## FINANCE

#### SCIENCE BUDGET

In 1998/99 the value of the CEH baseline Science Budget, which underpins the CEH Science Programme and contributes towards the costs of infrastructure, rose slightly in cash terms to reflect an additional infrastructure grant awarded by NERC, but was also reduced by a similar amount to reflect notional savings made as a result of the Rationalisation and Restructuring Programme approved by NERC Council. Various other adjustments (e.g. to Superannuation contributions), for cash flow loans (for capital investment in buildings) and for advances against customer commitments to the major Countryside Survey 2000 programme have also changed the figures, without affecting the underlying value of the Science Budget to CEH. As in previous years, therefore, the lack of revaluation represented a decline in real terms in the baseline CEH allocation. The NERC Operating Plan for 1999-2002, for the period covered by the Comprehensive Spending Review (CSR), however, now provides funding in forward years for a degree of maintenance of the core strategic allocation and infrastructure grant in real terms.

The year-on-year income summary for the first five years of operation of CEH, is included in Figure I, and the two previous years for comparison.



#### THEMATIC PROGRAMMES

The level of support gained by CEH from Thematic Programmes has remained reasonably steady in 1998/99, with new awards starting to flow from the Biological Diversity and Ecosystem Function in Soils (Soil Biodiversity) and Urban Regeneration (URGENT) Programmes. This has not, however, completely solved the underlying problems arising from the winding down of TIGER and LOIS which could not be fully managed by reductions in expenditure.

Future opportunities are, however, expected to arise under NERC approved Programmes on Global Nitrogen Enrichment (GANE), and Lowland Catchment Research (LOCAR) both of which are funded from 1999/2000.

In 1998/99 CEH Institutes received funding under the following main programmes:

- Terrestrial Initiative in Global Environmental Research (TIGER) workshops
- Land Ocean Interaction Study (LOIS)
- Large Scale Processes in Ecology and Hydrology
- Environmental Diagnostics
- Testable Models of Aquatic Ecosystems
- Ecological Dynamics and Genes (EDGE)
- Urban Regeneration and the Environment (URGENT)
- Stewardship and Exploitation of Environmental Data (SEEDCORN)
- Soil Biodiversity

In the past year, CEH has assisted the Terrestrial and Freshwater Science and Technology Board in developing a new Thematic Programme on Environmental Genomics. CEH scientists have also helped to formulate joint programmes between NERC and BBSRC on Bioremediation and Genetically-Manipulated Crops. The outcome of proposals to the NERC/MRC Programme on Environment and Health are also expected in the near future.

### **NON-THEMATIC PROGRAMMES**

The limited opening of the Non-Thematic funding mode to Centres/Surveys brought income of c.£80k to CEH Institutes in 1996/97. Income in 1997/98, as early awards began to take effect, amounted to c.£300k. In 1998/99 the value of Non-Thematic awards was c.£200k. Further success in the 1998/99 bidding rounds now means that CEH has 15 projects funded from the Non-Thematic funding mode. Access to the Non-Thematic funds has resulted in a number of joint research projects with university colleagues. The increase in collaboration is a welcome outcome and will strengthen the UK science base.

#### SCIENCE PROGRAMME

Broad analyses of expenditure in the 10 Programme areas in 1998/99, prepared for planning purposes and provided from the CEH Time Resources Allocation Management System (TRAMS), are shown at Figure 2. The allocation to support the Science Programme from CEH 'headroom' funds was increased by £220k (cash), partly as a response to specific comments and recommendations from the Programme Review Groups and partly to reflect the distribution of 1998 Integrating Fund projects. NERC is introducing a new financial management and accounting system (now due to be implemented in October 1999). In future, more complex analysis of actual programme and project expenditure using the new CEH Programme definitions will be available from the main NERC accounting system.





Figure 3 shows the major sources of income into the CEH Science Programmes over the last three years and the fluctuating trends within the 10 Programmes. The level of Commissioned Research income in each Programme reflects the relevance of the research to customer needs. Of particular note is the rapid rise in CR in the Land Use Programme, which is largely a result of the Countryside Survey 2000, funded by DETR and others. The steady rise of funding in Programme 6 (Biocontrol), which reflects the increasing interest in biotechnology and GMO studies, and in the Soils Programme is encouraging. The diversity of external users helps give stability to the external funding line and CEH uses its Science Budget to maintain a reasonably steady funding base for each Programme. However, in areas where Commissioned Research funding is also declining, SB can only be used as underpinning to a limited degree. Thus, certain programme areas are showing a fall in overall income, notably in Biodiversity and in Integrating Generic Science.

#### INTEGRATING FUND

Funding of  $\pm 1.3M$  over three years was allocated for a fourth round of Integrating Fund projects starting in 1998/99, supporting five new projects and allowing extensions for three projects from the first round (Interactions of virus, aphids and wild *Brassica* – a GMO study; Modelling the availability of radionuclides in upland organic soils; Modelling the transport and fate of viruses in the aquatic environment). Plans approved for a fifth round starting in 1999/2000 include seven projects, with funding of  $\pm 1.2M$  available over three years.

#### INFRASTRUCTURE

The CEH allocation to the Science Programmes and success in obtaining Thematic and Non-Thematic support brought an increase in the value of the Infrastructure grant from NERC in 1998/99 which, whilst below the rate of inflation, provided some increased flexibility in the management of CEH finance. Expansion of, and support to, the Science Programmes has also started to flow from a series of initiatives or successful bids. These include, inter alia, increased support for the Stable Isotope Facility at Merlewood to underpin both academic and Institute research; additional funding for the Biological Records Centre (£250k over five years) to meet NERC commitments to the National Biodiversity Network; and a one-off grant of £250k for capital equipment, approved by the Terrestrial and Freshwater Science and Technology Board for the 1999/2000 financial year. External income also continued to generate a substantial contribution towards the Infrastructure costs of CEH, thus reducing the reliance on Science Budget to provide the necessary funding base for research, and freeing resources in NERC for a wider range of programmes. Income has indicated funds for software development, support for ECN sites, data and surveys.

#### COMMISSIONED RESEARCH AND OTHER INCOME

Figure I shows the overall contribution of external income to the CEH budget, and Appendix 7 shows Institute receipts from major customers in 1998/99, with the receipts in earlier years, revalued to current prices, for the purposes of comparison. Changing emphasis in customer research needs has been reflected in a change in the pattern of support. A noticeable trend is towards increased collaborative, or partnership projects.

# STAFFING

As at 31 March 1999, the number of staff working in CEH stood at 670, comprising 473 scientists and 197 non-scientists. This represents the actual number of people on the staff complement. Of these, 190 are on fixed term appointments. Flexible recruitment and working practices mean, however, that some 85 staff are able to work part time. The full time equivalent, i.e. the staff effort available within CEH, was therefore 458 scientists and 171 non-scientists.

Normal retirements and natural wastage have an impact on the spread of resources available to carry out the CEH Mission. Restructuring to re-skill parts of the workforce, improve the age distribution and allow for appointments at a more junior level has been managed through a process of early releases of staff. Overall, some 50 staff have now left on early retirement or severance terms since CEH was formed in 1994, thus allowing a significant measure of redirection and replanning of research activities. The spread of skills of current CEH scientific staff (Figure 4) reflects these continuing changes in the balance of activities required to support the CEH Science Programme. Figure 5 shows the current age distribution of CEH scientific staff.



Figure 4. CEH staff – scientific skills



A proportion of the savings from the release of staff in 1998/99 was returned to NERC 'headroom', with the balance being retained in CEH to allow for between 10 and 15 'new blood' appointments at the post-doctoral level, targeted at issues of strategic relevance and overall contribution to specific Programmes. The first of these appointments will be made in 1999/2000.

Total staff numbers in the CEH Directorate and each of the CEH Institutes as at 31 March 1999 are contained in Appendix 2.

