e-chat site now enables all members of Flavour SA to share information in a secure web environment.

E-commerce capability has not yet been developed due to the closure of the national project funded by Supermarket to Asia that was to have provided the platform.

ScoreCard
The Food for the Future ScoreCard has become the measuring tool for the growth and development of the food industry. For the first time, data analysed by the ScoreCard provides the South Australian food industry comprehensive data to enable the industry to benchmark its success and track progress, particularly in value-adding and interstate and overseas exports.

A comprehensive range of quantitative measures have been developed for all food industry sectors to show the level of growth achieved. Each stage of the food chain is considered, from production to processing, through to consumption. This economic analysis determines the gross and net value of production, exports interstate and overseas, imports, interstate trade, retail sales, and contributions made by the food services sector. Work on regional ScoreCards commenced during 2000–01.

TARGETS FOR 20001–02
• Implement the new South Australia Food Online e-business capabilities in October.
• Extend the development of the Food Industry ScoreCard to include progress indicators and complete the regional ScoreCards.
FOOD AND FIBRE

Food and Fibre incorporates Agricultural Industries, Fisheries and Aquaculture Groups working in partnership to create exciting and innovative industry development and resource protection strategies. The focus of PIRSA’s programs for the agriculture, fishing and aquaculture industries is on enhancing the knowledge, skills and confidence of those industries so that they are better able to compete in the global market place, supporting the adoption of new technology to maintain competitiveness, and protecting the plant and animal resources from pest and disease threats.

AGRICULTURAL INDUSTRIES

The Agricultural Industries programs provide the government resources and services that support development of agriculture and protect the production resources in South Australia. The group has responsibility for delivering industry development projects, providing technical services, supplying policy advice to the Minister and Government, and managing legislation required by agricultural industries. This is achieved through a network of approximately 25 offices located throughout the agricultural regions of the State.

The Agricultural Industries Group has a purchasing group which establishes strategy, policy and funding for significant government initiatives for the rural sector. The purchasing function is provided from the Horticulture, Plant Health, Field Crops, Livestock, Animal Health and Meat Hygiene groups.

Agricultural Industries also has a service provision group which operates as PIRSA Rural Solutions. This is the key business unit within PIRSA providing services in agriculture, agribusiness, and natural resource management. PIRSA Rural Solutions delivers PIRSA-funded projects and services as well as providing a commercial consulting service to the private sector. It brings together the combined expertise of over 200 regionally based consultants and is focussed on building expert teams to address problems and opportunities for rural industries and communities. The major accounts currently managed by PIRSA Rural Solutions involve field crop development, horticultural development, land and water management, animal health and livestock industry development, re-vegetation strategies, regional development strategies, and special industry development projects.

Performance measure highlights

A survey of 337 primary producers in February 2001 showed that PIRSA Rural Solutions is providing high-value and highly valued services to its rural constituency. Expressed as a percentage for both agencies, satisfaction ratings were greater than 95%. Services from the South Australian Soil and Plant Analysis Service and the Analytical Crop Management Laboratory were rated at 99% and 97% respectively. Respondents were wanting to benefit from future services in the areas of succession planning, salinity control, supply-chain knowledge and soils management.

Strategic priority 1— INDUSTRY DEVELOPMENT — provide support for industry and regional development that focuses on global market opportunities

Horticulture

Export facilitation

The export facilitation project was enhanced in 2000–01, with development of cherry exports being a major focus. Assistance was provided in the development of new dried cherry and juice products, and evaluation of consumer punnet packs for export markets. PIRSA also had a key role in linking cherry suppliers from various States to lengthen the supply period, and improve business relationships between growers, packers, exporters and South-East Asian supermarkets. The project will be expanded with a number of other horticulture commodities.

Regional wine industry funds

Regulations establishing the Riverland and Langhorne Creek Wine Industry Funds came into effect on 14 June 2001. Grape growers and winemakers have the opportunity of contributing to the funds, which will be utilised by regional industry councils for industry development purposes.
Building Regions with Horticulture

Building Regions with Horticulture is a new regionally based industry initiative developed in conjunction with the Horticulture Industry Development Board. Assistance is being given to communities in the eight horticulture regions of the State to identify major new enterprise opportunities, access resources and develop these opportunities over a two-year period. Work has commenced with Clare and Lower Murray regions.

Olives

An educational program for the olive industry was developed by PIRSA Rural Solutions, with roll-out to commence in 2001–02.

Field Crops

Wheat breeding

A PIRSA – Adelaide University team was established to negotiate with the Grains Research and Development Corporation for the establishment of one of three wheat breeding centres in Australia. PIRSA is also supplying financial support.

Barley foods project

PIRSA is working with Yorke Peninsula farming groups to undertake a major market scoping study of key national and international companies and research groups involved in functional foods and beverages, with particular interest in barley grain.

Demonstration project

Three Japanese companies have expressed interest in high-protein wheat. Samples are to be obtained from farmers on Eyre Peninsula from the 2001–02 harvest and sent to the Bread Research Institute for analysis.

Field Crops Industry Development Board

A strategic plan for the establishment of a Plant Biotechnology Centre was developed with the Field Crops Industry Development Board and involved assistance with the brokering of an agreement between Adelaide University and Government to establish the Plant Biotechnology Centre.

The Field Crops Industry Development Board's charter is to provide advice to the Minister for Primary Industries and Resources on ways of increasing the value of the field crops industry in South Australia at all levels of the value chain. Priority projects were identified with the objective to increase value-adding in field crop sectors such as constituents of barley in food processing and high-protein wheat product exports. Project plans were developed for:

- increased production of higher protein and durum wheats
- identification of specific and novel products including barley foods; flavour components of wheat; and wheat varieties suitable for frozen dough manufacture
- mapping of the food chain for pulses and identification of opportunities
- creating a market-focussed culture amongst grain growers.

Champions project

PIRSA Rural Solutions was funded to provide industry development champions to work with the farming community and industry to identify and provide the market with the product it requires. The activities are expected to lead to a greater net benefit to the State economy.

Livestock

Quality pork

Quality assurance standards for pork production for domestic and export markets were developed with industry. The majority of pork is now produced under these standards.

Lower cost and more environmentally friendly straw-based housing systems are being developed and promoted in various regions for the growing of pigs. These systems are readily applicable to diversification of production on farms in the cereal cropping regions.
**Better Breeding**

Better Breeding, a program to stimulate commercial wool producers to seek more information on advanced breeding technology, to buy rams based on the performance of their progeny and to run on-farm ram comparisons, has successfully concluded. Independent evaluation shows that the project created a solid level of awareness amongst at least 66% of South Australian wool producers and that 73% of these producers were influenced by the program on their sheep breeding approach.

**SA Dairy Network**

PIRSA in partnership with DairySA and the South Australian Dairymen’s Association initiated the SA Dairy Network Project, aimed at accelerating the adoption of new technology and business skills for dairy business managers, their employees and service providers with direct links to the industry.

Communication methods and networks being developed include support of 16 dairy discussion groups, coordinating industry forums, promoting FarmBis-funded training and providing better access to relevant information for the 600 dairy farm businesses in South Australia. The project is jointly funded by PIRSA, DairySA and the Federal Dairy Regional Assistant Program with an estimated expenditure approaching $1 million over the next three years.

**SA Lamb**

SA Lamb, jointly managed by industry and PIRSA, is continuing to meet and exceed targets. Fifty-three per cent of lamb is now sold over-the-hook (only 10% in 1997), enabling producers to receive feedback on their product and subsequently adapt their management practices to meet the demands of the consumer. Average carcase weight has continued to climb in response to the demand for large lean lamb for export.

**Red meat quality**

The beef and lamb industries were supported in an endeavour to increase the consistency of supply and eating quality of red meat. Development of alliances and branded products, as well as improved communications along the demand chains, have been the major areas of support.

**TARGETS FOR 2001–02**

- Implement the Building Regions with Horticulture initiative in six regions.
- Develop project plans to increase value-adding in field crop sectors, including constituents of barley in food processing and high-protein wheat product exports.
- Field crop growers in the Murray Mallee, Eyre Peninsula and the High Rainfall production areas will be targeted to better manage all aspects of their business through participation in group-based action learning activities including business, natural resource management, marketing, market chains, benchmarking and advances in technology.
- Assist the Dairy Industry Development Board to facilitate development of a 10-year plan for the dairy industry in South Australia.
- Appoint a Product Development Officer for the beef industry to assist the development of more effective communication mechanisms in the industry and the establishment of alliances and branded quality products.

**Strategic priority 3 — RISKS AND BIOLOGICAL CONTAMINANT THREATS — successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access**

**Locust control campaign**

During 2000 South Australia faced one of the biggest locust outbreaks ever recorded in the history of the State. PIRSA led and coordinated a multi-pronged attack involving inputs from the South Australian farming community, local government, PIRSA and the Australian Plague Locust Commission. The farmers and local government were involved in ground control operations while PIRSA and the Australian Plague Locust Commission conducted the aerial campaign. Approximately 550 000 hectares were sprayed for locusts during a spring campaign which ran from late September to mid December. This control program was very successful in preventing the movement of major swarms into sensitive agricultural and horticultural areas and minimised the losses to the State's rural industries. Despite the large locust plague, both the grains and grape industries achieved record harvests.
The successful control effort was also achieved without any major ramifications of using pesticides over large areas. An awareness program on the responsible use of insecticides coupled with strict protocols on their use led to no major environmental problems being experienced throughout the State. Also, extensive sampling of grain and meat samples did not detect any residue violations during the program.

The PIRSA aerial campaign, which treated about 80% of the total area sprayed, very importantly proved to be a safe program with no major injuries or lost time recorded during a three-month period where approximately 50 staff worked long days and shifts under trying conditions.

**Plant Health**

*Fruit fly*

A record number (nine) of outbreaks of Mediterranean fruit fly were detected during the year, all in metropolitan Adelaide. The scale and intensity of the eradication response in the southern suburbs area, together with a coordinated community campaign against the use of chemicals, led to the suspension of the cover-spray component of the program in mid May and the initiation of a comprehensive independent review of PIRSA’s Fruit Fly Program.

The successful introduction of sterile Mediterranean fruit flies is seen as the key for future eradication of Medfly outbreaks in metropolitan Adelaide with greatly reduced use of insecticides.

**Field Crops**

*Lupin anthracnose management*

A comprehensive anthracnose program has been undertaken on Lower Eyre Peninsula, headed by an eradication and awareness/education program targeting farmers in quarantined areas, along with a targeted crop inspection program. Of 125 properties surveyed on Lower Eyre Peninsula, five were found to have infected samples, and were placed in quarantine as a result.

An outbreak of the disease was also found in the South East on *Albus* lupins. Intensive negotiations with the Victorian Government established agreed protocols for movement of infected grain to Horsham. Future market access for lupins will be dependent upon the South East being free of anthracnose.

*Brachytrite broomrape*

Technical information covering the biology, ecology and control of branched broomrape has been produced to help skill farmers to manage branched broomrape and meetings with farmer groups have further developed landholder awareness. This is in addition to control methods necessary to reduce the spread, and in turn eradicate the species.

**Animal Health and Meat Hygiene**

*Transmissible Spongiform Encephalopathy Surveillance*

The National Transmissible Spongiform Encephalopathy Surveillance Program is designed to support Australia’s status as free from mad cow disease and Scrapie. Under the program South Australia must meet an annual target for the collection of samples from aged cattle and sheep showing nervous signs or loss of weight. It has proved difficult to meet this target, particularly for sheep, however it was achieved in 2000 and there was no evidence of transmissible spongiform encephalopathies.

*National Livestock Identification System*

Permanent electronic tags have been introduced for the cattle industry under the National Livestock Identification System and additional to the system of temporary transaction tags. Electronic tags are machine-readable and provide individual whole-of-life identification. This development is important as it offers significant opportunities to improve on-farm management with increased productivity and higher quality carcasses. The ability to trace individual animals is also important to the efficient management of disease control programs and would be critical in the event of an exotic disease outbreak, such as foot-and-mouth disease.

*Animal Disease Passive Surveillance Network*

An effective system of animal disease surveillance is required to support South Australia’s livestock and livestock product trade. In addition, efficient and timely disease surveillance is a fundamental requirement to mounting an effective response to any exotic disease outbreak. To reverse the downward trend in animal disease information, an incentive scheme was introduced in January 2000 to encourage the reporting and accurate
diagnosis of animal health conditions which might significantly affect the livestock economy. The scheme is working very well with more than 300 notifications received in the eighteen months to June 2001.

**Poultry health**
The South Australian component of the National Newcastle Disease Survey, originally begun in May 2000, was completed with final samples and result analysis released to industry in March 2001. Five separate viruses were isolated, all proving to be of the lentogenic (non-virulent) Australian type. Approximately 20% of the farms tested had serological evidence of contact with the virus.

A number of infectious laryngotracheitis outbreaks occurred in the poultry industry and PIRSA assisted in liaison between affected farms, on control procedures and coordination of stock movement.

**Ovine Johne’s disease**
Surveillance has detected evidence of ovine Johne’s disease on 48 properties in South Australia since the inception of the program in 1998. Of these properties 42 are on Kangaroo Island, with a recently detected focus of disease in the Lower South East. Since December 1998, 30 properties have elected to de-stock with assistance from the Sheep Industry Fund, established from a sheep levy in October 1999. This has resulted to a cost of over $2.5 million in industry assistance for de-stocking.

Surveillance activity for ovine Johne’s disease switched to abattoir monitoring in October 1999. Since that time over 4500 lines of sheep have been inspected for the disease with confirmation of disease on eight Kangaroo Island properties. This testing has involved inspection of almost one million adult sheep at three abattoirs in South Australia by the Australian Quarantine and Inspection Service inspectors.

South Australian studs are still actively supporting the Sheep Market Assurance Program with over 230 participants, 80 of these having progressed to Monitored Negative 2 status. This program continues to provide a high-level of assurance for stockowners and purchasers of sheep about the disease risk in sheep flocks.

The sheep industry is still committed to progression of zoning for South Australia to Protected Zone status for ovine Johne’s disease by July 2002. The South Australian industry actively supports the Ovine Johne’s Disease Program through involvement in the South Australian Sheep Advisory Group and its technical arm the South Australian Ovine Johne’s Disease Committee.

**Tuberculosis surveillance**
At present Australia is officially free of tuberculosis and the National Granuloma Submission Program is designed to maintain this status by detection of tuberculosis at abattoir level. A steer with a lesion resembling tuberculosis was slaughtered at a South Australian abattoir in February 2001. Tracing identified the source to a feedlot in South Australia, with the steer originating from a property in the South East. Samples submitted to a reference laboratory in Western Australia found the organism to be avian tuberculosis. The positive outcome from this case was the ability to detect the organism at abattoir level and to effect trace-back, even when the lesion and pathology were consistent with bovine tuberculosis.

In a second tuberculosis incident, 2500 cattle were identified from a northern pastoral property after it was found that they had been purchased from a Queensland property in which tuberculosis had been detected in August 2000. This resulted in de-stocking of 6000 cattle with one further case of tuberculosis being detected.

**Emergency animal disease preparedness**
The foot-and-mouth disease epidemic in the United Kingdom has resulted in assistance being sought internationally for veterinary and para-veterinary staff to help in the response. PIRSA has sent four veterinarians and four Animal Health Officers to assist since the early stages of the outbreak in March 2001.

**TARGETS FOR 2001–02**
- Improve PIRSA’s disease surveillance, monitoring and investigation services and its emergency disease response capability through further recruitment of new skills.
- Undertake succession planning and training of key staff, in both policy development and field operations, for maintenance and further improvement of PIRSA’s contribution to the State’s biosecurity and trading position in livestock products, and to public health and food safety programs.
- Continue to develop PIRSA’s activities in Food Safety in South Australia.
Strategic priority 4 — INTEGRATED POLICY FRAMEWORK, REGULATION AND COMPLIANCE — create through consultation, effective policy and regulatory frameworks to enhance industry and community confidence

Legislation

Reviews of legislation

All legislation must be reviewed from a competition perspective (a National Competition Policy review) as a consequence of the Competition Principles Agreement between the Federal and State Governments. A review of the *Citrus Industry Act 1991* found that a number of the functions carried out by the Citrus Board do not provide sufficient public benefit to justify their retention. The review panel recommended that the industry’s representative organisations be approached to undertake those functions that produce industry benefits (such as the administration of a fund established under the *Primary Industries Funding Schemes Act 1998*). The Government is yet to determine its position on the recommendations of the review panel.

A National Competition Policy review of the *Wine Grapes Industry Act 1991* concluded that there are no compelling reasons to retain the Indicative Price provisions of the Act. The review also concluded that, in order to address concerns that the Terms and Conditions of Payment provisions result in rigidity in the market, the Act should be amended to allow individual grape growers and wine makers to negotiate an alternative payment arrangement that might be advantageous to both parties when the Minister for Primary Industries and Resources fixes terms and conditions of payment.

The National Competition Policy review of the *Dried Fruits Act 1993* continued with a white paper public consultation process which was completed in May 2001. The outcome of this process was identification of a staged deregulation process that will ultimately remove the Dried Fruits Act and deliver its functions to industry through a number of other mechanisms.

The South Australian Government has taken a position to support the single desk powers of the ABB Grain Board in South Australia until it can be demonstrated clearly that it is not in the best interests of the South Australian community to continue with such an arrangement. A review of the marketing arrangements will take place at the end of two years after the commencement of the *Barley Marketing Act 1993* on 30 November 2000.

PIRSA is reviewing the *Dairy Industry Act 1992* and Dairy Industry Regulations 1993 following deregulation of milk marketing and supply arrangements which came into effect on 1 July 2000. A green paper covering dairy food safety and related issues was released for public comment in October 2000. New legislation requirements for the dairy industry are now being considered in a wider framework which includes all primary industry sectors involved in food production.

Consultation with industry is planned to discuss a PIRSA proposal to incorporate dairy legislation into a proposed Primary Industries Food Safety Act. This consultation will take into account industry needs, the South Australian Food Bill and other national and State developments.

The *Poultry Meat Industry Act 1969* is being reviewed. The Crown Solicitor’s Office is to conduct a public benefit test on proposed new legislation which is to include a code of practice allowing growers for a particular processor to negotiate collectively with that processor.

National Competition Policy reviews have been conducted on both the *Impounding Act 1920* and the *Veterinary Surgeons Act 1985*. Recommendations from these reviews have required significant changes to both Acts. As a result the Veterinary Practices Bill is expected to be introduced into Parliament in the Spring session of 2001. Options for the replacement of the Impounding Act are still being considered.

The final report on the National Competition Policy review of the *Meat Hygiene Act 1994* has been deemed satisfactory by the Department of the Premier and Cabinet.

Acts repealed

The *Cattle Compensation Act 1939* was repealed in early July 2000 and the *Apiaries Act 1931* in mid January 2001.
Administered items

The Livestock Act 1997 makes provision for industry bodies in South Australia to form advisory groups and provide advice to the Minister for Primary Industries and Resources on important industry initiatives, particularly for legislative requirements and providing industry funds for projects.

The Sheep Advisory Group has overseen the introduction of legislation under the Primary Industries Funding Schemes Act enabling payment of financial assistance for Johne’s disease eradication for affected properties. The funding of assistance payments is sourced from the Sheep Industry Fund, established in October 1999, and comprising contributions from sheep producers based on the sale of sheep.

The Cattle Advisory Group has overseen the introduction of legislation under the Primary Industries Funding Schemes Act establishing an industry fund and compensation scheme to replace the fund and scheme under the repealed Cattle Compensation Act 1939. Similarly the Pig Industry Advisory Group was integral in the development of regulations to establish an industry fund and compensation scheme to replace the fund and scheme under the Swine Compensation Act 1936; these regulations are expected to come into operation in October 2001.

The Apiary Industry Advisory Group has overseen the introduction of legislation under both the Primary Industries Funding Schemes Act establishing an industry fund to replace the fund under the repealed Apiaries Act 1931, and under the Livestock Act replacing the registration and disease control provisions of the Apiaries Act.

The Deer Advisory Group has continued to work on the development of regulations establishing a fund for the industry and it is expected that the fund will be established in late 2001. The group has also been developing regulations under the Livestock Act to replace provisions under the Deer Keepers Act 1987. This Act will be repealed at the same time as the new regulations and fund are established.

These fund development initiatives place the State’s livestock industries in an excellent position with regard to industry development for the future.

National animal health policy and programs

Implementation of the key recommendations of an independent review of the South Australian Animal Health Service in January 1999 has resulted in significant improvements in the management system and the program structure. A three-year Strategic Plan and Business Plan was developed and implemented. A Manager Communications and Training, and Manager Disease Surveillance, were appointed. Substantial progress was made in defining functional specifications and commencing the design of a highly sophisticated information management system to support the Animal Health program.

Significant contributions were made to a wide range of national programs by provision of advice to Animal Health Australia, the Standing Committee on Agricultural and Resource Management committees and working parties, and the federal Department of Agriculture, Fisheries and Forests. Contributions included emergency animal disease preparedness; ovine and bovine Johne’s disease; national policy and regulations related to antibiotic resistance; Newcastle disease eradication in New South Wales; veterinary education; animal welfare; Animal Disease Surveillance; and Animal Health performance standards.

South Australia’s Chief Veterinary Officer was Chair of the Standing Committee on Agricultural and Resource Management Veterinary Committee in 2000, and also chaired a working group to provide the Federal Government with direction on the implementation of recommendations of the Joint Expert Technical Advisory Committee on Antibiotic Resistance. Cabinet submissions were prepared for appointments to the Veterinary Surgeons Board.

PIRSA Animal Health represents South Australia on the Egg and Egg Product Import Risk Assessment Panel convened by Biosecurity Australia. Two meetings were convened and a draft report is being finalised. There is similar representation on the Agricultural and Resource Management Council of Australia and New Zealand’s Hen Housing and Egg Labelling Review; the review recommendations were approved in August 2000.

PIRSA coordinated a study on the monitoring requirements for bovine tuberculosis in Australia after completion of the current five-year program in 2002.
The agency contributed to the national focus on harmonising domestic and export meat industry standards, which was completed in June 2001. The one standard for meat processing will enhance Australia’s reputation and capability as an exporter of safe quality meat product.

**Compliance services**

**Food safety within the meat industry**

PIRSA continued to successfully manage the Meat Hygiene Program under a certified ISO 9001 Quality Management System. Under this arrangement South Australia’s meat industry has achieved an outstanding compliance rate. Ninety-eight per cent of animal processors, poultry, smallgoods, wholesale, boning, and game meat sectors have had their food safety based quality assurance programs approved. Of these 10% have achieved international certification.

Around 250 retail small businesses have now been introduced to the Meat Hygiene Program. The retail sector has demonstrated a strong commitment to food safety and high standards with 25% of butchers already operating under approved quality assurance systems. The participation of the majority of retail butchers in the program provides an ‘all-of-chain’ approach to food safety within South Australia’s meat industry. The number of retailers having their quality assurance programs approved and the standards observed at audit is significant and reflects positively on the delivery of food safety regulation.

South Australia is one of only two States where primary surveillance of accredited meat processing facilities is carried out by approved third-party inspection/audit providers. A thorough review of the benefits of contestable auditing resulted in the appointment of two contracted external audit providers. Both have been well received by industry and have already added considerable value to the audit process through improved reporting systems, on-site training, and the broadening of operators perspective of business processes and systems. A combination of government- and contracted-audit arrangements resulted in around 1500 audits of domestic meat hygiene standards.

PIRSA continued to review allegations of individuals operating outside of the Meat Hygiene Act and the number of complaints further decreased. There was one serious offence resulting in prosecution, the defendant being fined $3000, with $290 costs. Over 200 inspections and 800 audits and incident investigations were undertaken during the year to manage compliance.

**Bovine Johne’s disease**

In 1999 the South Australian Bovine Johne’s Disease program was reviewed by PIRSA and the South Australian beef and dairy industries. All known infected herds (38 total; mainly dairy herds) were placed under an Official Order in 2001 and a disease management program developed with each of the property owners. New infected herds continue to be detected each year (approximately five per year) including some very large dairy herds. This trend is expected to continue as the number of infected herds is believed to be at least double the known infected herds and there has been a trend to consolidate into fewer larger dairy herds following deregulation of the dairy industry in 2001.

Market Assurance Programs for bovine Johne’s disease were initially developed for the cattle industries and later for the alpaca and goat industries. The number of participating herds is currently 195, 33 and 4 respectively for these three species. New entries to the CattleMAP are continuing (mainly beef herds), participation in the AlpacaMAP is now almost static and there is a slow rate of entry into the GoatMAP (only launched 12 months ago).

The Northern Pastoral Area was declared a Bovine Johne’s Disease Protected Zone in 2000 with the balance of the State being a Control Zone. A further expansion of the Protected Zone to include the Eyre Peninsula, Lower Flinders Ranges and Northern Agricultural Area is currently under investigation. There are, however, major concerns with the increasing levels of bovine Johne’s disease being detected in the rest of the State, mainly dairy herds in the high rainfall areas.

**American Foulbrood**

The Apiary Mandatory Disease Control Program is designed to maintain market access and increase apiculture industry self-reliance by reducing the prevalence of the bee disease American Foulbrood within the State’s registered apiary operations. The program, in its second year, has generally been well supported by industry and honey packers in South Australia.
Several new initiatives designed to improve the detection and control of American Foulbrood within the State were implemented. The Apiaries Act was replaced with new industry specific regulations under the Livestock Act. On the advice of industry, emphasis within the regulations has been placed on the introduction of expiation fees for breaches in the anticipation that this more rapid form of notification will improve apiary management. Other initiatives have included:

- Introduction of honey testing for American Foulbrood as part of the annual registration cycle (in excess of 150 operations have been tested this year).
- Drafting of a voluntary code of practice for apiculture management.
- Development of operational procedures for apiary regulatory field activities.

It is expected that the recent employment of an additional full time inspector within the program, combined with the new regulations, will allow significant progress in 2001–02 in reducing the prevalence of American Foulbrood in South Australia.

**TARGETS FOR 2001–02**

- Complete the National Competition Policy review of the Citrus Industry Act, providing stakeholders with an opportunity to contribute to the development of post-review arrangements for leadership of industry development.
- Complete the review of the Wine Grapes Industry Act and implement any changes arising from the review.
- Continue to make substantial contributions to national animal health, food safety and animal welfare policy through participation in the Standing Committee on Agricultural and Resource Management committees and working groups.

**Strategic priority 5 — ECOLOGICALLY SUSTAINABLE DEVELOPMENT — enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles**

**Horticulture**

A major review of sustainability issues threatening South Australia’s horticulture industries was completed, identifying a range of soil, water and crop management issues that varied from district to district, and on which future projects aimed at rectifying horticulture sustainability threats will be based.

**Livestock**

Better use of effluent from intensive livestock productions systems and guidelines for the operation of beef and lamb finishing systems were the major focus of an ecologically sustainable livestock systems project. The ramifications of more intensive livestock grazing systems on the environment are being examined to allow the optimisation of economically and ecologically sustainable production.

**Strategic priority 7 — BUILDING COMMUNITY CAPACITY — build capacity, leadership and global awareness in industry, and rural and indigenous communities**

**Horticulture**

*Wine grape industry*

Cultural change with wine grape producers has been promoted since 1999, through the NAVIGATOR extension process, encouraging development of human capital, continuous learning, and new thinking patterns to assist producers in dealing with their constantly changing circumstances. During 2000–01, producers extended their networks, developed a greater independence of thought and developed a broader outlook by using the process. The project is facilitated by PIRSA Rural Solutions and industry personnel. Interest in using the process in other areas of agriculture, outside of viticulture, is being explored.

**Field Crops**

*FarmBis*

FarmBis opportunities have been widely promoted throughout South Australian farming communities. PIRSA Rural Solutions consultants have established strong networks with local communities and farmer-based group leaders resulting in significant training opportunities being made available for field crop and livestock producers. It is anticipated that by the end of the project more than 1000 farmers will have been connected to training.
Eyre Peninsula low rainfall farming systems
The ‘Eyre Peninsula low rainfall farming systems’ project is proceeding with a high-level of farmer interaction and involvement in both the planning and participatory phases. Linkages are being maintained with the SARDI component of the project, which receives support from the Grains Research and Development Corporation. Comprehensive on-farm trials and demonstrations have provided useful inputs to issues and identification of training opportunities, which are being facilitated by PIRSA Rural Solutions.

Mallee low rainfall farming systems
The ‘Mallee low rainfall farming systems’ project has gathered strong momentum with groups taking on new challenges both in the field as a consequence of the comprehensively sponsored tri-state on-farm trial and demonstration program and through a wide range of training opportunities through the Challenge 2020 program. The Lameroo ‘Women in Farming’ group won the award for leading TOPCROP group in South Australia.

Weed management
The ‘Skilling growers in weed management’ project contains both a research and extension component. The Grains Research and Development Corporation component is spearheaded by 26 field trial sites across South Australia and the Victorian Mallee and Wimmera, representing the common characteristics of several agro-ecological sites. Results have been widely disseminated at numerous Grains Research and Development Corporation information updates, seminars and workshops.

The project has also provided support for the development of training workshops (through the TOPACTIVE/Challenge 2020 program) on weed management and control. These are the most popular training series being taken up by farmers across South Australia.

Improved pastures for livestock
The recovery in wool prices has led to strong and continuing interest by growers to participate in ‘Pastures for Profit’ groups and ‘Prograze’ groups in the South East and Fleurieu Peninsula. Additional projects focussing on pasture and grazing management are also being undertaken on Kangaroo Island.

Livestock
Rangelands initiatives
The ‘Supporting sustainable industries in the Rangelands’ project which includes the Central North East Farm Assistance Program is assisting pastoralists to develop long-term economic and ecological sustainable enterprises to ensure viable pastoral communities. More than 60 Business Planning Grants were made following workshops and review processes, which establish the directions and options that pastoralists may consider for their future viability.

Sheep Industries Development Centre
This Sheep Industries Development Centre is now well established as part of a major alliance at the Roseworthy Campus between Adelaide University, PIRSA and TAFE. A series of training initiatives, especially in genetics and breeding, were developed in partnership with industry to improve productivity and profitability in the sheep industries through the development of a culture of life-long learning.

TARGET FOR 2001–02
• Facilitation of the NAVIGATOR extension process to be solely by trained wine grape producers and other industry personnel, supported by PIRSA Rural Solutions.

Strategic priority 8 — PARTNERSHIPS — negotiate effective partnerships with industry, rural and indigenous communities, Commonwealth Government and local government for regional and industry development

Livestock
Livestock industry development boards
Three livestock industry development boards advise the Minister for Primary Industries and Resources on the strategic directions of, and Government investment in, the livestock industries in South Australia.
The Wool and Fibre Industry Development Board is supporting the profitable introduction of new technology into the shearing shed and has had considerable influence on issues relating to wool contamination.

The Meat Industry Development Board initiated the annual Meat Industry Awards for Excellence and has sought funding for projects to develop production and marketing efficiency and profitability.

The new Dairy Industry Development Board has initiated the development of a plan to give direction to the rapidly changing dairy industry post deregulation in South Australia. Government funding has been provided to assist the board to develop the 10-year plan for the South Australian dairy industry. A challenging target to increase milk production from 700 million litres to 1 billion litres per year has been proposed. This increase would enable cheese production to double in this State and open up new export opportunities for high-value export products such as specialty cheeses and dairy food ingredients.

**PIRSA Rural Solutions**

PIRSA Rural Solutions established a working relationship with Hortus Australia which has provided personal development amongst PIRSA Rural Solutions staff, and consequently led to growth in the group’s endeavour towards commercial consultancies in the area of education and training. Hortus have also acted as mentors with PIRSA Rural Solutions application for attaining its status as a Registered Training Organisation.

**Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions**

**Horticulture**

**Greenhouse modernisation**

The greenhouse modernisation project being managed by Virginia Horticulture Centre was progressed with the establishment of a two-hectare demonstration site and construction of a 1000 square metre greenhouse sponsored by Israeli greenhouse manufacturer, Azrom Industries; more high-technology greenhouses are being sought from other manufacturers. The new facility was officially opened in April 2001 and comprehensive training and industry skilling program have been initiated.

**Cropwatch**

Cropwatch continued to deliver forecasts of potential pest and disease outbreaks, particularly downy mildew to South Australia’s wine grape industry, especially in the Riverland.

**Field Crops**

**Crop harvest report**

Total circulation for the *Crop harvest report 2000/2001* exceeded 2000 copies for the first time. The publication, a partnership effort between PIRSA Rural Solutions and SARDI, reached 30% of the State’s farmers with copies being sent to all Australian states and overseas. Information from the report has appeared in the Southern Region Crop Summary, Australian Grains Research manual CD, Prime Notes CD, PIRSA website and PIRSA fax.

**Other publications**

Copies of the pulse, canola, and cereal disease workshops were produced and are in use through the Challenge 2020 producer training program. The canola variety recommendations fact sheet was updated and a booklet *Success with malting barley* was published as an educational and information source for malting barley growers across southern Australia.

**Animal Health and Meat Hygiene**

**Food safety**

PIRSA Quality Officers facilitate food safety based quality assurance, particularly for newly accredited businesses, and completed over 150 consultancies, including comprehensive assessments and reports to butchers. Officers have issued over 100 generic industry specific food safety based quality assurance manuals, advice and training to butchers.

As part of its enhanced responsibilities PIRSA facilitated a risk characterisation workshop for government and industry to identify hazards in the primary industry sector. This early work has provided some initial focus for PIRSA’s food safety program.
Meat and Livestock Australia and PIRSA continued to co-sponsor training sessions for the meat industry and Government to enhance the industry skill base. Eighteen workshops, targeted at small retail businesses, focussed on improving industry/regulator knowledge of meat industry standards, food safety programs, quality assurance and microbiological monitoring.

PIRSA worked cooperatively with South Australia’s kangaroo game meat industry to introduce a Field processors handbook, supported by training sessions for field processors on implementing food safety programs.

In partnership with Torrens Valley Institute of TAFE, PIRSA successfully negotiated funding assistance from regional development boards securing 20 training positions for regional meat processing businesses, for training based on the national Meat Safety Certificate course.

**PIRSA Rural Solutions**  
**Electronic solutions**

PIRSA Rural Solutions continued to develop decision-making software for its rural constituency to support efforts in improving productivity and ultimately improved business management. Access to information on the PIRSA website is continually refined.

**Roseworthy Information Centre**

The Roseworthy Information Centre was officially opened in November 2000 with information services transferred from Murray Bridge to Roseworthy. A joint project between PIRSA and Adelaide University, the centre is a hub for assembling and distributing a wide-range of information products to South Australia’s rural and agricultural communities. Future development of this centre will focus on upgrading of information delivery via PIRSA’s regional offices and a network of agencies located in rural communities.

**TARGETS FOR 2001–02**

- Deliver comprehensive greenhouse modernisation training and industry skilling programs.
- Improve the financial viability of the Cropwatch service.
- Support the biennial national Lamb Convention to be held in Adelaide in October 2001.

**Strategic priority 13 — WE BUILD COLLABORATIVE RELATIONSHIPS WITH OTHERS — our success depends on building and maintaining our relationships with clients, stakeholders and the community**

**PIRSA Rural Solutions**  
**Strategic alliances**

Consultancy opportunities for PIRSA Rural Solutions were broadened through collaborative projects with external companies such as PPK. A practical example project with PPK is near completion in the Eyre Peninsula Region.
FISHERIES

The Fisheries Group is responsible for providing policy, management, monitoring and extension advice services to Government, industry and the community to maintain and develop the State’s wild aquatic resources for the benefit of current and future generations. The group achieves this through four key functions — development of management arrangements for wild aquatic resources in consultation with stakeholders; development of appropriate legislation to reflect these management arrangements; education of stakeholders and the general community about wild aquatic resource management issues; and monitoring and promoting community compliance with legislation and regulations.

The group is strongly supported by SARDI Aquatic Sciences, in particular through its mandatory annual stock and economic assessments of fisheries to guide the sustainable development of the State’s fisheries resources.

Performance measure highlights

An independent stakeholder survey was carried out during the year to gauge the level of satisfaction with the Fisheries Group’s service delivery. For the first time, all aspects of the group’s activities were surveyed, with questions aimed at eliciting licence holder views on licensing, compliance and fisheries management functions. Nearly 300 replies were received representing a 31% response rate. Key results from the survey indicated:

- A reasonable level of satisfaction with fisheries management, with 56% of respondents considering current arrangements to be ‘definitely effective in protecting their species’ of interest from over exploitation.
- A high level of satisfaction with licensing services, with 79% of respondents satisfied or highly satisfied.
- A high level of satisfaction with work conducted by fisheries compliance officers, with 74% of respondents indicating that they considered performance to be excellent or fair.

Other themes which emerged from survey findings included the importance of easy access to information on fisheries management issues; the need for appropriate penalties for people whose actions put the resource at risk; transparency in relation to fisheries management and service provision; effective consultation in relation to fishery restructures and closures; the need for increased compliance attention to the recreational sector; and the need for adequate fisheries compliance officer presence around the State.

A newsletter style response was sent to fishery licence holders outlining key findings and associated improvement initiatives for implementation.

Strategic priority 1 — INDUSTRY DEVELOPMENT — provide support for industry and regional development that focuses on global market opportunities

**Seaweed Industry Development Board**

A range of projects to address seafood safety and quality, electronic marketing and product awareness, and activities associated with the State Food Plan were initiated by PIRSA and industry through the Seafood Industry Development Board.

Strategic priority 3 — RISKS AND BIOLOGICAL CONTAMINANT THREATS — successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access

**Japanese crab**

An introduced Japanese crab was identified from Outer Harbour in December 2000. An Emergency Management Committee was established under the protocols of the National Strategy on Marine Pest Incursions to coordinate an appropriate response. Further trapping in the Outer Harbour area over several months did not result in any further specimens being located.

**White shark**

Reports of incidental and accidental catches of the protected white shark were investigated with actions pending.
Strategic priority 4 — INTEGRATED POLICY FRAMEWORK, REGULATION AND COMPLIANCE — create through consultation, effective policy and regulatory frameworks to enhance industry and community confidence

Reviews of legislation

An issues paper on the National Competition Policy review of the *Fisheries Act 1982* was released in June 2001 which identified those provisions in the Fisheries Act and its subordinate legislation that have a significant impact on competitiveness in management of the State’s fisheries. Comments from this paper will lead into the full review of the Act scheduled for 2001–02.

Recreational fishing

A review of recreational fishing was completed by the Recreational Fishing Industry Review Committee in November 2000 and a five-year plan released in April 2001. Under the plan, recommended significant changes to recreational bag and boat limits were prepared for implementation. To this end, the *Recreational fishing guide* was updated with new size, bag and boat limits, re-printed in a more user-friendly format, and released on 1 July 2001. A total of 80 000 copies will be distributed.

The government policy on recreational access to rock lobster pots was changed in June 2001 allowing recreational fishers to make an application for recreational rock lobster pot registration from 1 August 2001.

Marine scalefish

A review of the marine scalefish restructure was completed.

Compliance services

The Fisheries Group provides compliance services to the community and fishing industry to ensure: protection of the aquatic habitat resource; resource-sharing arrangements are complied with; and production by both commercial and recreational fishers is within prescribed limits to meet sustainability objectives. Activities include monitoring of commercial catches and quotas, recreational daily bag and boat limits, compliance with fish size limits, restrictions on the use of gear by recreational and commercial fishers, and compliance by all resource users with restrictions on access to marine protected areas and aquatic reserves.

Regular monitoring during the year indicated an encouraging compliance rate; 504 offences were recorded from approximately 11 500 compliance checks. Offences resulted in 216 expiation notices, 234 cautions and the initiation of 54 prosecution briefs. There were 38 prosecutions heard, of which 31 resulted in either a finding or plea of guilty.

The Fisheries Group also carried out compliance monitoring functions under authority of the *Fisheries Management Act 1991* (Cwlth), through a service contract arrangement with the Australian Fisheries Management Authority, and marine safety checks under authority of the *Harbours and Navigation Act 1993*, through a service agreement with the Department of Transport. The memorandum of understanding between PIRSA and the Department for Environment and Heritage was revisited with training courses conducted for fisheries compliance officers (*National Parks and Wildlife Act 1972*) and National Parks and Wildlife Service investigators and rangers (*Fisheries Act*).

A marine safety services memorandum of understanding was signed with Transport SA enabling Fisheries Compliance Officers to also be authorised as Marine Safety Officers.

Risk assessment

The Fisheries Compliance unit undertook its first formal organisational risk assessment and developed an associated response plan, with assistance from SAICORP. Formal risk assessment processes were also introduced into the unit's operational planning for 2001–02 to ensure resources are targeted where the most impact will be achieved. This process will be strengthened for 2002–03 when the exercise will be conducted jointly with fishery management committees involving an independent risk management facilitator.

TARGETS FOR 2001–02

- Commence a full review of the Fisheries Act and develop a green paper.
- Implement the new Fisheries Prosecution Management System.
- Expand the use of the Vessel Monitoring System.
- Build a new offshore fisheries patrol vessel.
• Scope the introduction of electronic catch monitoring systems.
• Recruit, induct and train 15 additional fisheries compliance officers for regional deployment.
• Develop and implement arrangements with the Environmental Protection Agency for the monitoring of aquaculture activities across the State.

Strategic priority 5 — ECOLOGICALLY SUSTAINABLE DEVELOPMENT — enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles

National ecologically sustainable development framework
The Fisheries Group contributed to the development of a national framework for ecologically sustainable development through the Standing Committee on Fisheries and Aquaculture. This framework will be completed in 2001–02 and used as the basis for ecologically sustainable development reporting in South Australia. Stock assessment reports on all major fisheries were prepared by SARDI Aquatic Science and these reports indicate that the fisheries are being exploited within sustainable levels. The snapper fishery experienced seasonal closures in August and November 2000 to reduce fishing effort and catch on this important species.

TARGET FOR 2001–02
• Implement recognition and acceptance of ecologically sustainable development principles by fish farmers and the adoption of models for sustainability.

Strategic priority 7 — BUILDING COMMUNITY CAPACITY — build capacity, leadership and global awareness in industry, and rural and indigenous communities

Recreational fishing committees
The Fisheries Group continues to support nine regional recreational fishing committees across the State. These committees provide a greater opportunity for the community to be involved in fisheries management and the development of recreational fishing.

Volunteers
The number of trained regional FISHCARE volunteers increased by 15%. More than 75 volunteers are now active throughout the State with regional teams delivering information and material about fisheries management and relevant legislative measures.

The International Year of the Volunteer was acknowledged by a celebration dinner attended by the Deputy Premier, Chief Executive and other PIRSA Executive members.

FISHWATCH
The successful FISHWATCH program entered its 5th year with more than 3000 calls from members of the community logged.

Strategic priority 8 — PARTNERSHIPS — negotiate effective partnerships with industry, rural and indigenous communities, Commonwealth Government and local government for regional and industry development

The seven fishery management committees continued to operate in 2000–01 with a change in industry membership on some committees. These committees are very effective in providing quality advice to the Director of Fisheries, and Minister for Primary Industries and Resources, on the sustainable management of their specific fisheries.

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions

Licensing online
An online facility for the payment of commercial licence fees has been developed.
TARGET FOR 2001–02

- Introduce EFTPOS facilities across the State for the payment of fisheries fees and services.

Strategic priority 10 — PIRSA IS A GREAT PLACE TO WORK — we attract, develop, value and support our people; we provide a positive work culture

The management team initiated awards to staff for excellence, commitment and enthusiasm.

Fisheries Group staff were openly encouraged to attend PIRSA Management Forums.

A Fisheries Forum for all staff has been planned for August 2001 with the program responding to the needs of staff in the areas of team building, policy decision making and knowledge.

Training plans were developed and implemented within the compliance field.

Strategic priority 11 — WE MANAGE RESULTS — we manage our resources well; we provide leadership; our business processes are effective and efficient

Leadership for the Future

The Fisheries Group is committed to the PIRSA Leadership for the Future Program with three senior managers participating during the year.

Continuous improvement

Commitment to continuous improvement was demonstrated with a number of process review teams completing projects resulting in the implementation of new and improved business practices including decision making processes, the development and distribution of disaster response kits, and the increase in allowance for officers working on offshore vessels exceeding 12 metres in length.
AQUACULTURE

Aquaculture SA is responsible for providing services to the government, industry and the community to support and develop the State’s aquaculture industry in a sustainable manner for the benefit of current and future generations.

The group achieves this through its major functions — policy and resource management including policy and regulation, environmental monitoring, licensing, leasing and tenure allocation; industry support including information services, fish health and shellfish quality assurance, compliance; and industry development.

Performance measure highlights

The high level of interest and activity in aquaculture continued during 2000–01. The value of production again rose substantially with an increase in 1999–2000 to $260 million or 44%, up from $181 million in 1998–99.

The South Australian industry is leading the way in aquaculture development. The State became Australia’s largest aquaculture producer in terms of value and volume of production, and in the number of aquaculture authorisations granted.

Aquaculture is one of the few industries currently generating jobs growth in regional South Australia. The number of people directly employed in the industry in 1999–2000 increased to almost 1100. Indirect job creation from flow-on effects takes the number of people employed in the aquaculture industry in South Australia to over 2500, representing an increase of nearly 10% from the previous year.

It is expected that both the value of production and the jobs generated by the industry will have risen again in 2000–01. Those figures will become available later in the year.

Strategic priority 1 — INDUSTRY DEVELOPMENT — provide support for industry and regional development that focuses on global market opportunities.

Production value

The tuna sector continues to have the highest production value, but abalone, oysters and marron all grew substantially. New sectors are beginning to emerge, for example, yellowtail kingfish, mulloway, mussels, scallops and the use of inland saline waters.

Value of production

The gross value of production for aquaculture exceeded the commercial wild fisheries sector for the first time, demonstrating the growing importance of the industry to the State.

TARGETS FOR 2001–02

- Aim to maintain recent growth figures for the aquaculture industry.
- Facilitate the introduction of total quality management systems for aquaculture.
- Identify strategic research and development projects in aquaculture.

Strategic priority 3 — RISKS AND BIOLOGICAL CONTAMINANT THREATS — successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access South Australian Shellfish Quality Assurance Program

The South Australian Shellfish Quality Assurance Program continued to facilitate the safe production of South Australian shellfish thereby protecting consumers and providing a competitive trade advantage.

TARGETS FOR 2001–02

- Monitor waters and shellfish from growing areas within South Australia according to national protocols.
- Maintain databases of microbiology, algal and environmental parameters, and make this information available to the aquaculture industry.
- Prevent contaminated shellfish from reaching markets by closing contaminated growing areas.
• Respond to food-borne disease outbreaks, algal blooms, fish kills and environmental spillage events.
• Input into industry codes of practice.
• Develop and instigate protocols to prohibit the farming or collection of shellfish from prohibited areas.
• Provide policy advice to Government and industry re management of safe shellfish production.

**Strategic priority 4 — INTEGRATED POLICY FRAMEWORK, REGULATION AND COMPLIANCE — create through consultation, effective policy and regulatory frameworks to enhance industry and community confidence**

**Development issues**
Revised processes and procedures were implemented to ensure a more integrated approach to handling new aquaculture development inquiries.

**Policy framework**
Development of a strategic policy framework for the aquaculture industry commenced, to ensure ecologically sustainable management of the industry.

**Fish health**
A fish health management plan was developed for South Australia to protect the health status of South Australia’s aquaculture and fishing resources, thereby minimising production losses and protecting the environment and the State’s aquatic diversity.

The oyster spat importation protocol was agreed between all parties and came into effect, protecting South Australia’s waters from diseases. It forms one part of a translocation policy for the State.

**Licensing**
The number of aquaculture authorisations (that is licences, permits etc.) exceeded that of the commercial wild fishing sector for the first time. At 30 June 2001 there were 914 aquaculture authorisations current, compared to 870 fisheries licences.

The number of authorisations for aquaculture development increased by 9% to 916 in 2000–01, from 843 in 1999–2000. The cost of managing aquaculture in South Australia was $1971 per authorisation, which is significantly lower than the $14 000 to $92 000 recorded in other States.

**TARGETS FOR 2001–02**
• Undertake policy gap analysis and implement and document a strategic policy framework for the aquaculture industry that delivers clarity and accountability for stakeholders and allows effective risk management.
• Review licence, lease and development application procedures, and implement improvements to deliver a streamlined and effective application process that meets the needs of internal and external clients.
• Implement an improved system of aquaculture resource and development planning that delivers certainty, clarity and accountability for all stakeholders.
• Implement an improved system of environmental monitoring that delivers appropriate resource management data and meets the reporting needs of stakeholders.
• Review existing legislation and identify appropriate improvements.
• Establish and implement a quality management system for the delivery of key services incorporating quantifiable measures of performance.
• Review the performance and integrity of existing databases and spatial information systems within the context of a client needs analysis.
• Develop and implement an integrated State Government fish health policy, and risk assessment and management protocols and procedures.
• Develop and implement a State-wide fish health surveillance capability.
• Develop contingency plans for the response and coordination of possible fish health emergencies.
• Ensure State compliance with Federal Government and international obligations, including monitoring of industry compliance with licensing requirements.
• Promote public and industry awareness of fish health issues, supporting industry-wide fish health related initiatives.
• Provide technical and policy advice to PIRSA on all matters relating to farmed and wild fish health issues.

Strategic priority 5 — ECOLOGICALLY SUSTAINABLE DEVELOPMENT — enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles

Ecologically sustainable development
A continued focus for PIRSA has been, and will continue to be, the ecologically sustainable development of the aquaculture industry. During 2000–01 significant progress was made towards ensuring that the fundamentals of a regulatory planning framework, policies, standards and improved processes were in place. This contributes to the sustainable development of one of the State’s most significant primary industry sectors.

Management plans
A new approach to integrate aquaculture management plans was implemented into the planning process to provide greater confidence and certainty in the approval process. Further a review of all aquaculture management plans was commenced and is expected to take three years to complete.

Legislative development
A review of aquaculture legislation was completed and drafting of a Bill to be introduced to Parliament commenced. This legislation will provide a framework for the ecologically sustainable development of the aquaculture industry and provide clarity, transparency and certainty for all stakeholders.

Tenure, assessment and licensing
Improved processes for allocating tenure and issuing licences were developed and implemented. Licence conditions were also reviewed, with many of the alterations identified during public consultations on the review of legislation.

Industry standards
Industry standards for each aquaculture sector were developed with the emphasis on sustainable farm management practices and environmental standards. These standards are being implemented through conditions of licence.

TARGETS FOR 2001–02
• Implement recognition and acceptance of ecologically sustainable development principles by fish farmers and the adoption of models for sustainability.
• Complete five strategic aquaculture management plans.
• Implement a strategic policy and planning framework to ensure the ecologically sustainable management of the State’s farmed seafood sector.

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions

Regional development boards
Strategic alliances were developed with the 14 regional development boards, to improve the provision of information to existing or prospective fish farmers by better integrating the technical and business advice available.

Industry
Aquaculture SA worked with eight industry associations to facilitate networking, disseminate best-practice information and advice, identify training requirements and prioritise projects.

Industry projects
Aquaculture SA worked with various industry associations to secure over $146 000 of funding from external sources. There are six projects aimed at improving farm management techniques and strategic development of
the industry and include quality assurance, workshops, facilitating growth studies and occupational health and safety.

Technical advice
The group facilitated the provision of specialist aquaculture technical advisory services in three regional areas to improve the level of services available to people currently in the industry and to others interested in getting into the industry.

Fact sheets
Fifteen fact sheets were updated to provide contemporary information.

TARGETS FOR 2001–02
- Inform and educate the aquaculture industry of its new requirements to fulfil obligations under revised fish farming licences.
- Provide technical expertise, guidance and information to aquaculture industry associations, regional development boards, local government and where appropriate, farmer networks.
- Assist with project management of externally funded aquaculture related projects.
- Implement an aquaculture information and spatial management system.

Strategic priority 11 — WE MANAGE RESULTS — we manage our resources well; we provide leadership; our business processes are effective and efficient

Aquaculture Advisory Committee
An Aquaculture Advisory Committee was established to discuss and debate issues relating to the aquaculture industry and its relationship to the environment and to the community broadly, and to give advice to the Minister for Primary Industries and Resources. The committee met on four occasions.

TARGETS FOR 2001–02
- Develop a communication strategy and plan, to improve the understanding of aquaculture.
- Commission economic studies of aquaculture by region and by industry sector.
- Develop a whole-of-government planning strategy for aquaculture.
- Further develop industry-wide assessment and monitoring protocols for aquaculture.
SARDI

The South Australian Research and Development Institute (SARDI) is the South Australian Government’s principle resource for primary industries and related research and development, and is a primary source of advice on State science and research policy. It was established to provide a better focus and direction for the State’s research capacity; to ensure that research outcomes are relevant and available to industry; ensure that research and its management operate within commercial and industry standards; and increase South Australia’s national research and development profile and influence.

SARDI operates in four strategic research areas — Aquatic Sciences, Crops, Horticulture and Livestock Systems. The operational research units are supported and complemented by Corporate Services and Communications units. Research and development services are provided to agribusiness, commercial enterprise, manufacturing and processing industries, natural resource conservation agencies, primary industries (agriculture, fishing and aquaculture), rural industry development corporations and State Government agencies.

Performance measure highlights

SARDI completed 55 projects in 2000–01 and 200 projects were commenced or are ongoing. All projects and services met agreed criteria (milestones) and contributed to the defined project outcomes and scope. Projects reached milestones agreed in the project proposals or were renegotiated with clients.

Strategic priority 1 — INDUSTRY DEVELOPMENT — we provide support for industry and regional development that focuses on global market opportunities.

Aquatic Sciences

Aquafin Cooperative Research Centre

The Aquafin Cooperative Research Centre to be based at the South Australian Aquatic Sciences Centre, links the major research centres for finfish aquaculture nationally and will provide a total $70 million for research on finfish aquaculture over the next seven years. It comprises a research portfolio including programs on environment, health, production, propagation and education.

Aquaculture

Following a request by the South Australian Marine Finfish Growers Association to produce mulloway fingerlings, SARDI successfully produced (for the first time in Australia) large quantities of mulloway fingerlings to assist in the development of the industry.

In managing the Fisheries Research and Development Corporation national southern bluefin tuna aquaculture sub-program, SARDI prepared and published the Southern bluefin tuna aquaculture strategic research and development plan 2001–06: sustainability and innovation for the future with the assistance of the Fisheries Research and Development Corporation and Tuna Boat Owners Association SA.

A range of services were provided to the aquaculture industry including support in the preparation and submission of aquaculture development applications, undertaking environmental monitoring programs required by government, and supplying live feeds for finfish rearing when commercial hatchery supplies faltered.

Crops

Wheat variety improvement

Possible new resistances to crown rot in tetraploid wheats have been identified, which if confirmed, will assist the durum industry in the long term.

Commercialised release of Kukri, a prime hard quality wheat developed as part of the wheat breeding program at Roseworthy.

Oat variety improvement

Resistance and tolerance screening to stem nematode in oats was completed. Twenty-three selections from a segregating line were identified with resistance and tolerance, and seed from these selections will be bulked for possible release as a new variety in 2001.
The glasshouse crossing program produced about 225 oat F₁ seeds for grain and hay variety development. Disease reactions, agronomic characters and yield were collected for approximately 16 500 plots in the field program.

**Wheat variety improvement**

SARDI raised concerns regarding a breakdown of leaf rust resistance in a wide cross-section of common wheat varieties. This breakdown is of considerable concern, particularly regarding the potential impact on next year’s crops if environmental conditions are conducive to rust. SARDI is consulting with the breeders on additional resistant lines in the breeding program and any opportunities for accelerating their development.

**Barley variety improvement**

Net blotch strains were identified that are virulent on Sloop, Schooner and Chebec. This is a significant threat to the malting barley industry. An emergency permit for combining thiram in seed treatments to control seed-borne net form net blotch was obtained and has been promoted to industry.

The following update on progress with potential new barley is provided by Andrew Barr for Adelaide University’s Barley Breeding Program which is supported by SARDI.

WI3102 — This line continues to show very high levels of malt extract, which may have promise in the Australian domestic malting and brewing industries.

WI3167 — This Cereal Cyst Nematode resistant Sloop backcross line has a similar malting profile to Sloop in almost all aspects, except an average of 0.3% lower malt extract. A decision regarding its future will be made at the Malting Barley Quality Improvement Program steering group meeting in February 2001.

Franklin*Sloop — A total of 15 lines have been evaluated. This group of lines are showing good malting quality potential with excellent levels of DP, with some improvement in malt extract.

Haruna nijo*Skiff derived crosses — A number of these crosses have been identified which have excellent malting quality, in particular WI 3284 (Haruna nijo*Skiff)/Natasha and WI 3292 ([Haruna nijo*Skiff]/Jubilant).

Season 1999 Waite Stage 1 entries (WI3409–WI3419) — these lines incorporate a number of key parents, including Keel, Sloop, Chieftain, Monarch, Galaxy, VB 9623 and VB 9104, which showed excellent malting quality in 1999 season Stage 1 trials, combined with high yield and improved disease resistance.

Linkage between resistance to common root rot and six-row habit in barley has been confirmed in breeding lines. This will enable resistance to be transferred to malting quality lines.

A service for detecting resistance to particular scald (*Rhynchosporium secalis*) isolates in barley breeding lines was developed.

**Oat variety improvement**

Putative molecular markers were identified for Cereal Cyst Nematode resistance in the oat varieties Potoroo and Mortlock.

**Pulse variety improvement**

A feeding experiment was commenced to determine the effect of various rations of vetch and barley on the growth rate of lambs.

Seed testing for the January to March quarter includes Ditylenchus on clovers and lucerne, and fungal seed tests on mostly lentils but also faba beans and chickpeas. The highest level of *Ascochyta lentis* infection in lentils was 24% but most samples were below the threshold levels for *Ascochyta* (2%) and botrytis (5%).

**Oilseed variety improvement**

SARDI’s involvement in the National Brassica Improvement Project was reviewed with current funding arrangements likely to continue. Over 500 single plant selections from early maturing canola breeder’s lines have been taken for further development in South Australia.

Changes to the new Australian blackleg rating system were finalised with major input from SARDI.
Evaluation and farming systems

The harvest of the State-wide field trial program within the South Australian Field Crop Evaluation Program was successfully completed. This encompassed commercial varieties and breeders lines across 13 crop species, more than 100 field trial sites and 40 000 small trial plots.

Ongoing grain quality testing of wheat, oats and pulses for the national and locally based plant breeding programs was completed.

Climate risk Management training was provided to farmers as part of the Risk Management Workshops at Booborowie and Robertstown and to advisers and researchers in the Climate Risk Workshop at the Waite Research Precinct.

A large number of breeding lines were successfully screened for a wide range of diseases, in particular scald, septoria, leaf rust, stripe rust, net blotch, crown rot, yellow leaf spot.

A new nematode species on turf grass (associated with bowling greens in Western Australia) was identified which is causing significant damage.

Funding was successfully obtained for two new projects submitted to SAGITF to identify and incorporate new sources of resistance to *P. neglectus* and to assess damage caused by stem nematode to canola, wheat, barley and lentil varieties. A PhD thesis on *The root lesion nematode, Pratylenchus neglectus, in field crops in South Australia* was submitted in December 2000 and accepted in March 2001.

Pathology Diagnostics and Foundation Seed Services

New tests for blackspot and oat strains of take-all were introduced into the root disease testing package. All tests appear to be working well with very positive feedback on the Rhizoctonia DNA test. There has been very high use of the root disease tests by research programs with initial indications that take-all levels are building up in paddocks across southern Australia.

A Grains Research and Development Corporation funded project, ‘Diagnostic and decision support tools to assist management of soil-borne diseases’ was commenced.

Harvest of all the Foundation Seed Scheme contracts were completed with record yields (4.8 tonnes per hectare) of the new barley variety WI 3102 being recorded. Lines of bread and durum wheats for the Waite wheat breeding program were cleaned for multiplication over summer.

Horticulture

Citrus

Quality problems with Australian Navel oranges exported to the United States have been addressed through Horticulture Australia funded projects to research Rind Breakdown, wax-induced pitting and control of rind diseases. A photographic guide to the common post harvest diseases and disorders of Navel oranges and mandarins has been prepared by SARDI postharvest researchers to assist with diagnosis of problems with citrus for overseas markets.

Tree crops

Australian Centre for International Agricultural Research funding has been approved for SARDI to commence an apricot and plum breeding project with China.

Viticulture

The first purpose-built ‘SARDI spray fan’ has been tested and shown to be 25% more efficient in providing a uniform air flow for controlling diseases on grapevines through improved spray coverage. Improved wine quality will result from effective disease control on vines grown in cool humid climatic zones.

Post harvest

Guidelines for the postharvest handling of cherries will be developed by SARDI postharvest researchers in collaboration with PIRSA Food and Fibre staff. Manuals addressing harvest maturity, cooling and packaging protocols will provide background information for growers to develop quality management systems addressing food safety and quality specifications for cherries.
Livestock systems

Meat and wool

The Molecular Sciences Group within the meat and wool program is investigating the molecular events associated with the reprogramming of cloned embryos. The group has discovered at least two new previously undescribed proteins, their function is currently being elucidated. It is likely that they will be pivotal to embryo survival, a major technical issue in cloning research.

The Parasitology Group have characterised the level of moxydectin resistance in a number of sheep flocks, the consequences of which if left unchecked are serious for the high rainfall zone sheep production. The group is currently working with a number of farmer groups to devise sustainable parasite management systems.

New reproductive technology was applied to Matilda, Australia’s first cloned merino sheep resulting in surrogate ewes producing three lambs.

Sustainable Farming Systems

Long-term cropping trials of the Sustainable Farming Systems unit have shown that using controlled traffic systems can reduce fuel usage for tillage and seeding operations by more than 75%. In addition, breaking up compacted soil layers below the top soil can improve yields by at least 20% and improve water use efficiency. These results are likely to be applicable to extensive areas of cropping enterprises right across southern Australia.

The Sustainable Farming Systems unit is undertaking research and development activities with many farmers’ groups (e.g., Southern Yorke Peninsula Alkaline Soils Group, Yeelanna Landcare Group, Mallee Sustainable Farming Systems Project, Primary Industries of Kangaroo Island Inc.) in order to improve the ability of local communities to lead research projects and to develop their own priorities for research and development and technology transfer activities.

Pigs and poultry

Studies at the Pig and Poultry Production Institute have shown substantial improvement in pig health, reproductive performance and welfare are achievable by adopting simple management strategies to improve housing, hygiene, flooring, air quality, thermal conditions and environmental protection. The quality and suitability of indoor environment in piggery buildings can be improved by reducing odour and dust pollutants.

Completion of the evaluation of nutritional value of premium grains for livestock has provided a value of ingredients for pigs and poultry. Data will be incorporated into the Australasian Livestock Feed Ingredient database, which includes a comprehensive profile of samples such as their physical properties, geographic source, species and details such as plant cultivars, growing conditions, analytical methods and processing methods.

The Pig and Poultry Production Institute was established in the Livestock Systems Alliance, Roseworthy Campus, and is considered an international class institute. Developments from this alliance include: new projects undertaken with members of the alliance; the development of a feed extruder; and the involvement of new industry partners. The alliance will be expanding to include other collaborative organisations. The institute’s facilities are being used by industry partners to develop new initiatives.

There has been extensive involvement of industry in the research conducted at the Institute. Commercialisation of pig and poultry nutrition feed and environmental monitoring services is increasing, as well as income from commercialisation services. Air quality monitoring services for pig and poultry industries have also been developed by the Institute.

Food quality and safety has been enhanced through the establishment of the national food safety program with support of the Pig and Poultry Production Institute staff. This has gained strong industry support.

SARDI has developed research collaborations and consultancies through extensive commercialisation of the Institute’s research services and collaboration with national and international institutions, consultants and companies.

Natural resources have been sustained and developed through the integration of pig and poultry in farming systems and the development of a bio-systems association to promote sustainable use of pig and poultry waste.
There has been increased awareness of industry to adopt innovative technology to reduce environmental pollution.

**Pastures**

The SARDI Pastures Group commenced an Australian Centre for International Agricultural Research project to develop Lucerne in China in February 2000. The project has a Senior Scientist based in Adelaide who works with five agencies in China, the University of Tasmania and the Department of Agriculture in Western Australia. The project highlights stress tolerance — particularly to salt, waterlogging and acid or high aluminium soils. While the project has as its primary goal the improvement of lucerne in China, there will be large spin-offs for lucerne development in Australia, particularly in management of the increasing problems of salinity in Australia.

A new barrel medic cultivar, Jester, was commercialised during the year to replace the aphid susceptible cultivar, Jemalong. Jester is a general-purpose hard-seeded, mid season barrel medic (Medicago truncatula) adapted to a wide range of soils. Jester is a hybrid, with Jemalong as a parent, that has a good level of resistance to both spotted alfalfa aphid and blue-green aphid. It retains the performance and adaptability characteristics of Jemalong and apart from aphid resistance is practically indistinguishable. Jester has Plant Breeder's Rights protection and is expected to perform well on a wide range of soil types from calcareous sands, to red-brown earths, to grey-black clay loams that receive 350–500 millimetre average annual rainfall.

A new disc medic cultivar, Toreador, was commercialised during the year. Toreador grows well on a range of soils from red-brown earths to sandy soils, but is specifically targeted at deep, sandy soils for low rainfall environments (275–400 millimetres annual rainfall). Toreador has a high level of resistance to blue-green aphids and some resistance to spotted alfalfa aphids. Toreador was developed from an interspecies cross of Medicago littoralis x M. tornata followed by selection for disc medic characteristics, aphid resistance and good agronomic performance. Toreador has Plant Breeder's Rights protection and is 10 to 15 days earlier than the aphid susceptible disc medic cultivar ‘Tornafield’.

**Dairy**

The Flaxley Agricultural Centre is undertaking a major dairy farmlets study, including combinations of stocking density, fertiliser usage on rain-fed and irrigated pastures. The aim is to determine the most cost-effective production systems for the dairy industry; a very timely project in view of dairy deregulation and the present trend towards larger herd sizes. As an add-on to this project the impacts of these production systems on soil compaction and nutrient run-off are being evaluated.

Flaxley Agricultural Centre is assisting a local feed exporter in formulating a superior form of oaten hay for export to dairy farmers in Japan. At present, this trade is dominated by exports from the United States, however if the new formulation is shown to enhance milk production, it could improve South Australia’s position in this market.

Flaxley is also conducting time-and-motion studies on its dairy cows. The aim is to provide the cows with locally-sourced biodegradable track surface materials which give the tracks a softer surface and enable the cows to walk faster to and from the milking shed.

In collaboration with the Lucerne breeding division in SARDI, Flaxley has been screening its collection of lucerne cultivars for strains with superior silage-making properties, and proposes to extend this work to look for bloat-friendly cultivars. In addition, Flaxley is analysing a natural feed additive which could be given to newborn calves to improve their resistance to calfhood diseases.

**TARGETS FOR 2001–02**

- SARDI is to undertake novel research into the role of subsoil constraints on the productivity and sustainability of primary industries of southern Australia through a lead role in the Root Zone Improvement Centre, a collaborative research centre between PIRSA, Adelaide University, Victorian Department of Natural Resources and Environment, CSIRO Land and Water, and AgWest (Western Australia).
- The Pig and Poultry Production Institute is to develop a beak trim accreditation training program for the Australian Egg Industry at the request of the Agricultural and Resource Management Council of Australia and New Zealand.
- The Pig and Poultry Production Institute is also to develop a rapid method for assessing hygiene in pig sheds.
Strategic priority 2 — INNOVATION INDUSTRY — we promote and facilitate new and value-adding industry that builds on the States’ knowledge, infrastructure and innovation capability

Aquatic sciences

Shell fisheries

In partnership with the prawn fishing, through supportive funding from the Fisheries Research and Development Corporation, National Seafood Centre, SARDI was successful in adapting and transferring techniques for the development of live export of prawns.

Aquaculture

SARDI was successful in obtaining funding for the coordination of the Fisheries Research and Development Corporation, National Abalone Aquaculture Projects in genetics and nutrition. These activities complement Aquatic Sciences activities in the development of manufactured feeds for abalone and southern bluefin tuna, and the enhancement of product quality.

Crops

Wheat variety improvement

SARDI successfully improved the caffeine chromosome doubling method for wheat haploids to a point where it can be applied as a routine procedure in the SARDI Doubled Haploid Facility. Over 13,000 doubled haploids of wheat were produced in year 2000, with approximately 6000 lines sold to outside clients and the balance produced for collaborators in the Cooperative Research Centre for Molecular Plant Breeding, Adelaide University, and Grains Research and Development Corporation or South Australian Grains Industry Trust Fund funded projects within SARDI.

DNA probes were developed by the Root Disease Testing Service in conjunction with the Nematology Group and will be used for the first time in routine screening tests to quantify numbers of root lesion nematodes in wheat plants. The system has been successful, with less variation and greater accuracy than traditional microscopic evaluation of nematode numbers from plants.

Oat variety improvement

The first oat doubled haploid population for mapping molecular markers were produced.

Strategic priority 3 — RISKS AND BIOLOGICAL CONTAMINANT THREATS — we successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access

Aquatic sciences

Aquatic Sciences Consulting

Aquatic Sciences Consulting completed a survey of the potential areas of invasion and the abundance of the exotic crab, *Charybdis japonica*, in the Port River System.

Crops

Entomology

A new ant pest was recorded in Australia in late February. The fireant, *Solenopsis invicta*, was found in several places in the suburbs of Brisbane. It is probably the most serious ant pest around the world and currently is reported to cost the American economy about one billion dollars annually. It attacks plants and livestock, inflicts very nasty stings, is an environmental pest and can damage infrastructure (underground cabling). Action is being taken to contain and eventually eradicate the outbreak, despite views that it could have been present in Australia for up to five years. As there is a possibility that it has spread to other states, the SARDI Entomology Unit has been identifying ant specimens collected by local quarantine staff and so far all specimens have been negative.

Flies released in April into field cages have parasitised snails (pointed snail, *C. acuta*) and survived (probably as pupae) the first winter on Yorke Peninsula. Adults began emerging in mid October, with some indication that the bio-control agent *S. penicillata* favours Yorke Peninsula conditions.
SARDI staff managed a very successful locust control program which was the biggest ever run in South Australia.

**Wheat variety improvement**

The root lesion nematode, *Pratylenchus penetrans*, was recorded in South Australia for the first time. Severe damage was recorded in a wheat crop (following field peas). If this nematode is found to be widespread, it will have implications for growers since its host range in field crops is different to that of the two species commonly found in South Australia (*P. neglectus* and *P. thornei*).

**Strategic priority 5 — ECOLOGICALLY SUSTAINABLE DEVELOPMENT — we enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles**

**Aquatic sciences**

**Environment and ecology**

Following an intensive process of consultation throughout 2000–01, which broadly encompassed other government agencies and researchers in the South Australian universities, a new program, ‘Environment and Ecology’, has been established. This program focuses research on two sub-programs; Fisheries Habitat and Environment Assessment, Mitigation and Rehabilitation, with the long term goals to provide scientific and technical advice across government regarding key issues in the management of aquatic environments.

**Shell fisheries**

A range of outputs critical to the needs of sustainable development of South Australia’s fisheries and aquaculture resources were produced. Measures against performance indicators for each of the State’s fisheries, useful information on catch histories and relevant biological information was published in the *South Australian fisheries assessment* series. Subjects covered were Spencer Gulf and West Coast prawns, Southern Zone rock lobster, Northern Zone rock lobster, King George whiting, snapper, southern calamary, cuttlefish, pilchards, sand crabs, mud cockles, Murray cod, and Yellow eye mullet in Lake George (South East).

Studies to improve understanding of the impact of fishing on species that are not the primary target of fishing were conducted, including preliminary assessments on the level of by-catch from the rock lobster and prawn fisheries. In addition a preliminary study on the use of escape gaps in the rock lobster fishery led to the planning of a future project to identify the best configuration for escape gaps in pots.

**Finfish research**

A three-year population study of the giant Australian cuttlefish in northern Spencer Gulf, in collaboration with the Adelaide University and part funded by the Fisheries Research and Development Corporation, was completed. In addition a three-year Fisheries Research and Development Corporation funded project was also completed on the fishery biology and habitat ecology of sea garfish in southern Australian waters. This project was undertaken with the collaboration of Fisheries WA, Marine and Freshwater Research Institute Victoria, South Australian Museum and Adelaide University.

A major review of the direction and priority of sustainability research for the abalone resource was conducted with stakeholders. Significant gaps in the knowledge-base needed for adequate assessment were identified and research is being redirected to address these.

**Aquatic Sciences Consulting**

Aquatic Sciences Consulting undertook a marine benthic survey of an experimental drill site in Spencer Gulf and a field survey component of a preliminary assessment of potential sea disposal sites in Gulf St Vincent to assist in addressing environmental issues associated with development in South Australia.
TARGETS FOR 2001–02

- To further develop research on the relationship between fish and their habitat with a principal focus on understanding ecological processes and their relationships.
- To integrate the environmental research with other aquatic science programs in order to address questions on how to mitigate effect or rehabilitate degraded habitats.

Strategic priority 7 — BUILDING COMMUNITY CAPACITY — we build capacity, leadership and global awareness in industry, and rural and indigenous communities

**Crops**  
*Evaluating and farming systems*  
The Minnipa Agricultural Centre was nominated for a SA Great regional award.

**Aquatic Sciences**

*Aquaculture*  
Aquatic Sciences played an important role in the design and construction of a new $50 million Singapore Government aquaculture facility on Saint John Island. This also provided export opportunities for a South Australian manufacturer.

**Horticulture**  
A National Horticultural Research Network has been established to facilitate collaborative national projects and programs utilising infrastructure, resources and capabilities of CSIRO and State agencies supported with funding from Horticulture Australia.

**Riverlink**  
Riverlink Council has launched a Postgraduate Research Network in partnership with La Trobe University (Victoria) and regional industry groups to facilitate the employment of postgraduate researchers into Riverlink programs.

Strategic priority 8 — PARTNERSHIPS — we negotiate effective partnerships with industry, rural and indigenous communities, Commonwealth Government and local government for regional and industry development

**Aquatic Sciences**

*Aquaculture*  

**Horticulture**  

**Riverlink**  

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — we improve industry and regional access to information that supports better business decisions

**Aquatic Sciences**

A summary of South Australian commercial fisheries and aquaculture production to the end of 1999–2000 was produced and is publicly available.

The Aquatic Sciences Strategic Research Area trialed a work experience program. Under ‘FishCamp 2000’, eight secondary school students had the opportunity to spend four days with scientists assisting in the conduct of experiments and other research oriented duties.

**Crops**

*Wheat variety improvement*  
Two papers were published in *Journal of Nematology* concerning resistance in field crops to the root lesion nematodes, *Pratylenchus neglectus* and *P. thornei*. A media article was released for publication in rural newspapers regarding resistance in durum wheats to Cereal Cyst Nematode.

**Barley variety improvement**  
The International Barley Genetics Symposium was held in Adelaide during November — the first time that the conference has been held in the Southern Hemisphere. The conference attracted over 400 delegates and was extremely successful. SARDI assisted with the organisation and participated in the Pathology Field Tour for the
Symposium. This was a two-day tour with 30 interstate and overseas visitors and included a day on Yorke Peninsula.

**Oat variety improvement**

Information about the oat breeding program and potential new releases from the program were provided at Waikerie, Kybybolite, and Francis Field Days, where SARDI breeders were invited speakers.

The ‘6th International Oat Conference’ in Christchurch, New Zealand, was attended by SARDI staff where germplasm was procured and an international research project to find and incorporate new sources of stem rust resistance into cultivated oats was developed. Near infra-red quality research was presented in a poster paper and the Australasian Oat Breeding was co-authored.

**Pulse variety improvement**

Field inspections, farmer meetings and strategy planning phone links for the Anthracnose in lupins outbreak were held.

A full range of extension articles were prepared including papers sent to Grains Research and Development Corporation for GRDC Updates, chapters submitted to PIRSA Crop Harvest Report on Lupins, Beans, Chickpeas, High rainfall Cropping, canola, and chapters written for SARDI Field Crop Evaluation Program Post Harvest Report on beans, lupins, chickpeas, and canola. Fact Sheets were also written on the same crops.

A summary of current work was presented to the South Australian Farmers Federation’s Pulse and Oilseed Committee who then visited pulse trials at Turretfield on 3 and 4 October 2000.

The annual progress report of SARDI pea breeding work was presented at the annual Australian Coordinated Pea Improvement Program meeting held in Melbourne on 18–21 March 2001.

The vetch annual report was produced and sent to 120 farmers, researchers, resellers, agronomists and Grains Research and Development Corporation representatives. Five lines had higher grain yield than present cultivars over six sites, and seven lines showed higher dry matter production than current cultivars, Morava and Popany, in two sites.

Information was presented on management of chocolate spot in faba beans at the Cropping Systems Updates in Bendigo on 20–21 February 2001 and in Adelaide on 1 March 2001.

Information was presented on the detection of soil-borne pathogens of blackspot at the Second Australian Soilborne Diseases Symposium in Lorne on 6–8 March 2001.

The Australian Coordinated Pea Improvement Program meeting in Melbourne 19–20 March was attended by SARDI staff, where a summary of the pea pathology research conducted at SARDI in 2000 was presented, including details of downy mildew screening.

The Coordinated Improvement Program for Chickpeas in Australia meeting was attended by SARDI staff in Melbourne 20–21 March where the results from 2000 ascochyta blight resistance screening, foliar fungicide trials, and pathogen survival studies were presented.

A paper has been published in *Australian Plant Pathology Journal (Volume 30)* titled *Pathogenic variation of South Australian isolates of Leptosphaeria maculans and interactions with cultivars of canola (Brassica napus).*

The fact sheet published by Pulse Australia and co-authored by SARDI *Controlling foliar diseases of chickpeas, particularly ascochyta blight* was updated to include recent information on the use of foliar fungicides.

Pulse trial results for 2000 were compiled and publications (PIRSA Crop Harvest report, Field Crop Evaluation Program Post Harvest report, GRDC Updates) were produced.

Addressed grower and adviser meetings, including GRDC Update, Mundulla Bureau, Cummins pulse growers (Australian Wheat Board sponsored meeting and fares) and PulseSA meeting.
PIRSA Pulse and Oilseed Industry Development Group meetings (teleconferences) were held and information was presented to Pulse breeding meetings in Melbourne to coordinate pea, lentil, and chickpea breeding nationally.

Information was presented on management of pea diseases at a field day held by the Monarto Agricultural Bureau on 13 October 2000. A blackspot module for the Root Disease Testing Service Agronomist Accreditation course in Adelaide was also presented.

SARDI staff visited pulse researchers in Italy, attended a workshop in Spain on resistance to pulse diseases, and visited collaborators and assessed disease trials at the Victorian Institute of Dryland Agriculture.

Attended field days and extended information to farmers and industry regarding the performance of the vetch breeding program at Walpeup, Birchip, Waikerie, Blight, Lameroo and Melbourne.

**Oilseed variety improvement**

SARDI Research Officer was an invited speaker at field days at Kangaroo Island, Frances, Lucindale, Mundulla and Wolseley. This also included being a guest speaker at the MacKillop Farm Management Group high rainfall seminar in Naracoorte, and publishing reports in the PIRSA *Crop harvest report*, SARDI *Field crops post harvest report* and the MacKillop *Group harvest report*.

A media article was released in the November 2000 issue of *Ground Cover* to extend information regarding bio-fumigation and resistance to *P. neglectus* in canola.

**Evaluation and agronomy**

The first *SA crop variety sowing guide for 2001* booklet was compiled by staff from the Evaluation and Agronomy Unit during October 2000 which was sent to 8000 farmers and advisers throughout South Australia.

Attended the Grains Research and Development Corporation convened National Wheat Quality meeting at the Bread Research Institute in Sydney during November 2000.

The unit met with a delegation of durum breeders and chemists from Italy and showed them through the SARDI Grain Quality facilities during December 2000.

Compilation, editing and publication of *SA field crop evaluation program post harvest report 2000–01* was finalised with 450 copies printed and made available to Agribusiness, consultants and scientific collaborators.

All South Australian Field Crop Evaluation Program results were published in the PIRSA *Crop harvest report* (3000 copies to farmers State-wide), *Australian grains CD* and *Southern Yorke Peninsula Alkaline Soils Group research handbook*.

South Australian Field Crop Evaluation Program officers spoke at the Grains Research and Development Corporation ‘Cropping Systems Update’, Crop Science Society Meetings and various agribusiness consultant meetings.

The national *Pulse quality testing protocol manual* was completed and published.

Climate risk Management training was provided to farmers as part of the ‘Risk Management’ workshops at Booborowie and Robertstown and to advisers and researchers in the ‘Climate Risk’ workshop at the Waite Research Precinct.

Licensing agreements were finalised with Touchstone Consultancy for delivery of the SARDI ‘Climate Risk Management’ training module in Western Australia.

**Farming systems**

Meetings were held with invited farmers at Auburn, Cummins and Bordertown in October–November 2000 to plan for the medium and high rainfall climate risk management decision support trials to be conducted during 2001.
The ‘Indian Ocean Climate Initiative’ meeting, held in Perth in November 2000 was attended. Further developments were discussed in collaborative climate project work arrangements with Agriculture WA staff and others attending this forum.

Minnipa Agricultural Centre staff attended and participated in field days throughout Eyre Peninsula during October 2000. A Grains Research and Development Corporation sponsored workshop on the ‘Root Zone’ was attended in Canberra.

A Climate Risk Management training workshop was conducted for Victorian Department of Natural Resources and Environment staff in Melbourne in December 2000.

Chemists from CSBP Fertilisers in Western Australia and SARDI staff visited the Minnipa Agricultural Centre and fluid fertiliser sites to discuss the commercial manufacture of fluid fertilisers. A Canadian fluid fertiliser marketeer and farmer also visited the Centre with machinery agents from South Australia and Western Australia; after which they were taken to fluid fertiliser sites.

Biometrics SA spent two days at the Centre conducting a ‘Genstat’ training school. The school was highly successful in training researchers to use their own data and work together on research problems.

A SARDI Principal Research Scientist from the Minnipa Agricultural Centre, spoke on fluid fertilisers at the ‘GRDC Update’ held in Adelaide on 1 March 2001, at Waikerie on 6 March, at the IAMA conference in Adelaide on March 21 and at a GRDC Update in Parndana on 6 March.

The Minnipa Agricultural Centre shared a display and advice booth with the Streaky Bay PIRSA group at the Chandada Field Day on 28 March 2001.

SARDI staff met with Ausplow to discuss progress and developments in fluid fertiliser research. Ausplow are producing air seeders with fluid delivery systems and have made some developments in fluid formulations.

**Pathology**

New editions of the *Cereal leaf and stem diseases* and *Cereal root and crown diseases* books were published in October 2000.

A fact sheet was prepared on the biology and control of Cereal Cyst Nematode. Media articles were also prepared on the identification of *P. penetrans* (a root lesion nematode) in wheat and peas in South Australia; the identification of *Meloidogyne fallax* (a root knot nematode) in potato in South Australia; resistance of durums to Cereal Cyst Nematode; and the release of the new fact sheet for Cereal Cyst Nematode.

**Diagnostics and Foundation Seed Services**

A new manual developed for the root disease accreditation course was very well-received. Four hundred commercial and public agronomists were trained in interpretation of root disease tests from Perth to Dubbo in October–November 2000.

The *Plant Breeder’s Rights Information Bulletin* was updated during this quarter and was included in the *South Australian crop variety sowing guide for 2001*.

**Horticulture**

The SARDI Horticulture website has attracted considerable local and international interest through specialist pages and newsletters show-casing and linking technical information on cool chain handling, citrus, potatoes, apricots and integrated pest management.

**Riverlink**

The Riverlink web page has been updated and launched as a regional access resource for local events and technical information relevant to industries and agencies in the Riverland and Sunraysia regions.

**Cool chain handling**

A wall chart describing produce handling guidelines and cool chain handling pocket guides was prepared by the SARDI Postharvest Group with funding provided by the Air Freight and Sea Freight Councils and Horticulture...
Australia for distribution to growers, wholesalers and transport companies. The publications outline best practices to maintain cool temperatures and product quality from harvest through to the consumer.

**Entomology**

A communication plan ‘Implementing Integrated Pest Management of Diamondback Moth’ has been prepared by SARDI entomologists to provide a planned approach for growers to move away from the traditional reliance on chemicals. The plan involves an innovative approach to communication using grower workshops, newsletters, field visits, handbooks and publication on the SARDI website.

**Livestock Systems**

**Sustainable Farming Systems**

The national ‘Seed of Light’ was awarded to Dr N. Wilhelm of Sustainable Farming Systems. This is a national award provided by the Grains Research and Development Corporation in recognition of excellence in communicating research outcomes to industry. Only one award is provided each year to each of the three regional panels which the Corporation supports.

**Pigs and poultry**

A strategic planning workshop was held at the Roseworthy Campus involving the Pig and Poultry Production Institute, Adelaide University, International Integrated Biosystems network representatives and industry to plan future directions for sustainable and innovative use of pig and poultry waste.

A well-attended seminar was held at the 2000 Pig and Poultry Fair to disseminate the outcomes of the Institute’s pig and poultry research.

CDs incorporating a welfare quality assurance developed by the Victorian Department of Natural Resources and Environment and the Pig and Poultry Production Institute have been released to enable broiler, layer and ratite industries to prepare protocols and record keeping sheets to assist in meeting revised welfare standards.

The Australasian Livestock Feed Ingredient database has been made available on computer disk, AUSPIG and the Internet. This comprehensive, and up-to-date source of essential information will reach a range of potential beneficiaries including nutritionists, grain merchants, plant breeders, agronomists, and pig, poultry and fish producers.

The Institute developed HACCP-based quality assurance manuals to improve welfare of broilers, layers and ratites.

Workshops and conferences were facilitated by the Institute along with industry partners. Training materials are available for pig and poultry industries from the Institute.

Welfare audit documentation for the chicken meat industry and ratite industry was developed to fulfil industry’s and the community’s expectations of high levels of quality assurance associated with all aspects of production. The documentation has audit questions, background information, how the questions or practices relate to welfare, and recording sheets and checklists for farmers and unit managers to complete to help demonstrate compliance with the audit process.

**Strategic priority 12 — WE GROW AND HARNESS OUR KNOWLEDGE — our knowledge is a key business asset**

**Aquatic Sciences**

**Environment and ecology**

In May 2001, the Environment and Ecology Program group ran an international workshop on seagrass rehabilitation which assembled researchers from the United States and Australia to evaluate options for rehabilitating options along the Adelaide metropolitan coast.
Strategic priority 13 — WE BUILD COLLABORATIVE RELATIONSHIPS WITH OTHERS — our success depends on building and maintaining our relationships with clients, stakeholders and the community

Aquatic Sciences
In a collaborative project with the Research Institute for Aquaculture No. 1, Vietnam, (funded by Australian Centre for International Agricultural Research), SARDI completed a technological and socio-economic evaluation of integrated aquaculture systems in a highland region in northern Vietnam. Additional SARDI research indicated methods by which north Vietnamese farmers could increase the fish productivity of their ponds by some 50%. This outcome is now being further developed with the cooperation of selected Vietnamese farmers.

Crops
Pathology Diagnostics and Foundation Seed Services
A collaborative agreement between CSIRO and SARDI, and an international licensing agreement for commercial delivery of root disease testing technology, were signed between CSIRO, SARDI and Aventis CropScience on 19 October 2000. Agreements were also signed for the provision of root disease sample processing and root disease training to C-Qentec Diagnostics, the Australian subsidiary of Aventis CropScience.

Oat variety improvement
Oaten hay processors in South Australia and Victoria have formed a new company, AEXCO, which has applied for licensing rights to new oaten hay varieties produced by SARDI’s oat breeding program. The processors have agreed to apply an end point royalty of 50 cents per tonne on hay delivered for processing to assist in funding the breeding program. SARDI continues to support the quality of the industry through the annual ryegrass toxicity testing and shipment accreditation program.

A contract is being negotiated with a commercial partner for the production of specialty oat grain types for the export equine industry in Japan and South-East Asia.

Pulse variety improvement
Grains Research and Development Corporation, with the aim of renegotiating its investment in field pea breeding for further five years, undertook a review of the various components of the current Australian Coordinated Pea Improvement Program at a meeting with SARDI in July 2000.

SARDI is negotiating a commercial arrangement with CSIRO and a national agribusiness company to produce a number of transgenic pea varieties using SARDI’s nationally superior germplasm.

Licensing agreements were finalised with Touchstone Consultancy for delivery of the SARDI ‘Climate Risk Management’ training module in Western Australia.
The Sustainable Resources Group ensures that government policy and investment promotes healthy and prosperous primary production industries in South Australia that deliver safe produce, fulfil the current and future needs of South Australians, and incorporate economic, social and environmental aspects of resource use into management plans.

Much of the group’s activities are delivered through partnerships with primary producers, industries, resource managers, the community and other government sectors. The group facilitates improvement in the business and planning skills used in managing the State’s primary industries resource base. It develops and promotes technologies that support the use of primary industry natural resources up to their sustainable productive capacity. The group recognises the value of human resources and encourages its staff, industry and communities to work to their potential.

The group operates under eight programs — Animal and Plant Control; Land Management and Revegetation; Marine Habitat; Pastoral Management; Rural Chemicals; Rural Communities and Education; Strategic and Environmental Services; and Water Management.

Performance measure highlights

Customer satisfaction results
An independent customer satisfaction survey was conducted with rural farmers in order to gauge their satisfaction with Sustainable Resources information services. Overall 88% of customers either strongly agreed or agreed that the service was current, useful, timely and responsive, accessible and professionally provided for. Specific service ratings were: 90% for services in efficient techniques to control animal and plant pests; 86% for services in technical support for regional communities implementing Natural Heritage Trust projects; and 79% for services advising on integrated resource management.

In addition, an independent survey was conducted by Harrison Market Research on two key services: development of the Lower Murray Reclaimed Irrigation Areas program and the consultation for the Integrated Natural Resource Management Legislation.

Results from the Lower Murray Reclaimed Irrigation Areas indicated that stakeholders were enthusiastic about the success of the program, and customers were supportive of the goals of improved production, water quality and environmental benefits. Customers believe that consultation has been conducted well and that it is time for action. It is considered that any postponement will negatively impact on business progress.

The Integrated Natural Resource Management Legislation results showed that stakeholders and customers acknowledge the program is useful. Comments included that other interests such as planning should be incorporated in the legislation; the consultation process design was rather rushed and that the information flow was either adequate or limited; some groups were under-consulted and some under-represented. There was acknowledgment of the diverse number of groups associated with natural resource management and the challenge in communication between these groups. These issues are being incorporated into the redrafting of the legislation by PIRSA, the Department for Environment and Heritage and Department for Water Resources.

Outcome measures
An independent national review conducted for Agriculture, Fisheries and Forestry in mid 2000 showed that producers involved in structured training are twice as likely to adopt sustainable practices and also have increased gross operating surpluses. This equates to a 3% improvement in farm cash income and also a net present value of $9.585 million in South Australia and benefit–cost ratio of 2.78 for total investment and 6.95 for dollars invested by the State Government.

The impact of government policy supporting revegetation establishment can now be evaluated with State-wide plantings surveys completed in 1999 and 2000. The latest survey shows that revegetation in the South East region and Kangaroo Island has increased this year by 50% to 18 000 hectares, mainly due to blue gum woodlots. Trees for Life are the principal suppliers of planting stock in regional areas. Further improvements can be made by spatially locating areas planted. A pilot project to develop and trial a methodology for use by local communities was completed in the Goolwa to Wellington Local Action Planning area.
Strategic priority 1—INDUSTRY DEVELOPMENT—provide support for industry and regional development that focuses on global market opportunities

*Techniques, natural resource technologies and information*

The Sustainable Resources Group continues to provide a wide range of techniques, natural resource technologies and information which enables South Australian industry to be more globally competitive. This year the agricultural soil resource information was made available to support industry planning and investment.

The commercialisation of the Australian native plants industry continued to develop. Six of the original thirty-three species delivered to Israeli nurseries, contracted to State Flora Australia, are now commercially available in Europe and the United States. A further 28 species have been to Israel for evaluation.

Integration of revegetation and agricultural systems was progressed. The Natural Heritage Trust project ‘Management of native grasses and shrubs for perennial grazing systems’ contributed towards this endeavour as well as with two pilot regional revegetation technical workshops held in the South East and on Eyre Peninsula.

**TARGETS FOR 2001–02**

- Complete the Regional Revegetation Strategy for Eyre Peninsula.
- Conduct a State-wide technical workshop on chemical weed control in revegetation.
- Compete standard operating procedures for revegetation in difficult situations.
- Complete financial analysis, extension material and a final report for the Murray-Darling Basin Commission funded ‘Low rainfall alley farming’ project.
- Complete the joint venture funded agroforestry program ‘Integrating agroforestry into low rainfall farming systems’ project and associated scientific and extension papers.

Strategic priority 2—INNOVATION INDUSTRY—promote and facilitate new and value-adding industry that builds on the States’ knowledge, infrastructure and innovation capability

*Revegetation industry opportunities*

The promotion of new and value-adding industries continued with new revegetation industry opportunities. Promotion has attracted private investors to establish trials of new low-rainfall perennial biomass energy crops in South Australia. A pre-feasibility assessment was developed for multi-purpose biomass industries in the low to medium rainfall areas of South Australia. A national workshop (FloraSearch) also identified opportunities for the development of a range of native and exotic perennial species for low rainfall farming systems.

**TARGETS FOR 2001–02**

- Encourage private sector investment into new bio-energy options and other carbon sequestration initiatives that address greenhouse, natural resource management and economic issues.
- Promote and facilitate further trials of lower rainfall perennial biomass crops in regional South Australia.
- Fund FloraSearch project proposal to screen a wide range of native and exotic perennial species for potential plant products.

Strategic priority 3—RISKS AND BIOLOGICAL CONTAMINANT THREATS—successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access

*Branched Broomrape Program*

The Sustainable Resources Group, in collaboration with the Animal and Plant Control Commission, is minimising the impact of pest animals and plants on primary industries, natural environments and public safety. The Branched Broomrape Program continued with increased funding following the Agricultural and Resource Management Council of Australia and New Zealand agreeing to a $2.7 million eradication program. The program was developed in 1999 to ensure the distribution of branched broomrape was contained to the quarantine area. This year the program was reviewed and a survey of 240,000 hectares in South Australia and Victoria identified branched broomrape infestations on 130 properties (11,000 hectares). The susceptibility of crop, pasture and weed species to parasitism from branched broomrape was also determined. Research
commenced on predicting of time of flowering and investigation of control strategies to reduce the soil seed-bank of branched broomrape.

**Animal management**

The Northern Animal and Plant Control Board developed and successfully implemented a local management plan to control Johne’s disease in escaped commercial red deer in the Mid North. Tests on populations of feral fallow deer indicated they were not infected.

New research has shown that adaptive fox management practices will result in large benefits to lamb production under certain defined circumstances. These recommendations for fox management are being incorporated into an extension package to be distributed throughout Australia.

The Animal and Plant Control Commission developed an animal management policy for feral camels. In addition, the Commission reviewed the feral goat policy and implemented a management plan on compliance activities for dingo. A draft risk assessment procedure for the keeping of domestic goats has been agreed to by major stakeholders, as part of the review of the policy relating to feral goats.

**Rural chemical residues and use**

Managing the risks associated with rural chemical use necessitates assessment of the chemical residue status of rural products. The ‘Pooraka foodcare’ project proved that South Australian horticultural produce compared very favourably with the world’s best. In the last year, South Australia’s cattle industry has been comprehensively re-examined in order to maintain food safety standards and trade access. Precautions ensure the absence of organochlorins such as DDT.

Community awareness of rural chemical use has risen sharply. This has sparked a review of land use and development planning guidelines which impinge on the way primary producers use chemicals to control pests and diseases. The Sustainable Resources Group has responded to these community interests by developing packages to assist informed decision-making in government operations such as the Locust Control Campaign and the Fruit Fly Program.

**TARGETS FOR 2001–02**

- Complete fumigation and fencing of branched broomrape infestations on 19 kilometres of roadsides; conduct further links surveys on 200 properties.
- Complete reviews of camel and dingo policies.
- Commence research on externally funded projects on pest bird management and testing of rabbit calicivirus disease.
- Complete strategic plans for all animal and plant control boards.
- Develop regional policies on high priority weeds.
- Begin consultation with the community on the use of the marine environment and develop marine protected areas as a joint initiative with the Department for Environment and Heritage.
- Finalise the South Australian response strategy for introduced marine pests based on the national framework.
- Complete ‘Weed risk assessment of revegetation: farm forestry species’ project.
- Commence industry-funded studies of bird damage in vineyards and the management of this damage.

**Legislation**

New integrated natural resource management legislation will provide the context for sustainable land use and management. It will form the regional and State framework for the newly established regional integrated natural resource management committees in the Mid North, Mount Lofty Ranges and Murray Mallee regions. The framework is likely to incorporate regional bodies similar to that proposed under the National Action Plan for Salinity and Water Quality.

The consultation phase for the draft Integrated Natural Resource Management Bill was conducted in early 2000 and the Soil Conservation Council coordinated the development of a joint submission on the Bill from South
Australian natural resource management peak bodies. Input was provided to the Statutory Authorities Review Committee into the activities of soil conservation boards and animal and plant control boards.

The Sustainable Resources Group has reviewed the legislative base for rural chemicals over the last two years and written a new Bill to control rural chemical use. The legislation aims to manage health, environmental and trade risks associated with rural chemicals and some other contaminants in foods and natural fibres.

Development planning and land use
A major priority for the Sustainable Resources Group is that land use decisions in South Australia are based on the principles of sustainability and responsible resource use. This year the Sustainable Resources Group assisted in development of the Rural Planning Bulletin to guide land use development in rural areas and contributed to the development of the draft 'Planning strategy for the development of regional South Australia'. This is being supported with the development of codes of practice for a range of primary industries and the production of economic State-wide profiles and input output models for the regional planning frameworks.

The Pastoral Management program transferred this year from the Department for Environment and Heritage to PIRSA. The program inspected and reported on 30 pastoral leases to ensure compliance with the Pastoral Land Management and Conservation Act 1989.

National, State and regional initiatives
Policy advice is provided to Government on resource management issues. The advice is technically sound, reflects the latest knowledge and reflects the inclusion of social, economic and environmental considerations. The State Dryland Salinity Strategy was prepared under the guidance of the Soil Conservation Council and is due for release in June 2001, following approval by Cabinet.

The Sustainable Resources Group contributed to the development of the Federal Government’s negotiating position for CoP6 of the Kyoto Protocol, the Standing Committee on Agriculture and Resource Management’s work program on greenhouse and the South Australian Greenhouse Committee’s development of a whole-of-government approach to greenhouse issues.

The Marine and Estuarine Strategy commenced with the initiation of the marine planning process in the Upper Spencer Gulf.

Natural Heritage Trust
The 2000–01 Natural Heritage Trust State Bid requested $26.0 million from the Federal Government with $22.0 million approved. For the 2001–02 funding round, 277 Natural Heritage Trust applications were received requesting $33.9 million.

The 2001–02 Natural Heritage Trust State bid requested $25.8 million. It was submitted by the deadline of 30 June 2001 with successful projects expected to be announced in mid September 2001. Regional implementation strategies for natural resource management were a feature of 2001–02 State Natural Heritage Trust bid.

The Federal Government has committed a further $1 billion to the Natural Heritage Trust commencing in 2002–03 for five years.

TARGETS FOR 2001–02
- Complete the first report on the condition of South Australian agricultural lands.
- Commence the final funding round for the current Natural Heritage Trust program. Begin negotiations with the Federal Government prior to implementation of Natural Heritage Trust Mark II, starting in 2002–03.
- Present new legislation to control rural chemical use to Parliament for consideration.
- Construct an ecologically sustainable development policy framework which includes PIRSA and the industries with which it is associated, including fishing, mining and agriculture.
- Inspect and report on 90 pastoral leases.
- Commence Spencer Gulf Marine Plan and Marine Protected Areas pilot program with community consultation.
- Coordinate a whole-of-PIRSA approach to greenhouse issues by formation of a greenhouse network that facilitates information flow and incorporates key greenhouse issues in work programs.
Develop opportunities to extend the use of the pilot methodology for spatially located revegetation sought through the State Revegetation Committee.

Complete the third State-wide assessment of annual plantings and direct seeding versus clearing approvals.

Strategic priority 5 — ECOLOGICALLY SUSTAINABLE DEVELOPMENT — enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles

Ecologically sustainable development in primary industries

The ‘Celebration of 100 years of food and fibre since Federation’ project has engaged Government, business, the media, regional bodies and the South Australian community in detailed planning of major celebration events to occur during the latter half of calendar 2001. The South Australian community will have an increased awareness of progress made towards sustainable use of the State’s natural resources (soil, water, flora and fauna) in food and fibre production activities and their contribution to the economic wealth of South Australia.

Triple bottom line reporting

In order to enable sustained use and protection of land and marine natural resources, Sustainable Resources Group has encouraged and assisted community, industry and government throughout South Australia to adopt ecologically sustainable development and triple bottom line reporting. The first round of land condition assessments and reports for all pastoral leases in the State has been completed. The Soil Acidity Promotion program resulted in a 50% increase in lime used to ameliorate acidic agricultural soils in two years.

Future industry sustainability will depend on clarification of industry water requirements from landholders who irrigate crops. There will be a need for formal allocation of water. An irrigated crop water requirement publication and interactive computer program was produced to assist irrigation developers and water resource managers to determine their water needs for proposed plantings in any region of the State. Also a review has commenced of water use for irrigation in the Mount Lofty Ranges.

A CD-based training module was developed on environmental house-keeping in support of PIRSA’s environmental policy. This training module will contribute to the management of the agency’s environmental risk, waste management and recycling activities support.

TARGETS FOR 2001–02

- Complete the 1993–2002 Mount Lofty Ranges Catchment program and the on-ground works investment initiative.
- Hold a major food and fibre exhibition during the 2001 Royal Adelaide Show and arrange a one-hour documentary exploring South Australian food and fibre themes to be shown on ABC TV in September 2001.
- Develop and test a ‘Farm level water management’ module for on-farm recording and reporting water use efficiency, to reduce on-farm and off-farm impacts of irrigation.
- Develop and implement an irrigation training program to increase irrigation efficiency evaluation (both surface and groundwater based) in the Mount Lofty Ranges.
- Report on land condition trend over the last eight years in the Gawler Ranges and Kingoonya Soil Conservation Districts.

Strategic priority 6 — REMEDIAL ACTIONS — harness community and government resources to rehabilitate degraded systems and sites

State Salinity Plan

PIRSA provides strategic direction and facilitates action in relation to the State Salinity Plan. In August 2000, the Premier released Directions for managing salinity in South Australia to establish the priorities for managing salinity in South Australia. The State Dryland Salinity Strategy was endorsed by the community and Government in January 2001, and progress was made on the implementation of Action Plans for salinity management to meet resource management targets and in particular, meet the zero impact requirements from Murray River irrigators.
Water resources infrastructure

The development and rehabilitation of water resources related infrastructure for restoring productive use of land and water resources continued with the commencement of construction of Northern Outlet Drain as part of the Upper South East Dryland Salinity and Flood Management Plan.

A compliance report and notice of intention for Stage 3 of the Upper South East Dryland Salinity and Flood Management Plan was submitted to the Federal Government and an Upper South East proposal developed for funding under the National Action Plan for Salinity and Water Quality.

The Natural Heritage Trust funded ‘Salt to success’ project in the Upper South East (1998–2001) has resulted in 854 projects approved, totalling 15 054 hectares of revegetation and vegetation protection against a target of 17 520 hectares.

In the Riverland, the ‘Qualco Sunlands’ project, including all water infrastructure construction, was completed and transferred to the local management trust. At Loxton, Stage 2 of ‘Loxton irrigation rehabilitation’ project has advanced with replacement of the south rising main, final design and capital purchasers for the new pumping station, and transfer of the scheme to the Loxton Irrigation Trust.

The future direction for the ‘Lower Murray Swamps rehabilitation’ project was progressed following community consultation on all issues of policy, and progression of water allocation, Murray-Darling Basin Cap, and economic development options.

Facilitate community action

The Sustainable Resources Group facilitates community action to change inappropriate use of land, water and marine resources. Technical and coordination support was provided for the Regional Strategies program, that aims to accelerate the implementation of regional Natural Heritage Trust funded projects. The group has supported 30 major community on-ground works projects and over 100 Landcare groups.

This year, 320 priority disturbed areas were identified and rehabilitation strategies negotiated with local land managers in the Pastoral Region. In the Upper South East, a Natural Heritage Trust project to eradicate rabbits from the Narrung Peninsula has begun in association with local stakeholders.

TARGETS FOR 2001–02

- Release and implement the State Dryland Salinity Strategy.
- Complete construction of Northern Outlet Drain and commence construction of drains in the northern catchment of the Upper South East Dryland Salinity and Flood Management Plan.
- Finalise assessment of the Upper South East Stage 3 notice of intention.
- Establish the proposed Upper South East management structure that increases integration of environmental and biodiversity considerations.
- Develop Lower Murray Reclaimed Irrigation Area rehabilitation options and schedule construction program.
- Negotiate rehabilitation strategies in the Pastoral Region with 5% reduction in priority disturbed areas.
- Provide technical and coordination support for the Regional Strategies program, that aims to accelerate the implementation of regional Natural Heritage Trust funded projects.

Strategic priority 7 — BUILDING COMMUNITY CAPACITY — build capacity, leadership and global awareness in industry, and rural and indigenous communities

Communities and sustainable resource management

PIRSA through providing training in farm business and leadership has the aim of natural resource managers and their communities being better informed, motivated, contributing within networks and responding to sustainable resource management options, opportunities and issues.

The Advisory Board of Agriculture, Landcare and other rural networks were supported in implementing a sustainable future.

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* A limit imposed on the volume of water which can be diverted from the rivers for consumptive uses.
**Rural communities securing their future**

PIRSA enables rural communities to make balanced, informed decisions guided towards investment that secures their future. This is supported through the Rural Partnership programs. This year the Eyre Peninsula, Riverland and Murray Mallee Rural Partnership programs were completed.

The group implemented the Central North East Farm Assistance program following several years of poor seasonal conditions and low wool prices.

**Self reliance and continual learning**

Capacity building in communities and farm families develops self reliance and supports continual learning. This year, 33,500 farmers committed themselves to undertake FarmBis training to improve their skills and knowledge in farming and natural resource management.

Leadership capacity among rural communities was developed through the South Australian Rural Leadership program. Achievements of rural women who have contributed to community development were recognised through the Rural Industry Research and Development Corporation Rural Women’s Award and Rural Legend Awards.

The Animal and Plant Control Commission published and distributed an animal and plant control board member induction manual and a board planning manual in order to assist members of statutory bodies to undertake their duties and responsibilities.

**TARGETS FOR 2001–02**

- Initiate the new FarmBis Skilling Farmers for the Future program to improve the skills of farmers and fishers in business and natural resource management.
- Establish a framework to support project officers funded under Integrated Natural Resource Management initiatives.
- Present the SA Landcare Awards.
- Hold the 9th Community Landcare Conference of South Australia at Port Lincoln in October 2001.
- Enhance regional capacity building by developing spatial skills and knowledge in the South East Regional Information Centre.
- Hold three Community Landcare Officer workshops planned for 2001–02.
- Offer two South Australian Rural Leadership program courses.
- Hold a South Australian Rural Women’s Developing Leadership program in October.
- Implement the Rural Partnership program to develop processes for inclusion of sustainable land management information into school curricula.

**Strategic priority 8 — PARTNERSHIPS — negotiate effective partnerships with industry, rural and indigenous communities, Commonwealth Government and local government for regional and industry development**

The Sustainable Resources Group develops partnerships and alliances outside PIRSA, with other agencies, industry and the community to facilitate the integration of ecologically sustainable development of the State’s natural resources into action plans.

**Research partnerships and alliances**

The Cooperative Research Centre for Plant Based Management of Dryland Salinity has completed a planning process for start up on 1 July 2001. PIRSA is one of nine partners across Australia.

**Agency partnerships and alliances**

PIRSA and the Federal Government have initiated the new FarmBis Skilling Farmers for the Future program to improve the skills of farmers and fishers in business and natural resource management.

With the transfer of the Pastoral Management program from the Department for Environment and Heritage, PIRSA has taken responsibility for the Pastoral Management program and the formation of the first steps of Outback SA. This year, the Pastoral Management program collaborated with the Attorney General’s Department on the protection of Aboriginal heritage sites on pastoral leases.
The development of a monitoring and evaluation program for National Landcare program projects under the Natural Heritage Trust commenced. This evaluation is in liaison with Bushcare program and the Natural Heritage Trust. The National Landcare program has provided Aboriginal Landcare and vegetation officers employed by the Aboriginal Lands Trust access to workshops, training and information.

TARGETS FOR 2001–02

- Establish a pilot South East Regional Information Centre with local government, industries and agencies.
- Create a Natural Resource Centre of Excellence in partnership with the Federal Government, CSIRO and Adelaide University.
- Create a Centre for Rootcare Improvement in partnership with the Victorian Department of Natural Resources and Environment, CSIRO and Adelaide University.
- Secure Federal and State Governments’ Partnership Agreement to implement National Action Plan for Salinity and Water Quality and Natural Heritage Trust Mark II.
- Establish the Outback SA Port Augusta Centre.
- Assist with the introduction of indigenous land use agreements as means of resolving native title issues on pastoral leases.

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions

The Sustainable Resources Group is supporting natural resource managers, industry and the community to have access to information, knowledge and services on effective practice in environmental management, integrated natural resource management and ecologically sustainable development.

Environmental management

PIRSA’s rural chemical information product ‘inFINDER®’ has been increasingly commercially successful. The Victorian Department of Natural Resources and Environment is the latest major subscriber to the product, while other principal customers have been rural chemical retailers.

The community is becoming increasingly aware of environmental issues through promotional activities and publications. This year the Natural Heritage Trust Secretariat prepared an article for inclusion in Environment SA, various media releases regarding the funding process for community grants and was involved in World Environment Day activities.

Integrated natural resource management

PIRSA’s electronic publications and website are becoming more popular the urban and rural communities. Detailed soil and landscape information are now available in a set of five regional CDs in interactive format and the Landcare SA website was upgraded <www.landcaresa.org.au>.

Property Management Planning modules for ‘Farm forestry’ were completed and arrangements made for them to be available through the FarmBis project. A brochure is being developed on designing farm forestry for biodiversity.

Ecologically sustainable development

The Natural Resources and Environmental Management System business case was developed in conjunction with the Department of Industry and Trade and the Department for Environment and Heritage, and partnerships were established for a pilot Resource Information Centre in the South East.

TARGETS FOR 2001–02

- Using the Natural Resources and Environmental Management System, commence a program to ensure access to and availability of integrated natural resource and environmental information to South Australian regions, and attract South East horticultural industry development.
- Establish a Resource Information Centre in the Riverland and the Mount Lofty Ranges.
- Make available soil landscape information for the intensive land use zone of South Australia.
- Provide Web access to extensive information on soil conservation and sustainable soil and revegetation management.
Strategic priority 10 — PIRSA IS A GREAT PLACE TO WORK — we attract, develop, value and support our people; we provide a positive work culture

Performance development
The Sustainable Resources Group is implementing programs for staff to ensure they are focussed on group and corporate outcomes and feel secure, safe, satisfied, and productive. As a pilot within PIRSA, the group has implemented a performance development program to assist in training and development of all its staff. Also a CD-based occupational health, safety and welfare induction module for PIRSA was developed.

TARGETS FOR 2001–02
- Review and implement an induction process for all new staff for the Sustainable Resources Group.
- Review and implement a training program for Sustainable Resources staff (for example, conflict management, selection processes).

Strategic priority 11 — WE MANAGE RESULTS — we manage our resources well; we provide leadership; our business processes are effective and efficient

Strategic planning
Sustainable Resources Group reviewed its 2000–01 strategic plan in accordance with the new Corporate strategic plan, supporting continual improvement and innovation in the way that PIRSA conducts business.

TARGETS FOR 2001–02
- Repeat the Australian Quality Council’s guided self assessment of the Sustainable Resources Group.
- Complete the Sustainable Resources 2001–03 Strategic Plan and Balanced Scorecard.
MINERALS AND ENERGY RESOURCES

The Office of Minerals and Energy Resources incorporates the Mineral Resources and Petroleum Groups.

MINERAL RESOURCES

The Mineral Resources Group is a key group for facilitating mineral exploration and development, and is focussed on increasing the prosperity of South Australians by ensuring responsible development of South Australia’s mineral resources within a sustainable framework. It provides geoscientific research and specialist services as part of the process to acquire and update geological, geophysical and engineering data. The group is also responsible for industry regulation, legislative development and review, policy development and provision of advice.

Performance measure highlights

Online access was delivered in June 2001 to information and services relevant to mineral exploration and development and includes the ability to complete tenement application (see strategic priority 12).

In July 2000 the TEISA targeted exploration initiative was refocussed to boost the collection of essential drilling, mapping and geochemical data, following the recommendations of the Resources Task Force. Since then four drilling projects have been completed and 13 airborne contracts totalling $1.5 million carried out. The TEISA program for the next financial year (Year 4) will focus on the Gawler Craton, the Musgrave Block and the Curnamona Province. Despite an Australia-wide downturn in exploration activity, there has been an 11% increase in exploration licences granted in TEISA targeted areas since the initiative began.

Strategic priority 1— INDUSTRY DEVELOPMENT — provide support for industry and regional development that focuses on global market opportunities

Resources Task Force

One year into the three-year, $8 million Resources Task Force initiative, considerable progress has been made in addressing the priority objectives of improving access to land for resource developments; stimulating vibrant exploration activity and developing a more supportive and responsive Government.

The Resources Industry Development Board, chaired by Dr Ian Gould, was established to provide strategic advice to Government on the directions and constraints of the resources sector operating in South Australia. The board is playing an important role in developing the partnership between industry and the Government in working towards realising the vision for the South Australian resources industries, articulated in the Resources Task Force Report. Three subcommittees of the board have been set up to address issues relating to exploration enhancement, land access and infrastructure.

Planning approvals

New processes were established regarding consultation and response to planning issues. Specific issues addressed include planning approvals for the SAMAG haul road and power plant, the AMCOR glass bottle plant, and responses to the Gawler Ranges National Park proposal and the Para Wirra Recreation Reserve. Specific mineral potential reports on the two latter issues were prepared.

Olympic Dam

No major operational issues were identified under regulation of the Olympic Dam mine site and the environmental management program process. In February 2001, after only 12 years of production, Olympic Dam produced its one millionth tonne of refined copper. WMC have notified the Minister for Minerals and Energy of their intention to optimise production to 235 000 tonnes of copper per annum.

Challenger

Dominion Gold Operations has been granted a mining lease for the development of the Challenger gold project southwest of Coober Pedy. Dominion expects to complete a feasibility study for the project by mid 2001. The company plans to produce about 117 000 ounces of gold during the first two years (valued at $60 million at current prices) from an open cut, before transitioning to an underground mine. Resources of gold at Challenger total more than 500 000 ounces.
Ingomar coal test pit
Following PIRSA approval, SASE completed the successful excavation of approximately 18 000 tonnes of coal from the Ingomar trial pit, 70 kilometres south of Coober Pedy, to be used in a smelting trial to produce pig iron at Whyalla and to test its power generating capabilities. Rehabilitation of the site has commenced.

Uranium projects
Discussions continued with Pasminco with regard to an agreement over the Port Pirie tailings dam site.

Under the International Convention, both the Radium Hill site and the old treatment site at Port Pirie are to be registered under the Radiation Protection and Control Act 1982.

The mining and rehabilitation plan and the environmental management and monitoring plan for Beverley were approved in November 2000 enabling the Beverley Uranium Mine to commence commercial operations. The mine was officially opened by the Deputy Premier on 21 February 2001 and the first shipment of uranium concentrates took place in March 2001. In full production the Beverley Mine will produce around 1000 tonnes per year of yellow cake (U₃O₈), worth about $40 million at current prices.

Southern Cross Resources Australia is proceeding with its proposals to develop the Honeymoon Uranium project. The company plans to produce up to 1000 tonnes per year of yellow cake using in situ leaching technology. Southern Cross Resources released a draft environmental impact statement on 7 June 2000. In February 2001, the Federal Minister for the Environment announced that he required further information on hydrogeology before he could make a final decision. The additional information is currently being assessed. Commercial production could follow within about 12 to 18 months of final environmental approvals.

Mindarie
Southern Titanium has recently completed a trial pit for heavy-mineral sands at Mindarie, about 25 kilometres north of Karoonda, with highly encouraging results. The company has recently announced the quadrupling of the total resource to 262 million tonnes grading 2.33% (that is 6.1 million tonnes) heavy-minerals. A feasibility study is well advanced for a project producing 150 000 tonnes of concentrate per year. The company expects to begin construction of the $47 million dollar plant in 2001–02.

Dimension stone
The South Australian Stone Industry Association was established in November 2000. Funding from the Office of Minerals and Energy Resources allowed for the establishment of an office at the Australian Mineral Foundation, Glenside and for the appointment of an Executive Officer for a period of two years. The association has developed, and begun to implement, a strategic plan to grow the industry in South Australia.

Leigh Creek coalfield
Amendments to the Leigh Creek Mine Development Plan, which detail the operating and proposed rehabilitation for the site, were approved. A geotechnical engineering investigation is being undertaken on a significant low-wall failure in the ‘Upper Series’.

Strategic priority 2 — INNOVATION INDUSTRY — promote and facilitate new and value-adding industry that builds on the States’ knowledge, infrastructure and innovation capability

SAMAG magnesium metal project
The SAMAG magnesium metal project made substantial advances towards its goal of a commercial magnesium refinery near Port Pirie, fed with magnesite ore from the Willouran Ranges (northwestern Flinders Ranges). The project aims to commence production in early 2004 at an initial rate of 52 500 tonnes per year of magnesium metal, with construction planned to commence by early 2002. The investment needed to bring the project to production has been estimated at over US$375 million (in excess of A$700 million). The planned annual output of 52 500 tonnes would generate revenue of more than US$135 million (approximately A$250 million), at current spot market price.

SAMAG has secured mineral production tenements at Myrtle Springs (near Leigh Creek) and Mount Hutton, with sufficient reserves to support production of 240 000 tonnes of magnesite ore per year for over 30 years. Development approval has been granted for the ore haul road and ore loading site near Leigh Creek. Planning
SA has finalised the assessment report related to the environmental impact statement for the proposed smelter and power station near Port Pirie.

SAMAG has announced a Heads of Agreement for the supply of electricity with Australian National Power, who will build, own and operate a gas-fired power station adjacent to the smelter site, and is well advanced with negotiations for a 10-year supply of gas for the power station, via a pipeline from Victoria.

**South Australian Steel and Energy Project**

The State Government has been instrumental in the development of the South Australian Steel and Energy Project, a joint venture between Aurion Energy and Ausmelt, with plans to produce 2.5 million tonnes of pig iron annually, worth around A$400 million, at a capital investment set-up cost of around $800 million. The project has recently been successful in raising venture capital on the London Stock Exchange.

Coal and iron ore resources in the State’s Far North will be combined using an innovative smelting process to produce low-cost pig iron as feed for steel production. The project has successfully operated a demonstration plant at Whyalla to provide information for feasibility and design of a commercial-scale pig-iron plant. Small amounts of commercial specification pig-iron have been sold. A bulk coal sample, to be used in a smelting trial, was excavated from a trial pit at Ingomar for metallurgical testing.

**Strategic priority 3 — RISKS AND BIOLOGICAL CONTAMINANT THREATS — successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access**

**Brukunga Mine site**

For two decades the Government has operated an acid-water treatment plant at Brukunga to reduce the level of heavy-metal pollution occurring in Dawesley Creek. Pollution results from the leaching of sulphide minerals contained in the overburden waste-rock dumps and tailings dump that were discarded during mining and milling.

The Government recently committed substantial funding to rehabilitate the historic mine site. Over the next three years $5.1 million is committed to two projects: to divert Dawesley Creek water past the mine site, and to commission a supplementary acid-water treatment plant. The work will reduce heavy-metal pollution in Dawesley Creek to achieve water quality suitable for livestock watering and irrigation use.

Over the subsequent seven years $21.1 million or $3.0 million per annum will be committed to relocating the rock dumps back onto the old quarry bench and to be blended with limestone to neutralise acid forming reactions within the dumps. The dumps will be landscaped and planted with vegetation to form a stable land surface. This work will achieve an aesthetically pleasing outlook over the site and reduce acid seepage, enabling water treatment operations to be wound down to minimal levels.

**TARGET FOR 2001–02**

- Continue to progress the Brukunga Mine site rehabilitation: complete the planning and final design in consultation with stakeholders, and commence construction of the Dawesley Creek diversion.

**Strategic priority 4 — INTEGRATED POLICY FRAMEWORK, REGULATION AND COMPLIANCE — create through consultation, effective policy and regulatory frameworks to enhance industry and community confidence**

**Resource regulation planning services**

To facilitate responsible mineral exploration, assistance to industry is provided via information sheets, regulatory forms, guidelines and verbal advice.

All information sheets, guidelines and forms for mineral exploration licences are on the Minerals channel of the PIRSA website, with recent additions including technical reporting guidelines and free software to generate the standardised data headers for digital reporting.

The Mineral Resources Group has a key role in ensuring responsible and environmentally sound development of South Australia’s mineral resources by acting as the lead agency in coordinating the many interactions between...
Government and individual project proponents. The agency facilitates this through, timely assessment of all aspects of the mining proposals and the grant of necessary mining tenements and other approvals. Contributions were made to a consultant’s report on extractive industries and land-use planning; 15 land planning and local-council planning issues were reviewed (for example planning input on the proposed Mount Lofty Ranges linear park). The Mineral Resources Group contributed to the development of a Planning Bulletin for use by planners when dealing with mining issues.

**Licensing services**

Ninety-five exploration licence applications were received and processed, with 85 licences granted. A total of 220 exploration licence renewal applications were assessed for compliance with licence conditions and approved with appropriate work program and expenditure commitments. Of the 57 applications for work approvals on exploration licences, 88% were assessed and approved within the targeted time frame.

A total of 103 mining tenements (three in Pitjantjatjara lands) were granted or registered and 142 were renewed. These include mineral claims, mining leases, retention leases and miscellaneous purposes licences. The mining tenements were granted after extensive consultation with the public, landowners and other agencies. In addition, over 4176 precious stones tenements were also registered by opal miners.

Three native title mining agreements were registered, and 10 notices commencing native title negotiations in respect of 25 mining tenements, were lodged. In addition, one notice seeking an umbrella authorisation for the registration of unlimited precious stones claims was lodged, signifying the commencement of native title negotiations by the South Australian Opal Miners Association on behalf of its members.

As at 1 January 2001, 120 licensees held 343 exploration licences with 257 643 square kilometres or 26% of the State under licence. These measures of activity are slightly lower than for the previous year.

Expenditure reported to PIRSA by companies operating on exploration licences for calendar year 2000 was $22.2 million, a 26% decrease on 1999, reflecting an Australia-wide trend. That trend is now reversing.

**Compliance services**

Regular inspections and audits of exploration activities are carried out to ensure adherence to standards specified in guidelines and licence and work-approval conditions. Mining operations are inspected for compliance at regular intervals and prior to renewal, transfer, expiry or cancellation. During the year 96 mining programs were approved. Of the 1188 operating mine and quarry sites inspected, 88% complied with approved conditions and rehabilitation requirements; 19% of the 138 which did not comply have now been rectified. Ninety-eight per cent of the 5679 precious stone tenement (opal fields) sites inspected complied; 82% of the 427 which did not comply have now been rectified. In addition, 209 Lambina tenements were inspected and considered successfully rehabilitated. Eighty per cent of mineral exploration sites inspected (16 of 20) were in compliance with approval conditions and rehabilitation requirements; all noncompliance cases requiring corrective action were resolved. Eleven inspections were undertaken of operations within parks and regional reserves and other environmentally sensitive locations, and of these nine complied and two cases of noncompliance are being resolved.

Statutory technical (geoscientific data) reports for 388 exploration licences were registered and reviewed to ensure compliance with licence conditions and reporting guidelines.

Guidelines for submission of mineral exploration data in digital form were released in late 2000 and came into force on 1 January 2001. These guidelines are consistent with national standards and will facilitate industry submission and access to company exploration data.

The Mineral Resources Group represented the State on the Australian and New Zealand Minerals and Energy Council meeting and four Standing Committee of Officials meetings held during the year. In addition, briefings for out-of-session decisions were completed and there was representation on the Conference of Chief Government Geologists, Conference of Chief Mine Inspectors, Mine Safety Task Force, Taxation Review Task Force, Native Title, Land Access, the Minerals Legislative Subcommittee and Technical Task Forces.

**Legislation development and review services**

**Reviews of legislation**

The National Competition Policy review of the *Roxby Downs (Indenture Ratification) Act 1982* was completed in November 2000, with no amendments to that legislation being required.
The National Competition Policy reviews of the Mining Act 1971, Opal Mining Act 1995 and Mines and Works Inspection Act 1920, together with the Regulations under each of these Acts, have continued. The discussion paper has been completed and circulated to all stakeholders, and all comments have now been received. It is expected that these reviews will be completed by December 2001, with little or no amendment to any of these Acts.

**New legislation**

The Offshore Minerals Bill has been passed by Parliament but has yet to come into operation. Regulations to this Act are currently being prepared and will primarily address environmental issues and fees.

**Amended legislation**

The Mining (Private Mines) Amendment Act 1999 came into operation on 1 September 2000, excluding Part 73G which came into operation on 1 March 2001. The Act provided for amendments to the Mining Act in relation to better management and control of mining operations on private mines and wider environmental controls than those previously afforded under other environmental legislation.

The Mining Act is currently being reviewed (excluding Part 9B dealing with native title), and an issues paper is being prepared for circulation to all stakeholders. This review is expected to take approximately two years to complete and would involve amending many areas of the current Act including the number and type of mining tenements available, environmental provisions, better public consultation, enhanced transparency and greater accountability.

The Mining (Miscellaneous) Amendment Bill 2001 has been circulated to all stakeholders for comment, and outlines amendments to the Mining Act in relation to exploration licences, in particular reduced sizes, mandatory reductions in area, and increases in both rental payments and expenditure commitments in subsequent years of the licence’s term. The Bill also provides for the introduction of GDA94, an inclusion into Part 9B to allow the Minister for Minerals and Energy to grant a tenement where the applicant has a registered indigenous land use agreement under the Commonwealth’s Native Title Act 1993 and other minor administrative amendments. It is expected that the Bill will be forwarded to Parliament for debate in September 2001.

**TARGETS FOR 2001–02**

- Identify and implement programs to stimulate mineral exploration activity in South Australia in line with the Resources Task Force Recommendations — target investment of $100 million per year by 2007.
- Assist the Resources Industry Development Board to develop priorities for land access issues and regional infrastructure.
- Draft the Regulations for the Offshore Minerals Bill.
- Introduce the Mining (Miscellaneous) Amendment Bill.
- Complete National Competition Policy reviews of all mining-related Acts.
- Continue and progress the entire review of the Mining Act.
- Expand the features and range of tenement services and geoscientific information accessed online, and upgrade the mineral tenements database MinREG.

**Strategic priority 5 — ECOLOGICALLY SUSTAINABLE DEVELOPMENT — enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles**

Ecologically sustainable development has been an important focus of the Mineral Resources Group and during 2000–01 progress was made towards a sustainable minerals industry in South Australia through:

- Undertaking a total review of the Mining Act, including the incorporation of ecologically sustainable development principles into the objectives of the legislation.
- Actively maintaining relationships with indigenous landowner groups and disseminating information on mineral industry exploration and developments.
- Recognition of community obligations through formation of community consultative committees and facilitating working relationships between all stakeholders.
• Environmental management and regulation of internal and external exploration activities through initiatives such as the implementation of a Land access procedures manual.
• Promoting the role of responsible mineral exploration and development.

TARGETS FOR 2001–02
• Move towards the adoption of principles provided by the Mining, Minerals and Sustainable Development Australia Project.
• Continue to forge and maintain working relationships with indigenous landowners, community groups, minerals industry and other Government agencies.
• Continue the ongoing review of all areas of the current mining legislation which will provide a foundation for ecologically sustainable development of the minerals industry.

Strategic priority 6 — REMEDIAL ACTIONS — harness community and government resources to rehabilitate degraded systems and sites

Extractive Areas Rehabilitation Fund
The Extractive Areas Rehabilitation Fund provides funding to rehabilitate land disturbed by mining, to implement measures designed to prevent or limit damage or impairment of the environment, and to research measures to reduce environmental damage or impairment resulting from mining operations. Forty-one projects totalling $1 217 061 were approved during the year, the largest approval being $525 941 for rehabilitation of the Rocla Quarry near Gawler. Updates on the fund are provided in PIRSA’s MESA Journal.

TARGET FOR 2001–02
• Continue to support progressive and final rehabilitation of extractive mineral leases and private mines.

Strategic priority 7 — BUILDING COMMUNITY CAPACITY — build capacity, leadership and global awareness in industry, and rural and indigenous communities

A new agreement on Mintabie town lease is being developed in conjunction with the South Australian Opal Miners Association, Division of State Aboriginal Affairs and the Crown Solicitors Office. Negotiations with Anangu Pitjantjatjara on this issue are well advanced.

Strategic priority 8 — PARTNERSHIPS — negotiate effective partnerships with industry, rural and indigenous communities, Commonwealth Government and local government for regional and industry development

A strong working relationship has been forged between PIRSA and the Department for Environment and Heritage, with agreed conditions jointly developed for mineral exploration activities in parks and reserves including activity in Yumburra Conservation Park. An arrangement, such as a memorandum of understanding, is being considered to formalise arrangements for approval and compliance for exploration activity in parks and reserves. A joint paper on best-practice environmental rehabilitation in mineral exploration was presented with the Department for Environment and Heritage at Resources Week 2000.

Indigenous land use
Meetings between Anangu Pitjantjatjara and Mineral Resources Group representatives have been ongoing throughout the year with a view to increasing the level of mineral exploration on Pitjantjatjara lands; several new exploration licences have been granted. A paper outlining advances in mineral exploration on Pitjantjatjara lands was presented at Resources Week 2000. Support to Anangu Pitjantjatjara to assist in the processing of outstanding exploration licence applications has seen the development of a Traditional Owner database by Pitjantjatjara Council anthropologists. A PIRSA-funded study into the potential social and economic impact of mineral exploration and development on Pitjantjatjara lands has been completed.

Approval was given by both Anangu Pitjantjatjara and Maralinga Tjarutja for flying of further geophysical surveys, which commenced in June 2001, over the remainder of the Musgrave Block and parts of the Officer Basin. Negotiations are well advanced with Anangu Pitjantjatjara for regional bedrock and groundwater drilling programs and a trial regional mapping program to be undertaken in 2001–02.
In the area of Aboriginal heritage collaborative projects with the Division of State Aboriginal Affairs, under the auspices of the State Resources Plan, have included the development of an Aboriginal Heritage Sites database and a spatial, topographic Map Index of Traditional Aboriginal Authority.

TARGETS FOR 2001–02

- Actively liaise with Aboriginal landowner groups in South Australia on the mineral industry, to advance and maintain access to Aboriginal-owned lands for mineral exploration and development.
- Formation of the Anangu Pitjantjatjara Mining Committee or appointment of a mining liaison officer on Pitjantjatjara lands.
- Update the five-year strategic plan for exploration and development in Pitjantjatjara lands and commence negotiations with Anangu Pitjantjatjara on Year 4 TEISA exploration initiative programs.

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions

Promotion

A major objective of the Mineral Resources Group is the effective promotion of the State’s mineral prospectivity and competitive advantage. This was promoted through the ‘South Australia — More to explore’ campaign at a number of events including the Prospectors and Developers Association of Canada 2000 Convention and Trade Show, Mining 2000, Hydrothermal Iron Oxide – Copper–Gold and Related Deposits Conference and the Australian Geological Convention.

The Office of Minerals and Energy Resources hosted its inaugural open day in December providing industry the opportunity to review work programs and obtain latest airborne data. This was held in conjunction with St Barbara’s Day at the Adelaide Entertainment Centre.

Other promotional activities included advertising and editorial in key industry and research publications, and holding industry information seminars, for example the highly successful 1st Geological Hyperspectral Focus Group meeting, and meetings to facilitate the design of Year 4 TEISA exploration initiative programs.

Community activities included attendance at South Australia on Show, Reconciliation Day and the Karoonda Field Day, and the continued Minerals and Energy Education program.

The Minerals and petroleum South Australia 2001 was published as the first annual overview of the Office of Minerals and Energy Resources and released at the open day in December. This publication replaces the highly commended Minerals South Australia 2000 and includes details on minerals and petroleum exploration, production and emerging trends.

The Minerals channel of the PIRSA website underwent its first external audit in May. Recommendations have been incorporated in a work plan and another external audit has been scheduled for April 2002.

Geoscientific information management

Mineral Resources Group supports the management of South Australia’s mineral resources by maintaining, integrating, distributing and value adding to geoscientific information for all stakeholders through:

- management of Mineral Resources Group’s geoscientific databases
- a coordination role in data acquisition
- value adding to data
- distribution of data
- provision of data support to the Office of Minerals and Energy Resources and PIRSA stakeholders
- geohazard monitoring.

Geoscientific information management is critical to improving knowledge management for the Mineral Resources Group through the development and implementation of a framework which will foster best practice database design and data management.

A draft MINDEP_SA users manual has been completed, a presentation given at the Minerals and Energy Resources Open Day in December 2000 and a paper published in the MESA Journal.
TARGETS FOR 2001–02

- Migration of geoscientific databases onto a common platform.
- Design and development of a central online geoscientific data repository.
- Develop a single point of supply for users to view, verify, select and retrieve corporate data via a graphical interface.

Strategic priority 10 — PIRSA IS A GREAT PLACE TO WORK — we attract, develop, value and support our people; we provide a positive work culture

Mineral Resources Group spent 4% of its total salary budget in the area of training and staff development for 2000–01 with 88% of all staff undertaking some form of training, awareness course and/or attending conferences and seminars. Seven staff participated in the ‘Leadership for the Future’ program and two staff participated in the ‘Women in Leadership’ program.

In the area of occupational health, safety and welfare, health monitoring programs such as ‘Skin cancer awareness’ and ‘Stress management’ were offered to all staff. All managers and supervisors have undertaken a PIRSAFE awareness session and the field safety manual was reviewed. A local occupational health, safety and welfare committee (MinSAFE and later MerSAFE) has been established to ensure that PIRSAFE is implemented and maintained throughout the Mineral Resources Group.

Strategic priority 11 — WE MANAGE RESULTS — we manage our resources well; we provide leadership; our business processes are effective and efficient

A Mineral Resources Group Strategic Plan was developed in line with the new PIRSA strategic plan and the group was re-structured to be aligned with its strategic plan and achieve the new outcomes.

Strategic priority 12 — WE GROW AND HARNESS OUR KNOWLEDGE — our knowledge is a key business asset

Geoscientific information online

The South Australian Resources Information Geoserver (SAGRIC) went online in June 2001, providing access to information and services relevant to mineral exploration and development. The application offers explorers the ability to undertake application for mineral tenements online as well as view and download regional spatial data free of charge with facilities to purchase the more comprehensive data sets through a secure e-commerce module.

Targeted exploration initiative

In the third year of the four-year TEISA exploration initiative program a management team for the Minerals Program achieved public tender and award of 13 contracts (value in excess of $1,500,000). Contracts awarded were for airborne geophysical surveys, geological mapping, drilling and data compilation programs.

Gravity program

A total of 3500 gravity stations were acquired over three areas of the Gawler Craton. These surveys were designed to assist in the understanding of the Challenger gold deposit, the Archaean komatiite and mafic rocks that may host nickel and platinum group elements, and extensions to a major regional gravity anomaly which may be linked to the Olympic Dam deposit.

Airborne surveys

Completion of all airborne geophysical surveys for Year 3 of the TEISA program over the northern Musgrave Block has provided detailed structural information about the geology of the area which will assist with determining the geological framework and mineralisation models.

PIRSA and the Australian Geological Survey Organisation completed a joint airborne electromagnetic orientation program over selected sites within the Gawler Craton. Two new surveys have been flown over the Harris Greenstone Belt with an aim to assist the interpretation of the regolith and test for the presence of major conductors at depth (for example massive nickel–copper sulphide mineralisation). The Australian Geological
Survey Organisation has also acquired three new airborne electromagnetic data sets over the Challenger gold deposit, Tunkillia gold prospect and Moonta–Wallaroo copper–gold district.

Airborne hyperspectral remote sensing data was acquired over 1500 square kilometres within the WOODROFFE 1:250 000 area of the Pitjantjatjara lands to assist in detailed geological mapping. This hyperspectral data set provides cost-effective regional-scale mineralogical information in an area of the State which is highly prospective for minerals. Data is currently being interpreted.

**Drilling programs**

A report on the TEISA opal drilling program at Coober Pedy was followed up with a presentation at the Opal Symposium in Coober Pedy in April 2001

Greenstone Drilling Project Phase 1, on the Gawler Craton, commenced in mid May. A total of 89 holes have been drilled including approximately 2800 metres of reverse circulation, 340 metres of rotary air blast and 360 metres of diamond core have been completed to date. The project is designed to test the ultramafic–mafic – banded iron formation rocks in the Lake Harris, Hopeful Hill and Talia Hill – Mulлина Well regions.

Following interpretation of TEISA airborne magnetic data and a detailed ground gravity survey in the Southern Adelaide Geosyncline, a deep cored drillhole was completed in the Black Hill area to assess potential for nickel, copper and platinum group elements. The drillhole terminated in layered olivine and magnetite-bearing gabbro–norite at 749 metres. Geochemical and petrological studies from the core are under way to assess the mineralisation.

In March–April 2001, 12 holes totalling 979 metres were completed in the Moonta–Wallaroo area of the Yorke Peninsula. The program was designed to groundtruth the recent TEISA – Australian Geological Survey Organisation airborne electromagnetic survey and to produce and assess the dispersion of metals within the groundwater of the regolith. Results are being analysed.

A drilling program was undertaken in the northern Murray Basin to provide a better understanding of the mineral prospectivity of this region, following an assessment of basin stratigraphic and bedrock information. Thirteen holes were drilled for a total of 1002 metres. Twelve holes from 22 to 81 metres depth encountered Loxton/Parilla Sands providing information on heavy-mineral sands. One hole, drilled to 254 metres, intersected basement of weathered gabbro–norite with minor sulphides possibly equivalent to the intrusive rocks at Black Hill.

After conclusion of protracted negotiations relating to Aboriginal heritage site clearance, a major bedrock drilling program commenced in late April 2001 in the eastern margin of the Musgrave Block. To date 93 drillholes totalling about 3250 metres have been completed in the Abminga area in the north of the State. Ultramafic rocks, which may be prospective for nickel sulphide mineralisation have been intersected in several holes. Following extensive rain in June 2001, the program was rescheduled for completion in July 2001.

**Geological Survey**

The Geological Survey Branch aims to focus South Australian mineral exploration in highly prospective areas of the State with major geological programs in the Curnamona, Gawler Craton and Musgrave areas and strong emphasis on geoscientific information management. The work of teams which existed prior to the Mineral Resource’s Group restructure in January 2001 have also been reported on below.

**Curnamona Province**

Geological mapping of Willyama Supergroup rocks in the Olary region continued in several areas. On parts of the Mingary 1:100 000 sheet area, basement geological mapping for the Radium Hill South 1:25 000 sheet and regolith maps for five 1:25 000 sheets were completed. Mapping continued in the Weekeroo Inlier rocks and contract mapping by Geosurveys Australia of the Outalpa and Billeroo South areas commenced.

A new scheme for the lithostratigraphic definition of major rock units of the Olary Domain was published; incorporating new age information that clarifies relationships with the Broken Hill Domain, particularly through dating of volcanic rocks, and links with the Mount Isa region. Identification of rocks with the same age as the Broken Hill deposit host rocks is a highlight of this work. A draft report on recent uranium–lead dating of volcanic and sedimentary rocks has been completed. A report was published on uranium–lead dating of the Woman-in–White amphibolite and adjacent rocks.
Reports on the nature of the boundary between the Olary and Broken Hill Domains, nomenclature of the basement inliers and use of ortho- and geophysical imagery in geological mapping were published. A study of the stratigraphy of the Ethiduna Subgroup is under way.

A collaborative study with the Adelaide University on the isotope geochemistry of the Willyama Supergroup and Mesoproterozoic granites is under way. The Australian Geological Survey Organisation has commenced a structural study of key areas of the Olary Domain. A pilot project with the Collaborative Research Centre for Landscape Evolution and Mineral Exploration on regolith geochemistry of four prospect areas in the Olary area and regolith mapping of the Olary and Anabama 1:100 000 sheet areas was completed.

Uranium–lead dating of a suite of key metasedimentary and intrusive rocks from the Mount Painter area is under way. Results of this work will help with the understanding of the geological history and relationship to other regions of this complex area.

Gawler Craton
PIRSA and the Australian Geological Survey Organisation have completed their first year of a three-year collaborative program. Preliminary work and scoping studies have been completed on specific projects including regional geology adjacent to the Olympic Dam deposit; copper–gold mineralisation associated with Hiltaba Suite granites and major fault zones; regional- and district-scale controls on gold mineralisation in the Archaean Mulgathing Complex (for example Challenger gold deposit); prospectivity of komatiites in the Lake Harris Greenstone Belt; and regolith studies aimed at understanding basement mineralisation signatures in weathered rocks.

Adelaide Geosyncline
Field geological mapping on the remaining areas of the BURRA 1:250 000 sheet area was completed and is being compiled. Digital geological mapping data is now available for the Clare, Hallett and Terowie 1:50 000 sheets, completing 22 of a total of 24 sheets.

A collaborative study with the Adelaide University on timing of deformation and metamorphism in the Delamerian Orogeny has commenced. PIRSA is supporting a major study (AMIRA P544) by the Centre for Ore Deposit Research and other researchers of Neoproterozoic sediment-hosted copper mineralisation in the Southern African Copperbelt, and analogous sediments of the Stuart Shelf and Adelaide Geosyncline in South Australia.

The Adelaide Geosyncline program has been concluded.

Sedimentary Terranes
The CALLABONNA 1:250 000 scale geological map was published in June 2001. It is presented in a new folded format with a protective map jacket that includes information of general interest to a wide range of users.

An updated palaeochannel map was produced for the Gawler Craton. A palynological holotype CD was released at the Minerals and Energy Resources Open Day in December for use by industry and universities. A collaborative project with the Adelaide University on the Gambier Basin sequence stratigraphy was initiated.

The Sedimentary Terranes program has been incorporated into ongoing major programs in the Curnamona, Gawler Craton and Musgrave areas.

Regolith
Activities concentrated on the TEISA funded ‘Gawler Regolith Project — ET Gold prospect’ to investigate the influence of cover sediments and other materials on dispersal of mineral signatures at the surface over a drilled anomaly. The work followed on from a reconnaissance pilot study of known gold mineralised sites in the western Gawler Craton Christie Domain at the Challenger Deposit and the ET, Monsoon, South Hilga, Jumbuck, Golf Bore and Hawks Nest prospects. The final report, which includes spatial data and is being prepared as an interactive CD and DVD, will be submitted to PIRSA in late August 2001.

The important regolith program has been incorporated into the ongoing major programs and as part of PIRSA’s commitment to the Collaborative Research Centre for Landscape Evolution and Mineral Exploration.
TARGETS FOR 2001–02

- Review and expand the features and geoscientific information that can be accessed online through the South Australian Resources Information Geoserver system.
- Complete all TEISA projects including the southern Musgrave Block airborne survey and Lake Harris aerial electromagnetic survey.
- Pursue regional mineral prospectivity studies in three key areas of the State: Musgrave Block, Gawler Craton and Curnamona Block.

Strategic priority 13 — WE BUILD COLLABORATIVE RELATIONSHIPS WITH OTHERS — our success depends on building and maintaining our relationships with clients, stakeholders and the community

The Mineral Resources Group has many collaborative agreements with external bodies. These include other government agencies such as the Department for Environment and Heritage, Division of State Aboriginal Affairs and the Australian Geological Survey Organisation, universities throughout Australia, national and international mining companies, and negotiations with indigenous groups such as the Anangu Pitjantjatjara people. Close ties are also maintained with rural and urban community groups and schools.

TARGET FOR 2001–02

- Strengthen and expand ties with industry, community and government organisations.
PETROLEUM

The Petroleum Group is the lead agency in facilitating upstream petroleum activities in the State. The group facilitates the generation of royalty income, ecologically sustainable economic development, wealth and jobs through efficient management of the State’s petroleum rights on behalf of the people of South Australia. The group achieves this through three key roles — attracting private sector exploration investment that will lead to new commercial petroleum resource discoveries; regulating petroleum exploration and development activities to minimise adverse impacts on the environment and public safety; and providing policy advice to Government on all aspects of managing the petroleum resources of South Australia.

The Cooper Basin in the far northeast of the State hosts Australia’s largest onshore oil and gas province, supplying natural gas to New South Wales, the Australian Capital Territory, South Australia, and more recently, Victoria, and exporting LPG, naphtha and crude oil. Gas fields in the Otway Basin in the State’s South East supply the local market and are used for electricity generation.

Performance measure highlights
An independent survey of industry views on aspects of regulatory performance in the Australian jurisdictions for the upstream petroleum industry was commissioned in 1999 by the Australian and New Zealand Minerals and Energy Council. Regulatory performance was judged against a set of questions assessing the regulatory regime for consistency, responsiveness, timeliness, practicality, flexibility, transparency and cost-effectiveness. On a five-point scale the South Australian petroleum regulatory regime was rated by all respondents as a four or over (very good to excellent). Some sections of industry expressed concerns, however, regarding the retention of acreage by the pre-existing Cooper Basin joint venturers.

The Petroleum Group sponsored an independent customer survey of companies involved in the upstream petroleum industry in South Australia in mid 2001 to gauge their satisfaction with services provided by the Petroleum Group and to guide future research and marketing directions. This survey continues a series of surveys undertaken in 1996 and 1999. The survey questions were reviewed by the Australian Bureau of Statistics to improve ease of use and applicability of results. Initial results from the approximately 30 industry representatives surveyed indicate that the Petroleum Group remains regarded as the best in Australia for its overall performance in relation to the upstream petroleum industry. The survey responses will be analysed in detail over the coming months and action taken where necessary to improve performance.

Strategic priority 1— INDUSTRY DEVELOPMENT — provide support for industry and regional development that focuses on global market opportunities

TEISA research projects
Research projects completed under the TEISA exploration initiative program addressed knowledge gaps in key petroleum basins as identified in industry surveys. Results were disseminated at a number of workshops, including the APPEA (Australian Petroleum Production and Exploration Association) conference, and in-house seminars. Research focussed on Triassic seals study; Cooper Basin electrofacies study; Cooper Basin thermal history study; algal matter in Cooper Basin source rocks; Warburton and lower Cooper Basin regional seals study; and Officer, Stansbury and Arrowie Basins structure study.

Petroleum geology of South Australia series
The Petroleum Group initiated The petroleum geology of South Australia series of publications in 1995. Volumes published to date include the Otway, Eromanga, Officer and Cooper Basins. As the format of the series is very much ‘fit for purpose’, there is an ongoing need and expectation to periodically revise earlier volumes. Revision of the Otway Basin volume has commenced. Work is continuing on Volume 5, Bight and Duntroon Basins.

Cambrian basins
The Petroleum Group’s promotional activities in the Officer Basin over the last decade were reviewed by a consultant and the results are being used to determine a new focus for research and promotional activities.

SRK Consultants were commissioned to interpret the structural and tectonic histories of the Officer, Stansbury and Arrowie Basins in South Australia using their proprietary methodology. Results were presented at an industry workshop and will be promoted in trade journals.
Competitive gas supply
The Petroleum Group provided advice during the preparation and evaluation of the Government’s request for services to provide a competitive gas supply to South Australia and is the lead agency in overseeing these pipeline proposals through the legislative approval process. At June 2001 there were four active proposals to provide gas into South Australia: two relate to gas from Victoria and two for gas from northern Australia.

TARGETS FOR 2001–02
• Develop new strategies to effectively promote the Officer Basin.
• Publish two volumes of The petroleum geology of South Australia series (Bight and Duntroon Basins; Otway Basin 2nd edition) and commence compilation of volume 6, Cambrian Basins.
• Promote the results of TEISA projects to the petroleum industry and academia.

Strategic priority 2 — INNOVATION INDUSTRY — promote and facilitate new and value-adding industry that builds on the States’ knowledge, infrastructure and innovation capability

Coal seam methane
Following on success achieved in the United States in producing methane from low-rank coal, interest has been shown in applying this technology to South Australia. Twelve licence applications have been received and policy on possible conditions that may be imposed on these licences is being developed.

Geothermal energy
Three hot dry rock areas in the Nappamerri Trough of the Cooper Basin were gazetted in October 2000 as a result of the passage of the new Petroleum Act 2000 which made provision for geothermal energy exploration. At the close of bidding in February 2001, applications were received from three consortia covering all three areas and proposing up to $135 million of new exploration expenditure to be spent over the next five years.

This initiative is aligned with the State Government’s commitment to realise sustainable energy options for the future. Subject to feasibility studies each applicant proposes to install a pilot power station by 2006. A further two applications were also received for the Roxby Downs area.

TARGET FOR 2001–02
• Initiate a scoping study of the coal seam methane potential of the State.

Strategic priority 3 — RISKS AND BIOLOGICAL CONTAMINANT THREATS — successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access

The environmental risks associated with petroleum industry activities are required to be assessed and managed within a broad meaning of environment, covering its natural, social and economic aspects. The new Petroleum Act has a number of requirements which ensure that industry provides a demonstration of its management of such risks. One of these is the need for fitness-for-purpose, where a company is required to assess the risks imposed by its facilities on the natural environment, public safety, other land users and where relevant the security of natural gas supply. The first such reports are being prepared by Santos for its Moomba Plant and facilities; Origin Energy Resources for its Katnook and Ladbroke Grove gas plants, and wells in the Otway Basin; and Air Liquide Australia for its Caroline carbon dioxide plant and well in the Otway Basin.

Risks associated with petroleum exploration and production activities are required to be assessed and addressed at their planning stage and involves the preparation of an environmental impact report and a statement of environmental objectives outlining the relevant measurable objectives for addressing the risks identified in the environmental impact report.

Environmental impact reports and statements of environmental objectives have been prepared and approved for three wells in the Otway Basin and for the Caroline carbon dioxide plant, in line with requirements under the new Act. These were classified by the Petroleum Group as low impact and copies of the associated reports are found in the Environmental Register on the Petroleum channel of the PIRSA website. Statements of environmental objectives for seismic, drilling and well operations in the Cooper Basin, and for seismic,
production and processing operations in the Otway Basin were gazetted on the 31 October 2000. Also, alternative arrangements deemed to satisfy the requirements of a statement of environmental objectives for production and processing operations in the Cooper Basin were gazetted. These approvals were made conditional that they would be reviewed in accord with Part 12 of the Petroleum Act within 12 months of the gazettal date. As at June 2001, the environmental impact reports for these reviews were being prepared by the respective operators in close consultation with the Petroleum Group.

TARGETS FOR 2001–02

- Complete statements of environmental objectives for Otway Basin seismic and Cooper Basin drilling, production and processing.
- Provide financial support to specific research projects addressing risks associated with various petroleum production and processing activities.

Strategic priority 4 — INTEGRATED POLICY FRAMEWORK, REGULATION AND COMPLIANCE — create through consultation, effective policy and regulatory frameworks to enhance industry and community confidence

Petroleum exploration and production activities were regulated by the Petroleum Act 1940 in the period July to September 2000 and thereafter by the Petroleum Act 2000. To simplify compliance reporting, this report relates only to significant breaches of the Petroleum Act 2000 and Regulations, and as this is the first year of the new Act, compliance comparisons with previous years are not possible, except where there were similar provisions in the 1940 Act (as noted).

Licensing

Tenement status for 2000–01 is summarised in Table 1 and Figure 3. Two transmission pipeline licenses were varied — the Nangwarry pipeline project (PL 4) and the Moomba to Adelaide Pipeline Looping project (PL 1). Four preliminary survey licences were issued including the approval of statements of environmental objectives for the activities to be undertaken. These licences provide access for the undertaking of route surveys for proposed pipelines comprising the AMCOR Lateral in the northeast Adelaide plains, two for southwestern Victoria to Adelaide pipeline proposals and one for the Darwin to Moomba pipeline proposal.

A total of 31 petroleum production licences were issued with special conditions in the Cooper Basin, bringing the total number of production tenements to 194 of which 50 have special conditions.

Table 1  Tenement status, 2000–01

<table>
<thead>
<tr>
<th>2000–01</th>
<th>ONSHORE</th>
<th>OFFSHORE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>Production</td>
<td>Preliminary survey</td>
<td>Other</td>
</tr>
<tr>
<td>Applications received</td>
<td>43(a)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Total applications under consideration (year end)</td>
<td>54</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>Licences/permits granted</td>
<td>4</td>
<td>31</td>
<td>–</td>
</tr>
<tr>
<td>Renewals granted</td>
<td>1</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Variations approved</td>
<td>1</td>
<td>–</td>
<td>2</td>
</tr>
<tr>
<td>Suspensions</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Licences expired</td>
<td>7</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Licences surrendered</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Licences cancelled</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Applications refused</td>
<td>–</td>
<td>11</td>
<td>–</td>
</tr>
<tr>
<td>Total current (year end)</td>
<td>13</td>
<td>194</td>
<td>12</td>
</tr>
</tbody>
</table>

(a) These were applications for 36 areas (onshore). Thirty-eight applications were for petroleum exploration licences and five for geothermal exploration licences.
(b) Four applications were for preliminary survey licences and two for speculative survey licences.

Thirteen petroleum exploration licences were current during the year, and four of these operators complied with work program licence conditions. Three tenement operators failed to supply annual reports and consequently it cannot be determined if these operators are complying with their work program commitments. PIRSA is addressing this matter. A further four licenses were granted, and compliance with the work programs will be assessed in the coming year. No annual reports were received on the tenements that expired during the financial year, and only one of these operators had completed its work program on expiry of its licence.
An online public register for petroleum tenements was developed in time for the implementation of the new Petroleum Act.

Native title negotiations for a number of licences (CO98) were agreed in principle, and documentation is expected to be completed by end 2001.

**Royalty**

Of the 36 royalty returns for the year, only one return was late (by one day).

During the year the $1 billionth (2000 dollar value) South Australian petroleum royalty dollar was received. Royalty receipts were $26.7 million above initial budget forecast of $41.3 million, primarily due to the combined effect of high sustained international oil prices and a low-value Australian dollar.

Two targeted royalty audits were conducted during the year resulting in an additional royalty of approximately $698 000. At 30 June 2001, $659 000 of this royalty had been paid (although the licensee continues to dispute liability), with the remainder expected to be paid in early July 2001.

An explosion and fire in part of the Moomba Plant in mid June resulted in a fatality and a significant loss of petroleum. Investigation of issues regarding the recovery of royalty resulting from the lost petroleum has been initiated.

**Regulated activities**

Since September 2000, 49 petroleum wells commenced drilling, and on nine (18%) of those, the operator failed to give the Petroleum Group the appropriate time for the notice. In 11 (22%) of those cases the activity notification did not meet the requirements of Regulation 20. The latter breaches were generally in the initial period after the enactment of the new Act, and the offending licensees have since altered the information submitted to ensure compliance.

A total of 16 248 kilometres of two-dimensional and 1336 square kilometres of three-dimensional seismic data were recorded in the State and adjacent waters during the year. This comprised nine programs, eight onshore and one offshore. All onshore programs were classified as low-environmental significance and were covered by existing statements of environmental objectives. In several cases additional licences were required and issued to permit acquisition outside existing tenements. All seismic survey notifications were submitted within the required time and all included the information required by Regulation 20.

There were several instances in the Cooper Basin where seismic operations were undertaken outside of existing tenements. A ministerial direction was given to cease such works. This direction was subsequently appealed to the Minister for Minerals and Energy by the operator. An advisory committee was constituted according to the Petroleum Act to provide independent advice to the Minister. After consideration of submissions from the operator commenced the advisory committee recommended that the direction be neither altered or revoked.

Licensees are also required to notify the landowner before commencing their activities, and in some cases obtain the landowners informed consent. For the 49 wells drilled, the licensees failed to give the landowner the required 21 days notice in six cases (12%), and in all cases (0% compliance) the information given to the landowner was insufficient to meet the requirements of Regulation 22. All seismic survey landowner notifications were provided to the landowner in the required time period, but none compiled fully with the requirements of Regulation 22.

Two licensees are involved. For one, (two wells and three seismic surveys only) the licensee has modified their practices to ensure compliance in the future. For the other licensee (47 wells and five seismic surveys ), extensive discussions have taken place to address this compliance issue.

In relation to well evaluation programs (Regulation 27) the Petroleum Group is satisfied that the licensees have complied with the relevant legislation to as far as reasonably practical.

The Petroleum Regulations 2000 require licensees to submit technical data to the Petroleum Group within specified timeframes and in specified formats; most of these regulations are similar to provisions under the 1940 Act. A total of 44 well completion reports were due for submission from industry over the period, but only eleven (25%; down from 32% last year) were submitted by the due date. Petrophysical data for wells has generally been submitted on time, however, a significant amount of data for production wells has not been submitted by one licensee, and this is being pursued. Well samples were due for 46 wells in the period, but only seven (15%) were submitted by the due date. In nearly all cases insufficient volume of samples were provided.
This is being pursued with the licensee. Daily drilling reports have been submitted in compliance with Regulation 38.

Three ‘Quarterly cased hole reports’ have been received, however the content of two of these for some activities is not considered reliable. The licensee involved is modifying their data collection practices to ensure compliance.

A total of 22 shipments of seismic reports and data were received of which three related to surveys undertaken under the Petroleum Act 2000 (100% compliance in terms of timeliness) and the rest to past surveys under the 1940 Act. Of these shipments, 18% were noncompliant and required remedial action in terms of data content and format.

Although all data are required to be submitted in digital form, very little of this data was received in the required format, and required the Petroleum Group to incur additional costs in scanning these reports. A guideline on submitting data was prepared and issued for well data and other technical reports during the year. The unreliability and incompleteness of the data was also a concern in a number of cases. Strategies are being developed to ensure a higher degree of compliance in the future.

Annual reports for production licences were due from two licensees in the period. In one case the content did not comply with Regulation 33 and the licensee has been required to resubmit the report.

Pipeline licence annual reports have been submitted for nine of the 12 pipeline licences and are yet to be reviewed by Petroleum Group. The three outstanding reports (for Pipeline Licences 5, 9 and 12) were due in May 2001.

Of the six exploration licence annual reports due, only two were received, of which one was by the due date (17% compliance). The reports generally complied with the requirements of Regulation 33 with some minor omissions which the relevant licensee will be required to correct in future reports. The remaining overdue reports are being sought from the relevant licensees.

Core library sampling was carried out during the year with 446 samples being removed for analysis under the new Petroleum Act. At 30 June 2001, reports for 28 of these analyses were due to be submitted; 20 were received late, and eight were sent by the due date but not received by the Petroleum Group (71% compliance). The late party has been warned of the Petroleum Group’s focus to ensure compliance in this regard in the future.

Several documents were prepared to assist industry achieve environmental objectives and facilitate a culture of compliance. These included a draft statement of environmental objectives for seismic operations in the Otway Basin which has received conditional approval under the transitional provisions of the Petroleum Act; and an environmental impact report to supplement the former document and provide supportive information to assist the public make informed comment on the statement of environmental objectives when a consultation process is undertaken early in 2001–02. Preparation of a State-wide pipeline survey licence environmental impact report and statement of environmental objectives for pipeline surveys commenced to facilitate industry activity and compliance. A Field guide for the environmental assessment of newly abandoned seismic lines in the Cooper and Eromanga Basins, South Australia was published to assist stakeholders in assessing achievement of environmental objectives. An Example seismic operations procedure manual was also released to assist explorers in the Cooper and Eromanga Basins prepare appropriate documentation for their exploration activities, and hence facilitate achievement of environmental objectives.

Petroleum Act

The Petroleum Act proclaimed on 25 September 2000 has been recognised as being among several world-class examples of legislation in its area. The Act integrates the management of all the risks to the community from petroleum exploration and development activities and from petroleum transmission pipelines. Reformed licensing arrangements, including making them fully conformable to National Competition Policy, are also included. The Act provides for an open and transparent process whereby all stakeholders can assess the impact of petroleum activities on their interests and have issues addressed.
Overlapping tenement issues
A potential management issue relating to risks to Government and licensees was identified where the area of one type of licence, for example geothermal licence, overlaps the area of another licence, say a petroleum licence or mining licence, creating the possibility that the activities of one licensee will damage the resource of another. These issues will be addressed over the coming year.

Enforcement policy
An administrative policy for enforcement of the Petroleum Act is under development. A review paper was prepared to form part of the basis for discussion of the issues with stakeholders.

Access to upstream facilities
The Petroleum Group worked to improve the terms of a national proposal for open access to upstream petroleum facilities. Such access benefits the community by facilitating the marketing of small petroleum deposits with the aim of increasing competition in gas supply.

Environment Protection and Biodiversity Conservation Act
The Petroleum Group was proactive in the provision of advice and comments on the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 in relation to onshore and offshore upstream petroleum industry matters. In particular, the group provided comments on the referral of the offshore seismic proposal in the Great Australian Bight in permit areas EPP 28, 29 and 30. Other such advice and comments is being provided in relation to the Darwin to Moomba and Victoria to Adelaide pipeline proposals with the aim of having the approval process under the Petroleum Act recognised as an appropriate management regime for the purposes of the Environment Protection and Biodiversity Conservation Act.

Standards committees
Australian Standards AS 2885, ‘Pipelines — gas and liquids petroleum’, forms the basis of pipeline regulation under the Petroleum Act. The Petroleum Group has been contributing to two subcommittees revising the standard and having a lead role in the revision of risk assessment. ‘Part 3: operations and maintenance’ has been fully revised, with publication of the final document expected in the third quarter of 2001. Revision of ‘Part 1: design and construction’ is under way and expected to be completed in 2003.

Federal working groups
The Petroleum Group is regularly invited to participate on federal working groups. During the year these included the Petroleum (Submerged Lands) Act 1967 (Cwlth) offshore drilling regulation working group and the National Oil and Gas Safety Advisory Committee. Contributions were also made into the test case for modifying existing boundaries for Wetlands of International Importance, based on a Coongie Lakes site case study, and into the development of a wetlands management plan for the State.

Measuring company compliance culture
Innovative methods for assessing high-reliability organisations in respect of achieving the objectives of the Petroleum Act are being developed. An introductory workshop was attended by personnel from selected government agencies and licensees.

TARGETS FOR 2001–02
- Issue exploration licences for current applications for geothermal energy and coal seam methane.
- Improve industry compliance with provisions of the Petroleum Act, particularly relating to landholder/regulator notification and data/reports provision, through preparation and promotion of guidelines, direct communication and/or direction.
- Improve tracking of seismic records to be submitted by development of a commitment tracking database.
- Undertake appropriate amendments to the Petroleum Act to address a number of issues discovered during its implementation in 2000–01.
- Undertake competition policy amendments to the Cooper Basin (Ratification) Act 1975.
- Facilitate native title agreements.
- Resolve access issues to Cooper Basin roads.
- Complete the preparation of an administrative policy on compliance enforcement.
Strategic priority 5 — ECOLOGICALLY SUSTAINABLE DEVELOPMENT — enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles

Seismic impacts research

Two research studies of the impacts of seismic operations on fauna are near completion and aim to provide baseline data on impacts and recovery rates of impacts. They are part of an ongoing program to test the veracity of seismic line rehabilitation criteria and the information will assist in amending environmental management strategies, where necessary, to avoid long-term impacts and minimise short-term impacts. The studies include an investigation of small mammals and reptiles in the Nangwarry Forest Reserve near Penola (Otway Basin), and of ants and other invertebrates in the Cooper Basin.

Company annual reports

In accord with Regulation 33 the annual reports provided by licensees operating onshore in South Australia provided evidence that the licensees were meeting the requirements of the Act, in particular the approved statements of environmental objectives.

Field inspections

A number of field inspections were carried out in the Cooper Basin and Otway Basin to review company performance, particularly against reported performance in each of the company annual compliance reports (Fig. 4). In the Cooper Basin, 21 restored wellsites were inspected and 100% were in compliance with Petroleum Act. Formation water disposal ponds were inspected at 23 facilities and 78% were found to be in compliance. The noncompliances ranged from oil being found in the holding ponds on three of the facilities through to a small amount of oil on the evaporation ponds of two of the facilities. This has been raised with the licensee and action taken to remedy this matter immediately.

In the Otway Basin, the sites of the wells drilled during 2000–01 and the Katnook Plant were inspected and found to be in compliance with their respective approved statements of environmental objectives. A second evaporation pond was constructed at the Katnook facility, primarily to empty the first pond to enable an investigation of the condition of the first pond synthetic liner and the removal of an air bubble which has formed under the liner, but also to handle any excessive formation water production.

Since September 2000, four of the eight seismic surveys undertaken were inspected in the field; instances of noncompliance were noted, and required corrective action. Rehabilitation of 300 kilometres of old seismic lines in the Cooper and Eromanga Basins in the Koonchera area, near Clifton Hills, was satisfactorily undertaken by former operator, Santos. A detailed management plan to address outstanding issues for old seismic lines in the tablelands north of Innamincka is being developed in conjunction with Santos.

Quarterly compliance meetings

Each quarter the Petroleum Group meets with two of the major production licence operators to discuss and review their operations and the compliance of their operations with the Petroleum Act and relevant statements of environmental objectives. On the basis of discussions at these meetings, Petroleum Group’s inspections and company annual reports, the Petroleum Group is satisfied that these operators’ performance over the previous year in South Australia has been acceptable and meet the requirements of the Petroleum Act.

Moomba Plant incident

On the 16 June 2001 a fatal accident occurred at the Moomba Plant liquids pumping station, causing significant disruptions to the transport of liquids from the Moomba Plant to Port Bonython. The incident did not have a significant effect on the environment or the natural gas production and supply from Moomba to Adelaide and Sydney. The lead agency investigating the incident is the Department of Administrative and Information Services.

Oil spills

There were 70 oil spill incidents reported in the Cooper Basin in 2000–01 (Fig. 5). All fell within the reportable, but not serious, category under the Petroleum Act. The responses to these spills by Santos have been adequate in terms of effectively re-mediating any affected environment and in putting in place controls for minimising the recurrence of such incidents.
In the Otway Basin a spill of condensate occurred at the Katnook Plant tanker load-out facility on the 1 May 2001 and no serious environmental consequences were sustained. In response Origin Energy initiated a third-party review of the incident and are planning to implement the recommendations.

TARGETS FOR 2001–02

- Complete the two environmental research projects on the impacts of seismic operations on fauna.
- Resolve access to Coongie Lakes area for petroleum exploration while ensuring protection of core wetland values.

Strategic priority 6 — REMEDIAL ACTIONS — harness community and government resources to rehabilitate degraded systems and sites

Remedial actions for petroleum-related impacts are the responsibility of petroleum licensees. There were no cases identified during the year which necessitated the Government undertaking remedial works for past petroleum activities.

Strategic priority 7 — BUILDING COMMUNITY CAPACITY — build capacity, leadership and global awareness in industry, and rural and indigenous communities

A landholder/petroleum explorer liaison guideline was prepared as a consultative project between the Petroleum Group, South Australian Chamber of Mines and Energy, and South Australian Farmers Federation. It provides clear guidelines, protocols and expectations which aim to facilitate working relationships between landholders and petroleum explorers. In addition, the new Petroleum Act places a requirement on all petroleum licensees to adequately inform land occupiers of the potential consequences of their proposed activities before seeking the landholder’s consent for access. Both major petroleum licence operators in South Australia have prepared information booklets for landholders which when implemented should considerably improve landholder trust and acceptance of petroleum activities on their land.

A review of management options for petroleum activities in the Coongie Lakes was completed by the Coongie Lakes Task Force following a public consultation process. The preferred option was forwarded to relevant State Ministers for consideration, along with a series of other recommendations.

Four proposals for extensions of reserves under the National Parks and Wildlife Act 1972 were reviewed and recommendations forwarded for appropriate manner of proclamation. Two reserve management plans were also reviewed.

Displays at the Penola Hydrocarbon Centre, a public education facility established in 1998, were updated to reflect new petroleum discoveries in the area.

An Environmental Register which is accessible to the public was developed on the Petroleum channel of the PIRSA website. The purpose of the register is fundamental in satisfying the transparency principle, one of the principles upon which the Petroleum Act was established. In this regard, environmental assessment, approval and reporting documents are made available for public scrutiny and review.

TARGETS FOR 2001–02

- Promulgate and promote the landholder/petroleum explorer guidelines to facilitate working relationships in the community.
- Finalise management arrangements for petroleum activities which may, or may not, be allowed in the Coongie Lakes area.
Strategic priority 8 — PARTNERSHIPS — negotiate effective partnerships with industry, rural and indigenous communities, Commonwealth Government and local government for regional and industry development

Industry collaboration
A Senior Petroleum Geologist participated in testing a forthcoming Schlumberger GeoQuest software release and received extensive training in the Schlumberger Houston office. The opportunity was also used to investigate local data management and data delivery methods.

A CD to highlight investment opportunities existing in South Australian petroleum tenements and application areas was produced for the first time. This represents a new role for the Petroleum Group — that of assisting explorers in attracting farmin deals. Approximately 150 CDs were distributed to interested delegates at a major industry convention in the United States.

Academic collaboration
The Petroleum Group has strong links with the National Centre for Petroleum Geology and Geophysics at Adelaide University, collaborating with postgraduate student projects and funding its State Chair of Petroleum Geology. Professor Richard Hillis was appointed to the State Chair in 1999 and recently won the APPEA 2001 Best Paper Award (co-authored by J. Morton of the Petroleum Group and D. Warner and R. Penney of Santos).

Government collaboration
A collaborative National Geoscience Mapping Accord project on the Cooper and Eromanga Basins aims to produce a hydrocarbon generation model of the basins to assist industry in understanding the timing and rates of hydrocarbon generation and expulsion. Final results were reported to industry at the Cooper Basin workshop held in conjunction with the APPEA conference at Hobart in April 2001.

Administrative arrangements were established with the Department of Environment and Heritage and Planning SA to implement effective consultation and working relationships in the assessment and approval of activities under the Petroleum Act. A similar protocol is being prepared with the Department for Water Resources.

Selected officers underwent training to facilitate an effective integrated approach to areas of overlap between the Environment Protection Act 1993 and the Petroleum Act. The training is a key component in the Petroleum Group meeting the requirements of the memorandum of understanding between the Environmental Protection Agency and the Petroleum Group.

Preliminary survey licences
A State-wide statement of environmental objectives for pipeline preliminary survey licence activities aims to significantly reduce approval times required for pipeline projects. A report has been prepared for public consultation and the statement of environmental objectives is expected to be finalised by October 2001.

TARGETS FOR 2001–02
- Work with explorers to enhance the CD on South Australian farmin opportunities.
- Ensure continued support for the State Chair and for the National Centre for Petroleum Geology and Geophysics.
- Complete the National Geoscience Mapping Accord Cooper and Eromanga Basins project.
- Finalise Department for Water Resources administrative agreement regarding approval of activities under the Petroleum Act.

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions

Promotion of petroleum exploration opportunities
Effective marketing of the State’s petroleum rights is essential to ensure that the State obtains maximum value for these rights. An active and competitive worldwide market exists, so it is important that the Petroleum Group markets petroleum opportunities nationally and internationally. The promotional focus for 2000–01 was the Cooper Basin as part of the ongoing Cooper Basin acreage release strategy.
The first blocks in the Cooper Basin Round 3 acreage release closed in June 2000 with 11 bids received from five applicants; a rigorous process followed to select the winning bids which contained work program commitments of $10 million. The second phase of Round 3 closed in September 2000 and 21 bids were received; the winning bids contained work program commitments of $58 million. Bidding results for the 1998–2000 Cooper gazettal (three rounds) are:

- 120 bids received for 27 exploration blocks
- $245 million in exploration expenditure of which $166 million is guaranteed
- 117 guaranteed exploration wells.

Issue of the 27 licences will follow successful completion of native title agreements.

The fourth round Cooper Basin release (CO2001-A to F), comprising six small former petroleum production licence application areas, was opened for bidding in January 2001 with bids closing in August 2001. In a new initiative for onshore Australia, combined cash and work program bids have been called for these small blocks.

Promotion of offshore acreage in the Duntroon Basin, in conjunction with the Federal Government, is continuing with three gazettal blocks currently open for bidding (SO1-1 to 3). Bids close in April 2002.

The release of seven areas in the Otway Basin in the South East during 2000 resulted in the award of three new licences. The remaining acreage was re-released as two areas (OT2001-A and B) in the northern Otway Basin in January 2001 with bids closing in July 2001.

Two overseas visits were made to attend two major industry conventions and exhibitions (AAPG Convention and North American Prospectors Expo (NAPE) 2001) to promote South Australian exploration opportunities. Contacts made at these events have been added to the petroleum contacts database, which is used to produce targeted mailing and fax lists. Promotions were also carried out at the premier Australian industry conference (APPEA). For the third year in a row, the Petroleum Group organised a half-day Cooper Basin seminar as part of the official APPEA Conference program, which attracted 40 interested industry delegates. Around 380 explorers and consultants, academics and other government agencies have requested information on Cooper Basin opportunities over the past four years as a result of the Petroleum Group promotion.

Two Adelaide workshops were organised by the Petroleum Group. A Cooper Basin workshop showcased the results of current research, including TEISA projects, to local explorers and academics. The second workshop, organised for SRK Consulting to present the results of their analysis of the structural and tectonic history of the Officer, Stansbury and Arrowie Basins, attracted petroleum and mineral explorers and academics.

A total of 42 publications and eight information packages (including three CDs) were produced to promote South Australian petroleum opportunities. Three South Australian supplements were featured by trade journals, and advertisements and smaller articles on South Australian news were published in Australian and international industry journals. Eighteen presentations relating to the State’s hydrocarbon prospectivity and regulatory regime were given at local and interstate conferences and seminars during the year.

Minerals and petroleum South Australia 2001 was published in December 2000 providing an overview of the petroleum and mineral industry in South Australia and the role of the Office of Minerals and Energy Resources. The 13th edition of Petroleum exploration and development in South Australia was released as a CD enabling users to interrogate spatial databases for the first time.

Twelve copies of the Petroleum Exploration and Production System (PEPS) database were sold to industry customers this year; three were to new clients, and nine were renewals. Two additional copies were supplied free of charge to academic and research institutions.

One hundred requests for archived geophysical data sets were processed during the year and forwarded to explorers, of which 85% were forwarded within targeted timeframes.

Significant upgrading of the Petroleum channel of the PIRSA website continued. To fast track upgrades group personnel will receive training to enable them to edit the site directly.

The Petroleum Group’s pricing policy document was revised, including examples of costs of typical data requests of basic and value-added data sets.
The fifth edition of the *Petroleum services directory South Australia* was published providing information on locally based upstream petroleum exploration and development consultants and service companies. It includes entries from 123 companies (up from 114 in the previous year). An innovative web Service Directory database is being developed which aims to present current information and simplify production of the hard copy directory. The Petroleum Group continued its support of the Department of Industry and Trade’s broader directory which identifies South Australian companies that have skills sought by the upstream petroleum industry, both on and offshore. In the future it is hoped that this directory will also be added to the PIRSA Petroleum web page.

**TEISA data capture**

The TEISA data capture and archiving project, involving digital capture (primarily scanning) of all appropriate petroleum data into a suitable format for fast and efficient retrieval by industry, has completed the third year of its four-year term. To date, almost 1200 (80%) well completion reports, 200 geological reports and historical and current tenement register documents have been scanned, totalling over 22 gigabytes; all are being made progressively available on CD.

Scanning of all archived hard copy seismic sections continues, with 69% of the 30,000 sections now scanned and validated. This facilitates provision of data to clients and enables proper storage of this unique hard copy data at State Archives. Seventy per cent of the 700 boxes of ancillary field data were also scanned and validated. A contract to scan seismic and mineral reports is soon to commence. A seismic uphole database has been substantially completed, covering information used to calibrate seismic records.

**Seismic data sets**

A National Geoscience Mapping Accord project to merge Eromanga Basin data sets from South Australia, Queensland, New South Wales and Northern Territory was completed. Data for three key seismic horizons have been merged from disparate sources into integrated and consistent data sets which cover up to 8% of Australia.

**TARGETS FOR 2001–02**

- Continue to promote acreage in the Cooper and Eromanga Basins as part of the ongoing Cooper acreage release strategy.
- Continue to promote acreage in the Otway Basin.
- Support the recent federal Duntroon Basin acreage release.
- Continue to improve industry access to petroleum resources geoscientific and tenement information through electronic means including Web access.
- Complete the TEISA digital data capture projects.
Figure 3: SA petroleum exploration licences, including applications

Figure 4: SA petroleum wellsites inspected complying to environmental objectives

Figure 5: SA oil spill statistics

Note: The number of incidents for 2000-01 is significantly higher than previous years due to more accurate and thorough reporting required from companies under the Petroleum Act 2000.
ENERGY SA

Energy SA (formerly the Office of Energy Policy) facilitates the coordinated development and implementation of policies, legislative frameworks and regulatory responsibilities for the competitive, sustainable, safe and reliable supply and use of energy for the benefit of the South Australian community. The group achieves this through five key programs — energy policy; sustainable renewable energy policy and programs; regulation (through the Office of the Technical Regulator); the Remote Areas Energy Supply Scheme; and the national gas pipelines access regime.

Energy SA provides a one-stop shop for Government’s activities in conventional, sustainable and renewable energy and energy regulations.

Energy SA also hosts the Natural Gas Authority of South Australia and provides secretariats for the State Energy Research Advisory Committee and National Gas Pipelines Advisory Committee. The Energy SA Information Centre is part of the group.

Strategic priority 1— INDUSTRY DEVELOPMENT — provide support for industry and regional development that focuses on global market opportunities

Natural Gas Authority of South Australia

Contractual requirements of the Natural Gas Authority of South Australia were carried out as stipulated under six Sales Agreements to which the Authority is a party. In 2000–01, the Authority purchased 90 petajoules of gas at a cost of around $240 million for its customers, Terra Gas trader and Origin Energy.

TARGETS FOR 2001–02
- Continue to meet the contractual requirements of the Natural Gas Authority of South Australia.
- Improve and update systems and procedures to achieve a better efficiency in performing all functions that the Authority carries out.

Strategic priority 2 — INNOVATION INDUSTRY — promote and facilitate new and value-adding industry that builds on the States’ knowledge, infrastructure and innovation capability

State Energy Research Advisory Committee

The State Energy Research Advisory Committee recommends energy research, development and commercialisation projects suitable for government funding. The committee held a conference, Sustainable Energy Research in South Australia — Future Directions, on 21 September 2000 which was attended by 130 representatives from industry, Government and South Australian universities. In 2000–01, funding totalling $330 922 was awarded to nine projects involving renewable energy and four projects related to energy efficiency.

Strategic priority 3 — RISKS AND BIOLOGICAL CONTAMINANT THREATS — successfully manage risks including, biological and contaminant threats, to the environment, production efficiencies and market access

Gas and petroleum products supplies

Security and reliability of gas supplies have continued to be monitored and enhanced where possible.

The Gas emergency procedures manual developed in 1999 was updated to reflect the current needs of the gas and electricity generation industries. It provides procedures that ensure continued monitoring and regulation of gas safety during an emergency, and ration consumption of gas from distribution systems to ensure that essential services have continued access to their minimum gas requirements. The manual was tested during a desktop emergency exercise in October 2000 and then put to practice in November 2000 following a power blackout at Moomba.
Changes to Regulations under the Gas Act 1997 were gazetted and included national gas quality specification for natural gas, LPG and other gaseous fuels, thereby facilitating free and fair trade in gas throughout Australia. In addition, the regulations now provide a more effective way of ensuring that gas used in all types of gas appliances is safe to use.

Monitoring security of supply for petroleum products (transport fuels) in South Australia is a critical ongoing activity. The Adelaide Refinery continued to supply 100% of Mobil and Caltex requirements and some of the requirements of both BP and Shell. Cooperation between the major oil companies was facilitated during four periods when the Adelaide Refinery was shutdown for repairs plus a period in September 2000 when the pipeline feeding the Birkenhead bulk terminal was shutdown by industrial action interrupting fuel supplies.

An emergency website has been developed to ensure that in case of a State-wide electricity emergency, both gas and petroleum transport fuels contingencies planning and emergency operations can function independently.

**Gas supplies**

An inter jurisdictional agreement to share emergency gas supplies was agreed to by the Energy Markets Group following the gas plant incident at Longford in Victoria and two Moomba incidents. The agreement will aim to be to communicate the extent of incidents and the impacts, and enable sharing of gas supplies for essential services and gas pipeline integrity when there is a natural gas supply shortfall. South Australia has produced a discussion paper and a draft memorandum of understanding agreement with Victoria, New South Wales, Australia Capital Territory and Queensland. The Northern Territory and Tasmania have also expressed an interest in participating. Issues raised during industry consultation are being addressed.

**TARGETS FOR 2001–02**

- Continue to monitor security of supply for both gas and transport fuels, and implement procedures to manage available supplies to ensure that essential service providers continue to have access to gas and transport fuels for as long as possible following an interruption to supply.
- Improve and update systems and procedures to achieve a better efficiency in performing all energy emergency response functions (gas and petroleum products).

**Strategic priority 4 — INTEGRATED POLICY FRAMEWORK, REGULATION AND COMPLIANCE — create through consultation, effective policy and regulatory frameworks to enhance industry and community confidence**

**Policy, advice and support services**


Energy SA formulated submissions to the Australian Competition and Consumer Commission on the South Australian Government’s draft decision on the Moomba to Adelaide Pipeline, and the revised Access Arrangement proposed by Epic Energy for the Moomba to Adelaide Pipeline. It also formulated part of the South Australian Government response dealing with gas (through the Department of Premier and Cabinet) to the Productivity Commission for its Review of Part IIIA of Trade Practices Act 1974 (Cwlth) and clause 6 of Competition Principles Agreement.

Graham Scott was reappointed as the South Australian Independent Pricing and Access Regulator. ‘Local’ Regulations under the Gas Pipelines Access (South Australia) Act 1997, to establish the administrative structure for the operation of the South Australian Gas Review Board, were drafted. A Cabinet submission was prepared for reappointment of members of the South Australian Gas Review Board.

As a result of the High Court’s *Wakim* decision in June 1999, the Federal Court’s jurisdiction in the national gas pipelines access regime was found to be invalid. In its capacity as lead legislator, South Australia coordinated the
Ministerial approvals required by all Australian jurisdictions, under the 1997 Council of Australian Government Natural Gas Pipelines Access Agreement, to make consequential amendments to national gas pipelines access legislation. All required approvals were granted and the necessary amendments to the South Australian legislation were made.

Energy SA was represented at all meetings of the National Gas Pipelines Advisory Committee, which has statutory responsibility for considering and recommending changes to the National Third Party Access Code for Natural Gas Pipeline Systems to Ministers. Recommended changes to the Code were approved by the Ministers during the year. The committee uses the Code Registrar’s webpage to provide greater access to its recommendations.

A form of application was established and approved for determination of jurisdiction of close connection in accordance with the requirements of section 10(3) of Schedule 1 of Gas Pipelines Access (South Australia) Act for Allgas (for Tweed Distribution System in Queensland and New south Wales) and for Envestra (for the Albury Distribution System in Victoria and New South Wales).

The Second Amending Agreement to the Code was gazetted on 9 November 2000 and thereupon came into operation.

A final report on the National Competition Policy of the Stony Point (Liquids Project) Ratification Act 1981 was completed and presented to the Minister for Minerals and Energy. This is the final National Competition Policy review of legislation under the auspice of Energy SA.

An arbitration is being conducted to settle an access dispute over limited capacity in the Moomba to Adelaide Pipeline owned by Epic Energy. A number of South Australian retailers and power generators are seeking firm capacity in the Moomba to Adelaide Pipeline at levels which exceed current capacity.

South Australian Independent Pricing and Access Regulator
The South Australian Independent Pricing and Access Regulator Annual Report was completed and tabled in Parliament.

Energy SA staff have been seconded to prepare the final decision on the Access Arrangement for the South Australian Gas Distribution System owned by Envestra with a final decision expected in July–August 2001.

Compliance
Annual reports of the Technical Regulator were tabled in Parliament as required by the Gas Act and Electricity Act 1996.

The Technical Regulator promoted safety with the gas and electricity installation industry. Educational seminars were held for contractors and workers and two newsletters posted to all licensed contractors and workers highlighting work practices necessary to attain safety compliance standards.

Technical audits and special investigations of electrical workers and gasfitters were carried out to ensure compliance with the relevant safety standards and legislation. In 2000–01, there were 939 audits and 972 special investigations of electrical work, and 903 audits and 182 special investigations of gas work.

The new Electrical Products Act 2000 which updates legislation on energy labelling, minimum energy performance standards, and safety of electrical products was passed through Parliament. Regulations under the new Act are being prepared.

Appliances were assessed in accordance with the Electrical Products Act 1988, and certificates were given for 347 proclaimed articles, 35 non- proclaimed articles, 165 energy labels and five minimum energy performance approvals.

New, more stringent, appliance energy labelling and minimum performance requirements were implemented in South Australia to retain alliance with national requirements.

There were three product recalls exclusively in South Australia, including a dangerous air conditioner pump motor that had been associated with fire starts.
Eight Safety and Technical Management Plans have been established for the supply and distribution sectors of the industry and four technical audits were conducted for compliance against these.

**Gas full retail contestability**

Energy SA chaired the South Australian Gas Full Retail Contestability Steering Committee which is comprised of all licensed gas entities and representatives of user and industry groups in South Australia. Systems are being developed to ensure that consumers can connect and transfer gas retailers and that retailers participate in the market in a fair and competitive manner. A Network and Consumer Code, which states the rules for transferring, connecting, disconnecting, metering reading and dispute resolution, was produced and agreed to by retailers and industry. Adherence to this Code was made a licence condition for gas retailers and the distributor. A series of communications with industry and residential consumers was made explaining how and when consumers would be able to choose their gas retailer. The issues surrounding transfer operation and gas balancing, apportionment and reconciliation between the gas retailers and the distributor was progressed, and the overall strategy agreed upon. The gas scheme is designed to be consistent with national gas and electricity retail markets.

Under the Contestability Timetable that applies in South Australia all gas consumers become contestable on 1 July 2001. However, the timetable removes only legal barriers to contestability. Actual retail competition requires a customer transfer system, which has not yet been finalised either in South Australia or in other Australian jurisdictions. In the absence of actual retail competition the powers of the Pricing Regulator, under section 33 of the Gas Act, are being used to fix maximum prices for the sale of gas to non-contestable consumers and prescribed consumers.

**Clean fuel**

The Environment Protection Authority was supported in the introduction of the Environment Protection (Motor Vehicle Fuel Quality) Policy 2000, which became effective on 1 March 2001. The policy impacts on the security of transport fuel supply for the State, Port Stanvac Fuels Refinery, the motor vehicle industry and Adelaide’s air quality. It is an interim policy to protect Adelaide’s air quality until federal ‘clean fuel’ policies begin to become effective in 2005–06.

**Mutual recognition agreements**

Advice and input was provided, through the Department of the Premier and Cabinet, into Mutual Recognition Agreements with Singapore, European Economic Community and Switzerland.

Energy SA contributed to a national program on safety and technical standards for gas and electricity appliances affected by the Trans-Tasman Mutual Recognition Act 1997 (Cwlth).

**TARGET FOR 2001–02**

- Amend the Gas Pipelines Access (South Australia) Act to implement any changes agreed by relevant jurisdictional Ministers.

**Strategic priority 5 — ECOLOGICALLY SUSTAINABLE DEVELOPMENT — enhance the capacity of community and industry to integrate, achieve and report against environmentally sustainable development principles**

**Sustainable and renewable energy programs**

On 28 May 2001 the Minister for Minerals and Energy announced the establishment of Energy SA, encompassing the existing functions of the Office of Energy Policy, but providing an enhanced focus on sustainable and renewable energy. Central to the program is the allocation of an additional $1.29 million for sustainable energy initiatives, including a rebate program for solar hot water systems, an energy efficiency improvements rebate scheme in remote areas of the State and a new website. The promotion of sustainable and renewable energy technologies and practices will assist in reducing fossil fuel use, greenhouse gas emissions and costs.

**Renewable rebate programs**

The Photovoltaic Rebate Program and the Renewable Remote Power Generation Program are two federal programs administered for the State by Energy SA, which aim to encourage greater utilisation of renewable energy in South Australia.
The Photovoltaic Rebate Program commenced in January 2000 and provides a cash rebate for grid-connected or off-grid systems on residential and community buildings. From January 2000 to May 2001 over 230 applications were approved in South Australia totalling $1.4 million in rebates and amounting to 304 kilowatts in additional renewable energy capacity. In January 2001 the Royal Adelaide Zoological Society of South Australia became the first community applicant in Australia to install a solar electricity generation system. AGL are to continue to offer the same price for energy imports and exports (that is net metering) for residential building small photovoltaic generation systems.

South Australia was the first State to implement the Renewable Remote Power Generation Program, which provides rebates for new off-grid renewable energy systems that replace diesel for electricity generation. A subsidy of approximately $2 million per annum is available for four years.

A Solar Hot Water Heater Rebate Program, providing rebates of up to $700 per system, was launched on 28 May 2001 and aims to reduce the level of greenhouse gas emissions from residential water heating through the replacement of electric water heaters with solar systems.

Government energy management
The annual Government energy use report was prepared, along with a report to Cabinet on the Agency Energy Efficiency Targets Program. The reports showed that although overall gas and electricity use within Government had not increased, agencies were not meeting their agreed energy use reduction targets.

Documentation of the Government Energy Management Action Plan was completed and implementation of specific initiatives commenced. The action plan is a requirement of the National Greenhouse Strategy.

Energy SA made recommendations to the Energy Purchasing Working Party highlighting demand side responses to managing electricity costs and sustainable electricity generation opportunities. Energy SA participated in the tender specification and evaluation, ensuring electricity contracts would facilitate energy management within agencies and provide flexibility in the voluntary purchase of green power. Reducing energy use for public sector operations releases funds for core service delivery.

Energy demand management and Green Power considerations were incorporated in the Government’s electricity procurement contracts and electricity tenders were evaluated.

Green power
The National Green Power Accreditation Program was launched in South Australia by the Minister for Minerals and Energy on 20 November 2000. It is jointly offered by five jurisdictions (South Australia, New South Wales, Queensland, Victoria, and Australian Capital Territory) and is project managed by New South Wales. It is expected that the program will encourage new renewable energy developments.

Around the same time AGL launched its green power product ‘Green Energy’ in South Australia. At April 2001 there were 199 domestic AGL customers in South Australia, but several contestable electricity sites have also signed up to green power through other retailers. Wilpena Pound Solar Photovoltaic System is the only green power accredited generator in the State to date.

TARGETS FOR 2001–02

- Increase the number of installations of grid-connected and stand-alone renewable energy systems in South Australia through the delivery of Renewable Power Generation Rebates to the community.
- Implement the enhanced $1.29 million Sustainable and Renewable Energy Program.

Strategic priority 8 — PARTNERSHIPS — negotiate effective partnerships with industry, rural and indigenous communities, Commonwealth Government and local government for regional and industry development

Remote area energy supplies
The Remote Area Energy Supply Scheme continued to subsidise 13 existing remote area power stations. Three are owned and operated by local government or private participants; the rest are government owned and
operated. Electrical power was supplied from the nine government-owned power stations with virtually no interruption throughout an extremely hot summer.

Major capital works were finalised at Blinman and Kingoonya, where new power station infrastructure was installed and an obsolete generating plant replaced.

The Remote Areas Energy Supply tariff submission recommended increases in line with consumer price index but still maintaining a low tariff for the first level of consumption. The scheme is continuing to displace diesel fuel with more economic and environmentally friendly LPG. In four years 1.9 million litres of LPG was consumed compared with 3.8 million litres of diesel in the government-owned power stations.

Tenders have been called to establish a new power station at Parachilna with a large (solar) renewable content. The project is scheduled for completion in 2001.

Private ventures—initiatives
Several private wind farm and biomass proposals are being facilitated in conjunction with the Department of Industry and Trade and Infrastructure SA. An inter-agency team has been set up for this purpose as business interest in renewable energy electricity generation is strong. Funding applications to the Australian Greenhouse Office are being facilitated to connect such projects to the electricity grid.

Cities for Climate Protection program
Energy SA and the Australian Greenhouse Office jointly fund an energy management advisory service, through a full-time project officer to 14 South Australian councils (covering 66.4% of the State’s population) participating in the Cities for Climate ProtectionTM Australia program. The program aims to coordinate Cities for Climate Protection activities of local governments in the areas of greenhouse gas abatement and related energy efficiency and management. Technical advice on energy efficient projects and assistance with the implementation of energy management initiatives were provided, and the first of a series of forums was convened to facilitate the exchange of energy related information and ideas.

Other partnerships
Energy SA continued its association with the South Australian Wine and Brandy Association Greenhouse Allies program and produced a booklet describing methods for reducing energy use and associated costs within the industry. A Building Greenhouse Rating system was launched in association with Adelaide City Council. An Energy Efficient Display Home was developed and launched in association with I&C – AV Jennings.

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions

Information products and marketing
The Office of the Technical Regulator conducted a public awareness campaign to promote the benefits and the proper use of safety switches.

Energy advisory services
An additional Energy SA Advisory Centre was located at Level 16, 30 Wakefield Street, Adelaide, complementing the existing centre at 101 Grenfell Street. Direct customer-staff provision of the efficient and safe use of energy is provided. During the year staff answered 4860 queries by phone and mail, hosted 1125 visitors and distributed 54 700 brochures and fact sheets.

Two websites, Energy SA and Sustainable Energy SA, were developed to provide the key government energy communication medium. They provide information and links on energy markets, technologies, and energy efficiency for consumers.

Energy SA participated in eight Homebuyers Seminars through presentations to over 3000 home builders/buyers and staffed exhibition displays.

An expanded and revamped Energy SA magazine was developed, highlighting to the South Australian community key issues and government actions and initiatives.
A fact sheet, **Smart lighting**, was developed to aid community awareness of the effect household lighting has on energy use and cost, and related greenhouse gas emissions. It promotes the quantitative energy and environmental benefits of using compact fluorescent lighting.

The Smart Shower Heads campaign begun the previous year, focusing on the installation of water efficient shower heads to reduce the quantity of heated water, was expanded in 2000–01 with a number of metropolitan councils partnering Energy SA in both community awareness initiatives and product trials.

**Energy planning**

Energy scenario planning to 2020 indicated the critical importance of environmental pricing of electricity, through for example emissions trading, to facilitate the establishment of renewable energy generators. Energy conservation provides considerable opportunity to lower average demand, with rising prices from environmental pricing acting as further encouragement. Barriers to renewable energy uptake with the existing regulatory framework were analysed and options recommended to overcome them. Related papers have been placed on Energy SA website.

**Code Registrar**

The Code Registrar’s Annual Report was completed and tabled in Parliament as required by the Gas Pipelines Access (South Australia) Act.

Web access was provided in May 2001 to the Public Register maintained by the Code Registrar’s on behalf of all Australian jurisdictions. This enables inquirers to search the Public Register and download or order documents concerning access to natural gas pipelines within Australia.

**TARGET FOR 2001–02**

- Provide options to Government, including regulatory change, which will facilitate renewable energy.
AGENCY SUPPORT

The agency’s corporate support functions are provided by PIRSA Corporate Group. These functions cover information management, business services, corporate finance, rural finance and development, risk management and audit, economics and market analysis, human resources, policy and strategic development, public relations and communications, and legal services which are provided through an outposted arrangement with the Crown Solicitor’s Office.

Information Management is responsible for the management and delivery of information services, records management, mapping and spatial data, computing and communications infrastructure, business solutions and applications development, publishing services, inquiries and records storage. It incorporates the Centre for Minerals and Petroleum, and the Core Library.

Business Services is responsible for development, implementation, evaluation and management of whole-of-agency procurement, property and facilities, and administrative policy and processes.

Corporate Finance provides information and advice on accounting, budgeting, financial and resource management matters. It also handles accounting services including processing of payroll, paying accounts, receiving revenue, taxation compliance, and maintaining the integrity of the agency’s financial systems.

Rural Finance and Development’s aim is to support both Federal and State Governments achieve their objectives by providing effective and efficient administration of various business support financial assistance schemes, together with advice on rural finance issues. Financial support is available for primary producers, processors and exporters to access relevant schemes, which are designed to achieve various outcomes, ultimately with a view to achieving a prosperous primary sector.

Risk Management and Audit provides information and advice and it functions by identifying the risks to PIRSA (and its businesses), the risks to Government as a consequence of PIRSA’s activities, and evaluating the appropriateness and effectiveness of controls put in place by management to manage the identified risks.

The major focus of the Economics Branch is to assist in determining PIRSA’s optimal pattern of investments to maximise its impact as an economic development agency. It also contributes to major operational programs throughout PIRSA and to policy review and development.

Human Resources develop and encourage human resource management that is integral to the future of PIRSA and the life, health and growth of its people.

Policy and Strategic Development is responsible for the corporate development, implementation and management of PIRSA’s strategic planning, continuous improvement and quality management, performance measurement and evaluation, and agency-wide policy response to meet PIRSA and government requirements.

Public Relations and Communications primary role is to promote and communicate the role of the agency and its activities and services to the public.

Strategic priority 7 — BUILDING COMMUNITY CAPACITY — build capacity, leadership and global awareness in industry, and rural and indigenous communities

Rural finance and development

PIRSA’s Rural Finance and Development administers the State and Federal Governments’ business support financial assistance schemes which are designed to improve profitability, productivity and sustainability of farm business enterprises and advises on rural finance issues. FarmBis grants totalling $5.9 million were approved to primary producers to improve their business management skills. Property Management Planning grants totalling $605 000 were approved to 65 primary producer groups to participate in property management planning workshops. The program will merge with FarmBis from 1 July 2001.
Strategic priority 8 — PARTNERSHIPS — negotiate effective partnerships with industry, rural and indigenous communities, Commonwealth Government and local government for regional and industry development

Rural finance and development

PIRSA’s Rural Finance and Development administers various State and Federal Governments’ business support financial assistance schemes and advises on rural finance issues. A total of $594,238 representing 40 grants for interest rate subsidies were approved to assist applicants under the Rural Adjustment Scheme components of the Eyre Peninsula Regional Strategy improve productivity. The strategy concluded in November 2000.

Under the Riverland Rural Partnership Program 82 business planning grants totalling $85,000, 81 re-development grants totalling $405,000, 43 quality assurance grants totalling $353,000, 10 export enhancement grants totalling $235,000 and one export training grant of $3,000 were approved during the year.

The Central North East Farm Assistance, launched in September 2000, is a Federal and State Governments $4 million financial support initiative for producers in the Central North East of the State. The projects focus on improved business planning, improved profitability and sustainability, new enterprise evaluation and research and development. Fifty-seven business planning grants totalling $171,000, 11 productivity improvement grants totalling $110,000 and 11 infrastructure improvement grants totalling $55,000 were approved.

The Rural Industry Adjustment and Development Act 1985 authorises the Minister for Primary Industries and Resources to make loans and grants to assist on-farm development and adjustment towards lifting productivity and to fund projects for the benefit of farmers and the farming industry as a whole. During the year, nine grants and two loans totalling $2.5 million were approved. Financial statements for the fund managed under the Act are included in the ‘Financial statements’.

PIRSA is responsible for the provision of loans to cooperatives in South Australia engaged in the primary industries sector. One loan totalling $1 million was approved.

During the year PIRSA approved funding of $262,000 to assist fund the ongoing operations of 12 Rural Financial Counselling Services (14 counsellors) and the State Association with the principal aim of providing financial counselling and information to primary producers.

In addition there were 137 grants totalling $47,900 approved to assist landholders control locusts, and 10 grants totalling $10,582 approved to assist landholders control branched broomrape.

Strategic priority 9 — ACCESS TO INFORMATION AND SERVICES — improve industry and regional access to information that supports better business decisions

Core library

Drillhole samples obtained from mineral and petroleum exploration in South Australia provide essential information in the search for ore deposits and petroleum reserves, for reinterpretation of structural and stratigraphic relationships, and for geoscientific research. Samples are stored at PIRSA’s Core Library.

The number of inspections booked to view this resource at PIRSA’s Glenside drill core storage facility was again higher than normal, reflecting renewed interest in the mineral potential of the State.

New procedures were developed to ensure stricter monitoring of petroleum well core and cuttings sampling, as a requirement of regulatory changes under the Petroleum Act 2000.

Customer services

The Centre for Minerals and Petroleum provides a first point of contact for inquiries and sale of products relating to minerals, petroleum and groundwater resources. Two trends continued in 2000–01: increasing numbers of customers visiting the centre, and increasing numbers of inquiries relating to agriculture and aquaculture. The growing availability of data and publications in digital form has enabled easier access for customers, and resulted in increased sales due to significantly reduced reproduction costs.
Records management

Archiving project

The major program, to sentence and archive over two linear kilometres of PIRSA documents accumulated over the past 100 years, continued in accordance with State Records’ approved disposal schedules. The documents include geoscientific information which represents significant investment by industry and the public sector. On completion, records will be stored under optimal conditions for preservation, and a detailed inventory will be available, to support a timely response to requests for access by the public. An additional 450 linear metres were sentenced during 2000–01 and it is planned that this will now be a rolling program to sentence all PIRSA records in storage.

Spatial information

Spatial consulting services were provided to the Animal and Plant Control Commission (for the Pest2000+ application), Phylloxera and Grape Industry Board, Department of Industry and Trade, and for two PIRSA projects (South Australian Resources Information GeoServer and Primary Industries Information Management System). PIRSA coordinated the provision of government spatial data to the Iona–Adelaide Gas Pipeline Alliance members for route planning purposes. The Petroleum Tenements Data Sets were redesigned to enable more efficient access to the data by customers.

Cartographic work was completed for the publishing of the CALLABONNA 1:250 000 geological map. The 1:2 000 000 SA_GEOLOGY data set was compiled and released as were GIS data packages for Coober Pedy, Andamooka and Mintabie opal fields.

Information technology

e-business

Two e-business systems were implemented during 2000–01, providing customers with access to information via the PIRSA website 24 hours a day, seven days a week. Agricultural Diagnostic Online Services (ADOS) allows seed sample tests to be tracked and provides access to information within hours of the tests being completed. South Australian Resources Information GeoServer (SARIG) provides access to spatial data relevant to minerals explorers as well as an online exploration licence application service. An e-commerce infrastructure was established to support these projects and extensive work was undertaken to ensure data confidentiality and security.

Other projects

The PIRSA intranet was converted to utilise the same infrastructure which supports the PIRSA website enabling staff in all locations to quickly access up-to-date information and consequently improve customer service.

Other projects, undertaken in association with PIRSA business groups, were the implementation of a number of new websites (including Energy SA) and databases to improve information storage and retrieval. Data storage management requirements and corporate network security were also reviewed.

Conversion of SARDI’s Internet sites into the Knowledge Network structure commenced, but completion was delayed pending graphical design work by external consultants.

Infrastructure

Infrastructure investments were strategically deployed in order to achieve current and future business needs, to provide additional information technology infrastructure capacity and to rationalise information technology costs. Particular attention has been paid to enabling Internet-based facilities for PIRSA staff and customers in line with identified needs to access key information by remote and mobile users. Related activities included the migration of email services to the whole-of-government consolidated electronic messaging environment, the upgrade of data communications facilities at the Waite Campus, rationalisation of file servers and the update of Oracle databases to current standards. Alteration of the local area network operating system and hardware commenced to meet new business needs.

Publishing services

The trend of an increasing preference by PIRSA staff to prepare publications, reports and promotional material in digital format, either for CD or the Web, continued in 2000–01. Major products prepared by PIRSA Publishing Services were data packages, poster displays and CD compilations, newsletters, brochures, booklets and an earth science journal, but there was an increasing number of requests for developing PowerPoint
presentations for conferences and seminars. Publishing Services continued to promote the production of interactive CDs, enabling users to interrogate selected spatial database information, extending the applicability and usefulness of previous product output. A significant example was the 13th edition of *Petroleum exploration and development in South Australia*.

An increasing although small component of work was derived from the private sector, where Publishing Services uses its unique databases and expertise to prepare products that are not in commercial competition with other providers. Examples are plans or maps requested by local government showing various PIRSA activities, such as the extent of locust spraying carried out during the 2000 program.

**Interpretive trail**

Vitreous enamel signs are being prepared for a self-guided interpretive walking trail at The Gun Emplacement in Anstey Hill Recreation Park. This is a joint project by PIRSA, National Parks and Wildlife, and Friends of Anstey Hill. The signs along the 1 kilometre trail illustrate various geological and botanical features.

**Public relations and communications**

Key Public Relations and Communications unit initiatives introduced during the year included: development of *Open Gate*, a quarterly external publication in the *Stock Journal*, to provide effective communication with numerous key stakeholders; development of a mini-CD outlining the agency’s strategic plan and future direction to 2004; production of several fact sheets targeting international audiences; and preparation of several communications strategies for industry and agency groups.

During the locust eradication program in the north of the State the unit played an integral role in communicating developments and major milestones to external stakeholders. The unit was also pivotal in managing a number of animal health issues during the year.

Reflecting PIRSA’s leadership in primary industries, the agency was directly involved with and sponsored a number of important events during the year. These included the Agricultural and Environmental Science Careers Fair, the Royal Adelaide Show, Work Skills Expo, Kids Congress on the Environment, Geoscience Extension program for Eastern Adelaide Hub schools and regional field days.

Other major events and publicity campaigns coordinated during the year included Resources Week, the Royal Show Farm Expo (Kangaroo Island Region), National Science Week and Water Week with a Hungry Jack’s promotion. PIRSA was also a major sponsor of ‘Taikurringga Yerta — In Common Land’ a national conference, expo and family entertainment day held at Elder Park in April 2001.

As part of PIRSA’s strategy to promote information about primary industries and resources and to highlight potential career paths, workshops focusing on themes relevant to the agency, such as mineral exploration, sustainable resources and marine science, were delivered to 230 schools, community and professional groups throughout the year.

**TARGETS FOR 2001–02**

- Further develop e-business infrastructure and implement additional e-business opportunities.
- Facilitate and sponsor a number of major events linked with Australia’s centenary of federation by recognising and celebrating South Australia’s 100 years of food and fibre.

**Strategic priority 10 — PIRSA IS A GREAT PLACE TO WORK — we attract, develop, value and support our people; we provide a positive work culture**

PIRSA’s strategic plan provides direction and a framework for building a positive work culture and development of people. The responsibility for people management is vested with PIRSA groups. The primary role of the Corporate Human Resources Group is to develop human resource systems and policies that fit with the strategic directions of PIRSA and continuously review and improve human resource practices through analysis and evaluation of performance.

New technologies were applied to achieve improved information access and service delivery by Human Resources in 2000–01. These included:

- The placement of human resource information on the corporate intranet site to improve the quality and accessibility of information to all staff. An example of the successful deployment of this approach is the...
Learning and Development Policy, where policy information is supported with links to tertiary institutions and training providers.

- Access to an online job capabilities library which is being further developed to meet PIRSA’s needs and will be used to support improved recruitment and selection decisions and performance development processes (see capabilities below).

Other achievements are reported below against the key result areas of the Strategic Human Resources Management Framework for the South Australian Public Sector.

**A planned workforce / reliable monitoring and reporting**

A quarterly workforce report is provided to PIRSA Executive. The report analyses workforce information and identifies trends and issues requiring action.

A total of 1472 people or 1371.8 full-time equivalent staff were employed by PIRSA at the last pay period in June 2001. Workforce statistics are summarised in Table 2 and further details of *Public Sector Management Act 1995* employees, by classification and gender, are provided in Appendix 2.

**Table 2  Employee summary, all staff (at 22 June 2001)**

<table>
<thead>
<tr>
<th>EMPLOYEE TYPE</th>
<th>ONGOING</th>
<th>CONTRACT LONG TERM</th>
<th>CONTRACT SHORT TERM</th>
<th>OTHER</th>
<th>TOTAL</th>
<th>FTE(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>Total</td>
<td>M</td>
<td>F</td>
<td>Total</td>
</tr>
<tr>
<td><strong>Public Sector Management Act</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>517</td>
<td>225</td>
<td>742</td>
<td>88</td>
<td>275</td>
<td>363</td>
</tr>
<tr>
<td>Part time</td>
<td>8</td>
<td>64</td>
<td>72</td>
<td>24</td>
<td>37</td>
<td>61</td>
</tr>
<tr>
<td>Subtotal</td>
<td>525</td>
<td>289</td>
<td>814</td>
<td>200</td>
<td>112</td>
<td>312</td>
</tr>
<tr>
<td><strong>Weekly paid</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>49</td>
<td>4</td>
<td>53</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Part time</td>
<td>–</td>
<td>3</td>
<td>3</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Subtotal</td>
<td>49</td>
<td>7</td>
<td>56</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Part time</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Subtotal</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time</td>
<td>566</td>
<td>229</td>
<td>795</td>
<td>93</td>
<td>282</td>
<td>375</td>
</tr>
<tr>
<td>Part time</td>
<td>8</td>
<td>67</td>
<td>75</td>
<td>24</td>
<td>37</td>
<td>61</td>
</tr>
<tr>
<td>Grand total</td>
<td>574</td>
<td>296</td>
<td>870</td>
<td>202</td>
<td>117</td>
<td>319</td>
</tr>
</tbody>
</table>

(a) FTE full-time equivalent

Figure 6 identifies the fluctuations in casual hours worked over the 2000–01 year. Planned greater use of casual staff, employed through third party employment arrangements (labour hire), for incident response and seasonal work will improve efficiency and achieve better risk management.

During 2000–01, the average sick leave days taken for each full-time equivalent employee was 5.19 days which is an increase of 0.82 days from last financial year (Table 3). The number of family carer leave days decreased from 0.17 to 0.04 per full-time equivalent, and is possibly because leave application forms do not provide a specific carers leave option. The form is being updated.
Table 3 Sick leave summary

<table>
<thead>
<tr>
<th>Sick leave</th>
<th>Average number of days per full-time equivalent employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family carer</td>
<td>–</td>
</tr>
<tr>
<td>Other</td>
<td>–</td>
</tr>
<tr>
<td>Total</td>
<td>3.80</td>
</tr>
</tbody>
</table>

Workforce diversity

PIRSA has no data available on workforce diversity for 2000–01.

Equal opportunity programs

As part of equal employment opportunity, PIRSA recruited 18 people under the age of 25 through the Graduate Recruitment and the Youth Traineeship Scheme (Table 4). It is anticipated there will be a further increase in the recruitment of trainees in 2001–02.

Table 4 Persons employed through equal employment opportunity programs 2000–01

<table>
<thead>
<tr>
<th></th>
<th>Trainees</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>11</td>
<td>7</td>
</tr>
</tbody>
</table>

Age profile

The age profile by gender of PIRSA’s workforce and a comparison with the Australian workforce is provided in Table 5 and illustrates that the major concentration of staff fall in the greater than 45 years age group. This is significantly higher than the national average and analysis suggests that there may be capability gaps in critical areas of agency activity within five years as staff move towards retirement age (Fig. 7). To address this PIRSA has commenced the planned recruitment of 30 graduate staff beginning in August 2001 from savings generated from the strategic use of the Government’s enhanced targeted voluntary separation package scheme. Another response has been to focus on attraction and retention issues for contract staff to develop future capability in PIRSA.

Table 5 Age profile at 22 June 2001

<table>
<thead>
<tr>
<th>AGE GROUP (years)</th>
<th>NUMBER OF EMPLOYEES</th>
<th>PERCENTAGE OF ALL AGENCY EMPLOYEES</th>
<th>PERCENTAGE OF AUSTRALIAN WORKFORCE (a)</th>
<th>PERCENTAGE OF AUSTRALIAN POPULATION (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15–19</td>
<td>9</td>
<td>16</td>
<td>1.1</td>
<td>8.3</td>
</tr>
<tr>
<td>20–24</td>
<td>44</td>
<td>92</td>
<td>6.3</td>
<td>11.4</td>
</tr>
<tr>
<td>25–29</td>
<td>77</td>
<td>182</td>
<td>12.4</td>
<td>12.1</td>
</tr>
<tr>
<td>30–34</td>
<td>74</td>
<td>149</td>
<td>10.1</td>
<td>11.9</td>
</tr>
<tr>
<td>35–39</td>
<td>95</td>
<td>162</td>
<td>11.0</td>
<td>12.0</td>
</tr>
<tr>
<td>40–44</td>
<td>152</td>
<td>247</td>
<td>16.8</td>
<td>12.4</td>
</tr>
<tr>
<td>45–49</td>
<td>177</td>
<td>253</td>
<td>17.2</td>
<td>11.4</td>
</tr>
<tr>
<td>50–54</td>
<td>170</td>
<td>220</td>
<td>14.9</td>
<td>9.9</td>
</tr>
<tr>
<td>55–59</td>
<td>66</td>
<td>99</td>
<td>6.7</td>
<td>6.2</td>
</tr>
<tr>
<td>60–64</td>
<td>37</td>
<td>44</td>
<td>3.0</td>
<td>2.8</td>
</tr>
<tr>
<td>65+</td>
<td>7</td>
<td>8</td>
<td>0.5</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>908</td>
<td>1472</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(a) source: Australian Bureau of Statistics Supertable C2 at June 2001
(b) source: Australian Bureau of Statistics 3201.0 at June 2000

Responsive employment conditions / continuous improvement

An extension of the policy on flexible work practices, to include purchased leave and a nine day fortnight, is being prepared following its endorsement by PIRSA Executive.

A new Employee Assistance Program is being prepared following a review which identified that it is not meeting the needs of PIRSA people and managers. The service will be divided into two discrete programs; a confidential self referral that will be centrally funded and a service to support managers in early intervention in dealing with conflict and work performance issues.
Quality staffing / protection of merit and equity

A new approach to recruitment and selection has been developed, built around a ‘results’ based approach to writing position descriptions and selecting for demonstrated individual capabilities. The new system will make use of the online capabilities dictionary purchased by PIRSA. The new approach will be supported by an updated position classification and remuneration policy.

A two-day training course has been developed for roll out across PIRSA in 2001–02. The course aims to improve the quality of selection processes with particular focus on the application of equal employment opportunity and merit principles to the selection process.

Planned human resource development / managed performance

The ‘PIRSA capabilities’ project was progressed with development of capability sets for the Chief Executive, executive, senior managers and human resource and information technology staff. Capability sets are being integrated with the online capabilities system. Capabilities are the dynamic interplay of knowledge, understanding, skills, values, attitudes and interests that an employee demonstrates in achieving superior performance in a job.

In a 360 degree performance development survey, feedback was sought from managers, direct reports, stakeholders and customers on executive performance against the capability profile developed for senior executives, and the information then used for performance development discussion between the executive member and the Chief Executive. This process was further developed for senior managers in PIRSA Corporate with feedback information sourced online.

A ‘Quickstart’ guide to performance development was initiated as an interim measure to the performance development online site which will be available in September 2001.

All PIRSA groups made progress towards the implementation of performance development systems and an evaluation of their effectiveness is being planned. Forty-two per cent of employees had individual performance development plans when last surveyed.

Leadership development

A targeted program, Leadership for the Future, was developed and implemented to strengthen participants’ confidence and capacity to be leaders and managers in the twenty first century. Forty-three staff have attended so far. A formal evaluation indicated that the course was relevant, thought provoking and provided a practical learning experience.

The percentage of training expenditure relative to total employee remuneration costs was 1.57%. Total remuneration was $84,538,481 (including salaries, wages and on-costs) and total training and development costs were $1,334,105.

In addition, 13 staff attended the Women in Leadership program and 20 staff attended the Commissioner for Public Employment’s Leadership SA program.

Forums for managers

Managers Forums were developed to provide an opportunity to generate new thinking and discussion and build collective understanding of the critical issues facing the agency. Six forums were held during the year and addressed:

- identification of relevant issues
- PIRSA, the Government and key initiatives
- building PIRSA’s strategic framework
- people in PIRSA, the work culture and how to make the most of PIRSA for everyone.

A group of twelve younger PIRSA staff collaborated to create, lead and facilitate the last forum providing an opportunity to highlight younger people’s perspective and to reflect on the positive experiences of older and younger people learning from each other. The issue of an ageing workforce profile within PIRSA reinforces a continuing need for developing the people capacity within PIRSA.

An evaluation of the forums indicated that they successfully achieved the objectives of building collective understanding, generating new thinking and discussion and building linkages and collaboration across PIRSA.
groups. The forums were successful in increasing capacity to anticipate and shape the future and less successful in building leadership capacity.

**Occupational health, safety and welfare**

The safety and well being of people has a high priority within PIRSA. Significant improvements were made in occupational health, safety and welfare performance in 2000–01. In comparison with 1999–2000 the cost for weekly payments was 31% lower, lost-time claims were 14% lower and total number of claims was 22% lower. Lost-time injury frequency rates for the last three years are given in Figure 8.

Progress was made against the action plan with clear advancement in the three key result areas of improved occupational health, safety and welfare and injury management performance; continuous improvement of the PIRSAFE and Injury Management System; and promotion of the health and welfare of employees. Performance targets were met and performance in all key indicators improved considerably when compared to previous years targets.

The PIRSA Occupational Health, Safety and Welfare Forum met on four occasions and continued to play a major role in shaping the directions for occupational health, safety and welfare through identifying issues and providing feedback to the PIRSA Executive.

Evaluation of the PIRSAFE system was conducted at a number of levels. A project on occupational health, safety and welfare practices in high-risk work groups was completed, a telephone survey of staff on the effectiveness of the PIRSAFE system was conducted, internal audits of group-based systems was commenced and a review of occupational health, safety and welfare in the fruit fly eradication program was completed. Results indicated changed needs for planning, tailoring of information and different measures for system effectiveness which will be fed into a new occupational health, safety and welfare strategic plan for 2001–03.

A Disability Action Plan is under preparation and will be rolled out across the agency in 2001–02.

**TARGETS FOR 2001–02**

- Plan and commence implementation of new Human Resources Information System.
- Tender for provision of labour hire services.
- Conduct training in recruitment and selection processes using e-profiler system.
- Implement purchased leave and nine-day fortnight work practices.
- Implement new employee assistance programs.
- Evaluate the effectiveness of performance development systems.
- Measure the percentage of employees with documented individual development plans following the implementation of the new on-line performance development system.
- Review and assess new opportunities for leadership development.
- Develop new occupational health, safety and welfare strategic plan for 2001–03.
- Review all human resource policies and procedures for online use.

**Strategic priority 11 — WE MANAGE RESULTS — we manage our resources well; we provide leadership; our business processes are effective and efficient**

**Policy and strategic development**

A new strategic plan was produced providing strategic outcomes and priorities for PIRSA’s operations for 2001–2003 following agency-wide consultation. The plan was released on CD and the PIRSA website. Groups within PIRSA also developed strategic plans specific to their business, which sit under the corporate plan and are available from the website.

A two-year cycle was implemented for major corporate strategic initiatives such as development of the strategic plan and the Improving PIRSA organisational self-assessment. A CD was released to assist planning, finance and program manager’s understanding of the key processes and documentation in the yearly planning, budgeting and management cycle.

PIRSA improvement projects and initiatives identified during the first round of organisational self-assessment against the Australian Business Excellence Framework in 1998–99, were completed. The second cycle of self-assessment was commenced.
**Business services**

**Property and facilities**

A State-wide review of PIRSA’s properties and facilities was undertaken in early 2001 to understand the business and service delivery needs of the agency. The findings and draft recommendations have identified a number of ways to deliver services, improve utilisation of assets, consolidate operations, manage and achieve savings.

A project to relocate PIRSA’s record storage facilities from Glenside to Walkley Heights has been completed, with substantial operational improvements.

The establishment of a secondary drill core storage facility, a 2000–01 target, is still being considered: funding and location are yet to be decided. The sale of the former depot property at Thebarton was completed and the remaining core storage sheds removed. This was a demanding exercise requiring the distribution and transport of over 560 pallets of core to both Glenside and PIRSA’s Moonta site as a temporary measure.

**Greenhouse initiative**

The Government’s Greenhouse Targets Program incorporated within PIRSA’s Energy Management Strategy, has been reviewed by Energy SA in accordance with the National Greenhouse Strategy. Executive endorsed an action plan targeting significant opportunities to reduce energy consumption.

**Procurement**

PIRSA implemented its procurement development strategy, which provides the framework for procurement reform across the agency and ensures that PIRSA meets whole-of-government targets. A staff procurement competency program and electronic procurement options are under consideration.

**Project management**

A project information management system (Triple E) was enhanced during the year and over 30 awareness sessions conducted. Triple E assists business groups with financial budgeting, managing milestones, and producing progress reports for both PIRSA and external organisations. A pilot was successfully completed within SARDI and Sustainable Resources, and the system is now being implemented within the Corporate and Food and Fibre groups. Several other government agencies are interested in the system and two are conducting pilot tests.

**Corporate finance**

A Corporate Finance Strategic Plan, launched in November 2000, is driven by the PIRSA strategic plan as well as other influences including government reforms such as National Competition Policy, the adoption of commercial practices in operational areas of PIRSA and technological advancement which has enabled electronic processing of financial transactions. The Corporate Finance Branch was re-structured to achieve the new outcomes.

**Taxation compliance**

The impact of the goods and services tax was minimal due to a project-managed implementation process, which incorporated review and enhancement of business processes and a strong emphasis on training and awareness for PIRSA staff.

In recognition of the importance of managing taxation matters, dedicated taxation resources were recruited to ensure that PIRSA’s on-going taxation obligations for goods and services tax and fringe benefits tax are met. This included the establishment of a taxation management framework which identified a risk matrix for business transactions conducted by PIRSA and the processes which minimises the exposure to risk and additional tax liability.

In October 2000 a post implementation review of the goods and services tax systems and processes was conducted by independent tax consultants. This review contributed to the establishment of an action plan, which addresses the roles of operational areas of PIRSA and Corporate Finance in continuously improving tax compliance and minimising tax liability.
Financial systems
During 2000–01 Corporate Finance contributed to the establishment of a technical environment and processes which will enable business transactions to be conducted electronically via the Internet. Related to this is a current project to implement a receiving system, which will enable electronic file feeds to the financial system.

A system was established in August 2000 which enables all PIRSA purchase cardholders and their supervisors to electronically reconcile and acquit their monthly statement financial transactions. It provides a sound audit trail and requires less administrative effort compared to the previous manual system and considerably simplifies processing for tax purposes.

Planning commenced for major financial system projects in 2001–02 including improved general ledger information and asset management reporting, and the development of a financial reporting facility which will enable operational staff to run non-standard financial reports from their workstation.

Risk management
A risk manager was appointed in November 2000 to lead the Risk Management and Audit Unit. Risk management is to be integrated within the agency’s quality management and strategic planning framework, with operational responsibility for identifying and managing risks to reside with the business groups.

PIRSA has adopted a risk management framework and reporting system to ensure that whole-of-agency risks and opportunities are identified, analysed and appropriate management strategies implemented. This risk management approach will assist PIRSA mitigate the potential risks and maximise the opportunities in achieving its strategic and operational objectives. The deployment of this approach is through the PIRRISK risk management system (Fig. 9) which focuses on assisting management and staff to make informed decisions, encourage knowledge sharing and develop a formal risk management plan. This will enable groups to understand the risks and opportunities PIRSA faces in an environment of constant change.

Fraud
No instances of fraud were reported during the year. Ethical standards, a policy document which includes fraud prevention awareness, is provided to all employees. [please check as this is a statutory requirement that wasn’t covered]

Economics services
The need to help PIRSA to optimise its pattern of investment in the primary industries sector, in order to maximise its impact on the economic development of the State, continued in 2000–01. To contribute to this priority, the Economics Branch focussed on the strategic analysis of data and information on the business of the groups by application of various models, including the Monash model. This analysis provides a framework for making decisions about: the role of the Government in economic development; analysing the appropriateness of some traditional activities to achieve PIRSA’s outcomes; and assessing the effectiveness of agency programs currently being undertaken.

A major project was commenced looking at the economic impact of various programs undertaken by the agency and utilising the economic impact tools.

Information management
Improved financial management
Rationalisation of costs associated with the whole-of-government EDS information technology infrastructure contract continued with improved technology solutions being provided, whilst reducing the overall costs of services provided. A review of telecommunications infrastructure and strategies was completed and recommendations acted upon, with savings already achieved in reduced call costs.

Restructure
Restructuring occurred within two areas of Information Management. Business processes were reviewed and reengineered to streamline efficiency in Publishing Services, and Records and Document Services. Due to this restructure, the 2000–01 target to identify PIRSA’s records and document business requirements was delayed.
TARGETS FOR 2001–02

- Implement PIRSA’s energy use action plan, revise agency targets and develop performance indicators.
- Plan and address PIRSA’s regional property and facility needs that are congruent with the agency’s longer-term business and service delivery model.
- Continue to improve the Triple E system, including standardised reporting across the agency, and use it to manage the 2001–02 capital works program.
- Review PIRSA’s core storage sites.
- Complete the review and restructure of Corporate and Spatial Information Technology Services.

Strategic priority 12 — WE GROW AND HARNESS OUR KNOWLEDGE — our knowledge is a key business asset

Information management

The use and management of knowledge is an integral part of PIRSA’s business; the sharing of information and knowledge is seen an essential part of daily activities improving the agency and the quality of services provided. An Executive steering committee has been established to facilitate future knowledge management initiatives and provide strategic direction. Two workshops on knowledge management were organised for the PIRSA Executive and senior managers to provide a common understanding of it and the way forward, and a steering committee was established.

A whole-of-agency data management framework is being developed with associated standards, policies and practices for both spatial and textural data to maximise the use of data and information. A pilot program to assist the development of knowledge communities has been established whereby groups across the agency, with a common interest, can share knowledge. In addition several Human Resources Group initiatives are facilitating the development of a knowledge sharing culture within PIRSA, including programs such as leadership development, mentoring, information/knowledge sharing forums and position capabilities.

TARGETS FOR 2001–02

- Establish future strategic directions for knowledge management in PIRSA.
- Review organisational processes and business requirements to identify future opportunities for e-business developments.

Strategic priority 13 — WE BUILD COLLABORATIVE RELATIONSHIPS WITH OTHERS — our success depends on building and maintaining our relationships with clients, stakeholders and the community

Information management

Mobile phones

The transition of mobile telephone services to Optus was completed in the latter part of 2000, as part of the South Australian Government contract.

TARGETS FOR 2001–02

- Develop a three-year PIRSA Records Management Strategy based on whole-of-government and PIRSA’s requirements.
- Collaborate with State Records on the outsourcing of the storage of temporary value PIRSA records.
- Complete migration of the South Australian Government Radio Network.
- Provide PIRSA services for delivery via Services SA’s website, call centres and shop locations.
Figure 6 PIRSA paid casual hours

(Hours)

35,000
30,000
25,000
20,000
15,000
10,000
5,000


1999–2000 2000–01

Figure 7 PIRSA employee age profile by genders

(Number)

Male
Female

0
40
80
120
160


Figure 8 PIRSA lost time injury frequency rate*

(Rate)

18
16
14
12
10
8
6
4
2
0


* Number of new cases of lost-time injury for year x 1 million hours
† Number of hours worked in year

† Data excludes the Department for Water Resources which was created in February 2000.
FINANCIAL PERFORMANCE

Financial overview

PIRSA’s financial strategy is based upon a clear link between the budget process and the strategic plan. Allocations are provided to meet the outputs and outcomes determined by the Executive, in consultation with the Minister. This overview represents a summary of PIRSA’s financial performance in 2000–01.


Table 6  Summary statement of financial performance

<table>
<thead>
<tr>
<th></th>
<th>Budget 2000–01 $’000</th>
<th>Actual 2000–01 $’000</th>
<th>Actual 1999–2000 $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating expenses</td>
<td>176 635</td>
<td>197 837</td>
<td>182 417</td>
</tr>
<tr>
<td>Operating revenues</td>
<td>69 710</td>
<td>73 836</td>
<td>65 445</td>
</tr>
<tr>
<td>Net cost of services</td>
<td>106 625</td>
<td>124 001</td>
<td>116 972</td>
</tr>
<tr>
<td>Revenues from Government</td>
<td>106 974</td>
<td>113 850</td>
<td>107 635</td>
</tr>
<tr>
<td>Increase/(decrease) in net assets resulting from operations before abnormal items</td>
<td>49</td>
<td>(10 151)</td>
<td>(9 337)</td>
</tr>
</tbody>
</table>

The summary of the statement of financial performance in Table 6 shows PIRSA had an operating deficit of $10.2 million for 2000–01.

Operating expenses were $21.2 million higher than forecast, primarily due to carryover commitments from 1999–2000, in particular TEISA, Loxton Irrigation Scheme and Natural Heritage Trust. Other major factors which contributed to this variance was an increase in expenditure on both supplies and services and termination payments.

PIRSA’s 2000–01 larger than budgeted supplies and services expenditure were mainly in the areas of biosecurity and the Loxton Irrigation Scheme. The increased biosecurity expenditure was as a result of higher than expected emergencies in both fruit fly and plague locust outbreaks that affected the agricultural sector. In addition, there was an increase in termination payments which was primarily associated with targeted voluntary separation packages.

Operating revenues were $4.1 million higher than forecast primarily due to a higher level of federal grants and subsidies, as well as greater than budgeted income from charges, fees, rentals and other sources. These include inflows from State grants and subsidies such as the Food Plan, ovine Johne's disease and various cooperative research centre funding from industry. Revenues from Government were $6.9 million higher than forecast primarily due to one-off funding for the Spring Plague Locust Control Program.

Table 7  Summary statement of financial position

<table>
<thead>
<tr>
<th></th>
<th>Budget 2000–01 $’000</th>
<th>Actual 2000–01 $’000</th>
<th>Actual 1999–2000 $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>76 703</td>
<td>76 801</td>
<td>80 623</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>129 266</td>
<td>119 357</td>
<td>127 166</td>
</tr>
<tr>
<td>Total assets</td>
<td>199 969</td>
<td>196 158</td>
<td>207 789</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>12 339</td>
<td>14 090</td>
<td>11 246</td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td>39 424</td>
<td>41 762</td>
<td>46 086</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>51 763</td>
<td>55 852</td>
<td>57 332</td>
</tr>
<tr>
<td>Net assets</td>
<td>148 206</td>
<td>140 306</td>
<td>150 457</td>
</tr>
</tbody>
</table>
Current assets were $6.1 million higher than forecast primarily due to greater receivables and inventory balances. They were offset in part by a lower cash balance resulting from additional spending in the areas of biosecurity, Loxton Irrigation Scheme and terminal leave. Non-current assets were $9.9 million lower than forecast with the largest variance being attributed to property, plant and equipment. This was primarily due to delays in asset purchases, most notably the Plant and Food Biotechnology Centre and SARDI Aquatic Sciences pipeline.

Current liabilities were $1.8 million higher than forecast as a result of an increase in creditors, accruals and employee entitlements, partially offset by a reduction in borrowings. Non-current liabilities were $2.3 million higher than forecast as a result of higher long-term borrowings and an increase in creditors and accruals.

### Table 8 Summary statement of cash flows

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td><strong>Cash flows from operating activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments</td>
<td>(168 607)</td>
<td>(201 492)</td>
<td>(174 725)</td>
</tr>
<tr>
<td>Receipts</td>
<td>70 497</td>
<td>83 666</td>
<td>63 717</td>
</tr>
<tr>
<td>Cash flows from Government</td>
<td>106 974</td>
<td>113 850</td>
<td>107 635</td>
</tr>
<tr>
<td>Net cash provided by operating activities</td>
<td>8 864</td>
<td>(3 976)</td>
<td>(3 373)</td>
</tr>
<tr>
<td><strong>Cash flows from investing and financing activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payments</td>
<td>(9 448)</td>
<td>(4 915)</td>
<td>(8 721)</td>
</tr>
<tr>
<td>Receipts</td>
<td>7 746</td>
<td>7 636</td>
<td>9 726</td>
</tr>
<tr>
<td>Repayment of borrowings</td>
<td>(4 454)</td>
<td>(4 796)</td>
<td>(7 788)</td>
</tr>
<tr>
<td>Net cash used in investing and financing activities</td>
<td>(6 156)</td>
<td>(2 073)</td>
<td>(6 783)</td>
</tr>
<tr>
<td>Net increase/(decrease) in cash held</td>
<td>2 708</td>
<td>(6 049)</td>
<td>(10 156)</td>
</tr>
<tr>
<td>Cash at 1 July</td>
<td>62 683</td>
<td>69 750</td>
<td>79 906</td>
</tr>
<tr>
<td>Cash at 30 June</td>
<td>65 391</td>
<td>63 701</td>
<td>69 750</td>
</tr>
</tbody>
</table>

The statement of cash flows reflects cash receipts and payment disbursements which PIRSA incurred in the course of its activities.

Operating activities in the statement of cash flows are consistent with the results shown on the statement of financial performance except that the amounts vary in relation to accrual adjustments for both revenues and expenses, and goods and services tax was included in the statement of cash flows on a gross basis.

Payments for investing activities reflects lower than budgeted expenditure on plants and equipment due to a delay of asset purchases planned for the Plant and Food Biotechnology Centre and the SARDI Aquatic Sciences pipeline.

**Property, plant and equipment assets**

PIRSA has under its ownership and management property, plant and equipment assets valued at $95.1 million, which mainly consist of a number of large research centres across the State. The agency's largest investment is in property assets, as illustrated in Figure 13.

PIRSA has an ongoing need for investment in buildings, equipment and information technology to produce its agreed service delivery outcomes. The purchase, management and sale of assets is conducted by PIRSA to facilitate achievement of required results in the most efficient and effective manner.

The total value of the property, plant and equipment decreased marginally in 2000–01 by 1.8% from $96.9 in 1999–2000 mainly due to depreciation expenses.

**Biosecurity**

The Biosecurity Fund provides financial support in the event of outbreaks of fruit fly, plague locusts and other biological threats which come within the responsibility of PIRSA. As a result, PIRSA has a core role in
responding to a wide-range of incidents resulting from pest and disease incursions which threaten production systems and market access.

The frequency of these incidents has increased over recent years and markets are acutely sensitive to these threats. Benefits gained by biosecurity activities for plant and animal industries are generally large compared to the cost of incident response.

There has been an ongoing demand and increase in frequency for biosecurity expenditure that far exceeds the funds, which were originally established for fruit fly and locust responses. In particular, over the last four financial years there has been a dramatic increase in the call for funds to deal with fruit fly, branched broomrape, 'plague locusts, grasshopper and ovine Johne's disease.

The cost of fruit fly and plague locust programs reached $3.1 million and $6.6 million respectively compared to $1.6 million and $0.5 million in 1999–2000. Total payments for biosecurity in 2000–01 were $13.9 million.

Figure 14 shows a comparison in expenditure on biosecurity over the last four financial years.

**Account payment performance**

Treasurer’s Instruction 11 (Public Finance and Audit Act 1987) requires all undisputed accounts to be paid within 30 days of the date of the invoice or claim unless there is a discount or a written agreement between the agency and the creditor. As indicated in Table 9, PIRSA paid 81% of all invoices in 2000–01 on time. This compares with 88% of all invoices paid on time in 1999–2000 and is largely attributable to the additional administrative procedures associated with the introduction of the goods and services tax. Performance continues to be closely monitored in an effort to ensure that the accepted best practice benchmark of 90% of accounts being paid by their due date is met.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Accounts paid</th>
<th>Amount paid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Paid by the due date</td>
<td>53 009</td>
<td>81</td>
</tr>
<tr>
<td>Paid within 30 days or less from the due date</td>
<td>10 056</td>
<td>15</td>
</tr>
<tr>
<td>Paid more than 30 days from the due date</td>
<td>2 881</td>
<td>4</td>
</tr>
</tbody>
</table>

**Contracting out arrangements**

Contractual arrangements entered into by PIRSA, that exceed $4 million and continue beyond one year, are provided in Table 10.

<table>
<thead>
<tr>
<th>Project description</th>
<th>Supplier/private sector participant</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loxton Irrigation Scheme main pump station upgrade</td>
<td>Ottoway Engineering Pty Ltd</td>
<td>29 January 2001 – 28 February 2003</td>
</tr>
<tr>
<td>Loxton Irrigation Scheme — supply of 64 kilometres of pipes for the rehabilitation of the Loxton Irrigation District</td>
<td>Iplex Pipelines Australia Pty Ltd</td>
<td>30 May 2001 – 30 June 2004</td>
</tr>
<tr>
<td>Upper South East Dryland Salinity Plan — construction of the Northern Outlet Drain to alleviate surface flooding and control groundwater levels</td>
<td>TK and PA Brinkworth</td>
<td>December 2000 – October 2001</td>
</tr>
</tbody>
</table>
Part two

Office of Regional Development
Function
The Office of Regional Development was established following the Premier’s Regional Development Task Force report and has completed its second year of operation. The office aims to encourage a whole-of-government approach to the development and implementation of policy and services affecting rural and regional communities of South Australia. The office achieves this by providing resources to support the Minister for Regional Development; advising the Minister on strategic issues related to regional development; advocating for regions at an inter-agency level; and improving regional development outcomes by facilitating effective relationships and identifying opportunities for partnerships between governments, communities and business.

Organisation
The office consists of a small team of skilled professionals reporting directly to, and advising, the Minister for Regional Development. This reporting relationship to a Senior Cabinet Minister provides a high level of entry to Government, ensuring that regional issues and priorities are at the forefront of the Government’s agenda.

PIRSA provides administrative support to the Office of Regional Development including human resources, financial and business services, and information management. Statutory annual reporting requirements regarding employment and financial issues, fraud and Year 2000 compliance report are incorporated under PIRSA.

Ministerial responsibilities
Legislation
There is no legislation committed to the Minister for Regional Development.

Administered items and authorities
The office provides executive support for the Regional Development Council, advising on issues and priorities to the Government through the Minister for Regional Development, and the Regional Development Issues Group, providing leadership and coordination within the public sector on regional issues. There are no statutory authorities (boards, committees or trusts) or administered items within the Minister’s area of responsibility.

Governance
The new governance arrangements recommended by the Regional Development Task Force have continued to operate and consist of:
- Minister for Regional Development
- Office of Regional Development reporting to the Minister for Regional Development
- Regional Development Council — advising on issues and priorities of regional development to the Government through the Minister for Regional Development, who is the Chair
- Regional Development Issues Group — portfolio agency representatives are appointed by the relevant Ministers. Membership also includes the Executive Officer Regional Development South Australia and the Chief Executive Local Government Association. Its role is to provide leadership and coordination within the public sector on regional issues. The issues group is chaired by the Honourable John Dawkins, MLC, who is also Convenor of the Regional Development Council.

Strategic context
Goals
The Office of Regional Development represents a key Government strategy for the advancement of South Australia in the 21st century. The office was established as part of a series of new governance arrangements to facilitate priority and strategic issues impacting on the development of South Australia’s regions. The goals of the office have developed from the recommendations of the Regional Development Task Force and centre around the provision of strategic advice and facilitation of a whole-of-government approach to major issues impacting on regions including:
- development, coordination and integration of regional strategies and plans, using a whole-of-government and whole-of-State approach
• improved regional infrastructure
• significantly enhanced capacity of regional communities to embrace change and achieve their development goals
• enhanced regional services that are tailored to the specific requirements of regional communities
• a positive image for regional communities
• foster wealth and employment opportunities in regional areas
• provide a South Australian focus for promoting partnerships to support community economic development.

The release of *Regional directions for South Australia* by the Government during this year has provided a framework for goals, priorities and approaches, which build on and extend the recommendations of the Regional Development Task Force.

**Primary focus**

The primary focus and key activities of the office have been principally based on the direction given by the Government’s response to the Regional Development Task Force report and the more recently released, *Directions for regional South Australia*. The State Government’s commitment to a whole-of-government approach promotes better integration and coordination of regional development programs and services.

The office focuses on improving the level of integration and coordination within the public sector to ensure the best investment of public sector resources. On this basis, the key activities of the office have been:

• providing executive support to the Regional Development Council, its working groups and the Regional Development Issues Group
• facilitating whole-of-government and whole-of-State discussion regarding regional development around the goals of *Directions for regional South Australia*
• building partnerships and alliances to promote and encourage regional development
• providing a voice in Government for regional communities
• working with the Regional Development Council to draft a regional development strategy (*Directions for regional South Australia*)
• working with Government agencies to improve access to regional services that are tailored to the specific requirements of regional communities
• providing best-practice examples of how communities have undergone economic transformation
• building the social and economic capacity of communities
• encouraging Government, business and the community to work together
• providing an information hub with a linking and brokering role
• encouraging development of community leadership.
Performance review

Highlights

• Over 90% of the recommendations of the Regional Development Task Force have been addressed.
• The Government released Directions for regional South Australia in partnership with the Regional Development Council, providing an endorsed framework for working in partnership with spheres of government, stakeholders and the community.
• The first Community Builders Program was successfully conducted in four regional cluster groups.
• The inaugural National Rural Community Leadership Conference was successfully held.
• A regional funding and grants website was created to assist regional residents and organisations access funding.
• A pilot regional Coordinators Program was successfully conducted in the Riverland.

Higher level policy support

Directions for Regional South Australia — a framework for action

Directions for Regional South Australia was developed to provide a framework for long term commitment to managing the issues for people and communities in regional South Australia. It encourages collaboration amongst spheres of government, the community and stakeholders in responding to the priorities for regional development.

The development of the strategy involved the Regional Development Council, the Regional Development Issues Group and the Office of Regional Development. Its finalisation was preceded by consultation in all regions as well as with representatives of the community, government agencies, area consultative committees, business and other regional interest groups.

The strategy was released by the Deputy Premier at Mount Gambier in January 2001.

Regional Development Council

The office provided executive support to the Regional Development Council, which met on four occasions. Support has also been given to the Working Groups of the Council in establishing their work plans and coordinating input to the meetings.

Policy advice

The office has been involved in providing policy advice to the Deputy Premier, which included preparation and review of Cabinet Submissions, information for media releases and the development of policy statements.

Inter-governmental relations

The office has worked with federal, State and local government counterparts to provide a clear set of principles and goals to guide Ministers in developing more cooperative arrangements between all spheres of government in regional development including:

• Achieving flexibility, particularly within program and service delivery, recognising that States, Territories and their regional communities are unique and may require tailored solutions.
• Agreement of principles outlining how governments will cooperate, including lead-agency roles and use of existing regional development structures when implementing new policies.
• Development of a sustained, long-term commitment to the provisions of programs and services in regional Australia, including mechanisms ensuring the delivery of outcomes.

The Ministerial group also agreed to establish an integrated working group of officials to examine priority areas, including:

• delivery of services, support and information
• leadership development
• regional infrastructure
• attraction and retention of staff
• regional housing
• investment attraction.

WHOLE-OF-GOVERNMENT APPROACH TO REGIONAL DEVELOPMENT
The office has a key role in facilitating and encouraging a whole-of-government approach to responding to and working with regions to manage issues impacting on their development.

Regional Development Issues Group
The Regional Development Issues Group was established in 1999 in line with the recommendations of the Regional Development Task Force.

The office provided executive support to the Issues Group, which met on 12 occasions throughout the year. The key focus of its work and the main areas outcome were:
• regional coordination
• workforce accommodation
• community leadership development
• regional development investment projects
• regional employment.

Regional budget statement
The office coordinated the preparation of Regional South Australia: making a difference, 2001–02, released as part of the State Government Budget Papers. This statement was prepared and presented in line with the strategic goals identified in Directions for regional South Australia. In so doing, the Government demonstrated how it planned to focus resources through a whole-of-government perspective to address the priority needs of regional South Australia.

Contribution to cross-government working parties
The work of the office in encouraging and contributing to a whole-of-government approach to regional development issues has involved a range of cross–government working parties and committees. These include:

State Government agencies and stakeholders
Employment Council
Government response to Pointing to the Future (Employment Council report)
Country Vocational College Working Party
Attraction and Retention of Staff in Regions Working Group
Service SA Steering Committee
Regional Buying Policy Working Group
Premier’s Community Fund
Business Vision 2010 Performance Indicators
Regional Airports Strategy Steering group
IE 2002 Steering Committee
Community Investment Strategy.

Spheres of government and stakeholders
State/Local Government Partnerships Program
National Highways Strategy Steering Group
Port Augusta Social Vision and Action Planning — Senior Officers Group
South East Housing Issues Working Group
Regional Workforce Accommodations Study Steering Group
Cross-government Group on Regional Workforce Accommodation Shortages
Regional Infrastructure Gap Analysis Working Group
Regional Access to private Finance Working Group
Vocational Employment and Training State Reference Group
Inter-governmental Regional Development Task Force
State Reference Group — Networking the Nation
State contact for feedback on Rural Transaction Centre applications.
Implementation of the Regional Development Framework

The work of the office is influenced by the Regional Development Council and its priorities identified in Directions for regional South Australia. The result of the activities of the office are shown below in line with the goals of Directions for South Australia. The activities included in this section are limited to the work of the office and do not represent the work of agencies and other stakeholders in working towards the achievement of the goals of the strategy.

Planning and infrastructure

Regional workforce accommodation solutions initiative

Employment opportunities are a strong incentive to encouraging regional migration, however investment in accommodation has not always followed industry development and some areas are experiencing significant shortages. Lack of access to affordable housing is an impediment to regional economic diversification. The office has attracted a total of $100 000 in funding contributions from the three spheres of government, towards a Regional Workforce Accommodation Solutions initiative. Project partners include:

- federal agencies (Department of Transport and Regional Services and Department of Employment Workplace Relations and Small Business)
- State agencies (Departments of the Premier and Cabinet, Human Services, Industry and Trade)
- regional organisations (South East and Murraylands–Riverland Regional Local Government Associations, regional development boards, and the Murray Mallee Strategic Taskforce).

The initial investigation will provide a detailed analysis of the shortages faced in two areas (Murraylands and South East). It will search for practical solutions that address the issues. Appropriate models and initiatives will be documented and made available to regional communities, local government, State Government, private sector employers, regional development boards, workforce accommodation providers, and investors.

This initiative will cooperate closely with a cross-government regional workforce accommodation policy group that has been established by the Department of the Premier and Cabinet.

National regional housing group

The office convenes a national working group analysing regional housing issues to encourage greater cooperation between the spheres of government in addressing the issues. The group will report to the Council of Regional Development Ministers of the Commonwealth, States, Territories and Australian Local Government Association.

Regional infrastructure gap analysis

The Regional Development Task Force identified infrastructure needs and planning as key issues impacting on the development of regions. The office conducted a survey, with the assistance of regional development boards, to identify regional needs in infrastructure planning and development.

The findings, along with agency information, this information have been incorporated into the Regional Action Plans being prepared by Planning SA as part of the update of the Planning strategy for the development of regional South Australia.

Regional Infrastructure Fund

The Government has increased investment in key strategic infrastructure to improve regional economic performance. The office continues to assist the Department of Industry and Trade with assessment of applications under the Regional Infrastructure Fund. The $15.5 million fund (over three years) aims to accelerate high-priority infrastructure needs in rural and regional South Australia.

For the first two years of the fund, approved projects totalled $6.4 million, resulting in an estimated 2349 jobs being created or retained. A total project investment of $464 million has been leveraged from this assistance.

Streamlining planning regions

The office participated in the process, coordinated by Planning SA, for the development of planning regions that best reflect regional interests. These regional boundaries will be used in the revision of the Planning strategy for regional South Australia, a major planning document for the State.
Regional Airports Strategy
The office assisted in the development of a Regional Airports Strategy, which identified the probable scope of works required at regional airports throughout the State — indicating that most airports lacked the necessary revenue streams to fund the works. The preparation of the strategy, submitted to the Minister for Transport in November 2000, involved extensive research and community consultation. The report recommends a strategic framework and evaluative criteria for State Government contributions to airport infrastructure works. It estimated costs for a three-year projected program of airport developments. This includes a simple and effective methodology to categorise and prioritise the various projects strategically.

Supportive and responsive Government

Regional Funding and Grants Register
The Regional Funding and Grants Register was launched in March 2001 by the Deputy Premier and President of the Local Government Association. The website <http://www.grants.ord.sa.gov.au> is designed to be a single repository of grant and funding information. The site contains over 464 local, State, federal and philanthropic grants, awards and scholarships, also providing generic information about how to prepare a funding submission, as well as information to assist business when considering debt or equity finance options.

The site will soon contain a list of people or organisations in rural and regional South Australia who have experience in preparing funding submissions. Users will be able to identify the appropriate grant and also identify the closest resources available to assist in the preparation of grant applications.

The site has been well used, with the total number of hits registered on the site in the first four months of operation being 467,386.

Stronger communities

Youth entrepreneurship
The office supported the introduction of a Youth Entrepreneurship program, which encourages young people to take an active interest in developing their communities’ strengths through an pro-active business approach.

Community builders
The Community Builders Program was launched in South Australia under a partnership of the three spheres of government formed by the Local Government Association of South Australia, the federal Department of Family and Community Services and the Office of Regional Development.

The program aims to stimulate and encourage ‘grass roots’ leadership to assist communities help themselves; identifying and recognising energy and focus within local communities for community economic development. It is based on a cluster of communities working together to understand common interests and aspirations and to share successes. There is a strong action learning methodology, which promotes the understanding that people are the essential resource and that passion and enthusiasm for community engagement is the most significant source of energy.

The program was run in the Fleurieu, Mid Murray, Flinders Ranges, and Eyre Peninsula regions, involving 28 regional towns and 90 people directly.

An evaluation concluded that the 2000 program was highly successful in developing cluster awareness and collaboration, in achieving community engagement and betterment outcomes, and in developing ‘grass roots’ community leadership.

Based on the evaluation, the funding partners have committed to two further rounds across the State.

National Rural Community Leadership Conference
The office, together with Family and Community Services (federal), PIRSA, Australian Rural Leadership Foundation, University of South Australia (Whyalla Campus), IDEAS, and ETSA Utilities, organised the first national conference on rural community leadership. Participants came from around Australia and overseas to share and develop information, ideas and views on rural community leadership and how to encourage it. The Conference formulated a number of recommendations to support the development of rural community leadership. The report has been disseminated and provided to interested people and organisations.
**Rural community foundations**

The office played the key coordinating role in finalising a South Australian proposal to house the Foundation for Rural and Regional Renewal in national headquarters in regional South Australia.

The office has actively increased awareness of the benefits of rural community foundations and the role they play in community economic development. The office assisted the Barossa Light Development Corporation and Keith community secure funding from the Foundation for Rural and Regional Renewal to carry out a feasibility study to ensure that a community foundation is the best option for these regions.

**Improved regional services**

**Regional coordination — Riverland trial**

Based on recommendations from the Regional Development Task Force, a regional coordination trial was launched in the Riverland in March 2001. It drew together senior public servants and local government representatives into a regional managers forum within the region to explore ways of achieving the better delivery and coordination of services. The group targeted some short-term issues it could manage in the time of the trial. These include the attraction and retention of staff, intra-regional transport and the uptake of information technology. The trial will be evaluated after six months.

**Multipurpose service outlets**

Service SA is a Government program to place one-stop shops providing information services and transaction handling across the State. The office was a member of the Service SA project assurance group and a working sub-group to undertake a market research and evaluation.

In particular, the office promoted and assisted discussions between Service SA and the Rural Transaction Centres program for the development of a memorandum of understanding between the two initiatives.

**SA Great Regional Awards**

The first Regional Awards program was conducted by SA Great, with support from the Office of Regional Development, and was a highly successful initiative. The program provided a valuable opportunity for publicising regional achievements and the people behind them.

**Economic generation**

**Business retention and expansion**

A forum was initiated for key stakeholders to examine the level of interest in establishing a workable Business Retention and Expansion model for implementation in regional South Australia. The model focuses on valuing the importance of existing businesses and building the capacity of communities to help them grow. The basic premise of this program is that 60–80% of net employment change is sourced from existing businesses.

As a result of the forum it was overwhelmingly agreed that the Business Retention and Expansion concept should be further developed; so that its application can be considered through the regional development boards and area consultative committees in South Australia.

**Regional buying policy**

A cross-government working group was set up to develop a policy on State Government purchasing providing support for regional businesses. The impact of the federal National Competition Policy is complicated and its impact on the proposed policy is currently under consideration.

**Attracting regional investment**

The Inter-governmental Regional Development Taskforce (involving State, federal and local government) is attempting to find ways that the spheres of government can work collaboratively to overcome impediments to investment attraction in regions. The office has worked with Invest Australia to provide comments and feedback on a do-it-yourself guide to preparing an investment profile for a region and/or community.
Upper Spencer Gulf Common Purpose Group
The office is supporting the evaluation of the Upper Spencer Gulf Common Purpose Group, being conducted by the University of South Australia, Whyalla Campus.

Regional profiles
Work has continued as part of a cross-government working group assisting in the preparation of regional profiles for the new planning and development regions. The purpose of these snapshots is to provide:

- socio-economic indicators of regions, which are expected to be a valuable tool for information to potential investors, visitors and in the preparation of funding submissions.
- a source document for the updating of Regional Action Plans.

Regional promotion
Regional newspapers
The office has worked with the Department of Premier and Cabinet to promote the interests and achievements of the regions. A program of regional development inserts in country newspapers was established, with the publication of one insert outlining regional achievements and two further inserts planned.

Regional Issues newsletter
Three editions of the Regional Issues newsletter have been broadly distributed to State and regional organisations (up to 2000 copies per edition). The newsletter promotes the activities and outcomes of the Regional Development Issues Group. It aims to raise the profile of the Group and increase understanding of its role in achieving a whole-of-government response to regional issues.

Regional Action newsletter
The office produced its second issue of Regional Action, a newsletter informing readers about issues, initiatives in regional development and the work of the office.
The year ahead

The year ahead will have a strong emphasis on Building a Stronger Regional South Australia, a program concentrating on community capacity building, business retention and expansion and community economic development.

TARGETS FOR 2001–02

• Develop Business Retention and Expansion initiatives in cooperation with regional development boards.
• Promote the benefits and opportunities for establishing a community foundation to encourage the recycling of local wealth.
• Provide direct experience of best practice in community economic development and small town renewal through a program of study tours and forums.
• Develop a Community Toolkit for community economic development.
• Build the capacity of rural and regional communities by promoting the development and implementation of a broad range of leadership programs to meet their diverse needs.
• Influencing a whole-of-government approach to strategic regional infrastructure investment.
Part three

Bio Innovation SA
Bio Innovation SA’s role

Function
Bio Innovation SA was established in March 2000 as the South Australian Government’s commitment to accelerating the development of a commercial bioscience industry in this State. Bio Innovation SA does this by collaborating with the bioscience industry and research organisations to advise the Government of the activities needed to see the industry flourish.

Organisation
Bio Innovation SA was set up as a whole-of-government approach which draws officers from a range of key agencies including the Department of Human Services, Department of Industry and Trade, and PIRSA. Bio Innovation SA was incorporated under the Public Corporations Act 1993 on 14 June 2001. The board consists of the Chief Executives of the Departments of Human Services, Industry and Trade, PIRSA, Premier and Cabinet, and the Chief Executive Officer of Bio Innovation SA. Bio Innovation SA also has a quarterly reporting relationship to the Deputy Premier to ensure industry issues and priorities are at the forefront of the Government’s agenda.

PIRSA provides administrative support to Bio Innovation SA including human resources, financial and business services and information management.

Ministerial responsibilities
Legislation is committed to the Minister for Primary Industries and Resources. Bio Innovation SA advised the Minister on the bioscience industry in South Australia.

Strategic context
Bio Innovation SA represents a key Government strategy for the advancement of South Australia in the 21st century. The team was established to develop and implement a strategy for biotechnology industry acceleration in this State — the blueprint for turning ‘ideas to income’.

The mission of Bio Innovation SA is to enable the creation of 50 new bioscience companies by 2010 and encompasses the following goals:

- Recognition of the State as a centre for world-class research and development.
- World-class industry players located in South Australia, both through the commercialisation of local research and development as spin-off companies and from the desire of international groups to be located adjacent to our research and corporate culture.
- Build a high technology infrastructure and environment capably of promoting and attracting excellence in the ranges of skills required to build a bioscience industry.
- Research and development effort focused to achieve critical mass in several bioscience disciplines essential to securing future opportunities.
- Attract, generate and celebrate risk-aware investors specialising in bioscience across the financing spectrum (from start-up to expansion), thereby creating a local mini-financial hub.

To achieve this mission and subsequent goals, key activities of Bio Innovation SA have been:

- Advising the Government and research institutions on the commercialisation of bioscience.
- Identifying and supporting researchers working at the leading edge in areas of unmet market need.
- Identifying core competencies within the research community.
- Building awareness of State and federal research and development funding packages for commercialisation.
- Providing educational programs to enhance the skills and understanding of research scientists in the steps of commercialisation.
- Establishing networks for global linking of research and industry to sources of international public and enterprise funding.
• Linking the South Australian bioscience industry with federal strategies and programs to gain greater leverage from current and proposed funds.
• Promoting locally, nationally and internationally the strengths and capabilities of South Australia.
Performance review

Highlights
- Bio Innovation SA was incorporated under the provisions of the Public Corporations Act.
- Appointment of an internationally recognised Chief Executive Officer.
- Sponsorship of a high-level South Australian delegation to the BIO 2001 Conference and Exhibition in San Diego.
- Establishment and administration of the Bio Innovation SA Pre-seed Fund to provide grants to emerging South Australian bioscience companies.
- Launch of the Bio Innovation SA strategy, marketing kit and website to local, national and international bioscience communities.

Promotion
A marketing kit was produced and launched by the Deputy Premier to promote South Australia’s core capabilities in biosciences.

The website <www.bioinnovationsa.com.au> was established to provide the local, national and international bioscience communities with up-to-date information on South Australia’s bioscience industry.

Attendance by the Chief Executive Officer at various conferences, both national and international, to further promote the key competencies of the South Australian bioscience industry.

Collaboration with Department of Industry and Trade to take advantage of promotional opportunities for the bioscience industry.
The year ahead

Bio Innovation SA is responsible for the implementation of the State’s strategic plan *Bright is the future.* Particular emphasis will be placed on the pre-seed funding stage of start-up companies, fostering working relationships between all stakeholders and establishing strong links to capital markets. A feasibility study determining the requirements for a bioscience business incubator will be commissioned and a review of various intellectual property policies conducted.
Appendixes
1 PIRSA MINISTERIAL RESPONSIBILITIES

LEGISLATION

The principal legislation for which PIRSA has administrative responsibility for through the Minister for Primary Industries and Natural Resources, Minister for Regional Development and Minister for Minerals and Energy is listed below. Many of these Acts are supported by Regulations, Notices and Indentures or Directions in some instances.

Food and Fibre

Agricultural Industries

Barley Marketing Act 1993
Biological Control Act 1986
Branding of Pigs Act 1964
Brands Act 1933
Citrus Industry Act 1991
Dairy Industry Act 1992
Deer Keepers Act 1987
Dried Fruits Act 1993
Fruit and Plant Protection Act 1992
Impounding Act 1920
Livestock Act 1997
Meat Hygiene Act 1994
Noxious Insects Act 1934
Phylloxera and Grape Industry Act 1995
Poultry Meat Industry Act 1969
Primary Industry Funding Schemes Act 1998
Seeds Act 1979
South Australian Meat Corporation Act 1936
South Australian Meat Corporation (Sale of Assets) Act 1996
Swine Compensation Act 1936
Veterinary Surgeons Act 1985
Wheat Marketing Act 1989
Wine Grapes Industry Act 1991

Fisheries

Fisheries (Gulf St. Vincent Prawn Fishery Rationalisation) Act 1987
Fisheries (Southern Zone Rock Lobster Fishery Rationalisation) Act 1987
Fisheries Act 1982

Sustainable Resources

Agricultural and Veterinary Chemicals (South Australia) Act 1994
Agricultural Chemicals Act 1955
Animal and Plant Control (Agricultural Protection and Other Purposes) Act 1986
Dog Fence Act 1946
Pastoral Land Management and Conservation Act 1989
Soil Conservation and Land Care Act 1989
Stock Foods Act 1941
Stock Medicines Act 1939

Office of Minerals and Energy Resources

Mineral Resources

Broken Hill Proprietary Company’s Indenture Act 1937
Broken Hill Proprietary Company’s Steel Works Indenture Act 1958
Mines and Works Inspection Act 1920
Mining Act 1971
Opal Mining Act 1995
Roxby Downs (Indenture Ratification) Act 1982

**Petroleum**

Cooper Basin (Ratification) Act 1975
Petroleum Act 2000
Petroleum (Submerged Lands) Act 1982
Santos Limited (Regulation of Shareholdings) Act 1989

**Energy SA**

Electrical Products Act 1988
Gas Act 1997
Gas Pipelines Access (South Australia) Act 1997
Natural Gas Authority Act 1967
Natural Gas (Interim Supply) Act 1985
Petroleum Products Subsidy Act 1965
Stony Point ( Liquids Project) Ratification Act 1981

**PIRSA Corporate**

Primary Producers Emergency Assistance Act 1967
Rural Industry Adjustment and Development Act 1985

**Other Acts**

In addition PIRSA has limited administrative functions under the following Acts that are committed to other Ministers.

Electricity Act 1996
Fisheries Act 1995 (Vic.)
Fisheries Management Act 1994 (NSW)
Fisheries Management Act 1991 (Cwlth)
Fish Resources Management Act 1994 (WA)
Harbours and Navigation Act 1993
Historic Shipwrecks Act 1976 (Cwlth)
Historic Shipwrecks Act 1981
National Parks and Wildlife Act 1972
Petroleum Products Regulation Act 1995
Petroleum (Submerged Lands) Act 1967 (Cwlth)

**Legislative changes**

Legislative changes are summarised below and discussed in detail under ‘Performance review, strategic priority 4’.

**New or amended legislation**


**Reviews of legislation**


**Acts repealed**

The Cattle Compensation Act 1939 and the Apiaries Act 1931 were repealed.
ADMINISTERED ITEMS

PIRSA administers but does not control the following funds on behalf of the Federal Government, the Minister for Primary Industries and Natural Resources or the and Minister for Regional Development. These funds are not recorded in the agency’s operating statement or statement of financial position as the agency does not have any discretion to deploy the resources for achievement of its own objectives.

Office of Regional Development
The Office of Regional Development was established on 30 June 1999 reporting directly to the Minister for Regional Development. PIRSA provides human resources, financial and business services, and information management support. The office’s performance review is reported in ‘Part two’ of this annual report.

Bio Innovation SA
Bio Innovation SA is a Government initiative to attract investment and biotechnology companies to South Australia to build on the world-class research and development already being undertaken by the three universities and government agencies such as SARDI. PIRSA provides human resources, financial and business services, and information management support. The office’s performance review is reported in ‘Part three’ of this annual report.

Other
- Aquaculture Lease Rehabilitation Fund
- Barley Industry Levy
- Cattle Industry Fund
- Dairy Industry Fund
- Deerkeeper’s Compensation Fund
- Egg Industry Deregulation Fund
- Energy Management Task Force
- External Funds (Seed Levies; Anthracnose Compensation Fund)
- Extractive Areas Rehabilitation Fund
- Fisheries Research and Development Fund
- Gulf St Vincent Prawn Fishery Levy
- Ministers’ salaries and allowances
- Natural Disaster Relief Fund
- Natural Gas Authority of South Australia
- Natural Heritage Trust Fund
- SA Water — pricing subsidy for water and wastewater to country regions
- SAMCOR Funds administration
- Sheep Industry Fund (new)
- Soil Conservation and Landcare Fund
- Swine Compensation Fund
- Wheat Industry Levy

AUTHORITIES

Statutory
Statutory authorities associated with primary industries and resources and regional development and within the Ministers’ areas of responsibility are listed below. PIRSA provides relevant advice and assistance to these. Asterisks indicate those bodies (agencies) which have their own staff and other resources.

- animal and plant control boards* (43 throughout South Australia; 29 rural and 14 urban)
- Animal and Plant Control Commission
- Apiary Advisory Group*
- Australian Barley Board*
- Board of Examiners for Mine Managers
- Cattle Advisory Group
- Citrus Board of South Australia*
• Dairy Authority of South Australia*
• Deer Advisory Group
• Deer Compensation Fund Advisory Committee (to be decommissioned following repeal of the supporting legislation)
• district soil conservation boards (27 throughout South Australia)
• Dried Fruits Board*
• fishery management committees (Abalone; Blue Crab; Gulf St Vincent Prawn; Inland Waters; Marine Scalefish; Northern Zone Rock Lobster; Southern Zone Rock Lobster; Spencer Gulf and West Coast Prawn)
• Goat Advisory Group
• Meat Hygiene Advisory Council
• Pastoral Board
• Phyloxera and Grape Industry Board*
• Pig Advisory Group
• Sheep Advisory Group
• Soil Conservation Appeal Tribunal
• Soil Conservation Council
• Swine Compensation Fund Advisory Committee (to be decommissioned following repeal of the supporting legislation)
• Veterinary Surgeons Board*

Other

There are many non-statutory authorities on which PIRSA is represented. Significant ones are discussed under ‘Performance review’ (e.g. Premier’s Food for the Future Council, industry development boards and the Advisory Board of Agriculture).
## 2 WORKFORCE STATISTICS

The profile below represents Public Sector Management staff, including those employed through the Graduate Youth Initiative, at 22 June 2001. Employees are recorded at the remuneration level they have been appointed or assigned to. A summary of all staff employed by PIRSA, which includes those under other employment structures, is provided under ‘Strategic priority 10’ and ‘Human resource management’ sections of this annual report.

### Public Sector Management Act employees

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### Executive right to further employment

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### 3 OCCUPATIONAL HEALTH, SAFETY AND WELFARE STATISTICS

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<td><strong>1</strong> Occupational health and safety legislative requirements</td>
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<tr>
<td>Number of notifiable occurrences pursuant to the Occupational Health, Safety and Welfare Regulations 1995, Division 6.6</td>
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<td>0</td>
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<td>Number of notifiable injuries pursuant to the Occupational Health, Safety, and Welfare Regulations, Division 6.6</td>
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<td>0</td>
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<tr>
<td>Number of notices served pursuant to the Occupational Health, Safety and Welfare Act 1986, s. 35, s. 39 and s. 40 (default, improvement and prohibition notices)</td>
<td>2</td>
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<tr>
<td><strong>2</strong> Injury management legislative requirements</td>
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<tr>
<td>Compliance with schedule 4 of the Claims and Registration for Exempt Employer Regulations of the Workers Rehabilitation and Compensation Act 1986</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>Total number of employees who participated in the rehabilitation program</td>
<td>25</td>
<td>25</td>
<td>26</td>
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<tr>
<td>Total number of employees rehabilitated and reassigned to alternative duties</td>
<td>2</td>
<td>0</td>
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<tr>
<td>Total number of employees rehabilitated back to their original work</td>
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<td><strong>3</strong> WorkCover action limits</td>
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<tr>
<td>Number of open claims</td>
<td>85</td>
<td>98</td>
<td>101</td>
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<tr>
<td>Percentage of workers compensation expenditure over gross annual remuneration</td>
<td>0.84%</td>
<td>0.87%</td>
<td>1.11%</td>
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<tr>
<td><strong>4</strong> Number of claims</td>
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<tr>
<td>Number of new workers compensation claims in the financial year(b)</td>
<td>65</td>
<td>92</td>
<td>109</td>
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<td>Number of fatalities, lost time injuries and medical treatment only injuries(b)</td>
<td>0, 30, 36</td>
<td>0, 38, 54</td>
<td>0, 41, 68</td>
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<tr>
<td>Total number of whole working days lost(b)</td>
<td>not available</td>
<td>1,383</td>
<td>1,328</td>
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<td><strong>5</strong> Cost of workers compensation</td>
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<tr>
<td>Cost of new claims for the financial year</td>
<td>$180,569</td>
<td>not available</td>
<td>not available</td>
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<td>Cost of all claims excluding lump sum payments paid during the year(b)</td>
<td>$345,309</td>
<td>$499,276</td>
<td>$390,773</td>
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<td>Amount paid for lump sum payments (Workers Rehabilitation and Compensation Act, s. 42, s. 43, s. 44)(c)</td>
<td>$308,536</td>
<td>$189,655</td>
<td>$427,227</td>
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<tr>
<td>Total amount recovered from external sources (Workers Rehabilitation and Compensation Act, s. 54)</td>
<td>$1,263</td>
<td>$45,253</td>
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<td>Budget allocation for workers compensation</td>
<td>$468,112</td>
<td>$354,265</td>
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<td><strong>6</strong> Trends</td>
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<td>Injury frequency rate (calculated from Australian Standard AS 1885) for new lost-time injury/disease for each million hours worked</td>
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<td>14.29</td>
<td>16.26</td>
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<td>Most frequent cause (mechanism) of injury</td>
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<td>Most expensive cause (mechanism) of injury</td>
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<td><strong>7</strong> Meeting the agency’s strategic targets</td>
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<td>Targets and results from the agency’s action plan are provided</td>
<td>refer to narrative</td>
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(a) Numbers 1–7 relate to Premier and Cabinet Circular No. 13, June 2001, Annual reporting requirements.
(b) Previous year’s costs and statistics include claims that are now the responsibility of the Department for Water Resources.
(c) Part paid on PIRSA’s behalf by the Office for the Commissioner for Public Employment.
4 CONSULTANCIES

In 2000–01, 230 consultancies were engaged by PIRSA for a total expenditure of $2 493 480.

<table>
<thead>
<tr>
<th>CONSULTANT</th>
<th>PURPOSE</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consultancy fees below $10 000</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A total of 187 consultancies were engaged.</td>
<td>Subtotal</td>
<td>$429 257</td>
</tr>
<tr>
<td><strong>Consultancy fees between $10 000 and $50 000</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSIRO Mathematical and Information Sciences</td>
<td>Develop success measures for the stakeholder groups of the South Australian Natural Heritage Trust one-stop shop (Phase 2).</td>
<td>$10 000</td>
</tr>
<tr>
<td>Peter Fuller &amp; Associates Pty Ltd</td>
<td>Prepare a communications strategy for Bio Innovation SA.</td>
<td>$10 530</td>
</tr>
<tr>
<td>R. J. Hannam</td>
<td>Provide training for the Root Disease Testing Service.</td>
<td>$11 500</td>
</tr>
<tr>
<td>Cognition</td>
<td>Government occupational health and safety Best Practice Grant.</td>
<td>$11 500</td>
</tr>
<tr>
<td>Cotopaxi International Pty Ltd</td>
<td>Undertake a petroleum industry survey.</td>
<td>$11 818</td>
</tr>
<tr>
<td>Marsh Pty Ltd</td>
<td>Develop a risk management framework for Fisheries Compliance; partly sponsored by SAICORP.</td>
<td>$12 500</td>
</tr>
<tr>
<td>SUN Petroleum Geoservices</td>
<td>Develop regional lithology maps of the Cooper Basin to assist in acreage promotion.</td>
<td>$13 400</td>
</tr>
<tr>
<td>PPK Environment &amp; Infrastructure Pty Ltd</td>
<td>Collate and review downstream water supply issues from the Brukunga Mine site.</td>
<td>$13 687</td>
</tr>
<tr>
<td>Collins Anderson</td>
<td>Review the Evaluation of Land Act 1971.</td>
<td>$13 9160</td>
</tr>
<tr>
<td>Strategic Public Relations</td>
<td>Initiate logo, corporate image and strategic development for Bio Innovation SA.</td>
<td>$14 419</td>
</tr>
<tr>
<td>South Australian Centre for Economic Studies</td>
<td>Undertake an economic evaluation of the South East Collaborative Resource Information Centre.</td>
<td>$14 500</td>
</tr>
<tr>
<td>World Wide Project Management Services</td>
<td>Evaluate the Eyre Peninsula Regional Strategy.</td>
<td>$15 000</td>
</tr>
<tr>
<td>Skilmar Systems Pty Ltd</td>
<td>Review the Evaluation of Land Act.</td>
<td>$16 730</td>
</tr>
<tr>
<td>Cole Solicitors</td>
<td>Develop a proposal for an enforcement policy for the Petroleum Act 2000.</td>
<td>$17 345</td>
</tr>
<tr>
<td>PPK Environment &amp; Infrastructure Pty Ltd</td>
<td>Prepare a water model and cost of treatment alternatives for the Brukunga Mine site.</td>
<td>$18 000</td>
</tr>
<tr>
<td>Linex Pty Ltd</td>
<td>Evaluate the reservoir potential of the Warburton Basin.</td>
<td>$18 000</td>
</tr>
<tr>
<td>Luminis Pty Ltd – Adelaide University</td>
<td>Update the undiscovered resource estimate of the Cooper Basin.</td>
<td>$18 180</td>
</tr>
<tr>
<td>PPK Environment &amp; Infrastructure Pty Ltd</td>
<td>Prepare cost-benefit analysis and environmental impact of creek diversion at the Brukunga Mine site.</td>
<td>$19 048</td>
</tr>
<tr>
<td>Austin Williams</td>
<td>Prepare an aquaculture information package for use by regional development boards.</td>
<td>$19 414</td>
</tr>
<tr>
<td>Ernst &amp; Young</td>
<td>Benchmark PIRSA Rural Solutions Business Services against industry standards.</td>
<td>$19 550</td>
</tr>
<tr>
<td>CSIRO Land and Water, Canberra</td>
<td>Undertake a key part of the National Land and Water Audit.</td>
<td>$19 803</td>
</tr>
<tr>
<td>Brooker Consulting</td>
<td>Appoint Director of Bio Innovation SA.</td>
<td>$20 000</td>
</tr>
<tr>
<td>CSIRO Land and Water, Canberra</td>
<td>Report on application of recharge model to regional estimates of recharge across the Murray-Darling Basin.</td>
<td>$20 250</td>
</tr>
<tr>
<td>Where-U-Learn</td>
<td>Run the Leadership for the Future program.</td>
<td>$23 100</td>
</tr>
<tr>
<td>Dr John F. Lindsay</td>
<td>Evaluate the relation between algal mats and oil occurrences in the Cooper Basin.</td>
<td>$24 000</td>
</tr>
<tr>
<td>I.D.E.A.S.</td>
<td>Chief consultant to the Office of Regional Development's Community Builders Program; design program, train trainers, develop resources and provide expert advice.</td>
<td>$24 750</td>
</tr>
<tr>
<td>Anderson &amp; Associates</td>
<td>Prepare a communication and marketing strategy for regional programs of Rural Finance &amp; Development.</td>
<td>$25 000</td>
</tr>
<tr>
<td>Ian Kowalick</td>
<td>Review Santos Limited (Regulation of Shareholdings) Act 1989.</td>
<td>$30 000</td>
</tr>
<tr>
<td>KPMG Consulting</td>
<td>Review PIRSA network and data security.</td>
<td>$33 792</td>
</tr>
<tr>
<td>KPMG Consulting</td>
<td>Undertake Phase 3 and 4 of a State-wide strategic review of all PIRSA property and facilities.</td>
<td>$35 290</td>
</tr>
<tr>
<td>CONSULTANT</td>
<td>PURPOSE</td>
<td>VALUE</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>ARTS SA – South Australian Museum</td>
<td>Study the impact of seismic lines on ant communities and investigate the use of ants as bio-indicators in the Cooper Basin.</td>
<td>$36,090</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>Review business use of spatial information in PIRSA and identify gaps in information technology, infrastructure support, skills development and support mechanisms to ensure best use of spatial information.</td>
<td>$38,886</td>
</tr>
<tr>
<td>Animal and Plant Control Commission</td>
<td>Prepare a weed risk assessment of revegetation and farm forestry species.</td>
<td>$41,627</td>
</tr>
<tr>
<td>Anderson Collins</td>
<td>Commercialise and prepare a marketing succession plan for the Eyre Peninsula Regional Strategy.</td>
<td>$42,242</td>
</tr>
<tr>
<td>Arthur Robinson &amp; Hedderwicks</td>
<td>Provide expert legal advice on the National Gas Access Code to the National Gas Pipelines Advisory Committee.</td>
<td>$48,892</td>
</tr>
<tr>
<td>KPMG Consulting</td>
<td>Undertake Phase 1 and 2 of a State-wide strategic review of all PIRSA property and facilities, including preparation of a 10-year master plan.</td>
<td>$48,945</td>
</tr>
<tr>
<td>Riverland Development Corporation</td>
<td>Enhance export capabilities for Riverland producers.</td>
<td>$50,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>$862,004</strong></td>
</tr>
<tr>
<td>HLB Mann Judd Consulting</td>
<td>Implement cost reflective pricing on Scientific Diagnostic Services and Seeds for PIRSA Rural Solutions.</td>
<td>$52,727</td>
</tr>
<tr>
<td>SRK Consulting</td>
<td>Apply a unique propriety technique to analyse basement terrains and structures, and produce a Seebase™ model of Officer Stansbury and Arrowie Basins.</td>
<td>$89,432</td>
</tr>
<tr>
<td>The Allen Consulting Group</td>
<td>Provide program management and expert economic advice to the National Gas Pipelines Advisory Committee.</td>
<td>$130,737</td>
</tr>
<tr>
<td>Simon William Drilling</td>
<td>Ongoing Consultant Project Manager for Bio Innovation SA, employed until permanent director appointed; Cabinet approved.</td>
<td>$133,500</td>
</tr>
<tr>
<td>Keirnan Riches and Associates</td>
<td>Assist PIRSA Corporate Group with re-engineering of Corporate Finance Branch processes.</td>
<td>$149,624</td>
</tr>
<tr>
<td>Department of Treasury and Finance</td>
<td>Undertake a study of the South Australian gas market.</td>
<td>$646,198</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>$1,202,219</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$2,493,480</strong></td>
</tr>
</tbody>
</table>
5 OVERSEAS TRAVEL

Overseas travel by PIRSA employees for the period 1 July 2000 to 30 June 2001 is summarised below and has been prepared in accordance with Direction No. 9 of the Public Sector Management Act 1995. In 2000–01, 51 overseas visits were made by PIRSA employees, for a total cost of $226 830.

PIRSA’s financial support for overseas visits varied from full payment (salary plus on-costs, fares, necessary living expenses, registration fees etc.) to nil. In the latter instance there are generally two categories. All costs, including salary, are either externally funded or the monies are recouped through charging consultancy fees.

<table>
<thead>
<tr>
<th>EMPLOYEES</th>
<th>DESTINATION</th>
<th>PURPOSE</th>
<th>AGENCY COST$ (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD FOR THE FUTURE</td>
<td>1 Singapore</td>
<td>Further established a supply chain program with Cold Storage Supermarkets of Singapore for South Australian Food Products. (See also Food and Fibre.)</td>
<td>$1 020</td>
</tr>
<tr>
<td></td>
<td>1 Japan, Hong Kong</td>
<td>Together with South Australian companies and organisations, investigated and evaluated value-added food and beverage opportunities for further development and potential demonstration projects.</td>
<td>$8 050</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td>$9 070</td>
</tr>
<tr>
<td>FOOD AND FIBRE</td>
<td>AGRICULTURAL INDUSTRIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 Singapore</td>
<td>Further established a supply chain program with Cold Storage Supermarkets of Singapore for South Australian Food Products. (See also Food for the Future.)</td>
<td>$1 020</td>
</tr>
<tr>
<td></td>
<td>1 Taiwan, Singapore</td>
<td>Discussed the progress of current supply chain programs, and potential for expansion, with supermarkets in Taiwan and Singapore for South Australian horticulture and food products; undertook outturn assessments and documented the supply chain of South Australian cherries exported to Taiwan.</td>
<td>$1 000</td>
</tr>
<tr>
<td></td>
<td>1 California, Israel</td>
<td>Interpreter for an organised study tour sponsored by the Horticultural Research and Development Corporation and Adelaide University.</td>
<td>nil</td>
</tr>
<tr>
<td></td>
<td>1 Japan</td>
<td>Visited Foodex with local South Australian business people and met with Japanese businesses interested in frozen dough and high-protein flour.</td>
<td>$5 570</td>
</tr>
<tr>
<td></td>
<td>1 Japan</td>
<td>Undertook barley food and beverage research, meeting with an array of companies and research houses using barley for functional food and beverage products, and industrial appliances.</td>
<td>$10 500</td>
</tr>
<tr>
<td></td>
<td>1 Japan</td>
<td>Undertook further barley food and beverage research.</td>
<td>$7 750</td>
</tr>
<tr>
<td></td>
<td>1 Italy, Spain</td>
<td>Made a follow-up visit to ITALMOPA which represents commercial, technical and political interests of all bread, flour and durum semolina mills in Italy; inspected dryland olive groves, processing plants, machinery, economics and met with agronomy staff in Reggio and Perugia.</td>
<td>$2 980</td>
</tr>
<tr>
<td></td>
<td>1 India</td>
<td>Invited guest at the Annual Meeting of the Seed Industry Associations of the Asia-Pacific Region.</td>
<td>$1 310</td>
</tr>
<tr>
<td></td>
<td>7 UK</td>
<td>Assisted with the UK foot-and-mouth disease program under International Agreement in the containment of foot-and-mouth disease.</td>
<td>$17 280</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td>$48 760</td>
</tr>
<tr>
<td>FISHERIES</td>
<td>1 Japan</td>
<td>Investigated the Japanese markets for sea urchins by attending the Tsukiji fish market in Tokyo which is the major gateway for seafood import and government control; investigated a processing facility and aquaculture centre for sea urchins in Hokkaido; met with government officers in connection with the Tsukiji market and the seafood–aquaculture industry relating to sea urchins. (See also South Australian Research and Development Institute, Aquatic Sciences.)</td>
<td>$1 350</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td>$1 350</td>
</tr>
<tr>
<td>SOUTH AUSTRALIAN RESEARCH AND DEVELOPMENT INSTITUTE</td>
<td>Aquatic Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 USA</td>
<td>Presented a paper at a Lobster Biology and Management Conference and Workshop; held discussions regarding SARDI’s model interface for the American lobster fishery in New England.</td>
<td>$420</td>
</tr>
<tr>
<td></td>
<td>1 Canada, Chile, New Zealand, UK, USA</td>
<td>Researched sea urchin fishing and aquaculture industries as part of a Fisheries Research and Development Corporation funded project on enhancement of sea urchin roe for the Japanese market.</td>
<td>nil</td>
</tr>
</tbody>
</table>

(a) Includes salary component.
(b) Some overseas travel incurs no agency cost (see notes at start of table).
<table>
<thead>
<tr>
<th>EMPLOYEES</th>
<th>DESTINATION</th>
<th>PURPOSE</th>
<th>AGENCY COST a, b</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>France</td>
<td>Invited to Miyako International, an Australian import–export company with significant Japanese connections, to inspect the sea urchin aquaculture and marketing facilities in Japan, especially the Tokyo fish market (Tsukiji). (See also Food and Fibre, Fisheries.)</td>
<td>$1 560</td>
</tr>
<tr>
<td>2</td>
<td>Vietnam</td>
<td>Implemented the project ‘Integrated Aquaculture’, a collaborative venture in the highland region of Vinh Phuc Province, North Vietnam, and funded by the Australian Centre for International Agricultural Research; evaluated progress of final phase results and planned research program for the year 2001; reviewed the research plan and infrastructure facilities.</td>
<td>$2 000</td>
</tr>
<tr>
<td>1</td>
<td>China, Japan</td>
<td>Attended the Third World Fisheries Congress as a scientific representative of joint work being undertaken with the Southern Fishermen's Association in the development of an environmental management plan within the fishing industry; presented a paper and chaired a session.</td>
<td>2 390</td>
</tr>
<tr>
<td>3</td>
<td>Singapore, Vietnam</td>
<td>Further implemented the project ‘Integrated Aquaculture’; presented the results and conclusions of experiments conducted in the last two years at a workshop organised by the Research Institute for Aquaculture No. 1; finalised experimental design and operational protocol and initiated the experiments for 2001; completed the Australian Centre for International Agricultural Research report for the year 2000–01.</td>
<td>$8 870</td>
</tr>
<tr>
<td>1</td>
<td>China</td>
<td>Visited and gave lectures at the Dalian Fisheries University; investigated the potential to establish formal links with other major aquatic science research institutions in China; investigated, with Chinese counterparts, the possibility to establish mutually beneficial joint projects in research areas such as biotechnology (development), aquaculture carrying capacity (sustainability) and other relevant topics; visited select finfish, shellfish and seaweed farms in northern China.</td>
<td>$650</td>
</tr>
</tbody>
</table>

Crops

<table>
<thead>
<tr>
<th>EMPLOYEES</th>
<th>DESTINATION</th>
<th>PURPOSE</th>
<th>AGENCY COST a, b</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USA</td>
<td>Undertook advanced training at the Beckman Coulter facility in Indianapolis in preparation for the upgrade of the Beckman Coulter robotic system (for the proposed Biotechnology Centre) and performance of the complex non-standard routines required by the Field Crops Pathology Unit.</td>
<td>$5 740</td>
</tr>
<tr>
<td>1</td>
<td>Canada</td>
<td>Undertook a lead role in the standardisation of seed tests for bacterial and Verticillium wilt of lucerne by the International Seed Testing Association.</td>
<td>$6 150</td>
</tr>
<tr>
<td>1</td>
<td>Brazil</td>
<td>Attended the 21st International Congress of Entomology, Iguassu; presented a paper ‘Towards insecticide-free viticulture in Australia and New Zealand’ at the viticulture symposium.</td>
<td>$3 240</td>
</tr>
<tr>
<td>1</td>
<td>Switzerland</td>
<td>Participated in the Pesticide Resistance Working Group meeting.</td>
<td>$780</td>
</tr>
<tr>
<td>1</td>
<td>South Africa, Spain, USA</td>
<td>Participated in the International Citriculture Conference in Florida; visited post harvest – market access researchers and packing sheds in South Africa, USA and Spain.</td>
<td>$700</td>
</tr>
<tr>
<td>1</td>
<td>Italy, Spain</td>
<td>Keynote speaker and chairperson for a workshop, Pulse Diseases in Germplasm, in Spain; visited an Italian collaborator in the identification of Ascochyta rabiei in chickpeas in Australia.</td>
<td>$2 200</td>
</tr>
<tr>
<td>1</td>
<td>Mexico, USA</td>
<td>Worked with scientists at the International Maize and Wheat Improvement Centre in Mexico on a collaborative project to identify genes in wheat that provide disease resistance and drought tolerance; attended the 9th Annual Plant and Animal Genome Conference in San Diego; visited a laboratory in Kansas to discuss a project relating to the study of variation in the pathogen causing the important barley leaf scald disease.</td>
<td>nil</td>
</tr>
<tr>
<td>2</td>
<td>France</td>
<td>Presented papers and a poster at the Integrated Control of Slugs and Snails Conference, Lyon, outlining current research into the Mediterranean small brown snail as a quarantine concern in citrus orchards, and outlining the concept of integrated snail management in broadacre crops in southern Australia; liaised with other malacologists to enable the South Australian citrus industry to be up-to-date with the world's best practice; demonstrated industry efforts to maintain the high-quality standards of South Australian grain exports by work on snail control.</td>
<td>nil</td>
</tr>
</tbody>
</table>

Horticulture

<table>
<thead>
<tr>
<th>EMPLOYEES</th>
<th>DESTINATION</th>
<th>PURPOSE</th>
<th>AGENCY COST a, b</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>France, Switzerland</td>
<td>Attended the 3rd International Botrytis Symposium, Reims, and the Potato Association of America Conference, Colorado; investigated the latest development in chemical biological and cultural control of botrytis bunch rot of grape and potato diseases; established contact with overseas scientists working on the control of grape and potato diseases.</td>
<td>$6 000</td>
</tr>
<tr>
<td>1</td>
<td>USA</td>
<td>Presented two papers at the biennial World Vinifera Conference, Seattle, on innovation in Australian viticulture and growing Shiraz in Australia.</td>
<td>$1 650</td>
</tr>
<tr>
<td>1</td>
<td>France, Germany, Switzerland</td>
<td>Presented a paper at the 6th International Congress on Organic Viticulture, Basel, on using latest epidemiological data from SARDI research at Loxton; investigated Grapevine Yellows disease and collaborated in joint analyses.</td>
<td>$5 440</td>
</tr>
<tr>
<td>1</td>
<td>Italy, USA</td>
<td>Presented at the International Society for Horticultural Science’s 4th International Symposium on Olive Growing at Bari, and the 12th Ornamental Workshop on Diseases and Insects at Crossnore.</td>
<td>$3 750</td>
</tr>
<tr>
<td>1</td>
<td>South Africa</td>
<td>Presented a paper at the 2nd International Viticulture and Enology Congress.</td>
<td>$2 420</td>
</tr>
<tr>
<td>EMPLOYEES</td>
<td>DESTINATION</td>
<td>PURPOSE</td>
<td>AGENCY COST</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>1</td>
<td>Netherlands, UK, USA</td>
<td>Attended the Alliums 2000 Conference — University of Georgia and the Pest and Diseases Control Conference, Brighton; visited leek growers and leek seed producers in Holland.</td>
<td>$3 270</td>
</tr>
<tr>
<td>1</td>
<td>Brazil, Chile</td>
<td>Attended the Prunus Breeders Conference, Pelotas; visited Chile, Australia's most significant competitor in export markets.</td>
<td>$2 290</td>
</tr>
<tr>
<td>1</td>
<td>USA</td>
<td>Attended the International Citrus Conference, Florida; represented Australia and SARDI at the International Society of Citriculture Executive Meeting.</td>
<td>$4 870</td>
</tr>
<tr>
<td>1</td>
<td>USA</td>
<td>Presented a paper at the Unified Wine and Grape Symposium, Sacramento, on eutypa dieback in Australia; established contact with key people working in the control of eutypa dieback of grapevines in the USA and Europe; met with international researchers to discuss eutypa dieback research and potential collaborations.</td>
<td>$1 900</td>
</tr>
<tr>
<td>1</td>
<td>USA</td>
<td>Presented a paper at the International Union of Soil Science Conference, Riverside, on the performance of grapevines during and following irrigation with saline high-sodium water over an eight-year period; investigated the latest salinity management strategies in discussions with the United States Department of Agriculture – Agricultural Research Service scientists at Riverside; gained first-hand knowledge of latest techniques used in estimating crop water use from discussion with scientists at the Water Management Laboratory, Fresno, and University of California Kearney Field Station.</td>
<td>$2 420</td>
</tr>
<tr>
<td>1</td>
<td>USA</td>
<td>Presented a paper at the International Cherry Symposium.</td>
<td>$1 600</td>
</tr>
<tr>
<td>Livestock Systems</td>
<td>1 Argentina, Peru</td>
<td>Presented key papers at the 46th International Congress of Meat Science and Technology on consumer concerns.</td>
<td>nil</td>
</tr>
<tr>
<td>1</td>
<td>Argentina</td>
<td>Presented a paper to the 11th International Soil Conservation Organisation Conference.</td>
<td>nil</td>
</tr>
<tr>
<td>1</td>
<td>USA</td>
<td>Attended a series of conferences on sheep cloning; undertook training in techniques at Cornell University, New York, the current leader in the development and implementation of cloning technologies.</td>
<td>nil</td>
</tr>
<tr>
<td>1</td>
<td>South Africa</td>
<td>Presented a paper at the 9th International Sheep Veterinary Congress on novel research initiatives being conducted by SARDI; visited the National (Onderstepoort) Veterinary Research Institute, Faculty of Veterinary Science and leading pharmaceutical companies Merial, Novartis and Fort Dodge.</td>
<td>$2 700</td>
</tr>
<tr>
<td>1</td>
<td>Brazil</td>
<td>Presented a paper at the XIX International Grassland Congress, a forum for the exchange of scientific advances in pasture and forage plant improvement.</td>
<td>$3 000</td>
</tr>
<tr>
<td>1</td>
<td>Indonesia</td>
<td>Invited by the Australian Centre for International Agricultural Research to participate in a collaborative project in the Bailem Valley, West Papua, analysing the existing human – sweet potato – pig production systems.</td>
<td>1 940</td>
</tr>
<tr>
<td>3</td>
<td>Bhutan, China, Nepal</td>
<td>Visited Shandong Province for first meeting of the Australian Centre for International Agricultural Research funded project 'Lucerne Adapted to Adverse Environments in China and Australia; visited Beijing, Inner Mongolia, Gansu and Bhutan for project site selection; met with Shandong Animal Husbandry Office and Shandong Academy of Agricultural Sciences; negotiated continuation of the goat transgenesis project.</td>
<td>$7 000</td>
</tr>
<tr>
<td>1</td>
<td>South Africa</td>
<td>Presented a paper at the Annual Conference of the Red Meat Abattoir Association, Cape Town; visited various feedlots and abattoirs, and a game export organisation.</td>
<td>$2 960</td>
</tr>
<tr>
<td>1</td>
<td>Indonesia, Philippines</td>
<td>Member of an international team which reviewed major multilaterally funded Australian Centre for International Agricultural Research projects in Indonesia and the Philippines.</td>
<td>$2 450</td>
</tr>
<tr>
<td>Other</td>
<td>4 Denmark, Norway, Singapore, UK, USA</td>
<td>Attended the world's largest Biotechnology Convention in San Diego using the opportunity to network with a broad cross-section of scientists and biotechnology business interests; visited the University of California Davis to discuss research on animal transgenesis work and ruminant nutrient modelling.</td>
<td>$32 510</td>
</tr>
</tbody>
</table>

**Subtotal $122 870**

**SUSTAINABLE RESOURCES**

<table>
<thead>
<tr>
<th>EMPLOYEES</th>
<th>DESTINATION</th>
<th>PURPOSE</th>
<th>AGENCY COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USA</td>
<td>As a keynote speaker at the 8th Annual North American Weed Management Association Conference, presented a paper on weed risk assessment in Australia; met with weed researchers and noxious weed managers in California, Nebraska, Virginia and Washington.</td>
<td>$5 860</td>
</tr>
</tbody>
</table>

**Subtotal $5 860**
<table>
<thead>
<tr>
<th>EMPLOYEES</th>
<th>DESTINATION</th>
<th>PURPOSE</th>
<th>AGENCY COST* b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINERAL RESOURCES</td>
<td>Canada</td>
<td>Promoted exploration opportunities in South Australia at the 70th Prospectors and Developers Association of Canada Convention and Trade Show, Toronto, and made presentations to various Vancouver and Toronto based exploration and mining companies.</td>
<td>$13 600</td>
</tr>
<tr>
<td>PETROLEUM</td>
<td>USA</td>
<td>Promoted South Australian petroleum exploration and development opportunities, particularly in the Otway and Cooper Basins, at the North American Prospectors Expo 2001, Houston.</td>
<td>$10 000</td>
</tr>
<tr>
<td></td>
<td>USA</td>
<td>Seconded (by invitation) to Schlumberger GeoQuest in Houston to participate in testing of, and gain extensive training in, Schlumberger’s forthcoming software release. Also investigated data management and data delivery methods.</td>
<td>$11 270</td>
</tr>
<tr>
<td></td>
<td>USA</td>
<td>Promoted South Australian petroleum exploration and development opportunities, particularly in the Otway and Cooper Basins, at the American Association of Petroleum Geologists Conference, Denver.</td>
<td>$5 400</td>
</tr>
</tbody>
</table>

Subtotal $40 270

TOTAL $226 830
6 FREEDOM OF INFORMATION

Information statement
The following information is published pursuant to the Freedom of Information Act 1991, section 9.

Freedom of Information
The Freedom of Information Act gives all South Australians a legally enforceable right of access to documents held by the Government, making the business of government open and accountable to all. It does not provide right of access to documents in the possession of the private sector.

Under freedom of information, there are provisions to allow South Australians to apply to have documents relating to themselves corrected if they are incomplete, incorrect, misleading or out of date.

While freedom of information aims to provide access to the maximum amount of information possible, exemptions exist that provide protection to an individual’s privacy, and also the proper administration of the Government.

Agency’s structure and functions
These are set out elsewhere in this annual report (see ‘PIRSA’s role’).

Ways in which the functions of the agency affect members of the public
The agency has a major indirect effect on the general public by creating jobs and wealth through advice, encouragement and regulation of various primary industries and resources. The groups of the agency providing those services are listed below and their roles are described elsewhere in this annual report (see ‘Performance review’, ‘Part two’ and Part three’ respectively).

- Food for the Future
- Food and Fibre incorporating Agricultural Industries, Fisheries and Aquaculture SA
- SARDI
- Sustainable Resources
- Office of Minerals and Energy Resources incorporating Mineral Resources and Petroleum
- Energy SA
- Office of Regional Development
- Bio Innovation

Arrangements that enable the public to participate in the formulation of the agency’s policies
Officers from the agency are members of many committees (described elsewhere in this report, see ‘Performance review’ and ‘Ministerial responsibilities’) to which the public and/or industry has access.

Documents that are available for purchase from the agency
The following documents are made available for purchase from the agency, by contacting Customer Services, Ground Floor, 101 Grenfell Street, Adelaide:

- publications
- scientific papers
- technical reports
- conference and seminar proceedings
- books and theses
- extension and technical publications
- popular articles
- research reports.

Documents that are available from the agency free of charge
The following documents are made available free of charge from the agency and are available by contacting the individual groups or Customer Services:

- brochures
- pamphlets
- posters
• information packs
• policy documents
• administrative instructions
• Internet
  • downloadable education resources
  • community group presentations
  • media releases
  • Prime Time, PIRSA’s quarterly newsletter.

Accessing documents
As a general rule, the nearest office of the agency (as listed in the Adelaide and various country White Pages) can assist with document acquisition. Note that privacy principles (freedom of information) apply to documents concerning third parties.

Making a freedom of information application
Application forms relating to the amendment of personal records or to request information under the Freedom of Information Act can be obtained by contacting the Freedom of Information Coordinator on the address as listed below, or by contacting State Records via phone (08) 8343 6800 or Internet <http://www.archives.sa.gov.au/services/public/freeinfo_index.html>.

All applications lodged under the Freedom of Information Act cost $20.60 per application to the agency.

Point of contact
All freedom of information inquiries and requests should be addressed to:
Freedom of Information Coordinator
Primary Industries and Resources South Australia
GPO Box 1671
ADELAIDE SA 5001
7 FINANCIAL STATEMENTS
PRIMARY INDUSTRIES AND RESOURCES SOUTH AUSTRALIA

STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED 30 JUNE 2001

<table>
<thead>
<tr>
<th>Note</th>
<th>2000–01 $'000</th>
<th>1999–2000 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>78 393</td>
<td>78 783</td>
</tr>
<tr>
<td>5</td>
<td>89 293</td>
<td>72 472</td>
</tr>
<tr>
<td>6</td>
<td>21 406</td>
<td>19 181</td>
</tr>
<tr>
<td>7</td>
<td>1 564</td>
<td>1 842</td>
</tr>
<tr>
<td>8</td>
<td>5 406</td>
<td>(420)</td>
</tr>
<tr>
<td>9</td>
<td>943</td>
<td>1 772</td>
</tr>
<tr>
<td></td>
<td>Total expenses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>197 837</td>
<td>179 019</td>
</tr>
<tr>
<td>10</td>
<td>25 090</td>
<td>24 655</td>
</tr>
<tr>
<td>11</td>
<td>32 696</td>
<td>25 549</td>
</tr>
<tr>
<td>12</td>
<td>5 646</td>
<td>6 102</td>
</tr>
<tr>
<td>13</td>
<td>4 905</td>
<td>4 300</td>
</tr>
<tr>
<td>14</td>
<td>5 499</td>
<td>4 839</td>
</tr>
<tr>
<td></td>
<td>Total revenues</td>
<td>73 836</td>
</tr>
<tr>
<td></td>
<td></td>
<td>65 445</td>
</tr>
<tr>
<td>2(d)</td>
<td>113 850</td>
<td>107 635</td>
</tr>
<tr>
<td></td>
<td>Pursuant to Appropriation Act 2000</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>10 151</td>
<td>9 337</td>
</tr>
<tr>
<td></td>
<td>Decrease in net assets resulting from ordinary activities after restructuring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total changes in equity other than those resulting from transactions with the state government as owner</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 151</td>
<td>9 337</td>
</tr>
</tbody>
</table>

EXPENSES FROM ORDINARY ACTIVITIES:
- Employee costs
- Supplies and services
- Grants
- Interest
- Provision for doubtful debts
- Depreciation and amortisation
- Other

REVENUES FROM ORDINARY ACTIVITIES:
- User charges, fees and rentals
- Advances and grants
- Interest
- Sales of goods
- Other

NET COST OF SERVICES FROM ORDINARY ACTIVITIES: 124 001 113 574

REVENUES FROM GOVERNMENT:
- Pursuant to Appropriation Act 2000 113 850 107 635

DECREASE IN NET ASSETS RESULTING FROM ORDINARY ACTIVITIES BEFORE RESTRUCTURING 10 151 5 939

NET EXPENDITURE FROM RESTRUCTURING – 3 398

DECREASE IN NET ASSETS RESULTING FROM ORDINARY ACTIVITIES AFTER RESTRUCTURING 37 10 151 9 337

TOTAL CHANGES IN EQUITY OTHER THAN THOSE RESULTING FROM TRANSACTIONS WITH THE STATE GOVERNMENT AS OWNER 10 151 9 337
## Statement of Financial Position at 30 June 2001

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$63,701</td>
<td>$69,750</td>
</tr>
<tr>
<td>Receivables</td>
<td>$7,627</td>
<td>$5,942</td>
</tr>
<tr>
<td>Loans</td>
<td>$1,787</td>
<td>$1,729</td>
</tr>
<tr>
<td>Inventories</td>
<td>$3,659</td>
<td>$2,654</td>
</tr>
<tr>
<td>Prepayments</td>
<td>–</td>
<td>$516</td>
</tr>
<tr>
<td>Other</td>
<td>$27</td>
<td>$32</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>$76,801</td>
<td>$80,623</td>
</tr>
</tbody>
</table>

| **NON-CURRENT ASSETS** |         |           |
| Loans                  | $23,900 | $29,977   |
| Inventories           | $257    | $264      |
| Property, plant and equipment | $95,149 | $96,883 |
| Other                 | $51     | $42       |
| **Total non-current assets** | $119,357 | $127,166 |
| **Total assets**      | $196,158 | $207,789  |

| **CURRENT LIABILITIES** |         |           |
| Creditors and accruals | $7,904  | $5,787    |
| Borrowings            | $693    | $462      |
| Accrued interest on borrowings | $465 | $542 |
| Provision for employee entitlements | $4,511 | $4,455 |
| Other                 | $517    | –         |
| **Total current liabilities** | $14,090 | $11,246  |

| **NON-CURRENT LIABILITIES** |         |           |
| Creditors and accruals | $3,360  | $3,098    |
| Borrowings            | $20,469 | $24,547   |
| Provision for employee entitlements | $15,120 | $15,231 |
| Lease incentive (2(f)) | $2,813  | $3,210    |
| **Total non-current liabilities** | $41,762 | $46,086  |
| **Total liabilities** | $55,852 | $57,332   |

| **NET ASSETS** |         |           |
| **Total equity** | $140,306 | $150,457 |

| **EQUITY** |         |           |
| General reserve | $2,000  | $2,000    |
| Committed grants reserve | $13,979 | $12,187  |
| Asset revaluation reserve | $1,753  | $1,753   |
| Accumulated surplus | $122,574 | $134,517 |
| **Total equity** | $140,306 | $150,457 |

| **Commitments** |         |
| **Contingent liabilities** | 35 |

PIRSA ANNUAL REPORT 2000–01
### Statement of Cash Flows for the Year Ended 30 June 2001

#### Cash Flows from Operating Activities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Payments to suppliers and employees</td>
<td>(167,937)</td>
<td>(153,474)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants paid</td>
<td>(21,406)</td>
<td>(19,181)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipts from customers</td>
<td>36,580</td>
<td>32,287</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants received</td>
<td>33,184</td>
<td>25,139</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest on loans to the rural sector</td>
<td>2,844</td>
<td>3,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest paid on loans</td>
<td>(1,641)</td>
<td>(2,070)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest on cash balances</td>
<td>3,010</td>
<td>2,991</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST payments on purchases</td>
<td>(10,508)</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST receipts on sales</td>
<td>2,029</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GST receipts from taxation authority</td>
<td>6,019</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CASH FLOWS FROM GOVERNMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pursuant to Appropriation Act 2000</td>
<td></td>
<td></td>
<td>113,850</td>
<td>107,635</td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>(3,976)</td>
<td>(3,373)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Cash Flows from Investing Activities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of property, plant and equipment</td>
<td>(3,491)</td>
<td>(8,017)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from sale of property, plant and equipment</td>
<td>105</td>
<td>2,294</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment of lease liability</td>
<td>(397)</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans advanced to the rural sector</td>
<td>(1,027)</td>
<td>(704)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans repaid by the rural sector</td>
<td>6,619</td>
<td>6,737</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net cash provided by investing activities</strong></td>
<td>1,809</td>
<td>310</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Cash Flows from Financing Activities

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrowings from Treasury</td>
<td>914</td>
<td>695</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal repaid to Treasury/SA Financing Authority</td>
<td>(4,796)</td>
<td>(7,788)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net cash used in financing activities</strong></td>
<td>(3,882)</td>
<td>(7,093)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Net Decrease in Cash Held

**Net cash used in financing activities**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(6,049)</td>
<td>(10,156)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CASH AT 1 JULY**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(69,750)</td>
<td>79,906</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CASH AT 30 JUNE 2001**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(63,701)</td>
<td>69,750</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*GST goods and services tax.*
## OUTPUT SCHEDULE OF DEPARTMENTAL EXPENSES AND REVENUES AT 30 JUNE 2001

<table>
<thead>
<tr>
<th>Information services</th>
<th>State resource regulation services</th>
<th>Coordination and advice</th>
<th>Facilitation services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
</tr>
</tbody>
</table>

### EXPENSES FROM ORDINARY ACTIVITIES:

- **Supplies and services**: 31 620
- **Employee Costs**: 36 937
- **Grants**: 2 741
- **Depreciation and amortisation**: 2 682
- **Interest**: 55
- **Provision for doubtful debts**: 321

<table>
<thead>
<tr>
<th>Total expenses</th>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>74 356</td>
</tr>
</tbody>
</table>

### REVENUES FROM ORDINARY ACTIVITIES:

- **User charges, fees and rentals**: 10 011
- **Advances and grants**: 12 940
- **Sales of goods**: 3 358
- **Interest**: 212

<table>
<thead>
<tr>
<th>Total revenues</th>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28 549</td>
</tr>
</tbody>
</table>

### NET COST OF SERVICES FROM ORDINARY ACTIVITIES

<table>
<thead>
<tr>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 807</td>
</tr>
</tbody>
</table>

### GOVERNMENT REVENUES:

- **Pursuant to Appropriation Act 2000**: 40 319

<table>
<thead>
<tr>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 319</td>
</tr>
</tbody>
</table>

### DECREASE IN NET ASSETS RESULTING FROM ORDINARY ACTIVITIES

<table>
<thead>
<tr>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 488</td>
</tr>
</tbody>
</table>

## OUTPUT SCHEDULE OF DEPARTMENTAL EXPENSES AND REVENUES AT 30 JUNE 2000

<table>
<thead>
<tr>
<th>Information services</th>
<th>State resource regulation services</th>
<th>Coordination and advice</th>
<th>Facilitation services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
</tr>
</tbody>
</table>

### EXPENSES

- **Employee costs**: 40 332
- **Supplies and services**: 33 428
- **Grants**: 3 241
- **Depreciation/amortisation**: 2 810
- **Interest**: 212

<table>
<thead>
<tr>
<th>Total expenses</th>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81 153</td>
</tr>
</tbody>
</table>

### REVENUES

- **User charges, fees and rentals**: 11 487
- **Advances and grants**: 12 737
- **Sales**: 2 575
- **Interest**: 1 341

<table>
<thead>
<tr>
<th>Total revenues</th>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>28 954</td>
</tr>
</tbody>
</table>

### NET COST OF SERVICES

<table>
<thead>
<tr>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>52 199</td>
</tr>
</tbody>
</table>

### GOVERNMENT REVENUES

- **Pursuant to Appropriation Act 1999**: 48 986

<table>
<thead>
<tr>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>48 986</td>
</tr>
</tbody>
</table>

### DECREASE IN NET ASSETS RESULTING FROM OPERATIONS BEFORE RESTRUCTURING

<table>
<thead>
<tr>
<th>$'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 213</td>
</tr>
</tbody>
</table>
## PROGRAM SCHEDULE OF DEPARTMENTAL ADMINISTERED EXPENSES AND REVENUES FOR THE YEAR ENDED 30 JUNE 2001

### ADMINISTERED EXPENSES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td></td>
</tr>
<tr>
<td>Payment to Cooper Basin Producers</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>220 928</td>
</tr>
<tr>
<td>Natural Heritage Trust</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>22 467</td>
</tr>
<tr>
<td>Interest payment</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>99</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>99</td>
</tr>
<tr>
<td>Fisheries licences</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
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### ADMINISTERED REVENUES LESS EXPENSES

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PIRSA ANNUAL REPORT 2000-01
## Program Schedule of Departmental Administered Expenses and Revenues for the Year Ended 30 June 2000

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### Administered Revenues Less Expenses

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<td>-program schedule of departmental administered assets and liabilities as at 30 june 2001</td>
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<td>(1,177,000)</td>
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## Program Schedule of Departmental Administered Assets and Liabilities as at 30 June 2000

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<th>Cattle Industry Fund</th>
<th>Gulf St Vincent Prawn Fishery</th>
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<th>Swine Compensation</th>
<th>Fisheries Research and Development</th>
<th>Egg Industry Deregulation</th>
<th>Natural Heritage Trust</th>
<th>Natural Gas Authority</th>
<th>Energy M’gmt Task Force</th>
<th>Other</th>
<th>Total</th>
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<td>776</td>
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<td>1 393</td>
<td>399</td>
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<td>679</td>
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<td><strong>Total</strong></td>
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<td>936</td>
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<td>755</td>
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<tr>
<td><strong>Equity</strong></td>
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<td>2 788</td>
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NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

1. **Agency purpose and funding**

The Department of Primary Industries and Resources (PIRSA) is a key government agency focused on sustainable economic development.

PIRSA delivers specialist services and advice with the potential to increase the prosperity of South Australians, to improve their quality of life and to ensure the sustainable development of the State’s resource base for future generations. PIRSA delivers these services through locations across South Australia.

PIRSA’s business is to optimise the return on South Australia’s natural assets by:

- Fostering the sustainable development of new and existing industries across the food, fibre, minerals and energy sectors.
- Facilitating global competitiveness and innovative solutions.
- Building partnerships between industry, the community and government.
- Providing information and knowledge to help people make the right decisions for themselves.
- Regulating to preserve resources for future generations.

The principal sources of funds for PIRSA programs consists of monies appropriated by Parliament, research grants from Industry Research Corporations, licence receipts, federal grants and trading operations.

2. **Summary of significant accounting policies**

(a) **Basis of accounting**

The financial statements represent the operations of PIRSA for the year 1 July 2000 to 30 June 2001.

This financial report is a general purpose financial report.

The accounts have been prepared in accordance with applicable Australian Accounting Standards, Statements of Accounting Concepts, Urgent Issues Group Abstracts and Treasurer’s Instructions promulgated under the provisions of the *Public Finance and Audit Act 1987*.

The accounts have been prepared on the accrual basis of accounting. Except for certain assets which are at current cost valuation, the accounts have been prepared in accordance with the historical cost convention.

(b) **The reporting entity**

All funds through which the agency controls resources to carry on its functions have been included in these financial statements.

In the process of reporting on the agency as a single unit, all internal transactions have been eliminated in full.

**Administered resources.** The agency administers but does not control certain resources on behalf of the South Australian Government, the Federal Government, private sector organisations and other State Government agencies. The agency is accountable for the transactions involving those administered resources, but does not have the discretion to deploy the resources for achievement of the agency’s objectives. The agency acts only on behalf of the aforementioned bodies. The accrual basis of accounting has been used in accounting for administered resources.

Transactions and balances relating to these administered resources are not recognised as departmental revenues, expenses, assets or liabilities but are disclosed in the applicable program schedules.

**Trust funds.** The agency has received monies in a trustee capacity for trusts as set out in Note 30. As the agency performs only a custodial role in respect of these monies, and because the monies cannot be used for achievement of the agency’s objectives, they are not brought to account in the financial statements, but are shown in Note 30.
Transfer of the Pastoral Board from the Department for Environment and Heritage. In February 2000, Cabinet approved a number of administrative changes to portfolios under the Public Sector Management Act 1995 to coincide with changes to Ministerial portfolios. As a result of these changes responsibility for the Pastoral Land Management and Conservation Act 1989 was transferred from the Department for Environment and Heritage to Primary Industries and Resources SA. On 18 December 2000 the Pastoral Board and the Unit administering this Act were transferred to PIRSA. The revenue, expenditure and cash flows associated with their operations were transferred to PIRSA effective from 1 July 2000 and have been included in these statements.

Bio Innovation SA. Bio Innovation SA became a separate entity effective 14 June 2001. Refer to Note 36 for details of this change.

(c) User charges, fees and rentals
User charges, fees and rentals controlled by the agency are recognised as revenues. User charges, fees and rentals are controlled by the agency where they can be deployed for achievement of departmental objectives.

User charges, fees and rentals collected by the agency but not controlled by it are not recognised as revenues, but are reported as administered revenues in the Program Schedule — Administered Expenses and Revenues.

(d) Appropriations, grants and other contributions
All appropriations, grants and other contributions are recognised as revenues when the agency obtains control over the assets, this would normally be upon receipt.

Amounts appropriated to the agency for transfer to eligible beneficiaries in accordance with legislation or other authoritative requirements are not controlled by the agency and therefore not recognised as revenues, but are reported as administered revenues in the Program Schedule — Administered Expenses and Revenues. Similarly, the amounts transferred, are not recognised as expenses, but are reported as administered expenses in the Program Schedule — Administered Expenses and Revenues.

(e) Royalties
PIRSA receives royalties, levied on minerals and petroleum production, on behalf of the State Government. The royalties received are deposited into the Consolidated Account. As PIRSA has no control over these monies and is unable to use the monies to achieve its own objectives, royalties received are not recognised in the financial statements, but are disclosed in Note 15.

(f) Non-current assets
Items of property, plant and equipment are recorded in the ‘Statement of financial position’ as detailed above unless otherwise indicated:

(i) Land and buildings. In accordance with current Accounting Policy Statements issued by the Department of Treasury and Finance, the agency has applied the Australian Accounting Standard AAS 38 ‘Revaluation of non-current assets’ transitional provisions for the public sector and has elected to apply the same revaluation basis while the relationship between fair value and the existing valuation basis in the South Australian public sector is examined further.

The agency has adopted the requirements of the Department of Treasury and Finance Accounting Policy Statement APS 3 ‘Revaluation of non-current assets’ and Accounting Policy Statement APS 6 ‘Land and improvements’.

The majority of land and buildings have been independently valued by Valcorp Pty Ltd as at 30 June 1999, on the basis of deprival value being written-down current cost or current market buying price. Some land is brought to account at valuations by the South Australian Valuer-General. Buildings include ‘infrastructure’ which represents roads, fencing, signage etc. Updated valuations are obtained every three years.

(ii) Plant and equipment. Plant and equipment are brought to account at cost. Items of $2000 and greater are capitalised and amounts less than $2000 are expensed in the period incurred.
(iii) **Depreciation.** All buildings, plant and equipment having a limited useful life are systematically depreciated over their useful lives in a manner which reflects the consumption of their service potential.

Depreciation is provided on a straight line basis which is reviewed annually. The major depreciation periods are:
- **Buildings**: 60–70 years
- **Plant and equipment**: 3–20 years
- **Infrastructure**: 2–32 years

(iv) **Leasehold improvements.** Leasehold improvements are amortised over the shorter of either the unexpired period of the lease or the estimated useful lives of the improvements.

(v) **Lease incentives under non-cancellable operating leases.** On 1 August 1998, the agency, through the Department for Administrative and Information Services, entered into a 10-year non-cancellable operating lease over part of a property located at 101 Grenfell Street, Adelaide.

The fit-out costs for this leased property were met by the lessor. In accordance with Urgent Issues Group Abstract 3 ‘Lessee accounting for lease incentives under a non-cancellable operating lease’, this fit-out has been treated as a lease incentive giving rise to both an asset and a liability being the cost of the fit-out. The asset is amortised over the period of the lease and the liability is reduced through lease payments over the term of the lease.

(g) **Employee entitlements**

(i) **Salaries and wages and annual leave.** Liabilities for salaries and wages and annual leave are recognised, and are measured as the amount unpaid at the reporting date at current pay rates in respect of employees’ services up to that date. Expenses consequential to employment but which are not employee entitlements, for example payroll tax and superannuation on-costs, have been recognised as non-employee entitlement liabilities where the entitlement to which they relate has been recognised as a liability.

(ii) **Long service leave.** A liability for long service leave is recognised, and is measured as the current value of payments to be made in respect of employees with eight or more years service up to the reporting date. This base provides a reasonable approximate of the present value of the estimated future cash outflows to be made for these entitlements. Expenses consequential to employment but which are not employee entitlements, for example payroll tax and superannuation on-costs, have been recognised as non-employee entitlement liabilities where the entitlement to which they relate has been recognised as a liability.

(iii) **Superannuation.** The agency does not record a liability for the value of superannuation payments to be made to employees at preservation age, this liability is recorded by the SA Superannuation Board. The agency records a liability for any outstanding employer superannuation contributions payable to the SA Superannuation Board. The agency also recognises a non-employee entitlement liability for the superannuation on-cost on long service leave, annual leave and accrued salaries and wages.

During the year PIRSA paid $7.3 million to the Department of Treasury and Finance towards the accruing government liability for superannuation in respect of its employees.

(iv) **Workers compensation.** The workers compensation provision is an actuarial estimate of the outstanding liability at 30 June provided by a consulting actuary engaged through the Government Occupational Health and Injury Management Branch of the Department of the Premier and Cabinet. This actuarial estimate provides for the estimated cost of ongoing payments to employees as required under current legislation.

(h) **Cash**

For the purposes of the ‘Statement of cash flows’, cash includes cash deposits which are readily convertible to cash on hand and which are used in the cash management function on a day-to-day basis.

The agency’s appropriation from the Department of Treasury and Finance included an accrual component of $3.5 million. As at 30 June 2001 this appropriation had not been expended. In accordance with a directive from the Department of Treasury and Finance this accrual appropriation has been classified as a deposit at call.
(i) **Inventory**

Inventories are measured at the lower of cost and net realisable value on an item by item basis, as illustrated in Note 18. Where the net market value of an inventory item is less than cost, provision is made for the anticipated loss on realisation.

The agency controlled the following types of assets at the reporting date meeting the definition of self-generating and regenerating assets as defined by Australian Accounting Standard AAS 35 ‘Self-generating and regenerating assets’. Livestock has been brought to account at net market value in the ‘Statement of financial position’. Crops, orchards and vineyards are grown primarily for research purposes but also have a commercial element. As these items are not considered to be material in terms of total asset value and are difficult to measure reliably, they have been excluded from the ‘Statement of financial position’.

(j) **Provisions for doubtful debts**

The collectibility of trade debts is assessed at balance date and provision is made for any doubtful accounts.

In 1997–98 the Rural Finance and Development Steering Committee adopted the policy of calculating the general doubtful debt provision as 5% of the balance of the loan portfolio. In addition, review of individual loan balances is undertaken and specific provisions are created where appropriate. This approach has been retained for 2000–01 and will be reviewed in 2001–02.

(k) **Goods and services tax**

Legislation to introduce the goods and services tax (GST) on 1 July 2000, titled *A New Tax System (Goods and Services Tax) Act 1999*, was assented to on 8 July 1999. The GST replaces the wholesale sales tax regime and a number of other taxes.

The GST legislation provides that the price quoted for the supply of goods and services and the price paid by the purchaser must include the amount of the GST where applicable. As such, the gross proceeds collected by the supplier includes the amount of GST. The GST is collected on behalf of the taxation authority. The purchaser of goods and services subject to the GST is, in many circumstances, able to obtain input tax credits for the GST included in the price of the goods and services acquired. Therefore, the price paid by the purchaser includes the GST that will be recovered from the taxation authority where an input tax credit can be claimed.

Revenues, expenses and assets are recognised net of the amount of GST, except that receivables and payables are stated inclusive of GST and the amount of GST incurred that is not recoverable from the taxation authority is recognised as part of the cost of acquisition of an asset or as part of an item of expense.

3. **Outputs of the agency**

(a) **General**

Information about the agency’s output classes is set out in the ‘Output class summary’.

(b) **Output class summary**

**Output class 1 – Information services.** The focus for this class of service delivery is on services for generation, synthesis and dissemination of information and technology.

**Output class 2 – State resource regulation services.** The focus is on services that are required to regulate the use of and protect the State’s natural and productive resources. These services are the responsibility of PIRSA through either legislative responsibilities or Cabinet policy.

**Output class 3 – coordination and advice.** The focus is on coordination of whole of government initiatives or services as well as policy advice and development for and on behalf of the Minister.

**Output class 4 – facilitation services.** This class of outputs includes facilitation services that establish strategic alliances and strategies in the areas of wealth, health, welfare, safety, sustainability or self-reliance of industries, enterprises or communities.
4. **Employee costs**(a)

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and wages</td>
<td>66 177</td>
<td>66 597</td>
</tr>
<tr>
<td>Superannuation</td>
<td>7 324</td>
<td>7 381</td>
</tr>
<tr>
<td>Payroll tax</td>
<td>4 945</td>
<td>4 405</td>
</tr>
<tr>
<td>Annual and long service leave expenses**(b)**</td>
<td>(53)</td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>78 393</td>
<td>78 783</td>
</tr>
</tbody>
</table>

(a) 2000–01 figures include costs of $1.8 million ($1.5 million) for adverse events and $204 000 ($130 000) for the Upper South-East Dryland Salinity and Flood Management Plan. Supply and service costs associated with these activities are disclosed in Note 5.

(b) Annual leave and long service leave expenses only include changes in the provision assessed at balance date. In service and lump sum payments are classified as salary expenses.

5. **Supplies and services**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional services</td>
<td>19 621</td>
<td>20 474</td>
</tr>
<tr>
<td>Operational and administrative costs</td>
<td>14 074</td>
<td>13 739</td>
</tr>
<tr>
<td>Utility and property costs</td>
<td>9 446</td>
<td>10 045</td>
</tr>
<tr>
<td>Computing costs</td>
<td>5 770</td>
<td>4 537</td>
</tr>
<tr>
<td>Travel</td>
<td>8 176</td>
<td>7 521</td>
</tr>
<tr>
<td>Vehicle and equipment operating costs</td>
<td>2 060</td>
<td>2 133</td>
</tr>
<tr>
<td>Adverse events**(a)**</td>
<td>10 727</td>
<td>3 534</td>
</tr>
<tr>
<td>Upper South-East Dryland Salinity and Flood Management**(b)**</td>
<td>4 242</td>
<td>4 349</td>
</tr>
<tr>
<td>Telephone calls and rental</td>
<td>1 948</td>
<td>2 293</td>
</tr>
<tr>
<td>Loxton Irrigation Scheme**(c)**</td>
<td>11 189</td>
<td>1 900</td>
</tr>
<tr>
<td>Staff training and development</td>
<td>1 536</td>
<td>1 618</td>
</tr>
<tr>
<td>Other</td>
<td>504</td>
<td>329</td>
</tr>
<tr>
<td></td>
<td>89 293</td>
<td>72 472</td>
</tr>
</tbody>
</table>

(a) Expenditure on ad-hoc emergencies that affect the agricultural and fisheries sectors (e.g., fruit fly and locusts). Employee costs associated with adverse events are disclosed in Note 4. The significant increase in adverse events expenditure in 2000–01 is due primarily to the locust control program.

(b) The drainage component of the Upper South-East Dryland Salinity and Flood Management Plan will be constructed over six years. The project is funded on the basis of the State and Federal Governments each contributing 37.5% and the local community 25% of the cost. Current total estimated cost is $24 million with the potential to expand initially to $33 million under the National Action Plan for Salinity and Water Quality. Infrastructure works ownership will be transferred to the South-Eastern Water Conservation Drainage Board, upon completion of each stage. Employee costs associated with the Upper South-East Dryland Salinity and Flood Management Plan are disclosed in Note 4.

(c) Represents a continuing program of refurbishment of the irrigation distribution infrastructure and upgrading of the pumps for the existing district and including areas for new development outside the current boundaries of the Loxton Irrigation District. The total cost of the program is estimated to be $39.1 million with the State and Loxton growers’ share estimated to be $24.6 million spread over the projected construction period of five years.
6. Grants paid

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td><strong>Rural Finance and Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Adjustment Scheme</td>
<td>–</td>
<td>363</td>
</tr>
<tr>
<td>Eyre Peninsula Regional Strategy</td>
<td>590</td>
<td>1 941</td>
</tr>
<tr>
<td>Young Farmers Scheme</td>
<td>–</td>
<td>49</td>
</tr>
<tr>
<td>FarmBis</td>
<td>2 887</td>
<td>786</td>
</tr>
<tr>
<td>Central North East Farm Assistance Program</td>
<td>61</td>
<td>–</td>
</tr>
<tr>
<td>Rural counsellors</td>
<td>274</td>
<td>–</td>
</tr>
<tr>
<td>Project funding</td>
<td>193</td>
<td>84</td>
</tr>
<tr>
<td>Property management planning</td>
<td>117</td>
<td>–</td>
</tr>
<tr>
<td>South East Confined Aquifer Rehabilitation Scheme</td>
<td>56</td>
<td>–</td>
</tr>
<tr>
<td>Branched Broomrape</td>
<td>11</td>
<td>–</td>
</tr>
<tr>
<td>Riverland Rural Partnership Program</td>
<td>635</td>
<td>413</td>
</tr>
<tr>
<td><strong>Other State and local government agencies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal and Plant Control Commission</td>
<td>3 451</td>
<td>3 558</td>
</tr>
<tr>
<td>University of Adelaide</td>
<td>642</td>
<td>742</td>
</tr>
<tr>
<td>Roxby Downs Council</td>
<td>490</td>
<td>321</td>
</tr>
<tr>
<td>Dog Fence Board</td>
<td>367</td>
<td>350</td>
</tr>
<tr>
<td>Natural Heritage Trust</td>
<td>–</td>
<td>392</td>
</tr>
<tr>
<td>Agriculture Fisheries Forestry Australia</td>
<td>293</td>
<td>–</td>
</tr>
<tr>
<td>Other</td>
<td>459</td>
<td>423</td>
</tr>
<tr>
<td><strong>Total grants paid</strong></td>
<td>4 824</td>
<td>3 636</td>
</tr>
<tr>
<td><strong>Private sector</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remote Areas Energy Scheme</td>
<td>4 971</td>
<td>2 995</td>
</tr>
<tr>
<td>Collaborative payments</td>
<td>2 460</td>
<td>4 089</td>
</tr>
<tr>
<td>SA Food and Beverage Exporters Association</td>
<td>600</td>
<td>–</td>
</tr>
<tr>
<td>SA Steel and Energy Project</td>
<td>–</td>
<td>750</td>
</tr>
<tr>
<td>Anangu Pitiyanjiyara Council</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>Stone Industry Association</td>
<td>140</td>
<td>–</td>
</tr>
<tr>
<td>Soil Conservation Board</td>
<td>228</td>
<td>213</td>
</tr>
<tr>
<td>Ovine Johne’s Disease</td>
<td>–</td>
<td>22</td>
</tr>
<tr>
<td>Other</td>
<td>2 381</td>
<td>1 540</td>
</tr>
<tr>
<td><strong>Total grants paid</strong></td>
<td>10 880</td>
<td>9 759</td>
</tr>
<tr>
<td><strong>Balance at 30 June</strong></td>
<td>21 406</td>
<td>19 181</td>
</tr>
</tbody>
</table>

7. Provision for doubtful debts

Movements in the provision for doubtful debts (refer Note 2 (j)) during the period were:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td>Balance at 1 July</td>
<td>2 471</td>
<td>2 891</td>
</tr>
<tr>
<td>Less: Write-offs</td>
<td>635</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>1 836</td>
<td>2 891</td>
</tr>
<tr>
<td>Add: Amount provided</td>
<td>544</td>
<td>(420)</td>
</tr>
<tr>
<td>Balance at 30 June</td>
<td>2 380</td>
<td>2 471</td>
</tr>
</tbody>
</table>
8. **Depreciation and amortisation expenses**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td><strong>Depreciation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant and equipment</td>
<td>3,658</td>
<td>3,652</td>
</tr>
<tr>
<td>Building and</td>
<td>1,623</td>
<td>1,601</td>
</tr>
<tr>
<td>improvements</td>
<td>–</td>
<td>120</td>
</tr>
<tr>
<td><strong>Borehole network</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Depreciation</strong></td>
<td>5,281</td>
<td>5,373</td>
</tr>
<tr>
<td><strong>Amortisation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>397</td>
<td>–</td>
</tr>
<tr>
<td>Amdel loan</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total Depreciation and Amortisation Expense</strong></td>
<td>5,694</td>
<td>5,389</td>
</tr>
</tbody>
</table>

9. **Other expenses**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital loss on early repayment of debt to the Department of Treasury and Finance</td>
<td>21</td>
<td>126</td>
</tr>
<tr>
<td>Guarantee fees</td>
<td>37</td>
<td>72</td>
</tr>
<tr>
<td>Contributions to external bodies</td>
<td>504</td>
<td>328</td>
</tr>
<tr>
<td>Department for Water Resources externally funded projects</td>
<td>–</td>
<td>872</td>
</tr>
<tr>
<td>Other</td>
<td>381</td>
<td>374</td>
</tr>
<tr>
<td><strong>Total Other expenses</strong></td>
<td>943</td>
<td>1,772</td>
</tr>
</tbody>
</table>

10. **User charges, fees and rentals**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishing licences&lt;sup&gt;(a)&lt;/sup&gt;</td>
<td>8,484</td>
<td>8,750</td>
</tr>
<tr>
<td>Mining and petroleum application fees</td>
<td>354</td>
<td>391</td>
</tr>
<tr>
<td>Gas and electricity licence fees</td>
<td>2,220</td>
<td>1,520</td>
</tr>
<tr>
<td>Remote Areas Energy Scheme electricity sales</td>
<td>664</td>
<td>791</td>
</tr>
<tr>
<td>Mining and petroleum rentals</td>
<td>5,178</td>
<td>4,743</td>
</tr>
<tr>
<td>Consultancy and service</td>
<td>6,104</td>
<td>6,405</td>
</tr>
<tr>
<td>Other licences</td>
<td>384</td>
<td>259</td>
</tr>
<tr>
<td>Seed analysis and certification</td>
<td>877</td>
<td>765</td>
</tr>
<tr>
<td>Inspection and registration</td>
<td>486</td>
<td>567</td>
</tr>
<tr>
<td>Other</td>
<td>339</td>
<td>444</td>
</tr>
<tr>
<td><strong>Total User charges, fees and rentals</strong></td>
<td>25,090</td>
<td>24,655</td>
</tr>
</tbody>
</table>

<sup>(a)</sup> Represents allocation of licence fees from the Fisheries Research and Development Fund.
11. Advances and grants

The agency received contributions from various funding sources as detailed below, expressly for the purpose of undertaking specific projects. As at 30 June 2001 $1.8 million of those contributions, which have been recognised as revenue in the ‘Statement of financial performance’ are yet to be spent in the manner specified by the contributors.

<table>
<thead>
<tr>
<th>Grants received</th>
<th>2001</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td>Commonwealth grants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Adjustment Scheme</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Eyre Peninsula Regional Strategy</td>
<td>856</td>
<td>856</td>
</tr>
<tr>
<td>Riverland Rural Partnership Program</td>
<td>385</td>
<td>385</td>
</tr>
<tr>
<td>FarmBis</td>
<td>2 462</td>
<td>2 462</td>
</tr>
<tr>
<td>Central North East Farm Assistance Program</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>Loxton Irrigation Scheme</td>
<td>5 200</td>
<td>5 200</td>
</tr>
<tr>
<td>Natural Heritage Trust</td>
<td>6 027</td>
<td>4 768</td>
</tr>
<tr>
<td>Branched Broomrape</td>
<td>634</td>
<td>634</td>
</tr>
<tr>
<td>Murray Darling Basin Commission</td>
<td>133</td>
<td>133</td>
</tr>
<tr>
<td>Other</td>
<td>170</td>
<td>170</td>
</tr>
<tr>
<td><strong>Total Commonwealth grants</strong></td>
<td>15 950</td>
<td>14 691</td>
</tr>
<tr>
<td>State grants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Heritage Trust</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>National Gas Pipelines Advisory Committee</td>
<td>436</td>
<td>388</td>
</tr>
<tr>
<td>Animal and Plant Control (Regions)</td>
<td>318</td>
<td>318</td>
</tr>
<tr>
<td>Farmed Seafood Initiative</td>
<td>50</td>
<td>2</td>
</tr>
<tr>
<td>Food Plan</td>
<td>431</td>
<td>431</td>
</tr>
<tr>
<td>Ovine Johne’s Disease</td>
<td>934</td>
<td>934</td>
</tr>
<tr>
<td>Branched Broomrape</td>
<td>545</td>
<td>545</td>
</tr>
<tr>
<td>Other</td>
<td>831</td>
<td>831</td>
</tr>
<tr>
<td><strong>Total State grants</strong></td>
<td>3 545</td>
<td>3 449</td>
</tr>
<tr>
<td>Industry grants(^{(a)})</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisheries RDC</td>
<td>1 189</td>
<td>1 189</td>
</tr>
<tr>
<td>Fisheries RDC Pro-active Grant</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Grains RDC</td>
<td>6 073</td>
<td>6 046</td>
</tr>
<tr>
<td>Horticultural RDC</td>
<td>1 234</td>
<td>1 234</td>
</tr>
<tr>
<td>Pig RDC</td>
<td>448</td>
<td>357</td>
</tr>
<tr>
<td>Rural Industries RDC</td>
<td>463</td>
<td>438</td>
</tr>
<tr>
<td>Meat RDC</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Dried Fruits RDC</td>
<td>112</td>
<td>86</td>
</tr>
<tr>
<td>Dairy RDC</td>
<td>221</td>
<td>196</td>
</tr>
<tr>
<td>SA Grains Industry Trust Fund</td>
<td>540</td>
<td>412</td>
</tr>
<tr>
<td>Co-operative RDC</td>
<td>104</td>
<td>104</td>
</tr>
<tr>
<td>Grape and Wine RDC</td>
<td>302</td>
<td>302</td>
</tr>
<tr>
<td>CRC for Aquaculture</td>
<td>276</td>
<td>168</td>
</tr>
<tr>
<td>CRC for Beef</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>CRC for Viticulture</td>
<td>249</td>
<td>212</td>
</tr>
<tr>
<td>Animal Health Council</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Other</td>
<td>1 732</td>
<td>1 732</td>
</tr>
<tr>
<td><strong>Total industry grants</strong></td>
<td>13 201</td>
<td>12 734</td>
</tr>
<tr>
<td><strong>Total grants received</strong></td>
<td>32 696</td>
<td>30 874</td>
</tr>
</tbody>
</table>

\(^{(a)}\) RDC — Research and Development Corporation
12. **Interest revenue**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans to the rural sector</td>
<td>2,608</td>
<td>3,087</td>
</tr>
<tr>
<td>Deposits lodged with Treasury</td>
<td>3,038</td>
<td>3,015</td>
</tr>
<tr>
<td></td>
<td>5,646</td>
<td>6,102</td>
</tr>
</tbody>
</table>

13. **Sales of goods**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants</td>
<td>1,367</td>
<td>1,349</td>
</tr>
<tr>
<td>Livestock</td>
<td>946</td>
<td>352</td>
</tr>
<tr>
<td>Publications, books, maps and compact discs</td>
<td>478</td>
<td>672</td>
</tr>
<tr>
<td>Milk</td>
<td>614</td>
<td>627</td>
</tr>
<tr>
<td>Fruit and vegetables</td>
<td>206</td>
<td>231</td>
</tr>
<tr>
<td>Cereals</td>
<td>521</td>
<td>396</td>
</tr>
<tr>
<td>Wool and skins</td>
<td>245</td>
<td>162</td>
</tr>
<tr>
<td>Other</td>
<td>528</td>
<td>511</td>
</tr>
<tr>
<td></td>
<td>4,905</td>
<td>4,300</td>
</tr>
</tbody>
</table>

14. **Other revenue**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>South-Eastern Water Conservation Drainage Board levies</td>
<td>990</td>
<td>873</td>
</tr>
<tr>
<td>Loxton Irrigation external contributions</td>
<td>–</td>
<td>700</td>
</tr>
<tr>
<td>Seed royalties</td>
<td>448</td>
<td>390</td>
</tr>
<tr>
<td>Workers compensation recoveries</td>
<td>–</td>
<td>58</td>
</tr>
<tr>
<td>Government Employment Scheme recoups</td>
<td>194</td>
<td>579</td>
</tr>
<tr>
<td>Contribution from the Department for Water Resources</td>
<td>750</td>
<td>–</td>
</tr>
<tr>
<td>Transfer of Natural Disaster Relief Funding from administered funds</td>
<td>–</td>
<td>132</td>
</tr>
<tr>
<td>Hire of equipment</td>
<td>57</td>
<td>54</td>
</tr>
<tr>
<td>Reimbursements of salaries and project costs</td>
<td>2,349</td>
<td>677</td>
</tr>
<tr>
<td>Compensation for losses caused by delay in payment for Thebarton property</td>
<td>–</td>
<td>130</td>
</tr>
<tr>
<td>Other</td>
<td>711</td>
<td>1,246</td>
</tr>
<tr>
<td></td>
<td>5,499</td>
<td>4,839</td>
</tr>
</tbody>
</table>

15. **Royalties**

The following royalties were received and deposited into the Consolidated Account (refer Note 2(e)):

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas licences</td>
<td>2,527</td>
<td>4,810</td>
</tr>
<tr>
<td>Based on production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural gas/liquids</td>
<td>68,037</td>
<td>50,686</td>
</tr>
<tr>
<td>Minerals</td>
<td>37,199</td>
<td>24,796</td>
</tr>
<tr>
<td>Coal</td>
<td>1,327</td>
<td>1,224</td>
</tr>
<tr>
<td></td>
<td>109,563</td>
<td>76,706</td>
</tr>
<tr>
<td>Total Royalties</td>
<td>109,563</td>
<td>76,706</td>
</tr>
</tbody>
</table>

16. **Current assets — receivables**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade accounts receivable</td>
<td>6,854</td>
<td>4,689</td>
</tr>
<tr>
<td>Less: Provision for doubtful debts</td>
<td>256</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>6,598</td>
<td>4,570</td>
</tr>
<tr>
<td>Accrued interest on loans and deposits</td>
<td>1,029</td>
<td>1,372</td>
</tr>
<tr>
<td></td>
<td>7,627</td>
<td>5,942</td>
</tr>
</tbody>
</table>
17. Loans

(i) Rural Sector – Rural Finance and Development:

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$’000</td>
<td>$’000</td>
</tr>
<tr>
<td>Balance at 1 July</td>
<td>33 994</td>
<td>40 027</td>
</tr>
<tr>
<td>Advances during the year</td>
<td>1 027</td>
<td>704</td>
</tr>
<tr>
<td>Interest capitalised</td>
<td>2 844</td>
<td>3 300</td>
</tr>
<tr>
<td></td>
<td>3 871</td>
<td>4 004</td>
</tr>
<tr>
<td>Less: Principal repayments</td>
<td>9 463</td>
<td>10 037</td>
</tr>
<tr>
<td>Principal written off</td>
<td>635</td>
<td>–</td>
</tr>
<tr>
<td>Loans converted to grants</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>10 102</td>
<td>10 037</td>
</tr>
<tr>
<td>Balance 30 June</td>
<td>27 763</td>
<td>33 994</td>
</tr>
</tbody>
</table>

Other Loans:

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$’000</td>
<td>$’000</td>
</tr>
<tr>
<td>Balance 1 July</td>
<td>64</td>
<td>80</td>
</tr>
<tr>
<td>Less: Amortisation of loan</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Balance 30 June</td>
<td>48</td>
<td>64</td>
</tr>
<tr>
<td>Total loan balance 30 June</td>
<td>27 811</td>
<td>34 058</td>
</tr>
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</table>

(ii) Balance of Loans Outstanding comprises:

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$’000</td>
<td>$’000</td>
</tr>
<tr>
<td>Principal not yet due for repayment</td>
<td>27 811</td>
<td>33 821</td>
</tr>
<tr>
<td>Principal due but not yet paid</td>
<td>–</td>
<td>237</td>
</tr>
<tr>
<td>Total principal outstanding</td>
<td>27 811</td>
<td>34 058</td>
</tr>
</tbody>
</table>

(iii) Balance of Loans Classification:

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$’000</td>
<td>$’000</td>
</tr>
<tr>
<td>Current assets</td>
<td>1 787</td>
<td>1 729</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>26 024</td>
<td>32 329</td>
</tr>
<tr>
<td>Less: Provision for doubtful debts</td>
<td>2 124</td>
<td>2 352</td>
</tr>
<tr>
<td></td>
<td>23 900</td>
<td>29 977</td>
</tr>
<tr>
<td></td>
<td>25 687</td>
<td>31 706</td>
</tr>
</tbody>
</table>

18. Inventories

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$’000</td>
<td>$’000</td>
</tr>
<tr>
<td>Current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Livestock (net realisable value)</td>
<td>1 961</td>
<td>1 454</td>
</tr>
<tr>
<td>Plants and related items (at cost)</td>
<td>642</td>
<td>526</td>
</tr>
<tr>
<td>Publications and other finished goods (at cost)</td>
<td>282</td>
<td>459</td>
</tr>
<tr>
<td>Other (at cost)</td>
<td>774</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>3 659</td>
<td>2 654</td>
</tr>
<tr>
<td>Non-Current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publications and maps (net realisable value)</td>
<td>257</td>
<td>264</td>
</tr>
</tbody>
</table>
19. **Property, plant and equipment**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td>Land</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land at independent valuation (30 June 1999)</td>
<td>9 682</td>
<td>9 682</td>
</tr>
<tr>
<td>Land at valuation (30 June 2000)</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Land at cost</td>
<td>474</td>
<td>474</td>
</tr>
<tr>
<td></td>
<td>10 216</td>
<td>10 216</td>
</tr>
<tr>
<td>Buildings and Improvements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buildings at independent valuation (30 June 1999)</td>
<td>92 996</td>
<td>92 996</td>
</tr>
<tr>
<td>Buildings at valuation (30 June 2000)</td>
<td>461</td>
<td>461</td>
</tr>
<tr>
<td>Buildings at cost</td>
<td>1 731</td>
<td>1 526</td>
</tr>
<tr>
<td>Leasehold improvements</td>
<td>3 971</td>
<td>3 971</td>
</tr>
<tr>
<td></td>
<td>99 159</td>
<td>98 954</td>
</tr>
<tr>
<td>Less: Accumulated depreciation and amortisation</td>
<td>30 744</td>
<td>28 724</td>
</tr>
<tr>
<td></td>
<td>68 415</td>
<td>70 230</td>
</tr>
<tr>
<td>Plant and Equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plant and equipment at cost</td>
<td>47 740</td>
<td>44 976</td>
</tr>
<tr>
<td>Plant and equipment at valuation (30 June 2000)</td>
<td>668</td>
<td>668</td>
</tr>
<tr>
<td></td>
<td>48 408</td>
<td>45 644</td>
</tr>
<tr>
<td>Less: Accumulated depreciation</td>
<td>31 890</td>
<td>29 207</td>
</tr>
<tr>
<td></td>
<td>16 518</td>
<td>16 437</td>
</tr>
<tr>
<td>Total property, plant and equipment</td>
<td>95 149</td>
<td>96 883</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Land</th>
<th>Buildings</th>
<th>Leasehold Improvements</th>
<th>Plant and Equipment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td>Gross Carrying Amount</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at 30 June 2000</td>
<td>10 216</td>
<td>94 983</td>
<td>3 971</td>
<td>45 644</td>
<td>154 814</td>
</tr>
<tr>
<td>Additions</td>
<td>–</td>
<td>205</td>
<td>–</td>
<td>3 818</td>
<td>4 023</td>
</tr>
<tr>
<td>Disposals</td>
<td>–</td>
<td>–</td>
<td>(1 054)</td>
<td>(1 054)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 216</td>
<td>95 188</td>
<td>3 971</td>
<td>48 408</td>
<td>157 783</td>
</tr>
<tr>
<td>Accumulated Depreciation and Amortisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at 30 June 2000</td>
<td>–</td>
<td>27 963</td>
<td>761</td>
<td>29 207</td>
<td>57 931</td>
</tr>
<tr>
<td>Disposals</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>(975)</td>
<td>(975)</td>
</tr>
<tr>
<td>Depreciation/amortisation expense</td>
<td>–</td>
<td>1 623</td>
<td>397</td>
<td>3 658</td>
<td>5 678</td>
</tr>
<tr>
<td></td>
<td>–</td>
<td>29 586</td>
<td>1 158</td>
<td>31 890</td>
<td>62 634</td>
</tr>
<tr>
<td>Net Book Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As at 30 June 2000</td>
<td>10 216</td>
<td>67 020</td>
<td>3 210</td>
<td>16 437</td>
<td>96 883</td>
</tr>
<tr>
<td>As at 30 June 2001</td>
<td>10 216</td>
<td>65 602</td>
<td>2 813</td>
<td>16 518</td>
<td>95 149</td>
</tr>
</tbody>
</table>

20. **Other assets**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td>Current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amdel loan</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Workers compensation recoveries</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>32</td>
</tr>
<tr>
<td>Non-current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers compensation recoveries</td>
<td>51</td>
<td>42</td>
</tr>
</tbody>
</table>
21. **Current liabilities — creditors and accruals**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee related</td>
<td>1 065</td>
<td>695</td>
</tr>
<tr>
<td>Creditors and accruals</td>
<td>6 327</td>
<td>4 619</td>
</tr>
<tr>
<td>Workers compensation</td>
<td>489</td>
<td>462</td>
</tr>
<tr>
<td>Commonwealth excise funding</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7 904</td>
<td>5 787</td>
</tr>
</tbody>
</table>

22. **Borrowings**

(i) Indebtedness to Department of Treasury and Finance
    - 2000–01: 2 380
      - 1999–2000: 1 728
    - Indebtedness to SA Government Financing Authority
      - 2000–01: 18 690
      - 1999–2000: 23 171
    - Indebtedness to Department of Industry and Trade
      - 2000–01: 92
      - 1999–2000: 110

(ii) Balance of borrowings outstanding classifications:
    - Current
      - 2000–01: 693
      - 1999–2000: 462
    - Non-current
      - 2000–01: 20 469
      - 1999–2000: 24 547

23. **Provision for employee entitlements**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual leave</td>
<td>3 966</td>
<td>3 975</td>
</tr>
<tr>
<td>Long service leave</td>
<td>545</td>
<td>480</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4 511</td>
<td>4 455</td>
</tr>
<tr>
<td>Non-current</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long service leave</td>
<td>15 120</td>
<td>15 231</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15 120</td>
<td>15 231</td>
</tr>
</tbody>
</table>

24. **Non-current liabilities — creditors and accruals**

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee related</td>
<td>1 739</td>
<td>1 752</td>
</tr>
<tr>
<td>Workers compensation</td>
<td>1 621</td>
<td>1 346</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3 360</td>
<td>3 098</td>
</tr>
</tbody>
</table>
25. General Reserve
The General Reserve for PIRSA Rural Finance and Development was previously established to cover unforeseen losses which may arise from the loan portfolio. The need to maintain this General Reserve will be reviewed in 2001–02.

26. Committed Grants Reserve
The Committed Grants Reserve for PIRSA Rural Finance and Development was established to provide for grant commitments which as at 30 June 2001 were committed but not advanced.

27. Commitments for expenditure

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td>Operating leases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not later than one year</td>
<td>3 850</td>
<td>3 551</td>
</tr>
<tr>
<td>Later than one year and not later than five years</td>
<td>12 778</td>
<td>12 122</td>
</tr>
<tr>
<td>Later than five years</td>
<td>5 227</td>
<td>8 085</td>
</tr>
<tr>
<td></td>
<td>21 855</td>
<td>23 758</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not later than one year</td>
<td>13 347</td>
<td>–</td>
</tr>
<tr>
<td>Later than one year and not later than five years</td>
<td>8 334</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>21 681</td>
<td>–</td>
</tr>
<tr>
<td>Total commitments for expenditure</td>
<td>43 536</td>
<td>23 758</td>
</tr>
</tbody>
</table>

These operating commitments are not recognised in the financial report as liabilities.

The property leases are non-cancellable leases, with rental payable monthly in advance. Contingent rental provisions within the lease agreements allow for the review of lease payments every two years. Any changes in lease payments would be based on market rates. Options exist to renew the leases at the end of their terms.

Other consists of commitments for the Loxton Irrigation District Rehabilitation project and the Upper South East Dryland Salinity and Flood Management Plan, refer to note 5 for additional information.

28. Targeted voluntary separation packages
In accordance with Government policy to reduce the public sector workforce, 42 employees of the agency were paid targeted voluntary separation packages during the period.

These payments were met by the agency and have been recovered from the Department of the Premier and Cabinet.

As at 30 June 2001 payments amounted to $3.1 million and $3.1 million has been recovered. In addition to this $1.2 million was paid in accrued annual leave and long service leave entitlements to those employees who received a targeted voluntary separation package.

29. Consultants costs
During the reporting period the agency incurred expenses of $2.5 million ($2.2 million) on consultants. The cost of consultants for the 2000–01 year does not include GST.

Included in the consultancy cost of $2.5 million is an amount of $646 000 reimbursed to the Department of Treasury and Finance for the South Australian Gas Market Study. The agency received appropriation of $500 000 to contribute towards this study. The study was commissioned by the Government to provide an authoritative assessment of the South Australian gas market over the medium term.
30. **Trust funds**

The Trust funds of the agency are:

**Pleuro Pneumonia Fund.** This Fund consists of monies belonging to all State Governments and the Federal Government. The Fund is controlled by the Standing Committee of Agriculture and all expenditure is subject to the approval of the Chairman. Funds are to be used principally for publication of the history of the Pleuro Pneumonia Eradication Campaign and are held in a Section 21 Deposit Account.

**Extractive Areas Rehabilitation Fund.** This Fund is credited with amounts by way of royalty on extractive minerals and is used for the rehabilitation of land disturbed by mining operations. The funds collected are used to limit damage to any aspect of the environment by such mining operations in addition to the promotion of research into methods of mining engineering and practice by which environmental damage might be reduced.

**Fisheries Research and Development Corporation Pro-active Grant Fund.** This Fund consists of monies belonging to the Fisheries Research and Development Corporation which were distributed to the South Australian Government in 1992. The Fund is controlled by the Fisheries Research and Development Corporation with all project expenditure subject to written approval. The monies, which are held in an interest bearing Section 21 Deposit Account, are used to promote collaboration between the fishing industry, fisheries managers, researchers and other stakeholders through the South Australian Fisheries Research Advisory Body. There were no transactions during the year.

Aggregate details of the transactions and balances relating to these Trust Funds for the year ended 30 June are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Pleuro Pneumonia Fund</th>
<th>Extractive Areas Rehabilitation Fund</th>
<th>2000–01 Total</th>
<th>1999–2000 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receipts</td>
<td>4</td>
<td>910</td>
<td>914</td>
<td>1 121</td>
</tr>
<tr>
<td>Less: Expenditure</td>
<td>–</td>
<td>1 790</td>
<td>1 790</td>
<td>1 575</td>
</tr>
<tr>
<td>Excess of receipts (expenditure)</td>
<td>4</td>
<td>(880)</td>
<td>(876)</td>
<td>(454)</td>
</tr>
<tr>
<td><strong>Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance of funds 1 July</td>
<td>73</td>
<td>4 811</td>
<td>4 884</td>
<td>5 338</td>
</tr>
<tr>
<td>Add: Surplus (Deficit) for year</td>
<td>4</td>
<td>(880)</td>
<td>(876)</td>
<td>(454)</td>
</tr>
<tr>
<td>Fund balance at 30 June</td>
<td>77</td>
<td>3 931</td>
<td>4 008</td>
<td>4 884</td>
</tr>
<tr>
<td>Less: Commitments</td>
<td>–</td>
<td>2 100</td>
<td>2 100</td>
<td>2 150</td>
</tr>
<tr>
<td><strong>Balance of funds available</strong></td>
<td>77</td>
<td>1 831</td>
<td>1 908</td>
<td>2 734</td>
</tr>
</tbody>
</table>

As the agency performs only a custodial role in respect of these monies and because the monies cannot be used for the achievement of the agency’s objectives, they are not brought to account in the financial statements, but are shown here for information purposes.

31. **Employee remuneration packages**

The number of employees whose total remuneration package was $100 000 or more in relation to the reporting period was as follows:

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>$100 000 – 109 999</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>$110 000 – 119 999</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>$120 000 – 129 999</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>$130 000 – 139 999</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>$140 000 – 149 999</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>$150 000 – 159 999</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>$160 000 – 169 999</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>$180 000 – 189 999</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>$220 000 – 229 999</td>
<td>–</td>
<td>1</td>
</tr>
<tr>
<td>$230 000 – 239 999</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24</td>
<td>17</td>
</tr>
</tbody>
</table>
Note – These figures do not include employees who have received separation packages or payments for accrued annual leave and long service leave on departure from PIRSA.

Total remuneration received by the above employees was $3.2 million ($2.4 million).

32. Audit fees

These accounts include $212,000 ($210,000) paid or payable to the Auditor-General’s Department during the period.

33. (i) 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:

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>60,165</td>
<td>66,214</td>
</tr>
<tr>
<td>Deposits at call</td>
<td>3,536</td>
<td>3,536</td>
</tr>
<tr>
<td></td>
<td>63,701</td>
<td>69,750</td>
</tr>
</tbody>
</table>

(ii) Reconciliation of net cost of services from ordinary activities to net cash used in operating activities

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net cost of services from ordinary activities</td>
<td>(124,001)</td>
<td>(113,574)</td>
</tr>
<tr>
<td>Cash flows from Government</td>
<td>113,850</td>
<td>107,635</td>
</tr>
<tr>
<td>Depreciation and amortisation</td>
<td>5,694</td>
<td>5,389</td>
</tr>
<tr>
<td>Increase (decrease) in provision for doubtful debts</td>
<td>544</td>
<td>(420)</td>
</tr>
<tr>
<td>(Decrease) in provision for employee entitlements</td>
<td>(55)</td>
<td>(1,477)</td>
</tr>
<tr>
<td>Gain on sale of property, plant and equipment</td>
<td>(28)</td>
<td>(305)</td>
</tr>
<tr>
<td>(Increase) in receivables</td>
<td>(2,165)</td>
<td>(1,481)</td>
</tr>
<tr>
<td>(Increase) decrease in workers compensation recoveries</td>
<td>(4)</td>
<td>12</td>
</tr>
<tr>
<td>(Increase) in inventories</td>
<td>(998)</td>
<td>(790)</td>
</tr>
<tr>
<td>Loans converted to grants</td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td>Decrease in accrued interest receivable</td>
<td>343</td>
<td>189</td>
</tr>
<tr>
<td>SA Financing Authority capital loss</td>
<td>21</td>
<td>–</td>
</tr>
<tr>
<td>(Decrease) in accrued interest payable on loans</td>
<td>(77)</td>
<td>(101)</td>
</tr>
<tr>
<td>Increase in unearned revenue</td>
<td>517</td>
<td>–</td>
</tr>
<tr>
<td>Increase in creditors and accruals</td>
<td>2,379</td>
<td>1,550</td>
</tr>
</tbody>
</table>

Net cash used in operating activities

<table>
<thead>
<tr>
<th></th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net cash used in operating activities</td>
<td>(3,976)</td>
<td>(3,373)</td>
</tr>
</tbody>
</table>
34. Additional financial instruments disclosure

(a) Interest rate risk

PIRSA’s exposure to interest rate risk, which is the risk that a financial instrument’s value will fluctuate as a result of changes in market interest rates and the effective weighted average interest rate on those financial assets and financial liabilities, is as follows:

<table>
<thead>
<tr>
<th>Floating interest rate</th>
<th>1 year or less</th>
<th>Over 1 to 5 years</th>
<th>More than 5 years</th>
<th>Non-interest bearing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{$'000} )</td>
<td>( \text{$'000} )</td>
<td>( \text{$'000} )</td>
<td>( \text{$'000} )</td>
<td>( \text{$'000} )</td>
<td>( \text{$'000} )</td>
</tr>
<tr>
<td>2000–01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Assets:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>63 701</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>63 701</td>
</tr>
<tr>
<td>Receivables</td>
<td>161</td>
<td>868</td>
<td>–</td>
<td>–</td>
<td>6 598</td>
</tr>
<tr>
<td>Loans to rural sector</td>
<td>–</td>
<td>12 461</td>
<td>10 766</td>
<td>2 412</td>
<td>25 639</td>
</tr>
<tr>
<td>Loans other</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>63 862</td>
<td>13 329</td>
<td>10 766</td>
<td>2 412</td>
<td>97 015</td>
</tr>
<tr>
<td>Weighted average interest rate</td>
<td>5.77%</td>
<td>8.31%</td>
<td>8.45%</td>
<td>5.25%</td>
<td>–</td>
</tr>
<tr>
<td>Financial liabilities:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrowings Rural Finance and Development</td>
<td>–</td>
<td>12 715</td>
<td>8 262</td>
<td>92</td>
<td>21 069</td>
</tr>
<tr>
<td>Borrowings other</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>93</td>
</tr>
<tr>
<td>Payables</td>
<td>–</td>
<td>465</td>
<td>–</td>
<td>–</td>
<td>11 264</td>
</tr>
<tr>
<td>Total</td>
<td>–</td>
<td>13 180</td>
<td>8 262</td>
<td>92</td>
<td>11 729</td>
</tr>
<tr>
<td>Weighted average interest rate</td>
<td>–</td>
<td>6.48%</td>
<td>6.35%</td>
<td>6.50%</td>
<td>–</td>
</tr>
<tr>
<td>1999–2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial assets</td>
<td>69 750</td>
<td>11 341</td>
<td>16 373</td>
<td>3 928</td>
<td>107 398</td>
</tr>
<tr>
<td>Weighted average interest rate</td>
<td>4.97%</td>
<td>8.08%</td>
<td>8.76%</td>
<td>6.99%</td>
<td>–</td>
</tr>
<tr>
<td>Financial liabilities</td>
<td>–</td>
<td>12 328</td>
<td>13 020</td>
<td>110</td>
<td>34 436</td>
</tr>
<tr>
<td>Weighted average interest rate</td>
<td>–</td>
<td>6.47%</td>
<td>6.70%</td>
<td>6.50%</td>
<td>–</td>
</tr>
</tbody>
</table>

(b) Net fair value

The carrying amounts of financial assets and liabilities at the reporting date all approximate their net fair values.

(c) Credit risk

The maximum exposure to credit risk, excluding the value of any collateral or other security, at balance date to recognised financial assets is the carrying amount, net of any provisions for doubtful debts, as disclosed in the ‘Statement of financial position’ and notes to the financial statements.

35. Contingent liabilities

The nature of activities that PIRSA is involved in can create potential exposure to environmental, fisheries and petroleum matters, which PIRSA may be required to remedy in the future. PIRSA has some outstanding litigation in a number of these areas, specifically resulting from interpretation of fishing licences, past mining practices, petroleum exploration and animal health matters. These matters include:

(a) Minerals and Energy Resources

Certain matters associated with contaminants such as contaminated land and hazardous materials have been identified and are managed in accordance with recognised standards. This includes the environmental liabilities of past mining practices where there is no longer an active licence. For new activities, it is a lease condition that rehabilitation be undertaken by the leaseholder before a lease is surrendered. PIRSA’s responsibility is to ensure that a lease is not surrendered before appropriate rehabilitation has occurred, thus minimising the likelihood of future environmental risks to Government. Work is progressing to determine any liabilities that may be associated with this role. At this time, the financial impact cannot be reliably estimated.

Since mining ceased at Brukunga in 1972, the residual sulphides in the quarry, two waste rock dumps and tailings storage have been actively oxidising and generating acid water via natural process. Ownership of the Brukunga property was formally transferred to PIRSA during 1999–2000. It has been brought to PIRSA’s attention that landowners downstream of the Brukunga mine site are considering a class action against the Minister in respect to loss experienced due to contamination of Dawesley Creek.
In July 1999, an application was made to the Minister for Minerals and Energy to transfer mineral leases subject to a proclamation issued under the *National Parks and Wildlife Act 1972*, which states that the acquisition of rights are subject to the prior approval of the Minister for Environment and Heritage. The Minister for Environment and Heritage refused the acquisition of such rights. The Minister for Minerals and Energy advised that due to the Minister for Environment and Heritage’s decision, the application to transfer the leases was not approved under Section 83 of the *Mining Act 1971*. A claim has been made that the decisions made by both the Minister for Minerals and Energy and the Minister for Environment and Heritage were unreasonable and unfair. No amounts have been recognised at this stage because of significant uncertainty as to if any future costs may be incurred.

(b) Petroleum

As at 30 June 2001, litigation had commenced in the United States of America as a result of a collapsed rig off the South Australian coast. There has been an attempt to have the matter transferred to Australia, in which case if the application to transfer is successful there is a possibility that PIRSA may be enjoined in the action. At this time, the financial impact cannot be reliably estimated.

(c) Fisheries

As at 30 June 2001, PIRSA was involved in unresolved litigation for claims of unspecified damages for the management of the Gulf of St. Vincent Prawn Fishery. At this time, there exists significant uncertainty as to if any future costs may be incurred.

(d) Other

As at 30 June 2001, a number of unresolved litigation issues existed in regards to animal health. These involve both the Brucellosis Tuberculosis Eradication campaign from the 1970s and 1980s and the detection of ovine Johne’s disease. At this time, the financial impact cannot be reliably estimated.

36. Bio Innovation SA

Bio Innovation SA is a government initiative to attract investment and biotechnology companies to South Australia.


<table>
<thead>
<tr>
<th>2000–01</th>
<th>$’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee costs</td>
<td>22</td>
</tr>
<tr>
<td>Supplies and services</td>
<td>63</td>
</tr>
<tr>
<td>Asset purchases</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
</tr>
</tbody>
</table>

37. Equity

Equity represents the residual interest in PIRSA’s net assets. The South Australian Government holds the equity interest in PIRSA on behalf of the community.

| | Accumulated surplus | Committed Grants Reserve | General Reserve | Asset Revaluation Reserve | Total |
| | $’000 | $’000 | $’000 | $’000 | $’000 |
| Balance at 1 July | 134 517 | 12 187 | 2 000 | 1 753 | 150 457 |
| Change in net assets resulting from operations | (10 151) | – | – | – | (10 151) |
| Transfers to (from) reserves | (1 792) | 1 792 | – | – | – |
| Balance at 30 June | 122 574 | 13 979 | 2 000 | 1 753 | 140 306 |
DISCLOSURE STATEMENT AND AUTHORISATION

In our opinion:

(a) the attached financial statements and notes of Primary Industries and Resources SA for the year ended 30 June 2001 present fairly, in accordance with Statements of Accounting Concepts, applicable Accounting Standards, Urgent Issues Group Consensus Views and the Public Finance and Audit Act, 1987, the financial position of the entity as at the reporting date and the result of its operations and its cash flows for the year then ended.

(b) the internal controls over financial reporting have been effective throughout the reporting period.

Dennis Mutton  
CHIEF EXECUTIVE

Steve Archer  
DIRECTOR, FINANCE AND BUSINESS SERVICES

Ian Carrapiett  
ACCOUNTANT, FINANCIAL REPORTING

18 September 2001
INDEPENDENT AUDIT REPORT

TO THE CHIEF EXECUTIVE

SCOPE

As required by section 31 of the Public Finance and Audit Act 1987, I have audited the financial report of the Department of Primary Industries and Resources for the financial year ended 30 June 2001. The financial report comprises:

- A Statement of Financial Performance;
- A Statement of Financial Position;
- A Statement of Cash Flows;
- An Output Schedule of Expenses and Revenues;
- A Schedule of Administered Revenues and Expenses;
- A Schedule of Administered Assets and Liabilities;
- Notes to and forming part of the Financial Statements;
- A Certificate by the Chief Executive, the Director, Finance and Business Services and the Accountant, Financial Reporting.

The Chief Executive, the Director, Finance and Business Services and the Accountant, Financial Reporting are responsible for the financial report. I have conducted an independent audit of the financial report in order to express an opinion on it to the Chief Executive.

The audit has been conducted in accordance with the requirements of the Public Finance and Audit Act 1987 and Australian Auditing Standards to provide reasonable assurance that the financial report is free of material misstatement.

Audit procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial report is presented fairly in accordance with Treasurer's Instructions promulgated under the provisions of the Public Finance and Audit Act 1987, Australian Accounting Standards and other mandatory professional reporting requirements including Urgent Issues Group Consensus Views so as to present a view which is consistent with my understanding of the Department of Primary Industries and Resources financial position and performance as represented by the results of its operations and its cash flows.

The audit opinion expressed in this report has been formed on the above basis.

AUDIT OPINION

In my opinion the financial report presents fairly in accordance with the Treasurer's Instructions promulgated under the provisions of the Public Finance and Audit Act 1987, applicable Australian Accounting Standards and other mandatory professional reporting requirements, the financial position of the Department of Primary Industries and Resources as at 30 June 2001, the results of its operations and its cash flows for the year then ended.

21 September 2001

K I MacPHERSON
AUDITOR-GENERAL
# RURAL INDUSTRY ADJUSTMENT AND DEVELOPMENT FUND

## STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED 30 JUNE 2001

<table>
<thead>
<tr>
<th>Note</th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td><strong>REVENUE FROM ORDINARY ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest</td>
<td>2</td>
<td>1 121</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td></td>
<td>1 121</td>
</tr>
<tr>
<td><strong>EXPENSES FROM ORDINARY ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Young Farmers Scheme</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project funding</td>
<td>3</td>
<td>1 536</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td></td>
<td>1 536</td>
</tr>
<tr>
<td><strong>LOSS FROM ORDINARY ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL CHANGES IN EQUITY OTHER THAN THOSE RESULTING FROM TRANSACTIONS WITH THE STATE GOVERNMENT AS OWNER</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2001

<table>
<thead>
<tr>
<th>Note</th>
<th>2000–01</th>
<th>1999–2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td><strong>Funds Employed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General reserve</td>
<td></td>
<td>2 000</td>
</tr>
<tr>
<td>Committed grants reserve</td>
<td></td>
<td>8 030</td>
</tr>
<tr>
<td>Retained surplus</td>
<td></td>
<td>7 806</td>
</tr>
<tr>
<td><strong>Total funds employed</strong></td>
<td></td>
<td>17 836</td>
</tr>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits lodged with Treasurer</td>
<td></td>
<td>14 670</td>
</tr>
<tr>
<td>Loans to rural sector</td>
<td>7</td>
<td>348</td>
</tr>
<tr>
<td><strong>Less:</strong> Provision for doubtful debts</td>
<td>4</td>
<td>(82)</td>
</tr>
<tr>
<td><strong>Accrued interest on:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans to rural sector</td>
<td>194</td>
<td>270</td>
</tr>
<tr>
<td>Deposits lodged with Treasurer</td>
<td>45</td>
<td>239</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td></td>
<td>15 175</td>
</tr>
<tr>
<td>Non-current assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans to rural sector</td>
<td>7</td>
<td>3 623</td>
</tr>
<tr>
<td><strong>Less:</strong> Provision for doubtful debts</td>
<td>4</td>
<td>(852)</td>
</tr>
<tr>
<td><strong>Total non-current assets</strong></td>
<td></td>
<td>2 771</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td></td>
<td>17 946</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provisions</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrowings</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>Provisions</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total non-current liabilities</strong></td>
<td></td>
<td>108</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td></td>
<td>110</td>
</tr>
<tr>
<td><strong>Net Assets</strong></td>
<td></td>
<td>17 836</td>
</tr>
</tbody>
</table>
### STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2001

<table>
<thead>
<tr>
<th>Note</th>
<th>2000–01 Inflows (Outflows)</th>
<th>1999–2000 Inflows (Outflows)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$'000</td>
<td>$'000</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td><strong>CASH FLOWS FROM OPERATING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest received on loans to the rural sector</td>
<td>334</td>
<td>352</td>
</tr>
<tr>
<td>Interest received on deposits lodged with Treasurer</td>
<td>871</td>
<td>814</td>
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<tr>
<td>Grants:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project funding</td>
<td>(1 536)</td>
<td>(2 714)</td>
</tr>
<tr>
<td>Young Farmers Scheme</td>
<td>–</td>
<td>(49)</td>
</tr>
<tr>
<td>Administration expenses</td>
<td>(98)</td>
<td>(81)</td>
</tr>
<tr>
<td>Other</td>
<td>(2)</td>
<td>(1)</td>
</tr>
<tr>
<td><strong>Net cash used in operating activities</strong></td>
<td>9</td>
<td>(431)</td>
</tr>
<tr>
<td><strong>CASH FLOWS FROM INVESTING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans advanced to rural sector</td>
<td>(74)</td>
<td></td>
</tr>
<tr>
<td>Loans repaid by rural sector</td>
<td>568</td>
<td>425</td>
</tr>
<tr>
<td><strong>Net cash provided by investing activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>568</td>
<td>425</td>
</tr>
<tr>
<td><strong>CASH FLOWS FROM FINANCING ACTIVITIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal repayments</td>
<td>(18)</td>
<td>(6)</td>
</tr>
<tr>
<td><strong>Net cash used in financing activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(18)</td>
<td>(6)</td>
</tr>
<tr>
<td><strong>NET (DECREASE) INCREASE IN CASH HELD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>(1 260)</td>
</tr>
<tr>
<td><strong>CASH AT 1 JULY</strong></td>
<td>14 625</td>
<td>15 738</td>
</tr>
<tr>
<td><strong>TRANSFER OF NATURAL DISASTER RELIEF FUND SURPLUSES</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>–</td>
<td>147</td>
</tr>
<tr>
<td><strong>CASH AT 30 JUNE</strong></td>
<td>14 670</td>
<td>14 625</td>
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</table>

### NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS

1. **Statement of accounting policies**

The Rural Industry Adjustment and Development Fund is established under the *Rural Industry Adjustment and Development Act 1985*. The primary purpose of the Fund is to provide loans and grants, at Ministerial discretion, to develop a farm, make adjustments to farming methods or to undertake a project or research for the benefit of farmers.

The financial statements are in accordance with Statements of Accounting Concepts, applicable Australian Accounting Standards and with Treasurer’s Instruction 1000, ‘Annual Financial Statements’ issued pursuant to the Public Finance and Audit Act. The statements have been prepared in accordance with the historical cost convention using the accrual method of accounting.

**Rural Industry Adjustment and Development Fund**

The Rural Industry Adjustment and Development Act section 5(1) requires that a fund, entitled the Rural Industry Adjustment and Development Fund, be established and maintained at Treasury.

**Long service leave and annual leave**

The provisions represent all outstanding liabilities for annual leave due but not yet paid and long service leave for employees with eight or more years of service as at 30 June 2001.

**Provision for doubtful debts**

A provision is raised for any doubtful debts on a review of all outstanding amounts at year end. This is calculated at 5% of the total loans to rural sector. In previous years, the doubtful debt provision has been calculated at 10% of the total loans.
2. **Interest comprises interest received on**

<table>
<thead>
<tr>
<th></th>
<th>2000–01 $’000</th>
<th>1999–2000 $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans to the rural sector</td>
<td>258</td>
<td>319</td>
</tr>
<tr>
<td>Deposits lodged with the Treasurer</td>
<td>863</td>
<td>823</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1 121</td>
<td>1 142</td>
</tr>
</tbody>
</table>

3. **Project funding comprises payments for the following activities**

<table>
<thead>
<tr>
<th>Activity</th>
<th>2000–01 $’000</th>
<th>1999–2000 $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Industries — marketing and development</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Industry Development Board for Value Chain Analysis</td>
<td>226</td>
<td>–</td>
</tr>
<tr>
<td>Primary Industries Kangaroo Island</td>
<td>162</td>
<td>–</td>
</tr>
<tr>
<td>Industry Development Board for Sustainable Industries Rangelands</td>
<td>127</td>
<td>–</td>
</tr>
<tr>
<td>Industry Development Board for Lamb</td>
<td>100</td>
<td>–</td>
</tr>
<tr>
<td>Industry Development Board for Wool</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Primary Industries — Integrated Livestock Management Initiative</td>
<td>–</td>
<td>1 350</td>
</tr>
<tr>
<td>Primary Industries — Crop Biotechnologies</td>
<td>–</td>
<td>500</td>
</tr>
<tr>
<td>Greenhouse Industry Modernisation Project</td>
<td>154</td>
<td>–</td>
</tr>
<tr>
<td>Other</td>
<td>170</td>
<td>267</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1 536</td>
<td>2 714</td>
</tr>
</tbody>
</table>

4. **Provision for doubtful debts**

Movements in the provision for doubtful debts during the year were:

<table>
<thead>
<tr>
<th>2000–01 $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance 1 July 2000</td>
</tr>
<tr>
<td>Less: Written off</td>
</tr>
<tr>
<td>Add: Amount provided</td>
</tr>
<tr>
<td><strong>Balance 30 June 2001</strong></td>
</tr>
</tbody>
</table>

5. **Transfer to Committed Grants Reserve**

The Committed Grants Reserve was established to provide for grant commitments which as at 30 June 2001 had not been advanced.

6. **Provisions**

<table>
<thead>
<tr>
<th></th>
<th>2000–01 $’000</th>
<th>1999–2000 $’000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee entitlements — current</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Employee entitlements — non-current</td>
<td>18</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
<td>12</td>
</tr>
</tbody>
</table>
7. Loans to rural sector

<table>
<thead>
<tr>
<th></th>
<th>2000–01 $'000</th>
<th>1999–2000 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance 1 July</td>
<td>5 100</td>
<td>5 525</td>
</tr>
<tr>
<td>Add: Advances during year</td>
<td>74</td>
<td>–</td>
</tr>
<tr>
<td>Interest capitalised</td>
<td>334</td>
<td>352</td>
</tr>
<tr>
<td></td>
<td>5 508</td>
<td>5 877</td>
</tr>
<tr>
<td>Less: Principal repayments</td>
<td>902</td>
<td>777</td>
</tr>
<tr>
<td>Debt write-off</td>
<td>635</td>
<td>–</td>
</tr>
<tr>
<td>Balance 30 June</td>
<td>3 971</td>
<td>5 100</td>
</tr>
</tbody>
</table>

Current

<table>
<thead>
<tr>
<th></th>
<th>2000–01 $'000</th>
<th>1999–2000 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less provision for doubtful debts</td>
<td>(82)</td>
<td>(59)</td>
</tr>
<tr>
<td>Net current</td>
<td>266</td>
<td>271</td>
</tr>
<tr>
<td>Non-current</td>
<td>3 623</td>
<td>4 770</td>
</tr>
<tr>
<td>Less provision for doubtful debts</td>
<td>(852)</td>
<td>849</td>
</tr>
<tr>
<td>Net non-current</td>
<td>2 771</td>
<td>3 921</td>
</tr>
</tbody>
</table>

8. Accrued interest

Represents interest accrued to 30 June 2001 but not receivable until 2001–02.

9. Reconciliation of loss from ordinary activities to net cash used in operating activities

<table>
<thead>
<tr>
<th></th>
<th>2000–01 $'000</th>
<th>1999–2000 $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss from ordinary activities</td>
<td>(1 184)</td>
<td>(1 690)</td>
</tr>
<tr>
<td>Decrease in accrued interest receivable on loans</td>
<td>76</td>
<td>33</td>
</tr>
<tr>
<td>Decrease (increase) decrease in accrued interest receivable on deposits with treasurer</td>
<td>8</td>
<td>(9)</td>
</tr>
<tr>
<td>Provision for doubtful debts</td>
<td>661</td>
<td>(17)</td>
</tr>
<tr>
<td>Increase in provisions</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>(431)</td>
<td>(1 679)</td>
</tr>
</tbody>
</table>

10. Equity

<table>
<thead>
<tr>
<th></th>
<th>Accumulated Surplus $'000</th>
<th>Committed Grants Reserve $'000</th>
<th>General Reserve $'000</th>
<th>Total $'000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as 1 July</td>
<td>8 676</td>
<td>8 344</td>
<td>2 000</td>
<td>19 020</td>
</tr>
<tr>
<td>Change in net assets resulting from operations</td>
<td>(1 184)</td>
<td>–</td>
<td>–</td>
<td>(1 184)</td>
</tr>
<tr>
<td>Transfers to (from) Reserves</td>
<td>314</td>
<td>(314)</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Balance as at 30 June</td>
<td>7 806</td>
<td>8 030</td>
<td>2 000</td>
<td>17 836</td>
</tr>
</tbody>
</table>
RURAL INDUSTRY ADJUSTMENT AND DEVELOPMENT FUND

DECLARATION

The accompanying financial statements and notes present fairly the financial position, results of operations and cash flows in accordance with Statements of Accounting Concepts and Australian Accounting Standards.

Dennis Mutton
CHIEF EXECUTIVE

Geoff Knight
EXECUTIVE DIRECTOR, CORPORATE

K.L. Smith
ACCOUNTING OFFICER, FINANCIAL REPORTING
INDEPENDENT AUDIT REPORT

TO THE CHIEF EXECUTIVE

SCOPE

As required by section 31 of the Public Finance and Audit Act 1987, and section 14 of the Rural Industry Adjustment and Development Act 1985, I have audited the financial report of the Department of Primary Industries and Resources - Rural Industry Adjustment and Development Fund for the financial year ended 30 June 2001. The financial report comprises:

- A Statement of Financial Performance;
- A Statement of Financial Position;
- A Statement of Cash Flows;
- Notes to and forming part of the Financial Statements;
- A Certificate by the Chief Executive of the Department of Primary Industries and Resources, the Executive Director, Corporate and the Accounting Officer, Financial Reporting.

The Chief Executive of the Department of Primary Industries and Resources, the Executive Director, Corporate and the Accounting Officer, Financial Reporting are responsible for the financial report. I have conducted an independent audit of the financial report in order to express an opinion on it to the Chief Executive.

The audit has been conducted in accordance with the requirements of the Public Finance and Audit Act 1987 and Australian Auditing Standards to provide reasonable assurance that the financial report is free of material misstatement.

Audit procedures included examination, on a test basis, of evidence supporting the amounts and other disclosures in the financial report, and the evaluation of accounting policies and significant accounting estimates. These procedures have been undertaken to form an opinion whether, in all material respects, the financial report is presented fairly in accordance with Treasurer's Instructions promulgated under the provisions of the Public Finance and Audit Act 1987, Australian Accounting Standards and other mandatory professional reporting requirements including Urgent Issues Group Consensus Views so as to present a view which is consistent with my understanding of the Department of Primary Industries and Resources - Rural Industry Adjustment and Development Fund's financial position and performance as represented by the results of its operations and its cash flows.

The audit opinion expressed in this report has been formed on the above basis.

AUDIT OPINION

In my opinion the financial report presents fairly in accordance with the Treasurer's Instructions promulgated under the provisions of the Public Finance and Audit Act 1987, applicable Australian Accounting Standards and other mandatory professional reporting requirements, the financial position of the Department of Primary Industries and Resources - Rural Industry Adjustment and Development Fund as at 30 June 2001, the results of its operations and its cash flows for the year then ended.

28 September 2001

K I MacPHerson
AUDITOR-GENERAL
Contacts

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PIRSA has over 50 offices distributed across the State and Adelaide metropolitan area and these are listed in the Adelaide and various country White Pages.
<table>
<thead>
<tr>
<th>Inqury</th>
<th>Contact</th>
<th>Phone, fax and location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deputy Premier, Minister for Primary Industries and Resources and Minister for Regional Development</td>
<td>Rob Kerin MP</td>
<td>phone (08) 8226 0023, fax (08) 8226 0316</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level 17, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Minister for Minerals and Energy and Minister Assisting the Deputy Premier</td>
<td>Wayne Matthew MP</td>
<td>phone (08) 8226 2902, fax (08) 8226 0844</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level 12, SGIC Building, 211 Victoria Square, Adelaide</td>
</tr>
<tr>
<td>Chief Executive</td>
<td>Dennis Mutton</td>
<td>phone (08) 8226 0168, fax (08) 8226 0320</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level 17, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Food for the Future</td>
<td>Susan Nelle</td>
<td>phone (08) 8226 0585, fax (08) 8226 0188</td>
</tr>
<tr>
<td></td>
<td>Director</td>
<td>Level 16, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Food and Fibre</td>
<td>Barry Windle</td>
<td>phone (08) 8226 0310, fax (08) 8463 3363</td>
</tr>
<tr>
<td></td>
<td>Executive Director</td>
<td>Level 9, 101 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Agricultural Industries</td>
<td>Vacant</td>
<td>phone (08) 8226 0310, fax (08) 8463 3363</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level 9, 101 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Fisheries</td>
<td>Will Zacharin</td>
<td>phone (08) 8226 2316, fax (08) 8226 0434</td>
</tr>
<tr>
<td></td>
<td>Director</td>
<td>Level 14, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Aquaculture SA</td>
<td>Ian Nightingale</td>
<td>phone (08) 8226 0314, fax (08) 8226 0330</td>
</tr>
<tr>
<td></td>
<td>General Manager</td>
<td>Level 14, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>SARDI (South Australian Research and Development Institute)</td>
<td>Rob Lewis</td>
<td>phone (08) 8303 9401, fax (08) 8303 9403</td>
</tr>
<tr>
<td></td>
<td>Executive Director</td>
<td>Plant Research Centre, Gate 2B, Hartley Grove, Urrbrae</td>
</tr>
<tr>
<td>Sustainable Resources</td>
<td>Roger Wickes</td>
<td>phone (08) 8303 9522, fax (08) 8303 9555</td>
</tr>
<tr>
<td></td>
<td>Executive Director</td>
<td>Sustainable Resources Plant Research Centre, Gate 4, Hartley Grove, Urrbrae</td>
</tr>
<tr>
<td>Office of Minerals and Energy Resources</td>
<td>David Blight</td>
<td>phone (08) 8463 4153, fax (08) 8463 4155</td>
</tr>
<tr>
<td></td>
<td>Executive Director</td>
<td>Level 7, 101 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Mineral Resources</td>
<td>Neville Alley</td>
<td>phone (08) 8463 3204, fax (08) 8463 4155</td>
</tr>
<tr>
<td></td>
<td>Director</td>
<td>Level 7, 101 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Petroleum</td>
<td>Bob Laws</td>
<td>phone (08) 8463 3204, fax (08) 8463 4155</td>
</tr>
<tr>
<td></td>
<td>Director</td>
<td>Level 7, 101 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Energy SA</td>
<td>Cliff Fong</td>
<td>phone (08) 8226 5544, fax (08) 8226 5541</td>
</tr>
<tr>
<td></td>
<td>Executive Director</td>
<td>Level 19, Wakefield House, 30 Wakefield Street, Adelaide</td>
</tr>
<tr>
<td>PIRSA Corporate</td>
<td>Geoff Knight</td>
<td>phone (08) 8226 3368, fax (08) 8226 0299</td>
</tr>
<tr>
<td></td>
<td>Executive Director</td>
<td>Level 17, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Public Relations and Communications</td>
<td>Kay Matthias</td>
<td>phone (08) 8226 0338, fax (08) 8226 0027</td>
</tr>
<tr>
<td></td>
<td>General Manager</td>
<td>Level 17, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Office of Regional Development</td>
<td>Wayne Morgan</td>
<td>phone (08) 8226 3553, fax (08) 8226 0855</td>
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<tr>
<td></td>
<td>Executive Director</td>
<td>Level 17, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
<tr>
<td>Bio Innovation</td>
<td>Jurgen Michaelis</td>
<td>phone (08) 8226 0447, fax (08) 8226 0316</td>
</tr>
<tr>
<td></td>
<td>Director and Chief Executive Officer</td>
<td>Level 17, Grenfell Centre, 25 Grenfell Street, Adelaide</td>
</tr>
</tbody>
</table>