PERFORMANCE OVERVIEW

The challenges of responding to the community’s needs for meteorological and related services were successfully met in a year that included a number of significant weather events and served to underscore the Bureau’s key role in disaster mitigation. Damage and flooding from severe thunderstorms was widespread, with heavy rainfall on the New South Wales north coast causing major flooding. Tornadoes struck at several points in the southwest of Western Australian including one that cut a swathe of damage through several Perth suburbs. Tropical cyclones were particularly active, wreaking havoc in Western Australia, the Northern Territory and Queensland, with cyclone Larry’s devastating winds causing massive damage to buildings, infrastructure and crops where it crossed the tropical North Queensland coast near Innisfail. The Bureau’s Willis Island weather watch radar played a critical role in tracking the cyclone and providing early warning of the likely impact.

However, continuing budget pressures and the challenge of sustaining the existing asset base with current levels of depreciation funding adversely impacted the Bureau’s capacity to maintain and operate the national meteorological infrastructure and to identify and meet emerging needs for new services. While planning commenced for a rebalancing of operations and networks, it will not be possible to continue to maintain service levels without resolving these underlying issues.

Some other notable achievements included:

- progress towards the establishment of an Australian Tsunami Warning System, in collaboration with Geoscience Australia and Emergency Management Australia;
- installation of new radar facilities at Tennant Creek and Mackay, and new Doppler radars for Adelaide and Brisbane, as part of the Radar Network and Doppler Services Upgrade Project;
- commissioning of the new Meteorological Office at Mackay and significant progress on rebuilding of meteorological facilities on Willis Island, as part of the Field Office Replacement Project;
- the introduction of seven-day forecasts for all capital cities, ensuring the community
continues to receive timely and accurate longer-term information using the most up to date technology available;

- signing of a Memorandum of Agreement with the United States National Oceanic and Atmospheric Administration (NOAA) providing access to the latest software systems to support the provision of forecasts and warnings and to facilitate cooperation in the implementation of tsunami warning systems;

- commencement of a SunSmart UV alert service, in collaboration with the Cancer Council Australia and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA);

- successful completion of the Tropical Warm Pool - International Cloud Experiment (TWP-ICE) observational phase, the largest international weather experiment to take place in Australia;

- recognition of the Bureau’s website as the most popular government website and nationally the most popular Australian education reference website of 2005;

- implementation of a new version of the Australian region LAPS (Limited Area Prediction System) using satellite wind observations and providing greatly improved forecasts for the upper atmosphere;

- work in collaboration with CSIRO on the Australian Community Climate and Earth System Simulator (ACCESS), a new generation earth system simulator for examining, inter alia, climate change issues; and

- celebration of the 30th anniversary of the Cape Grim Baseline Air Pollution Station, one of the premier stations in the World Meteorological Organization (WMO) Global Atmosphere Watch Network.

The Bureau reached and exceeded many of its performance targets identified in the 2005-06 Portfolio Budget Statements. However, while indicating continued maintenance of satisfactory performance levels, these targets do not convey the vulnerability of operations in the medium to longer term under present budget arrangements and with increasing demands for services. Careful consideration will need to be given to realigning targets to reflect the Bureau’s real capacity to meet community expectations with current resource levels.

**SIGNIFICANT ISSUES**

Many challenges continued to face the Bureau of Meteorology in 2005-06, including:

- introduction of a new payroll system to provide better services for staff and its integration with the financial and management information systems;

- preparation for the acquisition of state-of-the-art forecasting tools to provide enhanced efficiency and effectiveness through automation of some manual forecasting tasks;

- establishment of an effective balance between automated and manual observations programs, including successful introduction of a new model for Meteorological Office operations;

- achievement of effective collaboration with Pacific Basin countries to maintain and
enhance their weather and climate services for mutual benefit across the region; and
• development of new products and services to equitably and sustainably meet community needs.

FINANCIAL RESULTS

Through the 2005-06 Budget, the Government provided additional funding over the following four years of: $0.884m for implementation of the Australian-United States Free Trade Agreement; $9.519m for Field Meteorological Office Replacement; and $48.566m for the Australian Tsunami Warning System (Indian and Pacific Oceans). Supplementation of $4.444m provided through Supplementary Additional Estimates and careful management of staffing numbers in the second half of the year resulted in a small operating surplus. Further information on the financial performance of the Bureau of Meteorology is available in the financial statements, commencing on page 133 of this report.

OUTLOOK FOR 2006-07

The Bureau of Meteorology will continue to provide high quality weather and related forecasts and warnings to the Australian community as its highest priority. Associated with this there will be a number of on-going and new activities, including:
• upgrade and installation of equipment for the Australian Baseline Sea Level network, as part of the Australian Tsunami Warning System, in collaboration with Emergency Management Australia and Geoscience Australia;
• operational introduction of new Doppler radar facilities in Melbourne and Tamworth, and associated services;
• continuation of the Bureau’s enhanced field office replacement program, including completion of Willis Island and commissioning of replacement offices at Charleville, Broome and Sydney Airport;
• planning, procurement and development of equipment and systems for the next generation automatic weather station;
• commissioning of new equipment e.g. radars, automatic weather stations, wind profilers and new generation satellite reception facilities;
• finding further efficiencies in Bureau programs to enable improved products and services to be delivered with fewer staff;
• progressing the ACCESS initiative with CSIRO, the Australian Greenhouse Office (AGO) and scientists from other academic institutions;
• enhancement of the new payroll and human resource management system;
• development and implementation of new forecast systems in collaboration with the NOAA Earth Science Research Laboratory (ESRL); and
• contributions to the implementation of disaster mitigation strategies.