

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 1,500 professional, technical and administrative staff are employed across Australia, its off-shore 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 nationwide 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, sited on coral reefs, or in deep waters on the ocean floor in the Pacific and Indian Oceans. The Bureau manages assets with a book value of approximately \$419 million, in an environment characterised by ongoing technological change. More information on specific aspects of the Bureau's resource management activity during 2008-09 is provided below.

Workforce Planning and Staff Retention and Turnover

During 2008-09 the Bureau continued to enjoy the organisational benefits of an effective, well-trained and highly committed workforce, albeit in a climate of increasing change and growing demands for services. Arising from its new role in providing water information services and with the creation of the organisational units to support this role, the Bureau experienced a major injection of staff, particularly in respect of hydrologists but also in other categories.

Staff turnover rates generally remained low when compared with most other Australian Public Service (APS) agencies, however over the next 5-10 years the Bureau will face a challenge to maintain the scientific quality and integrity and specialist nature of its operations and services due to the ongoing loss of experience as significant numbers of staff retire. In addition, the Bureau's staff age profile is characterised in a number of significant areas by a strong mid-50s peak, and this will require a proactive approach to succession management. The Bureau's 2008-09 recruitment program was aimed to some degree at employing qualified staff to replace these expected losses, and also at the progressive re-establishment of a more balanced age profile across the organisation.

The recruitment of specialist staff groups (meteorologists, hydrologists, observers and technicians) remained a high priority, and was complemented by modest recruitment in other categories. However, in spite of specific additional recruitment for the new Water Division, and best endeavours generally, because of other priorities these recruitments were not able to fully offset natural attrition in all categories.

Recognising all of the above, and noting ongoing work on a range of related matters such as performance management and capability development, the Bureau concluded that in respect of workforce skills and future leadership development generally, the existing controls/ measures and planned treatments were not adequate. Greater emphasis on a more strategic approach to workforce planning and development was considered necessary if the Bureau is to maintain key service operations and support the achievement of corporate objectives.

As a result, a formal Workforce Planning Project was commenced. Good progress was made during the later part of the year, with a workshop involving most senior managers contributing to the assessment of risks and the identification of the key elements of a future Workforce Plan. During that process, a small number of key 'milestone' projects were identified for completion by December 2009, including considerations of capability management, performance management, leadership training and the development of an overarching workforce plan.

The focus of all workforce planning strategies will be 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 in the Bureau. The objective will be to deliver successful business outcomes through human resource capabilities, ultimately establishing the right people in the right place at the right time.

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 the Defence Force and to 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, and through agreement, to the Royal Australian Navy (RAN) and overseas NMHSs;
- technical and general training in specialised meteorological support duties and systems for new Bureau technical staff, and through agreement, to trainees from overseas, Defence Force personnel and approved external participants;
- in-service training to maintain professional and technical skills;
- management and development training;
- 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 2008-09, 47 new professional and technical staff commenced the 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, 27 were undertaking the 40-week Graduate Diploma in Meteorology course (including six officers attached to the Royal Australian Navy and seven staff of overseas NMHSs), 12 the 30-week Technical Officer (Observer) course and eight the Technical Officer (Engineering) course.

Throughout the year, about 625 staff received specialised technical or professional in-service training. For Technical Officers (Observer) this included training on station management procedures 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 (RND SUP) to support the introduction of

new or enhanced services, particularly severe thunderstorm warning services. All forecasting staff in the New South Wales Regional Office were assessed against thunderstorm competencies, and a similar assessment campaign has commenced in the South Australia Regional Office. Specialist Hydrology training, covering flood warning competencies and water catchment simulation, for Water Division staff, were completed during the year.

Other training for Regional Office meteorologists focussed on forecasting of tropical cyclones and hazardous weather for aviation, and on fire weather forecasting. Aviation competency assessments were undertaken for forecasters from the South Australia Regional Office, the East Sale office in Victoria, the Sydney Airport Meteorological Unit (SAMU) and the Williamstown office in New South Wales. A training program for Regional Office staff on the Bureau's tsunami warning service was also completed.

The BMTC and the Victoria Regional Office were heavily involved in training on the Next Generation Forecast and Warning System (formerly termed the Graphical Forecast Editor), a new forecasting system which embodies a significantly different paradigm for the production of forecasts from that previously used. This intensive training and competency assessment program, which commenced in February 2008, was concluded at the end of October when the system was implemented as a fully operational demonstration pilot in the Melbourne Regional Forecasting Centre.

Leadership and professional development training continued to have high take-up rates with some 950 staff participating in short training courses, ranging in length from one day to one week, covering areas such as client service and emotional intelligence. Three induction programs were conducted for 63 new recruits to the Water Division. Additionally, around 950 staff accessed online training in areas such as APS Values and Code of Conduct, Equal Employment Opportunity, and Occupational Health and Safety and Trade Practices, and a total of 43 non-meteorological staff took part in two 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 Chifley Business School. The MEP provides formal qualifications at the Certificate and Graduate Certificate levels with 25 staff enrolled during 2008-09. Under the Bureau's Studybank scheme, 50 staff enrolled or continued as part-time students. Two staff continued full-time studies under Bureau scholarships to further their tertiary qualifications, and another completed studies supported by 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 254 RAAF pilots, air traffic controllers, navigators and flying instructors undertook meteorological training courses during 2008-09. In addition, five Royal Australian Navy (RAN) officers and one Royal New Zealand Navy (RNZN) officer on attachment to the RAN commenced 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 Program. Five staff members of national meteorological services of Pacific Island nations and one each from Singapore and Hong Kong commenced the Bureau's Graduate Diploma in Meteorology, joining the 14 Bureau, five RAN and one RNZN student.

A joint project with the US Cooperative Program for Meteorological Education and Training (COMET) resulted in the publication of a web-based training module on fog forecasting, used as a resource for Bureau aviation forecasters. A COMET instructional designer worked with BMTC stakeholders to facilitate the development of the module. Collaboration with COMET continues with the production of a second online training module on radar signatures for severe thunderstorms.

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 in 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 900 registered borrowers Australia-wide.

Over the year, more than 700 books and reports were added to the Library collection. More than 660 journal issues were received. The Library also received in excess of 200 journal titles 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 about 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 Melbourne.

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. 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 an operating surplus of \$7.8 million for the year end 30 June, with an overall growth in revenue of \$18.8 million relative to 2007-08.

Appropriation funding grew by \$12.6 million with the main contributing factors being the full-year impact of the transfer of the Ionospheric Prediction Service to the Bureau, and increased funds relating to the Bureau's water functions. The Bureau also achieved growth in the sales of goods and services with an increase of \$6.2 million compared with the previous year.

Total operating expenditure increased by \$11.2 million from 2007-08, reflecting increased activity levels from both appropriation-funded activities and sale of goods and services. Employee expenditure rose by \$5.5 million on the prior year, driven by the increased activity levels. Similarly, supplier expenses experienced a growth of \$8.8 million. The growth in these expenses was offset by a reduction in depreciation expense.

The increase in employee expenses was lower than expected, due to the delay in finalising negotiations for a new Certified Agreement, which were expected to be completed prior to June but in the event extended past the end of the financial year.

During 2008-09 the Bureau was responsible for an administered grants program, with \$19.454 million being distributed in relation to the Modernisation and Extension of Hydrologic Monitoring Services Program, which is part of the Bureau's water information function.

Purchasing

The purchase of Bureau goods and services is conducted in accordance with the Commonwealth Procurement Guidelines (CPGs), the Chief Executive Instructions and the Bureau's internal Procurement Policy Manual. Delegations and procedures are in place to provide effective control and management of the procurement process and allow the Bureau to obtain the best value for money, in accordance with the core principle of Commonwealth procurement. Procurement policies and procedures also ensure that the Bureau conducts competitive, non-discriminatory procurement, uses resources efficiently, effectively and ethically, and makes decisions in an accountable and transparent manner as required by the CPGs. 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. This includes periodic review of all procurement-related documentation to ensure that the Bureau's procurement processes are consistent with the CPGs and all other policies that impact on procurement. A review and update of Bureau procurement processes in 2008-09 improved internal processes to ensure adherence to recent changes in Commonwealth procurement policy, such as the 30-day payment policy for small and medium enterprises.

During 2008-09 the Bureau was compliant with the mandatory procurement procedures as outlined in the CPGs. AusTender was used to advertise the Bureau's open tender opportunities and to publish the Bureau's Annual Procurement Plan, which outlines the Bureau's anticipated tender opportunities for the upcoming financial year and is intended to provide an early alert to the marketplace of these opportunities. The Bureau's Annual Procurement Plan is available from the AusTender website at www.tenders.gov.au.

The Bureau was compliant with the requirement to publish details of all contracts with a value of \$10,000 (GST-inclusive) or more arranged in 2008-09 on AusTender, excluding those in the exempt category.

The Bureau was also compliant with the mandatory requirement to publish all contracts valued at \$100,000 (GST-inclusive) or more entered into during the financial year of 2007-08 and the calendar year of 2008 in accordance with the Senate Order on Government Agency Contracts. The report can be accessed on the Bureau's website at <http://www.bom.gov.au/bep/j4358.pdf>.

Asset Management

During 2008-09 several significant asset management initiatives were undertaken including:

- a major stocktake of assets held at the Bureau Head Office;
- a stocktake of the Bureau radar network;
- reassessment of the previous year's make-good estimates for new and existing premises and sites;
- Australian Valuation Office revaluation of all asset classes other than intangibles;
- assessment for Impairment Review of the intangible asset class; and
- the commissioning of \$37.8 million in assets under construction.

Property resource and leasehold management in 2008-09 included 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:

- upgrade of the Bureau's Central Computing Facility to accommodate a new supercomputer;
- the construction of a new Doppler radar at Terrey Hills, Sydney;
- the fit-out of new office accommodation for the Queensland Regional Office in Brisbane;
- the construction of a new Broome Meteorological Office;
- commencement of construction of new meteorological offices at Ceduna and Esperance;
- commencement of construction of a new radar at Serpentine near Perth in Western Australia;
- planning for new radars at Townsville, Tamworth and Emerald; and
- planning for new field offices at Albany, Port Hedland, Geraldton and Sydney Airport.

Consultants

A consultant is defined as an entity - whether an individual, a partnership or a corporation - engaged to provide professional, independent and expert advice or services. The key characteristics of a consultancy are that the services involve the development of an intellectual output that assists with an agency's decision making, and that the output reflects the independent views of the consultant. Consultants are normally engaged where the necessary skills or expertise are not available within the Bureau and are not required permanently, but may also be engaged to provide independent advice and expertise to the Bureau.

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.

During 2008-09, 20 new consultancy contracts were entered into involving total actual expenditure of \$1,100,934. In addition, eight ongoing consultancy contracts were active during the 2008-09 financial year, involving total actual expenditure of \$381,834. Details of consultancies in excess of \$10,000 are provided in Appendix 10.

Exempt Contracts

The CPGs require the publication of details of certain agency agreements and Commonwealth contracts on AusTender. However, the CPGs also allow the Chief Executive of an agency to direct that such details are not to be published where it is established that details of an agency agreement or Commonwealth contract (including standing offers) are exempt matters under the Freedom of Information Act 1982. In 2008-09 there were no contracts or standing offers arranged by the Bureau that were exempted by the Chief Executive from being published in AusTender on this basis.

Australian National Audit Office Access Clauses

The Bureau's tender documentation and contracts include standard access clauses that provide the Auditor-General with access to information held by contractors. The Bureau entered into 25 contracts during 2008-09 with a value of \$100,000 (GST inclusive) or more which did not provide for the Auditor-General to have access to the contractor's premises. Details of these contracts are provided in Appendix 12.

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 2008-09, the total expenditure on legal services was \$489,203 (GST-exclusive). Expenditure on internal legal services was \$140,575. The total expenditure on external legal services was \$348,628, comprising:

- \$348,628 for solicitor services; and
- nil for counsel services.