

CORPORATE RESOURCE MANAGEMENT

The operation of a national meteorological service is resource intensive, especially for a country the size of Australia. To undertake all the activities of the Bureau, approximately 1400 professional, technical and administrative staff are employed right across Australia, its offshore islands and Antarctica, including many specialists who have skills and training specific to the fulfilment of the Bureau's functions. A significant proportion of staff work shifts to maintain a round-the-clock nation-wide weather watch and to provide ongoing forecasts every day of the year.

Like its staff, the Bureau's asset base is widely dispersed. It includes observing instruments, computing and communications systems, software, land and buildings, some of which are in remote locations such as the field offices at Casey, Davis and Mawson in Antarctica, or sited on coral reefs in the Pacific Ocean. The Bureau manages assets with a total replacement value of approximately \$451 million.

In an environment characterised by ongoing technological change, this array of human, capital and financial resources demands robust management. The Bureau's ongoing challenge in corporate resource management is to carry out its statutory functions to acceptable levels within a resource constrained environment. More information on specific aspects of the Bureau's resource management activity during 2007-08 is provided below.

WORKFORCE PLANNING AND STAFF RETENTION AND TURNOVER

During 2007-08 the Bureau continued to enjoy the organisational benefits of an effective, well-trained and highly committed workforce. While staff turnover rates have generally continued to be quite low compared with most other Australian Public Service (APS) agencies, a major organisational challenge facing the Bureau over the next 5-10 years is the continued maintenance of the scientific quality and integrity and specialist nature of its operations and services in the face of ongoing loss of experience as significant numbers of staff retire.

As in past years, the Bureau placed a strong emphasis on workforce planning to maintain its key service operations and to support corporate objectives. The Bureau's staff age profile, characterised by a strong mid-50s peak resulting primarily from the high level of staff retention and the limited opportunities for recruitment, continues to be a factor in workforce planning. The Bureau's 2007-08 recruitment program was aimed at employing qualified staff to replace the loss of expertise that will occur over the next few years, and at the progressive re-establishment of a balanced age profile across the organisation. The recruitment of specialist staff groups (meteorologists, observers and technicians) was, of necessity, limited this year but the objective was to achieve a balanced recruitment outcome for all categories of staff employed in the Bureau. This proved to be particularly difficult as recruitment programs were not able to fully offset natural attrition. The Bureau is taking steps to address this situation in a more strategic manner so as to ensure a balanced and effective workforce in the immediate years ahead.

In recognition of the ongoing need for the holistic management of staff performance and to train staff for future roles, the Bureau continued to give emphasis to the strategic development of its workforce. In particular, the Bureau continued working towards formulating a succession planning process to prepare staff at all levels for those roles crucial to achieving the organisation's outcomes. Similarly, work continued on a new learning and development framework using the management principles contained in the APS framework. The focus of both of these strategies was to meet future requirements for sufficient numbers of suitably qualified staff having the essential skills, knowledge and attributes to fill critical roles at senior management and other levels.

Several other initiatives are being utilised to varying degrees including leadership and management training, greater emphasis on career planning, coaching and mentoring programs, job rotations, job assignments and intensified development of employees who demonstrate leadership potential.

TRAINING

The primary objective of the Bureau's training program is to meet current and emerging needs for a workforce with appropriate professional, specialised technical and management skills. A secondary objective is to provide specialised meteorological training to Defence Force personnel and to the staff of overseas National Meteorological and Hydrological Services (NMHSs).

To meet these objectives the Bureau of Meteorology Training Centre (BMTC) provides:

- specialised postgraduate meteorological training in operational forecasting for new staff of the Bureau, the Royal Australian Navy (RAN) and overseas NMHSs;
- technical and general training in specialised meteorological support duties and systems for new Bureau technical staff, trainees from overseas, Defence Force personnel and approved external participants;
- in-service training to maintain relevant professional and technical skills;
- management and development training for all categories of Bureau staff;
- curriculum development and the development and delivery of new courses for all training activities, including Computer Aided Learning and web-based modules; and
- consultative services on the education and training aspects of major new Bureau projects.

The BMTC also manages the operation of the National Meteorological Library.

INTERNAL TRAINING ACTIVITIES

During 2007, 47 new professional and technical staff completed extended initial training courses, which are planned on a calendar year basis to align with the availability of graduates from the tertiary education sector. Of these staff, 20 undertook the 40-week Graduate Diploma in Meteorology course, 18 the 30-week Technical Officer (Observer) course and nine the Technical Officer (Engineering) course. There was no initial recruitment in 2008.

Throughout the year, about 640 staff received specialised technical or professional in-

service training. For Technical Officers (Observer) this included training in first-in maintenance of observing equipment and the operation of new observing systems. For Technical Officers (Engineering) it included training for licensing and occupational safety requirements and in the operation of new equipment. Training in frontline management was also provided for Technical Officers. Meteorologists throughout the regions received training linked to the Bureau's Radar Network and Doppler Services Upgrade Project to support the introduction of new or enhanced services, particularly severe thunderstorm warning services. Other training for Regional Office meteorologists focussed on forecasting of tropical cyclones and hazardous weather for aviation, and on forecasts to support bush fire fighters. A training program for Regional Office staff on the Bureau's tsunami warning service was also run.

A major activity undertaken by the BMTC and the Victoria Regional Office was training in the Graphical Forecast Editor, a new forecasting system which embodies a significantly different paradigm for the production of forecasts from that traditionally used. An intensive training program commenced in February as part of planning for a pilot of the system in the Victoria Regional Forecasting Centre.

Leadership and professional development training continued to have high take-up rates with more than 1030 staff participating in short training courses, ranging in length from one day to one week. Additionally, almost 400 staff accessed online training in areas such as APS Values and Code of Conduct, Equal Employment Opportunity, Occupational Health and Safety and Trade Practices, and a total of 60 non-meteorological staff took part in one of two



Louise Carroll receives her Graduate Diploma of Meteorology from Deputy Director (Services), Gary Foley, at the 2007 Graduate Diploma in Meteorology course graduation.

five-day Introductory Meteorology courses, which provided an improved understanding of the context for their work.

A Bureau-specific Management Education Program (MEP) was conducted by the Association of Professional Engineers, Scientists and Managers Australia in conjunction with La Trobe University. The MEP provides formal qualifications at the Certificate and Graduate Certificate levels with 21 staff enrolled during 2007-08. Under the Bureau's Studybank scheme, 32 staff enrolled or continued as part-time students. Three staff continued full-time studies under Bureau scholarships to further their tertiary qualifications, and another completed studies on a part-time scholarship.

Bureau staff also provided meteorological courses at Royal Australian Air Force (RAAF) training bases in Pearce (Western Australia) and East Sale (Victoria). Some 349 RAAF pilots, air traffic controllers, navigators and flying instructors undertook meteorological training courses during 2007-08. In addition, four Royal Australian Navy (RAN) officers undertook the Bureau's Graduate Diploma in Meteorology course.

In support of the Bureau's corporate strategic objective of commitment to university education in meteorology and related fields, the BMTC maintained strong links with several tertiary education institutions, in particular with Monash University, RMIT University, La Trobe University and the University of Melbourne. These included reciprocal lecturing arrangements on specialised meteorology courses and provision of a short practical meteorology course run for final year and postgraduate atmospheric science students.

INTERNATIONAL TRAINING ACTIVITIES

The Bureau maintained a strong involvement in the World Meteorological Organization (WMO) Education and Training Programme. The WMO seventh Southern Hemisphere Public Weather Workshop and associated Tropical Cyclone Workshop were hosted during September and were attended by a number of staff from WMO Member countries and territories in the Pacific, South-East Asia and Africa. In addition, five staff members of national meteorological services of Pacific Island Countries and one from Sri Lanka undertook the Bureau's Graduate Diploma in Meteorology, joining the 20 Bureau and four RAN students, and three staff from the New Caledonia Meteorological Service were trained in weather radar maintenance.

A joint project with the US Cooperative Program for Meteorological Education and Training (COMET) involved the development of a web-based training module on fog forecasting, which will be used as a resource for Bureau aviation forecasters. A COMET instructional designer worked with BMTC stakeholders to facilitate the development of the module. The Bureau of Meteorology also became a participating member of the European Virtual Organisation for Meteorological Training program. BMTC's active participation will give the Bureau access to a library of online training resources.

NATIONAL METEOROLOGICAL LIBRARY

The National Meteorological Library maintains a pre-eminent collection of key meteorological books, reports and journals published in the English language, and endeavours to archive all meteorological books and reports published in Australia. In accordance with its Collection Development Policy, the library also collects reports and journals from other national meteorological services.

The National Meteorological Library's main collection is at the Head Office library in Melbourne, with smaller collections held in the Bureau's Regional Offices, the Canberra and Townsville Meteorological Offices, and Cape Grim Baseline Air Pollution Station, Tasmania. The library supports the programs of the Bureau of Meteorology but also provides services to other government agencies, universities, organisations with a particular interest in the science of meteorology, and the general public, and has more than 800 registered borrowers Australia-wide.

Over the year, 1,500 books and reports were added to the library collection. More than 660 journal titles were received, of which 230 were available in electronic format. The number of books and reports held by the National Meteorological Library totals more than 40,000 and, in addition, the library holds 485 climate data titles and 50,000 bound journal volumes. Electronic table-of-content and full text journal article alerting services were distributed nationally to Bureau staff. The increased range of electronic resources is particularly valuable to Bureau staff outside the Melbourne Head Office.

Working with the Bureau of Meteorology Corporate Communication Unit, the library continued to support access to more than 2,200 meteorological images listed in the library catalogue, Meteoric. An ongoing policy of acquiring and maintaining historical meteorological material also led to continued growth in the number of items in the Preservation Collection.

The National Meteorological Library continued to contribute its holdings to the national bibliographic database via the National Library of Australia's Libraries Australia service. It also serviced inter-library loan requests from libraries in Australia and overseas, and continued as a member of Libraries Australia's Document Delivery Service, which facilitates electronic transfer of requests between libraries. The library catalogue, Meteoric, which contains more than 32,000 records, was made freely available to the general public via the Bureau's internet site.

FINANCIAL MANAGEMENT ISSUES

The Bureau achieved a modest operating surplus of \$4.356 million for the 2007-08 financial year.

During the year, the Ionospheric Prediction Service (IPS) was transferred to the Bureau from the Department of Industry, Tourism and Resources. The transfer of financial responsibility was effective as at 3 December, and resulted in an additional \$2.554 million in appropriation revenue being made available to cover IPS operational expenses.

For the first time in 2007-08, the Bureau was responsible for an administered grants program, with \$8.043 million (GST-exclusive) being distributed in relation to the Modernisation and Extension of Hydrologic Monitoring Services Programme, which is part of the Bureau's new water information function. Details of these grants are provided in Appendix 11.

PURCHASING

The purchasing of goods and services by the Bureau is conducted in accordance with the Commonwealth Procurement Guidelines and the Chief Executive Instructions. Delegations and procedures are in place to provide effective control and management of the procurement process.

The Bureau takes a coordinated approach to contract development and management. The process brings together the necessary procurement, financial and legal expertise to assist all areas of the Bureau on contracting and purchasing matters.

ASSET MANAGEMENT

During 2007-08 several significant asset management initiatives were undertaken including:

- a major stocktake of stock held at the Bureau's warehouse;
- a stocktake of the Bureau's radar network;
- reassessment of the previous year's make-good estimates for new and existing premises and sites;
- further refinement and reissuing of asset policies (disposal, capitalisation and stocktake);
- assessment for Impairment Review of all asset classes; and
- the commissioning of \$42.1 million in assets under construction.

Property resource and leasehold management in 2007-08 involved civil works and fit-out programs required to provide adequate and energy-efficient operational environments, improvements to staff accommodation and security, ongoing rationalisation of national property assets, and continued refinement of property asset management and reporting systems.

Other property and leasehold activities progressed during the year included:

- the construction of a new radar at Bairnsdale in Victoria;
- the construction of a new radar at Gove in Queensland;
- the fit-out of new office accommodation for the Canberra Meteorological Office at the Canberra International Airport;
- the fit-out of new office accommodation for the Victoria Regional office in Docklands;
- the fit-out of new office accommodation for the Water Division in Canberra; and
- the construction of a new Queensland Regional Maintenance Centre at Eagle Farm, Brisbane.

CONSULTANTS

The selection and engagement of consultants is treated in the same way as the procurement of other goods and services and is conducted in accordance with the Commonwealth Procurement Guidelines and the Chief Executive Instructions. Where competition exists, and it is efficient to do so, selection on an open tender approach to the market is adopted, and is approved on a case-by-case basis.

Consultants are normally engaged where the necessary skills or expertise are not available within the Bureau and are not required permanently, or to compensate for short-term skills shortages, but may also be engaged to provide independent advice and expertise to the Bureau.

During 2007-08, 24 new consultancy contracts were entered into involving total actual expenditure of \$705,531. In addition, 14 ongoing consultancy contracts were active during the 2007-08 financial year, involving total actual expenditure of \$471,844. Details of consultancies in excess of \$10,000 are provided in Appendix 10.

EXEMPT CONTRACTS

There were no contracts or standing offers from the Bureau that were exempted by the Chief Executive from being published in AusTender on the basis that it would disclose exempt matters under the *Freedom of Information Act 1982*.

EXPENDITURE ON LEGAL SERVICES

The following statement is provided in accordance with paragraph 11.1 of the *Legal Services Directions 2005* which requires appropriate recording and monitoring of legal services expenditure for the financial year.

During 2007-08, the total expenditure on legal services was \$572,686 (GST-exclusive). Expenditure on internal legal services was \$138,627. The total expenditure on external legal services was \$434,058, comprising:

- \$434,058 for solicitor services; and
- nil for counsel services.